



TRS Risk Management Committee



June 2014

**TEACHER RETIREMENT SYSTEM OF TEXAS MEETING
BOARD OF TRUSTEES
AND
RISK MANAGEMENT COMMITTEE**

(Ms. Charleston, Committee Chair; Mr. Barth; Mr. Corpus; Mr. Kelly; & Mr. Moss, Committee Members)

AGENDA

**June 5, 2014 – 11:45 a.m.
TRS East Building, 5th Floor, Boardroom**

1. Consider the approval of the proposed minutes of the March 27, 2014 committee meeting – Karen Charleston
2. Receive report on Enterprise Risk Management – Jay LeBlanc & Michelle Pagán

NOTE: The Board of Trustees (Board) of the Teacher Retirement System of Texas will not consider or act upon any item before the Risk Management Committee (Committee) at this meeting of the Committee. This meeting is not a regular meeting of the Board. However, because a quorum of the Board may attend the Committee meeting, the meeting of the Committee is also being posted as a meeting of the Board out of an abundance of caution.

Tab 1

Minutes of the Risk Management Committee

March 27, 2014

The Risk Management Committee of the Board of Trustees of the Teacher Retirement System of Texas met on March 27, 2014 in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas.

The following committee members were present:

Karen Charleston, Chair
Todd Barth
David Corpus
David Kelly
Christopher Moss

Others present:

Joe Colonna, TRS Trustee	Dan Junell, TRS
Anita Palmer, TRS Trustee	Eric Lang, TRS
Dolores Ramirez, TRS Trustee	Lynn Lau, TRS
Nanette Sissney, TRS Trustee	Jay LeBlanc, TRS
Brian Guthrie, TRS	Hugh Ohn, TRS
Ken Welch, TRS	Michelle Pagán, TRS
Carolina de Onís, TRS	Mike Pia, TRS
Howard Goldman, TRS	Sharon Toalson, TRS
Britt Harris, TRS	Angela Vogeli, TRS
Jerry Albright, TRS	Dale West, TRS
Thomas Albright, TRS	Dr. Keith Brown, Investment Advisor
Lane Arnold, TRS	Steve Huff, Reinhart Boerner Van Deuren s.c.
Jase Auby, TRS	Brady O'Connell, Hewitt EnnisKnupp
Dr. Mohan Balachandran, TRS	Ann Fickel, Texas Classroom Teachers Association
Nick Ballard, TRS	Philip Mullins, Austin Retired Teachers Association
Ronnie Bounds, TRS	Josh Sanderson, Association of Texas Professional Educators
Janis Hydak, TRS	Tom Rogers, Texas Retired Teachers Association and Austin Retired Teachers Association

Ms. Charleston called the meeting to order at 10:35 p.m. A quorum of the committee was present.

1. Consider the approval of the proposed minutes of the December 12, 2013 committee meeting

On a motion by Mr. Moss, seconded by Mr. Kelly, the committee approved the minutes of the December 12, 2013 meeting as presented.

2. Receive the Bi-annual Risk Report

Mr. Auby reported on current compliance with the risk measures, including asset allocation, Value at Risk, tracking error, leverage, liquidity, counterparty exposures, and derivative exposures. Mr. Auby explained for Mr. Kelly that the tracking error for the Absolute Return Portfolio was set higher because the portfolio was currently dominated by credit strategies, which differed significantly from its benchmark, the LIBOR plus 200 benchmark. Mr. Auby presented the trust liquidity analysis, which runs a stress test by putting trust assets under an extreme stressed scenario. As Dr. Brown observed, the analysis showed the liquidity of the trust

to be well above threshold levels. Mr. Auby confirmed for Dr. Brown that the analysis also showed the trust could support additional illiquidity. Mr. Kelly, Dr. Brown, Mr. Harris, and Mr. Auby discussed the risk premiums involved in taking on more illiquid investments and how much added value from those investments would warrant additional allocations to them. Mr. Auby noted that Dr. Balachandran and Ms. Baum would further address this topic during the Strategic Asset Allocation discussion at the board meeting on this day.

The meeting adjourned at 10:55 p.m.

Tab 2

Enterprise Risk Management Report

Jay LeBlanc & Michelle Pagán

2014 Public Pension Fund ERM Peer Group Forum

Forum Purpose: Annual gathering of ERM professionals to learn and share best practices to enhance the discipline of ERM, discuss pension fund ERM processes and lessons learned, gain knowledge and expand participants' ERM expertise.

Group Objective: The ERM public pension peer group is a community of practice operating as an information sharing working group.

■ Forums held

Date	Location	# of Pension Funds Participating
April 2012	Austin, TX	6
March 2013	Tallahassee, FL	12
April 2014	Austin, TX	13

■ Planning is underway for the next forum in 2015

2014 ORGANIZATION PROFILE - ERM PEER GROUP FORUM

Organization Name	Location/ Headquarters	No. of Active Members	No. of Retirees	Approximate Trust Value \$	No. of Plans System Administrators	Investment Responsibility	Benefit Administration/ Delivery	Year your system was started	ERM reports to within organization?	Internal Risk Committee (Y/N)	ERM reports to: Full Board or Committee?
British Columbia Pension Corporation	British Columbia, Canada	367,200	150,600	\$80 billion	5	No	Yes	2000	CFO, VP Finance	Yes	Risk Committee, Corporate Audit, Corporate Board
California Public Employees' Retirement System	Sacramento, CA	1,014,237	566,975	\$267.3 billion	2,000	Yes	Yes	1933	CFO	Yes	Risk and Audit Committee
California State Teachers Retirement System	Sacramento, CA	868K	268K	\$181 billion	4	Yes	Yes	1913	Chief Operating Officer	Yes	Audits and Risk Management Committee
Employees Retirement System of Texas	Austin, TX	230,398	92,042	\$24 billion	4	Yes	Yes	1947	Executive Director	Yes	Full Board
Los Angeles County Employees Retirement Association	Los Angeles, CA	91,545	58,067	\$40 billion	9	Yes, external mgmt only	Yes	1938	No formal function yet		
New York State Teachers' Retirement System	Albany, NY	273,328	152,822	\$95 billion	1	Yes	Yes	1921	ED/CIO	Developing	No
Ohio Public Employees Retirement System	Columbus, OH	814,175	195,832	\$88 billion	2	Yes	Yes	1935	Executive Director	Yes	Risk Committee
South Carolina Retirement System Investment Commission	Columbia, SC	185,000	128,000	\$28 billion	5	Yes	No	Investment Commission started in 2006	Audit Committee	N	Committee (comprised of Board Members)
State Board of Administration of Florida	Tallahassee, FL	621,774	347,962	\$149 billion	2	Yes	No	1970	Chief Risk & Compliance Officer	Yes	Full Board
State of Wisconsin Investment Board	Madison, WI	590,000	173,000	\$100 billion	1	Yes	No	1951	Executive Director	Yes	Board Committee
Teacher Retirement System of Texas	Austin, TX	1,021,500	348,250	\$123 billion	3	Yes	Yes	1937	Director of Strategic Initiatives	Yes	Risk Management Committee
Teacher Retirement System of the City of New York	New York City, NY	112,460	69,515	\$53 billion	1	N	Yes	1917	Executive Director	N	Audit Committee
Washington State Investment Board	Olympia, WA	295,887	155,249	\$98.1 billion	17	Yes	No	1981	CFO	Y	Audit Committee Annually

ERM Update – June 2014

Stoplight Report Changes

- Employer Reporting risk level color changed from Caution “yellow” to Elevated “orange”
- Investment Reporting combined with Investment Operations
- TEAM Program risk level color changed from Caution “yellow” to Guarded “blue”

