R-114-2017

MISSION STATEMENT
FOR THE EMPLOYEES' RETIREMENT SYSTEM
OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

WHEREAS, LA RS 11:3821 describes the purpose and constraints upon the Employees' Retirement System of Sewerage and Water Board of New Orleans;

WHEREAS, mission clarity is a core best practice of investment governance; and

WHEREAS, based upon LA RS 11:3821, the mission of the Employees' Retirement System of Sewerage and Water Board of New Orleans is to "prudently manage an actuarially sound pension fund solely in the interest of participants and beneficiaries in a cost-effective manner";

NOW, THEREFORE, BE IT RESOLVED by Board of Trustees of the Employees' Retirement System of Sewerage and Water Board of New Orleans that it formally adopts the above Mission Statement as discussed at the October 16, 2017 meeting of the ERS Pension Committee.

____

____

I, __________, Executive Director,
Employees' Retirement System of the Sewerage and Water Board of New Orleans,
do hereby
certify that the above and foregoing is a true and
correct copy of a Resolution adopted at the Meeting of the
Board of Trustees of the Employees' Retirement System
of Sewerage and Water Board of New Orleans, duly called and held,
according to law, on **October 18, 2017.**

____

__________, **EXECUTIVE DIRECTOR**
EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

R-115-2017

**ADOPTION OF
THE CFA CODE OF CONDUCT
FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY
BY THE EMPLOYEES' RETIREMENT SYSTEM
OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**

WHEREAS, the Chartered Financial Analyst (CFA) Institute's *Code of Conduct for Members of a Pension Scheme Governing Body* (the code) represents best practice for members of the pension governing body when complying with their duties to the pension scheme;

WHEREAS, the conduct of the Code provides guidance to those *individuals* overseeing the management of the scheme regarding their individual duties and responsibilities;

NOW, THEREFORE, BE IT RESOLVED by Board of Trustees of the Employees' Retirement System of Sewerage and Water Board of New Orleans formally adopt the CFA *Code of Conduct for Members of a Pension Scheme Governing Body* at the October 16, 2017 meeting of the ERS Pension Committee.

____

____

I, __________, Executive Director,
Employees' Retirement System of the Sewerage and Water Board of New Orleans,
do hereby
certify that the above and foregoing is a true and
correct copy of a Resolution adopted at the Meeting of the
Board of Trustees of the Employees' Retirement System
of Sewerage and Water Board of New Orleans, duly called and held,
according to law, on **October 18, 2017.**

____

**__________, EXECUTIVE DIRECTOR
EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**

R-109-2017

ASSET ALLOCATION TARGETS AND RANGES FOR EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

WHEREAS, the investment of assets of the Employees' Retirement System of the Sewerage and Water Board of New Orleans (ERS) is governed by an Investment Policy Statement adopted by the ERS Board of Trustees; and

WHEREAS, the assets are allocated among equity investments, fixed income investments, and alternative investments according to targets established in the Investment Policy Statement; and

WHEREAS, the Executive Director presented a set of proposed changes to the target asset allocations at the Pension Committee's October 7, 2015 meeting; and

WHEREAS, the Pension Committee of ERS has voted to approve changes to the target asset allocations on October 7, 2015, November 4, 2015, and December 14, 2015;

WHEREAS, these changes were subsequently implemented through the sale and purchase of investments;

NOW, THEREFORE, BE IT RESOLVED by Board of Trustees of the Employees' Retirement System of Sewerage and Water Board of New Orleans that the Investment Policy Statement be formally revised to incorporate these policy targets asset allocations and the effective dates based upon historical implementation as noted by FFC Capital Management.

____

____

I, __________, Executive Director,
Employees' Retirement System of the Sewerage and Water Board of New Orleans,
do hereby
certify that the above and foregoing is a true and
correct copy of a Resolution adopted at the Meeting of the
Board of Trustees of the Employees' Retirement System
of Sewerage and Water Board of New Orleans, duly called and held,
according to law, on **October 18, 2017.**

____

__________, **EXECUTIVE DIRECTOR**
EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

R-110-2017

MISCELLANEOUS UPDATES OF THE INVESTMENT POLICY STATEMENT FOR THE EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

WHEREAS, the investment of assets of the Employees' Retirement System of the Sewerage and Water Board of New Orleans (ERS) is governed by an Investment Policy Statement adopted by the ERS Board of Trustees; and

WHEREAS, in the course of updating the Investment Policy Statement to incorporate policy targets asset allocations and the effective dates based upon previous ERS Pension Committee votes and historical implementation, FFC Capital Management proposed minor updates and edits to the Investment Policy Statement;

NOW, THEREFORE, BE IT RESOLVED by Board of Trustees of the Employees' Retirement System of Sewerage and Water Board of New Orleans that the Investment Policy Statement be formally revised to incorporate these miscellaneous updates and edits as detailed in the redlined Investment Policy Statement presented at the October 16, 2017 meeting of the ERS Pension Committee.

____

____

I, __________, Executive Director,
Employees' Retirement System of the Sewerage and Water Board of New Orleans,
do hereby
certify that the above and foregoing is a true and
correct copy of a Resolution adopted at the Meeting of the
Board of Trustees of the Employees' Retirement System
of Sewerage and Water Board of New Orleans, duly called and held,
according to law, on **October 18, 2017.**

____

__________, EXECUTIVE DIRECTOR
EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

Sewerage & Water Board of New Orleans

Chief Investment Officer's Presentation to the Pension Committee

October 16, 2017

October Meeting Agenda

- Action Plan Update (Info Item)
- Continued Discussion of ERS Governance Structure – Clarifying Governance
  - ERS Mission Statement (Action Item)
  - CFA Code of Conduct for Pension Governing Body (Action Item)
- Ensure IPS Asset Allocation Target & Ranges are Up-To-Date (2 Action Items)
- Update on Investment Consulting (Info Items)
  - Update on Asset-Liability Study RFP
  - Expiration of FFC Capital Management contract

Action Plan

PRIORITIES & DECISIONS

General Hierarchy of Governing Fiduciary Concerns

Decision/Risk	Fiduciary	Asset/liability	Structural	Implementation	Operational
Governance	1. Legislative 2. Political 3. Decision-making 4. Imprudent delegation 5. Publicity 6. Documentation	10. Benefits	18. Maverick 19. Research 20. Initial due diligence	29. Procedural control	51. Resources 52. Systems/ technology
Objective setting	7. Policy				
Asset allocation	8. Socially responsible investing 9. Actuarial/funding	11. Mismatch 12. Assumptions 13. Asset mix/classes 14. Model 15. Downside 16. Diversification	21. Rebalancing	30. Cash flow 31. Leverage	
Asset class strategy	17. Regret		22. Active/passive 23. Currency 24. Benchmark 25. Derivatives	32. Hedging 33. Tactical asset allocation 34. Timing 35. Credit	
Manager/portfolio structure			26. Style 27. Sector 28. Country	36. Manager 37. Holdings concentration 38. Tracking error 39. Counterparty	
Manager research & selection				40. Residual 41. Call	53. Liquidity
Custody/execution				42. Trading 43. Transition	54. Custodial 55. Securities lending 56. Valuation
Performance/process evaluation	44. Tolerance 45. Monitoring 46. Control 47. Contract 48. Audit/accounting 49. Oversight			50. Ongoing due diligence	57. Guideline breach

LEGEND
High impact
High risk
Moderate risk
Low risk

Source: Russell Investments, "Risk Management is the Cornerstone of Investing." February 2010.

Action Plan is Designed to Address Items According to Its Impact

(High impact items addressed first, then lower impact items)

1. Governance – mission, objectives, decision-making structure, IPS update, risk capacity and risk appetite
2. Actuarial Funding (Asset-Liability Study)
3. Rebid general investment consultant
4. Asset Allocation Study
5. Asset Class Structure (e.g., Active/Passive, Strategies, Benchmarks)
6. Manager Selection
7. Custodial, Operational
8. Review governance and update IPS

Action Plan Will Require Foundational Decisions

I. **FOUNDATIONAL DECISIONS** (October 2017 – December 2017)

A. Clarify governance focus

1. Amend the current IPS to reflect 2015 decisions.
2. Adopt an ERS Mission Statement
3. Adopt the CFA Code of Conduct for Members of a Pension Governing Body
4. Adopt a resolution to strongly encourage BOT to adhere to LA RS 11:185 Trustee Education requirements starting September 2018.

B. Decisions needed to complete Asset-Liability Study By June 2018

5. Amend and prioritize investment objectives
6. Hire Asset-Liability Consultant

C. Decisions needed to issue RFP for General Investment Consultant

5. Adopt Investment Philosophy
6. Agree upon an investment manager search process (based upon philosophy & policies)
7. Agree upon investment consultant duties and governance matrix

Action Plan Will Require Major Decisions

II. **<u>MAJOR DECISIONS</u>** (May 2018 – September 2018)*

D. Preparation

10. Governance Matrix:
    a. Who decides (and how) benefits?
    b. Who decides (and how) employer contributions?
    c. Who decides (and how) employee contributions?
    d. Who decides (and how) investment policy?
11. Hire General Investment Consultant
12. Adopt Statement of Risk Capacity and Risk Appetite

E. The BIG THREE Decision-Making

13. Benefit Policy
14. Contribution Policy
    a. Employee
    b. Employer
15. Investment Policy – Asset Allocation

Action Plan Will Require Formalizing Cumulative Decisions and Implementation

III. **FORMALIZE CUMULATIVE DECISIONS** (September 2018 – December 2018)*

- F. Update Documents
  - 16.Amend Investment Policy Statement
  - 17.Amend Bylaws
  - 18.Amend Rules and Regulations

IV. **IMPLEMENT ASSET ALLOCATION** (September 2018 – March 2019)*

- G. Portfolio Construction
- H. Investment Managers

*Dates are tentative and subject to revision.

Governance

CLARIFYING MISSION & DUTIES

Governing Documents

- La RS 11:3821
- Rules and Regulations of the Employees' Retirement System of the Sewerage and Water Board of New Orleans
- By-Laws of the Sewerage and Water Board of New Orleans
- S&WBNO ERS Investment Policy Statement
- Contracts with external managers, etc.

Complicated Governance

- Two separate entities created by two separate acts of the Louisiana Legislature with different objectives:
  - Sewerage & Water Board of New Orleans (S&WB)
  - Employees' Retirement System of the Sewerage & Water Board of New Orleans (ERS) funds (i.e., the "Trust")
- However, the two entities share:
  - The S&WB Board of *Directors* (who are not members of the ERS) are the overwhelming majority (11) of the ERS Board of *Trustees* (15).
  - The Executive Director and Special Counsel of the S&WB serve the same roles for the ERS but are *not paid additional compensation*.
  - Support services: benefits, finance, IT, legal but no employee's compensation is paid from ERS pension funds.

Steps to Clarify Governance

- Update the Investment Policy Statement to reflect actions approved by the Pension Committee.
- Formally adopt a Mission Statement for ERS.
- Formally adopt the CFA Institute's "Code of Conduct for Members of a Pension Scheme Governing Board" – (Appendix A to be discussed in October)
- Complete the "Governance Matrix" (aka "Crosswalk" of Responsibilities of the Committees of the Board) with respect to decision rights.
  - In preparation for the asset-liability study results, form a working group to collaboratively develop a fair division of decision-making rights with respect to: benefit policy, employer contribution rate, employee contribution rate, and investment policy.
  - The Chief Investment Officer will work with existing and new S&WB senior management to propose decision-making rights to complete the matrix and propose to the Pension Committee, etc.
  - Upon all relevant approvals, update Rules & Regulations, By-Laws, and Investment Policy Statement to reflect these decision-making rights.
- Ongoing Trustee education (see Appendices A and B).

Governance: Mission Statements

- Mission clarity is an investment governance best practice (see Appendix A)
- LA RS 11:3821 provides the purpose of and constraints upon the ERS
- The mission statement offered for adoption distills LA RS 11:3821 into an easy to read, understand, and implement statement.

LA RS 11:3821 Purpose

- "The Sewerage and Water Board shall set up an *actuarially sound pension fund for the payment of pensions and service benefits to its employees…."*
- *"The pension fund shall be under the jurisdiction, control, and management of the board of trustees of the retirement system and shall be used for <u>no other purpose</u> than to pay pensions to employees…."*

LA RS 11:3821 Constraints

- *"The prudent-man rule shall require each fiduciary of this retirement system and each member of the board of trustees to act collectively on behalf of this board exercising the care, skill, prudence, and diligence…."*
- *"No salaries, fees, …shall be paid to anyone…. The executive director and the special counsel of the Sewerage and Water Board shall act in the same official capacities for the pension fund without additional compensation."*

ERS Mission Statement

- *Prudently manage an actuarially sound pension fund*
- *solely in the interest of participants and beneficiaries*
- *in a cost-effective manner.*

Mission Statement: Implications of Cost-Effectiveness

- *There are investment management <u>and</u> administrative costs of the pension.*
- *These costs are to be paid from pension assets <u>and</u> resources of the Sewerage & Water Board (water utility employer).*
- *Pure cost minimization may not be prudent.*

CFA Institute's Code of Conduct for Members of a Pension Scheme Governing Body

1. Act in good faith and in the best interest of the scheme participants and beneficiaries.
2. Act with prudence and reasonable care.
3. Act with skill, competence, and diligence.
4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.
5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.
6. Deal fairly, objectively, and impartially with all participants and beneficiaries.
7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.
8. Review on a regular basis the efficiency and effectiveness of the scheme's success in meeting its goals, including assessing the performance and actions of scheme service providers, such as investment managers, consultants, and actuaries.
9. Maintain confidentiality of scheme, participant, and beneficiary information.
10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

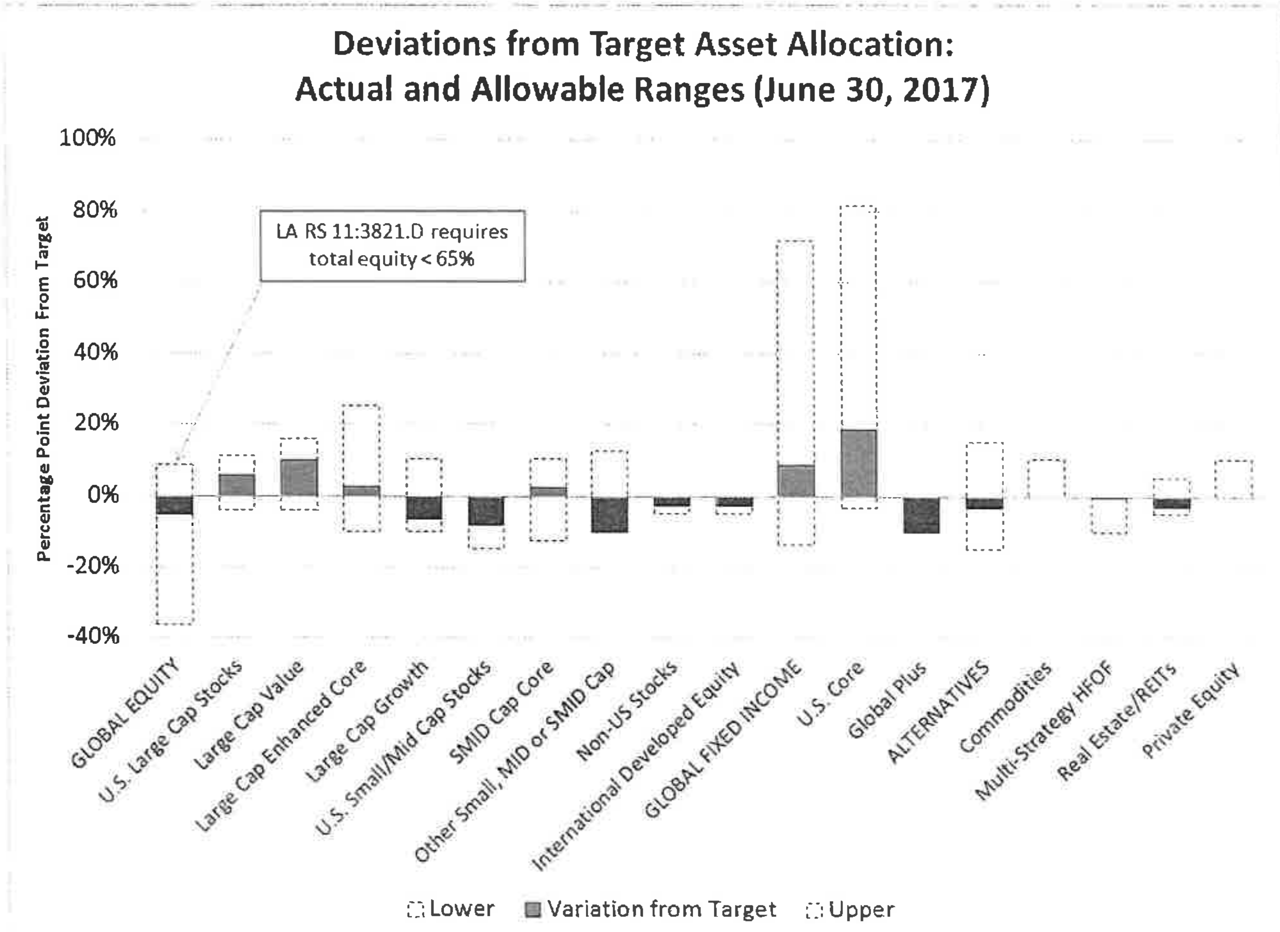
Governance

UPDATING THE IPS

Governance: Update the Investment Policy Statement

- Investment of assets of the ERS is governed by the Investment Policy Statement adopted by the ERS Board of Trustees.
- Assets are allocated among equity investments, fixed income investments, and alternative investments according to targets established in the Investment Policy Statement.
- The Executive Director presented a set of proposed changes to the target asset allocations at the Pension Committee's October 7, 2015 meeting.
- The Pension Committee voted to approve changes to the target asset allocations on October 7, 2015, November 4, 2015, and December 14, 2015.
- These changes were subsequently implemented through the sale and purchase of investments.
- **Recommendation**: the Board of Trustees of the Employees' Retirement System of Sewerage and Water Board of New Orleans formally revise the Investment Policy Statement to incorporate these policy targets asset allocations and the effective dates based upon historical implementation as noted by FFC Capital Management.

Governance: Important Monthly Monitoring



Updates

CONSULTANT SEARCHES

Update on RFP for Asset-Liability Study

- The future is *unknowable* (recall investment philosophy).
- We want to *honor* S&WB pension obligations.
- In order *to prepare to try to honor* those pension obligations we must analyze impacts of different scenarios:
  - Financial markets (e.g., market crashes)
  - Asset Allocations (i.e., investment policy)
  - Benefit Policies (e.g., open or closed to new employees)
  - Contributions
- RFP was issued September 27th and responses are due on October 20th by 11:00 am (Central).

General Investment Consulting

- FFC Capital Management has been serving ERS since at least October 2008.
- FFC Capital Management's contract expires March 3, 2018.
- In advance of the contract's expiration, the CIO will lead a process to rebid the contract following S&WB's Professional Services Procurement Policy.
- As part of the governance review, the Pension Committee review the services to be rendered in the next contract.

November Meeting Agenda

- Quarterly Performance Review
- Asset Allocation
  - Monitor
- Governance
  - LA RS 11:185 Trustee Education requirements
  - Review and prioritize Investment Objectives
- Review list of general consultant services
- Update on Asset-Liability Study search

Appendix A: 12 Factors of Best Practice Investment Governance

	Best-Practice Factors	
	Core	Exceptional
Coherence	Mission Clarity	Highly Competent Investment Executive
	Effective Focusing of Time	
People	Leadership	High-Level Board Competencies
		Supportive Compensation
Process	Strong Investment Beliefs	Competitive Positioning
	Risk Budget Framework	Real-Time Decision Making
	Fit-For-Purpose Manager Line-Up	Learning Organization

Source: Watson-Wyatt, “Best Practice Investment Governance: Going From Good to Great,” 2008.

Appendix B: PRMIA Principles of Good Governance*

- Key Competencies
- Resources and Processes
- Ongoing Education and Development
- Compensation Architecture
- Independence of Key Parties
- Risk Appetite
- External Validation
- Clear Accountability
- Disclosure and Transparency
- Trust, honesty and fairness of key people

*Professional Risk Managers' International Association, 2009

Appendix C
Investment Philosophy

- The goal of investing is to earn enough to meet your objectives.
- Understand what you can control (in descending order: costs, liquidity, risk, and returns).
  - While you cannot control returns, you can decide to buy low and sell high.
- We have met the enemy, and he is us.
- There are limits to prediction:
  - The future is unknowable, so diversify.
  - Market timing is generally unrewarding.
  - Markets don't just mean revert, they overshoot.
- There are trade-offs in investing:
  - More risk must be assumed to gain higher expected returns.
  - Excess returns and market efficiency are inversely related and often cyclical.
  - Too much capital is the enemy of good returns.
- Performance cannot be guaranteed, but there are some predictions:
  - Philosophy, processes, and organizational resources drive excess returns. Culture and alignment of interest can enhance or detract.
  - IR is a function of skills, breadth, and freedom.

Sewerage & Water Board of New Orleans

Re-Building the City's Water Systems for the 21st Century

West's Louisiana Statutes Annotated
Louisiana Revised Statutes
Title 11. Consolidated Public Retirement Systems (Refs & Annos)
Subtitle IV. Municipal and Parish Systems
Chapter 4. Other Pension and Relief Funds in Particular Cities (Refs & Annos)
Part III. Employees' Retirement System of the Sewerage and Water Board of the City of New Orleans (Refs & Annos)

LSA-R.S. 11:3821

§ 3821. Creation; contributions; management; investments; board of trustees

Effective: July 1, 2011
Currentness

A. The Sewerage and Water Board shall set up an actuarially sound pension fund for the payment of pensions and service benefits to its employees, which pension fund may be coordinated with and supplementary to Title II of the Federal Social Security Act; [1] the benefits of which Act shall be made available to employees of the Sewerage and Water Board when requirements of the federal law shall have been met. Employee contributions for coverage pursuant to the agreement entered into between the state of Louisiana and the secretary of health, education, and welfare may be withheld from employees' pay, and, in addition thereto, contributions to the retirement system, not to exceed eight percent of the salary in excess of one thousand two hundred dollars per year with respect to any employee hired subsequent to December 31, 1980, and not to exceed four percent of all salary in excess of one thousand two hundred dollars per year paid to any employee employed as of December 31, 1980, and not to exceed eight percent with respect to any amount subsequently paid to any employee in excess of the salary earned by such employee as of December 31, 1980, may be withheld for the retirement fund; however, for those employees hired on or after January 1, 1996, the first one hundred dollars per month of each employee's salary, equaling one thousand two hundred dollars per year, shall be included for purposes of contributions to this system. Members who were employed prior to January 1, 1996, shall have the option of paying such an actuarial amount to this system as may be necessary to receive credit in this system, proportionate to the credit that was not received as a result of excluding one thousand two hundred dollars per year from the member's contributions to this system. In the event the agreement with the Social Security Administration is cancelled and retirement benefits are increased, employee contributions may be increased to an amount not to exceed ten percent of the total salary. The Board shall set aside and pay to the pension fund from each of its funds, however described, against which salaries of its employees are properly chargeable, in proportion to the amount of salaries chargeable to each, such amounts as may be necessary to maintain the pension fund on an actuarial basis, and also to pay out of said funds the board's proportion of contributions under the provisions of the Federal Social Security Act and hospitalization insurance for all of its employees. The board is authorized to withdraw from the presently existing pension fund a sum sufficient to pay the employees' portion of the social security contribution for the period commencing January 1, 1955 to August 1, 1956, and to pay out of its Operating-Maintenance Funds the employers' portion of the social security contributions for the same period.

B. The pension fund shall be under the jurisdiction, control, and management of the board of trustees of the retirement system and shall be used for no other purpose than to pay pensions to employees and may pay plan sponsorship fees under the rules and regulations adopted by the board of trustees of the retirement system. Plan sponsorship fees include but are not limited to fees for money management, investment services, and custodial services.

C. The board of trustees of the retirement system may make such rules and regulations as it deems proper to carry out the purposes and objects of this Part in regard to pensions to be paid to its employees, subject to the following restrictions:

(1) No salaries. fees, commissions or emoluments shall be paid out of the pension fund to anyone serving on the pension committee or in any other capacity. The executive director and the special counsel of the Sewerage and Water Board shall act in the same official capacities for the pension fund without additional compensation.

(2) All assessments, dues, contributions, or monies received from any source for use or benefit of the pension fund and all surpluses, if and when accumulated and established, shall be invested by utilizing the prudent-man rule as provided in R.S. 11:263(C). The prudent-man rule shall require each fiduciary of this retirement system and each member of the board of trustees to act collectively on behalf of this board exercising the care, skill, prudence, and diligence under the circumstances then prevailing as a prudent institutional investor of ordinary discretion and intelligence in the management of large investments entrusted to such board.

D. Notwithstanding any provision of law to the contrary, the board of trustees of the retirement system may invest no more than sixty-five percent of the pension fund portfolio in equities, and no more than twenty-five percent of the pension fund shall be invested in any single equity.

E. The board of trustees of the Employees' Retirement System of the Sewerage and Water Board of the city of New Orleans shall be composed of:

(1) The members of the Sewerage and Water Board of New Orleans as provided in R.S. 33:4071.

(2) The three duly elected employee members of the pension committee, which committee is defined and described in the rules and regulations of the retirement system.

(3) The one retiree member of the pension committee, which committee is defined and described in the rules and regulations of the retirement system.

Credits

Acts 1991, No. 74, § 3, eff. June 25, 1991. Amended by Acts 1993, No. 349, § 1, eff. June 3, 1993; Acts 1995, No. 102, § 1, eff. June 12, 1995; Acts 1995, No. 103, § 1, eff. June 12, 1995; Acts 1995, No. 670, § 1, eff. June 21, 1995; Acts 1995, No. 683, § 1, eff. June 21, 1995; Acts 2000, 1st Ex.Sess., No. 47, § 1, eff. April 17, 2000; Acts 2001, No. 773, § 1; Acts 2011, No. 396, § 1, eff. July 1, 2011.

Notes of Decisions (19)

Footnotes

1 42 U.S.C.A. § 401 et seq

LSA-R.S. 11:3821, LA R.S. 11:3821

Titles 1 to 10, 12 to 46, 48 to 56 of the Revised Statutes and the Civil Code, Code of Civil Procedure, the Code of Criminal Procedure, the Evidence Code, and the Children's Code are current through the 2017 Second Extraordinary Session. All other statutes are current through the 2017 First Extraordinary Session.

CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY

CFA Institute

CFA Institute

CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY

CFA Institute is the global association of investment professionals that sets the standards for professional excellence. We are a champion for ethical behavior in investment markets and a respected source of knowledge in the global financial community.

Our mission is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

ISBN: 978-1-932495-86-7
September 2015 (reprint)

Contents

Preamble

The conduct of those who govern **pension schemes**[1] significantly impacts the lives of millions of people around the world who are dependent on pensions for their retirement income. Consequently, it is critical that **pension plans**, also known as systems, schemes, or funds, are overseen by a strong, well-functioning **governing body** in accordance with fundamental ethical principles of honesty, integrity, independence, fairness, openness, and competence.

Codes of conduct addressing professional activities are standard practice for many successful investment firms and have become increasingly common among public and private pension schemes. Such codes are established to improve the performance of schemes sponsored by private enterprise and public pension schemes alike. Just as there is no one-size-fits-all governance structure for investment firms, there is no single governance structure that can be universally applied to pension schemes. Varying goals, restrictions, political environments, market conditions, manager/**trustee** competencies, regulatory schemes, and many other factors will affect the appropriate governance structure for any pension scheme.

This *Code of Conduct for Members of a Pension Scheme Governing Body* (the code) represents best practice for members of the pension governing body when complying with their duties to the pension scheme. Whether public or private, each pension scheme board that adopts the code will demonstrate its commitment to serving the best interests of **participants** and **beneficiaries**.

The code provides guidance to those *individuals* overseeing the management of the scheme regarding their individual duties and responsibilities and is not meant to replace the overall policies and procedures established for the governance of the pension scheme. However, to reflect best ethical practice, incorporating the fundamental ethical principles embodied in this code will enhance those policies and procedures.

Depending on the nature and type of pension scheme, members of the governing body may have responsibility for overseeing the administration of benefits as well as the scheme's investment decision-making process. All of the principles outlined in this code apply equally to the officials' duties in each of these roles.

[1] Bold indicates terms defined in Appendix A.

For the purposes of this document, pension plans, systems, and funds are referred to collectively as "plans" or "schemes" and the individuals who serve on the governing body of the plans, schemes, or funds are referred to as "trustees."

Code of Conduct

Pension trustees

1. Act in good faith and in the best interest of the scheme participants and beneficiaries.
2. Act with prudence and reasonable care.
3. Act with skill, competence, and diligence.
4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.
5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.
6. Deal fairly, objectively, and impartially with all participants and beneficiaries.
7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.
8. Review on a regular basis the efficiency and effectiveness of the scheme's success in meeting its goals, including assessing the performance and actions of scheme service providers, such as investment managers, consultants, and actuaries.
9. Maintain confidentiality of scheme, participant, and beneficiary information.
10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Code of Conduct Guidance

1. Act in good faith and in the best interest of the scheme participants and beneficiaries.

The overriding objective of the pension scheme is to serve as a secure source of retirement income. Pension scheme trustees have a primary duty to act for the benefit of the scheme participants and beneficiaries. Trustees comply with this duty by striving to safeguard and grow the assets of the pension scheme to provide maximum benefit to the scheme participants and beneficiaries.

