



Fiduciary Performance Audit
State Teachers Retirement System

June 30, 2021

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June 30, 2021

Bethany Rhodes, Director
Ohio Retirement Study Council
88 East Broad Street, Suite 1175
Columbus, OH 43215

Dear Ms. Rhodes,

The Hackett Group, LLC (“THG”) is pleased to submit its credentials in response to the Request for Proposals for Fiduciary Performance Audit of the State Teachers Retirement System (“STRS”). We believe the information provided below responds to the needs of the Ohio Retirement Study Council

The Hackett Group recognizes ORSC's need for such a comprehensive review and will apply its subject matter expertise in the area of pension system audits and investment reviews to complete this assignment. We understand that the goal of this audit is to identify areas of weaknesses and strengths in STRS, compare STRS operation with best practices of other public pension plans, and make recommendations for improvement.

The Hackett Group is distinguished from any other organizations because we offer the following.

- *Highly experience senior consulting team representing complementary strengths and disciplines focused on public funds and plan sponsors with well over 100 years of combined relevant experience*
- *Effective project management including cloud-based tools to manage resources and documents. Well positioned to achieve the timeline associated with the project.*
- *Independent and Conflict-Free, The Hackett Group, LLC provides independent investment consulting and audit services that are fully transparent and free from any conflicts of interest. In providing our services, we view ourselves as an extension of the Board and will act as a fiduciary to the plan.*

Again, thank you for the opportunity to present our credentials.

Sincerely,

Toni Hackett Antrum, President

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1. PROPOSAL SUMMARY

The Hackett Group (“THG”) is pleased to submit its proposal in response to Ohio Retirement Study Council (“ORSC”) RFP to perform a fiduciary performance audit of the State Teachers Retirement System (“STRS”). The firm and its partners understand the requirements as outlined in the RFP and have assembled the right team to perform this important fiduciary review.

The Hackett Group, LLC (“THG”) is a boutique pension and investment consulting practice based in New Orleans. The firm is an independent institutional investment consulting firm and a Registered Investment Advisor (RIA) with the Securities and Exchange Commission. The firm provides customized investment counsel and consulting services to public funds, retirement plan sponsors, fiduciaries, private sector clients, and political subdivisions. THG is the successor firm to Washington Hackett, Smith & Company--the groundbreaking organization founded 30 years ago as the nation's first minority-owned pension consulting firm[RD1][THA2]. Washington Hackett, Smith & Company (WHS) provided comprehensive investment consulting services to institutional investors including California Public Employees Retirement System (CALPERS), S & WB Retirement System in New Orleans, the City of San Diego General Employees’ Pension, Denver Water Board Employees Fund, Louisiana School Employee Retirement System, City of Atlanta General Employees’ Pension Fund and the Treasurer’s office for the State of Louisiana. The firm was especially noted for the educational programs it sponsored including nationally recognized annual investment training conferences and numerous regional conferences. The firm was credited with the ability to synthesize Investment’s jargon into a “plain English” format that enabled fiduciaries to make more informed decisions.

In addition to pension and investment consulting, the firm provides public finance, real estate analysis, public policy consulting focusing on economic development and governmental fiscal and operational matters. The company is registered with the Municipal Securities Rulemaking Board as a municipal advisor.

Competitive Strengths and Project Success Factors

For this project we have identified several areas we view as *critical components of project success* – effective project management and superior organizational assessment – and we believe that our team offers particularly strong expertise in both areas.

The Hackett Group, LLC is a national expert in the area of public pension funds, 403 B, deferred compensation, investment, post-retirement health benefits, actuarial analysis and OPEB. The Hackett Group, LLC and its senior consultants are noted for independent and frank analysis and reports unafraid to write critical reports if the data supports the findings. The hard data, detailed understanding, and insightful recommendations that The Hackett Group and its senior consultants provide allows systems to make changes and/or improvements with confidence.

This team possesses over 100 years combined of pension management, pension consulting and institutional investment experience.

This proposal described a methodology and process that will achieve the desired goal. We will provide an in depth and usable final product with recommendations that are actionable...not pie in the sky or operationally unachievable.

Scope

Specifically, for this assignment, the audit scope performed by THG will include an assessment of the adequacy of operational processes, organizational structure and governance, investment policies and oversight, risk management, compliance with applicable statutes, and IT operations. The overall objective of the audit is to provide enough basis for concluding whether, or not, internal controls over the operational, governance, investment and legal processes of the System provide reasonable assurances that:

- The Governance, administration and organizational structure allow for effective management of the System and follow Best Practices.
- The System possesses robust, up-to-date investment guidelines to which it adheres;
- The System has properly identified and addressed both financial and operational risks; and,
- The operations and IT processes in place allow for the proper monitoring, oversight, and valuation of investments.

The end-product of this fiduciary audit will ensure that the processes for monitoring and oversight of the System's operation include sufficient controls to safeguard the System's assets.

Mandatory Statements and Disclosures

Primary Contact: Toni Hackett Antrum, the President of The Hackett Group, will act as the primary contact for this engagement.

Ownership: The Hackett Group, LLC is owned by Toni Hackett Antrum and Bernard Robertson, III. The firm's ownership is 100% minority owned. THG is an SBE (Small Business Enterprise) and a M/WBE (Minority/Woman-owned Business Enterprise). [RD3] The Hackett Group has no subsidiaries, affiliated companies or joint venture relationships. [RD4]

Material Change: A change in the firm's structure of ownership has not occurred in the last 18 months. There have been no material changes at The Hackett Group.

Litigation: Neither the firm nor its principal faces any material litigation. Since THG's inception, no client or former client has brought litigation against the firm.

Conflicts: No professional relationships involving the ORSC, the five Ohio public retirement systems, the State of Ohio or its political subdivisions exist. The Hackett Group foresees no ethical or professional conflicts if hired to perform the review.

2. CAPABILITIES AND EXPERIENCE

The principals of the firm possess combined experience of over 100 years in the investment arena, focused primarily on public pension funds, including working with jointly trustee boards of directors. Pioneers in the area of trustee and staff education and training, we comprehend the need for operational controls within a portfolio of complex investment asset classes. We have provided education and seminars covering all aspects of the Fiduciary Responsibilities of Trustees and Staff of pension funds and municipal employees.

The Senior Consultants each have more than 25 years advising pension funds and public entities. We have performed asset allocation studies, asset liability analysis, manager selection, peer group evaluation, performance measurement, education, and training for some of the largest state and municipal funds in the country. Clients have included various funds such as City of New Orleans Firefighters, Oklahoma Investment Commission, St. Louis Sewer District, St. Louis Public, Cook County Chicago, Illinois State University Retirement System, CALPERS, City of Denver, and the City of Atlanta.

A summary of projects The Hackett Group and its Senior Consultants have completed illustrates the flexibility and the multidisciplinary expertise of the firm.

Experience Highlights

1. The firm was engaged to review and provide in-depth compressive investment analysis, performance review and recommendations for improvement of the City's pension funds. **See Excerpt #1, Page 24 Recommendations** This investment and operational review included a review of the actuarial assumptions of the pension plans and recommendation of possible benefits modifications, as well as assessing the impact of these modifications on funding ratios and contributions. The Hackett Group reviewed the investment portfolios of each fund, including a total portfolio review of well over 40 Equity, Fixed Income and Alternative Investments separate accounts. The Hackett Group also evaluated the funds' investment policy statements and governance processes. With this valuable analysis, the City made the appropriate policy and legislative decisions regarding the New Orleans Municipal Employees Retirement System and the New Orleans Firefighters' Pension Fund. Recommendations included the following.
 - a. Adopt a cash management strategy creating a liquidity fund so that any liquidation of assets are not require for a "cash call"
 - b. Evaluate the costs and benefits of managing one or more of the equity allocation as index funds
 - c. The IPS should include an overall target and maximum weighting for each asset including illiquid investments and a more representative market index that reflects the overall portfolio's complexity and illiquidity.
 - d. Analyze the Impact of missed contributions, annual required contribution (ARC), smoothing and amortization terms on the unfunded actuarial liability (UAL)
 - e. Improve performance measurement reports to include enhanced risk statistics and

correlation of assets information.

2. An important component of the Legal review includes the adequacy of ethics training, The Hackett Group is designated by the State of Louisiana as a Certified Ethics Trainer, and over the past five years has conducted ethics training for City of New Orleans' departments, agencies boards and elected officials.
3. Leaders in investment trustee training and education, our curriculum in our educational offerings includes securities lending, proxy voting, and shareholder litigation. This gives THG unique insight into establishing proper procedures and best practice in each of these areas.
4. Lori McKnight, CFA, MBA, Senior Consultant at THG was responsible for developing the Compliance Framework at the State Board of Administration of Florida, the public defined benefit plan of approximately \$190 Billion as the compliance officer of public and private equity asset classes, from 2008- 2012 and for the total fund on statutory requirements testing. **Excerpt #6, Compliance Report.** During the 2008/2009 credit crisis there were heavy losses in the \$30 billion STIP (non-pension) pool fund which forced it to create a Compliance department dedicated solely to setting up policies and procedures, and compliance testing of investments from the total fund down to individual asset classes. Lori was the senior staffer who put together the first and second generations of a formal compliance program at the State of Florida pension plan. This included assessment and selection of risk metrics and testing modules in advance of a Charles River compliance software system, defining limits and signature authority hurdles on trading exceptions, a separate risk module built from scratch to cover hedge fund leverage risk, and tracking vintages, zombie funds and capital call liability on private equity funds. The overriding goal was to be able to put in place an effective monitoring compliance system that would help prevent (in advance) violations of statutes, rules and regulations, investment policy statements, policies and procedures across trading, risk management and investments.
5. An important assignment of the firm which fell squarely into the area of risk management and controls review was required. **Excerpt #5 – Recommendations - Maryland State Retirement System.** The Hackett Group was retained by the \$45 billion Maryland State Retirement Agency System to assist its Internal Audit staff in performing an operational audit as a subject matter expert in the area of Credit/Debt Strategy investments. In addition to providing supportive expertise, we apply this knowledge to conduct the audit, with assistance from Internal Audit. The audit scope includes an assessment of the adequacy of operational processes performed for the System's \$4 billion credit/debt strategy investments, focusing on:
 - initial due diligence for manager selection;
 - monitoring and oversight of positions;
 - valuation, recordation, and reporting; and
 - compliance with manager and fund investment guidelines and contracts

6. Affirmation of our approach and expertise, the firm gained two new clients, in the 4th Quarter of 2019. They are.
- Washington State Investment Board (WSIB) \$130 Billion
 - California State Teachers' Retirement System (Calstrs), a \$238 Billion pension system.
- In both cases, after a rigorous selection process, the firm was added to the fund's consultant pool under a five-year contract. The specific project(s) have not yet been determined. However, in both cases operational and investment reviews are included in scope of work.

