

Proposal to the
Ohio Retirement Study Council
to Perform a
Fiduciary Performance Audit of the
Ohio Public Employees Retirement System

November 2, 2017



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I. PROPOSAL SUMMARY

Executive Summary

Each proposal shall provide a narrative summary of the proposal being submitted. This summary should identify all of the services and work products that are being offered in the proposal and should demonstrate your firm's understanding of the project.

Funston Advisory Services LLC (FAS) understands the purpose of this Fiduciary Performance Audit is to identify areas of strengths and weaknesses in the Ohio Public Employees Retirement System (OPERS), compare OPERS operations with best practices of other public pension plans, and make recommendations for improvement. FAS is very interested in conducting this review of behalf of the Ohio Retirement Study Council (ORSC) and believe we would be the best candidate for the role for five primary reasons:

1. ***FAS is the most knowledgeable and experienced consulting firm capable of conducting this type of governance review.*** We have completed fiduciary and operational reviews of the South Carolina Retirement System Investment Commission, the South Carolina Public Employee Benefits Authority, the New York City Bureau of Asset Management, The New York State Comptroller (Common Retirement Fund), and the School Employees Retirement System of Ohio. Each one of these reviews was comprehensive and very well received. The rate of implementation of our recommendations has been very high. Through these reviews, several of which included benchmarking with numerous other state public pension funds, we have developed a broad knowledgebase of leading, prevailing and lagging governance and operational practices which can be leveraged for this review of OPERS. We are currently working with other state retirement systems and have an up-to-date understanding of current issues and leading practices.
2. ***We are independent and provide an unbiased perspective and recommendations.*** Consulting on governance, strategy, risk and operations to retirement systems is our only business. We do not have any other lines of business which could potentially cause conflicts or even the appearance of conflicts. We can and do provide candid and independent advice. Our reports have the credibility the ORSC and OPERS are seeking to reassure stakeholders.
3. ***The experience and expertise of our consultants are unmatched, and our advice is practical.*** Our team members have deep and diverse experience in leading retirement organizations, providing fiduciary and investment counsel, managing the finance, accounting, operations and other support functions of a system, building risk management capabilities, and in providing strategic and operational advice to clients like OPERS. We understand the environment and constraints in which OPERS operates and, consequently, we will work together to develop integrated solutions and provide recommendations which are practical and, therefore, implementable.
4. ***We deliver on our commitments.*** We have never missed a deadline, nor have we failed to deliver what we promised with any client. In addition to having the capability and expertise, we take our commitment to professional standards very seriously and do what it takes to meet our client commitments with the highest degree of integrity.
5. ***We understand the Ohio legislative environment and how to work with the ORSC.*** We have

recently completed a review of SERS of Ohio on behalf of the ORSC – our team understands the environment OPERS operates in and its challenges. As with the SERS fiduciary performance audit, Rick Funston will provide overall leadership and Randy Miller will again be the project manager. Keith Johnson and Reinhart Law will again provide fiduciary and other legal expertise. Jon Lukomnik, along with Rick and Randy, will again lead the review of investment due diligence and other investment operations. Ken Johnson, along with Randy, will again lead the review of organizational structure and staffing, budgeting and expenses and compensation policies. Steve Harding, who has years of public fund experience, will lead risk and controls review activities and the review of custody bank activities. Gina Eubanks will provide her expertise on internal audit and controls, and Kevin Barnhill provides decades of information technology experience, supported by Dan Grossberg. The entire team will be involved in identifying opportunities for improvement and formulating recommendations.

We believe a five- to six-month duration for this review is reasonable and achievable and have developed our approach and workplan to complete the review in that time period; if the review is launched prior to the 2017 Christmas holiday season we will adjust the schedule accordingly to accommodate availability. We would not see any significant benefit from a longer duration for this review.

We propose conducting this review in three phases as follows:

Phase 1: Data Gathering: Collect and review documents, including a benchmarking profile survey; conduct the Opening Conference; and conduct internal and external interviews. This phase would require five to six weeks to complete;

Phase 2: Assessment/Analysis: Complete each of the six main work tasks. The tasks comprising this phase would require ten to twelve weeks to complete; and

Phase 3: Final Report: Submit the final draft report; obtain OPERS executive and staff feedback; incorporate feedback; submit final report; and conduct Closing Conference. This phase would require five to six weeks to complete.

Rick Funston will have overall responsibility for the project and its results. On a day-to-day basis, Randy Miller will be the primary contact person and project manager. We would also expect to have regular weekly status update conference calls with the OPERS project liaison to ensure effective ongoing communication throughout the project. We will provide at least monthly written status reports to the ORSC as well as weekly conference calls to review progress. As described later in the proposal, we also use a cloud-based collaboration tool which would enable ORSC to monitor progress in real time.

Prior to conducting the Opening Conference, the FAS team will prepare a document request, including a benchmarking profile survey, and allow several weeks for the OPERS staff to respond. We will also work with the OPERS contact person to schedule interviews.

We anticipate submitting the first draft final report within fourteen to sixteen weeks. The five- to six-week Phase 3 will allow adequate time for the ORSC, and subsequently OPERS, to review the document and provide responses to FAS. After incorporating the feedback, we will submit the final report and present a summary of the report in the Closing Conference. All time estimates are dependent upon timely co-operation from OPERS.

The final report will include: a description of the work performed; an executive summary; a description of leading practices used for comparison; findings and recommendations as to whether OPERS' practices are leading, prevailing or lagging; recommended priorities based on such factors as degree of difficulty, cost, and involvement of other parties; and specific and concrete proposals to achieve any improvements recommended in the report. The recommendations and proposals will be prioritized and provide the potential costs or benefits associated with implementation. The key findings, recommendations, and proposals will be organized in a manner that clearly identifies to whom they are primarily directed (e.g., the Legislature, OPERS Board, OPERS staff functions, and the ORSC).

We sincerely look forward to the opportunity to work with the ORSC and OPERS on this important assignment. You have our commitment that this will receive our highest attention and we will deliver a high quality and timely report.

General Information

In addition to the summary, please provide all of the following general information:

- *Your firm's primary contact for ORSC staff use and, if different, for PERS staff use during the audit, including the contact's address, telephone and e-mail address;*
- *General ownership structure of your organization, including subsidiary and affiliated companies, and joint venture relationships;*
- *Information regarding any material change in your firm's structure or ownership within the last eighteen months, or any material change in ownership, staff, or structure currently under review or being contemplated by your firm;*
- *If available, a third-party assessment or report concerning client satisfaction and measures of your firm's strengths and weaknesses;*
- *Any material litigation which has been threatened against your firm or to which your firm is currently a party;*
- *A list and brief description of litigation brought against your firm by existing or former clients over the last five years; and*
- *A list of any professional relationships involving the ORSC, the five Ohio public retirement systems, the State of Ohio, or its political subdivisions for the past five years, together with a statement explaining why such relationships do not constitute a conflict of interest relative to performing the proposed review.*

Randy Miller, a Principal with FAS, will be the primary contact person for both the ORSC and OPERS. He can be contacted via email at rmiller@funstonadv.com or via telephone at (248) 250-1111.

FAS is and has been 100% owned by Rick Funston since its founding in 2010. No changes are currently being contemplated. FAS has no subsidiaries, nor does it have any equity positions in joint ventures;

however, FAS does often work with other firms either as a prime contractor or as a subcontractor in order to include the appropriate experience and capabilities for a specific engagement.

FAS has not been evaluated by a third-party firm for client satisfaction; however, we would be pleased to have the ORSC contact our reference clients to discuss our work.

FAS is not now, nor has it ever been, party to any material litigation.

FAS was selected by SERS of Ohio in late 2012 through a competitive bidding process to conduct a fiduciary audit of its investment operations. The audit was completed during the time period of January through April 2013. In the course of this review, FAS team members interviewed the Director and General Counsel of the ORSC as a key stakeholder in SERS. Subsequently, FAS team members had informal conversations with SERS and ORSC executives to follow up on our fiduciary audit recommendations and understand implementation progress.

Earlier in 2015, in response to an RFP, FAS submitted a proposal to SERS of Ohio to conduct an audit of its private equity fees; we were not selected for that assignment.

In March 2015, FAS was contracted by Ohio Police & Fire to conduct a Board workshop on leading practices in retirement system governance and the linkages between governance and strategy.

In August 2016, the ORSC selected FAS to conduct a fiduciary performance audit of SERS of Ohio. The review was initiated in September 2016 and completed in February 2017. A summary of the final report was presented to the ORSC during their May 2017 meeting. FAS has subsequently had follow-up conversations with representatives of the ORSC and SERS regarding our fiduciary performance audit recommendations.

Over the past five years, during various benchmarking studies conducted by FAS on behalf of other state retirement system clients, the Ohio Public Employees Retirement System (OPERS) and State Teachers Retirement System (STRS) of Ohio have each participated in two governance studies. Ohio Police & Fire participated in a benchmarking study we conducted on behalf of SERS of Ohio during our fiduciary audit in 2013.

FAS does not perceive any conflicts for this OPERS fiduciary performance audit assignment resulting from any of these relationships. To the contrary, we believe that these interactions have informed the proposed FAS project team about the state retirement system environment in Ohio and the expectations of the ORSC for this type of assignment, which should provide a significant advantage to being able to successfully perform this engagement on behalf of the ORSC.

II. CAPABILITIES AND EXPERIENCE

Overview of Funston Advisory Services LLC (FAS)

Funston Advisory Services is recognized as one of the nation's preeminent advisors to public retirement systems in the areas of governance, operations (including investment operations), compliance and risk intelligence. We are distinguished by the caliber and experience of our team and the quality and pragmatism of our advice. Our approach is based on leading practices and tempered with decades of practical experience based upon what actually works in specific circumstances.

Increasingly, we are the team that public retirement systems are turning to for help in governance, fiduciary and operational matters. We bring a track record of success and an outstanding team dedicated to this project and its success.

Over the past five years, FAS has assisted a growing number of major state public retirement systems and sovereign wealth funds in evaluating their fiduciary performance and identifying governance, regulatory, policy, and operational process improvement opportunities. We have also assisted funds in evaluating the requirements for establishing the capabilities for internal investment management. Our reviews typically result in a high level of acceptance of the results and extensive implementation of the recommendations.

Our clients have included the California Public Employees Retirement System, the Oregon Investment Council, the New York State Common Retirement Fund, the School Employees Retirement System of Ohio, both the South Carolina Retirement System Investment Commission and Public Employee Benefit Authority, the Trust Fund for the People of the Federated States of Micronesia, the New York City Comptroller's Bureau of Asset Management, the Utah Retirement Systems, the State Employees' Retirement System of Pennsylvania, the Los Angeles County Employees Retirement Association, the Indiana Public Employee Retirement System, the San Francisco Employee Retirement System, the Teacher Retirement System of Texas, and the Maryland State Retirement and Pension System.

We currently have a governance, risk and compliance review underway with the Florida State Board of Administration. Several of our governance and operations reviews have been conducted at the behest of oversight bodies, similar to the ORSC. These have included the South Carolina Inspector General, the Texas State Auditor's Office, and the ORSC itself for our recent fiduciary performance audit of SERS of Ohio.

We have also provided board and executive education to organizations such as CalPERS, Fairfax County Retirement System, California Association of Public Retirement Systems, Indiana Public Retirement System, Iowa Public Employees Retirement System, Maryland State Retirement and Pension System, Ohio Police & Fire Pension Fund, Oregon College Savings Plan, State of Wisconsin Investment Board, State University Retirement Systems of Illinois, State of Wisconsin Investment Board, the Washington State Investment Board, and the National Council on Teacher Retirement. In addition, we have published numerous articles on the topics of governance, fiduciary responsibility and risk intelligence. Our team members are frequent presenters at national and international industry conferences.

FAS has recently published a handbook for trustees entitled "One of a Kind! A Practical Guide for 21st

Century Public Pension Trustees”. The handbook provides pragmatic answers to some of trustees’ most frequently asked questions. Meredith Williams, Executive Director of the National Council on Teacher Retirement, states “One of a Kind! is a much needed and welcome addition to the public pension trustees’ toolbox. This comprehensive reference work is well-written and logically organized. I recommend that trustees and administrators keep it close at hand.”

Our extensive knowledgebase garnered from participation by over 50 public retirement systems contains data on a range of policies and practices. The FAS knowledgebase is described in more detail in *Appendix A*. We can readily assess how OPERS compares to its peers regarding leading, prevailing and lagging practices in numerous areas.

Each proposal shall describe your firm's capabilities and recent experience (at least during the last five years) in performing fiduciary audits or studies of public employee retirement systems. The firm should include information on the types and sizes of public employee retirement systems for which past work has been performed, including whether the systems were defined benefit or defined contribution plans, the types and number of participating employers, number of participants, and other relevant indicators of plan type, size, and comparability to PERS. You may provide a sampling or summary description of the scope of these projects and non-proprietary key findings and recommendations.

Recent Governance and Fiduciary Reviews

The following are overviews of five fiduciary reviews FAS has performed for public retirement systems over the past five years. Reference contact information for each is provided in *Section IV*.

Teacher Retirement System of Texas – Real Assets Investment Program Review

Background of the retirement system: The Teacher Retirement System (TRS) of Texas is the largest public retirement system in Texas, serving more than 1.5 million people. TRS’s responsibilities include the maintenance of an actuarially sound defined benefit retirement system and the provision of health insurance services to retirees and active public school employees. To meet these responsibilities, TRS manages a \$140+ billion investment portfolio. TRS has approximately 600 employees and an annual operating budget of \$113 million.

Primary areas of focus: Effectiveness of the Real Assets (RA) investment program.

Size and complexity: This engagement was completed with a core team of six people over a period of four months.

Results: Our report was submitted to the State Auditor’s Office and the Legislative Audit Council in December 2016 and was also submitted and presented to the TRS Audit Committee in February 2017. Investment Management Division leadership accepted 14 of 19 recommendations and agreed to subsequently discuss the other five with the Board of Trustees over the next two years and make recommendations in 2018 at the next policy review period.

Overview: In August 2016, FAS was selected by the Texas State Auditor’s Office to conduct a review of effectiveness of the real assets program of TRS. The review was initiated during September 2016 and completed in December 2016, with final presentation to the TRS Audit Committee during their February 2017 meeting.

The scope of this review was directed to specifically focus on the effectiveness of the Real Assets (RA) investment program at TRS. However, most aspects of investment oversight and management are common for the entire trust fund portfolio: the overall governance framework for the Board of Trustees and TRS and its Investment Management Division (IMD); the investment policies; investment reporting and oversight; risk management; organizational checks and balances; and independent oversight. As a result, the FAS team also reviewed all of these areas and assessed their effectiveness in the context of the Real Assets program.

The review focused on:

- Real Assets strategies and goals
- Investment Management Division policies and processes related to Real Assets
- Real Assets performance
- Real Assets risk management and compliance

In order to include the specific real assets expertise required for this engagement, Meketa Investment Group consultants worked as an integral part of the FAS team and played a critical role.

Although the Real Assets program was found to be sound, performing well, and utilizing leading or prevailing practices in all areas, the team identified nineteen recommendations for improvement which were discussed with IMD and accepted.

The core team which conducted this review included Randy Miller, Keith Bozarth, Chris Waddell, Chris Tehranian (Meketa), Christy Gahr (Meketa), and Lisa Bacon (Meketa), with advisory support from Rick Funston, Jon Lukomnik and John Haggerty (Meketa).

