

Public Agenda Item #1

Call Meeting of the ERS Board of Trustees Audit Committee to Order

August 19, 2020



Public Agenda Item #2

Review and Approval of the Minutes to the May 20, 2020 ERS Audit Committee Meeting – (Action)

August 19, 2020



Questions? Action Item



Public Agenda Item #3

* Review of External Audits

August 19, 2020 Tony Chavez, Director of Internal Audit



CliftonLarsonAllen Annual Financial Statement Audit

Tony Chavez, Director of Internal Audit
Jason Ostroski, CLA
Brittany Smith, CLA

Fiscal Year 2020 Financial Statement Audit



 Board approved Clifton Larson Allen (CLA) as new financial auditors in May 2020

- Audit work started May 2020
- Update and discuss transition

Strategic Alignment:

Engage Stakeholders for Informed Decision Making

Employees Retirement System of Texas (ERS)

Review and Discussion of the 2020 Plan for the External Financial Statement Audit August 19, 2020

Jason Ostroski, CPA Engagement Principal

Brittany Smith, CPA Engagement Manager

WEALTH ADVISORY | OUTSOURCING | AUDIT, TAX, AND CONSULTING

Investment advisory services are offered through CliftonLarsonAllen Wealth Advisors, LLC, an SEC-registered investment advisor





Agenda

- Engagement Team and Experience
- Engagement Scope and Approach
- Board of Trustees' Discussion

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2020 Engagement Team



- We combine national government pension practice leaders and local Texas resources to provide ERS a team that comprehensively understands ERS' unique needs and issues.
- External auditors report to and work directly for the Board

Create Opportunities

2020 Engagement Scope

- Audit of ERS' financial statements as of August 31, 2020
- Audit of ERS' GASB 68 and 75 schedules as of August 31, 2020
- Report on Internal Controls and Compliance
- Audits to be conducted in accordance with auditing standards generally accepted in the United States of America (U.S. GAAS) and Government Auditing Standards
- Written Communications with the Board



ERS®



Audit Methodology



Auditors' Responsibilities and Materiality

- Auditors' Responsibilities Opinion
- Materiality
 - Apply professional judgment
 - Consider decisions that users make
 - Use appropriate benchmarks, such as % of assets or revenue
 - Reasonable assurance vs. absolute assurance
 - Regulatory requirements GASB, AICPA, GAGAS

What is Risk Assessment in a Financial Statement Audit?

Risk Assessment

- Obtain an understanding of ERS, including internal controls
- Identify and assess risks of material misstatement of the financial statements
- Identify significant risks
- Evaluate both overall risks and risks that affect only specific assertions



Audit Procedures

- Concentrate audit effort in high risk areas
 - Inherent risk
 - Control risk
 - Perform less extensive procedures in low risk areas

QA

Significant Processes and Audit Areas

- We have identified the following areas as significant processes and audit areas:
 - Investments and Investment Income
 - ♦ Investments Alternative/Non-Custodial Significant Risk
 - Investments Publicly Traded/Custodial
 - Contributions/Member Testing
 - Employer and Member
 - Data analytic procedures over contributions
 - Benefit Payments
 - Annuity, lump sum benefit payment and claims testing
 - Data analytic procedures over benefit payments
 - Actuarial Information (including Total Pension Liability, Net Pension Liability, Total OPEB liability and Net OPEB Liability) and Related Disclosures – Significant Risk
 - Demographic and informational testing over employer census data
 - Data analytic procedures over census files
 - Financial Statement Process



Significant Risks – Alternative/Non-Custodial Investments

- Walkthroughs of initial due diligence, on-going monitoring and financial reporting
- Confirmation with a sample of fund managers
- Review audited financial statements
 - Evaluate auditor competence
 - Evaluate the opinion (i.e. unmodified, modified)
 - Determine if the financial statements are reported in accordance with GAAP and if investments are reported at fair value
 - Reconcile the audited NAV to the fair value reported by ERS

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Significant Risks – Actuarial Information

- Census data testing including employer attest reports
- Use of an auditor's specialist
- Confirm ERS' actuary's independence
- Review ERS' actuary's valuation reports
- Evaluate the reasonableness of the long term rate of return (LTRoR) and other assumptions
 - Compare to industry standards and circumstances specific to ERS
 - Review most recent asset allocation, actuarial audits, experience studies, long-term historical data and current market data
 - Review of the discount rate calculation