PREVIOUS CLIENTS OF SENIOR CONSULTANTS (Partial Listing)

- *City of New Orleans Ethics Review Board*
- *New Orleans Aviation Board*
- *New Orleans Regional Transit Authority*
- *Louisiana School Employees*
- *Employees Retirements System of Texas*
- *Maryland Supplemental Retirements System*
- *Sewerage and Water Board, New Orleans*
- *Denver Water Board*
- *Atlanta General Employees' Pension Plan*
- *Rivera Beach General Employees' Pension Fund*
- *California Public Employees Retirement System*
- *City of New Orleans, City Council, Retirement Committee*
- *Teachers Retirement System of the State of Illinois*
- *University of Texas Permanent Fund*
- *State of Louisiana, Office of the Treasurer*
- *Maryland State Retirement & Pension System*
- *Utah Retirement Systems*
- *The Center for Research in Security Prices*
- *STOXX*
- *Numerous Expert Witness Testimony Engagements (Defined Benefit and Defined Contribution)*
- *Oklahoma State Pension Commission*
- *Oklahoma Tobacco Fund*
- *St. Louis Metropolitan Sewer District*
- *St. Louis Public School Employees*
- *Montana Deferred Compensation System*
- *Public Employees Retirements System of Pennsylvania*
- *Los Angeles County Deferred Compensation System*
- *Florida SBA – Retirement System*
- *Ohio Deferred Compensation System*
- *Vermont State Treasurer*
- *City of Memphis Retirement System*

**HISTORY
OF THE FIRM AND ITS PRINCIPAL CONSULTANTS' COMMITMENT TO PUBLIC PENSION
FUNDS IS NOT AN AFTERTHOUGHT
IT'S A CORE PART OF OUR INVESTMENT CAREERS.**

The integrity of the public pension system in the U.S. is essential to taxpayers which fund the Systems as well as the Plan Participants and Beneficiaries who both contribute to the system and rely on its investment success for a secure retirement.

Toni Hackett Antrum

Commitment Highlights

1. The firm's CIO, Chris Tobe has earned the designation of CFA as well as CAIA (Chartered Alternative Investment Analyst and is considered an expert in evaluating Alternative Assets. He has been committed to providing public fund trustees with reforms and has written ***Kentucky Fried Pensions*** based on his experience serving as a trustee of the Kentucky State Pension Fund. Ever concerned about the management of pension fund's Chris updated and published his book and focused on the fees paid to alternative managers and manager performance. He is an expert on alternative investments, and a specialty evaluation of alternative investments having earned the designation of CAIA – Charter Alternative Investment Analyst – and reviews all such investments for suitability and transparency for public funds.
2. The predecessor firm to The Hackett Group was especially noted for the educational programs it sponsored, including nationally recognized annual investment training conferences and numerous regional conferences. The firm earned the reputation of having the ability to synthesize investments jargon into a "plain English" format that enabled fiduciaries to make more informed decisions. The Hackett Group proudly continues this tradition of education and communication with its clients on an individual basis. The Hackett Group recognizes the need to establish an education-centric relationship with clients to best equip the staff and trustees to evaluate investment decisions. We know that informed governance can improve the overall investment performance of the Fund.
3. The firm principal Toni Hackett was instrumental in the formation of a trustee education organization in the Atlanta region hosting several trustee education events focused on developing strategies to strengthen area pension plans insuring long-term viability and its role to support public employees and their beneficiaries into the future.
4. In Ohio, Toni also was responsible for planning the educational programs at the firm, including nine nationally recognized annual investment training conferences and numerous regional conferences which attracted investment managers as well as public, corporate and endowment plan fiduciaries, and elected officials. WHS held a very successful regional Trustee Training and Education Conference which included members of the Ohio pension fund under review. The Conference Chair was then Ohio State Treasurer, Ken Blackwell.

5. An Ohio native, Dorien Nunez, Senior Consultant, has conducted Trustee Education and training for Ohio Police and Fire, State Employees, State Teachers as well as OPERS. Other systems included State Highway Patrol, the City of Cincinnati Retirement System and was recently an expert panelist at the Ohio Trustee forum held in Columbus. Dorien has also consulted with Ohio Bureau of Workers Compensation and served several years on the Board of the Buckeye Institute and on the Ohio Governor's Minority Business Advisory Committee appointed by Gov. Voinovich. Dorien was the co-founder of the Greater Cincinnati/Northern Kentucky African American Chamber of Commerce as well as the Southern Ohio Hispanic Chamber.

6. Diversity and Inclusion within the Financial Services Industry Members and developing strategies to achieve greater inclusion has always been an important value at The Hackett Group. The predecessor firm Washington Hackett, Smith & Company, has been noted as coining the phrase and promoting "emerging managers," representing African-American and women owned money managers.

3. STAFF QUALIFICATIONS

Operationally, we will approach this project as a team, with complimentary expertise. A synergistic approach which will provide STRS with the very best advice to address the complex issues at hand.

The Hackett Group calls upon a cadre of trusted senior professionals when additional expertise is required for a project in areas such as law, human resources, accounting and IT. The core team and their roles is illustrated below. While the illustration is a traditional looking organization chart, we maintain a nonhierarchical organization. The firm promotes a collaborative culture, with information flowing across and between team members. Toni Hackett Antrum, the founder of the firm, serves as the Project Manager as well as a subject matter expert.



**Toni Hackett
Antrum, MBA**
*Chief Executive
Officer*

Project
Management,
Fiduciary Training &
Education, Fund
Governance,
Investment Policy
Development, Asset
Allocation, Process
Development

Alex Antrum
Data Manager

Internal & External
Data, Technology
Adoption

Cherry Cappel

IT Infrastructure &
Security, User
Functionality

**Bernard
Robertson**
*COO, Senior
Consultant*

Investment Strategy,
Manager
Search/Evaluation
Specialist

**Christopher
Tobe, CFA
CAIA**
*CIO, Senior
Consultant*

Alternative
Investment
Specialist, Asset
Allocation,

**Tessa Jackson,
MBA**
*Senior
Consultant*

Investment
Research, Real Estate
& Private Equity
Strategist

**Lori McKnight,
CFA**
Sr. Consultant

Investment
Compliance,
Performance
Measurement &
Analytics, Operations

Dorien Nunez

**Sean M.
Bruno, CPA**
*Sr. Consultant
Auditor*

**Sharon E.
Jones**
Senior Counsel



The following provides more detailed information about THG's core consulting team.

**Toni Hackett Antrum, MBA, Registered Municipal Advisor, President & Senior Consultant
Fiduciary Training and Education, Governance, Operational Improvement**

Toni has enjoyed a long and distinguished career in the public fund investment industry. She provided consulting services to leading public retirement programs beginning in 1988 under the banner of Washington Hackett, Smith & Company (WHS) -- the first minority-owned pension consulting firm in the country. As co-founder of WHS, she provided strategic planning, investment manager searches, performance measurement, and specialized investment analysis and training to public pension funds across the country with assets totaling over \$150 billion. Affiliates of WHS included a brokerage firm that specialized in institutional trading, as well as a multi-manager investment trust that managed over \$100 million in assets. Toni served as the primary retained consultant for several public pension funds, Louisiana School Employees, the New Orleans Sewerage and Water Board, the City of Atlanta General Employees, and Riviera Beach General Employees. She served as back-up consultant for additional clients of the firm. Toni also was responsible for planning the educational programs at the firm, including nine nationally recognized annual investment training conferences and numerous regional conferences which attracted investment managers as well as public, corporate and endowment plan fiduciaries and elected officials.

Toni began her investment career in New Orleans at Howard Weil Labouisse Friedrichs. She has worked at Great Western Financial Securities in Los Angeles and the firms Morgan Keegan and Merrill Lynch here in New Orleans. Her practice included working with community banks and insurance companies in cash management and developing retirement plans for employers and employees.

Currently, Toni serves as co municipal advisor to the New Orleans airport. Recent transactions have exceeded \$1.5 billion. In addition, Toni has led pension review projects at large public funds that focused on governance, investment policy development, benefits structure and costs, alternative investments, trustee education and investment performance measurement. A certified Ethics Trainer, she provides ethics training to public agencies in Louisiana – Employees, Administrators, Board Members, Commissioners and Trustees.

Toni serves as Commissioner of the New Orleans Redevelopment Authority (NORA) and The Housing Authority of New Orleans (HANO) and chairs the Finance Committee for both Boards. She also serves and as a member of the Board of City Trust and serves on the Ursuline Academy Board of Trustees also on the Finance Committee. She graduated with honors from Harvard College and earned an MBA from Columbia University School of Business. Toni is an Adjunct Professor at Southern University in New Orleans and Dillard University teaching investments and business communication.

**Chris Tobe, CFA, CAIA, Senior Consultant
Chief Investment Officer**

Chris Tobe, CFA, CAIA has joined the Hackett Group in 2013 as a public pension investment consultant with a focus on public pension plans and a specialty evaluation of alternative investments. Chris has 25 years of institutional investment experience with a focus on Public Pension plans. He is the author of "Kentucky Fried Pensions", a bestselling book on public pensions. Recently he has consulted to major public plans in Texas and Maryland with his firm Stable Value Consultants. He served as a Trustee and on the Investment Committee for the \$13 billion Kentucky Retirement Systems.

Past industry experience includes consulting stints at large consulting organizations. As a Senior Consultant with New England Pension Consultants (NEPC) Chris worked with several public pension plans including Oklahoma Investment Commission, Oklahoma Tobacco Fund, St. Louis Sewer District, St. Louis Public Schools, Amtrak & City of Dearborn. While at AEGON, he worked with public plans including those in Montana, Pennsylvania, Los Angeles County, Cook County in Illinois, Ohio, Vermont and the City of Memphis. And at Fund Evaluation Group from Chris worked with public university endowments at Purdue, University of South Carolina, Indiana State and the University of Memphis. Chris was employed by the Kentucky State Auditor to review the Kentucky Retirement Systems (KRS) and the Kentucky Teachers' Retirement System (KTRS) From 2008-2012 he served as a Trustee and on the Investment Committee for the \$13 billion Kentucky Retirement Systems.