New York State Common Retirement Fund – Fiduciary and Conflict of Interest Review

Background of the retirement system: The New York State Common Retirement Fund (“CRF” or the “Fund”) is the third largest state public pension trust in the United States and among the largest pools of institutional capital globally. The CRF holds assets in trust for over one million public sector members, retirees, and beneficiaries of the New York State and Local Employees’ Retirement System and the New York State and Local Police and Fire Retirement System, which include over 3,000 participating employers. As sole trustee of the CRF, the Comptroller is responsible for the investment, oversight, and management of the assets of the Fund to provide retirement and other benefits for current and future members, retirees and beneficiaries of the System. The Fund currently has invested assets of over \$190 billion.

Primary areas of focus: Fiduciary and conflict of interest review of the investment-related operations of the Fund. These reviews are to be completed on a triennial basis as part of a series of reforms instituted in by the Comptroller in 2008. FAS completed the first review in 2013 and was engaged again to conduct the second review in 2016.

Size and complexity: The 2013 review was completed with a core team of eight people over a period of five months and the 2016 review was also completed with a core team of eight over a period of five months.

Results: Our 2013 recommendations were accepted by the Comptroller and were largely implemented over the subsequent three years, although resource constraints caused some to be delayed. A progress review was conducted by Internal Audit staff of the Comptroller's Office. FAS findings were evaluated and implementation of recommendations was tracked. The second review commissioned in 2016 included a review of the extent of the implementation of the initial FAS recommendations.

Overview: In the summer of 2012, FAS was selected by the Office of the State Comptroller of New York to conduct a fiduciary and conflict of interest review of the CRF. The review was initiated during August 2012 and completed in January 2013.

The final report independently determined the extent to which:

1. The Comptroller is effectively fulfilling his fiduciary obligations;
2. There is a strong framework of governance in place to manage the Fund;
3. The highest standards are employed with regards to ethics, professionalism, and conflicts of interest;
4. The Fund is managed in an efficient and effective manner; and
5. There is a high level of operational transparency.

Prospectively, the policies, procedures and practices of the CRF were evaluated with respect to leading, prevailing, and lagging practices in use at comparable public pension funds in the U.S. and internationally.

The review included eight work streams conducted in parallel over the duration of the review:

1. An overall benchmarking process
2. A review of fiduciary responsibilities and decision-making processes
3. A review of ethical, professional, and conflict of interest standards
4. An analysis of operational transparency
5. Review of investment-related operations
6. Review of use of external managers and consultants
7. Review of investment accounting processes
8. Review of due diligence practices

The FAS team reviewed over 1700 documents; interviewed CRF executives, advisory board members, external managers and consultants; and conducted a comprehensive benchmarking process. The customized benchmarking approach for the CRF included utilizing the existing FAS database of leading and prevailing practices in major public pension funds, completing a new CEM Benchmarking investment benchmarking report, and an extensive, custom benchmarking process to address review areas not included in the existing FAS or CEM databases, including fiduciary responsibilities, ethical, professional and conflict of interest standards, transparency, investment operations, use of external managers and consultants, investment accounting, and due diligence.

The final report for the 2013 review is available at

http://www.osc.state.ny.us/reports/pension/NYSCRF_Fiduciary_and_Conflict_of_Interest_Review.pdf

The team which conducted this 2013 review included Rick Funston, Randy Miller, Mark Barrott, Keith Bozarth, Virginia Brizendine, Keith Johnson, Ken Johnson, and Jon Lukomnik.

The 2016 review included four major tasks:

1. Evaluate the extent to which the Fund has implemented the recommendations of the first fiduciary and conflict of interest review from 2013;
2. Evaluate the extent to which investments closed during the prior three years were executed in compliance with investment policies and procedures and Department of Financial Services (DFS) Regulations;
3. Determine whether policies, procedures, and processes are in place to ensure that the conduct of the investment-related operations of the Fund continue to be consistent with legal requirements; and,
4. Identify, if appropriate, enhancements to the CRF's investment-related policies, procedures, and practices to bring them in line with prevailing and/or best practices.

The FAS team identified 13 recommendations for improvement which were discussed and accepted by CRF leadership. The final report for the 2016 review is available at

http://www.osc.state.ny.us/reports/pension/NYSCRF_Fiduciary_and_Conflict_of_Interest_Review_2016.pdf

The team which conducted the 2016 review was largely the same as the 2013 review and included Rick Funston, Randy Miller, Keith Bozarth, Virginia Brizendine, Megan Jackson, Keith Johnson, Ken Johnson, and Jon Lukomnik.

New York City Office of the Comptroller Bureau of Asset Management (BAM) – Management and Operations Study and Best Practice Review

Background of the retirement system: The New York City Comptroller serves as a member of the Board of Trustees of four of the five City Public Pension Funds and is investment advisor to, and custodian of, the five Funds. As the investment advisor to the Funds, the Comptroller has the fiduciary responsibility of investing and protecting the Funds for more than 700,000 retirees and beneficiaries. The Bureau of Asset Management in the Comptroller's Office is responsible for managing over \$185 billion in defined benefit plan assets on behalf of five New York City retirement systems.

Primary areas of focus: Best practices review of all internal BAM departments, all key external service providers, sister bureau service providers, and relationships with five retirement boards. Topics included policies, practices and procedures, staffing, investment operations, information systems, contracting, compliance, risk, financial reporting, and corporate governance.

Size and complexity: This engagement was completed with a core team of ten people over a period of five months.

Results: The Comptroller and Chief Investment Officer have embarked upon a major restructuring and enhancement to the Bureau of Asset Management capabilities using the FAS report as a roadmap.

Overview: In June 2015, FAS was engaged by the New York City Comptroller's Office to conduct a comprehensive review of its Bureau of Asset Management (BAM). The RFP organized the work into twenty areas and included over 180 specific topics for review. The Comptroller's Office structured the work activity into three parts, starting with an evaluation of policies, procedures, and practices in all internal BAM divisions, as well as BAM's interactions with the Bureau of Accountancy. The internal evaluation was followed by a detailed performance analysis of BAM's investment processes and operations, including the performance of an array of external service providers, BAM's interactions with the five retirement systems, and an assessment of BAM's use of information technology. The third step was a detailed gap analysis which compared BAM to best practices in each of these areas. Over a period of four months, FAS produced a report which described our overall evaluation of BAM and its operations, including conclusions, opportunities for improvement based upon leading practices, and recommended actions and priorities. The final report included over 200 detailed recommendations.

We began this review with a detailed document request, a profile questionnaire which requested information for each of the twenty areas in scope, and two self-assessments which were conducted using a web-based survey. The first survey was administered to BAM employees and provided detailed input regarding each of the twenty areas; we received responses from over 70 percent of BAM staff. The second survey was administered to the trustees and executive directors of the five systems and provided feedback regarding support they receive from BAM.

FAS conducted two face-to-face meetings with BAM staff to review interim and draft final results. We also received extensive feedback on a draft final report and incorporated appropriate refinements into the final report. The final report was released in January 2016. The Comptroller's press release can be viewed at <https://comptroller.nyc.gov/newsroom/comptroller-scott-m-stringer-releases-comprehensive-review-and-reform-plan-of-the-bureau-of-asset-management/> and the report can be found at https://comptroller.nyc.gov/wp-content/uploads/documents/FAS_NYC_BAM_FinalReport.pdf

The team which conducted this review included Rick Funston, Randy Miller, Keith Bozarth, Virginia Brizendine, Peter Clapman, Marv Damsma, Lance Ihinger, Ken Johnson, Jon Lukomnik, Todd McGowan, Dave Mills, Rich Ronan and Chis Waddell.

South Carolina Public Employee Benefit Authority (PEBA) – Fiduciary Performance Audit

Background of the retirement system: The South Carolina Public Employee Benefit Authority (PEBA) is a state agency responsible for the administration and management of the state's employee insurance programs and retirement systems on behalf of 550,000 active, retired and inactive participants and beneficiaries. The total net position of the combined insurance trust fund assets is over \$1.0 billion. PEBA is also responsible for oversight of 457 and 401(k) defined contribution retirement plans with assets over \$3.5 billion.

Primary areas of focus: Fiduciary performance audit of the retirement and health insurance operations, including Governance, Policy Review and Development, Organization Structure, Communications with

Stakeholders, Benefits Administration, Actuarial Matters, Legal Compliance, Customer Service, Record Keeping and Security of Information, Cost of Operations, and Information Technology Systems.

Size and complexity: This engagement was completed with a core team of seven people over a period of five months.

Results: The PEBA Board has been monitoring progress of our recommendations and the PEBA Executive Director provides quarterly updates to the South Carolina Senate Finance Special Subcommittee to Review the Investment of State Retirement Funds.

Overview: In October 2014, the South Carolina Office of the State Inspector General (SIG) engaged FAS to conduct a fiduciary performance audit of PEBA. The purpose of this audit was to:

- Critically evaluate the fiduciary roles and responsibilities of PEBA and staff; the relationship with each other and other fiduciaries of the Retirement System; and the operational policies and practices of each.
- Identify areas of strength and weakness, along with improvement recommendations and conformance with best practices of other public pension and employee benefit plans.
- Articulate and prioritize recommendations according to their significance and urgency, and, where feasible, include an analysis of potential costs or benefits associated with implementation.

In addition to multiple interviews and extensive document reviews, FAS also designed, conducted and analyzed a custom survey with six peer retirement administration agencies. We relied upon the 2013 CEM Pension Administration Benchmarking Report conducted by the independent firm, CEM Benchmarking Inc. (CEM), as part of this fiduciary performance audit for retirement administration cost and customer service analysis. The full final report is available online at: http://oig.sc.gov/Documents/FAS_Final_PEBA_Fiduciary_Audit_Report_January_2015.pdf

The FAS team provided testimony to the South Carolina Senate Finance Subcommittee to Review the Investment of Retirement Funds and discussed eleven recommended changes in the statutes to improve retirement fund governance. The Subcommittee voted to include all of the FAS recommendations in its draft bill for 2015. Essentially all of the FAS legislative recommendations were ultimately included in an omnibus pension reform bill signed into law in April 2017.

The team which conducted this review included Rick Funston, Randy Miller, Virginia Brizendine, Rose Hewig, Keith Johnson, Todd McGowan, and Dave Stella.

South Carolina Retirement System Investment Commission – Fiduciary Performance Audit

Background of the retirement system: The South Carolina Retirement System Investment Commission (RSIC) is exclusively empowered to invest and manage all assets of the South Carolina Retirement Systems. Assets under management are currently over \$30 billion.

Primary areas of focus: Fiduciary performance audit of the investment commission operations, including Governance; Policy Review and Development; Organizational Structure; Investment Administration; Legal Compliance; and Information Technology.

Size and complexity: This engagement was completed with a core team of nine people over a period of five months.

Results: In total, 124 recommendations were identified, of which 108 could be addressed directly by the Investment Commission; of these 124, 38 required the direct involvement of the Commissioners. We also identified 12 recommendations which require action by the Legislature and 4 which require action by the State Treasurer's Office. The FAS team presented our recommendations to a Senate Finance Subcommittee which was chartered to review the investment of state retirement funds. On November 13, 2014, several members of the FAS team again met with the Senate Finance Subcommittee to present our recommendations for legislative revisions in the RSIC governance structure. The Subcommittee agreed to incorporate all of our recommendations into the initial draft legislation for 2015.

RSIC has prepared and published three Issue Briefs since the conclusion of this review to advise stakeholders on the progress of their implementation of our recommendations. The most recent Issue Brief is available at <https://www.rsic.sc.gov/PDFs/IssueBrief%20March%202017.pdf>

Overview: In December 2013, the South Carolina Office of the State Inspector General (SIG) engaged FAS to conduct a fiduciary performance audit of the RSIC. The purpose of this audit was to critically evaluate the fiduciary roles and responsibilities of the RSIC Commissioners and staff, the relationship with other fiduciaries of the Retirement System, and the operational policies and practices of the RSIC. The goal of the review was to identify areas of strengths and weaknesses, provide comparison with leading practices of other public pension plans, and make improvement recommendations.

Because the RSIC is a relatively new state agency, the review was designed to be broad in nature, spanning all key functions. The review of these functions was organized into six categories, including Governance; Policy Review and Development; Organizational Structure; Investment Administration; Legal Compliance; and Information Technology.

The fiduciary performance audit began in early December 2013. We reviewed nearly 800 documents and interviewed over 50 people. We also contracted with CEM Benchmarking Inc. to perform an independent investment cost effectiveness study.

In developing our report, we addressed six fundamental questions:

- Who are the RSIC fiduciaries?
- What are their duties?
- What are their authorities?
- Do their authorities match their duties? Are these duties in conflict with other roles played by the various fiduciaries?
- How is the RSIC performing?
- Where and how can the RSIC improve?

Although our review and recommendations were structured around the six areas defined in the RFP, we

also organized our recommendations into five key themes which cut across all areas of scope:

1. Improve assurance and independent reassurance to build trust and confidence.
2. Build capabilities across the organization (including HR, IT, Accounting, etc.).
3. Reset Commissioners' focus on strategy and oversight.
4. Align fiduciary duties and responsibilities.
5. Improve the custodian relationships.

Upon submission of our final report, and with input from the RSIC, we prepared a matrix which described for each recommendation the criticality, degree of difficulty, whether Commission involvement was needed, and whether outside entities needed to be involved or if their support was needed. The full final report is available online at:

<http://oig.sc.gov/Documents/FAS%20Final%20RSIC%20Fiduciary%20Audit%20Report%20April%2018%202014.pdf>

FAS team members have presented recommendations to the South Carolina Senate Subcommittee on Retirement System Investments on three occasions during 2014, the most recent on November 13, 2014. At that time, the Subcommittee voted to include all of the FAS legislative recommendations in their initial draft legislation put forward in the 2015 legislative session. The FAS team presented to the South Carolina Joint Committee on Pension Systems Review on October 26, 2016. A copy of our presentation can be found at:

<http://www.scstatehouse.gov/CommitteeInfo/Joint%20Committee%20On%20Pension%20Systems%20Review/102616Meeting/Funston%20Advisory%20Services%20South%20Carolina%20Joint%20Committee%2010-26-2016.pdf>

Essentially all of the FAS legislative recommendations were ultimately included in an omnibus pension reform bill signed into law in April 2017.

The team which conducted this review included Rick Funston, Randy Miller, Keith Bozarth, Virginia Brizendine, Marv Damsma, Lance Ihinger (from Cutter Associates), Keith Johnson, Ken Johnson, and Jon Lukomnik.

Specific Areas of Experience

You should include other information you believe may be relevant in demonstrating your capabilities in performing the actuarial audit, including other professional experience and data processing capabilities. Please include your firm's experience and capability regarding all of the following:

Reviewing internal trading and trade processing operations: The FAS fiduciary review of the New York City Bureau of Asset Management included a review of internal trading operations. Steve Harding has experience auditing internal trading operations at NYS CRF and at First Albany Corporation, a regional securities broker/dealer. In addition, FAS, working with Cutter Associates, performed a study for the Indiana Public Retirement System to evaluate feasibility of managing certain asset classes internally and, earlier this year, we also developed an implementation plan for internal investment management, including trading operations, for the Maryland State Retirement and Pension System. Ken Johnson led

FAS reviews of the broker selection and evaluation process at NYS CRF and SERS of Ohio. Jon Lukomnik has experience in overseeing internal trading operations in several prior roles, including as the former Deputy Comptroller for New York City and as the former managing director of an asset management subsidiary of Caisse des Depots et Consignation, the French national bank.