Risk Assessments

- New Risk Assessments
 - Investment Operations
 - Regulatory, Compliance & Litigation
- Updated Risk Assessments
 - Business Continuity
 - Communications & External Relations
 - Employer Reporting
 - Investment Accounting
 - Open Government
 - Records Management
 - TEAM Program

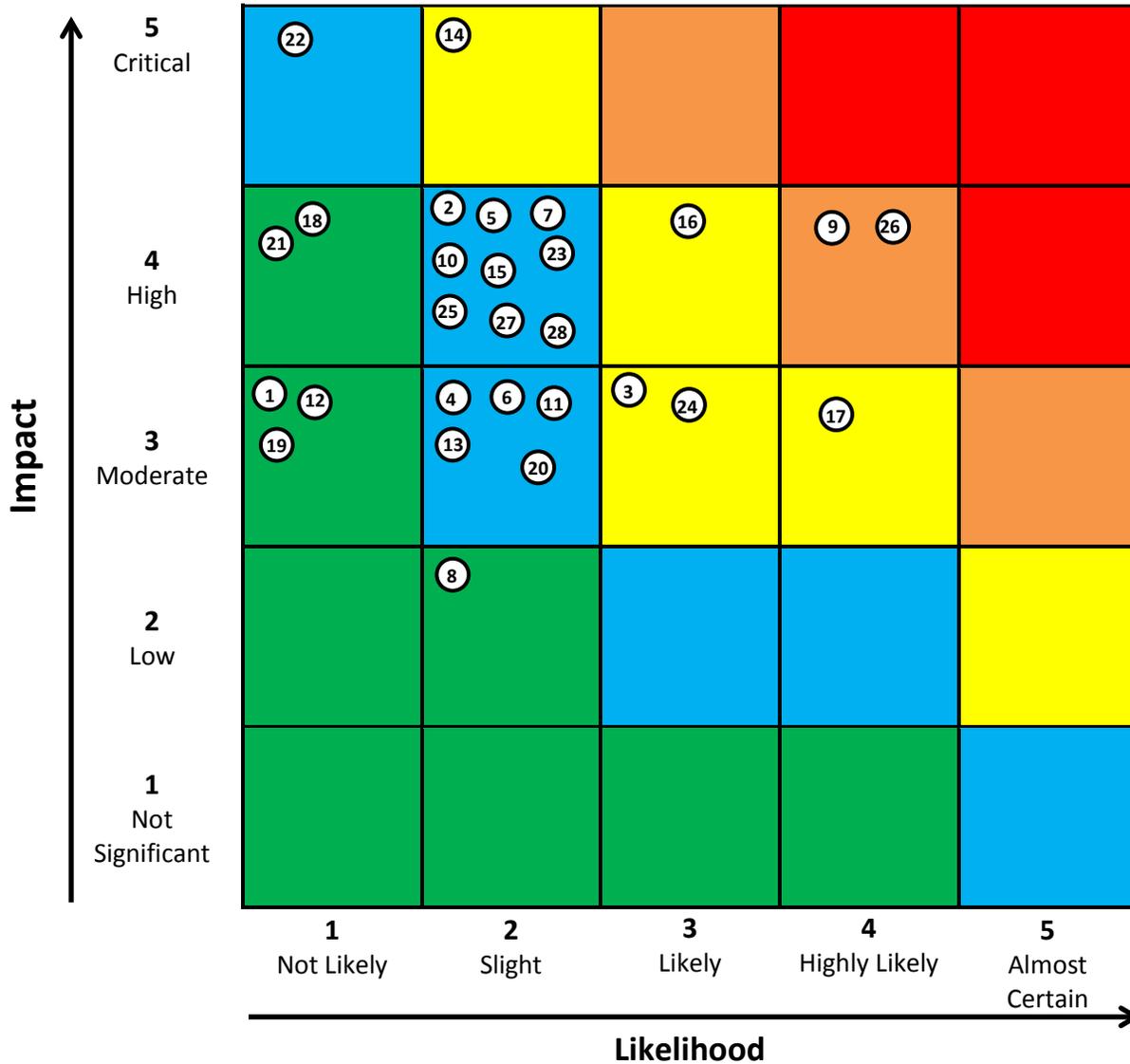
Teacher Retirement System of Texas Stoplight Report – June 2014

403(b)	Accounting & Reporting	Active Health Care Sustainability	Budget	Business Continuity
Communications & External Relations	Credit	Customer Service	Employer Reporting	Ethics & Fraud Prevention
Facilities Planning	Governmental/ Association Relations & Legislation	Health Care Administration	Information Security & Confidentiality	Investment Accounting
Investment Operations	Legacy Information Systems	Liquidity/Leverage	Market	Open Government
Pension Benefit Administration	Pension Funding	Purchasing & Contracts	Records Management	Regulatory, Compliance & Litigation
Retiree Health Care Funding	TEAM Program	Workforce Continuity		

RISK LEVEL (Threat to Achieving TRS Goals & Objectives)				
HIGH	ELEVATED	CAUTION	GUARDED	LOW
High Threat	Elevated Threat	Moderate Threat	Minimal Threat	Low Threat

EXPECTED RISK LEVEL TREND (NEXT 12-24 MONTHS)		
INCREASE	DECREASE	REMAIN CONSTANT

Teacher Retirement System of Texas Risk Heat Map – June 2014



Risk Category (Risk Score)

1. 403(b) (3,1)
2. Accounting & Reporting (4,2)
3. Active Health Care Sustainability (3,3)
4. Budget (3,2)
5. Business Continuity (4,2)
6. Communications & External Relations (3,2)
7. Credit (4,2)
8. Customer Service (2,2)
9. Employer Reporting (4,4)
10. Ethics & Fraud Prevention (4,2)
11. Facilities Planning (3,2)
12. Governmental/Association Relations & Legislation (3,1)
13. Health Care Administration (3,2)
14. Information Security & Confidentiality (5,2)
15. Investment Accounting (4,2)
16. Investment Operations (4,3)
17. Legacy Information Systems (3,4)
18. Liquidity/Leverage (4,1)
19. Market (3,1)
20. Open Government (3,2)
21. Pension Benefit Administration (4,1)
22. Pension Funding (5,1)
23. Purchasing & Contracts (4,2)
24. Records Management (3,3)
25. Regulatory, Compliance, & Litigation (4,2)
26. Retiree Health Care Funding (4,4)
27. TEAM Program (4,2)
28. Workforce Continuity (4,2)

Teacher Retirement System of Texas Risk Level & Trend Summary – June 2014

Risk Category	6/2013	12/2013	6/2014
403(b)			
Accounting & Reporting			
Active Health Care Sustainability			
Budget			
Business Continuity			
Communications & External Relations			
Credit			
Customer Service			
Employer Reporting			
Ethics & Fraud Prevention			
Facilities Planning			
Governmental/Association Relations & Legislation			
Health Care Administration			
Information Security & Confidentiality			
Investment Accounting			

Risk Category	6/2013	12/2013	6/2014
Investment Operations			
Legacy Information Systems			
Liquidity/Leverage			
Market			
Open Government			
Pension Benefit Administration			
Pension Funding			
Purchasing & Contracts			
Records Management			
Regulatory, Compliance & Litigation			
Retiree Health Care Funding			
TEAM Program			
Workforce Continuity			

ERM Update – June 2014

Risk Profile Updates

- Employer Reporting and Investment Accounting updated their goal or overall risk
- The following made updates to the risk level and/or trending information:
Credit, Customer Service, Employer Reporting, Investment Accounting, Investment Operations (divided into three risk areas), Liquidity/Leverage, Market, Pension Funding, Regulatory, Compliance & Litigation, and TEAM Program