At the Hackett Group Chris served as the lead consultant and subject matter expert with the Maryland State Retirement Systems. In 2015 he served as the sole consultant to the Utah Legislative Auditors review of the \$32.4 billion Utah Retirement Systems. In 2014 provided research support to the investigation of the \$86 billion North Carolina system by Edward "Ted" Seidle. In addition, Chris provided research support to the investigative report of the \$8 billion Rhode Island System led by Mr. Seidle.

Chris has published articles on public pension investing in the *Financial Analysts Journal*, *Journal of Investment Consulting* and *Plan Sponsor Magazine*. . In 2015 he published the book, "*Consultant & Plan Sponsors Guide to Stable Value*", and is a national expert in this DC asset class. Chris has been quoted in numerous publications including *Forbes*, *Bloomberg*, *Reuters*, *Pensions & Investments* and *the Wall Street Journal*.

Chris earned an MBA in Finance and Accounting from Indiana University Bloomington and his undergraduate degree in Economics from Tulane University. As an adjunct professor, he has taught the MBA investment course at the University of Louisville and has served as President of the CFA Society of Louisville. As a public pension trustee in, he completed the Program for Advanced Trustee Studies at Harvard Law School and in the, the Fiduciary College at Stanford University.

Experience Highlight

In 2009, the Maryland MSRP (\$4 billion DC plan) and the Texas ERS (\$3 billion DC plan) engaged Mr. Tobe to value plan assets where he examined the valuation of fixed income securities, the methodology for valuing securities, and portfolio characteristics. In 2011, Mr. Tobe completed legal expert witness testimony for a major insurance company on litigation involving valuation issues centered on a hedge fund. As well in 2011, he completed a major national arbitration in which his expert witness testimony directly impacted the valuation of Private Debt, a key issue in the arbitration. From 2008-2012, as a Trustee and member of the Investment Committee for the \$13 billion Kentucky Retirement Systems, Chris reviewed several investment valuations issues that he explored in his book, *Kentucky Fried Pensions*. In 2015 he was engaged by the Utah Legislative Auditor and completed a report on the performance of the \$30 billion Utah Retirement Systems. Currently in 2015 he serves as the investment expert in several legal cases involving valuations in Kentucky pensions. **See Excerpt #2, Utah Performance Audit, Page 26**

**Lori McKnight, CFA MBA, Senior Consultant
Compliance and Performance Measurement and Analytics**

Lori has more than 20 years of public and private equity institutional investment management experience. Before becoming a consultant in 2012, she spent more than 15 years with the 4th largest public pension plan in the United States, mostly serving as Compliance Officer. She led the implementation of compliance and oversight frameworks that continue to be used today. She has also served as an expert witness for equity investment class action cases. For the past three years, Lori has served as Director of Advocacy for the CFA Society Jacksonville. Lori graduated from Indiana University, and earned an MBA from Florida State University.

Familiarity with the day-to-day functions and challenges at a very large public pension plan is the foundation of Lori's expertise. Knowing how large public pension plans interact within the wide web of service providers (broker/dealers, asset managers/partnerships, custodial banks, consultants, software/hardware providers, etc.) further informs the base of core knowledge used to evaluate the effectiveness of a plan's risk, investments, and compliance systems. Most importantly, Lori works to encourage and promote best practices such as adoption of the CFA Institute's Asset Manager Code of Conduct, corporate governance and other guidance on investment topics put forth to the Securities and Exchange Commission and the wider investment community.

Lori's area of focus included projects involving factor-based investing (aka smart beta), assessing special investment initiatives in the infrastructure sector, assisting investment providers on how to best approach clients with their products and public speaking engagements at institutional investment forums.

As a CFA and advocate for the CFA program, Lori is committed to the highest standards of professionalism, ethics and accountability of the investment profession.

CFA – 2004 CFA Institute
MBA – 1992 Florida State University – Tallahassee, FL
BA/AS – 1985/1987 Indiana University – Bloomington, IN

Experience Highlight

Lori was part of the investment team selected to implement the defined contribution (DC) plan in 2001. Issues she worked on included asset allocation, compliance monitoring standards, vetting appropriate investment strategies and service providers, consultants, and platforms, as well as negotiating more favorable fee contracts to piggy-back on the existing defined benefit plan.

In her final three years with Florida, Lori served as the compliance officer of public and private equity asset classes, and the total fund statutory requirements testing

**Bernard Robertson, [RD5]III, CRPC, CAAMS, Senior Consultant
Investment Strategy and Manager Search/Evaluation Specialist**

Bernard has earned the Certified Retirement Planning Counselor and Accredited Asset Management Specialist designations that have assisted in portfolio development, research, risk management and the development and achievement of client goals.

The founder of Robertson Wealth Advisors, previously, Robertson served as Managing Director and consultant of a boutique investment firm in New Orleans, creating the processes that allowed for deeper client relationships centered on addressing the specific needs of clients with full qualitative analysis, education, and customized strategy. Earlier he experienced successes as a financial advisor with Smith Barney and as Senior Financial Advisor with Merrill Lynch. Robertson also led the formation of the Bird, Brauning, and Robertson advisory group at Bank of America Merrill Lynch.

An offensive tackle at Tulane University, Bernard blocked for fellow future NFL players Shaun King, Mewelde Moore, Patrick Ramsey, and J.P. Losman to name a few. Bernard, who was a four-year starter, was named to the Conference USA All-Freshman Team, twice named Conference USA First-Team All-Conference and was an All-American selection his senior season. He was selected by the Chicago Bears in the 5th round of the 2001 NFL Draft and played 3 years for the Bears before joining the Buffalo Bills for one season, and the Oakland Raiders for another. He has been inducted into the Tulane Athletic Hall of Fame as an individual in 2007 and again with his teammates on the historic 1998 Undefeated Team in 2008. In 2013, he was named to the All-Dome team honoring the best players in Tulane's history in the Superdome.

Robertson holds an EMBA with a concentration in Business Growth from Babson College, Master's degree in Business Administration, with a Global Business concentration from Tulane University's A.B. Freeman School of Business, and a Bachelor of Science degree with a double major in Sports Medicine and Sociology from Tulane University. In 2008, New Orleans City Business honored him as one of its "Innovators of the Year". Additionally, Robertson serves in a variety of civic leadership roles including as an executive board member for the Louisiana Council for Economic Education, the co-founder and past President for the Treme Charter School Association, and as Vice President and immediate past President of the NFL Players Association New Orleans Chapter (membership union).

In his personal life, Bernard credits education, family, and faith for his success. The Robertson family stays busy with education, sports, and giving back to the community.

Dorien Nunez, Senior Consultant

Trustee Training and Education, Actuarial, Trading Costs Research

Co-Founder and Director of Research of OMNI Research and the Wall Street Advantage, Nunez has been the Director of Research for a number of small boutique broker-dealers including NYSE member firms. He associated with The Hackett Group in early 2011 and has worked with Toni Hackett Antrum in various consulting roles for 20 years. OMNI Research created and conducted various trustee education programs including the annual "OMNIFinding Alpha in the Delta" Investment Roundtable and Trustee Institute each spring in New Orleans and the Annual "OMNI Buttonwood Investment Roundtable Series" held late summers at NYSE.

Nunez was the original instructor for the Florida Public Pension Trustees Certification program where he developed the performance measurement module.

An Ohio native, Dorien Nunez, Senior Consultant, has conducted Trustee Education and training for Ohio Police and Fire, State Employees, State Teachers as well as OPERS. Other systems included State Highway Patrol, the City of Cincinnati Retirement System and was recently an expert panelist at the Ohio Trustee forum held in Columbus. Dorien has also consulted with Ohio Bureau of Workers Compensation and served several years on the Board of the Buckeye Institute and on the Ohio Governor's Minority

Business Advisory Committee appointed by Gov. Voinovich. Dorien was the co-founder of the Greater Cincinnati/Northern Kentucky African American Chamber of Commerce as well as the Southern Ohio Hispanic Chamber.

Omni's Buttonwood series has been co-hosted at the New York Stock Exchange and NASDAQ & Options Industry Council (OIC) with a focus on Managing Risk, Alternatives and Emerging Managers. Nunez has provided his expertise to others in the Industry as a member of P&I's Research Advisory Panel and as a member of IMN's Advisory Board. IMN is the Information Management Network created by Frank Fabozzi and now a part of Institutional Investor. He has extensive experience as a moderator, speaker and conference chairperson for institutional investment events.

Nunez's experience spans almost 30 years and includes: Institutional investing; providing investment research and consulting services to managers, firms and Plan Sponsors (asset allocation analyses, due diligence on current/prospective investment firms/managers, investment education, etc.); conducting risk management analyses and monitoring. He has developed custom research and risk management tools to better enhance manager performance and to keep costs as low as possible – including designing custom pension fund and investment manager research system packages with proprietary models.

Nunez received his CFA in 1986. This is before 90+ per cent of the CFA's globally. He taught courses in Business and Finance as an Adjunct Professor at University of Cincinnati, Union Institute, and Northern Kentucky University. He created the Curriculum and co-created the training program for the AFL-CIO's oldest and largest constituency group, the A. Philip Randolph Institute. Nunez received his MBA from Harvard Business School where he won the Uehlmann Award for his research on "The Use of the Futures Market for Institutional Investors to Hedge Risks". His undergraduate degree from Harvard was in Sociology with emphasis on Statistics.

Tessa Jackson, MBA

Senior Consultant, Real Estate and Private Equity

Tessa Jackson is the Chief Strategist for Faubourg Advisors, a real estate and community development consultancy that specializes in creating catalytic development strategies for underserved communities, and whose representative clients include the Development Authority of Fulton County, the Georgia Development Capital Fund and the Claiborne Cultural Innovation District.

Ms. Jackson has over 15 years of combined community development, impact investing and social entrepreneurship experience. This experience includes seven years in regional program management and investment officer roles with the AFL-CIO Investment Program, where she underwrote debt and NMTC investments for the Housing Investment Trust and oversaw a number of community development-related initiatives. In addition to her tenure with the Investment Program, Ms. Jackson has served as a U.S. field officer for Trickle Up, an international microfinance organization, and played a key role in launching over a half dozen social impact ventures, including Hotel Hope, the Network for African-American Technology Entrepreneurs List, and Social Entrepreneurs of New Orleans. Throughout her career, Ms. Jackson has demonstrated an aptitude for effectively engaging with diverse stakeholders and developed a reputation for employing innovative thinking to solving complex social problems. A former Rockefeller Foundation Redevelopment Fellow, Ms. Jackson holds a Master of Business Administration from UC Berkeley's Haas School of Business, a Graduate Certificate in Urban Redevelopment from the University of Pennsylvania, and Bachelor of Arts and Sciences in Mechanical Engineering and Studio Art from Stanford University.