FAS also has experience in advising public pension funds which are currently externally managed, but are planning to adopt internal trading. These planning engagements required FAS to understand all aspects of internal trading requirements, including system requirements, creating oversight reports, and staffing needs for front, middle and back office functions. We conducted planning engagements of this type for the Indiana Public Retirement System in 2016 and, more recently, the Maryland State Retirement System. Randy Miller, Jon Lukomnik, Ken Johnson and Keith Johnson were all core members of those teams.

Reviewing internal operational and investment risk controls: FAS has reviewed internal operational and internal risk controls during our reviews of the New York State Common Retirement Fund, the School Employee Retirement System of Ohio, the South Carolina Retirement System Investment Commission, the New York City Bureau of Asset Management, and the Florida State Board of Administration.

For these projects, we have three team members with extensive experience in risk management and controls. Rick Funston was previously the National Practice Leader for Governance and Risk Oversight for Deloitte & Touche. Steve Harding was Director of Finance at the IAM National Pension Fund, 401(k) Plan and benefit Trust Funds, where he was responsible for all aspects of finance, accounting, and financial reporting for the \$11 billion fund. Prior to IAM, he was Assistant Director of Internal Audit at the New York State Common Retirement Fund where he managed financial, compliance and operational audits of the \$100+ billion fund. Gina Eubanks was Vice President of Professional Services at the Institute of Internal Auditors (IIA) and has earned the status of Certified Internal Auditor (CIA), Certification in Risk Management Assurance (CRMA), Certification in Control Self-Assessment (CCSA), and Certified Information Systems Auditor (CISA).

Reviewing ancillary investment functions such as cash management, securities lending, proxy voting, shareholder litigation, and regulatory reporting: Each of these areas was reviewed by FAS during our fiduciary reviews of the New York State Common Retirement Fund, the School Employees' Retirement System of Ohio, the South Carolina Retirement System Investment Commission, and the New York City Bureau of Asset Management.

On this team, Ken Johnson led the reviews of securities lending and regulatory reporting, Keith Johnson reviewed proxy voting and shareholder litigation, and Jon Lukomnik reviewed cash management. Jon Lukomnik was also responsible for the New York City pension funds' proxy voting as the former Deputy Comptroller.

Reviewing external manager and advisor selection processes, fee structures, reporting, and oversight: These areas were within the scope of our reviews at the New York State Common Retirement Fund, the

School Employees' Retirement System of Ohio, the South Carolina Retirement System Investment Commission, and the New York City Bureau of Asset Management.

On this team, Jon Lukomnik, with support from Randy Miller, led a review of the external manager and advisor selection process reviews and fee negotiations and Ken Johnson led review of the fee structures, reporting and oversight.

Reviewing investment accounting processes, performance computation processes, and custodial support: Each of these areas was within the scope of our reviews at the New York State Common Retirement Fund, the School Employees' Retirement System of Ohio, the South Carolina Retirement System Investment Commission, and the New York City Bureau of Asset Management. Ken Johnson led the review of custodial support during these reviews. Steve Harding was Director of Finance and Accounting at the IAM National Pension Fund and was responsible for all aspects of finance, accounting, and financial reporting. Steve Harding has reviewed these areas for NYS CRF as its internal auditor, and for numerous public pension funds, including OPERS, TRS of Ohio, and Ohio Police and Fire Retirement System as an independent consultant. Steve has performed audits and reviews at all of the major US based global custody banks, including their securities lending operations.

Reviewing the staffing, structure, and employee satisfaction of investment organizations: Each of these areas was within the scope of our reviews at the New York State Common Retirement Fund, the School Employees' Retirement System of Ohio, the South Carolina Retirement System Investment Commission, and the New York City Bureau of Asset Management.

Ken Johnson and Randy Miller led the review of these areas for each of these projects.

Reviewing incentive compensation programs for public investment organizations: Many of our public retirement systems do not have incentive compensation programs either due to legislative restrictions or a philosophical belief that they are inappropriate. Having said that, we have reviewed overall compensation programs, typically in conjunction with an existing compensation study conducted by an independent third party, during several of our fiduciary reviews.

Ken Johnson was the COO/CFO of the State of Wisconsin Investment Board (SWIB) for ten years where he had a significant role in developing the justification for enhanced incentive compensation. He led the FAS reviews of the status of incentive compensation at the South Carolina Retirement System Investment Commission, SERS of Ohio and the Maryland State Retirement and Pension System.

Conducting an asset/liability process study and developing an investment policy for a defined-benefit public pension plan: FAS does not conduct asset/liability studies and is not an investment advisor which provides financial advice and develops investment policy. However, we have reviewed the process by which asset/liability studies and investment policy are developed as part of the normal scope of our

fiduciary reviews with the School Employees' Retirement System of Ohio and the South Carolina Retirement System Investment Commission. In addition, Jon Lukomnik supervised the asset liability process when he was Deputy Comptroller for New York City.

III. STAFF QUALIFICATIONS

Each proposal shall describe the qualifications of all management and lead professional personnel who will participate in the fiduciary audit. Each personnel description shall include: (1) a resume; (2) a summary of experience each has had in performing fiduciary audits or studies of public employee retirement systems; and (3) a management plan identifying the responsibilities each will have on the audit. Each proposal shall also include a description of your firm's procedures in the event that a key person assigned to this engagement leaves your firm during the engagement.

Each resume should include information on the current and past positions held with your firm, educational background, relevant credentials, and other relevant information to demonstrate the person's qualifications.

The experience summaries should include information on the types and sizes of public employee retirement systems for which the designated staff have completed work, including whether the systems were defined benefit or defined contribution plans, the types and number of participating employers, number of participants, and other relevant indicators of plan type, size, and comparability to PERS. You may reference, rather than repeat, duplicative information provided in paragraph 3.2, Capabilities and Experience. The experience summaries also should describe the work performed and detail the roles and responsibilities that the individual staff had on the projects.

Proposed Project Team

Funston Advisory Services LLC (FAS) was formed in 2010. The principals have been providing governance, strategy and risk advisory services since at least 1980. FAS works with a network of public pension retirement system experts who operate as independent subcontractors to FAS, including specialized firms, such as Reinhart Law and Cutter Associates. Each team member is a highly-experienced professional, with decades of consulting, legal and/or pension industry experience. Our team has worked together on a series of high-profile governance assignments:

- California Public Employees' Retirement System (CalPERS) – Board Governance and Effectiveness Project
- Oregon Investment Council – Fiduciary Governance Review
- New York State Common Retirement Fund – Fiduciary and Conflict of Interest Review (twice)
- School Employees Retirement System (SERS) of Ohio – Fiduciary Audit (on behalf of the ORSC)
- South Carolina Retirement System Investment Commission (RSIC) – Fiduciary Performance Audit (on behalf of the State Inspector General)
- South Carolina Public Employee Benefit Authority (PEBA) – Fiduciary Performance Audit (on behalf of the State Inspector General)

- New York City Comptroller’s Office Bureau of Asset Management – Management and Operations Study and Best Practice Review
- Teacher Retirement System of Texas – Evaluation of the Investment Practices and Performance (on behalf of the Texas State Auditor’s Office)
- San Francisco Employee Retirement System – Independent Board Evaluation
- Florida State Board of Administration – Governance, Risk and Compliance Review (in process)

These engagements were unique assignments which required a customized approach and an in-depth understanding and review of governance structures and fiduciary responsibilities, critical decision-making processes, delegations of authority, investment operations, and accountabilities. The reviews frequently involved extensive benchmarking and original research to identify and describe leading and prevailing practices in a range of governance and operational areas.

Biographies of each team member proposed for this OPERS fiduciary performance audit are included below. Information regarding the types and sizes of public employee retirement systems for which proposed team members have completed work, including whether the systems were defined benefit or defined contribution plans, the types and number of participating employers, number of participants, and other relevant indicators of plan type, size, and comparability to OPERS can be found in *Section II. Capabilities and Experience*.

FAS has not had a project team member leave the firm during a project. However, in the event that a team member is not available to work on this project as planned for any reason, FAS project leadership will identify alternative approaches to completing the activities assigned to that person, including reassigning those tasks to other team members or bringing in a different team member from the FAS network. Those options will be discussed with the ORSC project liaison and we will mutually agree on the most appropriate course of action.

Rick Funston

Frederick (Rick) Funston is the Managing Partner of Funston Advisory Services LLC, focusing on governance, strategy, operations and risk intelligence. In 2001, he created the concept of risk intelligence for both value creation and value protection. He is a frequent public speaker. Rick is the Principal Author of *Surviving and Thriving in Uncertainty: Creating The Risk Intelligent Enterprise™*, published by John Wiley & Sons in April 2010. This book was specifically targeted to the governance and risk oversight needs of boards and executives in both public and private sectors. Most recently, he was the editor and a primary contributor to the recently-published “One of a Kind! A Practical Guide for 21st Century Public Pension Trustees.”

Rick is currently leading the Governance, Risk and Compliance Review for the Florida State Board of Administration. He previously led the Fiduciary Audit of the School Employees Retirement System (SERS) of Ohio for the ORSC, the Management and Operations Study and Best Practice Review of the New York City Bureau of Asset Management (BAM) for the New York City Comptroller, and the Fiduciary Performance Audits of the South Carolina Public Employee Benefit Authority and South Carolina

Retirement System Investment Commission (RSIC) for the Office of the Inspector General. He led two Fiduciary and Conflict of Interest Review for the New York State Common Retirement Fund (NYS CRF), a review of governance structure alternatives for the Oregon Investment Council, and Board Governance Improvement, Enterprise Risk Management, and Stakeholder Relations projects at CalPERS.

He has provided board and executive education for CalPERS, the State Universities Retirement System of Illinois, Iowa Public Employees Retirement System, Fairfax County Retirement System, Indiana Public Retirement System, Maryland State Retirement and Pension System, and the Washington State and State of Wisconsin Investment Boards.

Rick left Deloitte & Touche LLP in May 2010 and formed Funston Advisory Services LLC. Prior to his departure, he was the National Practice leader for Deloitte's Governance and Risk Oversight Services. In that capacity, he served many of Deloitte's largest domestic and global clients and was responsible for the thought leadership that has underpinned Deloitte's globally pre-eminent position in risk intelligence.

He has over forty years' experience in both not-for-profit and for-profit sectors. Before joining Deloitte, Rick was the CEO of Continuous Improvement Services Inc. He began his career in the public sector consulting on strategy and operations, organization and leadership development, performance management, program evaluation and survey research.

Rick has been a guest lecturer at the Yale School of Management and Princeton University. He also served on the Board of Visitors for the Oakland University School of Business Administration from 2009-2011 and is an Adjunct Professor for the executive MBA program. He was awarded a B.A. from York University in Ontario and an M.S.W. from Tulane University.

Rick will be the overall project leader for this review and will support the Investment Policy and Oversight and Risk Management and Controls reviews.

Randy Miller

Randall (Randy) W. Miller has been a Principal with Funston Advisory Services LLC since its founding in 2010. He has been a leader of our fiduciary and operations reviews and is an expert in public retirement system governance. He has co-authored a number of white papers on the topics of public pension fund governance, operations and risk and made contributions to "One of a Kind! A Practical Guide for 21st Century Public Pension Trustees." He has extensive experience in planning and conducting complex reviews and improvement programs in large organizations.

Together with Rick Funston, Randy has co-led assignments with many major public retirement systems, including the San Francisco Public Employees' Retirement System, LACERA, Teachers Retirement System of Texas, Utah Retirement Systems, Indiana Public Retirement System, ERS of Rhode Island, Pennsylvania SERS, New York City Bureau of Asset Management (BAM), the South Carolina Public Employee Benefit Authority, the South Carolina Retirement System Investment Commission (RSIC), the School Employees Retirement System (SERS) of Ohio, the New York State Common Retirement Fund (NYS CRF), the Oregon Investment Council, and the California Public Employees' Retirement System (CalPERS). He has provided

board and executive education for the Ohio Police & Fire Pension Fund and the Oregon College Saving Plan boards.

Randy was a consultant with Deloitte Consulting LLP from 1983 through February 2010, where he most recently led Mergers & Acquisitions Integration Services to manufacturing industry clients. He has significant international consulting experience, led Deloitte's Global Automotive Industry Consulting Practice, and was based in Germany with Deloitte from 1997-2003, where he led Deloitte Consulting DACH (Germany, Austria, and Switzerland) for two years. He specialized in planning and implementation of mergers, acquisitions and divestitures, market and supply chain strategy and cost reduction/operations improvements.

Randy has led a variety of benchmarking studies, including board governance, investment operations, overhead cost structure, information technology strategies, and business transformation strategies. Randy received an A.B. Degree from Dartmouth College with a major in Engineering Sciences. He also received a B.E. from the Thayer School of Engineering and an M.B.A. from the Amos Tuck School of Business, both also at Dartmouth.

Randy will be the project manager and liaison with the ORSC and OPERS for this review and will also support activities in the sections on Board Governance and Administration, Organizational Structure and Staffing, and Investment Policy and Oversight.

Steve Harding

Steven M. (Steve) Harding joined FAS in May 2017 and is a key member of the Florida SBA project team. He is a risk thought-leader with over thirty years of investment/pension audit and consulting experience. He has made practical recommendations which have helped over 50 of the largest public pensions (including three of the Ohio funds) and diverse investment organizations to implement leading practices across the U.S.

Most recently, Steve was Director of Finance and Accounting at the \$11 billion IAM National Pension Fund, 401(k) Plan (\$400 million), and Benefit Trust Fund (Medical, Vision, Dental). He was responsible for oversight of all aspects of finance, accounting, and financial reporting for the \$11 billion fund. Steve also headed his own consultancy firm, delivering risk management services primarily to public funds through their audit committees and internal auditors.

Prior to that, Steve was Managing Director at Independent Fiduciary Services (IFS), a registered investment adviser, where he ran the Operational Review side of the company. Steve was Assistant Director of Internal Audit at the New York State Common Retirement Fund where he managed financial, compliance and operational audits of the \$100+ billion fund. His experience includes both investments and benefits administration. After graduation, he worked for Coopers & Lybrand in Albany. He has also worked as Chief Audit Executive for a New York stock exchange member firm and public company where he held the Series 7 & 63 licenses, and has advised Board level finance, budget, audit and risk committees. Steve served for three years as an independent Audit Committee board member of the General Board of Pensions and Health Benefits of the United Methodist Church (now WesPath), the largest non-profit employee benefit plan in the U.S. with \$21 billion in assets.

Steve served as board member of the Foundation for Fiduciary Studies from 2003 to 2006. He also served as a special consultant to the Texas Municipal Retirement System Audit Committee and to the CalPERS Ad Hoc Risk Management Committee ERM initiative. He is a member of the American Institute of Certified Public Accountants and the Institute of Internal Auditors. Steve is a CPA licensed in New York.

Steve received his B.S. in Accounting from the University at Albany where he subsequently taught accounting subjects for ten years in the UAlbany School of Business graduate and executive MBA programs.

Steve will co-lead the Risk Management and Controls and support the Board Governance and Administration and Investment Policy and Oversight reviews.

Gina Eubanks

Gina Eubanks joined the FAS network in 2015 and has been a team member on several public pension governance engagements including Florida SBA, LACERA, SERS of Ohio, New York State CRF, and ERS of Rhode Island. She has an extensive background in advisory services over 20 years in the internal audit profession, six years as a Board Audit Committee member for a large credit union and recently joined Board Governance Committee for a behavioral health services provider. Through her work in both the United States and India, she has built a reputation for driving significant growth of strategic internal audit resource capabilities.