To act in the participants' and beneficiaries' best interest, an effective trustee will

- Consider the different types of beneficiaries relevant to each pension scheme, including **deferred beneficiaries** and pensioners. Trustees often engage in a delicate balancing act of taking sufficient risk to generate long-term returns high enough to support real benefit increases for active participants who will become future beneficiaries while avoiding a level of risk that jeopardizes the safety of the payments to existing pensioners.
- Place the benefit of the scheme participants and beneficiaries above that of the **sponsor** of the pension scheme even if the trustee is employed by or appointed to the board of the pension scheme by the scheme's sponsor.
- Consider whether the position of the scheme is enhanced by any investment or action and will not be swayed by other considerations, such as the interests of the employer sponsor of the pension or other external institutions (e.g., trade unions or political parties).

However, trustees who exclusively seek to enhance the position of participants and beneficiaries cannot discount additional considerations, such as the effect of the trustees' decisions on the financial health and viability of the scheme sponsor or their impact on scheme investments.

In carrying out their responsibilities, effective trustees will

- Consider the additional objectives of ensuring an adequate match between plan assets and liabilities, maintaining stable funding costs over time, keeping management costs down, and paying benefits upon the death, disability, retirement, or other special circumstances of plan members.

- Carry out the scheme activities in a way that does not impose an unnecessary financial burden on the plan sponsor and serves the interests of plan members well but without excessive burden to the plan sponsor.

- Consider the position of other stakeholders when carrying out their duties to the fund. If appropriate under applicable law, it is acceptable for a trustee to consider the impact that the investment of scheme assets may have—for example, creating jobs or stimulating industry in the local area—so long as the interests of the participants and beneficiaries remain paramount.

- Consider all relevant risk and value factors deemed appropriate when designing the scheme's investment strategy. In addition to typical financial measures, these factors may include environmental, social, and corporate governance issues.

2. Act with prudence and reasonable care.

Effective trustees will exhibit the care and prudence necessary to meet their obligations to pension scheme participants and beneficiaries. The exercise of prudence requires acting with the appropriate levels of care, skill, and diligence that a person acting in a like capacity and familiar with such matters would use under the same circumstances.

In the context of serving as a trustee, prudence requires

- Acting in a judicious manner to avoid harming scheme participants and beneficiaries.

- Acting in good faith, without improper motive or purpose.

- Exercising power and discretion consistently.

- Following the investment parameters set forth by the scheme documents and applicable regulation.

- Having appropriate knowledge of and skill in balancing risk and return by seeking appropriate levels of diversification.

Pension schemes typically employ experts to advise, direct, and implement the decisions of their trustees. Both internal staff and **external consultants** are retained for this purpose. These "designees" thereby partner with the trustees in carrying out the responsibilities set forth in this code. However, external third-party service providers and professional consultants may have less accountability or vested interest in the outcome of actions resulting from their advice.

Trustees can rely on external third-party service providers and professional consultants provided that the trustees have made reasonable and diligent effort to

- Determine that the service providers act with appropriate skill, competence, and diligence.
- Determine that third-party experts are independent and free of conflicts of interest and have the proper incentives to act in the best interests of the fund participants.
- Ensure that the designees' decisions have a reasonable and adequate basis and that the decision process is adequately documented.

Trustees may also consider

- Appointing expert trustees.
- Hiring internal staff with investment expertise who may act as an internal consultant.
- Developing an internal investment team to manage the fund directly.

However, although the delegation of certain trustee responsibilities to experts is a prudent option, the trustees retain the ultimate fiduciary duty and responsibility to monitor the experts and to ensure that the delegated responsibilities are carried out appropriately.

3. Act with skill, competence, and diligence.

Skill and diligence require trustees to be knowledgeable about the matters and duties with which they have been entrusted. Ignorance of a situation or an improper course of action on matters for which the trustee is responsible or should at least be aware is a violation of this code. Improper or ill-advised decisions can be costly to the pension scheme and detrimental to the scheme's participants and beneficiaries. Prior to taking action on behalf of the scheme, effective trustees and/or their designees analyze the potential investment opportunities and act only after undertaking due diligence to ensure they have sufficient knowledge about specific investments or strategies.

Effective trustees will have knowledge and understanding of

- Trust and pension laws.
- Pension scheme funding and liabilities.
- The policies of the scheme.
- The strategies in which the scheme is investing.
- Investment research and will consider the assumptions used—such as risks, inflation, and rates of return—as well as the thoroughness of the analysis performed, the timeliness and completeness of the information, and the objectivity and independence of the source.
- The basic structure and function of the selected investments and securities in which the scheme invests.
- How investments and securities are traded, their liquidity, and any other risks (including counterparty risk).

The level of such analysis will depend on the investment style and strategy employed by the scheme. Certain types of investments, such as hedge funds, private equity, or more sophisticated derivative instruments, necessitate more thorough investigation and understanding than do fundamental investments, such as straightforward and transparent equity, fixed-income, or mutual fund products. Trustees may seek appropriate expert or professional guidance if they believe themselves lacking the expertise necessary to make an informed decision.

Trustees should not act—or fail to act—for the beneficiaries if lacking appropriate understanding or knowledge.

- Trustees are expected to take any training or educational opportunities necessary to ensure that their level of knowledge and understanding about pensions and investments remains current.
- Incumbent trustees and the pension scheme sponsor have a responsibility to ensure that new trustees receive proper training and education to fulfill their duties.

4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.

Effective trustees endeavor to avoid actual and potential conflicts of interest between their work with the pension scheme and other personal or outside interests. Conflicts of interest are many and varied, but the interests of pension scheme participants and beneficiaries are paramount.

Effective trustees

- Strive to avoid even the appearance of impropriety. Outside duties or responsibilities should not influence decisions because the trustee acts primarily for the beneficiaries and participants of the scheme.
- Take great care to put their duties to the pension scheme before their loyalty to the sponsoring entity that appointed them (such as a company plan sponsor or labor union).
- Do not solicit political contributions from service providers to the fund, either personally or on behalf of another.
- Do not allow political interests, philosophy, or political party loyalty to influence decisions made on behalf of the scheme.

- Do not put themselves in a position where their interests and the interests of the pension scheme conflict. Trustees who also are pension scheme participants or beneficiaries should take precautions to avoid any personal profit at the expense of the scheme.
- Do not use the prestige or influence of their position for private gain or advantage.
- Avoid any employment or contractual relationship with, or any interest in, firms that provide services to the pension scheme.
- Are not involved in any retention or termination decisions of such firms or otherwise vote on matters related to the trustees' firms.
- Refuse any gift or benefit that could reasonably be expected to affect their independence, objectivity, or loyalty.
- Do not receive or accept, directly or indirectly, any gift, service, favor, entertainment, or any other thing of value from anyone currently engaged by or seeking business from the pension scheme if it could reasonably be expected to influence a decision or be considered a reward. The governing body should establish a written policy limiting the acceptance of gifts and entertainment in a variety of contexts.
- Refuse to accept gifts or entertainment of more than a minimal value from service providers, consultants, potential investment targets, or other business partners. Pension scheme governing bodies should define what the minimum value is and should consult applicable regulations, which may help establish limits as well. The governing body should also create a reporting mechanism for disclosure of gifts and consider creating limits (e.g., amount per time period, per vendor) for accepting gifts and prohibit the acceptance of any cash gifts.

To the extent conflicts may not be avoided, effective trustees recognize and take appropriate measures to deal with and manage the conflict, such as

- Disclosing all real or perceived conflicts of interests.
- Abstaining from a vote or excluding themselves from any deliberations in which they are in direct conflict.
- Ensuring that the pension scheme has procedures in place to manage and disclose any such conflicts. Policies should be appropriate to the circumstances and level of control that the trustees have over trading decisions of the fund.

- Documenting and disclosing to the pension scheme the acceptance of any gift or entertainment.

The overriding principle is that trustees should act in the best interests of the participants of the pension scheme and disclose any conflicts of interest.

The personal and business relationships that are built among the trustees or between trustees and outside experts, such as **investment managers,** are an intangible asset to be leveraged for the benefit of the scheme. The scheme should adopt policies to prohibit former trustees from using information gained about the scheme or relationships with incumbent trustees, investment managers, or other experts for personal benefit.

5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.

The pension scheme governing body, having been vested with the power to manage and administer the pension scheme, is responsible for ensuring adherence to the terms of the arrangement, statutes, bylaws, contract, trust instrument, or other associated governing documents. As a general matter, pension schemes operate in a complex, varied, and rapidly changing regulatory environment. Generally, trustees are not expected to master the nuances of technical, complex law or become experts in compliance with pension regulation.

Effective trustees

- Consult with professional advisers retained by the scheme to provide technical expertise on applicable law and regulation.
- Regularly investigate and ensure that the pension scheme has adopted and updated compliance policies and procedures designed to maintain compliance with laws and regulations that govern the pension scheme.
- Report any suspected illegal, unethical, or financial irregularities to the appropriate parties, including the scheme's internal auditor.

Policies and procedures are critical tools to ensure that pension schemes meet their legal and ethical requirements. Specific policies and procedures of the pension scheme supplement the fundamental principle-based ethical concepts embodied in this code. Documented compliance procedures will assist trustees in fulfilling the responsibilities enumerated in this code.

6. Deal fairly, objectively, and impartially with all participants and beneficiaries.

To maintain the trust that beneficiaries of the pension scheme place in them, trustees deal with all scheme participants and beneficiaries in a fair and objective manner. Effective trustees do not give preferential treatment to beneficiaries within a particular class of members or otherwise favor one class over the others. Many schemes have different types of participants: **active members** who are making contributions and accruing benefits, deferred members who have left employment but have not transferred their assets and will draw future benefits when reaching retirement age, and **retirees**, including spouses of deceased members, who are currently drawing retirement benefits. Effective trustees balance the interests of all types of members, treating each category of member fairly.

7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.

Effective trustees develop and implement comprehensive written investment policies that set forth the mission, beliefs, and strategic investment plans that guide the investment decisions of the scheme (the "policies").

Trustees

- Draft written policies that include a discussion of risk tolerances, return objectives, liquidity requirements, liabilities, tax considerations, and any legal, regulatory, or other unique circumstances.

- Review and approve the scheme's investment policies as necessary, but at least annually, to ensure that the policies remain current.

- Only take investment actions that are consistent with the stated objectives and constraints of these established scheme policies.
- Consider the suitability of investments given the needs of the pension scheme, its future (or projected) liabilities, risk tolerance, and diversification goals.
- Select investment options within the context of the stated mandates or strategies and appropriate asset allocation.
- Establish policy frameworks within which to allocate risk for both asset mix policy risk and active risk as well as frameworks within which to monitor performance of the asset mix policies and the risk of the overall pension fund.
- Work to achieve the proper investment blend to reflect the sometimes competing interests among the different classes of scheme members while focusing on long-term stability and growth.
- Carry out the terms of the scheme while abiding by any supplemental legal or regulatory requirements.

8. Review on a regular basis the efficiency and effectiveness of the scheme's success in meeting its goals, including assessing the performance and actions of scheme service providers, such as investment managers, consultants, and actuaries.

Effective trustees have the knowledge and understanding to critically review and verify the performance of the scheme's investment managers.

Trustees

- Develop disciplined decision rules for hiring, firing, and retaining investment managers that foster a long-term investment focus and are consistent with the scheme's investment policy statement. Hiring and firing decisions should be made by considering well-reasoned criteria that may include performance, organizational or operational strength, personnel quality, and other considerations.

- Ensure that the investment entity managing scheme assets employs qualified staff and sufficient human and technological resources to thoroughly investigate, analyze, implement, and monitor investment decisions and actions.
- Ensure that investment managers and consultants retained by the scheme adopt and comply with adequate compliance and professional standards.
- Ensure that the pension scheme has in place proper monitoring and control procedures for investment managers.
- Review investment manager performance assessments relative to the scheme's investment policy statement on a regular basis, generally quarterly but at least annually.

Trustees may delegate the selection and monitoring of investment managers to an investment committee or professional staff as long as the trustees maintain essential oversight and policy-setting responsibilities.

9. Maintain confidentiality of scheme, participant, and beneficiary information.

Effective trustees hold strictly confidential all information communicated to them in the context of their duty to the scheme, and they take all reasonable measures to preserve this confidentiality. This discretion applies to information related to individual scheme participants and beneficiaries as well as any information that may affect the scheme's competitive ability (e.g., detailed security transactions, investment holdings, private equity transactions, and merger and acquisition information). Effective trustees ensure that the scheme has in place a privacy policy that addresses how confidential pension scheme information will be collected, used, stored, and protected and should ensure that this policy extends to external agents and delegates.

10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Full and fair disclosure of relevant information is a fundamental ethical principle of capital markets and the investment services industry. Developing and maintaining clear, timely, and thorough communication practices is critical to providing high-quality financial services to scheme participants and beneficiaries.

Trustees have a responsibility to

- Ensure that the information they provide to scheme participants and beneficiaries is accurate, pertinent, and complete.
- Not misrepresent any aspect of their services or activities in any communications, including oral representations, electronic communications, or written materials (whether publicly disseminated or not).

Communication with participants and beneficiaries is generally provided on a regular timetable and by the pension scheme, not by individual trustees. Nevertheless, effective trustees work to ensure that all communications with scheme participants and beneficiaries are timely, relevant, complete, and accurate. If the pension scheme is considering significant changes, such as mandating a later retirement age, lowering the percentage of future benefits, or closing the scheme to new members, trustees will communicate this information well in advance to allow affected parties the opportunity to provide input. Among other disclosures, trustees have a duty to present performance information that is a fair representation of the scheme's investment record and that includes all relevant factors. Trustees have a responsibility to comply with the scheme's disclosure policies by submitting any requested information in a timely manner. To be effective, disclosures of information must be made in plain language and in a manner designed to effectively communicate the information.

Appendix A. Definitions

Active member. See **Participants.**

Beneficiaries. Those persons who are no longer making contributions to the pension scheme but who are receiving benefits.

Deferred member or **Beneficiary.** Those persons who are eligible for benefits in the future but who are no longer making contributions.

External consultant. An individual or entity outside the pension plan retained to provide professional services to the plan, including assisting the plan in selecting investment managers.

Governing body. The group of persons or legal entity responsible for managing and safeguarding the assets of the pension scheme.

Investment manager. An individual or entity retained by the pension scheme to invest the assets of the plan.

Participants. Those persons who are participating in the pension scheme by making contributions but who are not yet receiving benefits.

Pension plan or **Pension scheme.** An arrangement whereby a public or private employer, such as a corporation, labor union, or government agency, provides income through deferred compensation to its employees after retirement.

Plan sponsor. The entity that establishes the pension scheme and employs the members of the scheme.

Retirees. Those persons who are receiving pension benefits from the scheme.

Trustee. An individual who serves on the governing body of a pension plan, scheme, or fund.

CFA Institute

STAFF

Kurt Schacht, CFA
Executive Director

Jonathan Stokes, JD
Director
Standards of Practice Policy
Group

CFA INSTITUTE CENTRE FOR FINANCIAL MARKET INTEGRITY

The Code of Conduct for Members of a Pension Scheme Governing Body (the code) is a joint effort to develop and promote a code of professional conduct for individuals who sit on the governing bodies of pension funds. The CFA Institute Centre for Financial Market Integrity invited representatives from a number of industry organizations to participate in a working group that guided the creation of the initial draft of the code. We are grateful to the following groups who contributed to the working group's efforts: the Council of Institutional Investors (United States), the National Association of Pension Funds (United Kingdom), the Dutch Association of Industry-wide Pension Funds, the Swiss Pension Funds Association, the Hong Kong Retirement Schemes Association, and the Organisation for Economic Co-operation and Development. We are also thankful for the efforts of individuals and organizations who reviewed the document and sent in their contributions during the public comment period.

THE AMERICAS
800 247 8132 PHONE (USA and Canada)
+1 (434) 951 5499 PHONE
+1 (434) 951 5262 FAX

915 East High Street
Charlottesville, VA 22902
USA

477 Madison Avenue
21st Floor
New York, NY 10022
USA

ASIA PACIFIC
+852 2868 2700 PHONE
+852 8228 8820 INFO HOTLINE
+852 2868 9912 FAX

23/F, Man Yee Building
68 Des Voeux Road
Central, Hong Kong SAR

Unit 7, Level 12, Office Tower C1, The Towers, Oriental Plaza
No. 1 East Chang An Avenue, Dong Cheng District
Beijing, 100738, China

Naman Centre, Unit No. 103
1st Floor, Bandra-Kurla Complex, G Block, Bandra (East)
Mumbai 400 051, India

EUROPE, MIDDLE EAST, AND AFRICA
+44 (0) 20 7330 9500 PHONE
+44 (0) 20 7330 9501 FAX

131 Finsbury Pavement
7th Floor
London EC2A 1NT
United Kingdom

Square de Meeûs 38/40
1000 Brussels, Belgium

[redacted]

ISBN 978-1-932495-86-7

90000>

9 781932 495867

CFA Institute

www.cfainstitute.org
info@cfainstitute.org

CFA Institute

CODE OF ETHICS AND STANDARDS OF PROFESSIONAL CONDUCT

PREAMBLE

The CFA Institute Code of Ethics and Standards of Professional Conduct are fundamental to the values of CFA Institute and essential to achieving its mission to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society. High ethical standards are critical to maintaining the public's trust in financial markets and in the investment profession. Since their creation in the 1960s, the Code and Standards have promoted the integrity of CFA Institute members and served as a model for measuring the ethics of investment professionals globally, regardless of job function, cultural differences, or local laws and regulations. All CFA Institute members (including holders of the Chartered Financial Analyst® [CFA®] designation) and CFA candidates must abide by the Code and Standards and are encouraged to notify their employer of this responsibility. Violations may result in disciplinary sanctions by CFA Institute. Sanctions can include revocation of membership, revocation of candidacy in the CFA Program, and revocation of the right to use the CFA designation.

THE CODE OF ETHICS

Members of CFA Institute (including CFA charterholders) and candidates for the CFA designation ("Members and Candidates") must:

- Act with integrity, competence, diligence, respect and in an ethical manner with the public, clients, prospective clients, employers, employees, colleagues in the investment profession, and other participants in the global capital markets.
- Place the integrity of the investment profession and the interests of clients above their own personal interests.
- Use reasonable care and exercise independent professional judgment when conducting investment analysis, making investment recommendations, taking investment actions, and engaging in other professional activities.
- Practice and encourage others to practice in a professional and ethical manner that will reflect credit on themselves and the profession.
- Promote the integrity and viability of the global capital markets for the ultimate benefit of society.
- Maintain and improve their professional competence and strive to maintain and improve the competence of other investment professionals.

STANDARDS OF PROFESSIONAL CONDUCT

I. PROFESSIONALISM

A. Knowledge of the Law. Members and Candidates must understand and comply with all applicable laws, rules, and regulations (including the CFA Institute Code of Ethics and Standards of Professional Conduct) of any government, regulatory organization, licensing agency, or professional association governing their professional activities. In the event of conflict, Members and Candidates must comply with the more strict law, rule, or regulation. Members and Candidates must not knowingly participate or assist in and must dissociate from any violation of such laws, rules, or regulations.

B. Independence and Objectivity. Members and Candidates must use reasonable care and judgment to achieve and maintain independence and objectivity in their professional activities. Members and Candidates must not offer, solicit, or accept any gift, benefit, compensation, or consideration that reasonably could be expected to compromise their own or another's independence and objectivity.

C. Misrepresentation. Members and Candidates must not knowingly make any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities.

D. Misconduct. Members and Candidates must not engage in any professional conduct involving dishonesty, fraud, or deceit or commit any act that reflects adversely on their professional reputation, integrity, or competence.

II. INTEGRITY OF CAPITAL MARKETS

A. Material Nonpublic Information. Members and Candidates who possess material nonpublic information that could affect the value of an investment must not act or cause others to act on the information.

B. Market Manipulation. Members and Candidates must not engage in practices that distort prices or artificially inflate trading volume with the intent to mislead market participants.

III. DUTIES TO CLIENTS

A. Loyalty, Prudence, and Care. Members and Candidates have a duty of loyalty to their clients and must act with reasonable care and exercise prudent judgment. Members and Candidates must act for the benefit of their clients and place their clients' interests before their employer's or their own interests.

B. Fair Dealing. Members and Candidates must deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities.

C. Suitability.

1. When Members and Candidates are in an advisory relationship with a client, they must:
   - **a.** Make a reasonable inquiry into a client's or prospective client's investment experience, risk and return objectives, and financial constraints prior to making any investment recommendation or taking investment action and must reassess and update this information regularly.
   - **b.** Determine that an investment is suitable to the client's financial situation and consistent with the client's written objectives, mandates, and constraints before making an investment recommendation or taking investment action.
   - **c.** Judge the suitability of investments in the context of the client's total portfolio.
2. When Members and Candidates are responsible for managing a portfolio to a specific mandate, strategy, or style, they must make only investment recommendations or take only investment actions that are consistent with the stated objectives and constraints of the portfolio.

D. Performance Presentation. When communicating investment performance information, Members and Candidates must make reasonable efforts to ensure that it is fair, accurate, and complete.

E. Preservation of Confidentiality. Members and Candidates must keep information about current, former, and prospective clients confidential unless:

1. The information concerns illegal activities on the part of the client or prospective client,
2. Disclosure is required by law, or
3. The client or prospective client permits disclosure of the information.

IV. DUTIES TO EMPLOYERS

A. Loyalty. In matters related to their employment, Members and Candidates must act for the benefit of their employer and not deprive their employer of the advantage of their skills and abilities, divulge confidential information, or otherwise cause harm to their employer.

B. Additional Compensation Arrangements. Members and Candidates must not accept gifts, benefits, compensation, or consideration that competes with or might reasonably be expected to create a conflict of interest with their employer's interest unless they obtain written consent from all parties involved.

C. Responsibilities of Supervisors. Members and Candidates must make reasonable efforts to ensure that anyone subject to their supervision or authority complies with applicable laws, rules, regulations, and the Code and Standards.

V. INVESTMENT ANALYSIS, RECOMMENDATIONS, AND ACTIONS

A. Diligence and Reasonable Basis. Members and Candidates must:

1. Exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions.
2. Have a reasonable and adequate basis, supported by appropriate research and investigation, for any investment analysis, recommendation, or action.

B. Communication with Clients and Prospective Clients. Members and Candidates must:

1. Disclose to clients and prospective clients the basic format and general principles of the investment processes they use to analyze investments, select securities, and construct portfolios and must promptly disclose any changes that might materially affect those processes.
2. Disclose to clients and prospective clients significant limitations and risks associated with the investment process.
3. Use reasonable judgment in identifying which factors are important to their investment analyses, recommendations, or actions and include those factors in communications with clients and prospective clients.
4. Distinguish between fact and opinion in the presentation of investment analysis and recommendations.

C. Record Retention. Members and Candidates must develop and maintain appropriate records to support their investment analyses, recommendations, actions, and other investment-related communications with clients and prospective clients.

VI. CONFLICTS OF INTEREST

A. Disclosure of Conflicts. Members and Candidates must make full and fair disclosure of all matters that could reasonably be expected to impair their independence and objectivity or interfere with respective duties to their clients, prospective clients, and employer. Members and Candidates must ensure that such disclosures are prominent, are delivered in plain language, and communicate the relevant information effectively.

B. Priority of Transactions. Investment transactions for clients and employers must have priority over investment transactions in which a Member or Candidate is the beneficial owner.

C. Referral Fees. Members and Candidates must disclose to their employer, clients, and prospective clients, as appropriate, any compensation, consideration, or benefit received from or paid to others for the recommendation of products or services.

VII. RESPONSIBILITIES AS A CFA INSTITUTE MEMBER OR CFA CANDIDATE

A. Conduct as Participants in CFA Institute Programs. Members and Candidates must not engage in any conduct that compromises the reputation or integrity of CFA Institute or the CFA designation or the integrity, validity, or security of the CFA Institute programs.

B. Reference to CFA Institute, the CFA Designation, and the CFA Program. When referring to CFA Institute, CFA Institute membership, the CFA designation, or candidacy in the CFA Program, Members and Candidates must not misrepresent or exaggerate the meaning or implications of membership in CFA Institute, holding the CFA designation, or candidacy in the CFA program.

SEWERAGE & WATER BOARD
of NEW ORLEANS
EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT POLICY STATEMENT

Original Draft Adopted - November 4, 2004

As Amended – September 20, 2017~~May 20, 2015~~

Document Maintained By:

FFC CAPITAL MANAGEMENT

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Name of Plan: SWBNO Employees' Retirement System ("the Plan")

Type of Plan: Defined Benefit Plan, IRS Qualified

Plan Sponsor: Sewerage and Water Board of New Orleans (SWBNO)

Time Horizon: Greater than ~~5~~ 10 years (Long Term)

Assumed ROR: 7.00% (Actuarial -Assumption[1])

Strategic Allocation: ~~42~~49.25~~.00~~% Global Equities / ~~37~~38.75~~.00~~% Global Fixed Income / ~~21~~12.00~~.00~~% Alternatives

~~Asset Class/Sub-Class~~	~~Minimum~~	~~Strategic Allocation~~	~~Maximum~~
~~**EQUITY**~~		~~**42.00**~~	
~~-US Large Cap Equities~~	~~*20.00*~~	~~*20.00*~~	~~*35.00*~~
~~-US Mid Cap Equities~~	~~*0.00*~~	~~*0.00*~~	~~*7.50*~~
~~-US SMID Cap Equities~~	~~*0.00*~~	~~*13.00*~~	~~*21.50*~~
~~-US Small Cap Equities~~	~~*7.50*~~	~~*0.00*~~	~~*15.00*~~
~~-International Equities~~	~~*5.00*~~	~~*9.00*~~	~~*10.00*~~
~~-Int'l Emerging Equities~~	~~*0.00*~~	~~*0.00*~~	~~*5.00*~~
~~**FIXED INCOME**~~		~~**37.00**~~	
~~-Core Bond~~	~~*0.00*~~	~~*0.00*~~	~~*25.00*~~
~~-Core Plus Bond~~	~~*25.00*~~	~~*28.00*~~	~~*35.00*~~
~~-High Yield Bonds~~	~~*0.00*~~	~~*0.00*~~	~~*10.00*~~
~~-Global TIPS~~	~~*0.00*~~	~~*9.00*~~	~~*15.00*~~
~~-Convertible Bond~~	~~*0.00*~~	~~*0.00*~~	~~*10.00*~~
~~**ALTERNATIVES**~~		~~**21.00**~~	
~~-Commodities~~	~~*0.00*~~	~~*7.25*~~	~~*10.00*~~
~~-Multi-Strategy HFOF~~	~~*0.00*~~	~~*8.75*~~	~~*10.00*~~
~~-Private Equity~~	~~*0.00*~~	~~*0.00*~~	~~*10.00*~~
~~-Real Estate/REITs~~	~~*0.00*~~	~~*5.00*~~	~~*10.00*~~

Mandate	*Minimum*	*Target*	*Maximum*
GLOBAL EQUITY	36.50	49.25	65

Formatted Table

Formatted: Font: 8 pt

Formatted: Centered

Formatted: Font: 8 pt

Formatted: Centered

[1] ~~As determined from~~ Refer to ~~2010~~ January 1, 2017 Conefry & Company, LLC Actuarial Valuation~~Actuarial~~ Report

U.S. Large Cap Equity	*20.00*	***27.25***	*35.00*
Large Cap Value	*0*	*10.00*	*12.50*
Large Cap Enhanced Core	*0*	*10.00*	*12.50*
Large Cap Growth	*0*	*7.25*	*9.00*
U.S. Small/Mid Cap Equity	*9.75*	***13.00***	*16.25*
SMID Cap Equity	*9.75*	*13.00*	*16.25*
Other Small or MID Cap Equity	*0*	*0*	*0*
Non US Equity	*6.75*	***9.00***	*11.25*
International Developed Equity	*6.75*	*9.00*	*11.25*
International EM Equity	*0*	*0*	*0*
GLOBAL FIXED INCOME	***35.00***	***38.75***	***100***
Core Plus (Global) Bond	*0*	*37.00*	*40.00*
Core Fixed	*27.75*	*0*	*0*
Convertible Bond	*0*	*0*	*0*
High Yield Fixed	*0*	*0*	*0*
Cash & Equivalents	*0*	*1.75*	*2.00*
ALTERNATIVES	*0*	[illegible]	[illegible]
Commodities	*0*	*0*	*0*
HFOF-Absolute Return	*0*	*8.75*	*9.625*
Real Estate REITs	*0*	*3.25*	*5.00*
Private Equity	*0*	*0*	*0*

The Investment Policy Statement (IPS) should be reviewed and updated at least annually. Any change to this policy should be communicated in writing on a timely basis to all parties of interest.