**Sharon E. Jones, Senior Consultant
Legal, Diversity and Inclusion Strategist**

Ms. Jones is a diversity consultant who specializes in providing diversity/inclusion consulting and training to law firms, professional services firms, corporations, not for profits and other types of organizations. She is the President of Jones Diversity, Inc. Her firm's broad range of services enable the organization to fully utilize, retain and promote diverse employees into leadership roles.

She has served as the Interim Founding Director for the Center for Diversity Innovation at the University at Buffalo which focused on translational research in diversity and inclusion and bringing those best practices to employers in all sectors. Ms. Jones has practiced law and been a community leader over a 25-year career, including positions as a federal prosecutor, with major law firms and with Fortune 500 Corporations. She has been highly successful as a litigator, a counselor, an educator and a problem-solver regarding extremely complex and sensitive matters. She has served as the Chief Operating Officer for the Chicago Urban League, managing a \$10 million budget with over 70 employees. From 1985-1989, Ms. Jones served as an Assistant United States Attorney for the Northern District of Illinois, based in Chicago, where she conducted federal grand jury investigations and trials in high profile white-collar criminal cases. In private law practice, she was a partner at Bird, Marella, Boxer, Wolpert & Matz in Los Angeles. In addition to her litigation practice, she was responsible for all in-house continuing legal education, as well as being an adviser to clients on a variety of employment and workplace harassment issues. She was Of Counsel at Orrick Herrington & Sutcliffe in Los Angeles, where she created and implemented its litigation training as well as firm-wide orientation training and evaluation programs. In the corporate sector, Ms. Jones managed litigation matters worldwide for Abbott Laboratories, as well as advising senior management in matters of crisis management and in fashioning creative solutions to highly complex business issues.

Most recently, Ms. Jones acted as Senior Counsel at SBC Communications. Ms. Jones was Counsel of Record in the amicus curiae brief filed in the United States Supreme Court in 2003 by the Black Women Lawyers Association of Chicago in *Grutter v. Bollinger* and the University of Michigan in support of diversity in higher education. Ms. Jones is a past President of the Black Women Lawyers Association of Chicago. Previously, she served as the Program Chair and created the innovative monthly BWLA Roundtable luncheon series designed to increase mentoring and networking opportunities for its members. She was the Chair of the Chicago Bar Association Committee on Racial & Ethnic Diversity and was instrumental in the 2006 adoption of the Chicago Bar Association's Diversity Initiative and Commitments on Racial & Ethnic Diversity. She is a past President of the Harvard Law School Alumni Association (2010-2012) and responsible for the launch of the HLSA Global Women's Alliance and the HLSA of Arabia, among others. She currently serves on the Board of the National Association of Women Lawyers and she is an elected director of the Harvard Alumni Association.

Ms. Jones is a graduate of Harvard Law School and Harvard College

**Sean M. Bruno, CPA
Senior Consultant, Auditor,**

Upon graduation from Morehouse College in 1993, Sean M. Bruno began his career in public accounting with the "Big Six" accounting firm of Deloitte & Touche, LLP. Sean worked with Deloitte & Touche for three years. After leaving Deloitte & Touche, he joined Bruno & Tervalon LLP, CPAs where he became a Director after gaining years of experience in performing audits of governmental and not-for-profit organizations including several colleges and universities. In 2009, Sean ventured out and started his own firm, Sean M. Bruno, Certified Public Accountants. Sean has over twenty-five years of experience in performing audits

and providing consulting services to governmental and not-for-profit organizations, as well as to small businesses.

The Firm provides audit and other professional services to numerous clients, primarily in Louisiana and has a professional staff of four (4) including two CPAs. The Firm's staff has a combined sixty (60) years of experience in auditing.

Sean has earned a reputation for providing quality services and products to his clients. This is evident by the number of years that many of his clients have engaged his services, many in excess of ten years. The Firm's staff has undertaken auditing and management advisory services for numerous not-for-profit organizations, college and universities, and local governments for more than sixty (60) years.

This experience and exposure have resulted in an efficient delivery of services to such institutions. Examples of the client's that Sean has served include Regional Transit Authority, Orleans Parish Sheriff's Office and Tulane University.

Sean is a member of the Louisiana Society of Certified Public Accountants, and the American Institute of Certified Public Accountants. He was also elected to represent District 100 on the Democratic State Central Committee and continues to hold the seat. He also serves on the following Board of Directors: Citizens United for Economic Equity, Chairman, Lakefront Management Authority, New Orleans Chamber of Commerce, and Metairie Bank & Trust.

Support

The senior consulting team is supported by Cherry Cappel and Alexander Antrum, both technologist and data scientist respectively, in the areas of investment research and information technology. As with all audit related assignments we employ the services of a Certified Public Accountant to ensure that we comply with standard audit procedures and best practices. The input of Sean Bruno, CPA is especially utilized during the initial planning process as we create the frame for the total project.

Alexander H. Antrum

Data Manager

Serves as the point person for data management and technology. He earned his BS from Washington University in St. Louis in Applied Science (Mechanical Engineering) and as a Manager of Assessment, Data, and Research at a large non-profit. Alex has,

- Managed database system containing 600+ family records
- Developed data management and quality assurance policies and procedures
- Collaborated with Local Evaluation Partner to ensure complete transfer of participant information
- Developed data capture processes to match agency programming
- Develop R scripts to clean and analyze 10,000+ data points

4. REFERENCES

Reference 1:

Date of Services:	2017
Client:	Maryland State Retirement System
Client Address:	120 East Baltimore Street Baltimore, MD 21202-6700
Reference Name	Dave Rongione, CPA – Director of Internal Audit
Reference Telephone:	410-625-5656
Description of Work:	Subject Matter Expert/Internal Audit. Focusing on the adequacy of processes and monitoring and oversight included sufficient controls.

Reference 2:

Date of Services:	2018
Client:	Utah Legislative Auditors
Client Address:	350 N. State Salt Lake City, UT 84114
Reference Name	Wayne Kidd – Utah Legislative Auditor
Reference Telephone:	801-755-7322
Description of Work:	Investment Performance Review comparing to benchmarks and peers

Reference 3:[RD6]

Date of Services/Hire	Hired 2019
Client:	Washington State Investment Board
Client Address:	Mary.lobdell@sib.wa.gov
Reference Name	Mary. Lobdell, Legal Risk and Compliance Director
Reference Telephone:	360-956-4744
Description of Work:	Investment Compliance Review

Reference 4

Date of Services:	Hired 2015
Client:	City of New Orleans, New Orleans Firefighters Pension Fund
Client Address:	City of New Orleans, City Hall 1300 Perdido Street New Orleans, LA 70112
Reference Name	Norman Foster, CFO (Former) Stacey Head, Councilwoman (Ret) Chair, Council Retirement Committee
Reference Telephone:	504-652-1093
Description of Work:	Providing an analysis of the City of New Orleans Retirement System and New Orleans Firefighters Defined Benefit Plan, focusing on plan costs, actuarial issues, investment performance, plan design and legal/legislative constraints or challenges related to benefit re-design

Reference 5

Date of Services:	Hired 2019
Client:	California State Teachers' Retirement System *
Client Address:	shasan@calstrs.com P. O. Box 15275, Sacramento, CA 95851-0275
Reference Name	Shifat Hasan Associate Portfolio Manager
Reference Telephone:	916-414-7559
Description of Work:	Investment Asset Allocation/Total Fund Level Research Investment Risk Budgeting and Management Investment and/or Operational Due Diligence Regarding a Potential Investment General Investment, Portfolio Analysis, Monitoring and Research Investment Business and Operational Consulting Services, Independent Fiduciary Services

5. METHODOLOGY, WORK PRODUCT AND TIMELINE

GENERAL METHODOLOGY

For this project, The Hackett Group would adopt the following methodology. While the following is a list of the methods we will use, each step informs the other steps, and the process is not sequential, but circular or iterative. We utilize a process methodology which employs project controls based on a continuous improvement model. This model will inform every phase of this engagement. The controls to which we adhere allow the client and The Hackett Group to reach the destination together.

1. Planning

This phase sets the stage for a successful review process. providing a method of getting everyone "on the same page", setting expectations and outcomes. During this phase, The Hackett Group will hold a work initiation meeting with the Contract Monitor to clarify contract requirements, integrate resources, align timelines and determine how confidential or sensitive data will be securely transmitted.

2. Document review

The engagement begins by reviewing and analyzing internal documents, guidelines, policies, past analytical reports and studies as well as actuarial reports, Board minutes, performance reports, annual fund audit reports, Investment Policy Statement, among others. From this step and others, THG will begin to identify the System's current risks, existing controls, policies and procedures.

3. Interview

The analysis will then be supplemented by a series of interviews with the Fund's administration, key staff members, Board members and the Fund's consultants. These interviews provide a feedback loop so that as THG's team gains insight into the specific processes and are able to further refine the interviews and interactions. In addition, this process may be supplemented by staff, Board and plan participant surveys.

4. Best Practice Research

The Senior Consultants will compile analysis/data related to national trends and comparable plans. This data will be used to compare STRS to a broad universe of trends, data, and comparable plans. Resources to be used for national trends and best practices would include acknowledged industry standards (e.g., ERISA, UPIA, UMPERSA, AICPA, IIA, CFA Institute, Boston College Center for Retirement Research), secondary research from reputable industry sources (e.g., NASRA, DOL, SEC), GFOA, NCPERS, empirical facts gained from performing similar reviews of other public retirement systems, independent research, and the extensive experience of our senior consultant sand subject matter experts. Peer group survey and sampling for benchmarking and common practices identification.

5. Preliminary Assessment

The Team will next review preliminary results gathered in the document review and interview process for each area identified in the audit/review scope. We will make a preliminary determination regarding the proper monitoring and oversight of investments, and whether investments are in compliance with contracts, whether the systems, rules regulations and

governing statutes are adequate and the System's investment guidelines. As well, the Team will further refine the risk analysis, and make preliminary assessments concerning governance, organizational structure, legal compliance, and IT operations.