Gina frequently consults and facilitates on the topics of risk management, quality assurance and improvement programs, internal audit management, facilitation skills, and various governance related topics. She co-authored, "Leveraging COSO Across the Three Lines of Defense," published by the Institute of Internal Auditors and commissioned by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In addition, Gina made contributions to "*One of a Kind! A Practical Guide for 21st Century Public Pension Trustees.*"

Most recently, Gina was Vice President of Professional Services at the Institute of Internal Auditors (IIA) where she led quality assessment reviews, chief audit executive services and industry knowledge centers. During that time, she facilitated many chief audit executive events and the development of thought leadership related to emerging trends. Prior to joining the IIA, Gina was an internal audit director at a mortgage processing company and at Deloitte & Touche LLP for 15 years.

Gina holds several designations: Certified Internal Auditor (CIA), Certification in Risk Management Assurance (CRMA), Certification in Control Self-Assessment (CCSA), and Certified Information Systems Auditor (CISA). She earned a bachelor's degree in accounting from Middle Tennessee State University and attended an executive leadership program at Wharton School of Business at the University of Pennsylvania.

Gina will co-lead the Risk Management and Controls and support the IT Operations reviews.

Dan Grossberg

Daniel A. (Dan) Grossberg has a broad range of technical skills including program/project management, internal controls assurance, IT/ERP risk management and ITIL implementation. He has experience working in a large IT organization which included supporting Knowledge Management and IT Portfolio Management and aligning IT strategy to business priorities. Dan also has eight years of experience as an IT consultant and advisor, including implementation of various commercial ERP packages and assisting in turning around troubled software implementation projects.

An independent advisor since 2015, Dan has established a “gig” approach to IT Advisory work, teaming with professionals of similar experience who each contribute expertise across the broad spectrum of IT specialties demanded by audit and accounting firms and their enterprise clients. Dan contributes his IT assurance and audit readiness expertise to that group and was a member of the FAS team which conducted a fiduciary review of SERS of Ohio and led the review of IT operations and a review of the SMART system implementation.

Dan most recently served three years as Audit Director for BDO USA, LLC, developing BDO’s Information Systems (IS) Audit Practice for the Atlantic Region. He led IT audits for over 100 engagements annually, including 12-14 public companies that were subject to four PCAOB reviews (with no IT control findings). Dan also led advisory support for IT controls implementation across various industries.

Prior to BDO, Dan worked for 13 years with Ernst & Young in various information technology-related roles. His last assignment included rotating through several internal IT management roles in National and Global practice support including Knowledge Management and IT Portfolio Management. He served various internal clients including Americas Assurance leadership, Global Procurement leadership and Global Finance leadership in aligning IT strategy to business priorities through the development and execution of iterative budget and reporting processes and decision support.

Dan also served at Ernst & Young in a client service IT delivery role, including both internal- and external-facing responsibilities for project execution, business development and business management, including SAP and JD Edwards/EnterpriseOne implementations. He led analyses of several troubled ERP implementations to identify root causes and recommend adjustments to business processes and internal controls.

Dan received his Master of Accounting degree and completed PhD coursework in Accounting at the University of North Carolina, Chapel Hill and also received a Bachelor of Science in Accounting, Miami University, Oxford, Ohio. He is a Certified Public Accountant (CPA) and a Certified Information Systems Auditor (CISA).

Dan will lead be a senior advisor for the review of IT Operations.

Megan Jackson

Megan K. Jackson is an attorney and shareholder at Reinhart Boerner Van Deuren s.c. (Reinhart Law) in the firm’s Employee Benefits Practice and Institutional Investor Services and Public Plans groups. She consulted on FAS team projects for the Oregon Investment Council, SERS of Ohio, New York State

Common Retirement Fund, Pennsylvania State Employees' Retirement System, Employees' Retirement System of Rhode Island, and Maryland State Retirement and Pension System. She works closely with a range of benefits providers, including domestic and global pension funds. Megan is also an experienced business law attorney.

In the area of private markets investments, Megan has analyzed and negotiated the legal and economic terms of investments in private equity funds, hedge funds and alternative investment vehicles on behalf of domestic and foreign institutional investors. (The Reinhart team represents 11 of the 50 largest pension plans in the world and 27 of the 300 largest pension plans in connection with alternative investments, corporate governance, fiduciary matters and securities litigation.)

Megan is a member of the State Bar of Wisconsin. She is also a member of the Madison Public Library Board of Directors and the Madison Public Library Foundation. She serves on the Wisconsin Governor's Conference on Minority Business Development. Megan received her J.D. from the Indiana University Law School-Bloomington, completed a Course of Study at the University of Hong Kong, and earned her B.A. at the University of Illinois.

Megan will support the Board Governance and Administration, Investment Policy and Oversight, and Legal Compliance reviews.

Keith Johnson

Keith L. Johnson is an attorney who heads the Institutional Investor Legal Services team at Reinhart Boerner Van Deuren s.c. (Reinhart Law). Keith represents pension funds and institutional investors on fiduciary, investment, securities litigation and corporate governance program matters. He was program director of the Wisconsin International Corporate Governance Initiative at the University of Wisconsin Law School, while serving as an adjunct professor of law.

Keith and his team from Reinhart Law teamed with FAS in performing the CalPERS governance review, the governance structure review for the Office of the Oregon State Treasurer, two fiduciary and conflict of interest reviews of the New York State Common Retirement Fund, two fiduciary audits of SERS of Ohio, and the South Carolina RSIC and PEBA fiduciary performance audits.

Keith was formerly legal counsel to the State of Wisconsin Investment Board (SWIB), the ninth largest public pension fund in the United States, for more than 21 years, including almost seven as chief legal officer. In that capacity, he headed SWIB's fiduciary duty compliance, corporate governance, investment, legal services and securities litigation programs and was a member of SWIB's Risk Committee. He also served as a Board Member and President of the National Association of Public Pension Attorneys (NAPPA).

Keith regularly represents institutional investors in negotiation of investment manager and private market investment agreements and provides counsel on corporate governance, securities litigation and fiduciary duty to many of the world's largest pension funds and institutional investors. He and the Institutional Investor Legal Services team at Reinhart Law have provided investment, benefits, insurance, tax and fiduciary counsel services to a number of public pension funds, including CalPERS, the State of Wisconsin Investment Board, New York City Pension Funds, Texas Teachers Retirement System, North Carolina State

Treasurer, Connecticut State Treasurer, Kentucky Retirement Systems, Employees Retirement System of the State of Hawaii and Milwaukee City and County pension boards. He is co-editor of the Cambridge University Press Handbook of Institutional Investment and Fiduciary Duty.

Keith is a member of the State Bar of Wisconsin and the State Bar of Texas. He earned a J.D. degree from the University of Wisconsin Law School and a B.A. from the University of Wisconsin-Madison.

Keith will lead the Board Governance and Administration and Legal Compliance reviews and support the Investment Policy and Oversight section.

Ken Johnson

Kenneth (Ken) W. Johnson became Administrator for Global Investor Collaboration Services, LLC after retiring at the end of 2010 as Chief Operating Officer and Chief Financial Officer for the State of Wisconsin Investment Board (SWIB). As COO/CFO for over 10 years, Ken had oversight of SWIB support services including financial operations, information technology, communications with the public, and cost-effectiveness benchmarking. He previously served as a team leader and analyst for the nonpartisan Wisconsin Legislative Fiscal Bureau and as Executive Assistant to the Secretary of the Wisconsin Department of Veterans Affairs.

Ken has been part of the FAS team on numerous public retirement system assignments, including Maryland State Retirement and Pension System, the New York State Common Retirement Fund, SERS of Ohio, Indiana PRS, New York City Bureau of Asset Management, the South Carolina Public Employee Benefit Authority, and the South Carolina Retirement System Investment Commission (RSIC).

Ken served as a board member for the Wisconsin College Savings Program (EdVest) for 15 years and was Investment Committee Chair. He was a board member and Treasurer for Summit Credit Union, one of the largest credit unions in Wisconsin, for six years. He also served as the first outside Director and was an audit committee member for Bankers' Bank, which supports community banking services in the Midwest. Ken holds a Bachelor's Degree from Northwestern University and a Master's Degree in public policy administration from the University of Wisconsin-Madison. He also holds the Investment Foundations Certificate from the CFA Institute.

Ken will lead the review of Organizational Structure and Staffing and support the Board Governance and Administration, Investment Policy and Oversight, and Risk Management and Controls reviews.

Jon Lukomnik

Jon Lukomnik is managing partner of Sinclair Capital LLC, a strategic consultancy to corporations, institutional investors and the investment management industry. He has provided risk management, product development, due diligence, fund selection and portfolio construction services to various institutional investors. Clients have included Nikko Asset Management, Legg Mason, SBLI Mutual Life Insurance Company, and NS Capital. Jon is a trustee for the Van Eck mutual fund complex. He has also

been a director for various public companies, private companies, not-for-profit corporations and litigation trusts.

Jon led the evaluation of hiring and firing of external managers and consultants and due diligence and monitoring procedures during the NYC BAM, SERS of Ohio, NYS CRF and South Carolina RSIC reviews. He was also a senior advisor to the Cutter/FAS team which conducted a feasibility study for internal investment management at Indiana PRS and the internal investment management planning for Maryland State Retirement and Pension System.

Jon was Deputy Comptroller for Pensions for the City of New York in the mid-1990's, where he was the designated investment advisor for the City's five defined benefit pension funds and was investment advisor for defined benefit plans totaling \$80 billion in assets, as well as the City's own treasury. In total, he has served as investment advisor or trustee for more than \$100 billion in assets under management for various trusts, pension funds, endowments and asset management companies.

Over the course of his career, he has conducted more than 1,000 due diligence and external asset manager monitoring meetings. Jon has been named by the National Association of Corporate Directors as one of the 100 Most Influential People in America for Corporate Governance three times, most recently in 2016. He was the International Corporate Governance Network's 2013 honoree for "excellence in corporate governance." He is a member of the Standing Advisory Group of the Public Company Accounting Oversight Board (PCAOB).

A frequent contributor to both academic and practitioner publications, his new book, *"What They Do With Your Money: How the Financial System Fails Us and How to Fix It"* (Yale University Press, May 2016), co-authored with Stephen Davis and David Pitt-Watson, has been praised by The Economist and Financial Times. Jon also co-authored the award-winning book, *The New Capitalists: How Citizen Investors Are Reshaping the Corporate Agenda* (Harvard Business School Press, October 2006), wrote chapters in *The Handbook of Corporate Governance* (Wiley, May 2016) and co-wrote a chapter in *Corporate Governance in the Wake of the Financial Crisis* (United Nations, 2010).

Jon will lead the Investment Policy and Oversight and support the Organization Structure and Staffing reviews.

Kevin Barnhill

Kevin A. Barnhill has over 30 years of technology consulting, auditing, software development and IT leadership experience. He recently joined the FAS team as an information technology and security expert.

Kevin has a broad range of experience with companies such as: Chrysler, Citicorp, GE, IBM, Harris, Countrywide, Chase Manhattan, Bausch & Lomb, Bank of Montreal, USCG, Deluxe, PSDI, Mass Mutual, USAF, CBIS, Sprint PCS, NASD, ComSat, Phillip Van Heusen, Price Waterhouse, NY Life, Hyundai, ConEd, Western Digital & Sequent

At Chrysler, Kevin's team implemented enterprise processes to achieve CMM Level 3 and ISO 9001 certification. This included routine preventive security risk assessments, continual security process

improvements, and automating the monitoring of security health and enforcement of security policies. These certifications and processes increased Chrysler’s value for the sale to Daimler-Benz.

Kevin performed audits of the technology departments and partners for Chrysler, Deluxe and Phillip Van Heusen. These audits consisted of CMMI, ITIL, PMBOK, PCI-DSS and TOGAF relative to the technology domain under review. These standards are consolidated within COBIT 5.

Kevin’s work with Citicorp’s CMMI effort was directly responsible for successfully mitigating all year 2000 noncompliant code in Citicorp’s South and Central America operations.

Most recently, Kevin was Chief Technology Officer of Smart Companies where he was responsible for reviewing and overseeing all technical aspects of the company. This included data security and network security risk assessment, implementing PCI-DSS, proactive security policy maintenance and automatic enforcement. In this capacity he worked with Executive Management to grow the company through the use of technological resources. Using an active and practical approach, he directed all technology employees to attain the company’s strategic goals established in the company’s strategic plan.

Previously, Kevin was Enterprise Architect for WilsonMiller where, after an internal audit, he and his team integrated siloed Line-Of-Business systems into an integrated corporate database using best practices. Developed, branded and promoted applications that automate Firm’s differentiating processes based on integrated corporate database. Developed a series of financial tools to help executives, strategic business unit leaders, and line managers manage projects and clients efficiently.

While at London Bridge Phoenix Software, he co-developed the first retail banking system to utilize relational databases, windows microcomputers, a graphical user interface, an object-oriented architecture and an integrated CRM.

Kevin earned a Computer Science degree from University of Central Florida and an MBA specializing in Finance from Florida Gulf Coast University.

Kevin will lead the review of IT Operations.

Project Team Organization and Roles

The management plan should specify the roles and responsibilities that each of the management and professional staff will have on the fiduciary audit and include an estimated portion of the audit's time that will be spent by each on the audit and the individual's hourly billable rate.

Lead professionals included on the project team should, at a minimum, have performed a fiduciary audit or study of a public employee retirement system within the last two years.

The following chart indicates the roles of each individual, denoted by “L” for leader or “S” for support for each section, as well as the planned hours for each team member.

	A. Board Governance and Administration	B. Organizational Structure and Staffing	C. Investment Policy and Oversight	D. Legal Compliance	E. Risk Management and Controls	F. IT Operations	Project Oversight and Management	Planned Hours	Hourly Billing Rate (\$)
Kevin Barnhill						L		128	\$450
Gina Eubanks					S	S	S	136	\$375
Rick Funston			S		S		L	112	\$450
Dan Grossberg						S		24	\$450
Steve Harding	S		S		L		S	320	\$450
Keith Johnson	L		S	L				124	\$450
Ken Johnson	S	L	S		S			208	\$450
Megan Jackson	S		S	S				124	\$450
Jon Lukomnik		S	L					208	\$450
Randy Miller	S	S	S				L	192	\$375

Professional Affiliations

Each proposal shall include your firm's affiliations with organizations that sponsor and support investment or fiduciary related research.

Funston Advisory Services LLC is an associate member of the National Association of State Retirement Administrators (NASRA).

Keith Johnson is a member of the Council of Institutional Investors. He is a Fellow in the American College of Investment Counsel and has been active in the National Association of Public Pension Attorneys (NAPPA). Keith is also a member of the Stanford Institutional Investor's Forum Committee on Fund Governance that developed Best Practice Principles in 2007 and supporting Model Governance Provisions in 2013.

Jon Lukomnik is Program Director for the IRRCi (Investor Responsibility Research Center Institute). He co-founded and served as a Governor for the International Corporate Governance Network (ICGN), chaired the Executive Committee of the Council of Institutional Investors, and co-chaired the Conference Board's

Working Group on Hedge Fund Activism. He currently serves on the Standing Advisory Group to the Public Company Accounting Oversight Board (PCAOB).

Numerous FAS team members contributed chapters to the handbook for trustees entitled “One of a Kind! A Practical Guide for 21st Century Public Pension Trustees,” which was recently published by FAS. All areas of scope included in this fiduciary performance audit are addressed in the handbook at a level of detail appropriate for trustees.