STATEMENT OF PURPOSE

The purpose of this Investment Policy Statement (IPS) is to guide the Board of Trustees (the members of the Sewerage & Water Board and the elected employee members to the Board of Trustees) [Appendix A] in effectively supervising, monitoring and evaluating the investment of the SWBNO Employees' Retirement System assets. The Plan's investment program is defined in the various sections of the IPS by:

1. Stating in a written document the Board of Trustees' attitudes, expectations, objectives, and guidelines for the investment of all Plan assets.
2. Setting forth an investment structure for managing all Plan assets. This structure includes various asset classes, investment management styles, asset allocation,

and acceptable ranges that, in total, are expected to produce a sufficient level of overall diversification and total investment return over the long-term.

3. Providing guidelines for each investment portfolio that when viewed in conjunction with each individual investment manager's contract, control the level of overall risk and liquidity assumed in that portfolio.
4. Providing policy concurrent rate-of-return and risk characteristics for various investment options utilized in developing asset allocation. [Appendix B].
5. Encouraging effective communications between the Board of Trustees, the investment consultant and hired money managers.
6. Establishing formal criteria to monitor, evaluate, and compare the performance results achieved by the money managers on a regular basis.
7. Complying with all fiduciary, prudence and due diligence requirements experienced investment professionals would utilize; and with all applicable laws, rules and regulations from various local, state, federal, and international political entities that may impact Plan assets.

This IPS has been formulated, based upon consideration by the Board of Trustees, of the financial implications of a wide range of policies, and describes the prudent investment process the Board of Trustees deems appropriate.

INTRODUCTION

This document establishes the Investment Policy Statement for the SWBNO Employees' Retirement System for the management of the assets held for the benefit of the participants and beneficiaries in the System. The Board of Trustees is responsible for managing the investment process of the Retirement System in a prudent manner with regard to preserving principal while providing reasonable returns.

The Board of Trustees has arrived at this IPS through careful study of the returns and risks associated with various investment strategies in relation to the current and projected liabilities of the Retirement System. This policy has been chosen as the most appropriate policy for achieving the financial objectives of the Retirement System which are described in the Objectives section of this document.

The Board of Trustees has adopted a long-term investment horizon such that the chances and duration of investment losses are carefully weighted against the long term potential for appreciation of assets.

In addition to the policy defined herein, the management of the SWBNO Employees' Retirement System will be in strict compliance with all relevant and applicable legislation.

STATEMENT OF OBJECTIVES

The assets of the SWBNO Employees' Retirement System shall be invested in accordance with all relevant legislation. Specifically:

1. Investment shall be in accordance with the Louisiana Revised Statues, R.S. 11:3821.
2. Investments shall be made solely in the interest of the participants and beneficiaries of the pension plan and for the exclusive purpose of providing benefits to such participants and their beneficiaries and defraying the reasonable expenses of administering the plan.
3. The Board of Trustees and its investments advisors shall exercise the judgment and care under the circumstances then prevailing which an institutional investor of ordinary prudence, discretion and intelligence exercises in the management of large investments entrusted to it not in regard to speculation but in regard to the permanent disposition of funds considering probable safety of capital as well as probable income.

The primary investment objective shall be to achieve full funding of the actuarial accrued liability so that such assets are preserved for the providing of benefits to participants and their beneficiaries and such long-term return (either in the form of income or capital appreciation or both) may without undue risk maximize the amounts available to provide such benefits. These objectives have been established in conjunction with a comprehensive review of both the current and projected financial requirements and investment returns by asset class.

While there cannot be complete assurance that these objectives will be realized, it is believed that the likelihood of their realization is reasonably high based upon this Investment Policy and historical performance of the asset classes discussed herein. The objectives have been based on a five-year investment horizon, so that short-term fluctuation should be viewed secondary to long-term investment results.

Relative performance benchmarks for the System's investment managers are set forth in the Control Procedures section of this document.

This IPS has been arrived at upon consideration by the Board by a wide range of policies, and describes the prudent investment process the Board deems appropriate. This process includes seeking various asset classes and investment management styles that, in total, are expected to offer participants a sufficient level of overall diversification and total investment return over the long-term. The objectives are:

1. ~~1.~~ Have the ability to pay all benefit and expense obligations when due;~~Maintain the purchasing power of the current assets and all future contributions by producing positive real rates of return on Plan assets.~~
2. Achieve a fully funded status with regard to the Accumulated Benefit Obligation and 100% of the Projected Benefit Obligation;~~2. Achieve a fully funded status with regard to the Accumulated Benefit Obligation and 100% of the Projected Benefit Obligation.~~

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, … + Start at: 1 + Alignment: Left + Aligned at: 0" + Indent at: 0.5"

3. Maintain the purchasing power of the current assets and all future contributions by producing positive real rates of return on Plan asset;~~3. Have the ability to pay all benefit and expense obligations when due.~~

4. Maximize returns within reasonable and prudent levels of risk in order to minimize contribution~~4. Maintain flexibility in determining the future level of contributions;.~~

5. Control costs of administering the plan and managing the investments.~~5. Maximize return within reasonable and prudent levels of risk in order to minimize contribution;s.~~ and

6. Maintain flexibility in determining the future level of contributions ~~6. Control costs of administering the plan and managing the investments.~~

Keys to achieving objectives include maximizing investment returns within prudent levels of risk, while minimizing the Plan's reliance on contributions.

Time Horizon

The investment guidelines are based upon the Plan's investment time horizon of (>5) greater than five years. Interim fluctuations should be viewed with appropriate perspective. Similarly, the Plan's, strategic asset allocation is based on this long-term perspective. Short-term liquidity requirements are anticipated to be non-existent, or at least should be covered by the annual contribution.

Risk Tolerances

The Board recognizes the difficulty of achieving the Plan's investment objectives in light of the uncertainties and complexities of contemporary investment markets. The Board also recognizes some risk must be assumed to achieve the Plan's long-term investment objectives. In establishing the risk tolerances of the IPS, the ability to withstand short- and intermediate-term variability were considered. These factors were:

- The SWBNO Employees' Retirement System's strong financial condition enables the Board to adopt a long-term investment perspective, allowing for a less aggressive risk tolerance.
- Demographic characteristics of participants suggest an average risk tolerance due to the moderate to aging work force.

In summary, the SWBNO Employees' Retirement System's prospects for the future, current financial condition and several other factors suggest collectively the Plan can tolerate some interim fluctuations in market value and rates of return in order to achieve long-term objectives.

Performance Target

The desired investment objective is a long-term rate of return on assets that is at least 7.00%, as defined by current[2] actuarial assumptions. Annually, the Plan's overall total return, after deducting for advisory, money management, and custodial fees, as well as

[2] Refer to January 1, 2017 Conefry & Company, LLC Actuarial Valuation.~~Based upon 2010 actuarial report~~

total transaction costs; should perform above a customized index comprised of market indices weighted by the strategic asset allocation of the Plan.

ASSET ALLOCATION POLICY

Targets and Ranges

It shall be the policy of the SWBNO Employees' Retirement System to invest in each style based asset class ranging between a minimum and a maximum of total plan assets as indicated below:

Stated Ranges are as a Percent of Total Plan Assets

~~Mandate~~	~~Minimum~~	~~Target~~	~~Maximum~~
~~**EQUITY**~~		~~**42.00**~~	
~~*US Large Cap Stocks*~~	~~*20.00*~~	~~*20.00*~~	~~*35.00*~~
~~*Large Cap Value*~~	~~*0.00*~~	~~*10.00*~~	~~*35.00*~~
~~*LC[3] Enhanced Core*~~	~~*0.00*~~	~~*10.00*~~	~~*35.00*~~
~~*US Small/Mid Cap Stocks*~~	~~*7.50*~~	~~*13.00*~~	~~*22.50*~~
~~*SMID Cap Core/Value*~~	~~*0.00*~~	~~*13.00*~~	~~*22.50*~~
~~*Non US Stocks*~~	~~*5.00*~~	~~*9.00*~~	~~*10.00*~~
~~*International Equity*~~	~~*5.00*~~	~~*9.00*~~	~~*10.00*~~
~~**FIXED INCOME**~~		~~**37.00**~~	
~~*Core Plus Bond*~~	~~*25.00*~~	~~*28.00*~~	~~*35.00*~~
~~*Global TIPS[4]*~~	~~*0.00*~~	~~*9.00*~~	~~*15.00*~~
~~**ALTERNATIVES**~~		~~**21.00**~~	
~~*Commodities*~~	[illegible]	[illegible]	[illegible]
~~*Multi-Strategy/Absolute[5]*~~	~~*0.00*~~	~~*8.75*~~	~~*10.00*~~
~~*Real Estate/REITs[6]*~~	~~*0.00*~~	~~*5.00*~~	~~*10.00*~~

Mandate	*Minimum*	*Target*	*Maximum*
GLOBAL EQUITY	*36.50*	*49.25*	*65*
U.S. Large Cap Equity	*20.00*	*27.25*	*35.00*
Large Cap Value	*0*	*10.00*	*12.50*
Large Cap Enhanced Core	*0*	*10.00*	*12.50*

Formatted: Centered

Formatted: Centered

Formatted: Centered

Formatted: Centered

Formatted: Centered

[3] ~~Large Cap~~
[4] ~~Treasury Inflation Protected Securities~~
[5] ~~Hedge Fund-of-Funds~~
[6] ~~Real Estate Investment Trusts~~

Large Cap Growth	*0*	*7.25*	*9.00*	**Formatted:** Centered
U.S. Small/Mid Cap Equity	*9.75*	***13.00***	*16.25*	**Formatted:** Centered
SMID Cap Equity	*9.75*	*13.00*	*16.25*	**Formatted:** Centered
Other Small or MID Cap Equity	*0*	*0*	*0*	**Formatted:** Centered
Non US Stocks	*6.75*	***9.00***	*11.25*	**Formatted:** Centered
International Developed Equity	*6.75*	*9.00*	*11.25*	**Formatted:** Centered
International EM Equity	*0*	*0*	*0*	
GLOBAL FIXED INCOME	***35.00***	*38.75*	*100*	**Formatted:** Centered
Core-Plus (Global) Bond	*0*	*37.00*	*40.00*	**Formatted:** Centered
Core Fixed	*27.75*	*0*	*0*	
Convertible Bond	*0*	*0*	*0*	
High Yield Fixed	*0*	*0*	*0*	**Formatted:** Centered
Cash & Equivalents	*0*	*1.75*	*2.00*	
ALTERNATIVES	*0*	[illegible]	*21.00*	**Formatted:** Centered
Commodities	*0*	*0*	*0*	**Formatted:** Centered
HFOF- Absolute Return	*0*	*8.75*	*9.625*	**Formatted:** Centered
Real Estate/REITs	*0*	*3.25*	*5.00*	**Formatted:** Centered
Private Equity	*0*	*0*	*0*	**Formatted:** Centered

During the investment manager selection process, the Board of Trustees will communicate specific manager guidelines regarding capitalization and stylistic characteristics such that the total portfolio conforms to policy. It is expected that these guidelines will be strategic in nature and not change frequently.

Asset Class Guidelines

The Board of Trustees believes long-term investment performance, in large part, is primarily a function of asset class mix. The Board of Trustees has reviewed the long-term performance characteristics of the broad asset classes, focusing on balancing the risks and rewards.

History suggest, that while interest-generating investments, such as bond portfolios, have the advantage of relative stability of principal value; they provide little opportunity for real long- term capital growth due to their susceptibility to inflation. On the other hand, equity investments, such as common stocks, clearly have a significantly higher expected return but have the disadvantage of much greater year-by-year variability of return. From an investment decision-making point of view, this year-by-year variability may be worth accepting, provided the time horizon for the equity portion of the portfolio is sufficiently long (greater -than five years).

Adherence to Policy

The Board of Trustees is guided by the philosophy that asset allocation is the most significant determinant of long term investment return. The Retirement System asset allocation will be maintained as close to the target allocations as reasonably possible. Contributions to the Plan and withdrawals to pay benefits and expenses shall be allocated across portfolios to bring the asset mix as close to the target allocation as possible.

Rapid, substantive and unanticipated market shifts or changes in economic conditions may cause the asset mix to fall outside of the policy range. Any divergence caused by these factors should be of a short-term nature.

The Board of Trustees or its designee will review the Plan's allocation status at least quarterly. It is anticipated that active rebalancing will occur at least annually.

Cash Holdings

It shall be the policy of The Employees' Retirement System of The Sewerage & Water Board of New Orleans to be fully invested to the maximum extent possible. Any cash holdings in separate short term accounts should be kept as small as possible.

However, the Board of Trustees may from time to time authorize the use of cash equivalent(s)[7] and or money market fund(s)[8] as interim investment vehicle(s) for assets being transitioned from one manager/product to another.

For equity and fixed income portfolios, cash and short term instruments maturing in less than 360 days shall be restricted to a maximum of 5% of each portfolio except for brief periods or when building liquidity in anticipation of a large withdrawal.

---

[7] Fixed income instrument maturing in 360 days or less
[8] Very liquid mutual fund that invests solely in cash equivalents

Cash equivalent reserves shall consist of cash instruments having a quality rating by at least two rating agencies[9] of A-2, P-2, F-2, or higher.

Investment managers shall have discretion to invest up to 5% of assets under management in cash reserves when they deem it appropriate. However, the Investment Managers will be evaluated against their peers on the performance of the total funds under their direct management.

Non-Individual Securities

The Board of Trustees may authorize the use of non-individual securities such as indexed instruments[10] (interchangeably referred to as passive instruments), mutual funds, and other pooled (interchangeably referred to as commingled) investment vehicles.

Rebalancing

The percentage allocation to each asset class may vary as much as plus or minus 5% from the strategic allocation (policy), depending upon market conditions. When necessary and/or available, cash inflows/outflows will be deployed in a manner consistent with the strategic asset allocation of the Plan. If there are no cash flows, the allocation of the Plan will be reviewed quarterly.

If the Board of Trustees judges cash flows to be insufficient to bring the Plan within the strategic allocation ranges, the Board of Trustees shall decide whether to effect transactions to bring the strategic allocation within the threshold ranges.

[9] Standard & Poor's, Moody's and or, ~~or~~ Fitch
[10] Also commonly referred to index funds, exchange traded funds, or ETFs.

GUIDELINES FOR INDIVIDUAL SECURITY HOLDINGS

	Equities	Fixed Income & Cash	Alternatives
Minimum Diversification Standards:			
Single Investment	(a) Maximum 6% *ϕ	(a) Maximum 10% *ϕ except U.S. Treasury Notes and Bonds	Not Applicable
	(b) Maximum of 5% of outstanding shares of any company		
Single Industry	(c) Maximum 25% *	(b) Maximum 25% *	
Single Sector	(d) Maximum of 2 times the appropriate style index	(c) Maximum of 2 times the appropriate style index. *	
Minimum Liquidity Standards	(a) Readily marketable securities of U.S corporations, foreign securities or ADRs	(a) Readily marketable U.S. Corporate and Government debt obligations, including mortgage pass-through, CMOs, convertible bonds and foreign securities.	Not Applicable
	(b) Traded on one or more domestic or international exchanges.	(b) Remaining outstanding principal value of the issue must be (and remain) at least $100 million unless Plan Trustees approve.	
Minimum Quality Standards	(a) At least 3 years of earnings history **	Minimum Quality Ratings: Cash & Equivalents – S&P A-2, Moody's P-2, Fitch F-2 S&P – BBB-** Moody's – Baa3** Only Core Plus portfolio is allowed to buy and/or hold bonds rated below BBB-/Baa.	Not Applicable
	(b) Profitable (from continuing operations) in at least 3 of the last 5 years	BBB-/Baa3 bonds not to exceed 15% of portfolio*, † For Core Plus only, bonds rated below BBB-/Baa3 are not to exceed 15% of portfolio; non-rated bonds are not to exceed 1% of portfolio *	
Bond Maturities		(a) Minimum (single issue) maturity: None, but maturities under 12 months will be viewed as "cash" under this policy (b) Maximum remaining, term to maturity (single issue) at purchase: 30 years	Not Applicable

	Equities	Fixed Income & Cash	Alternatives
Foreign Securities	(a) Foreign securities to a maximum of 5%*	Foreign debt issues to a maximum of 5%*† Foreign debt issues to a maximum of 15% for Core Plus portfolio	Foreign debt issues to a maximum of 5%
Prohibited Categories	(a) Preferred stock (b) Lettered stock and other unregistered equity securities (c) Margin purchases (d) Short sales or warrants (e) Issuer related to the investment manager (f) Options, except as noted below (g) Commodity contracts, except stock index futures	(a) issuer related to the investment manager (b) Issues traded flat (not currently accruing interest) c) Debt obligations of either the Sewerage & Water Board of New Orleans or the City of New Orleans (d) Commodity contracts, except bond futures	(a) Direct Investments
Portfolio Turnover (maximum expected in one quarter without prior consultation)	35%	35%	Not Applicable
Reports to the Pension Committee	At least quarterly	At least quarterly	At least quarterly
Written Reports to the Committee	Monthly	Monthly	Quarterly

* Percentages refer to the market value of any single investment manager's portfolio, not the total fund. Small/Mid Cap Manager(s) is allowed a maximum of 10% in a single position. Foreign securities limitations do not apply to International Equity Manager(s) or Core-Plus-Bond Manager(s).

** Either as a ~~stand-alone~~stand-alone company or as a separately identifiable subsidiary, division or line of business. Does not apply to~~Not applicable to~~ Core ~~Bond~~ Plus (Global) Bond, Private Equity, Real Estate/REIT, or Absolute Return. Refer to individual manager guidelines.

ϕ Exception given for indexed or exchange-traded funds and notes (ETF's and ETN's).

†With the exception of Convertible Bonds and Core Bond Plus. Refer to individual manager guidelines.

Formatted: Indent: Left: 0"

DUTIES AND RESPONSIBILITIES

The Board of Trustees is responsible for overseeing the Retirement Systems' investments. This includes, but is not limited to, the selection of acceptable asset classes, allowable ranges of holdings between asset classes and individual investment managers as a percent of assets, the definition of acceptable securities within each asset class, investment performance expectations, and monitoring compliance with state investment regulations.

The Board of Trustees selects, retains and replaces investment managers and custodians, and controls the asset allocation within policy limits.

The Board of Trustees will communicate the policy and performance expectations to the Investment Managers. The Board of Trustees will also review investment performance regularly to assure the policy is being followed and progress is being made toward achieving the objectives.

Board of Trustees

As fiduciaries under the Plan, the primary responsibilities of the Board of Trustees are:

1. Prepare and maintain this investment policy statement;
2. Prudently diversify the Plan's assets to meet an agreed upon risk/return profile;
3. Prudently select both actively managed and indexed (passive) investment products;
4. Control and account for all investment, record keeping, and administrative expenses associated with the Plan;
5. Monitor and supervise all service vendors and investment options; and
6. Avoid prohibited transactions and conflicts of interest.

Pension Consultant

The Board of Trustees will retain a (one or more) third-party Consultant(s) to assist the Board of Trustees in managing the overall investment process. The Consultant(s) will be responsible for guiding the Board of Trustees through a disciplined and rigorous investment process to enable the Board of Trustees to meet the fiduciary responsibilities outlined herein.

Investment Managers

Distinguishable from the Board of Trustees and Pension Consultant, who are responsible for managing the investment process, investment managers are responsible for making investment decisions (security selection and price decisions). The Investment Managers shall be responsible for determining investment strategy and implementing security selection and the timing of purchases and sales within the policy guidelines set forth in this statement and as otherwise provided by the Board of Trustees. The specific duties and responsibilities of each investment manager are:

1. Manage the assets under their supervision in accordance with the guidelines and objectives outlined in their respective contracts, prospectus, or trust agreement.

2. Exercise full investment discretion with regards to buying, managing, and selling assets held in the portfolios.

3. If managing a separate account (as opposed to a mutual fund or a commingled account), seek approval from the Board of Trustees prior to purchasing and/or implementing the following securities and transactions, unless otherwise stated in manager's contract with Board of Trustees:

   - Letter stock and other unregistered securities; commodities or other commodity contracts; and short sales or margin transactions. Securities lending; pledging or hypothecating securities.
   - Investments in the equity securities of any company with a record of less than three years continuous operation, including the operation of any predecessor
   - Investments for the purpose of exercising control of management,

4. Vote promptly all proxies and related actions in a manner consistent with the long-term interest and objectives of the Plan as described in this IPS. Each investment manager shall keep detailed records of the voting of proxies and related actions and will comply with all applicable regulatory obligations.

5. Communicate with the Board of Trustees all significant changes pertaining to the fund it manages or the firm itself. Changes in ownership, organizational structure, financial condition, and professional staff are examples of changes to the firm in which the Board is interested.

6. Effect all transactions for the Plan subject to best price and execution. If a manager utilizes brokerage commission generated from Plan assets to effect soft-dollar transactions, records detailing all activity (brokerage and soft-dollar use) will be kept and communicated to the Board of Trustees on a monthly basis.

7. If applicable (i.e. for active equity managers), to direct its trading to designated commission recapture broker(s) at or near target level of 35% of total trades placed on behalf of Plan. Again, records detailing the level of participation will be kept and communicated to the Board of Trustees on a monthly basis.

8. Use the same care, skill, prudence, and due diligence under the circumstances then prevailing that experienced investment professionals, acting in a like capacity and fully familiar with such matters, would use in like activities for like retirement Plans with like aims in accordance and compliance with ERISA and all applicable laws, rules, and regulations.

9. If managing a separate account[11] (as opposed to an indexed product, mutual fund or commingled account), **acknowledge co-fiduciary responsibility by signing and returning a copy of this IPS.**

[11] Also referred to as SMA or separately managed account

Custodian

Custodians are responsible for the safekeeping of the Plan's assets. The specific duties and responsibilities of the custodian are:

1. Maintain separate accounts by legal registration
2. Value the holdings
3. Collect all income and dividends owed to the Plan
4. Settle all transactions (buy-sell orders) initiated by the Investment Manager
5. Provide monthly reports that detail transactions, cash floaws, securities held and their current value, and change in value of each security and the overall portfolio since the previous report.

INVESTMENT PRODUCT AND MANAGER SELECTION

The process for selecting both indexed strategy products, as well as alternative strategy managers will consist of the Consultant's pre-search development of criterion which consider both quantitative and qualitative characteristics for the specific class and style of indexed or alternative strategy. The Board of Trustees will adopt and diligently apply the criterion in its selection of each passive product or alternative strategy manager.

With exception given to indexed products, for example an iShares or SPDR S&P 500 ETF, as well as alternative strategy managers, for example Private Equity, Absolute Return/HFOFs and/or Real Estate/REIT managers, the Board of Trustees will apply the following due diligence criteria in selecting each (active) equity and fixed income manager.

1. Regulatory oversight: Each investment manager should be a regulated bank, an insurance company, a mutual fund organization, or an SEC registered investment adviser.
2. Correlation to style or peer group: The product should be highly correlated to the asset class of the investment option. This is one of the most critical parts of the analysis, since most of the remaining due diligence involves comparisons of the manager to the appropriate peer group.
3. Performance relative to a peer group: The product's performance should be evaluated against the peer group's median manager return, for 1-, 3-, and 5-year cumulative periods.
4. Performance relative to assumed risk: The product's risk-adjusted performance (standard deviation, alpha and/or Sharpe Ratio) should be evaluated against the peer group's median manager's risk-adjusted performance.
5. Minimum track record: The product's inception date should be greater than three years.
6. Assets under management: The product should have at least $75 million under management.

7. Holdings consistent with style: The screened product should have no more than 20% of the portfolio invested in "unrelated" asset class securities.

8. Stability of the organization: i.e. *Manager Tenure* - no material organizational or investment team changes in the past two years.

Volatility

Consistent with the desire for adequate diversification, the investment policy is based on the assumption that the volatility of the combined portfolios will be similar to that of the market opportunity available to institutional investors with similar return objectives.

The volatility of each investment managers' portfolio will be compared to the volatility of appropriate market indices and peer groups. Above median volatility is acceptable only so long as performance is commensurately above median.

Liquidity

Based on current actuarial assumptions, it is expected that contributions will exceed benefit payments for the foreseeable future. Therefore, there is no need for Investment Managers to maintain liquid reserves for payment of pension benefits.

If benefit payments are projected to exceed contributions in some future period, the Board of Trustees or its designee will notify the investment managers well in advance of any withdrawal orders to allow them sufficient time to build up necessary liquid reserves. The managers will be expected to review the cash flow requirements with the Pension Committee at least annually.

Voting of Proxies

Voting of proxy ballots shall be for the exclusive benefits of the participants and beneficiaries of the Retirement System. Unless the Board of Trustees provides information on how to vote a proxy, the investment managers shall vote the proxies in accordance with its own policy for shareholder issues. Managers will communicate their proxy voting record to the Board of Trustees in writing every quarter and will provide a written summary of all proxies voted on an annual basis.

Execution of Security Trades

The Board of Trustees expects the purchase and sale of securities to be made in a manner designed to receive the combination of best price and execution. The Board of Trustees may implement a Directed Brokerage Program in the future. In June of 2001, the Board of Trustees implemented a Commission Recapture Program.

Securities Lending Guidelines

The Plan may engage in the lending of securities subject to the following guidelines:

1. Collateral on loans is set at 102% of the market value of the security plus accrued interest.
2. Collateral should be marked to market daily.
3. Securities of the System are not released until the custodian bank receives payment for the book entry withdrawal of the loaned security.

4. Eligible securities can include the lending of all U.S. Treasury and other government guaranteed securities, corporate securities, and common stock.

CONTROL PROCEDURES

Conflicts of Interest

The Investment Manager (and any persons acting on its behalf) who enters into a contract with the Plan must reasonably believe, immediately prior to entering into the contract, that the contract represents an arm's length arrangement between the parties and that the Board of Trustees, alone or together with the Board of Trustee's independent agents, understands the proposed method of compensation and its risks. In addition to the requirements of Form ADV, the Investment Manager shall disclose to the Board of Trustees, or to the Board of Trustee's independent agent, prior to entering into an advisory contract, all material information concerning the proposed advisory arrangement including the following:

1. The periods which will be used to measure investment performance throughout the contract and their significance in the computation of the manager's fee.
2. The nature of any index which will be used as a comparative measure of investment performance, the significance of the index, and the reason the Investment Manager believes the index is appropriate.
3. How the securities will be valued and the extent to which the valuation will be determined independently where the Investment Manager's compensation is based in part on the unrealized appreciation of securities for which market quotations are not readily available.

Review of Liabilities

All major liability assumptions regarding number of participants, compensation, benefit levels, and actuarial assumptions will be subject to an annual review by the Board. This review will focus on an analysis of major differences between the Retirement System's assumptions and actual experience.

Review of Investment Policy Statement

The IPS will be reviewed annually and updated with pertinent or substantive changes as frequent as necessary.

Review of Investment Objectives

Investment performance will be reviewed annually to determine the continued feasibility of achieving the investment objectives and the appropriateness of the investment policy for achieving these objectives.

It is not expected that the investment policy will change frequently. In particular, short-term changes in the financial markets should not require an adjustment in the investment policy.

Review of Investments

The Board will review in addition to the total fund; each active manager's and indexed product's performance at least quarterly with its Consultant. The total fund will be measured against a composite index of asset class proxies or benchmarks blended in the same percentages as the IPS asset allocation targets contained herein. Each active investment manager will be measured against an appropriate benchmark(s) as stated in their respective contract(s). Each indexed product will be measured against its appropriate tracking index.

Market Indices

Available benchmarking opportunities for the capital markets include the Dow Jones 30 Industrial Average, S&P 500, Russell 1000 Indexes for large cap equities, the Russell 2000 Index for small cap equities, the MSCI ACWI Index for global equities, the MSCI ACWI ex-U.S. Index for international equities, the Barclays Aggregate Bond Index for investment grade fixed income securities, Venture Economics Index for Private Equity, HFRI Fund-of-Funds Index for Absolute Return and/or other comparable indices appropriate for monitoring individual portfolio investment strategies. Some of the other comparable indices include style indices such as the Russell 1000 Growth or Value Index for large cap growth or value, and the Russell 2000 Growth or Value Index for small cap growth or value.

Performance reviews will focus on:

1. Total Retirement System and investment manager compliance with the IPS guidelines and stated investment regulations.
2. Material changes in the manager organizations, such as in investment philosophy, personnel, acquisitions or losses of major accounts, etc.
3. Comparison of managers' results to a universe of funds using a similar investment style and similar asset classes.
4. Comparison of managers' results to style specific benchmarks established for each individual manager's portfolio. Where multiple asset classes are employed in a portfolio, a customized benchmark index may be developed to mirror the asset classes utilized by the manager.
5. The appropriate market index will be stated in each investment manager's contract.

Compliance

On an ongoing basis, the Board of Trustees and its Consultant will review each investment manager's relative compliance with, and adherence to the principles, guidelines and benchmarks established in this IPS. Annually, each investment manager will be formally examined and graded individually. If, in the opinion of the Board of Trustees, there is concern for remedial action to be taken by the investment manager, it will be expressed and communicated by the Board of Trustees to the Investment Manager at that time.

The investment managers will be responsible for keeping the Board of Trustees advised of any material changes in personnel, investment strategy, or other pertinent information potentially affecting performance of all managers. The investment managers will be responsible for reconciliation with Custodian Bank.