6. Analysis

In this stage, THG will identify the process controls and weaknesses, with input from STRS staff. The firm will design and execute tests of controls. For those areas identified from this examination, the firm will design and perform substantive tests. THG will document the process through its working papers.

7. Recommendations

THG will engage STRS management in discussion of preliminary recommendations to determine accuracy and the feasibility of implementation.

8. Drafting/Re-Drafting

The milestone marking the completing of each category of the review will be the drafting of our findings to be incorporated into the final report.

9. Final Report Presentation

At dates, times and audiences determined by ORSC and STRS.

As we conduct the audit, especially as we focus on compliance with existing processes, rules, procedures we will utilize standard audits procedures with regard to sampling. In cases where there are a large number, we will randomly sample method or in other cases a cluster sampling method. The team would select the most appropriate analytical procedures from among the five types: THG and the STRS will jointly develop an expectation regarding calculations, based on information from prior periods, industry trends, and other information. THG will use one or more of the following analytical procedures:

1. Compare client with industry data
2. Compare client data with similar prior-period data
3. Compare client data with client-determined expected results
4. Compare client data with -determined expected results
5. Compare client data with expected results, using nonfinancial data

Other resources for this project will include outside databases to compare performance, asset allocation, and portfolio statistics. The primary database – The Wilshire Public Fund Universe¹ is a widely respected industry standard because of the independent reporting of returns by the custodial banks. The database takes into consideration the unique qualities of public fund, their risk profile, the similarity of liabilities, the investment constraints and their governance structure. We are careful to eliminate institutional investors such as corporate pension funds, foundations or endowments. While asset size may be the same, the fund profiles are dissimilar and therefore not comparable.

¹ **Wilshire – Public Fund Universe**

Wilshire Trust Universe Comparison Services (TUCS) Custodians submit asset positions and performance data to be pooled into universes of managed tax-exempt portfolios. Wilshire TUCS is the most widely accepted benchmark for the performance of institutional assets. It provides comprehensive information on the effects of risk, allocation, and style.

As a supplement to the general consulting methodology we would use, the following is a more detailed description of the methodology we have utilized in the past to review alternative (non-public) investments and operational compliance.

STATE TEACHERS RETIREMENT SYSTEM

WORK PRODUCT

Description	Approach and Required Assistance or Input
2.1 BOARD GOVERNANCE AND ADMINISTRATION	Board Governance administration is critically important component of this review. Studies indicate that proper oversight can add an additional 1 percent to overall fund performance. During this phase we will review policy and procedures, training, budget processes and adherence to those policies. We will conduct extensive interviews with staff and Board, including observing Board and committee meetings. Review of similar funds and sources will reveal best practices. While we will identify deficiencies, we will also highlight area of strengths.
2.2 ORGANIZATIONAL STRUCTURE AND STAFFING	Without proper staffing and structure, there will be sub optimal execution of policy and procedures and the desired organizational mission will not be achieved. We will conduct a thorough HR review and compare to other Ohio funds as well as similar sized funds. Important consideration will be an evaluation of investment staffing and their interface with the investment managers and consultants. We will review customer service and performance and assess the staff continuing education, while reviewing effectiveness of training as well as cost. During this phase, we will construct a sample survey to determine external stakeholder satisfaction.
2.3 INVESTMENT POLICY AND OVERSIGHT	<p>Investment Policy</p> <p>The governing document and the most important component of the investment review is the Investment Policy Statement - IPS. We not only look at the adequacy and completeness of the document, but adherence to policy. This will be accomplished by extensive conversations with the current consultant to determine the process for creating policy, how often it is reviewed and whether it is adhered to as outlined in the RFP. We will test areas by reviewing Board and committee minutes looking at areas such as manager selection, and rebalancing. We will make sure all assets are addressed in the policy and categorized properly. This is an area of particular concern in the area of alternative investments. <i>Excerpt #4, IPS Best Practices.</i></p> <p><i>Some of the items we will confirm include the Review allocations to strategies, Review prohibitions and limitations, Review Board Policies – relevant to investments and compliance – initial and annually, Conduct initial interviews with Board staff – initial and on-going. Procure information and data on portfolios – initial and on-going. Assess each private market strategy – initial and then sampling scheduled, Review investment manager contract, Review historical reports provided by investment manager, Procure a series of holdings or risk exposures through time which are representative of the strategy, Load into analytical database and run quantitative work, Determine Compliance metrics by portfolio and allocations – initial until modifications necessary,</i></p>

Determine Compliance Framework for Board reporting – initial until modifications necessary, Review metrics and Framework with Board staff and investment managers – initial until modifications necessary, Reporting – Quarterly - Lagged one quarter due to reporting by investment managers, Compliance Report , Compliance, Monitoring FLAG Report and Recommendations, Investment Oversight and review

We will review all the performance records, from the consultant, custodian, and directly from the manager. Outliers in performance will receive additional scrutiny and may involve communication with the consultant and/or investment manager directly. This phase of the project will be accomplished by reviewing performance monitoring reports by consultants and staff. We will be able to independently calculate manager performance of the traditional assets via a direct feed from the custodian. We will make sure that investments are measured against the appropriate benchmarks, especially in those areas where performance fees are a component of manager compensation.

During this phase we will review the actuarial assumptions, systems and methods to calculate liabilities by reviewing actuarial studies and reports. If necessary, we will rebuild an actuarial model to test the accuracy of the actuarial data. **Excerpt #3, Recommendations, City of New Orleans Investment and Actuarial Review**

Costs are as important as investment return and, in some case, more controlling. We will review brokerage and trading costs, indicate areas where efficiencies can be gained, identify hidden costs as well as fees paid to external managers, with particular emphasis on hidden fees among alternative investment managers.

Investment and fiduciary risk

Because we possess expertise in providing asset allocation reviews and studies combined with our experience in Board and fiduciary training, we will not only be able to evaluate the asset allocation models used by the fund, but also determine its implications in the risk profile and performance of the fund. We will look at how asset allocation and its implementation affect the actuarial picture and look at shortfalls in investment performance. Monte Carla simulations demonstrate the impact on the risk and return profile of the Fund integrating the fund’s liabilities (current and expected benefit payments), the contribution risk, and the effectiveness of the fund in providing benefit payments – the core mission of the pension fund. To assess the investment policies, asset allocation strategies and related portfolios, several analytical tools will be used.

The risk management of the investment portfolio ultimately is what determines the ability to pay participants and beneficiaries their current and projected future benefits payments. The performance of the investment fund is a major determinant of this. Therefore, managing investment risk is paramount. We will look at other risks such as market risk, currency risk, interest rate risk ,etc. and examine to what degree these are recognized, monitored, and mitigated by Fund staff and consultants, in this vital area.

Custodian Policy

	<p>The fund Custodian(s) is a cornerstone of risk controls, because assets are held for the benefit of the Fund. As the primary source of performance, valuation, reconciliation and record keeping, it is important that the best practices and most current services in this area are evaluated. Custodial banks frequently offer many services that clients do not take advantage of. We are firm believers in maximizing the services of this relationship. During this phase, we will review the custodial statements for traditional assets, review of all statements and contracts from alternative managers, and contact the custodian and managers for questions. The firm will place special emphasis on opaque asset classes and investments housed away from a custodian.</p>
<p>2.4 LEGAL COMPLIANCE</p>	<p>This phase will involve examining documents, any current written disclosures and then following up with interviews by e-mail and/or phone. Our expertise includes understanding the complexities of underlying documents and structures. The legal compliance review will be informed by a firm that is noted for defending a national pension fund in ERISA litigation and matters involving governmental and judicial ethics, as well as the development of internal codes of conduct. An important component of the Legal review includes the adequacy of ethics training, disclosure, and monitoring of compliance for Fund. The Hackett Group has been certified as ethics training and is currently training city department and agencies and Boards on ethics. An important component of this phase is legal compliance and adherence to IRS regulations. The CPA and the legal team will confirm this portion of the review.</p>
<p>2.5 RISK MANAGEMENT AND CONTROLS</p>	<p>For Ohio Police and Fire, we would follow these steps.</p> <p>This will be done by examining current written procedures and then following up with interviews with staff and the internal auditor by e-mail and/or phone. If needed, we will review the process and design means of testing in order to identify fraud, risk, or evaluate system controls.</p> <p>Conducting a documentary walkthrough of controls will allow THG, with input from Audit Staff, to identify significant controls and test for consistency of application, preliminarily identify both strengths and weaknesses of the Fund’s policies in place, and, importantly, identify missing controls. To accomplish this, THG will:</p> <ul style="list-style-type: none"> • Obtain, document, and analyze the System's written internal controls; • Document transaction reporting procedures and internal processes in each of the Fund’s strategies, based on current written policies; • View and document transactions from each strategy, based on statistical sampling techniques, to determine if sampled transactions flow properly through the internal controls system; and, • Document investment and operational risks based on the results. <p>Recommendations will be made as to the implementation of a system of internal controls and procedures that will minimize risk, if the Firm concludes that such systems would benefit from improvement. In our final report, we will provide recommendations for best practices to minimize risk for the Fund. A draft report will be provided at this stage of the engagement, allowing all parties to understand and resolve any differences</p>

	<p>between THG and staff regarding findings, and tentative conclusions and recommendations</p> <p>During this phase, team members we will include a CPA firm and Actuary. However, we will not render an accounting or actuarial opinion. Our opinion will be that of an investment and pension expert on the investment assumptions and returns as well as the actuarial assumptions and how they are reflected in the financial statements.</p>
<p>2.6 IT OPERATIONS</p>	<p>In this phase, the high-risk areas in the SERS information technology system will be identified, evaluated and insure procedures for mitigation using IT industry standards. System analysis will include, but not be limited to software integration analysis, server and storage analysis and user interface analysis. User interface analysis and software integration will be a primary focus of our review. An additional critical area of review will be the Incident management process as well as issues of security, redundancy and contingency, including the multi- step process for the incident management system. In order to accomplish this phase, consultants will be on site to observe and identify areas of deficiency and will require the input of the chief technology officer, the primary users of the system as well as end users. We would also require the input of external providers of software and other IT providers or vendors.</p>

For this project we do not anticipate the need for staff interpretation because the Senior Consultants at the firm are considered subject matter experts in the area of investments, Fund management and processes, identification and strategies for the mitigation of associated risks. We will rely on face to face meetings (in person or virtual), calls and emails for clarification, cloud based surveys and do not anticipate the need for specific space resources from the Fund.