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
403(b)	Rebecca Merrill	Set fee caps for 403(b) products offered to school district employees. Maintain list of both qualified companies and products which meet requirements of law and TRS rule.	Public education employees purchase non-qualified products and/or products from non-qualified companies.	3,1		While the 403(b) program is important to help ensure that members invest with reputable companies, it is not a core part of TRS' mission. So, if the program were to experience problems, TRS' core functions would continue on without interruption. Additionally, TRS has mitigations in place – such as review of 403(b) rules and a 403(b) program specialist – to help ensure the consistency of the 403(b) program. Therefore, the impact and likelihood of a 403(b) program failure seem low.	Current mitigations are not changing and there is no new anticipated legislation impacting the 403(b) program. So, the trend remains constant.
Accounting & Reporting	Don Green	Maintain and monitor the integrity, accuracy, and completeness of financial information and timeliness of reporting.	Materially inaccurate financial information and reports would result in Board of Trustees and Texas Legislature decisions being made on flawed data and adverse or qualified audit opinions.	4,2		Although there are challenges ahead in the implementation of a new accounting system and new accounting pronouncements, there should be adequate and knowledgeable staff to accomplish the tasks.	It is anticipated that staffing levels and experience will remain relatively constant. Any challenges initiated by the implementation of the TEAM Program (TEAM) will be mitigated by sound accounting and reporting processes and procedures.
Active Health Care Sustainability	Betsey Jones	Facilitate long-term soundness of TRS-ActiveCare in order to pay eligible participant health care claims.	Inadequate funding by the state and participating entities could affect sustainability.	3,3		Inadequate funding would jeopardize the fund's ability to provide public school employees with affordable health care.	The fund has a negative balance on an incurred basis as of 8/31/2013 and medical and drug claim costs continue to rise. District and State minimum contribution requirements to the fund have been static since the inception of the plan.

RISK SCORE	
IMPACT	5-Critical, 4-High, 3-Moderate, 2-Low, 1-Not Significant
LIKELIHOOD	5-Almost Certain, 4-Highly Likely, 3-Likely, 2-Slight, 1-Not Likely

Example: 3,1 (Impact, Likelihood) = 3-Moderate, 1-Not Likely

RISK LEVEL				
HIGH	ELEVATED	CAUTION	GUARDED	LOW
High Risk	Elevated Risk	Moderate Risk	Guarded Risk	Low Risk