In addition, FAS team members have also published numerous articles and other books and made presentations relating to public pension fund fiduciary responsibilities and governance. The most recent examples include:

- **“Part 1: Bringing Home the Investment: Building the Case for Internal Investment Management,”** article written by Rick Funston, Lance Ihinger, Randy Miller, Keith Bozarth and Keith Johnson, June 2015, available at <http://www.nasra.org/investment> .
- **“Part 2: Bringing Home the Investment: What Does It Take to Make Internal Management Work?”** article written by Rick Funston, Lance Ihinger, Randy Miller, Keith Bozarth and Keith Johnson, June 2015, available at <http://www.nasra.org/investment> .
- **“How Can Trustees Learn to Trust? – Achieving the Right Balance in Decision-Making between the Board and Executive Management,”** article written by Rick Funston and Randy Miller, March 2015, available at www.nasra.org/governance .
- **“Kick-starting an Internal Risk Management Dialogue,”** article written by Rick Funston and Randy Miller, *Pensions & Investments*, September 29, 2014, p. 12.
- **“New and Developing Approaches in Governance and Risk Management,”** presentation and participation in a panel discussion by Rick Funston, NASRA 60th Annual Conference, Asheville, NC, August 5, 2014.
- **“ERM 101 for Public Retirement Systems,”** a series of five white papers written by Rick Funston and Randy Miller, May 2014, available at www.nasra.org/governance .
- **“Public Pension Governance That Works,”** white paper by Randy Miller and Rick Funston, March 2014, available at www.nasra.org/governance .
- **“Shift Happens: Pension Funds under Pressure,”** keynote presentation by Rick Funston to the Public Pension Financial Forum (P2F2) 10th Annual Conference, Scottsdale, Arizona, October 28, 2013.
- **“Leading Practices in Fund Governance”** keynote presentation by Rick Funston to the National Association of Public Pension Attorneys, Santa Fe, New Mexico, June 26, 2013.
- **“Leading Practices in Governance and Risk Oversight”** presentation by Rick Funston, The Conference Board, New York May 8, 2013.

- ***“Leading Practices in Fund Governance”*** presentation by Rick Funston, Institutional Investors Institute, Los Angeles, April 26, 2013.
- ***Leading Practices in Fund Governance”*** presentation by Rick Funston to the Fairfax County Retirement System Trustee Seminar, April 8, 2013.
- ***“Misadventures of an Irresponsible Investor,”*** Jane Ambachtsheer, Stephen Davis, Jack Gray and Keith Johnson, *Rotman International Journal of Pension Management*, Vol. 5, No. 2/2012, Page 8 (Fall 2012).
- ***“Institutional Money Management: An Inside Look at Strategies, Players, and Practices,”*** Chapter 18, *Pension Funds*, Steven Harding, John Wiley & Sons, Kolb Series in Finance (Fall 2012).
- ***“Public pension fund governance: alignment of responsibility with authority,”*** authored by Rick Funston, Keith Johnson, Randy Miller and Mark Barrott, published in the August 1, 2012 *P&I Plan Sponsor Digest*.
- ***“What Every Trustee Needs to Know About Risk,”*** presentation by Rick Funston to the Stanford Fiduciary College/National Council on Teacher Retirement Trustee Workshop, Palo Alto, July 25, 2012.
- ***“Our inability to judge time frames,”*** Jon Lukomnik, *Journal of Risk Management in Financial Institutions* (March 2012).
- ***“Say-On-Pay Lawsuits—Is This Time Different?”*** Kenneth B. Davis and Keith Johnson, Harvard Law School Forum on Corporate Governance and Financial Regulation Blog (February 5, 2012).
- ***“Reclaiming Fiduciary Duty Balance,”*** James Hawley, Keith Johnson and Edward Waitzer, *Rotman International Journal of Pension Management*, Vol. 4, No. 2, Page 4 (Fall 2011).
- ***“Auditors at the Crossroads,”*** Keith Johnson, *Corporate Compliance Insights* (July 25, 2011).
- ***“Corporate Governance in the Wake of the Financial Crisis,”*** Chapter 6, Jon Lukomnik, United Nations (2011).
- ***“Institutional Fund Managers and Portfolio Churn,”*** Danielle Guyatt and Jon Lukomnik, *International Journal of Pension Management* (Fall 2010).
- ***“Active Shareholder Stewardship: A New Paradigm for Capitalism,”*** Stephen Davis, Jon Lukomnik and David Pitt-Watson, *International Journal of Pension Management* (Fall 2009).
- ***“Modernizing Pension Fund Legal Standards for the Twenty-First Century,”*** Frank Jan de Graaf and Keith Johnson, *International Journal of Pension Management*, Vol. 2, Page 44 (Spring 2009).

IV. REFERENCES

Each proposal must include a list of at least three organizations, but no more than five, that may be used as references for your work on fiduciary audits or studies. References may be contacted to determine the quality of the work performed, personnel assigned to the project, and contract adherence. The following should be included for the references listed:

- *Date of the fiduciary audit work;*
- *Name and address of client;*
- *Name and telephone number of individual in the client organization who is familiar with the work; and*
- *Description of the work performed.*

Reference information is indicated below for five case examples included in section II. *Capabilities and Experience*. For more complete project descriptions please refer to that section.

1. Teacher Retirement System of Texas

September – December 2016
 Michael Clayton, Audit Manager
 Texas State Auditor's Office
 P.O. Box 12067
 Austin, Texas, 78711-2067
 (512) 936-9465
michael.clayton@sao.texas.gov

Work performed: Review of the effectiveness of the Real Assets investment program, including investment oversight and management, overall governance framework, investment policies, investment reporting and oversight, risk management, and independent oversight.

2. New York State Common Retirement Fund

August 2012 – January 2013 and January – June 2016
 Helen Fanshawe, Deputy Counsel
 New York State Office of the State Comptroller
 110 State Street
 Albany, NY 12236
 (518) 474-6036
hmfanshawe@osc.state.ny.us

Work performed: Fiduciary and conflict of interest review of the New York State Common Retirement Fund, including assessing if the Fund was being managed in an efficient and effective manner.

3. New York City Office of the Comptroller Bureau of Asset Management (BAM)

June 2015 – October 2015

Scott Evans, Deputy Comptroller for Asset Management and Chief Investment Officer

One Centre Street

New York, NY 10007

(212) 669-8318

sevans@comptroller.nyc.gov

Work performed: Best practices review of all internal BAM departments, all key external service providers, sister bureau service providers, and relationships with five retirement boards. Topics included policies, practices and procedures, staffing, investment operations, information systems, contracting, compliance, risk, financial reporting, and corporate governance.

4. South Carolina Public Employee Benefit Authority (PEBA)

October 2014 – March 2015

Brian Lamkin, Inspector General

111 Executive Center Drive, Suite 204

Synergy Business Park

Enoree Building

Columbia, SC 29210-8416

(803) 896-4729

oig@oig.sc.gov

Work performed: Fiduciary performance audit of the retirement and health insurance operations, including Governance, Policy Review and Development, Organization Structure, Communications with Stakeholders, Benefits Administration, Actuarial Matters, Legal Compliance, Customer Service, Record Keeping and Security of Information, Cost of Operations, and Information Technology Systems.

5. South Carolina Retirement System Investment Commission (RSIC)

December 2013 – April 2014

Brian Lamkin, Inspector General

111 Executive Center Drive, Suite 204

Synergy Business Park

Enoree Building

Columbia, SC 29210-8416

(803) 896-4729

oig@oig.sc.gov

Work performed: Fiduciary performance audit of the investment commission operations, including Governance; Policy Review and Development; Organizational Structure; Investment Administration; Legal Compliance; and Information Technology.

V. METHODOLOGY, WORK PRODUCT, AND TIMELINE

Each proposal shall describe the proposed methodology for each element of the components listed in Section II, Scope of Audit. The description should include specific techniques that will be used, including anticipated sampling techniques and sizes, and proposed sources of data and information. You may propose alternative ways of addressing the elements of the audit's scope.

In describing your proposed methodology, also identify the type and level of assistance that you anticipate will be needed from the staff of PERS, including assistance to understand the operations and records of PERS and to access, obtain, and analyze information needed for the audit. The description of the proposed methodology shall also identify meetings, interviews, programming support, space needs, etc., that you anticipate needing from PERS.

Each proposal shall also include one or more examples of work products for fiduciary audits that may help to illustrate the proposed methodology and final work product.

Each proposal shall provide an estimated date that the final report will be submitted and the projected timeline or the anticipated work requirements and milestone dates to reach that date. This may be expressed as time after start of contract (i.e., "1 week after contract start date," "4 weeks after contract start date"), rather than specific calendar dates.

The stated purpose of this fiduciary performance audit as stated in the RFP is: *The Contractor selected under this RFP (the Contractor) will review and critically evaluate the organizational design, structure, and practices of PERS overall and of its investment program. The Contractor will identify areas of strengths and weaknesses in OPERS, compare OPERS operation with best practices of other public pension plans, and make recommendations for improvement.*

Methodology

Funston Advisory Services LLC has developed a fiduciary and governance review framework and methodology which we have used in similar assignments with other public retirement system clients (see *Section VI. Additional Information*).

For addressing an integrated retirement system such as OPERS, the FAS framework starts with the overall duties of the fiduciary and conceptually addresses three major questions:

- Are the plan fiduciaries effectively assessing plan liabilities, making reasonable assumptions for investment returns and risk, and adopting prudent investment strategies?
- What is the legal, governance and policy framework under which the plans operate and how does it compare to industry practices?
- How do fund practices, procedures and performance with respect to administrative operations, compliance, and controls compare to peers, taking into considering its operating framework?

We have used the FAS framework as a check for completeness of the scope of the RFP and for identifying recommended additions to ensure that any potential gaps are covered.

The approach which follows incorporates the FAS methodology into the structure defined in the RFP. The major work steps identified are:

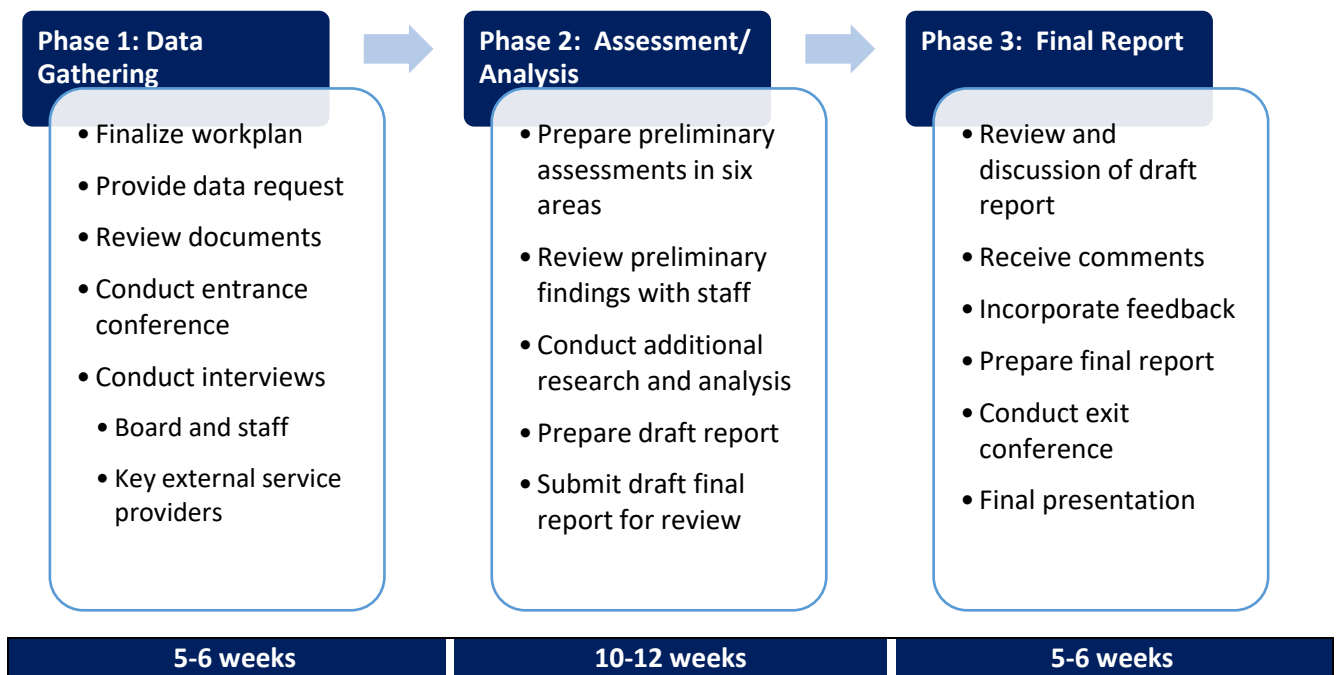
Phase 1: Data Gathering – Workplan Review and Approval, Data Collection, Entrance Conference and Interviews

Phase 2: Assessment/Analysis

1. Board Governance and Administration
2. Organization Structure and Staffing
3. Investment Policy and Oversight
4. Legal Compliance
5. Risk Management and Controls
6. IT Operations

Phase 3: Final Report – Management Review, Final Report Submission and Exit Conference

We have organized the work steps into three sequential phases of effort as shown in the graphic below:



Phase 1: Data Gathering

We will include a five- to six-week initial phase to finalize the workplan, launch the project (including the entrance meeting), collect and review documents, and conduct an initial round of interviews with the OPERS Board members and staff, key stakeholders, a sampling of external investment managers, the custodial banks, the investment consultants, the actuary, and the external auditor. The data request will include a detailed system profile questionnaire to provide information about OPERS' structure, policies and procedures which can be compared to peer data in the FAS benchmarking knowledgebase.

This will establish the initial data gathering and provide the basis for further analysis in Phase 2. A preliminary data request and interview list is included as *Appendix B* (to be modified when the workplan is reviewed and finalized).

Phase 2: Assessment/Analysis

After Phase 1, six workstreams will be conducted in parallel over the following ten to twelve weeks as described below:

A. BOARD GOVERNANCE AND ADMINISTRATION

The Contractor will perform a review of the governance structure of PERS in terms of the make-up of its Board and level of monitoring and oversight provided in its policies, procedures, and practices. The Contractor shall evaluate the adequacy of the policies concerning delineation of roles and responsibilities of the Board, staff, investment managers, and others with administrative or oversight responsibilities.