This project will be thoroughly documented, tracked with summary reports provided monthly. The goal of this thorough documentation is to allow the team and the client to remain on track and to eliminate surprises, misunderstandings, misrepresentations, errors.

TIMELINE and MILESTONES

The time frame for this project is dependent upon access and response time of actuary, investment managers, custodian as well as turn-around time of document requests, data etc, and interviews scheduling. We would rely on virtual meetings rather than physical face to face meetings for this project. Based on the staffing that would be assigned to this account, we estimate a maximum term of five months for this project.

Phases	Month	1	2	3	4	5
Phase 1 Project Kick Off Audit Entrance Meeting. Initial Document Request. Project Design. Development of Protocol for Sensitive Document Sharing.						
Phase 2 Document Review, Schedule/Conduct Initial interviews Preliminary Assessment Review Topics <ul style="list-style-type: none"> • Governance Structure Review • Organization Structure and Staffing • Legal Compliance Review 						
Phase 3 Best Practice Research, Peer Comparison, Survey Development, Analysis and Review						
Phase 4 Survey Development, Conduct Survey, Peer Analysis, Compilation and Analysis						
Phase 5 Document Review Interviews Preliminary Assessment Review Topic <ul style="list-style-type: none"> • Investment Policy and Oversight • Risk Management and Control • IT Evaluation 						
Recommendations, Stakeholder Feedback, Document Revisions, Re-Interview						
Phase 6 Drafting, Re-Draft/Revise Staff/Board Discussions, Monthly Reporting, Final Report Staff/Board Presentation						

6. ADDITIONAL INFORMATION

Excerpt 1 Recommendations

New Orleans Municipal Employees Retirement System and New Orleans Firefighters Pension Fund Study Commissioned by New Orleans City Council – Retirement Committee and also the Mayor Office. 2012, Recommendations Section, Review performed by The Hackett Group

Recommendations	New Orleans Firefighters	Municipal Employees
Management & Governance		
The Board should create investment subcommittees allowing for in depth review and oversight of investments	✓	
The City, as the Plan Sponsor should exercise a greater role in oversight of fund	✓	
The Fund along with the City should create a liquidity plan that will reduce impact on investments	✓	
Improve documentation and communication of fund investments and investment performance to stakeholders	✓	
Analyze the Impact of missed contributions, annual required contribution (ARC), smoothing and amortization terms on the unfunded actuarial liability (UAL)	✓	
Adopt a cash management strategy creating a liquidity fund so that any liquidation of assets are not require for a “cash call”	✓	✓
Evaluate the costs and benefits of managing one or more of the equity allocation as index funds		✓
Evaluate managers for duplication of process and concentration to reduce portfolio risk/volatility		✓
Reduce or trim manager line up with the goal of reaching breakpoints, reducing fees, track fund of fund fees		✓
Adopt a policy that requires an asset/liability study be conducted every five years or when major changes in the benefits structure are planned	✓	✓
Investment Policy Statement (IPS)	✓	
The IPS should include an overall target and maximum weighting for each asset including illiquid investments and a more representative market index that reflects the overall portfolio’s complexity and illiquidity.	✓	

The IPS should include a target weighting for each approved asset class.		✓
The IPS should include/clarify the board's rebalancing philosophy and specify a general course of action if an asset class exceeds its approved range.	✓	✓
The management report should include the estimated liquidity for the total portfolio and each investment manager and specify any penalty costs for early withdrawals.	✓	
On a continuing basis, the management report should include information about the weighted average fees for the total portfolio and each investment manager	✓	✓
The management report should include a comparison of performance and asset allocation to a universe of peer public pension plans and a revised market index.	✓	
	✓	
On a continuing basis, the management report should include risk statistics for the total plan relative to the market index, or for investment managers, compared to relevant benchmarks and risk statistics	✓	✓
Management & Performance Reporting	✓	
The management report should include a comparison of performance and asset allocation to a universe of peer public pension plans (<i>and revised market index that reflects the portfolio's complexity- NOFF</i>)	✓	✓
Reports should include details of the total and individual commitments to private equity and private real estate, including the amount of the original commitment, funding since inception, and any unfunded commitments.	✓	✓
On a continuing basis, the management report should include information about the fees, both gross and weighted averages, for the total portfolio and for each investment manager.	✓	✓
On a continuing basis, the management report should include net performance for its total portfolio and individual investment managers	✓	✓
Alternative Investments	✓	
Exploration of Secondary Market for Real Estate and other investments to create cash and unlock returns	✓	
Enhance monitoring of alternative managers. Consider using a specialist consultant because the asset class is a growing component of the total portfolio	✓	✓

Exit Strategy Analysis should be developed for illiquid investments, including exploration of secondary market for real estate, to create cash, realize returns or losses	✓	
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Excerpt #2 State of Utah Performance Audit

*A Performance Audit of Utah Retirement Systems' Management and Investment Practices (2016)
Analysis and Expert Opinion*

Introduction

While URS has performed in line or slightly above its peers over ten years and longer periods, they have underperformed the last five years, after the 2008 crash. URS (along with around a quarter of the larger US public plans) significantly lowered allocations to US Stocks and primarily increased its allocations to alternatives. All of these plans, including URS, underperformed plans with more US Stocks in this period of very high stock market performance, especially compared to most alternative investments.

Fee Drag on Performance

My opinion and concern is that a significant amount of the alternative underperformance in the last five years for all public plans including URS is a result of high fees. Fees in alternatives, including performance fees, were calculated in a recent North Carolina report (completed by Benchmark Financial Services, Inc. for the State Employees Association of North Carolina) to be 300 basis points or more .iv Utah's 12% allocation to alternatives in 2004 has grown to nearly 40% allocation in 2014 which, by my estimate, means they could be paying over \$300 million a year in fees just in alternatives. While it is difficult to time markets and asset class, one thing plans can control, to some extent, is investment fees. It is important to note that URS was nationally lauded for its success in negotiating lower fees in 10 of its 40 hedge funds in 2009.v However, 300 bps a year, or even 200 bps, is a significant drag on performance. Given URS prior success and continued high allocation to alternatives, I think it is important for the Utah Legislature to encourage URS to continue and expand their effort to minimize fees.

Alternative Investment Performance & Risk Factors

Many plans and consultants nationwide claim that their plans are less risky because of the higher allocation to alternatives which have less correlation with the stock market. I believe that this claim of lower risks have led to higher allocations of alternative investments in public pensions nationwide. I contend that while alternatives lower some risks, they raise many other types of risks. Specifically, I believe that the proponents of higher alternatives over emphasize the use of one-dimensional risk models based on standard deviation and correlation with, primarily, the stock market. I think the proponents under emphasize other risks such as liquidity risk, leverage risk, legal risk, fiduciary risk, pricing risk, and fee risk. Alternative assets do look attractive in the one-dimensional risk models because they perform differently than the stock market. There are diversification benefits that smooth out the overall plans standard deviation of return. I contend that if you put what I consider proper emphasis on the multitude of risks with alternatives, they are less attractive from a risk return point of view and deserve a lower allocation in portfolios. Public pension plans historically hired investment managers to manage the plans, stocks, and bonds that were owned and physically held in the name of the plan at a large custodial bank. This provided total transparency and instant liquidity, as well as reduced legal and fiduciary risk. Also, most custodians provided independent third party pricing for these stocks and bonds which provided an additional check on the investment valuation and performance provided by the managers. However, in the last ten years many public pensions have moved significant assets into alternative assets. Most alternatives are not held by the custodian, but in a limited partnerships that generally have much more limited liquidity and transparency of not only the underlying assets, but of the fees and expenses charged as well.

Also, the pricing of the underlying illiquid assets—and thus the performance of these investments—are heavily influenced by the managers themselves with little or no independent third party pricing.

My opinion is that there is compelling evidence of very positive benefits for the first 10% in alternatives for the diversification benefits for most public pension plans under almost all market conditions. This is consistent with the 2004 URS allocation and some of the better performing peers, especially in the 5-year period. There are no hard and fast numbers, but as allocations get over 10%, and especially when they get over 20%, the other unmeasured risks I outlined before gradually, I believe, start to outweigh the diversification benefits from a normal stock market. A 40% allocation can be appropriate if the highest priority of the entity is to weather bad markets. But, for public pensions, in general, I think you are punished more for being wrong, than you are awarded for being right. Therefore, I believe that over time URS should consider reducing its 40% exposure to alternatives more in line with the median state plan, especially the hedge fund allocation.

Alternatives in Public Pension – Trends 2014

In April the SEC found that over half of the alternative managers (private equity & hedge funds) surveyed, charged additional fees on top of the already high fees.vii Toward the end of the year, under SEC pressure, major private equity firm Blackstone admitted to hiding fees.viii A few public plans in California, led by Orange County, are binding together to negotiate lower private equity fees collectively. Another report points out many plans have started to negotiate more regarding hedge fund fees in which URS already has a successful track record of aggressively negotiating fees.x A look at the industry demonstrates that varied philosophies exist on asset mix. On September 16, 2014 CALPERS announced it would dump its entire hedge fund portfolio of over \$4 billion because it finds them too costly and complicated.xi Days later, the State Auditor of Pennsylvania called for their major public plans to dump hedge funds. However, many plans, including the Pennsylvania plan, and New Jersey and Texas Teachers have publicly declared they are sticking with their hedge fund allocations.

Conclusion

Investment performance is not only important to the participants in public pension plans, but to all taxpayers as it effects their contribution. URS has nearly twice the allocation to alternative investments than the median large state plan. Within alternatives, they have around four times the amount of hedge funds of the median plan. While they have less exposure to stock market swings than the average plan, I think these alternatives at this level increase some other types of risks. In my opinion most hedge funds and other alternative investments increase liquidity risk, leverage risk, legal risk, fiduciary risk, pricing risk, and fee risk. URS overall performance has ranged from below average to average, since the 2008 crash, but is not unlike a number of other public plans who have lower US stock allocations and higher than average allocations to alternatives, specifically hedge funds. URS held up better than most in 2008, but lagged in the bull markets of mostly 2009 and 2013 accounting for most of the difference. It is widely held in the investment industry that asset allocation drives over 90% of returns and this seems the case in Utah as well from the data. If URS had stuck with its 2004 asset allocation, using the exact same money managers, it would have been above average in performance, suggesting that selection of money managers has been mostly on target.