Performance Expectations

The Board of Trustees recognizes that real return objectives may not be meaningful during some time periods. In order to ensure that investment opportunities available over a specific time period are fairly evaluated, the Board of Trustees will use comparative performance statistics to evaluate investment results. Each investment manager (whether equity, fixed income or alternative manager) and the total Retirement System, will be expected to achieve minimum performance standards as follows:

1) Rank in the top forty percent (40%) of an appropriate style peer group of actively managed portfolios over rolling three-year periods.
2) Exceed an appropriate benchmark index, net of management fees over rolling three-year periods.

The Board of Trustees is keenly aware that ongoing review and analysis of the Plan's investment products and managers is just as important as the due diligence implemented during the selection process. The net performance of all indexed products and investment managers will be monitored on an ongoing basis; and at the sole discretion of the Board of Trustees, corrective (probation, termination) or progressive (new hire, add funds) action may be taken if it is deemed appropriate at any time.

On a timely basis, but not less than quarterly, the Board of Trustees will meet to review whether or not individual active investment managers as well as indexed products achieve and maintain the Board's performance expectations as outlined above; specifically:

- The manager's adherence to the Plan's investment guidelines
- Material changes in the manager's organization, investment philosophy, and/or personnel
- Any legal, SEC, and/or other regulatory agency proceedings affecting the manager.

While these performance standards should be achieved over a three to five year period complete market cycle, the Board of Trustees will also monitor performance on a shorter-term basis.

The Investment Managers are requested to be aware at all times of the pension plan's actuarial assumption of seven percent (7%) overall annual return.

Probationary Period

Investment managers should be advised that the Board of Trustees intends to track interim progress toward multi-year (3 to 5-year) goals. However, if in the opinion of the Board of Trustees an investment manager's performance is deemed to be deficient, the Board of Trustees will inform the investment manager in writing that the firm has been placed on probation (*Watch List*). The length of an investment manager's probation period will be determined by the Board of Trustees on a case-by-case basis. If the Board of Trustees' concerns are not sufficiently addressed during this probationary period, or if the investment manager is unable to remedy deficiencies in performance, this would constitute grounds for termination of the investment manager.

An Investment Manager may be removed from probation if, in the opinion of the Board of Trustees, the factors which caused the probationary review have been eliminated, mitigated or otherwise appropriately and sufficiently addressed to the complete and total satisfaction of the Board of Trustees.

Specifically, a manager may be placed on the Watch List and a thorough review and analysis of the investment manager may be conducted, when:

1. A manager performs below median for their peer group over 1, 3, and/or 5 year cumulative period(s); or over any period deemed relevant by the Board of Trustees.

2. A manager's 1 to 3 year risk adjusted return (alpha and/or Sharpe) falls below the peer group's median risk adjusted return.

3. There is a change in the professionals managing the portfolio.

4. There is a significant decrease in the product's assets.

5. There is an indication the manager is deviating from his/her stated style and/or strategy.

6. There is an increase in the product's fees and expenses.

7. Any extraordinary event such as a substantive change in firm ownership occurs that may interfere with the manager's ability to fulfill their role in the future.

The Board of Trustees has determined it is in the best interest of the Plan's participants that performance objectives be established for each investment manager. Manager performance will be evaluated in terms of an appropriate market index (e.g. the S&P 500 stock index for large cap domestic equity manager) and the relevant peer group (e.g. the PSN[1] Large Cap Universe for large cap domestic managers).

A manager evaluation may include the following steps:

1. A letter to the manager asking for an analysis/explanation of their performance (underperformance) for the period(s) under review.
2. An analysis of recent transactions, holdings, and portfolio characteristics to determine the cause for underperformance or to check for a change in style.
3. A meeting with the manager, which may be conducted on-site, to gain insight into organizational changes and any changes in strategy or discipline.

[1] PSN Enterprise is a software application licensed by Plan's Consultant; powered by the PSN investment manager database. The PSN database provides connectivity to separately managed accounts, open ended mutual funds, closed end funds, exchange traded funds, hedge funds, fund-of-funds, stocks, variable annuities and other investment content. A proprietary platform of Informa Investment Solutions, the PSN database was fully integrated into the former Check Free Systems Mobius investment manager database in September 2006.

Style Benchmarks

Style Based Asset Class	Index/Benchmark	Peer Group Universe
Global Equity	***Russell 3000 Index***	***PSN All Cap***
Large Cap Value	Russell 1000 Value Index	PSN Large Cap Value
LC Enhanced Core ~~Large Cap Value~~	Russell 1000 Index~~Russell 1000 Value Index~~	PSN Large Cap~~PSN Large Cap Value~~
Large Cap Growth~~LC Enhanced Core~~	Russell 1000 Growth Index~~Russell 1000 Index~~	*PSN Large Cap Growth*~~PSN Large Cap~~
Mid Cap Equity~~Large Cap Growth~~	Russell Mid Cap Index~~Russell 1000 Growth Index~~	*PSN Mid Cap*~~PSN Large Cap Growth~~
SMID Cap Equity~~Mid Cap Core~~	Russell 2500 Index~~Russell Mid Cap Index~~	PSN Small/Mid Cap ~~PSN Mid Cap~~
Small Cap Equity~~SMID Cap Core~~	Russell 2000 Index~~Russell 2500 Index~~	PSN Small Cap ~~PSN Small/Mid Cap~~
International Equity~~Small Cap Core~~	MSCI ACWI-EX US Index ~~Russell 2000 Index~~	PSN Int'l Equity~~PSN Small Cap~~

Formatted Table

Formatted: Font: Not Bold, Font color: Auto

Formatted: Font color: Auto

Formatted: Font: Not Italic

Formatted: Font: Not Bold, Not Italic

Formatted: Font: Not Bold, Not Italic

International EM Equity~~*International Equity*~~	MSCI Emerging Markets Index~~*MSCI ACWI-EX US Index*~~	PSN Int'l EM~~*PSN Int'l Equity*~~
Global Fixed Income	***Bloomberg Barclays Aggregate Bond***	***PSN Core Plus Fixed***
U.S. Core Bond	Bloomberg Barclays Aggregate Bond Index	PSN Core Fixed
High Yield ~~Core Bond~~	Bloomberg Barclays HY US Index~~Barclays Aggregate Bond Index~~	PSN High Yield~~PSN Core Fixed~~
Core--Plus- (Global) Bond (constrained)	1) Bloomberg Barclays Aggregate Bond Index 2) Bloomberg Barclays ~~Agg~~ Universal Bond Index ~~+ 50 bps~~	PSN Core Plus Fixed
Global TIPS	Bloomberg Barclays World Inflation Linked Bond Index	PSN Global TIPS
Convertible Bonds	BofA ML Inv. Grade Convertible Bond Index	PSN Convertibles
Alternative Investments	*~~Sub-Class~~Custom Blended Index*	
Multi-Strat/Multi-Manager HFOFs/Absolute Return	HFRI Fund-of-Funds Index	PSN Fund-of-Funds
Domestic REITs International REITs	MSCI REIT FTSE/EPRA NAREIT ex US	PSN REIT/Real Estate PSN Global/Int'l REIT
Commodities	S&P GSCI	PSN Commodities & Energy
Private Equity	Cambridge Private Equity	TBD

Formatted: Font: Not Bold

Formatted: Font: Not Bold

Formatted: Font: Not Bold, Not I

Formatted: Font: Not Bold, Not I

Formatted: Centered

Formatted: Centered

Formatted: Left

Cause for Termination

While the Board of Trustees intends to fairly evaluate both indexed (passive) products and active investment managers over time; the Board reserves the right to terminate its relationship with a product sponsor or investment manager at any time without a probationary period if there is:

1. Failure to meet the Board of Trustees' communication and reporting requirements.
2. A significant change in the personnel managing the investment decisions of the Fund, or a change in the ownership of the Investment Manager that could be deemed to adversely impact the management of Fund assets.
3. A lack of confidence that the Investment Manager or his organization can produce acceptable results in the future.
4. Unacceptable justification for poor performance results.
5. Lack of responsiveness to the Board of Trustees.
6. A change in asset allocation which may result in the termination of an Investment Manager for reasons other than for cause.
7. In the Board of Trustees' opinion, a change of Investment Manager would be beneficial to the Plan.

There is no implied contract for a fixed time period, or otherwise, between the SWBNO Employees' Retirement System and any of its Investment Managers, and the relationship between the parties may be terminated at any time for any reason with prior written notification.

Measuring Costs

The Board of Trustees will review, at least annually, all costs associated with the management of the Plan's investments including:

1. Fees and expense reimbursements of pension consultant
2. Fees and expense ratios of each active investment manager and passive investment product
3. Custody Fees: Encompassing the holding of the assets, the collection of income and disbursement of payments.
4. Trading Costs: Evaluating whether or not the manager is demonstrating attention to best execution efforts, commission recapture program targets[13], and other efficiencies in trading securities.

[13] Refer to Page ~~15~~19, ~~#'s~~ numbers 6 and 7 of this IPS for details

POLICY ADOPTION STATEMENT

This Investment Policy document is hereby adopted by the Board of Trustees of the Sewerage and Water Board of New Orleans on ~~May 20~~September 20, ~~2015~~2017.

Adopted by: The Board of Trustees of Sewerage and Water Board of New Orleans

______________________________, Trustee

[illegible]

______________________________, Trustee

[illegible] Representative

______________________________, Trustee

Christopher Bergeron – Elected EE Representative

______________________________, Trustee

~~Harold Heller~~

Chante Powell-Pierre – Elected EE Representative

______________________________, Trustee

Marvin Russell – Elected EE Representative

______________________________, Trustee

[illegible]

______________________________, ~~Trustee~~

[illegible]

________________________________, Trustee

~~Alan Arnold~~John Wilson – Elected EE Representative

________________________________, Trustee

Alan Arnold

~~Robin Barnes~~

________________________________, Trustee

Robin Barnes

~~Marion Bracy~~

________________________________, Trustee

Marion Bracy

~~Dr. Tamika Duplessis~~

________________________________, Trustee

Dr. Tamika Duplessis

~~Ralph Johnson~~

________________________________, Trustee

Stacy Horn Koch

~~Council District "A"Robin Barnes~~

________________________________, Trustee

Ralph Johnson ~~Council District "B".~~

~~Eric Blue~~

_________________________________, Trustee.

Joseph Peychaud

~~Council District "C"~~

[illegible]

_________________________________, Trustee

[illegible]

_________________________________, Trustee

Scott Jacobs

_________________________________, Trustee

Keri Kane

_________________________________, Trustee

Ray Manning

Mark Moody

_________________________________, Trustee

Council District "A" - TBD

~~Joseph Peychaud~~

_________________________________, Trustee

Council District "B" - TBD

_________________________________, Trustee

Council District "C" - TBD

~~Stacey Horn Koch-~~[illegible]

Formatted: Left

Formatted: Left

CO-FIDUCIARY ACKNOWLEDGEMENT

The undersigned hereby acknowledges fiduciary capacity as defined by the Employee Retirement Investment Security Act (ERISA) of 1974.

The undersigned hereby acknowledges that it has read this Investment Policy Statement document and further will comply with the procedural and reporting requirements contained herein: and as amended by the Board of Trustees from time to time.

Acknowledged by:

Print Name:
Title:
Company:

APPENDIX A

Sewerage and Water Board of New Orleans

Board Officers

Mitchell J. Landrieu, President

[illegible] ~~Suchitra Satpathi~~, <u>Mayor's Representative</u>

[illegible] ~~Manning Scott Jacobs~~-President Pro-Tem

Sewerage and Water Board of New Orleans

Board Members

Alan Arnold

<u>Robin Barnes</u>

~~Robin Barnes~~

Marion Bracy

Dr. Tamika Duplessis

<u>Stacy Horn Koch</u>

<u>Ralph Johnson</u>

~~Stacy Horn Koch~~

~~Scott Jacobs~~

~~Kerri Kane~~

~~Mark Moody~~

Formatted: Indent: Left: 2.5"

Joseph Peychaud

~~Kimberly Thomas~~

Sewerage and Water Board of New Orleans

Employee Trustees

<u>Christopher Bergeron</u>

<u>Chante' Powell-Pierre</u>

~~Harold Heller~~

Marvin Russell

~~Gerald Tilton~~

John Wilson

Formatted: Left

Sewerage and Water Board of New Orleans Management

Executive Director

Timothy W. Viezer, PhD, CFA, CAIA

Chief Investment Officer

~~Cedric S. Grant, Executive Director~~

~~Robert K. Miller, Deputy Executive Director~~

APPENDIX B

SUMMARY OF CAPITAL MARKETS ASSUMPTIONS ~~INPUTS~~

LONG TERM CAPITAL MARKET ASSUMPTIONS
RETURN AND RISK CHARACTERSTICS

ASSET CLASS ~~CORRELATION~~	~~EXPECTED~~ E_R ~~AROR~~RETURN	E_σ RISK	CORRELATIONS ~~to US LCE~~
US Large Cap Equity	8.40	17.00	1.00
US Mid Cap Equity	8.55	21.00	.91
US Small Cap Equity	8.70	25.00	.80
US Long Bonds	4.75	6.00	.30
Cash Equivalents	3.00	3.00	-.01
Non-US Equity	8.70	20.00	.65
Non US Fixed Income	4.75	10.00	.04
Inflation Indexed Bonds	4.50	5.50	.30
High Yield Bonds	7.00	10.00	.50
Private Equity	12.00	30.00	.73
Absolute Return	7.50	9.00	.50
Real Estate	7.00	16.00	.45
Emerging Equities	9.50	28.00	.60

Correlations are to US Large Cap Equity;

E_R = Expected AROR Annualized Rate of Return; and

~~Note:~~ E_σ ~~Risk is σ~~= Expected Risk quantified as a measurement of Standard Deviation of the annual variability of returns.

~~AROR = Annualized Rate of Return.~~

The above table was developed in November 2009 utilizing data that was derived from sources believed to be accurate and reliable. Neither forecasts nor past performance are indicative of future results; therefore there is no implied assurance of any individual asset class achieving the referenced expected return, risk or correlation characteristics.

Formatted: Space After: 0 pt
Formatted: Font: Calibri
Formatted: Justified, Space After: 0 pt
Formatted: Font: Calibri, 14 pt
Formatted: Normal, Justified, Font color: Auto
Formatted: Space After: 0 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 14 pt
Formatted: Space After: 0 pt
Formatted: Font: Calibri, 14 pt
Formatted: Space After: 0 pt
Formatted: Font: 14 pt, Font color: Auto
Formatted: Font: 12 pt, Font color: Auto
Formatted: Font: Calibri, 12 pt
Formatted: Font: Calibri, 12 pt
Formatted: Font: Calibri, 14 pt
Formatted: Font: Calibri, 12 pt
Formatted: Font: 10 pt
Formatted: Font: Not Italic

~~US LCE – US Large Capitalization Equity.~~

~~The above table was developed in November 2009 utilizing data that was derived from sources believed to be accurate and reliable. Past performance is not necessarily indicative of future results; hence, there is no implied guarantee that any individual asset class will achieve the referenced Expected AROR.~~

Formatted: Font: Calibri, 12 pt

Formatted: Normal (Web), Left, Sp... 0 pt, Font Alignment: Center

Formatted: Font: Calibri

Formatted: Font: (Default) Calibri...

Formatted: Space After: 0 pt

APPENDIX C

GLOSSARY OF TERMS

Absolute Return Strategies: Strategies that are developed by private investment firms that seek to generate high absolute returns taking active positions in a variety of markets employing different financial instruments.

Active Management: (also called *active investing*) refers to a portfolio management strategy wherein the manager makes specific investments with the goal of outperforming an investment benchmark index. Investors or mutual funds that do not aspire to create a return in excess of the market benchmark index will often invest in an index fund that replicates as closely as possible the investment weighting and returns of that index. This is called passive management. Active management is the opposite of passive management, because the manager of a passive management fund does *not* seek to outperform the benchmark index.

Accumulated Benefit Obligation: ABO is an approximate measure of the liability of a pension plan in the event of a termination at the date the calculation is performed.

Alpha: This statistic measures a portfolio's return in excess of the market return adjusted for risk. It is a measure, of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk, which was taken for that level of market exposure.

Asset Allocation: The process of determining the optimal allocation of a fund's portfolio among broad asset classes.

AROR: Annualized rate of return.

Basis Point: 100 bps (basis points) equals 1%.

Best Execution: This is formally defined as the difference between the strike price (the price at which a security is actually bought or sold) and the "fair market price", which involves calculating opportunity costs by examining the security price immediately after the trade is placed. Best execution occurs when the trade involves no lost opportunity cost, for example, when there is no increase in the price of a security shortly after it is sold.

Beta: A statistical measure of the volatility or sensitivity, of rates of return on a portfolio or security in comparison to a market index. The beta value measures the expected change in return per one percent change in the return on the market. Thus, a portfolio with a beta of 1.1 would move 10% more than the market.

Commingled Fund: This is a type of investment fund that is similar to a mutual fund in that investors purchase and redeem units that represent ownership in a pool of securities. Commingled funds usually are offered through a bank- administered plan allowing for broader and more efficient investing.

Commission Recapture: An agreement by which a plan Fiduciary earns credits based upon the amount of brokerage commissions paid. These credits can be used for services that will benefit the plan such as consulting services, custodian fees, or hardware and software expenses.

Convertible Bonds: Securities, usually bonds or preferred shares that can be converted into common stock.

Core Fixed Income - A fixed income approach that applies 90% or more of the securities available in the Lehman Brothers Aggregate Index. MBS issues should be the major component of the portfolio in a core product.

Core Fixed Plus: A debt investment with which the investor loans money to an entity (company or government) that borrows the funds for a defined period of time at a specified interest rate. This fixed-income style permits managers to add instruments with greater risk and greater potential return, such as high yield, global and emerging market debt, to their core portfolios of investment-grade bonds.

Correlation Coefficient: Correlation measures the degree to which two variables are associated with one another. Correlation is a commonly used tool for constructing a well-diversified portfolio. Traditionally, equities and fixed-income asset returns have not moved closely together. The asset returns are not strongly correlated. A balanced fund with equities and fixed-income assets represents a diversified portfolio that attempts to take advantage of the low Correlation between the two asset classes.

Defined Benefit Plan: A DB plan is a type of employee benefit plan in which employees know (through a formula) what they receive upon retirement or after a specified number of years of employment with an employer. The employer is obligated to contribute funds into the defined benefit plan based on an actuarially determined obligation that takes into consideration the age of the workforce, their length of service and the investment earnings that are projected to be achieved from the funds contributed. Defined Benefit Plans are over funded if the present value of the future payment obligations to employees is less than the current value of the assets in the Plan. It is under funded if the obligations exceed the current value of these Plan assets.

Direct Investment: (1). Also referred to as **Direct Stock Plans** are offered by companies that allow you to purchase or sell stock directly through them without your having to engage an investment advisor or pay commissions to a broker. But you may have to pay a fee for using the plan's services. Some companies require that you already own stock in the company or are employed by the company before you may participate in their direct stock plans. You may be able to buy stock by investing a specific dollar amount rather than having to pay for an entire share. DSPs usually will not allow you to buy or sell your securities at a specific market price or at a specific time. Rather, the company will purchase or sell shares for the plan at established times — for example, on a daily, weekly, or monthly basis — and at an average market price. You can find when the company will buy and sell shares and how it determines the price by reading the company's disclosure documents. Depending on the plan, you may be able to have your shares transferred to your broker to have them sold, but the plan may charge you a fee to do so. (2.) Also refers to the prohibited process or transaction type as it relates to alternatives. For this purpose, Direct Investment is defined as an investment made directly by an investor with a private company as it relates to a Private Equity or Absolute Return transaction; without the benefit and discretion of a third party investment manager or advisor.

Directed Brokerage: Circumstances in which a board of trustees or other fiduciary requests that the investment to a particular broker so that the commissions generated can be used for specific services or resources. See ***Soft Dollars***.

Dollar-Weighted Rate of Return: Method of performance measurement that calculates returns based on the cash flows of a security or portfolio. A dollar-weighted return applies a discounted cash flow approach to obtain the return for a period. The discount rate that equates the cash inflow at the end of the period plus any net cash flows within the period with the initial outflow is the dollar-weighted rate of return. This return also is referred to as the internal rate of return (IRR).

Economically-Targeted Investment (ETI): Investments where the goal is to target a certain economic activity, sector, or area in order to produce corollary benefits in addition to the main objective of earning a competitive risk-adjusted rate of return.

Equal Weighted: In a portfolio setting, this is a composite of a manager's return for accounts managed that gives equal consideration to each portfolio's return without regard to size of the portfolio. Compare to ***Size-Weighted Return***. In index context, equal weighted means each stock is given equal consideration to the index return without regard to market capitalization. The Value Line Index is an example of an equal weighted index.

ERISA: Employee Retirement Income Security Act is a 1974 law governing the operation of most private pension and benefit plans. The law eased pension eligibility rules, set up the ***Pension Benefit Guaranty Corporation***, and established guidelines for the management of pension funds.

Fiduciary: Indicates the relationship of trust and confidence where one person (the Fiduciary) holds or controls property for the benefit of another person.

Any person who (1) exercises any discretionary authority or control over the management of a plan or the management or disposition of its assets, (2) renders investment advice for a fee or other compensation with respect to the funds or property of a plan, or has the authority to do so, or (3) has any discretionary authority or responsibility in the administration of a plan.

Foreign Direct Investment (FDI) is defined as a company from one country making a physical investment into building or factory in another country. Its definition can be extended to include investments made to acquire lasting interest in enterprises operating outside of the economy of the investor.

Fund-of-Funds: A fund-of-funds **(FoF)** is an investment fund that uses an investment strategy of holding a portfolio of other investment funds rather than investing directly in shares, bonds or other securities. This type of investing is often referred to as multi-manager investment.

There are different types of 'fund of funds', each investing in a different type of collective investment scheme (typically one type per FoF), eg. Mutual Fund FoF, Hedge Fund FoF, Private Equity FoF or Investment Trust FoF.

Geometric Return: A method of calculating returns which links portfolio results on a quarterly or monthly basis. This method is best illustrated by an example, and a comparison to Arithmetic Returns, which does not utilize a time link. Suppose a $100 portfolio returned +25% in the first quarter (ending value is $125) but lost 20% in the second quarter (ending value is $100). Over the two quarters the return was 0% - this is the geometric return. However, the arithmetic calculation would simply average the two returns: (+25%)(.5) + (-20%)(.5) +2.5%.

Global: This term commonly refers to all countries including the United States. Common benchmarks include the MSCI All Country World Index (ACWI).

Hedge Fund: A hedge fund is a private investment fund open to a limited range of investors that is permitted by regulators to undertake a wider range of activities than other investment funds and also pays a performance fee to its investment manager. Although each fund will have its own strategy which determines the type of investments and the methods of investment it undertakes, hedge funds as a class invest in a broad range of investments, from shares, debt and commodities to works of art.

As the name implies, hedge funds often seek to offset potential losses in the principal markets they invest in by hedging their investments using a variety of methods, most notably short selling. However, the term "hedge fund" has come to be applied to many funds that do not actually hedge their investments, and in particular to funds using short selling and other "hedging" methods to increase rather than reduce risk, with the expectation of increasing return.

Hedge Fund Fund-of-Funds: (HFOFs) An investment fund consisting of multiple hedge funds. HFOFs can be made up of several hedge funds with similar strategic focus or several hedge funds with varying or multiple strategies. The latter would be referred to as a multi-strategy HFOF.

International: This term commonly refers to all countries excluding the United States. Common benchmarks include the MSCI All Country World Index (ACWI) ex US and the MSCI EAFE Index.

Large Cap (LC) Enhanced Core: An investment seeking to provide a total return that exceeds that of typically the S&P 500 index. The fund normally invests at least 80% of net assets in common stocks that comprise the S&P 500 Index, convertible securities that are convertible into stocks included in that index, and derivatives whose returns are closely equivalent to the returns of the S&P 500 Index or its components. It generally holds fewer stocks than the index and may hold securities that are not in the index.

Large Cap Growth: Large-Cap Growth funds seek to invest in large companies with good growth prospects. According to Morningstar, large-cap funds invest in companies with market capitalizations of more than $11 billion. Other organizations may use different definitions. Large-cap funds typically are less volatile than mid-cap and small-cap funds because large companies are more established and more predictably successful than smaller companies. Large companies also are more likely to pay dividends. Growth funds often have high P/E ratios because managers are willing to pay a premium for stocks of fast-growing companies.

Large Cap Value: Large-Cap Value funds seek capital appreciation by investing primarily in large companies with market capitalizations of $5 billion or more. In selecting stocks, managers of value funds target companies that appear undervalued in terms of price-earnings ratios, price-to-book ratios or other such measures. Large-cap funds tend to be less volatile than those that invest in smaller companies.

Liquidity Risk: The risk that there will be insufficient cash to meet the fund's disbursement and expense requirements.

Market Capitalization: The market cap of a stock is its current price multiplied by the number of shares outstanding. It is the measure of a company's total value on a stock exchange.

Market Timing: A form of ***Active Management*** that moves funds between asset classes based on short-term expectations of movements in the capital markets. (Not recommended as a prudent process). It is very difficult to improve investment performance by attempting to forecast market peaks and troughs. A forecasting accuracy of at least 71% is required to outperform a buy and hold strategy.

Market-Weighted: Typically used in an index composite. The stocks in the index are weighted based on the total ***Market Capitalization*** of the issue. Thus, more consideration is given to the index's return for higher market capitalized issues than smaller market capitalized issues.

Money Markets: Financial markets in which financial assets with a maturity of less than one year are traded. Money market funds also. Refer to open-end mutual funds that invest in low-risk, highly liquid, short-term financial instruments and whose net asset value is kept stable at $1 per share. The average portfolio maturity is 30 to 60 days.

Passive Management: (also called **passive investing**) is a financial strategy in which a fund manager makes as few portfolio decisions as possible, in order to minimize transaction costs, including the incidence of capital gains tax. One popular method is to mimic the performance of an externally specified index—called an 'index funds'. Passive management is most common in the equity markets, where index funds track a stock market index, but it is becoming more common in other investment types, including bonds, commodities, and hedge funds.

Private Equity: Equity capital made available to companies or investors, but not quoted on a stock market. The funds raised through private equity can be used to develop new products and technologies, to expand working capital, to make acquisitions, or to strengthen a company's balance sheet.

Profit Sharing Plan: Retirement plan that receives contributions as a percentage of the company's profits.

Projected Benefit Obligation: PBO is a measure of a pension plan's liability at the calculation date assuming that the plan is ongoing and will not terminate in the foreseeable future.

Proxy Voting: A written authorization given by a shareholder to someone else to vote his or her shares at a stockholders annual or special meeting called to elect directors or for some other corporate purpose.

REIT (Real Estate Investment Trust): An investment fund whose objective is to hold real estate-related assets, either through mortgages, construction and development loans, or equity interests.

Residual Risk: Residual risk is the unsystematic, firm-specific, or diversifiable risk of a security or portfolio. It is the portion of the total risk of a security or portfolio that is unique to the security or portfolio itself and is not related to the overall market. The residual risk in a portfolio can be decreased by including assets that do not have similar unique risk.
For example, a company that relies heavily on oil would have the unique risk associated with a sudden cut in the supply of oil. A company that supplies oil would benefit from a cut in another company's supply of oil. A combination of the two assets helps to cancel out the unique risk of the supply of oil. The level of residual risk in a portfolio is a reflection of the "bets" which the manager places in a particular asset class or sector. Diversification of a portfolio can reduce or eliminate the residual risk of a portfolio.

Risk-Adjusted Return: The return on an asset or portfolio, modified to explicitly account for the risk of the asset or portfolio.

Risk-Free Rate-of-Return (R_f): This rate is widely accepted as the return on a 90-day T-Bill. This is used as a proxy for no risk due to its US Government issuance and short-term maturity. The term is really a misnomer since nothing is free of risk. It is utilized since certain economic models require a "risk free" point of departure. See ***Sharpe Ratio.***

R-squared (R^2): Formally called the coefficient of determination, this measures the overall strength or "explanatory power" of a statistical relationship. In general, a higher R^2 means a stronger statistical relationship between the variables that have been estimated, and therefore more confidence in using the estimation for decision-making.

SWBNO: Sewerage and Water Board of New Orleans (Plan Sponsor)

Safe Harbor Rules: A series of guidelines which when in full compliance may limit a fiduciary's liabilities.

Sharpe Ratio: This statistic is a commonly used measure of risk-adjusted return. It is calculated by subtracting the ***Risk-free Return*** (usually the then current 3-Month T-Bill rate) from the portfolio return and dividing the resulting "excess return" by the portfolio's total risk level (standard deviation). The result is a measure of return gained per unit of total risk taken. The Sharpe ratio can be used to compare the relative performance of managers. If two managers have the same level of risk but different levels of excess return, the manager with the higher Sharpe ratio would be preferable. The Sharpe ratio is most helpful when comparing managers with both different returns and different levels of risk. In this case, the Sharpe ratio provides a per-unit measure of the two managers that enables a comparison.