Specifically, this will include an analysis of:

- *Board trustee education, training, and their associated costs;*
- *Whether PERS sufficiently delineates, communicates, and documents the lines of reporting and responsibility over staff responsibilities in general and in the investment program specifically and whether the role of the Board and staff are clearly defined for both;*
- *The statutes and administrative rules under which PERS operates to determine if the Board and staff comply with applicable statutes and rules as well as whether the statutes and administrative rules are sufficient to allow the Board and staff to meet their responsibilities;*
- *Comparison of the governance provisions and practices to industry standards and best practices in comparable systems.*
- *PERS budget process and its adherence to Board approved budget;*
- *Written policies and procedures currently in place to monitor and guard against professional conflicts of interest;*
- *Succession planning for key positions;*

- *Administrative costs, including determining their appropriateness compared to comparable public systems; and*
- *Communication policies and procedures of PERS between the Board, its members, and its retirees.*

For the Board governance and administration review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- Ohio statutes and administrative rules governing OPERS
- OPERS governance policies, including charters, delegations, position descriptions, ethics and standards of behavior policies and communications policy
- OPERS Board education and training program and materials
- OPERS communications policies and plans
- Interviews with Board members and OPERS executive staff
- FAS governance leading policies and practices knowledgebase
- Most recent three OPERS annual operating budgets and financial and operating reports
- OPERS staff development and succession planning documentation
- Most recent CEM pension administration benchmarking report for OPERS

FAS has significant experience in reviewing the governance structure of public retirement systems and Board policies and practices. Using the information described above, the FAS team will:

1. Assess the overall OPERS governance structure, Board composition, and lines of reporting and compare with leading practices at peer state retirement systems in the U.S., with particular emphasis on investment governance
2. Review the policies and role of the Board vis-à-vis OPERS staff, advisors, and external managers
3. Evaluate oversight and monitoring activities
4. Review Board and staff processes for compliance with applicable laws, administrative rules and policies
5. Review conflict of interest policies and procedures and compare with leading practices
6. Compare OPERS Board authorities and performance with leading, prevailing and lagging practices at peer funds and identify if there are areas where the Board is unduly limited by regulations from fulfilling its fiduciary duties
7. Assess OPERS' budgeting and expense monitoring processes and its administrative costs and compare to peer retirement systems and leading practices
8. Compare OPERS' Board continuing education program with leading and prevailing practices at peer retirement systems

9. Review OPERS' stakeholder communications policies and plans and compare to leading practices

FAS team members leading this section will be Keith Johnson, Ken Johnson, Steve Harding, Megan Jackson, and Randy Miller.

B. ORGANIZATIONAL STRUCTURE AND STAFFING

The Contractor will perform a review of the overall organizational structure of PERS and its capacity and effectiveness in implementing the policy and assignments delineated by the PERS Board and management. Specifically, this will include an analysis of:

- *Staffing size, hiring procedures, staff qualifications, roles, compensation, performance evaluation requirements, and an analysis of these factors compared to other similar size public pensions;*
- *Adequacy of process to evaluate and improve customer/member satisfaction;*
- *Whether compensation levels are sufficient to facilitate PERS' ability to attract and retain qualified pension fund professionals; and*
- *Monitoring and maintaining staff qualifications and continuing education requirements.*

For the organization staffing and structure review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- OPERS human resources policies and procedures
- OPERS staffing reports, including hiring, termination, vacancy and retirement eligibility
- OPERS position descriptions
- OPERS employee evaluation policies and procedures
- Internal OPERS employee satisfaction survey results
- OPERS member service reports
- Most recent CEM pension administration benchmarking report for OPERS
- Most recent independent compensation study conducted for OPERS
- Interviews with OPERS executives and staff, including the Director of Human Resources
- OPERS employee continuing education and training program materials
- FAS knowledgebase of retirement system staffing

FAS has performed similar reviews at other public retirement systems. We will rely upon existing compensation studies in evaluating the OPERS compensation structure and will also rely upon existing OPERS and CEM pension administration reports in evaluating member satisfaction. This engagement will

not include a new compensation or administration study. Using the information described above, the FAS team will:

1. Assess the organization structure, staffing and capabilities of OPERS as compared to peer retirement systems
2. Review human resources policies and practices and compare to leading practices
3. Assess staff qualifications and hiring and evaluation processes
4. Evaluate OPERS compensation policies and structure
5. Assess OPERS processes for monitoring, measuring and improving member satisfaction
6. Review OPERS staff training and continuing education policies and program and compare to peer retirement systems

FAS team members leading this section will be Ken Johnson, Randy Miller and Jon Lukomnik.

C. INVESTMENT POLICY AND OVERSIGHT

a. Investment policy. *The contractor will perform an evaluation of the Board investment policy and procedure. The contractor will:*

- *Review the process by which the investment policy is adopted and compare that process to best practices;*
- *Review the investment policy statement and compare it to industry best practices;*
- *Determine whether PERS investment policy includes all critical elements, acknowledging an understanding of PERS' financial and actuarial characteristics, and in accordance with established investment and funding goals, and risk tolerances;*
- *Evaluate whether the asset allocation is tied to the investment policy statement;*
- *Evaluate whether PERS investment policy is compatible with the most recent asset/liability study and five-year experience review;*
- *Evaluate the adequacy of the mechanisms and decision-making processes utilized for setting, periodically reviewing, and rebalancing the asset allocation;*
- *Evaluate whether PERS policy specifies to what extent the basis for particular investment decisions should be articulated in writing by the Board or PERS staff;*
- *Evaluate the extent to which PERS observes its formal written investment policies and procedures, and identify what, if any, practical problems have resulted either on a systematic or isolated (but significant) basis; and*

- *Evaluate how often and by what process the Board or staff reviews PERS' written policies, guidelines, and procedures.*

For the investment policy review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- OPERS current Investment Policy Statement (IPS) and most recent prior two versions
- Interviews with OPERS investment staff
- Interview with the general investment consultant and specialty consultants
- Interviews with at least ten investment managers from a variety of asset classes, focusing on the most recently hired (to understand the current processes) and those with the largest allocations (for risk management reasons)
- Interview with the OPERS actuary
- FAS investment policy and operations knowledgebase
- OPERS annual investment reports for past three years
- OPERS most recent asset-liability study
- OPERS most recent five-year experience review
- OPERS rebalancing reports from past three years
- OPERS Board minutes from past three years

We will utilize the knowledge of our team members and the FAS knowledgebase to assess the contents of the IPS. The FAS team will review the IPS, the asset-liability study, investment reports and rebalancing reports to evaluate consistency of investment staff actions with policies. Using the information described above, the FAS team will:

1. Assess how the IPS is developed and updated and compare to leading and prevailing practices
2. Review the content of the IPS and compare to peer leading practices
3. Assess consistency between the IPS and the asset allocation, the asset/liability study, and the most recent five-year experience study
4. Review mechanisms and decision-making processes for periodically reviewing and rebalancing the asset allocation
5. Evaluate OPERS policies and practices for documentation of investment decisions
6. Assess OPERS compliance with documented investment policies and procedures and identify any issues
7. Review OPERS Board and staff policies and processes for periodic review and updating or investment policies, guidelines and procedures

FAS team members leading this section will be Jon Lukomnik, Keith Johnson, Megan Jackson, Steve Harding, Randy Miller and Ken Johnson.

b. Investment oversight and review. *The contractor will perform an evaluation of the oversight and control of investments. The contractor will:*

- *Evaluate the appropriateness of Board and staff controls, procedures, and capabilities to regularly review and monitor the performance of the investments and the practices of investment managers, as well as ensuring compliance with policies;*
- *Evaluate PERS' process for measuring, evaluating, and controlling transaction costs, directed brokerage and commission recapture (if any), and compare the process to other funds as well as public or private third party industry surveys.*
- *Evaluate the process used to determine and measure investment performance, including how performance data is collected and verified and selection of appropriate benchmarks;*
- *Evaluate the basis and methodology for the compensation of external investment managers and advisors and payments to others, if any;*
- *Evaluate the written policies and procedures currently in place to monitor and guard against professional conflicts of interest; and*
- *Analyze how investment managers are selected, including the transparency in the decision-making process, due diligence provisions, whether specific criteria and procedures govern the selection process, whether they are actually observed in the selection process, and whether there is adequate documentation of selection process.*

For the investment oversight review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- Investment compliance reports
- Interviews with OPERS investment staff, investment accounting staff, financial staff who calculate investment manager fees, compliance officer, external managers, and the investment consultants
- Trade execution analysis reports
- Most recent CEM investment benchmarking report
- Investment performance reports from the general consultant and custodial bank
- OPERS staff investment reports to the Board
- External manager fee calculations and reports
- OPERS conflict of interest policies and procedures for external managers

- External manager compliance reports
- OPERS investment due diligence policies and procedures
- OPERS manager files (at least ten investment managers from a variety of asset classes, focusing on the most recently hired and those with the largest allocations)

The FAS team will rely upon existing investment performance reports, transaction execution analysis reports, and the CEM investment report to evaluate overall investment performance and level of manager and brokerage fees. We will evaluate policies and processes for developing the manager pipeline, selection, due diligence and monitoring of external managers based upon interviews with internal OPERS staff, investment consultants, and external managers and transaction file documentation. Using the information described above, the FAS team will:

1. Assess OPERS controls, procedures and capabilities for investment oversight, performance monitoring, and manager compliance
2. Assess OPERS processes for monitoring and controlling transaction costs and compare to leading practices
3. Assess processes by which OPERS selects performance benchmarks and monitors and measures performance
4. Evaluate external manager compensation and payment processes and compare to peers
5. Assess external manager conflict of interest policies and compliance procedures and compare to leading practices
6. Review OPERS' investment manager due diligence and selection policies, practices and documentation and compare to leading practices

This section will be led by Jon Lukomnik, Steve Harding, Keith Johnson, Megan Jackson and Ken Johnson.

c. Investment and fiduciary risk. The contractor will perform an evaluation of the awareness of risk and management of risk in investments. The contractor will:

- *Evaluate the processes by which the Board is aware of the risks associated with the asset allocation they have adopted; and*
- *Examine investment risk factors. Attention should be on the types, levels, and appropriateness of risks in the investment portfolios and overall funds as well as any internal controls in place at PERS to ensure compliance with the adopted standards, policies and procedure for managing investment and fiduciary risk. This examination should include a comparison to best practices.*

For the investment and fiduciary risk review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- Investment risk reports and analyses provided to the OPERS Board over the past three years

- Investment compliance reports from the past three years
- Interviews with the OPERS Board, investment staff and investment consultants, including asset class consultants
- FAS team member experience and the FAS investment operations knowledgebase

For the assessment of OPERS investment and fiduciary risk, we will rely on interviews with Board members, investment consultants, and investment staff to assess the process through which investment risk has been discussed and evaluated when setting the asset allocation. We will also utilize the investment risk reports and analyses prepared over the past three years and compare the OPERS risk policies and procedures to leading practices. Using the information described above, the FAS team will:

1. Evaluate how the Board assesses risk during the asset allocation process
2. Evaluate how OPERS identifies and controls investment and fiduciary risk and compare to leading practices

This section will be led by Steve Harding, Jon Lukomnik and Rick Funston.

d. Custodian policy. The Contractor will evaluate PERS' relationship with its custodial bank, including the custodial bank's breadth of services, technological planning and capability to address PERS' needs, the bank's structure and level of fees, cash management and analytical services, and the ability of PERS to have oversight over custodial functions. The Contractor will also review the custody model used by the Ohio Treasurer of State as custodian of financial assets for PERS and evaluate the oversight provided as compared against other public systems and best practices.

For the custodian policy review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- The contract and service level agreement with OPERS' custodial bank(s)
- Most recent custodial bank RFP(s)
- OPERS custody fee data for the past three years
- Interviews with OPERS staff, the custodial bank staff and Treasurer of State staff
- FAS project team experience and the FAS custody knowledgebase

For the assessment of the custodial bank services received by OPERS, we will identify the services provided by the custodial bank and compare them to services typically provided by custodial banks to peer funds. We will compare the level of custody fees to those of peers based upon the FAS knowledgebase and the CEM investment report. FAS has examined custody models used in other states and has information to assess the model in use by OPERS. Using the information described above, the FAS team will:

Evaluate the OPERS relationship with its custodial bank and compare to peers

1. Compare the breadth and quality of services provided by the custodial bank to OPERS and level

of fees paid with peer retirement systems

2. Evaluate the Ohio custody model and custodial bank oversight structure and compare to peer public retirement systems

This section will be led by Steve Harding and Randy Miller.

D. LEGAL COMPLIANCE

The Contractor will evaluate the adequacy of PERS' legal compliance with applicable state and federal law and regulations. The evaluation will include an analysis of:

- *Legal compliance and adherence to IRS regulations;*
- *Adequacy of internal and external counsel;*
- *Adequacy of ethics training, disclosure, and monitoring of compliance; and*
- *Board and staff compliance with legal requirements.*

For the legal compliance review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- OPERS IRS filings over the past three years
- Most recent IRS Determination Letter
- Investment compliance checklists
- OPERS transaction files (at least ten investment managers from a variety of asset classes, focusing on the most recently hired and those with the largest allocations)
- List with description of external legal services obtained over the past three years
- Ethics training materials used by OPERS
- OPERS compliance reports for Board members and staff
- Interviews with OPERS legal, compliance and investment staffs
- OPERS project team experience and the FAS knowledgebase

For the internal and external legal services assessment, the FAS team will utilize interviews with internal counsel and the investment staff and peer information on level of legal staffing and external fees. We will assess the adequacy of legal services over the past three years. Using the information described above, the FAS team will:

1. Review communications with the IRS to identify potential compliance deficiencies
2. Review the process by which OPERS monitors compliance with IRS requirements and responds to compliance issues

3. Assess legal services in comparison to peers over the past three years
4. Review the ethics training and compliance programs, as well as compliance reporting processes, and compare them to leading practices
5. Review transaction compliance checklists for each asset class and review a sample of transactions for compliance with guidelines and legal requirements

This section will be led by Keith Johnson and Megan Jackson.

E. RISK MANAGEMENT AND CONTROLS

The Contractor will evaluate the risk review and control procedures of PERS. The Contractor will also evaluate the PERS management process by analyzing, as appropriate, the essential components of its internal control structure. These components include segregation of duties, availability of information, timeliness, accessibility, and accuracy of information, policy manuals, supervision and review, audits, and training and planning. A review of this task area should also encompass an assessment of whether the pension fund utilizes a holistic view of risk management.

The evaluation will include an analysis of:

- *The adequacy of financial controls and integrity of financial statements. This should include an analysis of the purchasing policy and adherence to that policy;*
- *The adequacy of the current accounting process;*
- *The appropriateness and utility of regular reports provided to the Board and management, and how that reporting compares to industry standards and best practices;*
- *Sufficiency of internal and external audit procedures; and*
- *Adequacy of record-keeping system.*

For the risk management and controls review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- OPERS risk policies and procedures
- OPERS audit plans and reviews prepared by internal audit or third parties
- OPERS procurement policy and procedures
- Description of accounting processes
- Recent external audit reports, including any management letters
- Recent internal audit reports
- Recent internal audit Quality Assessment Review (QAR)

- Internal audit self-assessment reports
- Operational risk reports
- Record-keeping policies, procedures and systems
- Interviews with OPERS Audit Committee members, Executive Director, head of Risk Management, Director of Internal Audit, Director of Finance and staff, and the external auditor
- FAS project team experience and the FAS risk and reporting knowledgebase

For the assessment of OPERS' risk management and controls, the team will evaluate the overall risk assessment approach (inputs, methodology, outputs), control procedures related to risk (relevancy), and internal control structure (design, effectiveness, sustainability through training and planning). We will also review and assess the purchasing policy, including vendor selection, evaluation and monitoring and compare to leading practices.

In conformance with the Institute of Internal Auditors' (IIA) *International Professional Practices Framework*, the FAS team will assess the sufficiency of internal audit procedures. We will review the accounting policies and procedures and the preparation and approval of financial statements and compare to leading practices at peers and also evaluate the processes used to oversee and conduct the external audit. Finally, we will review the OPERS record-keeping policies, processes and systems and compare them to leading practices.