URS current allocation of around 40% alternatives (Real Estate + Private Equity + Hedge Fund) is set up to outperform peers if the stock market underperforms the alternatives, and conversely should underperform if, like in 2013, the stock market outperforms the alternatives. This is why I believe that over time URS should consider reducing its 40% exposure to alternatives, especially the hedge fund allocation. We do not know what future markets will be and how the investments will perform. It is a

difficult for all plans to decide how much market risk they want to take. However, we do know that pension contributions are not going away and that they will continue to be huge parts of state budgets. State governments will continue to grapple with the types and amount of oversight that they want to have over pension investments.

Excerpt #3 Recommendations, City of New Orleans Investment and Actuarial Review

*New Orleans Municipal Employees Retirement System
Study Commissioned by New Orleans City Council – Retirement Committee
2012, Recommendations Section, Review performed by Toni Hackett Antrum*

PRELIMINARY RECOMMENDATIONS

ACTUARIAL ASSUMPTIONS

- *Update Mortality Table from 1971 to 2000.*
- *Extend Amortization Period from 10 years to 20 or 25 years*

PLAN DESIGN OR BENEFIT STRUCTURE

- *Consider dropping the DROP*
- *Moving Vesting from 5 yrs to 7 yrs (or up to 10 yrs)*
- *Modify multiplier to an across the board factor of 2.5X*
- *Increase Employee Contributions from 4% to 6% gradually.*

INVESTMENT POLICY AND ASSET ALLOCATION

- *Adopt a policy that requires an asset/liability study be conducted every five years or when major changes in the benefits structure are planned*
 - *Meets cash flow needs*
 - *Reduces risk (portfolio volatility)*
 - *Recognizes the need to stabilize and/or reduce contributions*
- *Ensure the next asset liability study is conducted by an independent investment consultant working in conjunction with an actuary*
- *Clarify rebalancing policy and indicate strategies that would bring the Fund to the policy target or the edge of the range*
- *Adopt a cash management strategy that creating a liquidity fund so that any liquidation of assets are not required for a “cash call”*

INVESTMENT MANAGER STRUCTURE

- *Reduce or trim manager line up with the goal of reaching breakpoints, reducing fees*
- *Evaluate managers for duplication of process and concentration*
- *Evaluate the costs and benefits of managing on or more of the equity allocation as index funds*

INVESTMENT PERFORMANCE REPORTING AND MONITORING

- *Enhance monitoring of alternative managers. Consider using a specialist consultant because the asset class is a growing component of the total portfolio*
- *Ensure tracking activities to include all the fees paid to fund of fund managers*

Excerpt #4 Investment Policy Statement Best Practices

*New Orleans Municipal Employees Retirement System
Study Commissioned by New Orleans City Council – Retirement Committee
2012, Recommendations Section, Review performed by Toni Hackett Antrum*

Best Practice for Comprehensive Investment Policy Statement (IPS) Subject Areas Checklist	
INTRODUCTION	NOMERS CURRENT POLICY
Reference to law creating the Fund with specific reference to investment related section of the law	Best practice
Description of intended beneficiaries of the fund	Best Practice
Scope or purview	Best Practice
STATEMENT OF PURPOSE	
Description of the fundamental purpose of the retirement fund	Best Practice
Language describing that the fiduciary must act in the sole interest of members and beneficiaries, and for the exclusive	Best Practice
LISTING OF INVESTMENT GOALS INCLUSION	
Preserve the actuarial soundness of the fund in order to meet benefit obligations	Needs Enhancement
Obtain a long-term rate of return (one or two market cycles) net of fees, equal to or in excess of the policy benchmark	Needs Enhancement
Clarify how to manage investment risks	Does Not Address
Establish risks that may be taken to achieve return goals	Needs Enhancement
Define policy benchmark and asset allocation targets	Needs Enhancement
Reference of the duty to incur only reasonable expenses	Does Not Address
IDENTIFICATION OF ROLES & RESPONSIBILITIES	
Board/Investment Committee	Best Practice
Internal staff – general and investment related duties, reporting and expectations	Does Not Address
Investment consultants – duties, reporting lines, expectations regarding the frequency of communications and acknowledgement of fiduciary responsibilities	Does Not Address
Investment managers – duties, acknowledgement of fiduciary responsibilities and frequency of communication (could reference contractual mandates	Needs Enhancement
Custodian bank – role as custodian or trustee and role regarding cash management, performance calculations, etc.	Does Not Address
Description of other service providers’ duties such as securities lending, brokerage, proxy voting, etc	Does Not Address
ASSET ALLOCATION	
Acknowledgement of its primary importance	Needs Enhancement
Recognition of the allocation’s purpose, such as to provide an optimal mix of investment to produce desired returns and meet current and future liabilities with minimal volatility	Best Practice
Description of frequency and methodology of asset liability modeling and allocation resetting	Does Not Address
Minimum, maximum and target allocation ranges	

Standards regarding diversification including limits to a single issuer, single asset class, economic sector, or country

ASSET CLASS GUIDELINES AND BENCHMARKS

Definition of each asset class and rational for inclusion in the portfolio	Does Not Address
Rational for selected benchmarks, who set them and how often they are revisited	Does Not Address
Description of any prohibited investments (e.g., short selling, margin, and investments precluded by law or regulations)	Needs Enhancement
Detailed overview of allowable credit risk in the portfolio (e.g. minimum credit rating for any fixed income investment as determined by a nationally recognized credit rating agency)	Best Practice
Rebalancing Policy	
Statement of the purpose of rebalancing (i.e. to ensure that the investment program adheres to its strategic asset allocation)	Needs Enhancement
Description of the timing and method used to rebalance (e.g. most cost effective manner, use of excess cash, index strategies as a source, or liquidation of over funded managers)	Needs Enhancement
Frequency of the portfolio reviewed for rebalancing	Does Not Address

MANAGER AND SERVICES PROVIDER SELECTION PROCESS

Criteria used for selection of investment manager
Steps required to remedy or address underperformance
Steps for termination of managers

MONITORING AND REPORTING

Statement of purpose for monitoring and reporting (i.e. to ensure compliance with the IPS and applicable law, to manage risk, and to assess manager performance)	Needs Enhancement
Description of quarterly reporting for both external managers and other external investment professional (can include an outline of current strategy and investments, performance vs. benchmark, and portfolio composition relative to the asset allocation policy)	Needs Enhancement
Purpose and scope of annual and more frequent reporting	Does Not Address

SHAREHOLDER ACTIVITIES

Description of the proxy voting policy and how votes are cast and recorded	Needs Enhancement
Statement of the circumstances under which the Board will sign on to or initiate a shareholder proposal	Does Not Address
Statement of how (or if) a focus list of underperforming companies is identified and what communication the Board takes to engage companies in dialogue	Does Not Address
Description of the process of opting in and out of shareholder class actions	Does Not Address
Identification of core principles of corporate governance (board independence, CEO compensation, access to the proxy, audit committee, etc)	Does Not Address
Requirement to annually review IPS	Does Not Address

Excerpt #5 – Recommendations - Maryland State Retirement System

Operational Audit, Credit/Debt Pension Assets, Subject Matter Experts, Internal Audit

Executive Summary

In 2016 the Maryland State Retirement and Pension System (“SRPS”) issued a Request for Proposals for a qualified subject matter expert to conduct an audit of the operational processes employed for its Credit/Debt Strategy investments within the Investment Management Division (“IMD”). As a result of the procurement process, SRPS hired The Hackett Group to conduct the audit, with assistance from the Internal Audit Division (“IAD”).

The audit’s scope focused on an assessment of the operational processes performed for the System’s Credit/Debt Strategy investments.

The overall objective of the audit was to provide a sufficient basis for concluding whether, or not, internal controls over the operational processes for the System’s Credit/Debt Strategy investments provide reasonable assurance that:

- (1) Credit/Debt Strategy investments are properly monitored and overseen.
- (2) Credit/Debt Strategy investments are properly valued, recorded, and reported; and
- (3) Credit/Debt Strategy investments are in compliance with contracts and the System’s investment guidelines.

The identification and description of risks and controls to be audited was developed by The Hackett Group from SRPS’ written procedures, interviews with management, and other supporting documentation and reference material.

The audit commenced in January 2016 and onsite work was performed in March and May. The audit period was July 2015 through December 2015. The exit conference was held on October 12, 2016.

The controls we identified, when taken as a whole, were suitably designed and operated. However, we noted three (3) findings and have outlined them in this report. The audit also identified other less significant deficiencies and/or gaps, which we did not consider to be reportable conditions. These items were presented to management for correction or remedial action.

Background

As of June 30, 2016, the System had approximately \$45.83 billion in assets, which were managed by external asset managers in nine different asset classes. As disclosed in the System’s Fiscal Year (FY) 2015 Comprehensive Annual Financial Report (CAFR), investments in Credit/Debt Strategies were approximately \$4.5 billion, accounting for 9.7% of plan assets as of June 30, 2015.

The CAFR describes the System's investment in Credit/Debt Strategies as including both liquid and illiquid structures. It includes the following categories:

- Flexible credit (23.3%).
- Hedge funds (13%).
- Distressed debt (17.2%).
- Emerging market debt (11.9%).
- Mezzanine funds (11.4%).
- High yield (9.2%).
- Investment grade credit (9.9%); and
- Terra Maria program (4.1%).

While this segment of the total pension portfolio is grouped into one asset class – Credit/Debt Strategies – the underlying investments and the structure of the investments are different and can be categorized in several ways. Eleven (11) of the 42 investments are public investments. These public investments represent a combination of traditional fixed income investments, hedge funds and commingled investment vehicles. The remaining 31 private investments make up more than two thirds of the asset class at SRPS. The private investments are categorized as real assets because their value is based on a contractual claim on an underlying real asset and the structure of the investment is a private partnership. For this audit, we generally divided the investments and their processes between public and private.

This asset class lacks the controls associated with traditional stocks and bonds. Of the 41 investments reviewed, approximately $\frac{3}{4}$ are alternative limited partnership arrangements. Historically most of the controls on pension investments are designed for traditional stocks and bonds. Alternative structured portfolios, by comparison, are typically held outside the traditional custodial bank. The custodian for the public pension has played a major role as an independent check and balance on fees, contract compliance, valuations and portfolio risks – a very effective control mechanism. The absence of this control creates different types of risks which must be monitored in different ways. Our findings are consistent with what we would expect with this structure.