EXPECTED RISK LEVEL TREND (NEXT 12-24 MONTHS)		
INCREASE	DECREASE	REMAIN CONSTANT

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Budget	Don Green	Ensure TRS has appropriate budget to provide and sustain resources necessary to successfully carry out TRS' mission, goals, and objectives to serve our members.	Lack of a sufficient operating budget could jeopardize our ability to effectively serve our members.	3,2		The agency's operating budget is driven by staffing, membership growth, trust fund balance, and other workload drivers. The agency's strong organizational governance plays a crucial role in meeting these challenges.	Any risk drivers in the ability to sustain an appropriate budget and available resources are mitigated by a strong strategic planning process and working closely with all divisions to identify funding to achieve goals and objectives in accordance with state statute.
Business Continuity	Rebecca Merrill	Recover and resume operations in the event of a major business interruption.	Members do not receive statutorily required services timely.	4,2		Updating the business impact analysis questionnaires and business continuity plans occurs annually. Critical systems are identified and recovery timeframes are communicated to the disaster recovery teams. Based on annual disaster recovery testing and mitigations in place, business continuity represents a minimal threat to meeting TRS' goals and objectives.	Over the next 12-24 months the risk level is not expected to change due to the mitigations in place and the proof-of-concept testing for a co-location alternative.
Communications & External Relations	Howard Goldman	Maintain effective communication and positive relations with members, retirees, employers, TRS employees, news media, and the public.	Poor communication could lead to confusion resulting in increased calls to TRS, poor or inappropriate decision-making regarding TRS benefits, and incorrect information provided to external parties.	3,2		Due to existing procedures and routine interaction with other departments when responding to media requests, preparing articles for publications and developing information for social media channels and our website, the overall risk level is controlled.	No substantive changes have occurred in the processes and policies followed to warrant an increase or decrease in risk levels.
Credit	Jase Auby	Maintain effective management of counterparty and securities lending risks.	Unmanaged counterparty and securities lending exposures could result in losses to the investment portfolio.	4,2		All counterparties currently meet required credit ratings; securities lending exposures well managed and are within guidelines.	All counterparty credit ratings are A3/A- or higher by three credit agencies; provided, one counterparty is not rated by Moody's and so is rated A3/A- or higher by two rather than three agencies. Credit ratings expected to remain stable.
Customer Service	Marianne Woods Wiley	Deliver superior service to members and internal/external customers.	Inadequate customer service could result in dissatisfied members or customers and could lead to increased scrutiny and oversight.	2,2		High quality customer service is provided by all Benefit Services departments based on internal and external feedback. Telephone hold time is decreasing now that we have hired more counselors. Also, we have adopted a service level measure that	Expect trend to be constant unless major legislative changes are passed, a larger than usual number of members retire, and/or TEAM requires more subject matter expert involvement than anticipated.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
						provides a clearer picture of service by showing the proportion of calls that were not answered within an acceptable timeframe.	
Employer Reporting	Don Green	Accurately capture and utilize employer reported data to project and calculate future benefits of TRS members and to properly allocate the total pension liability across districts.	<ul style="list-style-type: none"> Incorrect reporting could lead to calculated benefits being inaccurate. Improperly allocating actuarial liability across districts. 	4,4		Current system limitations present challenges to data analysis and verification controls. Risk level has increased due to recent GASB pronouncements requiring greater controls around district data and reports.	The new TEAM LOB system is expected to address most of the risks and challenges surrounding collecting, analyzing and verifying district data. However, the system will not be implemented until at least fiscal year 2015.
Ethics & Fraud Prevention	Brian Guthrie	Maintain a culture that upholds ethical behavior and values that contribute and promote the fiduciary duties of prudence and loyalty, and reduces fraud risks.	A lack of ethics could undermine the duties of prudence and loyalty and create fraud risks resulting in loss of assets and credibility, adverse publicity, and increased scrutiny and oversight.	4,2		While the impact of an ethical breach or instance of fraud would be high, the likelihood of such an event is relatively low. Currently, TRS has a number of mitigations in place such as educating individuals on the fraud, waste, and abuse policy and the fraud web reporting form. These types of mitigations, along with TRS' background check policy, operate together to create a guarded risk for a fraud or ethics breach.	The risk of a fraud or ethical breach is trending neither up nor down. TRS continues to maintain mitigations that help prevent incidences of fraud or an ethical breach. This holds the trend line constant.
Facilities Planning	Don Green	Develop a long-term space plan for TRS facilities.	Inadequate facilities planning could result in less than desirable conditions for TRS members, visitors, and staff and could jeopardize our ability to continue providing an exemplary level of service to our members.	3,2		An evolving organization with rapidly changing needs for the amount and type of space required can experience negative impacts on service levels and/or moderate business disruptions.	Implementation of TEAM is creating immediate and short-term challenges that are being mitigated through temporary reallocations of space. Long-term challenges are being addressed by management through discussions with legislative and regulatory agency representatives. We have engaged a consultant (CBRE) to assist in the assessment of our long-term space needs.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Governmental/ Association Relations & Legislation	Ray Spivey	Maintain effective communications and positive relations with the Legislature, associations, and other public parties.	Poor communications could lead to adverse relations, unfavorable legislation, and restricted funding.	3,1		Our relationship with the legislature is constantly improving and communication has been effective. Our relationship with the public also appears to be positive.	No major issues are expected over the next 12-24 months.
Health Care Administration	Betsey Jones	Administer a retiree and active member health care program that is responsive to and valued by enrollees.	Inadequate administration of the health care programs could possibly affect the health of those who depend on the delivery of TRS health care services.	3,2		Much of the administration of the programs is outsourced. Contract monitoring and controls mitigate this risk.	Administration of the programs is stable with no anticipated significant changes.
Information Security & Confidentiality	Amy Morgan/ Ken Welch	Maintain the integrity, availability, and protection in the storage, use, and transfer of TRS information resources (in any form or medium).	Unauthorized or unintentional release/access of TRS confidential information could result in state or federal law violations, sanctions against TRS or its employees, and harm the best interests of TRS.	5,2		Depending on the scope of an unauthorized or unintentional release of confidential data, this could have a critical impact on TRS. With the existing mitigation strategies and the new strategies in place that were recommended through the HIPAA/HITECH audit the likelihood is low.	While we have put additional controls in place based on findings in the HIPAA/HITECH audit, new security risks are introduced into technical environments daily. Our security posture has improved but information security is an area that needs constant attention. We should never get comfortable that enough security or mitigating strategies are in place.
Investment Accounting	Don Green	<ul style="list-style-type: none"> Maintain the integrity of investment information - reporting and disclosure, accuracy, completeness and valuation. Ensure TRS investment fundings and distributions are appropriately and accurately delivered and received. 	Materially inaccurate investment information and reports would result in Board of Trustees and Texas Legislature decisions being made on flawed data and adverse or qualified audit opinions.	4,2		The system's custodian maintains the official investment book of record. Funds are sent and received by custodian bank. Department monitoring and oversight control mitigate the risks for this category.	An RFP has been issued for a custodian bank, we do not anticipate significant changes in the level of risk associated with any custodian that would be selected.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments		
						Risk Level	Trending	
Investment Operations	Public Market Operations	Sylvia Bell	Maintain the integrity of the transaction settlement and position information for optimal investment management decisions.	Inefficient or ineffective transaction settlement or position management process could result in losses to the fund.	4,3		Given the operational complexity of these processes, there exists moderate threat to TRS achieving its investment goals and objectives.	IMD performs daily and monthly reconciliations of trade and positions and NAVs via TRS custodian systems. Results are provided to IMD profit centers on a daily and monthly basis. TRS-custody bank relationship is managed through customized Service Level Agreement with key performance indicators.
	Private Market Operations	Sylvia Bell	Maintain integrity of the transaction settlement and position information for optimal investment management decisions.	Inefficient or ineffective transaction settlement or position management process could result in losses to the fund.	4,3		Given the operational complexity of these processes, there exists moderate threat to TRS achieving its investment goals and objectives.	IMD performs monthly and quarterly reconciliations of trade and positions and NAVs via TRS custodian systems. Results are provided to IMD profit centers on a monthly and quarterly basis. TRS-custody bank relationship is managed through customized Service Level Agreement with key performance indicators.
	Performance Reporting	Sylvia Bell	<ul style="list-style-type: none"> Maintain the integrity of investment information - reporting and disclosure, accuracy, completeness and valuation. Develop and disseminate customized investment reporting for both management and governance to enhance making better strategic and tactical investment decisions. 	Performance reports contain material inaccuracies.	4,3		Communication of inaccurate information, to both internal and external parties, could result in a moderate threat to TRS investment decisions.	IMD performs daily, weekly and quarterly reconciliations of investment returns. Investment results are presented to the IMD management committee for review and validation. Third-party calculation and pricing is performed by TRS custodian bank. TRS-custody bank relationship is managed through customized Service Level Agreement with key performance indicators.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Legacy Information Systems	Amy Morgan	Provide information systems to meet TRS' business and customer service needs.	Inability to provide adequate and consistent information in a timely fashion via the preferred delivery mechanism.	3,4		It is complicated for our legacy systems to provide robust, online self-service applications for our members. So there is a moderate impact that the preferred delivery mechanism may not be available when desired. The likelihood is highly likely because we know that some of our membership would like to do all their business with us online and that desire will only grow over time.	The legacy systems are still working well and are stable. The functionality that they provide has not and will not diminish in the near future. There are some web self-service applications for members and retirees to use.
Liquidity/Leverage	Jase Auby	Maintain levels of liquidity appropriate for the support of fund disbursements, anticipated investment funding needs and trust level leverage.	Inadequate liquidity could lead to cash shortfalls.	4,1		Trust is highly liquid and minimally levered.	Trust use of liquidity and leverage is monitored daily and is projected to remain stable.
Market	Britt Harris	Maintain market risk exposures consistent with investment objectives.	Too little or too much exposure to market risk could each lead to undesirable investment outcomes.	3,1		Investment policy asset allocation ranges limit absolute market risk (VaR) appropriately; relative risk (tracking error) is budgeted by IMD and is well within min/max range.	Limits remain appropriate and are currently under routine review as part of the 2014 strategic asset allocation process.
Open Government	Carolina de Onís	Ensure compliance with laws and rules related to open records and meetings.	Non-compliance could lead to penalties and fines or voiding of board actions.	3,2		Volume and complexity of investment-related open records requests and requests seeking personal financial information about TRS' key employees.	Hired new staff attorney devoted to investment-related open records requests; installed and configured new software to process, track, and respond to requests; new legislation enhances protection of key employees' personal financial information.
Pension Benefit Administration	Marianne Woods Wiley	Accurate delivery of benefits to TRS members, retirees and beneficiaries, including systems monitoring and controls related to accurate calculations and benefit payments to others.	Ineffective delivery of benefits could lead to inaccurate information, inaccurate benefits/payments, dissatisfied members, retirees, or beneficiaries, and loss of credibility, adverse public perception, increased scrutiny, and oversight.	4,1		Current controls and monitoring assure accurate delivery of benefits. Accuracy and timeliness of benefit delivery meets or exceeds expectations as evidenced through audits and performance metrics.	Expect trend to be constant unless major legislative changes are passed, a larger than usual number of members retire, and/or TEAM requires more subject matter expert involvement than anticipated.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Pension Funding	Brian Guthrie	Sustain a financially sound pension trust fund.	Absent sound funding for the plan could lead to insufficient assets to pay for long-term benefits and financial obligations.	5,1		While the impact of a loss of pension funding would be significant, the likelihood of such an event is relatively low. The valuation for 2013 determined the pension fund actuarially sound with a funding period of 28 years. However, the fund is expected to recognize additional deferred losses, the plan's fiscal health depends on the current contribution level continuing indefinitely, and there continues to be parties interested in changing the plan's funding and defined benefit status. Therefore, the risk is guarded.	Currently, the risk of a fiscally unsound pension fund remains constant. The Texas Legislature made plan modifications that improved the health of the plan and increased contribution rates. The 8/31/13 valuation indicated good fiscal health. The continued health of the plan depends on the current contribution rates continuing indefinitely.
Purchasing & Contracts	Don Green	Maintain effective procurement and contract management systems.	Inappropriate procurement practices could result in purchases of sub-standard products and services, unfavorable pricing or contract terms, and violation of laws. Ineffective contract monitoring could result in contractors not fulfilling their contractual obligations.	4,2		Impact is listed at 4 (high) because in the event the overall risk were to occur, it would have a fairly significant impact to TRS ranging from appearance issues, violation of statute, or by not spending TRS funds in a responsible manner (pay too much, contractors not fulfilling obligations, project failures, etc.). Likelihood is listed at 2 (slight) because TRS has good processes and procedures in place, our Contract Administration Coordinator performs an internal quality assurance function, we must report procurement activities regularly, and we are subject to audit by multiple audit entities, both internal and external.	The procurement function has a fairly stable risk trend and risks should remain somewhat similar and constant over time. Significant impacting factors would be loss of staff with institutional knowledge and divergence from current oversight levels and controls. As these are not the case at TRS, our procurement risk level should remain the same.
Records Management	Marianne Woods Wiley	Preserve and destroy TRS records through adherence to laws and rules, and by applying TRS records management policies and practices.	An ineffective records management program could result in loss or accidental release of records, loss of credibility, delays in accessing/destroying records, and increased scrutiny and oversight.	3,3		There is a high growth rate in the volume of e-records. We have silos of files where the retention and disposition is managed manually by individual staff.	While staff is paying more attention to managing e-records, progress is slow and volume continues to grow. Additional time is needed to develop tools that allow e-records to be managed more efficiently.