Using the information described above, the FAS team will:

1. Assess the essential components of the OPERS internal control structure and the adequacy of financial controls
2. Assess the process through which financial statements are created and their integrity
3. Assess OPERS' purchasing policies and practices and procedures for compliance with those policies
4. Assess current OPERS accounting processes
5. Evaluate the utility of standard reports to the Board and management and compare to leading practices
6. Assess internal audit capabilities and procedures
7. Assess the external auditor selection process and services provided by the external auditor
8. Evaluate OPERS record-keeping system

This section will be led by Steve Harding, Gina Eubanks, Rick Funston and Ken Johnson.

F. IT OPERATIONS

The Contractor will evaluate the control, accuracy, and integrity of the PERS information technology system. This should include a review of PERS data integrity; security and confidentiality of its records system; contingency and continuity planning; and incident management system. The Contractor will evaluate the overall risk level for PERS IT operations. The analysis will include an analysis of:

- *The quality of processes and controls for the organization and management of IT operations and governance; IT project and portfolio management; data management; application development and maintenance; local area network infrastructure; security; business continuity plan and disaster recovery; and*
- *Areas of high risk and PERS' mitigating controls for those defined high-risk areas. The analysis will compare the PERS' control structure with IT industry best practices.*

For the IT operations review, we will utilize the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- OPERS IT governance processes
- OPERS IT strategy and delivery framework
- OPERS IT, data and business continuity policies and procedures
- OPERS IT planning documents (strategic, operational, network, data security, etc.)
- OPERS applications systems portfolio and application map
- OPERS technology platforms and service catalog
- OPERS IT service management standards
- Description of OPERS program management functions
- OPERS IT service level standards and reports
- OPERS cost of ownership of IT services and IT budget allocation
- OPERS IT risk assessment
- Documentation for OPERS IT projects
- OPERS disaster recovery and business continuity plans
- IT and security incident and outage reports
- Interviews with the Director of Information Technology and staff, the Executive Director, Director of Member Operations
- FAS project team experience and the FAS IT knowledgebase

The FAS team will assess OPERS' overall IT governance structure, policies and procedures and project management policies, procedures and capabilities. We will also evaluate the overall systems and data infrastructure. We will review and assess key IT risks and evaluate mitigation controls currently in place.

Using the information described above, the FAS team will:

1. Assess OPERS' overall IT governance structure, policies, procedures and control structure
2. Review the OPERS technology infrastructure and applications portfolio along with the service catalog
3. Assess the organizational structure of OPERS IT to support the ongoing performance of the fund operations
4. Assess OPERS' project management policies, procedures and capabilities
5. Evaluate OPERS' systems and data infrastructure
6. Evaluate OPERS data integrity, confidentiality and security policies and practices and compare to industry leading practices
7. Review the cyber security capabilities of OPERS' operations and systems, including the technology environment delivering applications and data
8. Review the OPERS disaster recovery and continuity planning policies, plan and practices and compare to leading practices
9. Review major IT projects underway, including the status and related risks
10. Review OPERS' incident reporting system
11. Assess risks associated with OPERS IT operations
12. Prepare impact analyses of the recommended changes with suggestions for alternatives

This section will be led by Kevin Barnhill, Dan Grossberg and Gina Eubanks.

As each of these six areas are being analyzed and preliminary assessment are being developed, the FAS project team will review preliminary results and have follow-up discussions with OPERS staff throughout Phase 2 to ensure we have appropriately understood and interpreted the information provided to us. At the conclusion of Phase 2, the FAS project team will prepare a draft final report to be provided to ORSC and OPERS for their review.

Phase 3: Final Report

We will conclude the fiduciary performance audit with a five- to six-week process to review and refine the final report with OPERS and the ORSC to ensure accuracy of findings and practicality of recommendations. We have found this to be an important part of the process which greatly increases the likelihood of acceptance by the client and results in a high level of implementation. We would also expect to work with OPERS leadership to identify appropriate priorities and timeframes to expect to implement the

recommendations, as well as a high-level assessment of resources required. The contents of the final report are described below under *Deliverables*.

How FAS Proposes to Work with the ORSC and OPERS

We believe it is important to have clear accountability for consultant results and defined protocols for client-consultant communications. As such, Rick Funston will have overall responsibility for the project and its results. On a day-to-day basis, Randy Miller will be the primary contact person and project manager.

We would expect to have a day-to-day liaison on a part-time basis at the ORSC and also expect OPERS to appoint a project liaison to work with the FAS project manager part-time on a day-to-day basis. We would keep the ORSC liaison apprised of the progress of the review on a weekly basis and, if we encounter any issues in obtaining information or scheduling interviews, would request assistance.

The OPERS project liaison would be responsible for obtaining and uploading documents in response to the FAS request, obtaining responses to the benchmarking profile questionnaire, and assisting in scheduling meetings and interviews. We utilize a secure, cloud-based collaboration tool called Huddle for OPERS to upload documents to be available to the FAS project team. We can make this tool available to the ORSC liaison to view the project team's working documents, if desired.

We propose working initially with the ORSC and OPERS project liaisons to develop clear communications protocols regarding interview requests and scheduling, document requests, follow-up discussions, and scheduling of meetings. This should help ensure effective and efficient use of ORSC and OPERS executive and staff time and avoid redundant or confusing requests. We would also expect to have regular weekly status update conference calls with the OPERS project liaison and the ORSC liaison to ensure effective ongoing communication throughout the project. We will provide a formal monthly progress report to the ORSC advising on overall project status and any potential issues which have been identified.

Prior to conducting the Opening Conference, the FAS team will prepare a document request (a preliminary draft is included in *Appendix B*, as previously mentioned) and allow several weeks for the OPERS staff to respond. We assume that most documents, including investment manager contracts and related due diligence materials, will be available electronically, can be uploaded to a secure tool. As mentioned earlier, this will include a detailed system profile questionnaire to provide information about OPERS' structure, policies and procedures. We will also work with the OPERS liaison to schedule interviews.

After a brief period to perform an initial review of the documents provided, we expect to have most of the FAS team on site for the Opening Conference and to:

1. Introduce ORSC and OPERS executives and staff to the FAS team members;
2. Discuss project timing and ensure a clear understanding of project plans and protocols;
3. Conduct interviews; and
4. Follow up on further data collection requirements.

Subsequent to these activities, we would envision on-site work in Columbus to be on an as-needed basis for follow-up interviews or reviewing preliminary observations with OPERS executives and staff. We would have all or part of the FAS team on-site to participate in the Closing Conference. Many of the follow-up discussions and interviews can be conducted as telephone conversations. Our experience is that this is an efficient and cost-effective working style for this type of review.

For the Closing Conference, we will present a PowerPoint summary document of our findings and recommendations. The full final report will be provided in advance of the Closing Conference.

Deliverables

As requested, FAS will provide monthly status updates and weekly phone calls to the ORSC and propose that the progress report submission include a conference call, or face-to-face meeting if appropriate, to discuss status and provide an opportunity for both the ORSC and FAS teams to ask questions and discuss issues.

The final report will include: a description of the work performed; an executive summary; findings and recommendations, including priorities; and specific and concrete proposals to achieve any improvements recommended in the report. The recommendations and proposals will be prioritized and provide the potential costs or benefits associated with implementation. The key findings, recommendations, and proposals will be organized in a manner that clearly identifies to whom they are primarily directed (e.g., the Legislature, OPERS Board, and ORSC). This is consistent with our normal approach for this type of review, and we have found that it results in a very high level of adoption of our recommendations.

Timeline

We believe this fiduciary performance audit can be completed within five to six months. Our GANTT chart style workplan, included as *Appendix D*, indicates the expected duration necessary for each task area.

The FAS team will be prepared to begin the engagement after we are selected within two weeks of finalizing the contract.

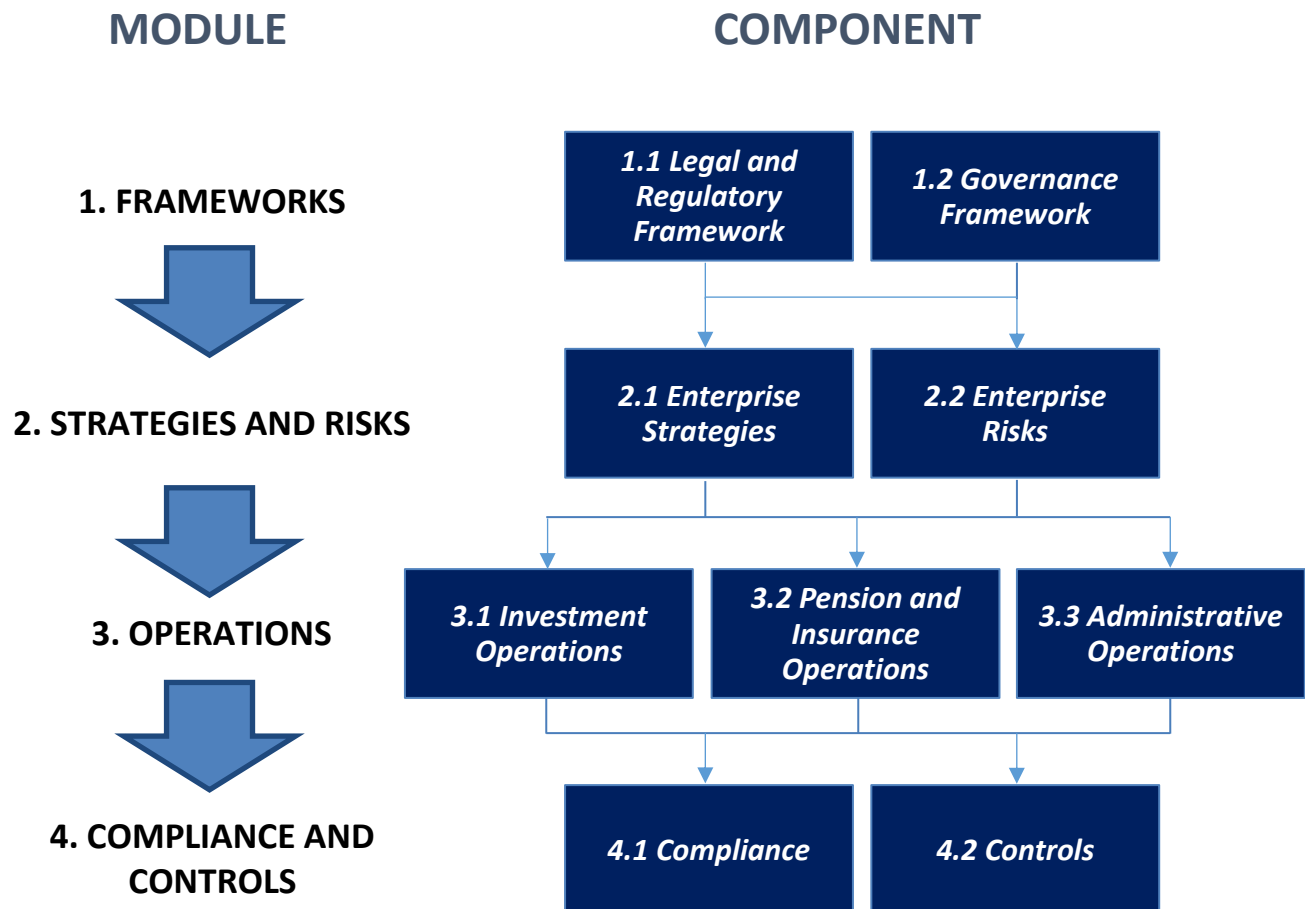
VI. ADDITIONAL INFORMATION

Each proposal shall include any additional information that will be helpful to gain an understanding of the proposal. This may include diagrams, excerpts from reports, or other explanatory documentation that would clarify and/or substantiate the proposal. Any material included here should be specifically referenced elsewhere in the proposal.

The FAS Fiduciary Audit Methodology

Funston Advisory Services LLC (FAS) has developed a fiduciary performance review methodology which evaluates a retirement system’s governance, strategy, risk and compliance policies and practices. The methodology, indicated in the graphic below, is comprehensive and adaptable to each specific assignment (see appendix for topics included in each major area). Our approach to fiduciary reviews is “One size fits one,” but it is important to utilize a consistent methodology to identify leading, prevailing, and lagging policies and practices.

The FAS Fiduciary Review Methodology



VII. GLOSSARY

Each proposal shall provide a glossary of all abbreviations, acronyms, and technical terms used to describe the services or products proposed. This glossary should be provided even if the terms are described or defined when first used in the proposal response.

ALS – Asset-liability study

BAM – New York City Bureau of Asset Management

CalPERS – California State Employees’ Retirement System

CCSA – Certification in Control Self-Assessment

CEO – Chief Executive Officer

CFO – Chief Financial Officer

CIA – Certified Internal Auditor

CIO – Chief Investment Officer

CISA – Certified Information Systems Auditor

COO – Chief Operating Officer

COSO – Committee of Sponsoring Organizations of the Treadway Commission

CRF – New York State Common Retirement Fund

CRMA – Certification in Risk Management Assurance

FAS – Funston Advisory Services LLC

GAO – Government Accountability Office

IAA – Institute of Internal Auditors

IRRCi – Investor Responsibility Research Center Institute

IT – Information Technology

ICGN – International Corporate Governance Network

IPS – Investment Policy Statement

ITIL – Information Technology Infrastructure Library

LACERA – Los Angeles County Employees Retirement Association

NAPPA – National Association of Public Pension Attorneys

NASRA – National Association of Public Retirement Administrators

OIC – Oregon Investment Council

OPERF – Oregon Public Employees’ Retirement Fund

OPERS – Ohio Public Employees Retirement System

ORSC – Ohio Retirement Study Council

OST – Oregon Office of the State Treasurer

P2F2 – Public Pension Financial Forum

PCAOB – Public Company Accounting Oversight Board

PEBA – South Carolina Public Employee Benefit Authority

RSIC – South Carolina Retirement System Investment Commission

SERS – School Employees Retirement System

STRS – State Teachers Retirement System

SIG – South Carolina State Inspector General

SWIB – State of Wisconsin Investment Board

VIII. COST INFORMATION

The pricing summary should include a breakdown of costs per element, including personnel costs (including hourly rates and estimated hours for professional and clerical staff assigned to the audit); travel and lodging; data processing costs; materials; and any other potential costs. The cost estimates in the pricing summary must include all necessary charges to conduct the audit and must be a "not to exceed" figure.

	A. Board Governance and Administration	B. Organizational Structure and Staffing	C. Investment Policy and Oversight	D. Legal Compliance	E. Risk Management and Controls	F. IT Operations	Project Oversight and Management	Total Hours
Kevin Barnhill						128		128
Gina Eubanks					60	60	16	136
Rick Funston			16		16		80	112
Dan Grossberg						24		24
Steve Harding	24		152		96		48	320
Keith Johnson	40		48	36				124
Ken Johnson	56	72	64		16			208
Megan Jackson	40		48	36				124
Jon Lukomnik		16	192					208
Randy Miller	40	40	40				72	192
Total	200	128	560	72	188	212	216	1576

	Hours	Blended Rate	Total
Professional fees	1576	\$437.44	\$689,400
Travel and lodging			\$28,000
Materials and other costs			\$4,000
Total			\$721,400

IX. Appendix A – FAS Knowledgebase

FAS has completed five leading practices benchmarking studies over the past four years. These studies were all completed by FAS team members and include development of surveys and collection of data from selected pension fund peer groups, data validation and analysis, preparation of final reports, and follow-up discussions and webinars with participants.

- ***Public Pension Fund Governance Benchmarking Survey and Leading Practices, 2011***

The benchmarking study was very useful in helping the CalPERS Board understand governance leading practices and to move forward to implement substantive changes. Sixteen major pension funds in the U.S., Netherlands, South Africa and the U.K participated.