QA

Financial Statement & GASB 68/75 Audit Timeline

Key Milestones	Dates
Planning	July through August 2020
Understanding and Testing of Internal Controls	July through August 2020
Substantive Testing Procedures	September through November 2020
Issue Financial Statement Audit Report	December 2020*
Testing of GASB 68 and 75 schedules	March through May 2021
Issue GASB 68 and 75 Audit Reports	May 2021

^{*} December 20 is a statutory deadline for ERS to submit the CAFR to the Comptroller



Board of Trustees Discussion

- Recognizing the importance of two-way communication, we encourage you to provide us with information you consider relevant to the audit. This may include, but is not limited to the following:
 - ERS' objectives and strategies and the related business risks that may result in material misstatements.
 - Your understanding of risks of fraud and controls in place to prevent and detect fraud.
 - Other matters you believe are relevant to the audit of the financial statements.

Q.





Questions?



Public Agenda Item #4

Review of Internal Audit Reports

August 19, 2020

Tony Chavez, Director of Internal Audit Tressie Landry, Audit Manager Karen Norman, Project Lead



Private Equity Audit

Audit Objective: To determine if investments in private equity are in accordance with ERS Investment Policy



Scope Area	Sub-Objectives
Portfolio Management	 Has the portfolio been adapted to meet investment objectives? Are processes in place to manage and mitigate portfolio risk?
Investments	 Do investment recommendations communicate relevant information? Is information validated? Are investments properly authorized?
Governance	 Is information presented reliable to facilitate proper oversight? Is portfolio performance and management explained to promote transparency? Does performance incentive align with portfolio objectives?

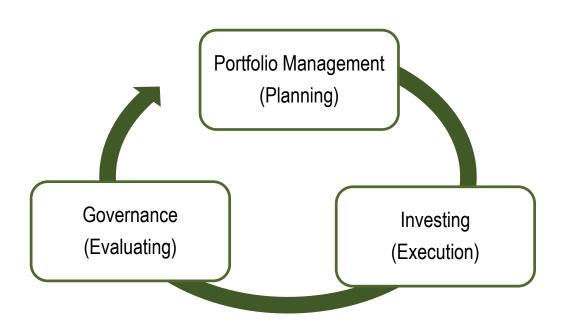
Audit Results



OVERALL ASSESSMENT		Satisfactory	
Scope Area	Results		Rating
Portfolio Management	Observation #2 – Private Equity investment classification process should be improved. (Moderate)		Satisfactory
Investments	The investment selection process is thorough and provides accurate information for the ACIC's review and approval of new investments.		Satisfactory
Governance	Observation #1 - Additional information communicated in Annual Asset Class Review would improve clarity. (Significant) Needs		Needs Improvement

Private Equity Portfolio Cycle

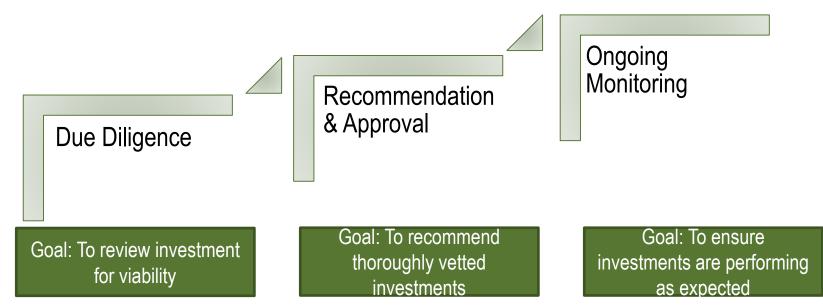




Investment Selection Process



The investment selection process is thorough and provides accurate information for the review and approval of new investments.