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Regulatory, Compliance & Litigation	Carolina de Onís	<ul style="list-style-type: none"> Adhere to and analyze current laws, rules, and policies (e.g., maintain tax qualification status). Render competent advice on legal risk management and awareness, manage litigation risks, and negotiate contracts to address risks. 	Non-compliance with laws and rules could lead to penalties, fines, liability and litigation; impaired ability to conduct business; burdensome oversight; third-party investigations/audits; adverse legislation; increased scrutiny; or loss of tax qualification status.	4,2		Changes in regulatory environment (Dodd-Frank, BASEL III) and changes in TRS laws (open records, retirement age, health plans, etc.).	Hired and have regular consultation with outside counsel; created Chief Compliance Officer position for IMD (housed within Legal) and moved Investment Compliance from Internal Audit to Legal, better coordination within Legal; hiring new attorneys; and retaining existing expertise.
Retiree Health Care Funding	Betsey Jones	Facilitate long-term soundness of TRS-Care in order to pay retiree health care costs.	Inadequate funding would affect solvency of the program over the next biennium, requiring significant premium increases or benefit reductions.	4,4		Inadequate funding would jeopardize retirees having access to affordable health care. The fund is projected to become insolvent in the 2016-2017 biennium.	The fund is projected to deplete each year and become insolvent in the 2016-2017 biennium.
TEAM Program	Ken Welch	Implement cost effective, efficient, and sustainable processes and systems that enable TRS to serve its members, employers, and annuitants.	System design, implementation and functionality of the new processes and systems do not meet the growing demands of TRS in service of its members. Program/project implementation schedule and cost exceeds original estimates.	4,2		<p>The Impact rating remained constant from the last report to this report, at a 4.</p> <p>The Likelihood rating decreased from a 3 on the last report to a 2 for this report. This validates what was stated in the last Stoplight Report that it was expected that several of the existing risks would have their likelihood reduced due to the mitigations that have been taken to date.</p> <p>This resulted in a reduced Risk Threat Level that went from a “Moderate Risk” to a “Guarded Risk”.</p>	<p>The number of key TEAM risks increased to 15 from the previous report, which was 14. The net increase of 1 risk included the addition of 3 new risks as well as the closing of 2 risks. This validates what was stated in the last Stoplight Report that it was expected that several new risks would be identified.</p> <p>The Risk Level Trend is being kept at a “Remain Constant” status. This is due to the fact that several of the projects had just begun and as more knowledge is obtained about these projects it is expected that more risks will be identified over the next 6 months. Couple this with the expectation that the projects that have been ongoing will close some risks, resulting in an overall net zero.</p>

Teacher Retirement System of Texas Risk Profiles – June 2014

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
Workforce Continuity	Janet Bray	Preserve valued institutional knowledge, and ensure a skilled, capable, and motivated workforce is maintained to execute TRS' functions.	The delivery of member services and pension fund management could be negatively impacted by turnover, the inability to retain qualified staff, lack of a sufficient knowledge transfer program, and an inconsistent performance management process.	4,2		Maintaining a qualified, competent workforce is important for TRS to achieve its goals and objectives. Turnover in the workforce is inevitable, and the loss of staff may create some delays or reductions in meeting strategic or operational objectives. However, these potential risks are not critical enough to stop TRS from meeting goals or terminate business services. As a result, the overall workforce continuity risk level color is set at Guarded (Blue) because of minimal threats to achieving TRS goals and objectives.	We anticipate overall workforce continuity risks decreasing over the next 12-24 months due to various Human Resources (HR) initiatives. These include implementing new HR technologies; updating all agency job descriptions; identifying core competencies, knowledge, skills and abilities for positions; addressing gaps in those attributes through increased learning and development opportunities; and resolving staffing needs through workforce planning, succession planning and the realignment of job functions as necessary.

Conclusion

Summary for this Reporting Period

- Risk assessments for nine Stoplight Report categories completed this reporting period
- Elevated risk areas – Employer Reporting & Retiree Health Care Funding
- Action items are planned or in progress to further mitigate higher risks

ERM Activities for December 2014

- Risk Assessments
 - Stoplight Report
 - TEAM Program projects
- Ad-hoc Risk Assessments

APPENDIX

A. Risk Report Details

BUSINESS CONTINUITY RISK REPORT

RISK OWNER

Rebecca Merrill

REPORTING DATE

June 2014

GOAL

OVERALL RISK

OBJECTIVE

Recover and resume operations in the event of a major business interruption.

Members do not receive statutorily required services timely.

Restore and provide continuation of time-sensitive and critical services within the times specified in the business impact analysis and business continuity plans.

SUMMARY

Existing mitigations are working as implemented; however, additional mitigations are in progress or planned to further reduce the risks related to business continuity plans, disaster recovery testing/location, and staffing. Key mitigations include: annual reviews and updates to the business impact analysis and business continuity documents; disaster recovery testing/plans; Incident Management Team (IMT) plan review and update; training staff; contract monitoring; and, multiple sites for backup tape storage. Recent activities include:

- BCPs and BIAs were updated in the fall of 2013.
- Tabletop exercise conducted in June 2013.
- Emergency notification system was tested agency-wide. The IMT plan has been updated and is current.
- Received approval for co-location budget and strategy. An Internal Audit consulting project included a review of the disaster recovery plans and co-location strategy.
- Business Continuity Coordinator retired and a new replacement hired in February 2014.
- New statewide business continuity plan standards issued by the State Office of Risk Management, Department of Information Resources, and Texas Homeland Security.