- ***Public Fund Investment Management Governance Survey, 2012***

This study was completed at the request of the Office of the Oregon State Treasurer (OST). It included a review of fund governance with seven peer funds utilizing a detailed analysis of 66 authorities under 9 broad “Powers Reserved” categories. The “treasurer model” and “investment board model” governance structures were compared and contrasted.

- ***Public Pension Fund Fiduciary and Governance Leading Practices Survey, 2012***

Completed at the request of the New York State Comptroller’s Office, this study evaluated and identified leading and prevailing practices in eleven different areas. The study included 15 public pensions funds with AUM of \$50 billion or greater. The results were also used to highlight differences found among sole fiduciary, investment board, and integrated board governance models.

- ***Public Pension Fund Governance Leading Practices Survey, 2013***

At the request of the School Employees Retirement System of Ohio, FAS conducted a targeted benchmarking process covering five topical areas with twelve peer public pension funds with AUM ranging from \$7 billion to \$14 billion.

- ***Public Pension Investment Board Benchmarking Survey, 2014***

As part of our fiduciary performance review of the South Carolina Retirement System Investment Commission, FAS conducted a benchmarking survey of a peer group of seven U.S. state public pension investment boards with AUM of \$10 billion or greater. Topics included various board policies and practices, decision-making processes, the custodian relationship, and personnel and sourcing strategies.

- ***Retirement Administration Agency Peer Benchmarking Results, 2014***

As part of our fiduciary performance review of the South Carolina Public Employee Benefit Authority (PEBA), FAS conducted a benchmarking survey of public retirement systems which administer retirement benefits and are separate from the agencies which manage fund investments. Among the seven agencies which participated, five also oversee defined contribution plans, five administer health insurance, and three oversee other insurance programs. Topics benchmarked included board policies and practices, legal authorities, organization structure, and risk management.

The FAS Public Pension Fund Leading Practices database includes information on the following topical areas:

- Fiduciary profile (responsibility (single or board), board member terms, elected or appointed, requirements, types of committees, time commitment)
- Key decision authorities and fiduciary alignment (66 specific authorities):
 - Governance
 - Strategy and resourcing
 - Oversight
- Ability to establish independent investment holding companies
- Open meeting requirements (existence and policy exceptions)
- Board practices (risk management, reporting, outside advice)
- Board self-assessment (approach, process, administration, feedback)
- Board self-development (expertise, training plans, delivery)
- Policies governing board conduct (policies, compliance, discipline)
- Fund policies and frequency of review and updating
- Executive staff profile (executive positions, board reporting, succession planning)
- Executive management hiring and compensation decision responsibilities
- Investment operations profile (legal list restrictions (allowable investments, allocation limits, exposure limits), internally vs. externally managed funds, internal and external investment costs, internal investment management resources, decision-making processes)
- Training type and frequency
 - Ethics
 - Asset classes
- Legal operations
 - Staffing level
 - External counsel (spending, fee structure)
 - Use of outside fiduciary counsel
- Operational transparency and disclosures
- Investment operations management
 - Cost management strategies
 - Cost monitoring
- Use of external managers
 - Hiring process
 - Number and size of mandates and trends
- Use of consultants
 - Type and number
 - Spending by type
 - Value
- Due diligence
 - Frequency
 - Participation
- Contracting and use of custodial services
- Securities lending trends
- Foreign exchange oversight

- Internal and external audit approval responsibility
- Investment accounting operations
 - Segregation of duties
 - Staff certifications
 - Software and documentation flow
 - Asset accounting approvals

Our specific benchmarking study with U.S. state retirement systems which are governed by a fiduciary Board of Trustees and where the defined benefit pension funds are invested and managed by a separate investment board or sole fiduciary includes:

- Board of trustees and policies
 - Composition
 - Qualifications
 - Terms
 - Meeting frequency and duration
 - Time spent on agency business
 - Defined policies and source
 - Ethics/standards of conduct compliance
 - Board discipline
 - Engagement of outside legal counsel
 - Trustee indemnification
- Board self-assessment
 - Process
 - Frequency
 - Use of upward and/or peer-to-peer assessments
 - Feedback process
- Board education
 - Mandated topics
 - Training plans
 - New member orientation
 - External training
- Retirement system authorities
 - Budget approvals
 - Staffing authorities
 - Compensation
 - Rate of return assumption
- Co-fiduciary responsibilities
 - Fund valuations
 - Selection of external auditor
 - Custodian and role of State Treasurer
- Organization
 - Executive positions and reporting relationships
 - Employer training responsibilities
- Stakeholder relations and communications

- Communications plans
 - Communications responsibilities
- Risk management
 - Risk programs
 - Risk in decision-making processes
- Strategic planning
 - Planning process
 - Responsibilities
 - Frequency of updates
- Business continuity plans
- Staff training and education
 - Types of functional training
 - New employee orientation
- Use of outside counsel
 - Type of issues
 - Annual spending

X. Appendix B – Preliminary Data Request

A. *Board Governance and Administration*

1. Ohio statutes governing OPERS
2. OPERS governance policies, including charters, delegations, position descriptions, ethics and standards of behavior policies and communications policy
3. OPERS Board education and training program and materials
4. Most recent three OPERS annual operating budgets and financial and operating reports
5. OPERS staff development and succession planning documentation
6. Most recent CEM pension administration benchmarking report for OPERS

B. *Organization Structure and Staffing*

7. OPERS human resources policies and procedures
8. OPERS staffing reports, including hiring, termination, vacancy and retirement eligibility
9. OPERS position descriptions
10. OPERS employee evaluation policies and procedures
11. Internal OPERS employee satisfaction survey results
12. OPERS member service reports
13. Most recent CEM pension administration benchmarking report for OPERS (common with A.)
14. Most recent independent compensation study conducted for OPERS
15. OPERS employee continuing education and training program materials

C. *Investment Policy and Oversight*

16. OPERS current Investment Policy Statement (IPS) and most recent prior two versions
17. OPERS annual investment reports for past three years
18. OPERS most recent asset-liability study
19. OPERS most recent five-year experience review
20. OPERS rebalancing reports from past three years
21. OPERS Board minutes from past three years
22. Investment compliance reports
23. Trade execution analysis reports
24. Most recent CEM investment benchmarking report

25. Investment performance reports from the general consultant and custodial bank
26. OPERS staff investment reports to the Board
27. External manager fee calculations and reports
28. OPERS conflict of interest policies and procedures for external managers
29. External manager compliance reports
30. OPERS investment due diligence policies and procedures
31. OPERS transaction files (at least ten investment managers from a variety of asset classes, focusing on the most recently hired and those with the largest allocations)
32. Risk reports and analyses provided to the OPERS Board over the past three years
33. Investment compliance reports from the past three years
34. The contract and service level agreement with OPERS' custodial bank
35. Most recent custodial bank RFP
36. OPERS custody fee data for the past three years

D. Legal Compliance

37. OPERS IRS communications over the past three years
38. Most recent IRS Determination Letter
39. Investment compliance checklists
40. OPERS transaction files (at least ten investment managers from a variety of asset classes, focusing on the most recently hired and those with the largest allocations) (common with C)
41. List with description of external legal services obtained over the past three years
42. Ethics training materials used by OPERS
43. OPERS compliance reports for Board members and staff

E. Risk Management and Controls

44. OPERS risk policies and procedures
45. OPERS control plans and reviews prepared by internal audit or third parties
46. OPERS procurement policy and procedures
47. Description of accounting processes
48. External audit reports for prior three years, including any management letters
49. Operational risk reports
50. Record-keeping policies, procedures and systems

F. IT Operations

51. OPERS IT governance processes
52. OPERS IT strategy and delivery framework
53. OPERS IT, data and business continuity policies and procedures
54. OPERS IT planning documents (strategic, operational, network, data security, etc.)
55. OPERS applications systems portfolio and application map
56. OPERS technology platforms and service catalog
57. OPERS IT service management standards
58. Description of OPERS program management functions
59. OPERS IT service level standards and reports
60. OPERS cost of ownership of IT services and IT budget allocation
61. OPERS IT risk assessment
62. Documentation for OPERS IT projects
63. OPERS disaster recovery and business continuity plans
64. IT and security incident and outage reports

XI. Appendix C – Preliminary Interview List

1. Each OPERS Board member
2. OPERS executive staff
 - a. Executive Director
 - b. Chief Investment Officer
 - c. Asset class managers
 - d. Investment risk manager
 - e. General Counsel
 - f. Chief Compliance Officer
 - g. Head of Risk Management
 - h. Director of Internal Audit
 - i. Director of Finance
 - j. Investment accounting staff
 - k. Financial staff who calculate investment manager fees
 - l. Director of Information Technology and staff
 - m. Director of Member Operations
 - n. Director of Benefits
 - o. Director of Human Resources
 - p. Director of Government Relations
 - q. Director of Marketing and Communications
3. General investment consultant
4. Asset class consultants
5. Investment managers (at least ten investment managers from a variety of asset classes, focusing on the most recently hired and those with the largest allocations)
6. OPERS actuary
7. OPERS custodial bank staff
8. Treasurer of State staff (those who interact with OPERS regarding custodial bank matters)
9. OPERS external auditor

XII. Appendix D – Workplan and Timeline

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Phase 1: Data Gathering																							
1. Finalize the workplan	█																						
2. Collect and review documents	█	█	█																				
3. OPERS complete profile survey	█	█	█																				
4. Prepare for entrance meeting and interviews			█	█																			
5. Conduct entrance meeting					█																		
6. Conduct interviews with OPERS Board and staff					█																		
7. Conduct external service provider interviews					█	█	█																
Phase 2: Assessment																							
A. Board Governance and Administration								█	█	█	█	█	█	█	█	█							
1. Board trustee education, training, and their associated costs																							
2. Whether OPERS sufficiently delineates, communicates, and documents the lines of reporting and responsibility over staff responsibilities in general and in the investment program specifically and whether the																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
role of the Board and staff are clearly defined for both																							
2. Evaluate oversight and monitoring activities																							
3. The statutes and administrative rules under which OPERS operates to determine if the Board and staff comply with applicable statutes and rules as well as whether the statutes and administrative rules are sufficient to allow the Board and staff to meet their responsibilities																							
4. Comparison of the governance provisions and practices to industry standards and best practices in comparable systems																							
5. OPERS budget process and its adherence to Board approved budget																							
6. Written policies and procedures currently in place to monitor and guard against professional conflicts of interest																							
7. Succession planning for key positions																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
8. Administrative costs, including determining their appropriateness compared to comparable public systems																							
9. Communication policies and procedures of OPERS between the Board, its members, and its retirees																							
B. Organizational Structure and Staffing																							
1. Staffing size, hiring procedures, staff qualifications, roles, compensation, performance evaluation requirements, and an analysis of these factors compared to other similar size public pensions																							
2. Adequacy of process to evaluate and improve customer/member satisfaction																							
3. Whether compensation levels are sufficient to facilitate OPERS' ability to attract and retain qualified pension fund professionals																							
4. Monitoring and maintaining staff qualifications and																							

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
continuing education requirements																							
C. Investment Policy and Oversight																							
a. Investment policy																							
1. Review the process by which the investment policy is adopted and compare that process to best practices																							
2. Review the investment policy statement and compare it to industry best practices																							
3. Determine whether OPERS investment policy includes all critical elements, acknowledging an understanding of OPERS' financial and actuarial characteristics, and in accordance with established investment and funding goals, and risk tolerances																							
4. Evaluate whether the asset allocation is tied to the investment policy statement																							
5. Evaluate whether OPERS investment policy is compatible with the most recent asset/liability study and five-year experience review																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
6. Evaluate the adequacy of the mechanisms and decision-making processes utilized for setting, periodically reviewing, and rebalancing the asset allocation																							
7. Evaluate whether OPERS policy specifies to what extent the basis for particular investment decisions should be articulated in writing by the Board or OPERS staff																							
8. Evaluate the extent to which OPERS observes its formal written investment policies and procedures, and identify what, if any, practical problems have resulted either on a systematic or isolated (but significant) basis																							
9. Evaluate how often and by what process the Board or staff reviews OPERS' written policies, guidelines, and procedures																							
b. Investment oversight and review																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Evaluate the appropriateness of Board and staff controls, procedures, and capabilities to regularly review and monitor the performance of the investments and the practices of investment managers, as well as ensuring compliance with policies																							
2. Evaluate OPERS' process for measuring, evaluating, and controlling transaction costs, directed brokerage and commission recapture (if any), and compare the process to other funds as well as public or private third party industry surveys																							
3. Evaluate the process used to determine and measure investment performance, including how performance data is collected and verified and selection of appropriate benchmarks																							
4. Evaluate the basis and methodology for the compensation of external investment managers and advisors and payments to others, if any																							

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
5. Evaluate the written policies and procedures currently in place to monitor and guard against professional conflicts of interest																							
6. Analyze how investment managers are selected, including the transparency in the decision-making process, due diligence provisions, whether specific criteria and procedures govern the selection process, whether they are actually observed in the selection process, and whether there is adequate documentation of selection process																							
c. Investment and fiduciary risk																							
1. Evaluate the processes by which the Board is aware of the risks associated with the asset allocation they have adopted																							
2. Examine investment risk factors. Attention should be on the types, levels, and appropriateness of risks in the investment portfolios and overall funds as well as																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
any internal controls in place at OPERS to ensure compliance with the adopted standards, policies and procedure for managing investment and fiduciary risk. This examination should include a comparison to best practices.																							
d. Custodian policy																							
1. Evaluate the custodial bank's breadth of services, technological planning and capability to address OPERS' needs																							
2. Evaluate the bank's structure and level of fees																							
3. Evaluate the custodial bank's cash management and analytical services																							
4. Evaluate the ability of OPERS to have oversight over custodial functions																							
5. Review the custody model used by the Ohio Treasurer of State as custodian of financial assets for OPERS and evaluate the oversight provided as compared against other public systems and best practices																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
D. Legal Compliance																							
1. Legal compliance and adherence to IRS regulations																							
2. Adequacy of internal and external counsel																							
3. Adequacy of ethics training, disclosure, and monitoring of compliance																							
4. Board and staff compliance with legal requirements																							
E. Risk Management and Controls																							
1. The adequacy of financial controls and integrity of financial statements. This should include an analysis of the purchasing policy and adherence to that policy.																							
2. The adequacy of the current accounting process																							
3. The appropriateness and utility of regular reports provided to the Board and management, and how that reporting compares to industry standards and best practices																							
4. Sufficiency of internal and external audit procedures																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
5. Adequacy of record-keeping system																							
F. IT Operations																							
1. Review of OPERS data integrity																							
2. Review of OPERS security and confidentiality of its records system																							
3. Contingency and continuity planning																							
4. Incident management system																							
5. The quality of processes and controls for the organization and management of IT operations and governance; IT project and portfolio management; data management; application development and maintenance; local area network infrastructure; security; business continuity plan and disaster recovery																							
6. Areas of high risk and OPERS' mitigating controls for those defined high-risk areas. The analysis will compare the OPERS' control structure with IT industry best practices.																							

FAS PROPOSAL TO CONDUCT A FIDUCIARY PERFORMANCE AUDIT OF OPERS

FAS Activities	Week																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Phase 3: Final Report																							
1. Submit complete final draft report for ORSC and OPERS review																							
2. Obtain feedback from ORSC and OPERS and revise report, as appropriate																							
3. Submit second draft final report to ORSC and OPERS																							
4. Submit final report to ORSC and OPERS and conduct Closing Conference																							