Observation #1: Annual Asset Class Review



Transparency comes from accurate, timely, and clear reporting to the Board of the Trust's assets, investment returns and risks, portfolio costs, and portfolio implementation decisions made by Staff — *ERS Investment Guidelines*

a) Annual Asset Class Review

- Staff will educate and report to the Board on risk management at the Trust and asset class levels so the Board can maintain its oversight of the investment program and make strategic decisions as needed
- Staff for each asset class will present to the Board at least annually an overview of their program

b) Quarterly Summary Board Reports

The Executive Director or designee shall provide to the Board in writing or present at a meeting on a quarterly basis summary reports on each private market asset class



- Investment performance can be assessed at the aggregate portfolio (summary) level and at the sub-component (investment) level.
- Portfolio level performance utilizes best practice benchmarks: Private market equivalent (PME) and peer group comparison.

Private Equity Benchmarking Inherent Risk

- Reporting Lag
- Long lock-up of capital
- Impact of J-curve

Performance Benchmark	Performance Metric Description	Benchmark		
Peer Comparison (Public Pension Peers)*	Relative performance to other public pension private equity portfolios	Wilshire Trust Universe public pension private equity portfolios > \$5 billion NAV		
Peer Comparison (Burgiss)**	Relative performance to private equity universe	Burgiss Database		
Public Market Equivalent (PME)** Relative performance to a public market index ACWI IMI				
* Policy Benchmark ** Reference Index used for comparison purposes to assess performance against other benchmarks that are not the policy benchmark.				

The appropriate benchmark for private equity performance depends on the question investors are asking?



PME = Was the decision to allocate capital to the private investments a good one?

- \$'s invested in private equity vs same \$'s invested in public equity index
- Benchmark = Index + PME Premium
- Benchmark = ACWI IMI + 300 basis points
- Premium removed from PME Benchmark in May 2019

Limited partners using public-market indices should choose a premium above the returns of public stocks that reflects the additional compensation that their institution both requires and expects to be able to achieve when taking on the illiquidity and other risks of private equity. - ILPA

May 2019 Investment Policy

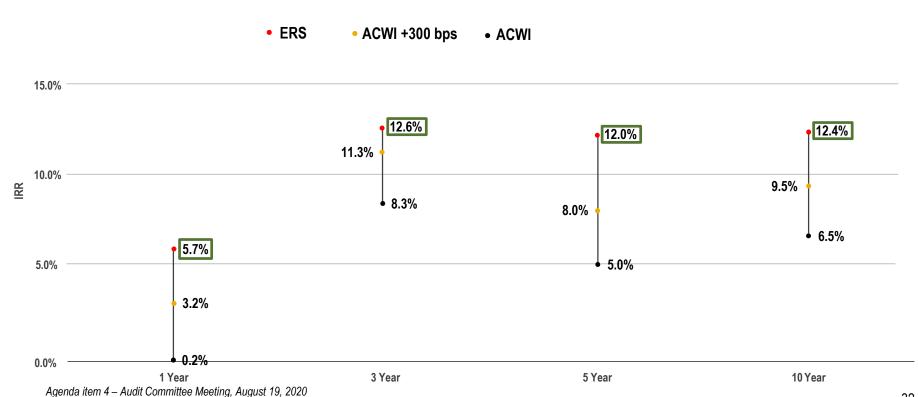
Private Equity	
Benchmark -	Median Wilshire Associates Trust Universe Comparison Service's (TUCS) Total Private Equity
	Return of Master Trusts – Public: Plans > \$5 Billion
Reference Indices* -	Pubic Market Equivalent (PME), Burgiss Peer Universe
Role -	Growth, Enhanced Returns, Illiquidity Premium
Primary Risk Control -	Pacing, Regional Diversification, Strategy Diversification
Benchmark Description -	The portfolio will benchmark against the median performance of public pension plans with greater than \$5 billion in assets.
Management Style -	Active
Additional Information -	The portfolio will be implemented with diversification across partners, strategies, geography and industry. Strategy exposures include Venture Capital, Buyouts, Distressed Debt, Mezzanine, Natural Resources, and Secondaries.

March 2019 Investment Policy

Private Equity		
Benchmark -	MSCI ACWI IMI + 300 bps (over a 10-year period) (M1WDW\$GI)	
Reference Indices* -	Wilshire Trust Comparison, Pubic Market Equivalent (PME), Burgiss Peer Universe, TUX Peer Universe	
Role -	Growth, Enhanced Returns, Illiquidity Premium	
Primary Risk Control -	Pacing, Regional Diversification, Strategy Diversification	
Benchmark Description -	The portfolio will target a return premium of 300 bps over public equities (MSCI ACWI IMI) with a similar level of overall risk.	
Management Style -	Active	
Additional Information -	The portfolio will be implemented with diversification across partners, strategies, geography and industry. Strategy exposures include Venture Capital, Buyouts, Distressed Debt, Mezzanine, Natural Resources, and Secondaries.	