Socially-Targeted Investment: An investment that is undertaken based upon social, rather than purely financial, guidelines. See also ***Economically-Targeted Investment.***

Soft-Dollars: The portion of a plan's commission expense incurred in the buying and selling of securities that is allocated through a ***Directed Brokerage*** arrangement for the purpose of acquiring goods or services for the benefit of the plan. In many soft dollar arrangements, the payment scheme is affected through a brokerage affiliate of the consultant. Broker-consultants servicing smaller plans receive commissions directly from the counseled account. Other soft dollar schemes are effected through brokerages that, while acting as the clearing/transfer agent, also serve as the conduit for the payment of fees between the primary parties to the directed fee arrangement.

Standard Deviation (Risk): A statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns were normally distributed (i.e., has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Strategic Asset Allocation: Rebalancing back to the normal mix at specified time intervals (quarterly) or when established tolerance bands are violated (±5%).

Tactical Asset Allocation: The "first cousin" to ***Market Timing*** because it uses certain "indicators" to make adjustments in the proportions of portfolio invested in three asset classes - stocks, bonds, and cash.

Time Horizon: *The Plan* or portfolio's investment time horizon is defined as the point in time when disbursements in a given year exceed the sum of contributions, and increase in assets as a result of investment performance. In other words, *the Plan's* time Horizon is the point in time when there is more money going out than there is coming in.

It can also be described as the primary variable in determining the allocation between equities and fixed income. An investment time horizon of less than five years is considered *short*, while five years or more is considered *long*.

Time-Weighted Rate of Return: Method of performance measurement that strips the effect of cash flows on investment performance by calculating sub period returns before and after a cash flow and averaging these sub period returns. Because dollars invested do not depend on the investment manager's choice, it is inappropriate to weight returns within a period by dollars.

Treasury Inflation Protected Securities (TIPS): A special type of Treasury note or bond that offers protection from inflation. As with other Treasuries, when you buy an inflation-indexed security you receive interest payments every six months and a payment of principal when the security matures. The difference is that the coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI).

Trading Costs: Behind investment management fees, trading accounts for the second highest cost of plan administration. Trading costs usually are usually quoted in cents per share. Median institutional trading costs range around 5 to 7 cents per share.

(U.S.) 90-Day T-Bill: The 90-Day or 3-Month T-Bill provides a measure of riskless return. The rate of return is the average interest rate available in the beginning of each month for a T-Bill maturing in 90 days.

(U.S.) Large Cap: Companies based in the United States referred to as domestic companies having market capitalizations between $10 billion and $200 billion.

(U.S.) Mid Cap: Companies based in the United States referred to as domestic companies having a market capitalization of between $2 billion and $10 billion.

(U.S.) SMID Cap: Companies based in the United States referred to as domestic companies having a market capitalization of between $300 million and $10 billion. A term commonly used to refer to an equity style of management which combines both Small Cap and Mid Cap disciplines. A term used to acknowledge both Small and Mid-Cap Stocks collectively.

(U.S.) Small Cap: The definition of (U.S.) small-cap can vary throughout the investment industry, but generally a company based in the United States with a market capitalization between $300 million to $2 billion.

Variance: The Variance is a statistical measure that indicates the spread of values within a set of values. For example, the range of daily prices for a stock will have a variance over a time period that reflects the amount that the stock price varies from the average, or mean price of the stock over the time period. Variance is useful as a risk statistic because it gives an indication of how much the value of a portfolio might fluctuate up or down from the average value over a given time.

This glossary was compiled from various sources including the following:

Eugene B. Burroughs, CFA, Investment Terminology (Revised Edition), International Foundation of Employee Benefit Plans, Inc., 1993;~~,~~
John Downes, Jordan Elliot Goodman, Dictionary of Finance and Investment Terms (Third Edition), Barron's Educational Series, Inc.;
John W. Guy, How to Invest Someone Else's Money, Irwin Professional Publishing, Burr Ridge, Illinois;~~,~~
Donald B. Trone, William R. Allbright, Philip R. Taylor, The Management of Investment Decisions, Irwin Professional Publishing, Burr Ridge, Illinois;~~,~~
Donald B. Trone and William R. Allbright, Procedural Prudence for Fiduciaries, self- published, 1997;~~,~~
Foundation for Fiduciary Studies, Auditor's Handbook, 2002-2003;
~~Wikipedia (free encyclopedia)~~
Investment Management Consultants Association (IMCA); and
PSN Enterprise

Formatted: Space After: 0 pt

Page 5: [1] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [2] Formatted Table	Octave Francis III	12/30/2015 2:32:00 PM

Formatted Table

Page 5: [3] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [4] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [5] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [6] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [7] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [8] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [9] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [10] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [11] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [12] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [13] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [14] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [15] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [16] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [17] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [18] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt, Bold

Page 5: [19] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [20] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [21] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [22] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [23] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [24] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [25] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [26] Formatted Table	Octave Francis III	12/30/2015 2:32:00 PM

Formatted Table

Page 5: [27] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [28] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [29] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [30] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [31] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [32] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [33] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [34] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [35] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [36] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [37] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [38] Formatted Table	Octave Francis III	12/30/2015 2:32:00 PM

Formatted Table

Page 5: [39] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [40] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [41] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [42] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [43] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [44] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [45] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Page 5: [46] Formatted	Octave Francis III	12/30/2015 2:32:00 PM

Centered

Page 5: [47] Formatted	Octave Francis III	9/1/2017 4:16:00 PM

Font: 8 pt

Sewerage & Water Board of New Orleans

Pension Committee Meeting
October 7, 2015

Pension Statistics

- Funded Ratio 78.4%.
- Employer Contribution Rate 22.573%.
- Employee Contribution Rate 6.000%.
  Amortizing Unfunded Actuarial Liability over 25 years.
- Pension Asset $236.5 million.
- Unfunded Actuarial Liability $68.3 million.

Current Committee Strategy

Reviewing equity, fixed income, and alternative investment allocations and managers performance *to ensure adequacy of investments for meeting obligations to vested employees*.

Recommended Next Steps

- *Sell TIPS / Western Asset Management*
- *Allocate funds into Core Plus / Pyramis Global Advisors*

Recommended Next Steps

- *Sell Commodities / Elements Rogers and Powershares DB*
- *Allocate funds into Global Equity / pro-rata into Barrow Hanley, Chicago Equity, New South, and Earnest*

Recommended Next Steps

- *Sell International REITS / iShares International Real Estate ETF*
- *Allocate funds into Domestic REIT / Vanguard REIT*

Recommended Next Steps

- *Review performance of active managers on quarterly basis and consider shift to passive investments.*

Recommended Next Steps

- ***Prepare for upcoming Compensation and Benefit Study to evaluate potential shift from Defined Benefit to Defined Contribution pension for non-vested employees.***


SEWERAGE & WATER BOARD
CRESCENT BOX
WATER METER
FORD METER BOX CO. WABASH, IND.
NEW ORLEANS, LA.
®

"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board OF NEW ORLEANS

MITCHELL J. LANDRIEU, President
WM. RAYMOND MANNING, President Pro-Tem

625 ST. JOSEPH STREET
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52W-ATER
www.swbno.org

October 7, 2015

The Pension Committee of Sewerage and Water Board of New Orleans met on Wednesday, October 7, 2015 at 10:30 AM in the Board Room at 625 St. Joseph Street.

ATTENDANCE

PRESENT: Mr. Wm. Raymond Manning (Chairman)
Mr. Alan Arnold
Mr. Harold Heller, Jr.
Mr. Joseph Peychaud
Mr. Gerald Tilton
Mr. John H. Wilson III

ABSENT: Mr. Scott Jacobs
Mr. Marvin R. Russell, Jr.

Also in attendance were Cedric S. Grant, Executive Director; Robert K. Miller, Deputy Director; Nolan P. Lambert, Special Counsel; Director's Office, Legal, Finance and Personnel Department staff; Stephen Daste, Melanie Parent, and Octave Francis of FFC Capital Management; Janice Leaumont of Capital One; John Weiler of Weiler & Rees; and Theo Sanders of LAMP.

The meeting was called to order to discuss and act upon the following matters:

APPROVAL OF PREVIOUS REPORTS

The Pension Committee approved and accepted the Pension Committee Report of August 5, 2015.

MOTION TO INCLUDE PRESENTATION OF RECOMMENDATIONS BY THE EXECUTIVE DIRECTOR AND ACTION ON THE RECOMMENDATIONS ON THE CURRENT AGENDA

Mr. Lambert noted that the motion to include the presentation of recommendations and any actions taken on the recommendations required the unanimous consent of the Committee members present. Upon proper motion and second, the Committee unanimously approved to include Mr. Cedric Grant's presentation on the current agenda.

EXECUTIVE DIRECTOR'S PRESENTATION

Mr. Grant opened the presentation by noting certain pension statistics, particularly the funded ratio and unfunded actuarial liability. He observed that the current strategy underway by the Pension Committee was to review the equity, fixed income, and alternative investment allocations and managers performance in order to ensure adequacy of investments for meeting obligations to vested employees. With that in mind, recommended these next steps:

1. *Sell TIPS / Western Asset Management and allocate funds into Core Plus / Pyramis Global Advisors.*
2. *Sell Commodities / Elements Rogers and Powershares DB and allocate funds to Global Equities / pro-rata into Barrow Hanley, Chicago Equity, NewSouth, and Earnest.*
3. *Sell International REITS / iShare International Real Estate ETF and allocate funds into Domestic REIT / Vanguard REIT.*
4. *Review performance of Active Managers on quarterly basis and consider shift to passive investments.*
5. *Prepare for Upcoming Compensation and Benefit Study to evaluate potential shift from Defined Benefit to Defined Contribution pension for non-vested employees.*

Following the presentation, the Committee discussed the recommendations in detail and there was apparent consensus on items 1, 4, and 5.

Mr. Arnold then made the following motion: to sell TIPS Bonds / Western Assets Management and allocate funds into Core Plus / Pyramis Global Advisors; and to review performance of active managers on quarterly basis and consider shift to passive investments; and to prepare for upcoming compensation and benefit study to evaluate potential shift from a defined benefit to a defined contribution pension plan for non-vested employees. Upon second by Mr. Peychaud, the motion was unanimously approved.

Following action on those items, Mr. Arnold then moved to sell Commodities / Elements Rogers and Powershares and allocate the funds to Global Equities / pro-rata to Barrow Hanley and Chicago Equity. The motion failed for lack of a second.

As an alternative to that motion, Mr. Wilson moved to sell Commodities / Elements Rogers and Powershares and allocate the funds to Global Equities / pro-rata to Barrow Hanley, Chicago Equity, NewSouth, and Earnest. Upon second by Mr. Arnold, the motion failed to receive the unanimous consent of the members present.

ADJOURNMENT

There being no further business to come before the Committee, the meeting adjourned at approximately 11:20 AM.

Respectfully Submitted,

Wm. Raymond Manning
Chairman

"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52W-ATER
www.swbno.org

MITCHELL J. LANDRIEU, President
WM. RAYMOND MANNING, President Pro-Tem

November 4, 2015

The Pension Committee of Sewerage and Water Board of New Orleans met on Wednesday, November 4, 2015 at 4:00 PM in the Board Room at 625 St. Joseph Street.

ATTENDANCE

PRESENT: Mr. Wm. Raymond Manning (Chairman)
Mr. Alan Arnold
Mr. Harold Heller, Jr.
Mr. Scott Jacobs
Mr. Joseph Peychaud
Mr. Marvin R Russell, Jr.
Mr. John H. Wilson III

ABSENT: Mr. Gerald Tilton

Also in attendance were Cedric S. Grant, Executive Director; Robert K. Miller, Deputy Director; Nolan P. Lambert, Special Counsel, Director's Office, Legal, Finance and Personnel Department staff; Stephen Daste, Melanie Parent and Octave Francis of FFC Capital Management; John Weiler of Weiler & Rees.

CHANGES TO THE EQUITY, FIXED INCOME, AND ALTERNATIVE INVESTMENT ALLOCATIONS AND MANAGERS

Mr. Francis presented FFC's analysis of the Q-3-2015 Investment Program Status. FFC recommended:

- Termination of Western Asset, Elements Rogers Commodities, and Powershares DB Commodities with proceeds allocated to the remaining system investment managers within the terminated investment managers asset class or placed in cash until a suitable asset class is selected or investment can be selected.

- Placing Ernest Partners, Vanguard, and iShares on probation for 90 days.

The unanimous approval from the October 7, 2015 Pension Committee meeting to terminate Western Asset TIPS and allocate 100% those proceeds into Pyramis Global was reaffirmed.

Mr. Arnold motioned to sell Elements Rogers and Powershares DB at the earliest convenience. Upon a second by Mr. Jacob, the motion was approved.

Mr. Arnold motioned to sell iShares and place the proceeds in cash but the transition sale would not be effected for the next 30 day. Upon a second by Mr. Wilson, the motion was approved.

2015 ANNUAL AFFIRMATION STATEMENT

Mr. Francis presented his Affirmation Statement for 2015 confirming his compliance with the professional services agreement with the Board regarding no conflicts of interest.

RECONCILIATION OF INVESTMENT RETURN INFORMATION

Mr. Miller noted that there were discrepancies between the investment returns reported from the investment managers and the investment returns reported from the pension investment consultant. Staff met with the pension investment consultant to review the attached reports and determined these conclusions:

The investment return reports from the actively managed investment funds are ad hoc legacy reports requested by provided directly to the Pension Committee for the purpose of providing information as soon as practicable following the month end and do not contain adjustments and corrections that occur following the month end. Staff considers the differences between the investment returns reported from the investment managers and the investment returns reported from the pension investment consultant to be immaterial over the long term.

PRESENTATION OF SEPTEMBER 2015 FINANCIAL RESULTS

Mr. Francis presented FFC's September 2015 Flash Performance Report.

PRESENTATION BY ALAN ARNOLD

Mr. Arnold distributed information and presented remarks regarding *Analysis of US Equity Managed Portfolios Relative to Cost Effective of Passive Alternative for this Space*.

Mr. Manning called on Mr. Francis and Mr. Miller to come back to the next meeting with a schedule and process for concluding the current discussions on asset allocation and investment selections.

ADJOURNMENT

There being no further business to come before the Committee, the meeting adjourned at approximately 6:00PM.

Respectfully Submitted.

Wm. Raymond Manning
Chairman

"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board OF NEW ORLEANS

MITCHELL J. LANDRIEU, President
WM. RAYMOND MANNING, President Pro-Tem

625 ST. JOSEPH STREET
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52W-ATER
www.swbno.org

December 14. 2015

The Pension Committee of Sewerage and Water Board of New Orleans met on Wednesday, December 14. 2015 at 3.15 PM in the Board Room at 625 St. Joseph Street.

ATTENDANCE:

PRESENT: Mr. Wm. Raymond Manning (Chairman)
Mr. Alan Arnold
Mr. Harold Heller, Jr.
Mr. Scott Jacobs
Mr. Marvin R Russell, Jr.
Mr. Gerald Tilton
Mr. John H. Wilson III

ABSENT: Mr. Joseph Peychaud

Also in attendance were Cedric S. Grant, Executive Director; Robert K. Miller, Deputy Director; Nolan P. Lambert, Special Counsel, Director's Office, Legal, Finance, Personnel and Security Department staff; Melanie Parent and Octave Francis of FFC Capital Management and Janice Lemont of Capital

ITEM 1: RECOMMEDATIONS FOR RE-ALLOCATION OF ELIGIBLE PROCEEDS FROM LIQUIATED INVESTMENTS

Mr. Francis presented FFC's analysis of equity products and recommended i-share S&P 500 Growth ETF to the Committee.

Mr. Jacob motioned that the cash available from the liquidation of the commodity products previously selected for sale be invested i-share S&P 500 Growth ETF. Upon a second by Mr. Arnold, the motion passed

ITEM 2: REVIEW OCTOBER 2015 INVESTMENT PERFORMANCE

Mr. Francis reviewed the October 2015 Flash Performance Report. The committee accepted the report.

ITEM 3: EMPLOYEES' RETIREMENT SYSTEM COST OF LIVING INCREASE

Mr. Miller presented analysis of changes in the consumer price index during the period from August 2014 to August 2015. He reported that the change in the consumer price index was -0.284%. Mr. Miller noted that there would be no change for the COLA for the upcoming year. This was a notification item.

ADJOURNMENT:

There being no further business to come before the Committee, the meeting adjourned at approximately 6:00PM.

Respectfully Submitted,

Wm. Raymond Manning, Chair

SEWERAGE AND WATER BOARD OF NEW ORLEANS

REQUEST FOR PROPOSALS

ASSET-LIABILITY STUDY CONSULTING SERVICES FOR THE

EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

PROPOSALS ARE DUE BY

October 20, 2017
By
11:00 AM Central Time

Table of Contents

I. Purpose, Background, and Scope of Project

A. Purpose

1. This Request for Proposals ("RFP") has been issued by the Sewerage & Water Board of New Orleans ("S&WB") to find a consultant to conduct an **asset-liability study** for its defined benefit pension fund.

B. Background

1. Under Louisiana *R.S. 11:3821*, the Employees' Retirement System ("ERS") of the Sewerage & Water Board of New Orleans was created effective January 1, 1957. The ERS serves approximately 998 active members and 861 retired members and survivors and carries an IRS 401A Qualified Defined Benefit Plan designation.
2. The governance of the ERS is performed by a 15 member Board of Trustees (BOT) comprised of the S&WB Board of Directors (11), elected active employee members (3) and a retired member (1). The BOT is charged with the administration, management and investment of the ERS assets. La. *R.S, 11:3821* also established a Pension Committee (PC) to perform the administrative business of the ERS. ERS's general investment consultant is FCC Capital Management. S&WB hired a Chief Investment Officer in May 2017.
3. As of June 30, 2017, the market value of assets amounted to approximately $216.8 million USD. The assets are invested as follows:
   a. Public Equities: $111.3 million – 4 active managers, 1 index fund
   b. Fixed Income: $80.2 million – 1 manager in 2 accounts
   c. Alternatives: $25.2 million – 1 fund of hedge funds and 1 REIT fund
4. ERS employs Conefry & Company, LLC to provide annual actuarial valuations. At the last valuation on December 31, 2016, the funded ratio was 81.3% and its actuarial assumed rate of return is 7.00%. Although ERS has employed Conefry & Company for many years, ERS has not performed an asset-liability study since about 2003.
5. S&WB currently has 1,501 budgeted positions, of which 317 positions are vacant. 40% of S&WB's workforce is or will be eligible to retire in the next 5 years. Of the 998 active participants, 513 are fully vested. Moreover, 119 employees are currently in the Deferred Retirement Option Plan ("DROP"), 120 are eligible to retire now, and 163 will be eligible to retire in the next 5 years. ERS has an external net cash flow of -3.66%.
6. S&WB and ERS would like to explore how it could achieve its investment objectives including paying all benefits and expense obligations when due and achieving a fully funded status with regard to the Accumulated Benefit Obligation and 100% of the Projected Benefit Obligation under two scenarios: (1) the defined benefit plan remains open to all employees and (2) the defined benefit plan continues but is closed to new employees. There is no current plan to close the plan to new employees.

C. Scope of Project - This asset-liability study is a one-time project.

II. Description of Work to Be Performed & Objectives to be Met

A. Description of the Work to Be Performed

1. ERS seeks to understand the dynamic relationship between pension plan assets and its pension obligations (liabilities) over time. The proposed asset-liability study should help identify future trends in the financial health of the plan based upon economic uncertainties. The proposed asset-liability study should illustrate the impact of various asset allocation targets on funded status and required contributions under a range of different macroeconomic/investment/contribution/benefit scenarios.

B. Objectives to Be Met

1. The project will have two (2) phases.
    a. In **Phase I** the selected consultant will:
        i. Meet (in person or by telephone) with the Chief Investment Officer for a planning session.
        ii. Make a presentation to the ERS Pension Committee that will provide a process overview and receive prioritized investment objectives and investment preferences.
        iii. Use information from the ERS Actuary – Conefry & Company.
        iv. Use their asset-liability model to forecasts ERS liabilities, assets, contributions, and payments with several different asset allocations.
            a) The consultant will produce deterministic forecasts, scenarios analyses, stochastic (e.g., Monte Carlo) simulation analyses of assets and liabilities and their impact on the funded ratio, contributions, liquidity, etc.
            b) The study will consider two main benefit policy scenarios:
                1) The defined benefit pension remains open to all employees and
                2) The defined benefit pension remains open to existing permanent employees and is closed to new employees (who would go into a defined contribution plan).
            c) The investment consultant will incorporate measures of risk capacity[1] into the analysis.

---

[1] Specifically, S&WB would like to use the metrics developed by Alfred Bühler and Lukas Riesen in their article (provided in Appendix A) "What can I expect from my pension fund?" Investment & Pensions Europe, December 2014. http://www.ppcmetrics.ch/files/publications/files/2014-01%20IPE_LR_What%20can%20I%20expect%20from%20my%20pension%20fund.pdf

v. Will produce a report of these forecasts and simulations detailing metrics (e.g., funded ratio, contributions, liquidity, asset allocations, etc.) and their probabilities.
   a) The consultant will review the preliminary report with the Chief Investment Officer and S&WB Senior Management and make required adjustments, if necessary.
   b) The consultant will present its report to the Pension Committee.

b. In Phase II, the consultant will review with the Chief Investment Officer and S&WB Senior Management revisions to the modeling to reflect changes as requested by the Pension Committee, S&WB Senior Management, and/or the Chief Investment Officer. Such revisions might include such things as a change in employee contribution rates, a one-time market adjustment to active member wages, a significant number of retirements in one year, etc.
   i. Using the changes specified in II.B.1.b, the consultant will produce a revised report of these forecasts and simulations detailing metrics (e.g., funded ratio, contributions, liquidity, asset allocations, etc.) and their probabilities.
   ii. The consultant may be called on to present the Phase II findings to the Pension Committee.

III. Instructions for Submitting Proposals

A. Preparation of Proposals.

1. Firms responding to this RFP must provide answers to all the questions posed in Section VI of this RFP.
2. Proposals must follow the order of questions as they are asked in Section VI of this RFP. In response to each question posed in Section VI, restate the question (denoted by number or letter) in **bold font** followed by your answers in regular font.
3. Answers should be thorough but concise.
4. Supporting material must be clearly referenced to the appropriate question. Information and materials that are *strictly promotional in nature* are prohibited. The submission of such material may serve to disqualify the firm from further consideration.
5. Verbal communication with the S&WB staff during the selection process is absolutely prohibited. Firms can submit written requests for clarification of questions or terms contained in the RPF prior to the deadline to:

   Willie M. Mingo, Jr.
   Director of Procurement
   Sewerage and Water Board of New Orleans
   625 St. Joseph Street Room 133
   New Orleans, Louisiana 70165
   wmingo@swbno.org

   In all cases, verbal communications will not override written communications.

B. Proposals must include a Cover Letter and Representations and Warranties.

1. The cover letter must:
   a. State in the affirmative that the firm meets each and all of the minimum requirements listed in Section V of this RFP
   b. State that the firm is willing and able to provide the services described in Section II "Description of the Work to Be Performed" of this RFP
   c. Include an affirmation that there is no conflict of interest and:
      i. Identify any possible relationships that might impair their ability to perform if awarded the contract, including familial or business relationships that the firm, the proposed subcontracts, and their principals have with members of the BOT of the ERS or any S&WB employee.
      ii. Identify all proposed subcontracts to be utilized in connection with the project. The successful respondent shall notify the S&WB and ERS of any change in subcontractors and obtain prior approval for the use of any new subcontractors before they can begin work on the project.

iii. Respondents are directed to review Louisiana Code of Ethics (Louisiana *Revised Statutes Title 42:1101-1125*) as a non-exclusive reference for information regarding ethics and conflicts of interest.

d. Identify any section of the firm's proposal that the firm deems confidential.

i. S&WB will consider each proposal as confidential, subject to the provisions and the disclosure requirements of the State of Louisiana *Revised Statutes, Title 44, Public Records Law,* and to any other disclosure requirements imposed by law.

ii. All information included in the response to the RFP containing proprietary or trade secret information shall contain a cover sheet stating in bold type "DOCUMENT CONTAINS CONFIDENTIAL, PROPREITARY, OR TRADE SECRET INFORMATION." Information so identified shall be determined as in fact proprietary or trade secret information by the agency within 30 (thirty) days or receipt. Upon a request for Public Information the owner of such information shall be notified prior to disclosures, including the agency's determination or whether such information is subject to disclosure.

iii. S&WB will, however, have the right to make copies of all Proposals for its internal review process and to provide such copies to its staff, Advisors, and representatives of the BOT, and other parties as they deem fit. Other than as expressly permitted or required in the RFP, respondents or their representatives must not make any public comments, respond to questions in a public forum, or carry out any activities to publicly promote or advertise their qualification, Proposal, or interest in *this specific procurement.*

2. Representations and Warranties

a. All firms are required to submit an executed copy of the following Representations and Warranties as an attachment to the cover letter described above.

i. Firm warrants that it meets or will meet before the award of the Investment Consultant Services Agreement ("Agreement"), the bonding requirement provided by the Employment Retirement Income Security Act of 1974 (ERISA) or that it carries at least an equivalent fidelity bond that will be applicable to proposer's actions under the Agreement (unless exempt and explanation of exemption is attached).

ii. Firm warrants that it maintains errors and omissions insurance as well as fiduciary liability insurance providing a prudent amount of coverage for negligent acts or omissions and that such coverage will be applicable to proposer's action under Agreement.

iii. Firm warrants that it will not delegate its fiduciary responsibilities assumed under the Agreement.

iv. Firm warrants that it has completed, obtained and performed all registrations, filings, approvals, authorizations, consents or examinations required by a government or governmental authority for acts contemplated by the Agreement.

v. Firm warrants that it meets all of the minimum qualifications applicable to the firm under the RFP as follows:

   A. List each minimum requirement specified in Section V and specifically describe how your firm meets the applicable minimum qualifications.

B. Add the following (on the next page) to the Representations and Warranties:

(Continued from previous page)

____________________________ ____________

Name of Firm Date

____________________________ ____________

Signature Title

FIRM NAME:

ADDRESS:

TELEPHONE #:

E-MAIL ADDRESS:

CLIENT CONTACT:

SIGNED:

PRINT NAME:

TITLE:

DATE:

C. **Firms must submit by Friday, October 20, 2017 by 11:00 AM (Central):**

1. ONE (1) bound original and SIX (6) loose copies of its proposal to:

   Willie M. Mingo, Jr.
   Director of Procurement
   Sewerage and Water Board of New Orleans
   625 St. Joseph Street Room 133
   New Orleans, Louisiana 70165

2. Portable Document File (PDF) of proposal to
   wmingo@swbno.org

D. Rejection of Proposals:

1. Firms responding to the RFP must restrict their proposal to that specified in Section II "Description of Work to Be Performed & Objectives to be Met" in this RFP. Alternate or substitute structures will be rejected.

2. S&WB reserves the right to reject any or all proposals, in whole or in part, received by this request due to noncompliance with the requirements of this RFP or for any other reason. S&WB will not pay for any information herein requested nor is it liable for any costs incurred by the submitting firms.

3. Firms whose proposals do not meet the minimum requirements will be so notified. S&WB will notify all respondents of the successful firm.

4. S&WB reserves the right to not hire or to defer the hiring of a firm for these services.

IV. Timetable for Selection – Subject to Change

A. October 6, 2017 – **INQUIRIES** – Inquiries and requests for interpretation or clarification of the RFP from potential bidders will be accepted only by email to wmingo@swbno.org. All inquiries must be received *no later than* Friday, October 6, 2017 by 1:00 PM (Central).

1. Firms who believe that this RFP contains an error, inconsistency or omission should submit a request for clarification by email to wmingo@swbno.org *no later than* October 6, 2017 by 1:00 PM (Central).

B. October 20, 2017 – **PROPOSALS DUE**. One (1) bound and six (6) unbound copies and one (1) Adobe Portable Document Format (PDF) file must be delivered to the following address only. Submissions received after the due date will not be considered.

1. Physical copies labeled "Request for Proposal – Asset-Liability Study" to:

   Willie M. Mingo, Jr.
   Director of Procurement
   Sewerage and Water Board of New Orleans
   625 St. Joseph Street Room 133
   New Orleans, Louisiana 70165

2. **PDF** to: wmingo@swbno.org with "Request for Proposal – Asset-Liability Study" in the e-mail's title.

C. **DATE TO BE ANNOUNCED – FINALIST INTERVIEWS –** S&WB will notify the finalist firm(s) and may conduct one-on-one interviews in New Orleans.

D. **DATE TO BE ANNOUNCED – ANNOUNCEMENT OF SELECTION** – S&WB will notify the finalist firm of its selection. Selection is independent of the successful negotiation of a contract between S&WB and the selected firm.

V. Minimum Qualifications

A. Prospective firms **MUST** meet the following minimum qualifications to be given further consideration in the search for a consultant to conduct an asset liability study. Failure of a proposal to meet the following minimum qualifications will be deemed "non-responsive" and eliminated from further consideration.