RISK DETAILS

Risk Description

Mitigations

1. business continuity plans (BCP) and disaster recovery plans (DRP) do not exist

- annual review and updates to business impact analysis (BIA) and BCPs based on meetings with business units

- disaster recovery testing and update of plans based on testing
- review and update IMT Plan

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
2. BCPs and DRPs are not current or incomplete	<ul style="list-style-type: none"> ▪ annual review and updates to BIAs and BCPs based on meetings with business units 	<ul style="list-style-type: none"> ▪ disaster recovery testing and update of plans based on testing
3. BCPs and DRPs are not communicated to affected department staff	<ul style="list-style-type: none"> ▪ communicate with team leader and alternate team leader as needed ▪ BCP Awareness Presentation 	<ul style="list-style-type: none"> ▪ Risk Management handbook ▪ share critical systems list with IT ▪ Business Continuity Policy
4. not capturing critical functions in the Business Impact Analysis (BIA) and BCPs	<ul style="list-style-type: none"> ▪ annual review and updates to BIAs and BCPs based on meetings with business units to identify critical functions ▪ review and update IMT Plan 	<ul style="list-style-type: none"> ▪ disaster recovery testing and update of plans based on testing ▪ share critical systems list with IT
5. lack of testing critical functions identified in the BIA	<ul style="list-style-type: none"> ▪ annual review and updates to BIAs and BCPs based on meetings with business units to identify critical functions ▪ cross-training for disaster recovery testing 	<ul style="list-style-type: none"> ▪ disaster recovery testing and update of plans based on testing ▪ review and update IMT Plan
6. business continuity provider and vendors cannot provide nor guarantee services for business resumption of critical systems (AT&T, IBM, co-location, ViON)	<ul style="list-style-type: none"> ▪ annual contract review ▪ disaster recovery testing ▪ emergency purchasing flexibility ▪ future co-location/replication technology options ▪ backup natural gas generator 	<ul style="list-style-type: none"> ▪ contract with large multi-site business continuity/recovery services vendor ▪ contracts or Memorandum of Understanding (MOU) with external partners ▪ redundant power in data center
7. vendors or entities do not protect TRS confidential information during a business interruption or disaster recovery test	<ul style="list-style-type: none"> ▪ data is deleted/scrubbed from vendor's resources after recovery testing and documented in DRPs ▪ TRS security implemented during recovery of data 	<ul style="list-style-type: none"> ▪ firewall encryption ▪ contract provisions ▪ encryption of TRS data ▪ business associate agreements
8. data loss between backups (24 hour period)	<ul style="list-style-type: none"> ▪ proof-of-concept for real time synchronization ▪ future co-location/replication technology options 	<ul style="list-style-type: none"> ▪ future TEAM technical architecture configuration
9. failed telecommunications with business partners or external entities	<ul style="list-style-type: none"> ▪ BCPs provide external contact information ▪ virtual private networks over direct paths ▪ review and update IMT Plan 	<ul style="list-style-type: none"> ▪ multiple paths to Internet ▪ contract with large multi-site business continuity/recovery services vendor

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
10. lack of hardware/software to recover critical systems after an incident	<ul style="list-style-type: none"> ▪ contract with large multi-site business continuity/recovery services vendor ▪ future TEAM technical architecture configuration ▪ disaster recovery testing and update of plans based on testing 	<ul style="list-style-type: none"> ▪ emergency purchasing flexibility ▪ TRS owns recovery infrastructure ▪ future co-location/replication technology options run disaster recovery tests ▪ lessons learned from disaster recovery tests
11. fail-back process to return to TRS is not in place	<ul style="list-style-type: none"> ▪ future co-location/replication technology options ▪ contract provisions 	<ul style="list-style-type: none"> ▪ future TEAM technical architecture configuration
12. unable to recover missing data between outage through recovery period	<ul style="list-style-type: none"> ▪ IT BCP plan allows for recovery of some business data ▪ future co-location/replication technology options 	<ul style="list-style-type: none"> ▪ remote access to available systems during recovery
13. lack of staff to recover critical systems after an incident	<ul style="list-style-type: none"> ▪ mainstream software ▪ disaster recovery procedures ▪ cross-training for disaster recovery testing ▪ future co-location/replication technology options 	<ul style="list-style-type: none"> ▪ improved offsite access to systems ▪ use vendor's remote resources ▪ review and update IMT Plan ▪ emergency call list
14. long-term (>6 weeks) continuity of operations strategy does not exist	<ul style="list-style-type: none"> ▪ future co-location/replication technology options ▪ contract provisions 	<ul style="list-style-type: none"> ▪ future TEAM technical architecture configuration ▪ emergency purchasing flexibility
15. data backup media is not available	<ul style="list-style-type: none"> ▪ multiple sites for storing tapes ▪ multiple copies available ▪ NETAPP snapshots 	<ul style="list-style-type: none"> ▪ future co-location/replication technology options
16. members are not able to communicate with TRS to complete business processes	<ul style="list-style-type: none"> ▪ communication system testing ▪ disaster recovery contract includes phone capacity 	<ul style="list-style-type: none"> ▪ alternate website for communicating TRS contact information
17. critical vendors do not have BCPs or DRPs in place	<ul style="list-style-type: none"> ▪ contract with large multi-site business continuity/recovery services vendor 	<ul style="list-style-type: none"> ▪ contract provisions
18. recovery data cannot be unencrypted	<ul style="list-style-type: none"> ▪ maintain necessary information in multiple secure locations 	<ul style="list-style-type: none"> ▪ future co-location/replication technology options

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
19. risk management staff is not available	<ul style="list-style-type: none"> ▪ IMT plan outlines roles and responsibilities ▪ cross-training 	<ul style="list-style-type: none"> ▪ review and update IMT Plan
20. business unit staff are not available for recovery and continuation of business	<ul style="list-style-type: none"> ▪ team lead alternates assigned ▪ documented BCP 	<ul style="list-style-type: none"> ▪ review and update IMT Plan
21. insufficient staffing for recovery and continuity shifts	<ul style="list-style-type: none"> ▪ cross-training ▪ detailed DRPs 	<ul style="list-style-type: none"> ▪ policies and procedures
22. transportation to recovery site not available	<ul style="list-style-type: none"> ▪ use of personal vehicles ▪ remote access 	<ul style="list-style-type: none"> ▪ alternate modes of transportation
23. ineffective communication methods between TRS staff in the event of an incident	<ul style="list-style-type: none"> ▪ TRS Alert for text, phone, and email communication ▪ TRS weatherline 	<ul style="list-style-type: none"> ▪ TRS website ▪ manual call trees ▪ multiple cell phone service providers
24. insufficient lodging near disaster recovery site	<ul style="list-style-type: none"> ▪ search for closest available hotels ▪ alternate forms of lodging 	<ul style="list-style-type: none"> ▪ seek increased per diem if state rate is not available
25. accident on the way to recovery site	<ul style="list-style-type: none"> ▪ segregate the team by function into separate vehicles 	<ul style="list-style-type: none"> ▪ alternate modes of transportation ▪ use of multiple vehicles
26. business unit staff have not identified or do not have sufficient tools, procedures, resources to begin recovery at disaster recovery site	<ul style="list-style-type: none"> ▪ identify tools, procedures, resources needed within BCP ▪ purchase needed supplies 	<ul style="list-style-type: none"> ▪ duplicate resources stored at Incident Command Center ▪ define business unit needs within contract
27. personal issues/family obligations prevent recovery staff from participating	<ul style="list-style-type: none"> ▪ communicate personal issues between recovery team members 	<ul style="list-style-type: none"> ▪ provide guidance and/or identify resources for personal preparation
28. citywide electrical grid failure	<ul style="list-style-type: none"> ▪ backup generators 	<ul style="list-style-type: none"> ▪ coordinate with city leaders
29. can't find leased space to resume business	<ul style="list-style-type: none"> ▪ extend use of the contracted disaster recovery site ▪ research/partner with other agencies/business 	<ul style="list-style-type: none"> ▪ use of portable temporary structures ▪ VPN and teleworking capabilities ▪ secondary agency location
30. resources/tools needed to continue business can't be found/purchased	<ul style="list-style-type: none"> ▪ identify workarounds/ alternate tools and resources ▪ reach out to peer public pension funds 	<ul style="list-style-type: none"> ▪ send designated travel team to purchase out-of-state or internationally