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Benchmark IRR Comparison (March 31, 2019)





PME = Was the decision to allocate capital to the private investments a good one?

- PME compares rate of return on \$'s invested in private equity vs same \$'s invested in public equity index
- PME Premium was traditionally incorporated until May 2019
- Benchmark = ACWI IMI + 300 basis points
- Currently no premium incorporated

Limited partners using public-market indices should choose a premium above the returns of public stocks that reflects the additional compensation that their institution both requires and expects to be able to achieve when taking on the illiquidity and other risks of private equity. - ILPA



- Sub-component (investment) level performance
- Sources of performance within the portfolio not communicated:
 - Did we make good decisions within the portfolio across strategies, sectors, geographies and vintages?
 - Did we select good fund managers (General Partners)?
- Best practices suggest a pooled performance attribution process which segments the portfolio by different attributes such as investment type and vintage year.

What investments were the primary performance drivers?

ERS Private Equity Strategies

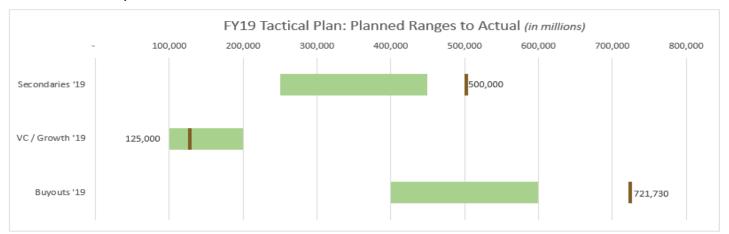
- Buyout
- Venture Capital & Growth Equity
- Energy & Natural Resources
- Debt
- Secondaries
- Special Situations

Observation #1: Implementation Decisions



- Tactical Plan is a roadmap for the upcoming year
- Individual investments communicated throughout the year
- Discussion over planned to actual commitments is not shared

What market opportunities were identified during the year?



Hybrid Investment Philosophy (Private Equity Board Primer)

- Multi-year portfolio plan with inherent flexibility
- If access available to a quality fund manager, flexibility allowed to deviate from the plan to take advantage of the opportunity

Observation #1: Diversification Levels



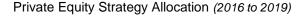
- The Board has established diversification ranges as a risk management control
- Diversification limits are reported; the portfolio maintains compliance
- The overview does not report diversification relative to target allocations nor diversification level trends
- Discussion of relative diversification would promote transparency by identifying the investment vehicle types the emphasize/deemphasize (overweight/underweight)

	Target		2019
Strategy	Allocation	Diversification Range	Diversification
VC - Growth Equity	20%	10-30%	21%
Buyouts	47.5%	35-60%	43%
Debt	7.5%	0-15%	7%
Secondaries	17.5%	5-30%	16%
Energy & Natural Resources	12.5%	5-20%	13%
Special Situations	2.5%	0-5%	0%

Observation #1: Diversification Levels



Current diversification levels have remained stable over the last several reporting periods;
 Secondaries have increased, while reducing Debt





Observation #1: Portfolio Costs



Costs matter and need to be effectively managed. - ERS Investment Policy



- Private equity fee terms (management fee and profit share) and forecasted costs savings based on negotiated fees are reported.
- Discussion of actual costs and profit share

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Fiscal Year	Total Exp	enses*
FY 2015	42,97	5,406
FY 2016	70,770	0,164
FY 2017	46,29	7,948
FY 2018	37,11	2,421
FY 2019	45,600	0,394

^{*}Includes management fees and organizational expenses

Fiscal Year	Profit Share*	
FY 2017	\$ 12,608,854	
FY 2018	\$ 18,417,554	
FY 2019	\$ 31,682,773	

^{*} To improve governance, beginning in Fiscal Year 2018, the Texas Government Code required ERS to report profit share.