B. **Basic Minimum Qualifications**:

1. Firm must have completed at least 5 (five) asset-liability studies for a (corporate, public, or Taft-Hartley) pension fund. If selected, S&WB will ask for contact information to verify the accuracy of the response. Please complete the table below:

Date Completed	Pension Name	Type	Asset Size

2. Firm must have at least 5 (five) years of experience in conducting asset-liability studies in-house for (corporate, public, or Taft-Hartley) pensions. What year did your firm first conduct an asset-liability study? (Firms with over 5 years of asset-liability study experience may provide an approximate date).
3. Individual leading the asset-liability study efforts at your firm must have:
   a. at least 10 (ten) years of investment/actuarial experience;
   b. at least 5 (five) years of asset-liability study experience; and
   c. at least 3 (three) years of tenure at your firm.
4. Your firm must be able to provide customized scenarios similar to those described in section II.B.1.a.iv.(b) and section II.B.1.a.iv.(c).

VI. Questions

A. Organizational Background:

1. Give a brief history of your organization including the following:
    a. Year of organization;
    b. Year of initiation of investment consulting business;
    c. Development of significant business lines;
    d. Nature of firm's ownership;
    e. Nature of relationships with affiliated companies or joint ventures;
    f. Organizational issues/changes within the last three years.
2. Describe the current structure of your organization. Provide an organizational chart(s) showing the relationships and authority within the consultant services unit and within the organization.
3. List the percentage of total firm revenues derived from investment consulting services for the five most recent fiscal years and projection for the current year.
4. Complete the following table:

Client Profile							
	Public Pensions	Corporate Pensions	Taft Hartley Plans	Endowments & Foundations	Family Offices	Other	Total
Assets ($ Millions)							
# of Clients							

B. Describe your firm's resources for conducting asset-liability studies.

1. List the members of your asset-liability team and provide brief biographies, including education, professional designations, professional experience, and tenure with your organization.
2. Please translate the team biographies into the table below:

Asset-Liability Team Summary							
Name	Title	Bachelor's Degree	Master's Degree	Advanced Degree	Professional Designation	Professional Experience	Firm Tenure
Josephine Example	Vice President	BS	MS	PhD	ASA	15	5

C. Describe your experience performing asset-liability studies for pension plans in general and specifically:

1. How many studies have you performed on average per year?
2. How many total studies have you cumulatively performed?
3. How many studies have been for pensions smaller than $500 million in assets?
4. What is your experience in performing asset-liability studies for "closed [to new entrants]" and "frozen" pension plans?
5. Please provide three references from clients (past or present) for whom you conducted an asset-liability study. Include contact name, contact's title, organization's name, phone number, and e-mail address.

D. Describe your overall asset-liability study process.
   1. Describe your process.
   2. What information/time do you need from the client to complete the study?
   3. What do you consider to be the advantages and limitations of your process?
   4. How has your process evolved over the years?
   5. What are the most recent enhancements to your model and/or process?
E. Describe the timeline to complete a typical asset-liability study.
   1. What are the major factors that affect your ability to complete the process according to schedule?
F. Describe your asset allocation models.
   1. Describe how you forecast capital market inputs for the asset allocation models.
   2. List the asset classes, sub-asset classes or strategies for which your forecast returns.
   3. Do you use mean-variance analysis?
   4. Do you use multi-moment optimization?
   5. Have you developed proprietary in-house models or do you use a vendor's product? Please explain your choice.
   6. Can you incorporate dynamic asset allocation into the asset-liability study? Have you done so in the past? Describe a study or studies wherein you incorporated dynamic asset allocation in an asset-liability study.
G. Describe your liability modeling.
H. Have you developed a proprietary in-house model or do you use an outside vendor's product?
I. How do you model and forecast liquidity?
J. Describe your stochastic simulation process.
   1. Do your Monte Carlo simulations use normal distributions or non-normal distributions? If you use normal distributions, how do you account for probability distributions in financial markets that often appear to be heavy-tailed (i.e., exhibiting skewness or kurtosis)?
K. Can your model/process accommodate specific market scenarios such as the 1994 bond market crash, 2000-2002 bear market, or 2007-2009 financial crisis in a specific period (e.g., the next five years)?
   1. Describe examples of studies you have conducted in the past that incorporated similar scenarios.
L. Describe your experience customizing asset-liability studies for clients.
   1. Can your model/process evaluate specific scenarios determined by the client? To what extent?

2. Specifically, the S&WB would like to evaluate two main scenarios: (a) defined benefit plan remains open to new entrants and (b) defined benefit plan is closed to new entrants. Can you run these scenarios? Please describe a previous project in which you ran a similar analysis.
    a. In scenario (b), we would like to estimate the pension costs with an assumed employer contribution for the employees in the defined contribution plan. Could you provide the excluded employee's projected wages for such a purpose?

M. What metrics do you provide in the analysis? Please provide an example report output.

N. The S&WB would like to develop a Statement of Risk Capacity and Risk Appetite. We believe that the asset-liability study will provide information to help articulate the Pension Committee's risk appetite.
1. Can you provide probabilities of outcomes to assist in the development of a statement of risk appetite, such as "over the next 5 years, the funded ratio should have less than a __% probability of being lower than __%"? What are the most important statements of probability in the context of an asset-liability study?
2. ERS's current Investment Objectives are listed below. How would your study results combined with the Investment Objectives translate into a Statement of Risk Appetite? Have you done this in previous studies?
    a. ERS Investment Objectives
        i. Have the ability to pay all benefit and expense obligations when due.
        ii. Achieve a fully funded status with regard to the Accumulated Benefit Obligations and 100% of the Projected Benefit Obligation.
        iii. Maintain the purchasing power of the current assets and all future contributions by producing positive real rates of return on Plan assets.
        iv. Maximize returns within reasonable and prudent levels of risk in order to minimize contributions.
        v. Control costs of administering the Plan and managing the investments.
        vi. Maintain flexibility in determining the future level of contributions.
3. The Chief Investment Officer wants to incorporate "risk capacity" into this asset-liability study and has identified a paper by PPCmetrics[2] which he believes will be useful given the current and near-term profile of ERS.

---

[2] Alfred Bühler and Lukas Riesen, "What can I expect from my pension fund?" Investment & Pensions Europe, December 2014. http://www.ppcmetrics.ch/files/publications/files/2014-01%20IPE_LR_What%20can%20I%20expect%20from%20my%20pension%20fund.pdf (Paper is included in Appendix A)

Can you incorporate the paper's measures of "structural risk capacity," "financial risk capacity," and the "risk-bearing funding ratio" into the asset-liability study?

a. If your response is "yes," please outline briefly whether you have done this or something similar before or if you have not used the concept before, how you might do so here.
b. If your response is "no," please outline briefly, what concept(s)/measure(s) you believe are more appropriate and whether you would incorporate your preferred measures into the asset-liability study.

N. Fees and Costs for Proposed Service

1. Please state the proposed cost in dollars to provide all the work to be performed as described in Section II (Phases I and II).
    a. As an alternative, the respondent may propose:
        i. A total dollar amount for Phase I as described in Section II and
        ii. A cost per hour and estimated hours to complete Phase II as described in Section II.

VII. Criteria for Evaluation and Relative Weights of Criteria

A. Evaluation of Proposals

1. S&WB will pre-screen proposals for minimum requirements, compliance with Section III "Instructions for Submitting Proposals," and other items expressed in this RFP and Policy 95 "Professional Services Procurement Policy" (Included in Appendix C). S&WB will score responsive proposals with the evaluation criteria and weights in the table below. Finalist(s) may be interviewed by S&WB and/or the ERS Pension Committee. S&WB may conduct on-site due diligence at semi-finalist respondents' offices. The decision whether or not to conduct on-site due diligence and/or interviews in New Orleans is at the sole discretion of S&WB and the ERS Pension Committee. ERS may execute a contract without an interview or on-site visit. The ERS BOT will approve the final selection.

	Topic	Score Weight	
1	**Organization**	**5.0%**	
	Longevity		2.0%
	Stability		2.0%
	Focus		1.0%
2	**Dedicated Resources**	**15.0%**	
	Quantity		7.5%
	Quality (education, experience)		7.5%
3	**Experience**	**15.0%**	
	Performing asset-liability studies		10.0%
	Specialized		5.0%
4	**Overall Process**	**5.0%**	
	Clarity		1.0%
	Robustness		1.0%
	Innovation		1.0%
	Reasonable Timeline		2.0%
5	**Specific Process Components**	**20.0%**	
	Asset Allocation		5.0%
	Liability Modeling		5.0%
	Liquidity Modeling		2.0%
	Stochastic Simulations		3.0%
	Scenario Modeling		5.0%
6	**Customization - Scenarios**	**7.5%**	**7.5%**
7	**Customization - Risk Capacity**	**10.0%**	**10.0%**
8	**Output - Statement of Risk Appetite**	**7.5%**	**7.5%**
9	**Output - Metrics**	**5.0%**	**5.0%**
10	**Fees**	**10.0%**	**10.0%**
	TOTAL	**100.0%**	**100.0%**

2. S&WB requires 0% (zero percent) participation on Economically Disadvantaged Business (EDB) enterprises on this RFP. Although NOT required of this RFP, S&WB encourages all organizations to identify and use S&WB certified EDB vendors whenever and wherever possible. A complete list of S&WB certified EDB vendors can be viewed at: http://www.swbno.org/business_disadvantagedbusinessprogram.asp

VIII. Appendices

Appendix A: Article - Alfred Bühler and Lukas Riesen,
"What Can I Expect From My Pension Fund?"
Investment & Pensions Europe, December 2014

sion fund of the City of Zurich, Vera Kupper Staub.

Overall, the direction of travel is clear. "More regulation and a limitation of flexibility for Pensionskassen can probably not be avoided altogether," says Triponez, notwithstanding OAK's efforts to introduce "proportionate" regulation and maintain dialogue with institutions. "However, as the experience of cost transparency has shown, useful regulation may also lead to innovation in the pension industry, which will in the end create value for the individual member of the pension fund."

"What is better: a too high funding level with insufficient funding – with a likelihood of the funding level dropping – or a lower funding level with moderate benefit promises?"

Christoph Ryter

"Overregulation is a constant problem," says Ryter, conceding that OAK is by no means the only source. "Every time a problem in the second pillar occurs, a new regulation is introduced, creating more problems," he says.

Schnurrenberger criticises the "overpolitisation" of the occupational pension sector. "Every politician, no matter from which side, tries to co-opt the second pillar for their political campaign," he says.

And looking further ahead, the proposed reform package Altersvorsorge 2020 will doubtless introduce new regulatory requirements.

What can I expect from my pension fund?

Alfred Bühler and Lukas Riesen explain why the risk-bearing funding ratio could become the yardstick for Swiss pension funds

Commentary

For a pension scheme, the purpose of investing is to fund future benefits. A pension fund can offset investment risks in two different ways – either by taking advantage of existing risk capital (reserves), or by adjusting future contributions and benefits. An analysis of an investor's risk capacity therefore looks at two areas:

- Financial risk capacity (already existing reserves)
- Structural risk capacity (changes of future contributions and benefits)

Financial risk capacity

A pension fund's financial risk capacity describes its ability to offset losses without putting current or future benefits at risk. The difference between assets and liabilities is the financial risk capital. For Swiss pension funds, the most important component of the liabilities is usually provisions for benefits to retirees.

As pensions are nominally guaranteed by law, a portfolio of sovereign debt instruments of a similar maturity serves as a replicating portfolio for valuation purposes. This results in the need to use the prevailing yield of sovereign debt as a discount rate for computing the economic value of the benefits. The economic funding ratio measures the relationship between the economic value of assets and liabilities. Discounting future cashflows with the expected investment returns is not appropriate for an analysis of the financial risk capacity, as the expected return can neither be guaranteed on a short-term nor long-term basis. If a pension fund uses expected returns as discount rate, it implicitly relies on possible recapitalisation measures borne by active members and employers, blending financial and structural risk capacity.

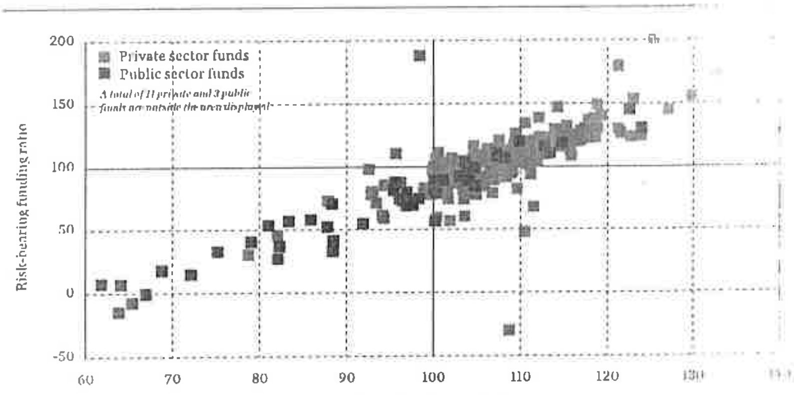
Structural risk capacity

Structural risk capacity describes the ability of a pension fund to reduce benefits or increase contributions in order to improve the financial [illegible]. The structural risk capacity is heavily [illegible] pensioner liabilities. The higher the share of liabilities to retirees, the lower a fund's structural risk capacity, as current pensions cannot be cut according to Swiss law. As this is the case, a scheme with no active members does not show any structural risk capacity.

Risk-bearing funding ratio

The economic funding ratio describes the financial risk capacity, and the share of liabilities to retirees is the relevant factor for the structural risk capacity. It is on this basis that PPCmet-

Swiss pension fund funding ratios at year-end 2013



		Pension funds in the data set		
		Private	Public	Total
Number of pension funds		237	53	290
Number of active members		1,746,876	624,919	2,371,7[illegible]
Number of pensioners		420,539	290,987	711,[illegible]
Assets	CHFbn	315.8	203.0	518.[illegible]
Freizügigkeitsleistungen	CHFbn	173.7	105.3	279.[illegible]
Assets for pensions in payment *	CHFbn	110.0	115.1	225.[illegible]
Regulatory funding ratio %		107.9	87.8	99.2
Risk-bearing funding ratio %		105.6	54.2	86.2
Overfunded **	CHFbn	16.2	1.3	17.5
Underfunded **	CHFbn	6.4	49.5	55.9

* Assets required, including reserves needed to cope with increasing longevity

** Compared with risk-bearing funding ratio

Source: PPCmetrics

[illegible] developed its concept of the risk-bearing funding ratio. As pensioners do not contribute to the structural risk capacity, they can be excluded without reducing the structural risk capacity of the remainder of the fund. Setting aside assets corresponding to the economic value of liabilities to retirees allows a risk-free funding of pension benefits. The ratio between the remaining assets for covering the liabilities to active members is equal to the risk bearing funding ratio. It is used to measure the overall risk capacity of a pension fund, aggregating the financial and structural risk capacity. It further allows a comparison between pension funds, independent of their share of liabilities to retirees.

[illegible] pension fund can calculate the risk-bearing funding ratio by converting the actuarial liabilities to retirees disclosed in the balance sheet into their economic value, using the factors listed on our dedicated website*. The economic value of liabilities to retirees can then be subtracted from the total asset base. The ratio between the remaining assets, belonging to the active members, and the liabilities to active members results in the risk-bearing funding ratio.

If the risk-bearing funding ratio is above 100%, then pensions are fully funded without burdening active members with additional investment risk. Where the risk-bearing funding ratio falls below 100%, then active members should expect either benefit reductions or recapitalisation [illegible] and employers can also be asked to make additional contributions in the future. As a result, the measure captures the potential burden on employees and employers as risk bearers of the pension fund.

Alfred Bühler and Lukas Riesen

The importance of the risk-bearing funding ratio

PPCmetrics holds data on 290 Swiss pension funds with CHF519bn (€432bn) in assets. Of these, 237 private funds had an average risk-bearing funding ratio of 105.6% at the end of 2013 (see table). On average, current pensions are fully funded and the remaining assets [illegible] all liabilities to active members. The graph [illegible] the actuarial funding ratio as published in [illegible] reports in comparison to the risk-bearing funding ratio, which highlights two areas.

First, there are many private pension funds with a risk-bearing funding ratio between [illegible] and 100%.

Second, two pension funds with identical actuarial funding ratios can have very different risk-bearing funding ratios – with differences of 50% not uncommon. Assessing the ability to bear risk solely on the basis of the actuarial funding ratio can result in significant misperceptions.

Data leads to transparency

The risk-bearing funding ratio [illegible] transparency for active members regarding the likelihood of increased contributions [illegible] reduced benefits. Such transparency is indispensable when making decisions regarding [illegible] employer (and its pension fund), the [illegible] tion of benefits or early retirement. Transparency can only be achieved through figures that have a straightforward interpretation and [illegible] be calculated without understanding complex insurance mathematics. The risk-bearing funding ratio meets all these requirements.

Alfred Bühler and Lukas Riesen are both partners at PPCmetrics in Zurich.

**See www.deckungsgrad.ch*

Appendix B: ERS of S&WB NO Actuarial Report 12/31/2016

CONEFRY & COMPANY, L.L.C.

160 Pleasant Ridge Drive

Belle Chasse, LA 70037-4502

Tel. 504.392.8853 ▪ *Facsimile 504.392.4430*

May 24, 2017

Mr. Cedric S. Grant
Executive Director
Sewerage and Water Board of New Orleans
625 St. Joseph Street
New Orleans, LA 70165

Re: January 1, 2017 Actuarial Valuation

Dear Mr. Grant:

This letter and report supersede the letter and report dated April 30, 2017. The actuarial valuation was revised because of revised financial statements of the plan. Enclosed is the revised actuarial valuation report of the Employees' Retirement System of the Sewerage and Water Board of New Orleans as of December 31, 2016.

This actuarial valuation has been performed on a basis consistent with that which was performed as of December 31, 2015.

It should be noted that Exhibit III contains the Schedule of Funding Progress according to the requirements formerly mandated by Statement No. 25 (as modified by Statement No. 50) of the Governmental Accounting Standards Board (GASB #25 and #50). As described in that Exhibit III, these statements have been replaced by GASB Statements #67 and #68 and are addressed in a separate report.

Summarized below are the principal results of the actuarial valuation.

Summary of Valuation Results

		12/31/2015	12/31/2016
1.	Number of Active Participants	971	998
2.	Total Active Annual Payroll	$ 33,672,902	$ 35,363,156
3.	Plan 10 Year "Amortization" Contribution as a Percentage of Active Payroll	37.073%	36.175%
4.	Expected Employee Contribution as a Percentage of Active Payroll (See p. 12 of report)	5.000%	5.000%
5.	Employer 10 Year "Amortization" Contribution as a Percentage of Active Payroll	32.073%	31.175%

		12/31/2015	12/31/2016
6.	Plan 30 Year Amortization (Minimum) Contribution as a Percentage of Active Payroll	25.690%	25.235%
7.	Expected Employee Contribution as a Percentage of Active Payroll (See p. 12 of report)	5.000%	5.000%
8.	Employer 30 Year Amortization (Minimum) Contribution as a Percentage of Active Payroll	20.690%	20.235%
9.	Market Value of Plan Assets	$ 222,427,527	$ 224,356,261
10.	Actuarial Value of Plan Assets (Adjusted Market Value Basis)	$ 233,572,291	$ 238,715,902
11.	Valuation Unfunded Actuarial Liability	$ 63,996,458	$ 64,592,033
12.	Ratio of UAL to Valuation Payroll	190.1%	182.7%
13.	Funded Ratio	80.7%	81.3%

There have not been plan amendments or any changes to the actuarial assumptions or method since the immediately preceding valuation. The plan amendments adopted on November 19, 2014 involving definition of "average compensation" and employee contributions are the most recent substantive amendments to the plan's provisions which would have a material effect on the actuarial valuation results (see page 12, Exhibit I of the report).

Yours truly,

Michael A. Conefry, FCA, ASA, MAAA*
Actuary

* Member of the American Academy of Actuaries and qualified to render the Statements of Actuarial Opinion contained herein.

MAC:wp
Enclosures

ACTUARIAL VALUATION REPORT

EMPLOYEES' RETIREMENT SYSTEM
OF THE SEWERAGE AND WATER BOARD
OF NEW ORLEANS

Annual Actuarial Valuation
as of January 1, 2017

CONEFRY & COMPANY, LLC

ACTUARIAL AND EMPLOYEE BENEFIT CONSULTING
NEW ORLEANS, LOUISIANA

INTRODUCTION

We present in this report the results of our actuarial valuation of the Employees' Retirement System of the Sewerage and Water Board of New Orleans as of January 1, 2017. The plan is an actuarially funded qualified governmental defined benefit pension under the Internal Revenue Code, and we have performed this actuarial valuation using conventional and generally accepted actuarial methods, assumptions, and principles applicable to qualified defined benefit pension plans. We have performed the actuarial valuation using the Entry Age Normal Cost Method. A full description of the funding method is contained in Section II of the report.

The Summary of Plan Provisions presented in the Appendix is intended to describe the principal benefits provided by the plan, particularly from the perspective of their significance in affecting the actuarial liability and cost of the plan. The summary is not, of course, intended to be a comprehensive or complete description of all benefits payable under all circumstances under the pension plan.

EMPLOYEES' RETIREMENT SYSTEM

OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

SUMMARY

I. FINANCIAL AND ACTUARIAL STATUS as of January 1, 2017

We have conducted this actuarial valuation using employee data and asset information furnished by the administrative office of the System. This section of the report presents a summary of the assets of the plan at Market Value, as well as the development of the Actuarial Value of Assets used in the funding method. The funding method used to determine the actuarial liabilities is described in Section II and the actuarial assumptions upon which the liabilities are based are summarized in Exhibit II of the report.

ASSETS

The following table showing the composition of the assets as of December 31, 2016 is based on information supplied by the administrative office and the auditors of the System.

Table 1

Statement of Assets
as of December 31, 2016

Assets	Market Value
Cash	$ 40,495
Investments	224,250,456
Total Invested Assets	224,290,951
Plus accounts receivable	+65,310
Less accounts payable	0
Total Assets	$ 224,356,261 *

* The actuarial value of assets used in this valuation is Adjusted Market Value as determined in Table 2. D.R.O.P. account balances are included in the foregoing Assets and shown as an actuarial liability in Table 4, item (2)f.

ACTUARIAL VALUE OF ASSETS

Beginning with the January 1, 1998 actuarial valuation, the method of determining the actuarial value of assets was changed to adjusted market value from the former adjusted book value basis. The change had been necessitated because the former method, in our opinion and that of the auditors, was not "market value related" within the meaning of Statement No. 25 of the Government Accounting Standards Board (GASB #25) and its successor GASB Statements.

This revised method reflects actual market value performance over a seven year period ending on the valuation date. The market value performance is averaged over the seven year period by reflecting the actual external cash flow and adjusting each prior year's market value to the current valuation date using the actuarial interest assumption.

The following table develops the Adjusted Market Value of Assets to be used as the Actuarial Value of Assets in the actuarial valuation.

Table 2

Actuarial Value of Assets

As of December 31, 2016

Plan Year Ending	Beginning Market Value	Net External Cash Flow For Year	Market Value Inv. Income For Year	Ending Market Value	Market Value Performance For Year	Adj. Market Value Component
2010	191,024,143	-8,223,289	22,439,431	205,240,285	12.0053%	239,776,118
2011	205,240,285	-8,114,890	8,968,361	206,093,756	4.4578%	232,596,117
2012	206,093,756	-8,472,301	23,082,600	220,704,055	11.4351%	244,324,533
2013	220,704,055	-9,525,020	23,179,014	234,358,049	10.7339%	254,195,277
2014	234,358,049	-9,143,898	11,342,520	236,556,671	4.9416%	248,773,859
2015	236,556,671	-9,985,003	-4,144,141	222,427,527	-1.7896%	226,989,147
2016	222,427,527	-10,642,132	12,570,866	224,356,261	5.7902%	224,356,261
Years Included: 7		-64,118,755	97,450,873			
					Average Adj. MV:	$238,715,902

II. EMPLOYER AND EMPLOYEE CONTRIBUTIONS for the Plan Year Beginning January 1, 2017

DESCRIPTION OF ACTUARIAL COST METHOD

Under the Entry Age Normal Cost Method, the normal cost of the plan is designed to be a level percentage of payroll, calculated on an aggregate basis, spread over the entire working lifetime of the participants. The future working lifetime is determined from each participant's hypothetical entry age into the plan assuming the plan had always been in existence, to his expected retirement date. The actuarial accrued liability is the amount of total liability not covered by future entry age normal costs. This amount is composed of the actuarial value of benefits already funded (assets) and those not yet funded (unfunded actuarial liability).

The plan's funding cost for the year is the sum of the Entry Age Normal Cost and the amount necessary to amortize the remaining unfunded actuarial liability as of the valuation date over the adopted amortization period.

Beginning with the January 1, 2007 actuarial valuation, a new amortization basis was established. The former amortization basis used a level dollar amortization for a ten (10) year "closed" (that is, with the remaining period reducing by one each year) amortization period from January 1, 2003 through December 31, 2012. This has been replaced by a level dollar amortization for an "open" (that is, a constant number of years) ten (10) year amortization period effective on each valuation date. This open ten (10) year amortization amount is developed later in this section and presented in Table 5.

Table 3

Entry Age Normal Cost for Plan Year Beginning January 1, 2017

(1)	Actuarial Present Value at Entry Age of Expected Benefits to Plan Participants	$ 16,915,000
(2)	Actuarial Present Value at Entry Age of Future Payroll of Active Participants	159,107,959
(3)	Normal Cost as a Percentage of Payroll: (1) divided by (2)	10.631%
(4)	Current Payroll of Active Participants *	35,363,156
(5)	Normal Cost: (3) x (4) (Assumed payable January 1, 2017)	$ 3,759,457
(6)	Normal Cost, adjusted for monthly payments	$ 3,878,600

* There are 998 active participants: 513-fully vested; 0-partially vested; 485-not vested.

Table 4
Unfunded Actuarial Liability
as of January 1, 2017

(1)	Actuarial Present Value of Expected Benefits to Active Plan Participants		
	(a) Basic and Supplemental Retirement Benefit	$ 96,397,447	
	(b) Death and Survivor Benefit	7,232,607	
	(c) Disability Benefit (Inc. suppl & surv.)	6,994,526	
	(d) Vesting Benefit	7,122,155	
	(e) Refund of Employee Contributions	1,848,314	
	Total Active		$ 119,595,049
(2)	Actuarial Present Value of Expected Benefits to Inactive Plan Participants		
	(a) Regular Retirees	$ 129,379,206	
	(b) Disability Retirement	7,324,044	
	(c) Survivors	7,382,961	
	(d) Terminated Vested	1,122,569	
	(e) D.R.O.P. Retirees (Future Benefits)	47,405,127	
	(f) D.R.O.P. Retirees (Account Balances)	11,328,708	
	Total Inactive		$ 203,942,615
(3)	Total Actuarial Present Value of Expected Benefits to All Plan Participants (1) + (2)		323,537,664
(4)	Actuarial Present Value of Future Payroll of Active Participants		190,289,991
(5)	Normal Cost as a Percentage of Payroll: (From Table 3)		10.631%
(6)	Actuarial Present Value of Future Normal Cost Contributions: (4) x (5)		20,229,729
(7)	Actuarial Value of Assets (from Table 2)		238,715,902
(8)	Unfunded Actuarial Liability: (3) - (6) - (7)		64,592,033

TOTAL CONTRIBUTION FOR PLAN YEAR BEGINNING January 1, 2017

CONTRIBUTION TO AMORTIZE UNFUNDED ACTUARIAL LIABILITY

The adopted "amortization" contribution for a plan year equals the normal cost plus the level dollar amount necessary to amortize the Unfunded Actuarial Liability over ten (10) years. The annual amount required to amortize the Unfunded Actuarial Liability of $64,592,033 over 10 years at 7% annual interest (assuming monthly payments) is $8,913,956.

Table 5

Total Required "Amortization" Contribution for the Plan Year Beginning January 1, 2017

(1)	Normal Cost (From Table 3; assumed payable monthly)	$ 3,878,600	
(2)	Net Annual charge Required for Amortization of Unfunded Actuarial Liability Over 10 year period beginning January 1, 2017 (See Above; Assumed payable monthly)	8,923,945	
(3)	Total Plan Contribution as of January 1, 2017: (1) + (2)	$ 12,792,556	(36.175%) *
(4)	Annual Employee Plan Contributions as of January 1, 2017 (See note below)	$ 1,768,158	(5.000%) *
(5)	Employer Contribution as of January 1, 2017: (3) - (4) (Assumed payable monthly)	$ 11,024,398	(31.175%) *

* Expressed as a percentage of annual participant payroll of $35,363,156.

Note: Current actual employee contribution is 6% of payroll effective January 1, 2015. By Board Resolution R-248-2014, as long as the Retirement System is not 100% funded, the Employer Contribution percentage shall be calculated as if the Employee Contribution percentage has remained at 5% of payroll.

"MINIMUM" CONTRIBUTION

GASB Statements 25 and 27 required that the Unfunded Actuarial Liability be amortized over a period not longer than 30 years. Although those statements are not any longer applicable, we present the contribution on that basis for historical continuity. The contribution for a plan year equals the normal cost plus the amount necessary to amortize the Unfunded Actuarial Liability over the thirty (30) year period which begins on the valuation date. Using a level dollar, open period amortization method, the annual amount required to amortize the Unfunded Actuarial Liability of $64,592,033 over the 30 year period beginning January 1, 2017 at 7% annual interest (assuming monthly payments) is $5,045,345.