BUSINESS CONTINUITY RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
Business Continuity Coordinator is working with departments to develop BCPs (Risk 1)	Risk Management	9/2013		Complete	Completed BIAs and developed BCPs for Investment Accounting and individual business units within Investment Operations.
<p>During the next BIA/BCP process, the Business Continuity Coordinator will:</p> <ul style="list-style-type: none"> ▪ Work with departments to develop BCPs if they do not exist, if they are incomplete, or not current (Risk 1, 2, 4, 26) ▪ Verify BCP communication method with individual business units (Risk 3) ▪ Discuss data loss between backups with BCP team leaders (Risk 8) ▪ Determine if adequate business continuity backups exist (Risk 20, 21, 22, 27) ▪ Provide a self-assessment for personal issues that can prevent participation in disaster recovery/business continuity activities (Risk 27) 	Risk Management	1/2015		Planned	BCC will follow-up with Investment Accounting, Human Resources, and Investment Operations to confirm completion of their BIAs and BCPs. Due to new requirements, individual business unit BCPs will be compiled into one comprehensive BCP and any missing BCPs will be identified during this process.
Develop online BCP awareness presentation (Risk 3)	Risk Management	6/2013		Complete	BCP Awareness presentation rolled out TRS-wide.
Annual BCP awareness presentation to the Leadership Team (Risk 3)	Risk Management	12/2013		Complete	Online BCP awareness presentation provided to Leadership Team.
Schedule disaster recovery test (Risk 2, 4, 5, 6, 10)	Risk Management, Information Technology	12/2014		Planned	
Research co-location options (Risk 6, 8, 10, 11, 12, 13, 14, 15)	Information Technology	6/2013		Complete	Proof-of-concept tested in fiscal year 2012. Funding was approved for co-location option.

BUSINESS CONTINUITY RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
Finalize design and vendor requirements and enter into co-location implementation phase (Risk 6, 8, 10, 11, 12, 13, 14, 15, 18)	Information Technology	2/2015		In Progress	Currently in negotiations with co-location vendor.
Research revising contract provisions to include BAA requirement (Risk 7)	Risk Management, Purchasing & Contracts	12/2013		Complete	The BAA requirement is included in contract provisions; requested BAAs from disaster recovery vendors.
Research revising contract provisions to include BCP and DRP requirement (Risk 17)	Risk Management, Purchasing & Contracts	12/2013		Complete	Large multi-site business continuity/recovery services vendor have business continuity and disaster recovery plans in place; copies can be requested for review by TRS staff.
Identify critical vendors and confirm business continuity/disaster recovery plans exist (Risk 17)	Risk Management	12/2014		Planned	
Store encryption password and key in separate locations (Risk 18)	Risk Management, Information Technology	6/2014		Planned	One will be stored at the Incident Command Center in April and the other in disaster recovery site in June.

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
BIA/BCP annual reviews and updates (Risk 1, 2, 4, 5)	BC/DR Coordinator	<ul style="list-style-type: none"> Ongoing communication with team leaders and alternates during the review process. Review plans to ensure critical processes and systems have not changed from previous year. Communicate any changes to critical processes and systems to IT for testing and recovery purposes.
Disaster recovery testing (Risk 1, 2, 4, 5, 6, 10)	BC/DR Coordinator, Information Technology	Planning and participation in exercise. Post-exercise report to executive director.

BUSINESS CONTINUITY RISK REPORT

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
Disaster recovery plans (Risk 1, 2, 4, 5, 10, 13, 19)	Information Technology	Review plans and update as needed after each disaster recovery exercise.
Review and update IMT plan (Risk 1, 4, 5, 9, 13, 19)	Risk Management	Periodic reviews quarterly and detailed review on an annual basis as part of the BCP process.
Cross-training/rotating staff (Risk 5, 13, 19, 21)	Information Technology	Participate in exercise and cross-train and rotate staff to share knowledge of disaster recovery processes and procedures.
Contract monitoring (Risk 6, 7, 9, 10, 14, 16, 17, 26)	Risk Management, Information Technology, Purchasing	Annual review and coordination with Purchasing and IT to update or revise.
Multiple sites for storing backup tapes (Risk 15)	Information Technology	Backup tapes are stored offsite in two locations. Daily pick up and sign off for Safesite Austin tapes. Dallas tapes are sent monthly. Inventories are performed daily and documented.

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

RISK OWNER

Howard Goldman

REPORTING DATE

June 2014

GOAL	OVERALL RISK	OBJECTIVES
Maintain effective communication and positive relations with members, retirees, employers, TRS employees, news media, and the public.	Poor communication could lead to confusion resulting in increased calls to TRS, poor or inappropriate decision-making regarding TRS benefits, and incorrect information provided to external parties.	<ul style="list-style-type: none"> ▪ Publicize the agency's updated Staff External Communications Policy. ▪ Review and improve existing procedures relating to internal and external communications. ▪ Develop new procedures to address potential spikes in Social Media activity and how to most effectively address them.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts a majority of the risks with existing mitigations. Additional mitigation strategies are planned to further reduce risks related to communication with news media and the public. Key mitigations include training and discussions, tracking TRS-related media interviews through web-based software, and policies and procedures. Recent activities include:

- Updated TRS publications to reflect legislative changes.
- Changed our *TRS Benefits Handbook* distribution method from snail mail to e-delivery.
- Established a new Media Center page of the TRS website, including TRS contact info and an agency facts section.
- Began using the intranet to distribute daily news clippings and enable employees to request new business cards.
- Promoted *MyTRS* through a variety of means, including agency publications, email and the website.
- Launched *MyTRS* Rewards -- a member discount website for those registered with *MyTRS*.
- Developed new branding for TRS, including the agency's first graphic style guide. This has resulted in new letterhead, business cards, email templates, PowerPoint templates, and a number of other related changes.
- Tracked new developments in the area of website accessibility and worked with IT introduce new web scanning and monitoring services.
- Worked with IMD to implement a new process for collecting investment-related info in response to press inquiries.
- Substantially increased the number of social media followers of TRS across multiple channels and enhanced the TRS Facebook page with additional features and photographs.

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

SUMMARY (cont'd)

- Updated the External Staff Communications Policy to include language on employee endorsements of outside organizations.
- Produced *TRS Today* videos on TRS legislative studies, the Aetna Medicare Advantage plans, TRS-Care program improvements, legislative changes, and TRS Investments. We have also continued to produce general information and instructional videos.
- Created a Website Redesign Committee and began work, through TEAM, to develop an RFO for designing and building a new website.
- Played an integral role in TEAM Communications, including on the Reporting Entity Outreach Team.
- Provided assistance in writing specifications for TEAM projects, including those pertaining to our commitment to 508 Accessibility Standards in all TEAM technology program purchases.
- Provided ongoing assistance for posters, printed materials, videos, photography, presentations, etc.
- Managed the 2013 board election process.
- Conducted the 2014 Member Satisfaction Survey. Now producing the final report with survey findings.