Observation #2: Investment Classification



Classification

Diversification Metrics

Risk Management

ERS Private Equity Diversification

- Strategy
- Industry Sector
- Geography
- General Partner
- Vintage Year

ERS Private Equity Strategy

- Buyout
- Venture Capital & Growth Equity
- Energy & Natural Resources
- Debt
- Secondaries
- Special Situations

Observation #2: Classification Process



- Process based on team members' evaluation of fund's documents followed by identification of which approved group it should be allocated
- Generally, process will address majority of investment scenarios
- 86 of 114 investment classifications matched with Burgiss Classifications

Private Equity Investment Classification Inherent Risks

- Complex with potential for mixture of investments within a group
- High subjectivity
- Incentive to meet targeted ranges

What Is Burgiss? Burgiss is a research-quality database for private capital funds providing performance data on 10,000 institutional funds covering \$7.3T in committed capital.

Observation #2: Classification Process



- Increased risk for misclassification arises under the following investment scenarios:
 - Funds with a mixture of multiple investments in asset classes/strategies such as investments in both Buyouts and Venture Capital
 - 2) Buyout and/or Venture Capital & Growth Equity funds that invest in real assets (oil and gas industry, hotels/resorts)
- Private equity benchmark providers incorporate a rules based approach to promote a repeatable, consistent and more objective investment classification.

ERS Classification	Burgiss Classification	Number of Instances
Growth Equity	Buyout	12
Natural Resources	Buyout	4
Natural Resources	Mezzanine	3
Debt	Special Situation	2
Buyout	Venture Capital	2
Buyout	Real-Estate	2
Buyout	Special Situation	2
Buyout	Distressed Securities	1

Investment Classification Scenario	Taxonomy Guidance
Funds invest in a mixture of sub-asset class such as Buyouts and Venture Capital/Growth Equity?	The category with the majority of capital invested (70%) minimum is selected.
Control buyout and growth capital funds investing in the oil and gas industry?	 Are the underlying investments companies? Do the companies derive value primarily through their underlying tangible assets?

Observation #2: Secondary Classification



Secondaries - "Partnerships that have been acquired from other limited partners and typically have had their capital called to greater than 50% of commitments. These partnerships can include any of the Private Equity strategies."

ERS Private Equity Strategy Group

- Buyout
- Venture Capital & Growth Equity
- Energy & Natural Resources
- Debt
- Secondaries
- Special Situations

Strategy (Sub-Asset Class) vs. Investment Vehicle Type

Sub-Asset Class

- Buyouts/Acquisition
- Venture Capital & Growth Equity
- Energy & Natural Resources
- Debt

Characteristics/Attributes

- Equity or debt
- Company or asset focused
- Company maturity (developing or developed)
- Rating of debt
- Seniority of debt

Investment Vehicle Type

- Primary Funds
- Co-investments
- Fund-of-one
- Fund-of-Funds
- Secondaries

Characteristics/Attributes

- Partnership structure
- Maturity of the fund (vs asset held)
- Marketplace purchased

Items within a group should be distinct and independent from each other to ensure proper diversification.

Observation #3: ICP methodology

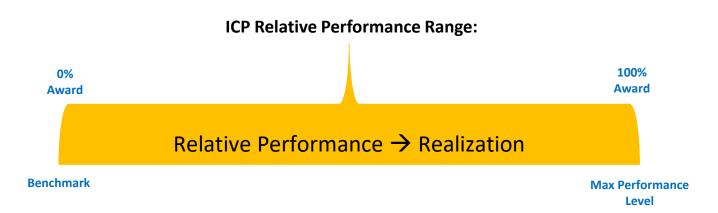


ICP performance goal incorporate best practice private equity performance measures

Private Equity ICP Goal	ICP Portfolio Weight	Performance Metric	Benchmark
Peer Comparison (Peer)	40%	Relative performance to other public pension private equity portfolios	Wilshire Trust Universe public pension private equity portfolios > \$5 billion NAV
Public Market Equivalent (PME)	10%	Relative performance to a public market index	ACWI IMI