Table 6

Total Required "Minimum" Contribution for the Plan Year Beginning January 1, 2017

(1)	Normal Cost (From Table 3; assumed payable monthly)	$ 3,878,600		
(2)	Net Annual Charge Required for Amortization of Unfunded Actuarial Liability Over 30 year period beginning January 1, 2017 (see above) (Assumed payable monthly)	5,045,345		
(3)	Total Plan Contribution as of January 1, 2017: (1) + (2)	$ 8,923,945	(25.235%)	*
(4)	Annual Employee Plan Contributions as of January 1, 2017 (See note below)	$ 1,768,158	(5.000%)	*
(5)	Employer Contribution as of January 1, 2017: (3) - (4) (Assumed payable monthly)	$ 7,155,787	(20.235%)	*

* Expressed as a percentage of annual participant payroll of $35,363,156.

Note: Current actual employee contribution is 6% of payroll effective January 1, 2015. By Board Resolution R-248-2014, as long as the Retirement System is not 100% funded, the Employer Contribution percentage shall be calculated as if the Employee Contribution percentage has remained at 5% of payroll.

NET ACTUARIAL EXPERIENCE
for the Plan Year Beginning January 1, 2016

Actuarial experience refers to the comparison of actuarial results of each valuation with those expected from the previous valuation according to the actuarial assumptions. A decrease or increase in the Total Plan Contribution as a percentage of payroll is indicative of favorable (gains) or unfavorable (losses) experience, respectively. If the overall experience follows the general pattern indicated by the assumptions presented in the Appendix, the Total Plan Contribution (on a given amortization basis) as a percentage of payroll will remain relatively stable, except for routine fluctuations.

The Total "Amortization" Contribution as a percentage of payroll decreased from 37.073% for the plan year beginning January 1, 2016 to 36.175% for the plan year beginning January 1, 2017. The Total "Minimum" Contribution as a percentage of payroll decreased from 25.690% for the plan year beginning January 1, 2016 to 25.235% for the plan year beginning January 1, 2017. These decreases of 0.898% and 0.455% of payroll, respectively, are indicative of an overall actuarial gain for the most recent plan year. This gain represents the net decrease in the total plan contribution as the combined result of actuarial experience and the change in total plan contribution attributable to plan amendments, as shown in the following table.

Table 7
Effect on Total "Amortization" and "Minimum"
Contributions by Component
for the Plan Year Ending December 31, 2016

Component	"Amortization" Gain (-) or Loss (+)	"Minimum" Gain (-) or Loss (+)
Interest	+0.376%	+0.211%
Salary Scale	-0.211%	-0.116%
New retirements	+0.385%	+0.213%
Net from All Other Sources	-1.445%	-0.763%
Net change from actuarial experience	-0.898%	-0.455%
Net change from Plan Amendments	0.000%	0.000%
Overall Total Gain(-)/Loss(+)	-0.898%	-0.455%

APPENDIX

EXHIBIT I

EMPLOYEES' RETIREMENT SYSTEM OF THE
SEWERAGE AND WATER BOARD OF NEW ORLEANS

SUMMARY OF PLAN PROVISIONS

EFFECTIVE DATE:	Authorized by Act Number 551, effective January 1, 1957; Last Restatement for Plan Qualification, January 27, 2011; Latest Restatement, April 17, 2013; last amendment date as of the date of performance of this valuation, November 19, 2014.
MEMBERSHIP:	Employees who become members as a condition of employment.
CREDITABLE SERVICE:	Prior service plus membership service for which credit is allowable. Also, one year service credit given for every 250 days of unused sick and annual leave. Credit for prior military service may be purchased (maximum 4 years) by active contributing member who is vested; lump sum payment required based on 4% of excess over first $100 monthly average for each month claimed plus 7% compound interest. Military service available only to those who will not receive a benefit from another retirement system (except Social Security). There are also provisions for restoring service on behalf of certain leaves without pay such as for Katrina Disaster Leave and Workers' Compensation.
EARNABLE COMPENSATION:	Annual compensation paid to an employee; excluding on-call and stand-by pay or over-time.
AVERAGE COMPENSATION:	Average annual earned compensation of a member for highest thirty-six successive months of service as a member, minus $1,200. For employees hired after December 31, 1995, the $1,200 reduction was not applicable. Effective June 19, 2002, the $1,200 reduction was eliminated for all employees. Periods without compensation are not used in determining the average compensation. For employees not yet eligible to retire as of December 31, 2014, the thirty-six month period was changed to forty-eight months effective January 1, 2017 and sixty months effective January 1, 2018.
EMPLOYEE CONTRIBUTIONS:	4% of earnable compensation through December 31, 2012; effective January 1, 2013, 5% of earnable compensation; effective January 1, 2015, 6% of earnable compensation. By Board Resolution R-248-2014, as long as the Retirement System is not 100% funded, the Employer Contribution percentage shall be calculated as if the Employee Contribution percentage has remained at 5% of payroll.

EMPLOYER CONTRIBUTIONS:

Certain percentage of earnable compensation of each member, determined on basis of regular interest and mortality tables adopted by the Board, and additional percentage of earnable compensation, determined by actuary.

RETIREMENT BENEFITS:

Eligibility:

Any age with 30 years of Service; age 60 and 10 years of Service; effective January 1, 1996, age 65 and 5 years of Service; age 70 with any Service. Effective June 19, 2002, age 60 and vested (with actuarial reduction) and any member whose age and service total 80 or more years may retire without reduction for age.

Benefits:

Retirement allowance, consisting of (1) and (2) below:

1) An annuity, which is the actuarial equivalent of employee's accumulated contribution; plus

2) An annual pension, which, together with above annuity, provides total retirement allowance equal to 2% of average compensation times first 10 years, plus 2 1/2% of average compensation times next 10 years, plus 3% of average compensation times next 10 years, plus 4% of average compensation times creditable service over 30 years. Effective June 19, 2002, the above percentages were changed to 2.5% for the first 25 years plus 4% for years over 25 years.

3) An additional annual pension equal to 2% of $1,200 times first 10 years, plus 2 1/2% of $1,200 times next 10 years, plus 3% of $1,200 times next 10 years, plus 4% of $1,200 times service over 30 years; if the employee was hired prior to 1996 and retires prior to age 65 on retirement allowance. Ceases at age 65 or receipt of first Social Security check, whichever comes first. Effective June 19, 2002, this additional benefit no longer applies except to those who retired prior to that date.

4) For service retirement prior to age 62 with less than 30 years of Service, (2) and (3) above are reduced by 3% for each year rounded to nearest day below the age of 62.

5) Effective January 1, 1997, a member may retire after 30 years of service, regardless of age, with no reduction in his benefit.

6) Maximum Benefit: Benefit no greater than 100% of average compensation, unless member has already accrued a larger benefit as of April 13, 1977.

7) Form of Benefit: Modified cash refund annuity. If a member dies after retirement and before receiving the amount of his accumulated contributions in annuity and pension payments, then lump sum balance of his contributions is paid to beneficiary.

8) Cost-of-Living: Effective July 1, 1992, for members that retired prior to January 1, 1984, if funds are available, each July 1st a 2% increase times the number of years retired will be given to members over age 65.

For members that retired on or after January 1, 1984, and are over age 65, each January 1st, increases in benefits based on the increase in the CPI, not to exceed 2%.

Spouses receiving a Joint and Survivor Annuity that have reached the age of 65 shall also receive an increase, based on the increase in the CPI, not to exceed 2%.

DISABILITY BENEFITS:

Eligibility: 10 years of credited service. (certified by physician nominated by Board).

Benefits:

1) A retirement allowance equal to the greater of: An annuity, which is the actuarial equivalent of the member's accumulated contributions at retirement; or

2) An annual pension equal to 75% of the accrued benefit based on service credits to the member had he continued in service until age 62.

3) Benefit offset by Workmen's Compensation benefits.

4) Effective 1/1/84, disability allowance is subject to the same COLA after age 65 as regular retirement.

DEATH BENEFITS:

Eligibility: Death of member in active service.

Benefits: Employee's accumulated contributions paid to beneficiary.

1) If member has 3 years Creditable Service, but less than 10 years, a lump sum benefit equal to the Member's accumulated contributions and 25% of the member's prior year earned compensation is payable to the designated beneficiary or estate.

2) If member dies in active service with less than three years Creditable Service, a Lump Sum Benefit equal to the Member's accumulated contributions is payable to the designated beneficiary or estate.

3) If, at date of death, member was eligible for retirement and leaves Surviving Spouse, Surviving Spouse shall be eligible for a Joint and 100% benefit or a lump sum refund of Employee's contributions.

4) If, at date of death, member was ineligible for retirement, but had at least 10 or more years of creditable service, then surviving spouse shall receive benefit equal to 80% of the former member's accrued benefit at death, payable at the later of the member's death or spouse's attainment of age 62.

5) If, at date of death, member was receiving a disability benefit and dies, his spouse shall receive 80% of the former member's disability retirement allowance payable at the later of the retiree's death or spouse's attainment of age 62. Eligible children shall receive 65% of the disability benefit payable until they reach age 18, age 25 if the child attends school full time or is mentally or physically disabled or until the spouse attains age 62.

6) The spouse's benefit shall be subject to the COLA after attaining age 65 as for a regular retiree.

SEPARATION BENEFITS:

1) A member that withdraws from service before age 60 with 10 years of Creditable Service may allow his accumulated contributions to remain on deposit until he is eligible to receive a separation retirement allowance. Effective June 19, 2002, only 5 years of Creditable Service is required.

2) Upon withdrawal without 10 years Creditable Service (or, after June 19, 2002, 5 years) Employee is entitled to a refund of his accumulated contributions or may allow contributions to remain on deposit for maximum of five years. In case of employee's death, accumulated contribution are paid to designated beneficiary.

Note:

If employee re-enters after receipt of refund and continues service thereafter for 18 months, he may repay amount of refund plus the amount of employee contributions, with interest at a rate of 4% for service prior to 1970 and 7% compounded annually to date of payment for service after January 1, 1970, to receive prior creditable service again.

OPTIONAL FORMS OF BENEFIT:

1) A member shall receive a retirement allowance payable for life. If he dies before receiving, in annuity payments, the value of his annuity at the time of his retirement, the balance is payable to his beneficiary.

2) A reduced benefit payable for the life of the member and continued to beneficiary after member's death. A specific percentage is chosen by the member at the time of retirement. Such percentage shall be an integral multiple of 5%, to a maximum of 100%.

3) A reduced benefit payable for the life of the member and 100% of that amount is paid to the spouse after member's death.

RECIPROCITY:

Effective July 16, 1974, provisions made for reciprocal transfers of service and funds between this System and Employees' Retirement System of the City of New Orleans, in the event an employee transfers from one employing agency to the other; service credits were transferred from sending system to receiving system provided all employee contributions plus earned interest and all employer contributions plus agreed-upon interest were transferred; effective September 23, 1993 (retroactive for transfers on and after October 17, 1988), agreement was amended to provide for a transfer from the sending system to the receiving system equal to the GASB #5 liability of the sending system at 7% interest, 5% salary scale, the remaining GASB #5 actuarial assumptions and the salary and benefit structure in effect for the sending system at time of transfer.

DROP ACCOUNT:

Effective January 1, 1996, any member who is eligible for a service retirement under Section 6(1) can participate in the DROP program:

1) A member can only participant once, and only up to three years. Effective June 19, 2002, the allowable period was increased to 5 years.

2) When a member joins the DROP, he stops contributing to and earning benefits in the system. Employer contributions also stop. His retirement benefit begins being paid into his DROP account.

3) Interest is credited to the separately invested DROP accounts at the actually earned rate at the end of each month (not including the month of withdrawal unless on the last day of the month), but not below zero. Members of the DROP receive no cost-of-living increases.

4) Upon termination of employment at the end of the specified period of DROP participation, the DROP account is paid out in a lump sum.

5) Continued employment after the end of the DROP period is possible only by reapplication to the Board by the employee. If rehired, that employee shall receive a lump sum of his DROP account balance as if he had retired. For DROP participants rehired after April 20, 2005, the retirement allowance that had been paid into the participant's DROP account shall be suspended while re-employed and the participant shall be treated in the same manner as a re-employed retiree.

SUMMARY OF SUBSTANTIVE PLAN CHANGES IN RECENT YEARS HAVING AN IMPACT ON ACTUARIAL VALUATION RESULTS

September 23, 1993:	Reciprocity agreement with City of New Orleans amended, retroactive for transfers on and after October 17, 1988.
January 8, 1994:	Allows for purchase of credit for prior military service.
December 13, 1995:	Plan amended for qualification under Internal Revenue Code for Governmental Plans.
January 1, 1996:	The Deferred Retirement Option Plan was adopted to allow members terminating employment and accepting a service retirement allowance under plan section 6(1) to participate in this program.
	Average Compensation amended to remove the $1,200 reduction for employees hired after December 31, 1995.
	Any member with 5 years of Creditable Service and attainment of age 65 may retire.
January 1, 1997:	For members retiring on or after January 1, 1997 and choose a Joint and Survivor option, if the beneficiary predeceases the retiree, the reduced benefit reverts back to the maximum amount upon the death of the spouse.
	A member with 30 years of creditable service may retire, regardless of age, with no reduction in benefits.
	Death benefit payable to the spouse of a deceased disabled retiree is now available immediately upon the retiree's death, on an actuarially equivalent basis.
June 21, 2000:	Disability benefit equal to 75% of the member's accrued benefit based on service credits to the member had he continued in service until age 62.
	Eligible Dependent amended to add age 25 if the child attends school full-time or if the child is mentally or physically disabled.

SUMMARY OF SUBSTANTIVE PLAN CHANGES IN RECENT YEARS HAVING AN IMPACT ON ACTUARIAL VALUATION RESULTS

June 21, 2000:	Death benefit payable to designated beneficiary or estate when there is no spouse or eligible dependents equal to the member's accumulated contributions at death plus 25% of the member's prior year's earnable compensation payable from the Trust fund.
January 1, 2001:	Any retiree with less than 30 years of Credited Service and under age 62, the benefit is reduced by 3% for each year of age rounded to the nearest day below age 62.
February 25, 2001:	Plan amended for the Uruguay Round Agreements Act, the Small Business Job Protection Act of 1996, Uniformed Services Employment & Reemployment Rights Act of 1994, the Taxpayer Relief Act of 1997, the Internal Revenue Service Restructuring and Reform Act of 1998 and the Community Renewal Tax Relief Act of 2000, (GUST).
June 19, 2002:	Benefit formula amended to 2.5% of first 25 years of service, plus 4.0% for each year of service in excess of 25 years, up to a maximum of 100% of pay. A Rule of 80 retirement eligibility (age plus years of service greater than or equal to 80) without age reduction was added. Eligibility to leave employee accumulated contributions on deposit for Separation Retirement was changed from 10 years to 5 years; the exclusion of the first $1,200 of annual pay was eliminated; D.R.O.P. period was extended from 3 to 5 years.
January 31, 2011:	Interest on DROP accounts changed from "Credited Interest" to that actually earned on the separately invested DROP accounts, but not below zero.
January 1, 2013:	Employee contribution formula amended from 4% to 5% of earnable compensation.
November 19, 2014:	Employee contribution formula amended from 5% to 6% of earnable compensation effective January 1, 2015 (but see explanation on page 12). Period used in determining average compensation changed for employees not yet eligible to retire as of December 31, 2014, was changed to forty-eight months effective January 1, 2017 and sixty months effective January 1, 2018.

EXHIBIT II

EMPLOYEES' RETIREMENT SYSTEM
OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

STATEMENT OF ACTUARIAL BASIS FOR FUNDING PURPOSES

Actuarial Funding Method:

Cost Method:	Entry Age Normal Cost Method.
Asset Valuation Method:	Adjusted Market Value. Refer to the explanation on page 2 of the report and development in Table 2.

Actuarial Assumptions

Interest:	7% compounded annually.
Mortality:	1971 Group Annuity Mortality Table for males and females. (See chart in the following pages for specific rates by age and sex).
Turnover:	Table developed from the 1977-1980 Actuarial Experience Study, as used by the prior actuary. (See chart in the following pages for specific rates by age).
Salary Increases:	5.0% compounded annually.
Cost of Living Increases:	Actuarial liabilities for future cost of living increases were included for both active and inactive participants as per the appropriate sections of the plan.

Actuarial Assumptions (Continued)

Retirement:	It has been assumed that employees retire at a variation of the earliest age at which they would be eligible to retire (with reduced benefits, if applicable) as follows; if the earliest age of retirement eligibility is less than or equal to age 55, the assumed age at retirement is the earliest age plus one year, but not beyond age 55; if the earliest age of retirement eligibility is greater than age 55, the assumed age at retirement is the earliest age of retirement eligibility.
Disability Incidence:	The rates utilized in the 14th actuarial valuation of the U.S. Railroad Retirement System. (See chart in the following pages for specific rates by age).
Survivor Benefits:	85% of active participants are assumed to be married to spouses of equal age. Children's survivor benefits and spouse's disability benefits (in the event of the death of a member on disability) were estimated to be 10% of the related benefits giving rise to the secondary benefits being valued.
Other assumptions:	20% of participants terminating with a vested right were assumed to withdraw their accumulated contributions upon termination, while 80% were assumed to retain their vested deferred benefits by leaving contributions on deposit. Accumulated employee contributions are credited with 2% interest compounded annually.

SEWERAGE AND WATER BOARD OF NEW ORLEANS RETIREMENT SYSTEM
JANUARY 1, 2017 ACTUARIAL VALUATION
ASSUMED RATES OF MORTALITY, WITHDRAWAL AND DISABILITY INCIDENCE BY AGE AND GENDER

	MORTALITY			
AGE	MALE	FEMALE	WITHDRAWAL	DISABILITY INCIDENCE
15	.000433	.000193	.368600	.001100
16	.000444	.000205	.368600	.001100
17	.000457	.000218	.368600	.001100
18	.000471	.000231	.358700	.001100
19	.000486	.000245	.346600	.001100
20	.000503	.000260	.332900	.001100
21	.000522	.000275	.317800	.001100
22	.000544	.000292	.301800	.001100
23	.000566	.000309	.285100	.001100
24	.000591	.000327	.268000	.001100
25	.000619	.000347	.250700	.001100
26	.000650	.000368	.233600	.001100
27	.000684	.000390	.216700	.001100
28	.000722	.000414	.200200	.001100
29	.000763	.000440	.184300	.001100
30	.000809	.000469	.169100	.001100
31	.000860	.000499	.154700	.001100
32	.000916	.000533	.141200	.001100
33	.000978	.000569	.128500	.001100
34	.001046	.000608	.116800	.001100
35	.001122	.000651	.106100	.001300
36	.001204	.000698	.096300	.001500
37	.001295	.000750	.087600	.001800
38	.001397	.000807	.079800	.002100
39	.001509	.000869	.072800	.002400
40	.001633	.000938	.066800	.003000
41	.001789	.001013	.061600	.003600
42	.002000	.001094	.057200	.004200
43	.002260	.001186	.053500	.004800
44	.002569	.001286	.050400	.005500
45	.002922	.001397	.047800	.006400
46	.003318	.001519	.045800	.007400
47	.003754	.001654	.044200	.008200
48	.004228	.001802	.042900	.009000
49	.004740	.001967	.041900	.009700
50	.005285	.002151	.041200	.011100
51	.005867	.002324	.040500	.012600
52	.006480	.002520	.040000	.014000
53	.007127	.002738	.040000	.015800
54	.007806	.002982	.040000	.017600
55	.008519	.003256	.040000	.019000
56	.009262	.003574	.040000	.020000
57	.010039	.003948	.040000	.021500
58	.010889	.004388	.040000	.025000
59	.011924	.004901	.040000	.029500
60	.013119	.005489	.040000	.034500
61	.014440	.006156	.040000	.039000
62	.015863	.006898	.040000	.051000
63	.017413	.007712	.040000	.051000
64	.019185	.008608	.040000	.051000
65	.021260	.009563	.040000	.051000

SEWERAGE AND WATER BOARD OF NEW ORLEANS RETIREMENT SYSTEM
JANUARY 1, 2017 ACTUARIAL VALUATION
ASSUMED RATES OF MORTALITY, WITHDRAWAL AND DISABILITY INCIDENCE BY AGE AND GENDER

	MORTALITY			
AGE	MALE	FEMALE	WITHDRAWAL	DISABILITY INCIDENCE
66	.023643	.010565	.040000	.051000
67	.026316	.011621	.040000	.051000
68	.029188	.012877	.040000	.051000
69	.032435	.014461	.040000	.051000
70	.036106	.016477	.040000	.051000
71	.040008	.019000	0.000000	.051000
72	.043827	.021911	0.000000	.051000
73	.047489	.025112	0.000000	.051000
74	.051221	.028632	0.000000	.051000
75	.055293	.032385	0.000000	.051000
76	.060068	.036408	0.000000	.051000
77	.065924	.040769	0.000000	.051000
78	.072595	.045472	0.000000	.051000
79	.079692	.050616	0.000000	.051000
80	.087431	.056085	0.000000	.051000
81	.095445	.061853	0.000000	.051000
82	.103691	.067936	0.000000	.051000
83	.112303	.074351	0.000000	.051000
84	.121116	.081501	0.000000	.051000
85	.130102	.089179	0.000000	.051000
86	.139315	.097468	0.000000	.051000
87	.148714	.106452	0.000000	.051000
88	.158486	.116226	0.000000	.051000
89	.168709	.126893	0.000000	.051000
90	.179452	.138577	0.000000	.051000
91	.190489	.151192	0.000000	.051000
92	.201681	.165077	0.000000	.051000
93	.212986	.180401	0.000000	.051000
94	.226535	.197349	0.000000	.051000
95	.241164	.216129	0.000000	.051000
96	.256204	.236970	0.000000	.051000
97	.272480	.258059	0.000000	.051000
98	.290163	.280237	0.000000	.051000
99	.309125	.304679	0.000000	.051000
100	.329825	.331630	0.000000	.051000

EXHIBIT III

December 31, 2016 DISCLOSURE INFORMATION ON FUNDING PROGRESS

This section is included to provide information which had been historically required by the Governmental Accounting Standards Board Statements Number 25 and 27 and is provided for historical continuity and consistency. GASB Statements 25 and 27 have been replaced by GASB Statements 67 and 68. These two statements have made extensive and fundamental changes in the nature of the financial disclosure requirements and have effectively removed the actual funding aspects of the plan from any direct involvement. The effective date of GASB 67 (with respect to the plan itself) is the first Plan Year beginning after June 15, 2013 (namely, the Plan Year beginning January 1, 2014). The effective date of GASB 68 (with respect to the Sewerage & Water Board as sponsoring employer) is the first Fiscal Year beginning after June 15, 2014 (namely, the Fiscal Year beginning January 1, 2015). The actuarial information for financial disclosure as required by these GASB Statements is presented in a separate report.

The Projected Benefit Obligation (PBO) as of December 31, 2016 is based on all of the assumptions outlined in Exhibit II including future salary growth. The Unfunded Accrued Liability (UAL) is that used in funding the plan and is developed in Table 4.

SCHEDULE OF FUNDING PROGRESS

		12/31/2015	12/31/2016
Interest Assumption		7.00%	7.00%
RATIO OF UAL TO VALUATION PAYROLL:			
[1]	Unfunded Accrued Liability (UAL)	$ 63,996,458	$ 64,592,033
[2]	Valuation Annual Payroll	33,672,902	35,363,156
[3]	Ratio: [1] divided by [2]	190.1%	182.7%
FUNDED RATIO:			
[1]	Projected Benefit Obligation (PBO)		
	Inactive Plan Participants	$ 197,041,228	$ 203,942,615
	Active Plan Participants	92,267,868	89,744,429
	Total PBO	$ 289,309,096	$ 293,687,044
[2]	Actuarial Value of Assets	233,572,291	238,715,902
[3]	Funded Ratio: [2] divided by [1]	80.7%	81.3%

EXHIBIT IV

ACTIVE AND INACTIVE PARTICIPANT PROFILES

EMPLOYEES RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
01/1/2017 ACTIVE PARTICIPANT AGE VS SERVICE GRID
JANUARY 1, 2017 ACTUARIAL VALUATION

------- ALL ACTIVE PARTICIPANTS -------

AGE	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	TOTAL ANNUAL SALARIES	AVERAGE SALARY
20-24	52	0	0	0	0	0	0	0	0	52	1,242,651.30	23,897.14
25-29	109	25	0	0	0	0	0	0	0	134	3,906,967.89	29,156.48
30-34	96	49	8	0	0	0	0	0	0	153	5,008,833.75	32,737.48
35-39	52	20	10	4	1	0	0	0	0	87	2,883,209.12	33,140.33
40-44	46	22	8	4	15	0	0	0	0	95	3,074,323.23	32,361.30
45-49	33	21	11	11	25	10	0	0	0	111	4,016,984.37	36,189.05
50-54	52	22	15	8	25	19	19	0	0	160	6,255,237.02	39,095.23
55-59	29	28	11	6	15	24	12	3	0	128	5,307,429.14	41,464.29
60-64	21	14	6	3	7	7	2	0	0	60	2,697,481.76	44,958.03
65-69	5	1	1	4	1	1	1	0	1	15	778,039.16	51,869.28
70-74	0	1	1	1	0	0	0	0	0	3	192,004.79	64,001.60
	495	203	71	41	89	61	34	3	1	998	35,363,161.53	35,434.03

EMPLOYEES RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
01/1/2017 INACTIVE PARTICIPANT PROFILE
JANUARY 1, 2017 ACTUARIAL VALUATION

------- REGULAR RETIREES -------

	YEARS SINCE RETIREMENT											
AGE	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	TOTAL ANNUAL BENEFIT	AVERAGE ANNUAL BENEFIT
45-49	1	0	0	0	0	0	0	0	0	1	34,720.68	34,720.68
50-54	5	2	0	0	0	0	0	0	0	7	243,741.24	34,820.18
55-59	13	33	3	0	0	0	0	0	0	49	1,577,729.16	32,198.55
60-64	24	66	42	3	0	0	0	0	0	135	3,578,845.08	26,509.96
65-69	7	70	52	20	0	1	0	0	0	150	4,124,015.16	27,493.43
70-74	2	20	64	20	6	1	0	0	0	113	2,506,729.20	22,183.44
75-79	1	1	18	22	12	0	0	0	1	55	1,163,552.52	21,155.50
80-84	0	0	1	19	14	8	0	0	0	42	687,599.64	16,371.42
85-89	0	0	1	4	6	9	4	0	0	24	439,644.60	18,318.53
90+	0	1	0	0	0	2	6	1	0	10	126,372.96	12,637.30
	53	193	181	88	38	21	10	1	1	586	14,482,950.24	24,714.93

EMPLOYEES RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
01/1/2017 INACTIVE PARTICIPANT PROFILE
JANUARY 1, 2017 ACTUARIAL VALUATION

------- DISABLED RETIREES -------

AGE	YEARS SINCE RETIREMENT 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	TOTAL ANNUAL BENEFIT	AVERAGE ANNUAL BENEFIT
40-44	0	1	0	0	0	0	0	0	0	1	21,581.52	21,581.52
45-49	0	1	2	0	0	0	0	0	0	3	58,004.88	19,334.96
50-54	0	3	0	0	0	0	0	0	0	3	51,594.48	17,198.16
55-59	0	5	4	2	0	0	0	0	0	11	185,182.56	16,834.78
60-64	0	5	5	3	2	1	0	0	0	16	190,986.84	11,936.68
65-69	0	0	6	3	3	0	0	0	0	12	129,360.96	10,780.08
70-74	0	0	1	2	4	0	0	0	0	7	67,994.76	9,713.54
	0	15	18	10	9	1	0	0	0	53	704,706.00	13,296.34

EMPLOYEES RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
01/1/2017 INACTIVE PARTICIPANT PROFILE
JANUARY 1, 2017 ACTUARIAL VALUATION

------- SURVIVORS -------

AGE	YEARS SINCE RETIREMENT 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	TOTAL ANNUAL BENEFIT	AVERAGE ANNUAL BENEFIT
0-19	0	1	0	1	0	0	0	0	0	2	16,377.84	8,188.92
45-49	1	0	0	0	0	0	0	0	0	1	2,527.20	2,527.20
50-54	1	2	0	0	0	0	0	0	0	3	12,596.16	4,198.72
55-59	6	3	2	0	0	0	0	0	0	11	95,659.80	8,696.35
60-64	11	7	1	1	0	0	0	0	0	20	182,192.76	9,109.64
65-69	9	3	4	0	1	0	0	0	0	17	118,081.20	6,945.95
70-74	1	6	1	3	0	0	0	0	0	11	68,378.04	6,216.19
75-79	4	5	1	0	0	2	0	0	0	12	133,960.44	11,163.37
80-84	3	2	4	1	0	0	0	0	0	10	50,762.04	5,076.20
85-89	2	3	0	0	1	2	0	0	0	8	106,468.80	13,308.60
90+	0	2	4	0	0	0	0	1	1	8	64,339.20	8,042.40
	38	34	17	6	2	4	0	1	1	103	851,343.48	8,265.47