Investment Environment and Industry Trends

The current environment of extremely low interest rates has encouraged plans nationwide to migrate away from traditional investments to less liquid and less transparent forms of fixed income, in order to enhance investment return. The credit/debt area contains investments in fixed income with higher rates than traditional government and corporate bonds. The credit/debt type of investment was primarily developed by insurance companies for enhanced yield. In recent years, however, they have been adopted by large pension plans. These types of investments carry significantly higher fees than traditional fixed income investments. In addition, many of these investments are structured as private investments or limited partnerships. While debt-based, they share many of the same structural and fee concerns seen in Private

Equity. Public pensions are now being pushed in several directions: to achieve higher yields from their non-equity investments, and to control fees.

These investments require more analysis and demand higher fees, given their increased complexity.

Fees are a major concern nationwide. For example, in April of 2014 the SEC surveyed 400 investment limited partnerships, and found that over 200 of them overcharged fees to their limited partners. Other SEC concerns include issues regarding disclosure and misleading valuations. The major independent fee measuring service CEM went on record in 2014 recommending disclosure of both management and performance fees.

An important solution for the industry is the fee disclosure and reporting guidance template developed by the Institutional Limited Partners Association, known as ILPA. The primary component of ILPA reporting is the ILPA standards. The ILPA template provides a standard format to report management fees, performance fees and expenses as well as valuation and other metrics. This development was a reaction to criticism of the high fees charged by alternative investments despite less than expected performance – especially in public pensions.

Much ambiguity remains, however, on the issue of fees. There is significant disagreement, for instance, as to whether performance fees should be considered a fee at all, or rather a distribution of profits within the partnership.

Disclosure of expenses is another pressing area of concern for private partnerships. In 2015, the SEC found numerous ways that general partners have shifted or overcharged expenses to limited partners. In one instance, managers accelerated the payment of future monitoring fees and increased the rate of charging legal fees. These actions were ruled by the SEC to be a breach of the managers' fiduciary duty.

The SEC Enforcement Director, commenting on private investments, stated that, "even experienced investors can be defrauded if they lack transparency into the various fees, expenses, and practices."

In some cases, the SEC has stepped in. A credit opportunities-type fund was recently fined for misleading investors. The major control weakness was that the GP did not provide annual audited financial statements. SRPS requires submission of the annual audited financials from all investments.

The ILPA standards developed by the industry represent progress toward improved transparency and accountability. We see Maryland's public endorsement of ILPA as a good first step toward improved practices in the plan.

Acknowledgements

We wish to thank all of those involved in meeting our requests for information, specifically the Managing Director of Investment Operations, the Senior Compliance Officer, and the Managing Director and Senior Investment Analyst for Credit/Debt Strategy investments.

Audit Findings and Recommendations

1. There is not sufficient documentation to show who reconciled a private investment's quarterly report to their audited annual financial statements, or K-1 forms, and when the reconciliation was performed.

Currently, Investment Operations staff receives and reconcile each private investment's quarterly reports to audited financial statements, or K-1's. There was no evidence of when this is done, and by whom. Best practices suggest that an important element of an effective control is the indication of who initiated, completed and/or reviewed the process.

Risk Level: **Low**

Action Item Owner: Investments

Action Items: We recommend that, going forward, the individual reconciling a private investment's quarterly statement to their audited financial statements, or K-1 form, sign and date to show who performed the reconciliation, and when it occurred.

2. There is no secondary review of the appropriateness and accuracy of invoiced public manager fees by appropriate supervisory personnel.

Currently, the Director of Investment Operations recalculates quarterly public manager fees and compares them to invoices received. They sign and date each invoice to confirm that it was appropriate, and calculated correctly. However, there is no appropriate secondary approval of the invoice. While the Director of Cash Management and Deputy Cash Manager reportedly sign off on a memo accompanying the approved invoice, they are not necessarily indicating the appropriateness and correctness of the payment, and are not at a level that is higher than the initial approver.

Risk Level: **Low**

Action Item Owner: Investments

Action Item: We recommend that there be a secondary review and approval of all manager invoices at an appropriate level. This review should include be performed by someone at a higher level than the initial approver.

3. Private Manager fees were not consistent with fee rates specified in contracts/side letters.

In our review of fees charged for private investments, we found differences in 11 of 21 fees tested. For most of the differences, the fees charged were less than those required by contracts/side letters. This was reportedly due to the growing practice of fee offsets. Due to the limited reporting that is currently required for private investments, it was not possible to assess if the fee reductions were correct. Given the high number and complexity of private investments, it is unlikely that fee offsets can be properly monitored by existing staff.

Risk Level: **Medium**

Action Item Owner: Investments

Action Items: We recommend that the Agency:

- Require that new partnerships report in accordance with the ILPA Fee Reporting Template, which provides details and transparency for fee offsets;
- Encourage existing partnerships to report in accordance with the ILPA Fee Reporting Template; and
- Provide sufficient staffing to properly monitor fees and their related offsets.

Excerpt #6 – Recommendations - Maryland State Retirement System

SBA Risk Management and Compliance Compliance Report for Quarter Ended December 31, 2011



A. STATUTORY COMPLIANCE		STATUS
1	Chapter 215.47, F.S. - Investments	All investments statutorily permitted
2	Chapter 215.4755, F.S. - Certification and disclosure requirements for investment advisers and managers	All investments within statutory limits Conflict of interest certifications received as of 12/31/11 for public market external investment managers
3	Quarterly Report to Joint Legislative Auditing Committee on Florida PRIME and Fund B	Monthly Florida PRIME reports for quarter ending 12/31/11 reviewed and approved by SBA Trustees and sent to JLAC on 2/9/12
4	Protecting Florida's Investment Act Compliance (Iras/Sadam)	No violations reported - latest quarterly report approved by Trustees on 12/6/11
5	Prise Cuba Act of 1993 (Chapter 215.471, F.S.)	No restricted securities currently identified as of 12/31/11 - no compliance violations
6	Northern Ireland (Chapter 121.153, F.S.)	No restricted securities currently identified as of 12/31/11 - no compliance violations
7	Form 13F - SEC Institutional investment managers that have discretion over \$100 million in Section 13(a) securities	Report filed for SBA internally managed accounts
8	Form 13H - SEC Disclosure for large traders	Communicated large trader identification number to all registered Global Equity broker-dealers
9	Bucket Clause Securities	No proposed plans for such investments were reported to the IAC
B. INVESTMENT POLICY STATEMENTS - APPROVED BY TRUSTEES		STATUS
1	FRS Pension Plan	Asset allocation within specified ranges
2	FRS Investment Plan	Performance measured to approved benchmarks Education requirements in compliance Investment Plan Administrator and Funded Provider requirements in compliance Investment options and performance measurement against approved benchmarks in compliance
3	Lawton Childs Endowment Fund	Asset allocation within specified ranges
4	Florida PRIME	Performance measured to approved benchmarks Portfolio securities and transactions in compliance with Investment Policy Statement Federated conducted monthly stress test and reported results to the Investment Oversight Group as of 12/30/11
5	Fund B Surplus Fund	Daily NAV and other high risk ranked parameters independently verified and in compliance Securities and transactions independently reviewed and all principal and interest payments distributed to participants net of fees
C. ETHICS / CONFLICTS OF INTEREST		STATUS
1	Ethics Policy	Annual certifications of compliance completed by all employees for FY 2011-12
2	Internal Controls and Fraud Policy	No instances of fraud or employee misconduct reported or discovered Fraud Hotline: No calls received as of 2/27/12
3	Insider Trading Policy	No compliance violations reported
4	IAC Annual Conflict Disclosure Statement	Certifications received for three new IAC members (Wash, Price, and Harrell)
5	Consultant Independence and Disclosure Principals (CIDP)	All eight CIDPs received for calendar year 2011 as of 2/15/12
6	Personal Investment Activity Policy and Annual Certifications	All required employees completed training and annual compliance certifications for FY 2011-12 One minor personal trading violation was detected during the quarter All personal investment holdings reports received for new employees All certifications executed
7	Conflict of Interest Certification - SBA Employees participating in selection process for external investment manager or private market investments	The online fiduciary training site for IAC members has been developed and link sent to IAC members on 2/28/12
8	Financial Training	All mandatory training requirements fulfilled for FY 2011-12
9	Mandatory Employee Training	Signed at 2/13/12 Audit Committee meeting for calendar year 2012
10	Audit Committee Annual Independence Statements	All managers reported compliance with Investment Management Agreements as of 12/31/11
11	Self-Annual Statement of Compliance - External Investment Managers (Public)	

7. GLOSSARY

- 1. "AICPA" American Institute of Certified Public Accounts**
- 2. "CAIA" Chartered Alternative Investment Analyst**
- 3. "CFA" Chartered Financial Advisors Institute**
- 4. "DOL" Department of Labor**
- 5. "ERISA" Employee Retirement Income Security Act**
- 6. "GFOA" Government Finance Officers Association**
- 7. "IIA" Institute of Internal Auditors**
- 8. "IPS" Investment Policy Statement**
- 9. "NASRA" National Association of State Retirement Administrators**
- 10. "NCPERS" The National Conference on Public Employee Retirement Systems**
- 11. "MSRB" Municipal Securities Regulatory Board**
- 12. "SEC" Securities and Exchange Commission**
- 13. "THG" The Hackett Group**
- 14. "UMPERSA" Management of Public Employee Retirement Systems Act**
- 15. "UPIA" Uniform Prudent Investor Act**

8. COST INFORMATION

The Hackett Group’s hourly fee is \$250. This figure represents a fully loaded rate including. This blended rate includes rates and the costs for senior consultants, analysts, external subject matter professionals and clerical. Also, the rate absorbs subscriptions and access to databases and software to be used for this project. Travel and direct project expenses are quoted separately in the “not to exceed” quote. The total not to exceed quote is three hundred and seven thousand dollars (\$307,000.00)

Description	Est. Hours	Rate	Cost
1. Governance & Administration	150	\$250	\$37,500
2. Organizational Review	125	\$250	\$31,250
3. Investment Review	300	\$250	\$75,000
4. Legal Compliance Review	120	\$250	\$30,000
5. Risk and Controls Review	220	\$250	\$55,000
6. IT Review	128	\$250	\$32,000
7. Reporting/Drafting	95	\$250	\$23,750
8. Admin/Project Mgt.	50	\$250	\$12,500
Total	1,061	\$250	\$297,000.00

Materials and Expenses: -		
Travel expenses estimate		\$ 9,000
Other project expense, primarily printing and postage		1,000
Total Estimated Materials and Expenses:		\$ 10,000
Total Estimated Project Cost	<i>Not to exceed</i>	\$307,000.00