Observation #3: ICP Methodology





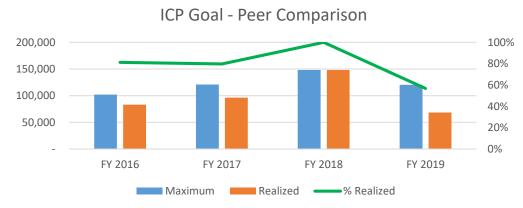
- Max Performance Level established for ICP purposes as a risk control
- "Performance Goals will be based on exceeding benchmarks and other individual performance metrics to reward outstanding performance as is consistent with the objectives of the Plan by focusing employees on high quality outcomes." ICP

Observation #3: ICP methodology



Peer Comparison:

- ICP Performance Range 50th Percentile to 37.5th Percentile (100% ICP Award)
- 37.5th Percentile equates to better performance than 63% of peer group
- Industry Top Quartile 25th Percentile and higher
- No information to support 37.5% Max Performance





Observation #3: ICP Methodology



Private Market Equivalent:

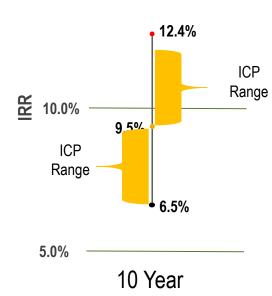
"Was the decision to allocate capital to private investments a good one?"

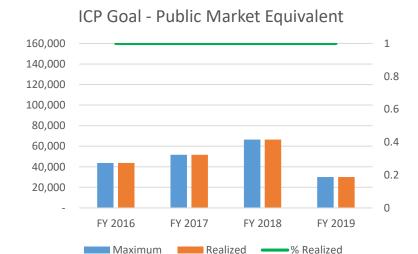
- Relative performance to a public market index
- Should an illiquidity premium be included in PME ICP calculation?
- Previously Board approved private equity benchmark of Time-Weighted Return (TWR)
 ACWI IMI + 300bps
- IRR vs. TWR

Observation #3: ICP Methodology











Questions?



Status of Audit Recommendations

Tony Chavez, Director of Internal Audit Tressie Landry, Audit Manager, Internal Audit

Status of Audit Recommendations



Methodology

- Process owner self-assessment and information sharing
- Internal Audit review and evaluation

Status Levels

- Implemented
- Partially Implemented
- No Action Taken
- Management Acceptance

The chief audit executive must establish a follow-up process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.

~Institute of Internal Auditors standard 2500.A1

Summary



Audit Engagement	Observation #	Implementation Actions	MAP Status
Revenue Processing (2017-05)	1	Duplicate tasks were eliminated and procedure documents include purpose of task.	Implemented
	2	Multi-agency, multi-year project to implement CAPPS	Partially Implemented
HealthSelect SM of Texas ^(R) Denial Process (2017-09)	1	Committee charter complete, awaiting executive approval	Partially Implemented
	2	A HIPAA compliant worksheet summary.	Implemented
Temporary Worker Contract Management	1	All criminal history checks are performed by ERS vendor. Alignment of HR procedures with Information Security Policy is remaining.	Partially Implemented

Agenda item 4 – Audit Committee Meeting, August 19, 2020

Summary



Audit Engagement	Observation #	Implementation Actions	MAP Status
Procurement Audit (2015-02)	2	SB20 reporting requirements reviewed and contracts are reported to LBB.	Implemented
Service Credit Purchases (2015-05)	1	Complete review of accounts and corrections made.	Implemented
Procurement Card Audit (2017-03)	1	Formal procedures for procurement card use have been implemented.	Implemented
Benefits Coordinator Training (2018-03)	2	Formal tracking of items received by the Communication Liaison has been implemented	Implemented

Agenda item 4 – Audit Committee Meeting, August 19, 2020

Summary



Audit Engagement	Observation #	Implementation Actions	MAP Status
Investment Management Fees (2018-09)	1	Other expenses were separated from management fees in the CAFR	Implemented
	2	Additional reconciliations have been implemented and many directives are input directly by ERS employees	Implemented



Questions?