EMPLOYEES RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
01/1/2017 INACTIVE PARTICIPANT PROFILE
JANUARY 1, 2017 ACTUARIAL VALUATION

------- DROP RETIREES -------

AGE	YEARS SINCE RETIREMENT 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	TOTAL ANNUAL BENEFIT	AVERAGE ANNUAL BENEFIT
50-54	15	0	0	0	0	0	0	0	0	15	589,379.40	39,291.96
55-59	46	0	0	0	0	0	0	0	0	46	1,997,568.12	43,425.39
60-64	45	0	0	0	0	0	0	0	0	45	1,346,889.12	29,930.87
65-69	13	0	0	0	0	0	0	0	0	13	548,668.56	42,205.27
	119	0	0	0	0	0	0	0	0	119	4,482,505.20	37,668.11

SEWERAGE AND WATER BOARD OF NEW ORLEANS RETIREMENT SYSTEM
12/31/2016 TERMINATED VESTED EMPLOYEES WITH DEFERRED BENEFITS

	NAME	EMPLOYEE ID NUMBER	SEX	DATE OF BIRTH	DATE OF TERMINATION	(BASIC) INIT. MO. BENEFIT	(BASIC) CURR. MO. BENEFIT	SUPPL. MONTHLY BENEFIT	ACCUMULATED EMPLOYEE CONTRIBS.
743			M	11/05/59	3/24/2001	1,812.12	1,812.14	36.96	31,447.13
744			M	8/19/71	5/04/2006	0.00	435.87	0.00	7,004.63
745			M	4/14/58	1/11/1994	250.44	250.44	26.25	7,540.24
746			M	2/24/67	11/08/2004	0.00	1,110.29	0.00	21,156.73
747			M	3/29/62	8/08/2007	0.00	2,133.13	0.00	23,833.94
748			M	8/29/62	1/13/1999	337.93	337.93	21.25	7,605.62
749			M	2/25/58	1/13/2007	0.00	1,306.16	0.00	25,960.64
750			M	2/06/61	3/16/2011	0.00	0.00	0.00	10,376.09
751			F	10/17/76	5/29/2009	0.00	301.10	0.00	4,196.67
752			M	11/30/55	4/11/2007	0.00	507.35	0.00	7,034.37
753			F	6/25/61	7/08/1995	555.81	555.81	22.50	14,099.34
754			F	11/22/58	10/24/1999	930.15	930.15	28.75	16,496.91
755			M	1/13/69	4/21/2006	0.00	1,550.40	0.00	24,767.31
756			M	7/27/61	6/21/1996	1,099.34	1,099.34	23.75	19,182.41
757			M	11/22/53	12/04/2000	1,086.60	1,086.61	31.81	32,383.78
758			M	11/14/69	7/10/2012	0.00	1,155.34	0.00	0.00
759			M	9/24/60	9/07/2000	688.67	688.68	40.37	14,593.58
760			M	12/17/62	3/31/2006	0.00	1,324.56	0.00	21,895.91
	TOTAL COUNT: 18			TOTALS:		6,761.06	16,585.30	231.64	289,575.30

EXHIBIT V

MARKET VALUE AND ACTUARIAL VALUE ASSET INVESTMENT PERFORMANCE

EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
ESTIMATED MARKET VALUE INVESTMENT PERFORMANCE
BY CALENDAR YEAR

PLAN YEAR ENDING	BEGINNING MARKET VALUE	EMPLOYER CONTRIBUTIONS FOR YEAR	EMPLOYEE CONTRIBUTIONS FOR YEAR	TRANSFERS IN FOR YEAR	TOTAL BENEFIT PAYMENTS FOR YEAR	TRANSFERS OUT FOR YEAR	NET EXTERNAL CASH FLOW FOR YEAR	MARKET VALUE INV. INCOME FOR YEAR	ENDING MARKET VALUE	MARKET VALUE INV. PERFORMANCE FOR YEAR
12/31/91	56,348,353	4,524,382	1,001,436		4,460,555	0	1,065,263	11,331,152	68,744,768	19.9208%
12/31/92	68,699,004	4,980,959	1,113,066		4,988,329	0	1,105,696	5,789,535	75,594,235	8.3601%
12/31/93	75,594,235	4,873,366	1,092,713		4,678,593	0	1,287,486	8,471,584	85,353,305	11.1120%
12/31/94	85,353,305	5,102,920	1,298,780		5,220,801	0	1,180,899	-2,682,882	83,851,322	-3.1217%
12/31/95	83,851,322	5,188,055	1,395,149		5,733,411	0	849,793	22,390,520	107,091,635	26.5680%
12/31/96	107,091,635	5,678,507	1,463,218		5,704,458	0	1,437,267	12,894,655	121,423,557	11.9605%
12/31/97	121,423,557	5,933,289	1,202,021		6,410,573	0	724,737	21,841,187	143,989,481	17.9341%
12/31/98	143,989,481	5,448,823	1,138,063		6,573,992	0	12,894	13,756,662	157,759,037	9.5535%
12/31/99	157,759,037	5,151,389	1,028,094		6,928,999	0	-749,516	16,013,013	173,022,534	10.1745%
12/31/00	173,022,534	5,444,048	1,053,495		7,317,215	0	-819,672	5,658,247	177,861,109	3.2780%
12/31/01	177,861,109	5,417,854	1,040,680		7,632,745	0	-1,174,211	-1,677,973	175,008,925	-.9465%
12/31/02	175,008,925	2,931,065	1,089,543		7,625,705	0	-3,605,097	-15,455,327	155,948,501	-8.9231%
12/31/03	155,948,501	3,391,535	1,097,183		9,184,249	0	-4,695,531	36,142,887	187,395,857	23.5304%
12/31/04	187,395,857	3,721,034	1,120,776		8,884,614	0	-4,042,804	19,502,120	202,855,173	10.5204%
12/31/05	202,855,173	3,716,381	1,176,637	714,343	10,177,467	0	-4,570,106	7,713,678	205,998,745	3.8459%
12/31/06	205,998,745	3,343,713	982,418	2,357,005	12,231,855	0	-5,548,719	28,734,146	229,184,172	14.1391%
12/31/07	229,184,172	3,885,124	1,014,461	1,854,239	12,812,727	0	-6,058,903	8,667,155	231,792,424	3.8324%
12/31/08	231,792,424	4,915,512	1,143,858	958,605	13,269,799	0	-6,251,824	-59,122,504	166,418,096	-25.8553%
12/31/09	166,418,096	5,247,031	1,161,744	516,393	14,231,876	0	-7,306,708	31,912,755	191,024,143	19.6067%
12/31/10	191,024,143	5,146,081	1,190,714	849,540	15,409,624	0	-8,223,289	22,439,431	205,240,285	12.0053%
12/31/11	205,240,285	5,436,700	1,161,996	1,233,504	15,947,090	0	-8,114,890	8,968,361	206,093,756	4.4578%
12/31/12	206,093,756	6,114,997	1,128,257	1,690,683	17,406,238	0	-8,472,301	23,082,600	220,704,055	11.4351%
12/31/13	220,704,055	5,946,614	1,465,774	1,065,165	18,002,573	0	-9,525,020	23,179,014	234,358,049	10.7339%
12/31/14	234,358,049	6,055,890	1,535,723	2,001,222	18,748,955	0	-9,156,120	11,354,742	236,556,671	4.9416%
12/31/15	236,556,671	6,506,652	1,905,689	1,847,259	20,244,603	0	-9,985,003	-4,144,141	222,427,527	-1.7896%
12/31/16	222,427,527	6,407,201	2,063,122	1,629,756	20,742,211	0	-10,642,132	12,570,866	224,356,261	5.7902%
	Number of Years Included: 26						-101,277,811	269,331,483		

EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
ESTIMATED INVESTMENT PERFORMANCE BY MARKET VALUE AND ACTUARIAL VALUE OF ASSETS
BY CALENDAR YEAR

YEAR ENDING	ENDING MARKET VALUE	MARKET VALUE INV. PERF. FOR YEAR	MARKET VALUE MEAN FUND	ACTUARIAL VALUE MEAN FUND	ENDING ACTUARIAL VALUE OF ASSETS	ACTUARIAL ASSETS INV. PERF. FOR YR
12/31/1991	68,744,768	19.9208%	56,880,985	58,063,594	64,921,832	10.8943%
12/31/1992	75,594,235	8.3601%	69,251,852	65,474,680	72,541,969	9.9496%
12/31/1993	85,353,305	11.1120%	76,237,978	73,185,712	81,932,422	11.0718%
12/31/1994	83,851,322	-3.1217%	85,943,755	82,522,872	87,957,901	5.8706%
12/31/1995	107,091,635	26.5680%	84,276,219	88,382,798	100,059,569	12.7308%
12/31/1996	121,423,557	11.9605%	107,810,269	100,778,203	114,805,212	13.2056%
12/31/1997	143,989,481	17.9341%	121,785,926	115,167,581	120,911,255	4.6726%
12/31/1998	157,759,037	9.5535%	143,995,928	120,917,702	134,901,231	11.5592%
12/31/1999	173,022,534	10.1745%	157,384,279	134,526,473	149,976,441	11.7633%
12/31/2000	177,861,109	3.2780%	172,612,698	149,566,605	164,845,672	10.4896%
12/31/2001	175,008,925	-.9465%	177,274,004	164,258,567	180,737,128	10.3895%
12/31/2002	155,948,501	-8.9231%	173,206,377	178,934,580	187,892,718	6.0138%
12/31/2003	187,395,857	23.5304%	153,600,736	185,544,953	196,697,432	7.2760%
12/31/2004	202,855,173	10.5204%	185,374,455	194,676,030	204,706,452	6.1907%
12/31/2005	205,998,745	3.8459%	200,570,120	202,421,399	209,829,340	4.7885%
12/31/2006	229,184,172	14.1391%	203,224,386	207,054,981	217,143,723	6.2124%
12/31/2007	231,792,424	3.8324%	226,154,721	214,114,272	223,583,589	5.8374%
12/31/2008	166,418,096	-25.8553%	228,666,512	220,457,677	222,598,640	2.3891%
12/31/2009	191,024,143	19.6067%	162,764,742	218,945,286	228,999,660	6.2608%
12/31/2010	205,240,285	12.0053%	186,912,499	224,888,016	230,298,898	4.2343%
12/31/2011	206,093,756	4.4578%	201,182,840	226,241,453	229,137,699	3.0736%
12/31/2012	220,704,055	11.4351%	201,857,606	224,901,549	229,633,410	3.9875%
12/31/2013	234,358,049	10.7339%	215,941,545	224,870,900	226,423,894	2.8085%
12/31/2014	236,556,671	4.9416%	229,779,989	221,845,834	223,689,647	2.8947%
12/31/2015	222,427,527	-1.7896%	231,564,170	218,697,146	233,572,291	9.0845%
12/31/2016	224,356,261	5.7902%	217,106,461	228,251,225	238,715,902	6.9160%

MVBVH151.33

EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS
ESTIMATED INVESTMENT PERFORMANCE
BY CALENDAR YEAR

PLAN YEAR ENDING	BEGINNING MARKET VALUE	NET EXTERNAL CASH FLOW FOR YEAR	MARKET VALUE INV. INCOME FOR YEAR	ENDING MARKET VALUE	MARKET VALUE INVESTMENT PERFORMANCE			ACTUARIAL ASSET VALUE INVESTMENT PERFORMANCE			YEAR
					FOR YEAR	CUMULATIVE	AVERAGE	FOR YEAR	CUMULATIVE	AVERAGE	
12/31/91	56,348,353	1,065,263	11,331,152	68,744,768	19.9208%	19.92%	19.92%	10.89%	10.89%	10.89%	1
12/31/92	68,699,004	1,105,696	5,789,535	75,594,235	8.3601%	29.95%	13.99%	9.95%	21.93%	10.42%	2
12/31/93	75,594,235	1,287,486	8,471,584	85,353,305	11.1120%	44.39%	13.03%	11.07%	35.43%	10.64%	3
12/31/94	85,353,305	1,180,899	-2,682,882	83,851,322	-3.1217%	39.88%	8.75%	5.87%	43.38%	9.43%	4
12/31/95	83,851,322	849,793	22,390,520	107,091,635	26.5680%	77.04%	12.10%	12.73%	61.63%	10.08%	5
12/31/96	107,091,635	1,437,267	12,894,655	121,423,557	11.9605%	98.22%	12.08%	13.21%	82.98%	10.59%	6
12/31/97	121,423,557	724,737	21,841,187	143,989,481	17.9341%	133.77%	12.90%	4.67%	91.52%	9.73%	7
12/31/98	143,989,481	12,894	13,756,662	157,759,037	9.5535%	156.10%	12.47%	11.56%	113.66%	9.96%	8
12/31/99	157,759,037	-749,516	16,013,013	173,022,534	10.1745%	182.15%	12.22%	11.76%	138.80%	10.15%	9
12/31/00	173,022,534	-819,672	5,658,247	177,861,109	3.2780%	191.40%	11.29%	10.49%	163.85%	10.19%	10
12/31/01	177,861,109	-1,174,211	-1,677,973	175,008,925	-.9465%	188.65%	10.12%	10.39%	191.26%	10.21%	11
12/31/02	175,008,925	-3,605,097	-15,455,327	155,948,501	-8.9231%	162.89%	8.39%	6.01%	208.77%	9.85%	12
12/31/03	155,948,501	-4,695,531	36,142,887	187,395,857	23.5304%	224.75%	9.48%	7.28%	231.24%	9.65%	13
12/31/04	187,395,857	-4,042,804	19,502,120	202,855,173	10.5204%	258.91%	9.56%	6.19%	251.75%	9.40%	14
12/31/05	202,855,173	-4,570,106	7,713,678	205,998,745	3.8459%	272.72%	9.17%	4.79%	268.59%	9.09%	15
12/31/06	205,998,745	-5,548,719	28,734,146	229,184,172	14.1391%	325.42%	9.47%	6.21%	291.49%	8.90%	16
12/31/07	229,184,172	-6,058,903	8,667,155	231,792,424	3.8324%	341.72%	9.13%	5.84%	314.34%	8.72%	17
12/31/08	231,792,424	-6,251,824	-59,122,504	166,418,096	-25.8553%	227.51%	6.81%	2.39%	324.24%	8.36%	18
12/31/09	166,418,096	-7,306,708	31,912,755	191,024,143	19.6067%	291.72%	7.45%	6.26%	350.80%	8.25%	19
12/31/10	191,024,143	-8,223,289	22,439,431	205,240,285	12.0053%	338.75%	7.67%	4.23%	369.89%	8.04%	20
12/31/11	205,240,285	-8,114,890	8,968,361	206,093,756	4.4578%	358.31%	7.52%	3.07%	384.33%	7.80%	21
12/31/12	206,093,756	-8,472,301	23,082,600	220,704,055	11.4351%	410.72%	7.69%	3.99%	403.64%	7.63%	22
12/31/13	220,704,055	-9,525,020	23,179,014	234,358,049	10.7339%	465.54%	7.82%	2.81%	417.79%	7.41%	23
12/31/14	234,358,049	-9,156,120	11,354,742	236,556,671	4.9416%	493.49%	7.70%	2.89%	432.78%	7.22%	24
12/31/15	236,556,671	-9,985,003	-4,144,141	222,427,527	-1.7896%	482.87%	7.31%	9.08%	481.18%	7.29%	25
12/31/16	222,427,527	-10,642,132	12,570,866	224,356,261	5.7902%	516.61%	7.25%	7.25%	523.31%	7.29%	26

Number of Years Included: 26

CERTIFICATION

The foregoing report presents fairly the actuarial position of the Employees' Retirement System of the Sewerage and Water Board of New Orleans as of January 1, 2017 in accordance with generally accepted actuarial principles applied on a basis consistent with the preceding valuation, except where noted. In our opinion, the assumptions used in preparing the liabilities and estimated costs are reasonably related to the experience of the plan and to reasonable expectations and represent our best estimate of anticipated experience under the plan.

CONEFRY & COMPANY, L.L.C.

Michael A. Conefry, FCA, ASA, MAAA, MSPA
Enrollment Number 17-1235

New Orleans, Louisiana
May, 2017
V201612

Appendix C: S&WB Professional Services Procurement Policy

Sewerage and Water Board of New Orleans 625 St. Joseph Street Cedric S. Grant, Executive Director	**Policy Memorandum No: 95** **Revised October 15, 2014** **PROFESSIONAL SERVICES PROCUREMENT POLICY**
TO: All Sewerage and Water Board Employees	

I. INTRODUCTION

Professional Services must be competitively selected in accordance with this Policy. The qualifying factors for Professional Service contracts are as follows:

- Contracts for a personal service of a professional character, i.e., attorney, doctor, engineer, etc.
- Requirements of a technical skill or experience of a high degree in a recognized discipline.
- Service which requires advanced study or training in a specialized field.

Professional Service contracts under the sum of $15,000 may be issued at the discretion of the department head. Professional Service contracts in excess of $15,000 shall be entered into using the following selection procedures.

Professional Service contracts will be entered into when a need has been determined based on the lack of specific knowledge or available staff time to complete work or on the determination to transfer the risk of the work to another employer. Every reasonable effort will be made to use S&WB personnel. These contracts must be routed to Civil Service for final approval. Professional Service contracts will not be entered into if there are insufficient funds available, as determined by the Executive Director, General Superintendent or Deputy Director, to cover the cost of the contract.

While the goal of disadvantaged business participation in these contracts is 35%, it is recognized that not all contracts lend themselves to this level. Therefore, all professional service contracts whose value exceeds $15,000 must be submitted to the Staff Contract Review committee for determination of the recommended percentage of disadvantaged business enterprise participation.

Unless contracted using emergency procedures, all Professional Service contracts above $15,000 must receive Board approval; selection of the firm and authority to negotiate and enter into a contract must be given by the Board in a Board resolution.

The following identifies the personnel/departments involved in the contracting process and their responsibilities:

A. **PURCHASING DEPARTMENT:** The solicitation process for all professional and service contracts will be maintained in this department. Historical files on these contracts will be maintained here. The contract files will contain all original documents assembled by the Contract Administrator during the solicitation and selection process, as well as those original documents produced by the Purchasing Department. The Purchasing Department may also periodically survey potential contractors who did not submit proposals or qualifications. Information received in these surveys, when performed, will be used to identify any problems indicated which these contractors feel limit their interest in participation.

B. **CONTRACT ADMINISTRATOR:** This person is recommended by the department head requesting the contract and is approved by the Executive Director, Deputy Director, General Superintendent, or Deputy General Superintendent. The appointed Contract Administrator should obtain the necessary training in development of requests for qualifications and requests for proposals as well as the evaluation of proposals.

The Contract Administrator directs the preparation of RFQ's and RFP's; checks references supplied by proposal respondents; and is responsible for assembling the procurement documents including all ranking data, reference checks, and interview notes assembled during the selection process. All original documents must be turned over to the Purchasing Department by the Contract Administrator; the Contract Administrator may retain copies of all original documents in departmental files.

C. **PROPOSAL SELECTION COMMITTEE:** The purpose of the Proposal Selection Committee is to conduct an independent and objective evaluation of proposals. This committee-evaluates and ranks the responses to the RFQ's and RFP's and prepares a ranking of the respondents. The committee is composed of the following five employees: 1) General Superintendent or designee; 2) Deputy Director or designee; 3) Department Head requesting the service or designee; 4) Employee who will manage and monitor the contract and 5) An expert (employee or non-employee) in the field as determined by the Executive Director. For complex procurements, the Selection Committee may retain firms with specialized expertise to advise or assist in analyzing the RFQ/RFP responses. Should the Selection Committee engage a non-employee individual or firm to advise or assist in the analysis of the RFQ/RFP, that individual or firm will be required to submit a letter affirming that no conflict of interest exists and full compliance with the disclosure requirements.

All meetings of the Selection Committee shall be open to the public and in compliance with Louisiana Open Meetings law.

D. PROFESSIONAL RFQ/RFP CONSULTANT: This contractor may be hired upon Board approval to prepare, or help prepare Requests for Qualifications and Proposals where additional expertise beyond that available from S&WB personnel is necessary to prepare these requests.

E. S&WB COMMITTEE: Approves or disapproves the selection made by the Selection Committee and presents its recommendation to the Board of Directors.

F. BOARD OF DIRECTORS: Approves or disapproves the recommendation of the Committee and authorizes contract negotiations and preparations by Board resolution.

G. LEGAL DEPARTMENT: Personnel in the Legal Department, along with the Contract Administrator and appropriate staff, prepare the contract with the selected firm.

H. ROUTING DEPARTMENTS: Following a timeline set by the Contract Administrator, personnel in the departments listed below review the contract to ascertain that it complies with all policies, regulations, and requirements under their jurisdiction:

ORIGINATING DEPARTMENT
ECONOMICALLY DISADVANTAGED BUSINESS PROGRAM
INTERNAL AUDIT
RISK MANAGEMENT
LEGAL DEPARTMENT
GENERAL SUPERINTENDENT OR DEPUTY DIRECTOR
EXECUTIVE DIRECTOR
CIVIL SERVICE

Approval of the contract is indicated by the department's signature on the contract approval sheet; recommended changes are submitted to the Contract Administrator by memorandum.

I. CIVIL SERVICE: Civil Service reviews and approves all Professional and Personal Services contracts in accordance with Rule III, Section 6.2 of the Rules of the Civil Service Commission, City of New Orleans.

J. S&WB PRESIDENT/S&WB PRESIDENT PRO-TEMPORE OR AS OTHERWISE AUTHORIZED BY THE BOARD: Signs the contract.

II. REQUEST FOR QUALIFICATIONS/REQUEST FOR PROPOSALS SELECTION PROCEDURES

When the need for a professional contract has been determined, the Contract Administrator will begin the preparation of either (1) Request for Qualifications or (2) Request for Proposals. These documents will be prepared either by (a) an in-house committee composed exclusively of S&WB personnel, (b) a consultant firm hired specifically for their expertise and technical knowledge of the project, or (c) a committee composed of in-house and consultant personnel. Requests for Qualifications and/or Requests for Proposals will be advertised in the Official Journal of the City of New Orleans and other appropriate publications, as well as, electronic media.

Request for Qualifications and Request for Proposals must include, but are not limited to the following:

1. Purpose, Background, and Scope of Project
2. Description of Work to be Performed and Objectives to be met
3. Deadline for Proposals
4. Identity of the Contact Persons
5. Timetable for Selection
6. Qualification of Personnel
7. Sewerage and Water Board Policies and Procedures
8. Economically Disadvantaged Business Participation Requirement
9. Criteria for Evaluation and the Relative Weight Attached to Each

Weightings for each criterion will be established in the Request for Proposals and Request for Qualifications. Except as determined by the Executive Director upon recommendation of staff, the following criterion are standard and should be included in every Request for Proposals and Request for Qualifications:

1. Specialized Experience and Technical Competence
2. Performance History, including cost control, work quality and ability to Meet schedules and deadlines
3. Location of firm in Orleans Parish
4. Company size and Capability of Completing the Work in a timely fashion
5. Economically Disadvantaged Business Participation Requirement

Other weighting criterion which may be included in the Request for Proposals and Request for Qualifications may include but are not limited to:

1. Fees and Costs for Proposed Service
2. Anticipated schedule and Provisions for Ensuring Adherence to Project Schedule

Once Requests for Proposals have been issued, a pre-proposal conference may be held for all parties interested in submitting proposals. Potential proposers will receive copies of all questions posed at the conference along with their answers. Any questions not raised at the pre-proposal conference from prospective proposers must be submitted to the Purchasing Department and answered by the Purchasing Department in writing. All documentation from the pre-proposal conference, along with additional questions posed to the committee will be preserved in the contract folders; originals will be sent to the Purchasing Department.

If only one response from the Request for Proposals is received, evidence must be presented to the Board that the service provider possesses proprietary processes or that good faith effort was demonstrated to obtain proposals from other firms. The Purchasing Manager must document to the Board that public advertisement, including notice to potential or interested consultants, was made and providing further documentation that additional solicitation is expected to be fruitless. The Board may give its approval not to continue advertising for proposals based on the evidence.

If a second attempt to secure additional responses to the RFP's is unsuccessful, the Purchasing Manager may convey information to the Board regarding the single responsive party.

Once Requests for Qualifications/Proposals have been issued, the Selection Committee members and Board members may not discuss the solicitation with prospective proposers except at Selection Committee meetings or Board meetings, respectively. If the Selection Committee members or Board members are contacted, they should refer the proposer to the appropriate staff member of the Purchasing Department.

Responses to the Request for Proposals will be evaluated by the Selection Committee. Ranking criteria and its weighting will be established in the Request for Proposal. The responsive parties will be ranked using the above described suggested criteria.

Fees and costs shall not be requested of any respondents on RFQ/RFP issued for the selection of providers of design services (La. R.S. 38:2318.1).

Responsive parties may be invited for oral interviews before the Selection Committee. All committee notes ranking the companies' RFQ's, RFP's, and oral presentations will be filed by the Purchasing Manager in the project's file. The recommended proposal will be presented to the appropriate Board Committee with a request to enter into a contract with that respondent. The Committee will then approve or disapprove of the Selection Committee's recommendation and present its recommendation to the full Board for its approval.

The Board of Directors shall either approve the contract with the selected respondent or terminate the procurement process for these services. Upon receiving Board approval, staff may conclude any remaining contract negotiations with the selected respondent.

The Executive Director or General Superintendent may authorize emergency procurements which deviate from the procedures detailed herein when there exists a threat to public health, welfare, or safety under emergency conditions, provided that any emergency procurement must be made with as much competition as is practicable under the circumstances and in compliance with applicable law. A written determination of the basis for the circumstances and for selection of the particular contractor must be included in the contract file.

The Executive Director or General Superintendent, with the written concurrence of the Special Counsel, may make additional written exceptions to the procedures promulgated herein as required to meet emergency situations or as otherwise may be in the Board's best interests. The Executive Director or the General Superintendent must provide written notice to the Board Members within seven (7) days of granting the exception, explaining why the exception was granted.

The Purchasing Manager may authorize solicitation, without the need for formal advertising, the names of at least three firms from a list of pre-qualified firms who have been vetted through a selection process, kept and maintained by the City of New Orleans, its Departments, Boards and Commissions, Unattached Boards and Commissions, or other related entities, and present the same to a Proposal Selection Committee for evaluation and recommendation.

III. CONTRACT MONITORING AND REPORTING

The Contract Administrator shall file a written standardized evaluation report upon the completion of a contract and file same with Purchasing Department Manager.

IV. DISCLOSURE REQUIREMENTS

Each RFQ/RFP shall require the submission by each respondent of a cover letter that includes the following:

- Identify any possible relationships that might impair their ability to perform if awarded the contract, including any familial or business relationships that the firm, the proposed subconsultants, and their principals have with members of the Sewerage and Water Board of New Orleans or any of its employees.
- Respondents are directed to review the Louisiana Code of Ethics (Louisiana Revised Statutes Title 42:1101-1125) as a non-exclusive reference for information regarding ethics and conflicts of interest.
- Affirmation that there is not a conflict of interest
- Respondents shall also be required to identify all proposed subcontracts to be utilized in connection with the project. The successful respondent shall notify the Board of any change in

subcontractors and obtain prior approval of the use of any new subcontractors before they can begin work on the project.

Each member of the Proposal Selection Committee shall submit a signed statement prior to review of the proposals that include the following:

> I hereby certify that I have no personal interest, economic or otherwise, in the proposed contract with the Sewerage and Water Board of New Orleans for which I am evaluating bids on the Request for Qualifications and/or Request for Proposals as a member of the Review Panel and/or Selection Committee. Further, I certify that I have no relationship with any of the proposers or bidders, be it economic or otherwise that would affect my ability to be fair and impartial in the review/selection process.

V. PENALTIES FOR NON-COMPLIANCE

Contractors' failure to comply with the Rules and Regulations of the Sewerage and Water Board of New Orleans, laws of the State of Louisiana or City of New Orleans, including, but not limited to, disclosure requirements, financial reporting, EDB Participation requirements, may result in monetary damages or termination of the contract.

Legal Approval [signature] **Date:** 10/22/14

Executive Director Approval Cedric S. Grant **Date:** 10/20/14

Revision No.	Issue Date	Reason for Revision
	10/15/14	Revision

POLICY UPDATE: Sewerage and Water Board of New Orleans reserves the right to review and update its policies and procedures, as deemed necessary, at any time.

SEWERAGE AND WATER BOARD OF NEW ORLEANS
POLICY CERTIFICATION

Pursuant to City Of New Orleans Executive Order MJL 10-05, on competitive selection procedure for procurement and award of professional service contracts, the following is hereby certified.

(1) Sewerage and Water Board of New Orleans Policy Memorandum No. 95, Professional Services Procurement Policy, (Revised October 15, 2014) provides procedures that are consistent with the purposes and intent of the City Charter.

(2) The Sewerage and Water Board of New Orleans may use the procedures outlined in this Professional Services Procurement Policy as an alternative competitive procedure, and Executive Order MJL 10-05 shall not apply to the Board.

The above is hereby certified by the City Attorney, in her capacity as a representative of the Mayor of the City of New Orleans.

______________________________ Date: ________________
Sharonda Williams, City Attorney
Representing the Mayor of the City of New Orleans

n:\pers\policies\procurement\141015policycertification.docx