Public Agenda Item #5

Review of Audit Administrative Items: Internal Audit's Proposed Fiscal Year 2021 Audit Plan – (Action)

August 19, 2020

Tony Chavez, Director, Internal Audit Tressie Landry, Audit Manager, Internal Audit



- Statute requires a risk-based annual audit plan be developed and approved by the Board of Trustees
- The Plan is designed to provide coverage of key program risks given the existing staff and approved budget
- Overall framework remains the same with continuous enhancement







RISK	INVESTMENT RISK ATTRIBUTES	MEMBER SERVICES RISK ATTRIBUTES	INFORMATION SERVICES RISK ATTRIBUTES
STRATEGIC (Directive)	 Board/Management initiative Asset allocation targets and ranges Tactical planning and positioning (over/under weight) High tracking error volatility Legislative interest Public perception Investment literacy (complexity) 	 Criticality to achieving mission Board/Management initiative Reputation loss if goals not achieved Size of population served Criticality of service/program provided Legislative interest Public perception 	 Criticality data/system in achieving mission Level of system availability required to achieve mission System delivery direct to members Reputation loss if goals not achieved Size of population served Legislative interest
OPERATIONAL (Implementation)	 Asset class maturity Complexity of investment strategy Market accessibility to meet tactical plans Investment risk management complexity Required expertise Staffing levels/Turnover Level of external management Opportunity for personal gain, misuse/misappropriation; 	 Service/Program complexity and maturity Transaction volume Required expertise Staffing levels/Turnover Level of external management in delivery services Opportunity for personal gain, misuse/misappropriation; 	 System complexity and maturity Required confidentiality of data/ transactions Transaction volume Level of data ownership Data origination (internal vs. external) Staffing levels/Turnover
FINANCIAL (Dollars)	 Percent of total fund balance Frequency of valuation (market price) Utilization of leverage as part of investment strategy Liquidity Risk for material financial misstatement Corresponding incentive compensation 	 Total program expenditures Level of cost oversight of expenditures (direct payment vs. pass-through) Market cost conditions and trends Cost transparency Risk for material financial misstatement 	 Total direct cost of information system Total cost for related program Risk for material financial misstatement
REGULATORY (Mandates)	Volume and complexity of regulatory requirements Level of negative public perception from non-compliance Potential loss of autonomy/stewardship from non-compliance Severity of fines from non-compliance Time since last audit Prior audit observations Potential for conflict of interest		





- Time since last review
- IT Impact on COVID
- Board and Executive Office Input
- Division management input
- External interest
- Engagements suggested by leading practices











CORE BUSINESS	ENGAGEMENT
INVESTMENTS	 Internal Public Equity* Private Real Estate Alternative Investments Funding
MEMBER SERVICES	 Survivor Benefits* Deferred Compensation Program (Texa\$aver)* Dental Insurance Budgeting Qualified Domestic Relations Orders (QDRO) Property Management Accounting (Consulting)
INFORMATION SYSTEMS	 COVID IT Action Review (Consulting) Security Monitoring & Event Analysis (Cybersecurity)
MULTIPLE	Financial Opinion Audit
* Carry-over FY21 Audit Plan	

Agenda item 5 – Audit Committee Meeting, August 19, 2020



Questions?

Action Item



Public Agenda Item #6

Review of Audit Administrative Items: Annual Internal Audit Independence Assessment

August 19, 2020

Tony Chavez, Director of Internal Audit Tressie Landry, Audit Manager, Internal Audit



Annual Internal Audit Independence Assessment

Tony Chavez, Internal Audit Director Tressie Landry, Audit Manager

Auditor Independence Criteria



Texas Government Code requires adherence to:

- Standards for the Professional Practice of Internal Auditing
- Generally Accepted Government Auditing Standards (GAGAS)

Independence—The freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner.

(Source: The Institute of Internal Auditors)

Independence Assessment



GAGAS conceptual framework for independence:

- a) Identify threats to independence;
- b) Evaluate the significance of the threats identified;
- c) Apply safeguards as necessary to eliminate the threats or reduce them to an acceptable level

Types of Threats to Independence

- Self-interest threat
- Self-review threat
- Bias threat
- Familiarity threat
- Undue influence threat
- Management participation threat
- Structural threat

Source: GAGAS

Independence Assessment Results



- Auditor Independence (individual) staff free from impairments to independence
- Organizational independence audit function is free from interference
- Non-Audit Services safeguards are in place to prevent non-audit services from impacting independence



Questions?



Public Agenda Item #7

Adjournment of the ERS Board of Trustees Audit Committee Meeting

August 19, 2020