RISK DETAILS

Risk Description	Mitigations	
1. inaccurate, insufficient, or misleading information is released to the news media	<ul style="list-style-type: none"> ▪ coordinate with subject matter experts ▪ approval process for releasing information ▪ policies and procedures ▪ communicate with editorial boards or other media personnel ▪ post information to TRS website and social media outlets ▪ collaborate with associations, legislators, and other stakeholders to communicate accurate information 	<ul style="list-style-type: none"> ▪ use software tool to monitor articles and make corrections as needed or respond to inaccuracies in a timely manner ▪ review reporters' reputations and past reports ▪ write op-eds ▪ respond to letters, phone calls, and email messages ▪ provide statements to telephone counseling center ▪ refer to previous responses to ensure consistency
2. inaccurate, insufficient, or misleading information is released to the public	<ul style="list-style-type: none"> ▪ coordinate with subject matter experts ▪ approval process for releasing information ▪ refer to previously approved information to ensure consistency ▪ post information to TRS website, social media outlets, and send email notices 	<ul style="list-style-type: none"> ▪ make corrections as needed or respond to inaccuracies in a timely manner ▪ provide statements to telephone counseling center ▪ collaborate with associations, legislators, and other stakeholders to communicate accurate information ▪ policies and procedures

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Risk Description	Mitigations
	<ul style="list-style-type: none"> ▪ respond to letters, phone calls, and email messages
3. TRS-related information is not disseminated to TRS members and retirees in a timely and effective manner	<ul style="list-style-type: none"> ▪ post information to TRS website, social media outlets, and send email notices ▪ adhere to time management tools for publications ▪ coordination with subject matter experts ▪ policies and procedures ▪ collaborate with associations, legislators, and other stakeholders to communicate accurate information ▪ respond to letters, phone calls, and email messages ▪ provide statements to telephone counseling center
4. inaccurate, insufficient, or misleading TRS-related information is disseminated to TRS employers	<ul style="list-style-type: none"> ▪ communicate via employer email distribution list including superintendents, TRS <i>Update</i> newsletter, TRS website, and social media outlets ▪ coordinate with subject matter experts ▪ approval process for releasing information ▪ make corrections as needed or respond to inaccuracies in a timely manner ▪ provide statements to telephone counseling center ▪ collaborate with associations, legislators, education service centers, and other stakeholders to communicate accurate information ▪ respond to letters, phone calls, and email messages ▪ policies and procedures
5. unauthorized release of confidential information	<ul style="list-style-type: none"> ▪ policies and procedures ▪ restrict access ▪ coordinate with subject matter experts ▪ include language in contracts regarding usage of information
6. inaccurate, insufficient, or misleading TRS-related information is disseminated to TRS employees	<ul style="list-style-type: none"> ▪ coordinate with subject matter experts ▪ approval process for releasing information ▪ policies and procedures ▪ post information to TRS website, intranet, social media outlets, and send email notices ▪ internal newsletter ▪ make corrections as needed or respond to inaccuracies in a timely manner ▪ respond to phone calls and email messages ▪ refer to previously approved information to ensure consistency
7. hacker or software/hardware failure disrupts live webcasts or TRS social media sites	<ul style="list-style-type: none"> ▪ vendor support ▪ contract provisions ▪ website and/or social media postings ▪ statement for telephone counseling center ▪ procedures ▪ send email messages
8. inappropriate, inaccurate, or negative social media comments posted and/or left unattended	<ul style="list-style-type: none"> ▪ monitor social media comments ▪ social media filter tool ▪ policies and procedures ▪ respond in a timely manner ▪ backup team
9. vendor error during live webcasts	<ul style="list-style-type: none"> ▪ vendor support ▪ contract provisions ▪ website and/or social media postings ▪ statement for telephone counseling center ▪ procedures ▪ monitor webcasts

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Risk Description	Mitigations	
10. excessive volume of comments from Facebook/Twitter (e.g. comments go viral)	<ul style="list-style-type: none"> ▪ adjust staffing ▪ prepared messages/ statements/fact sheets to respond to comments ▪ notify telephone counselors 	<ul style="list-style-type: none"> ▪ monitor comments ▪ post information to TRS website, intranet, social media outlets, and send email notices ▪ procedures
11. unauthorized contact/ interviews with the news media	<ul style="list-style-type: none"> ▪ policies and procedures ▪ track TRS-related media interviews through web-based software 	<ul style="list-style-type: none"> ▪ contact media to discuss TRS policies and procedures ▪ training and discussions ▪ disciplinary action
12. negative perceptions are not responded to in a timely manner	<ul style="list-style-type: none"> ▪ post information to TRS website, social media outlets, and send email notices ▪ collaborate with associations, legislators, and other stakeholders to communicate accurate information 	<ul style="list-style-type: none"> ▪ respond to letters, phone calls, email messages, and media inquiries ▪ member surveys to identify negative perceptions ▪ coordination with subject matter experts
13. materials cannot be printed due to equipment failure or insufficient expertise to fully utilize equipment	<ul style="list-style-type: none"> ▪ vendor procurement ▪ equipment repairs ▪ internal and external printing options ▪ hiring staff with appropriate skills 	<ul style="list-style-type: none"> ▪ post digital version to website ▪ increase use of e-publications ▪ training
14. outside vendors fail to fulfill contract obligations	<ul style="list-style-type: none"> ▪ terminate contract ▪ subcontracting services 	<ul style="list-style-type: none"> ▪ seek compensation ▪ work with vendor to remediate issues
15. not able to maintain technical expertise/experience due to rapidly changing technology	<ul style="list-style-type: none"> ▪ training ▪ networking with professional colleagues 	<ul style="list-style-type: none"> ▪ hire consultants/contractors ▪ attend association meetings
16. information is inaccessible to persons with disabilities	<ul style="list-style-type: none"> ▪ policies and procedures ▪ web accessibility committee ▪ produce accessible materials ▪ participate in DIR program to scan and monitor website for accessibility ▪ internal program monitors web accessibility standards for internal and external websites 	<ul style="list-style-type: none"> ▪ use web coding for accessible web page ▪ accessibility coordinator ▪ TEAM projects require accessibility compliance to federal and state standards ▪ monitor changes in the law ▪ Access TTY/TDD Program replaced with DIAL Relay 711

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
Increase employee awareness of and adherence to Staff External Communications Policy and related procedures (Risk 1, 11)	Communications Staff	6/2014		Planned	Sent updated policy to all employees. Increase coverage in Chalkboard newsletters.
Develop new messages and statements in anticipation of potential problems (Risk 2)	Communications Staff	6/2014		Planned	
Draft procedures to address excessive volume of social media comments and live webcast issues (Risks 7, 9, 10)	Communications Staff	6/2013		Complete	Enhanced procedures to address social media comment volume and live webcast issues.
Use web coding to make web pages accessible (Risk 16)	Communications Staff	6/2014		Complete	Scanning program and compliance software is being used to ensure proper coding for accessibility.
Evaluate new legal requirements regarding accessibility and update the website appropriately (Risk 16)	Communications Staff	6/2014		Complete	Using monitoring tool to ensure awareness of legal requirements regarding accessibility legislation and standards.

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
Policies and/or procedures (Risk 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16)	Communications Staff	Review/update policy and procedures.
Training and discussions (Risk 11)	Communications Staff	Address policy in new employee orientation. Email updated policy to all employees. Publish <i>Chalkboard</i> article relating to the policy.
Track TRS-related media interviews through web-based software (Risk 11)	Communications Staff	Scan all TRS-related articles and blogs on a daily basis.

EMPLOYER REPORTING RISK REPORT

RISK OWNER

Don Green

REPORTING DATE

June 2014

GOAL

OVERALL RISKS

OBJECTIVES

Accurately capture and utilize employer reported data to project and calculate future benefits of TRS members and to properly allocate the total pension liability across districts.

- Incorrect reporting could lead to calculated benefits being inaccurate.
- Improperly allocating actuarial liability across districts.

- Improved electronic reporting and auditing through TEAM.
- Supplement with additional staff to prepare for TRS staff retirements.

SUMMARY

Key mitigations include internal and external training and ongoing communication with reporting entities. Existing mitigations are working as implemented; however, due to recent GASB pronouncements requiring greater controls around district data and reports, additional mitigations are in progress or planned to further reduce the risks related to reporting and staffing.

RISK DETAILS

Risk Description	Mitigations	
1. ineligible members reported	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ <i>TRS Update</i> newsletter 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ internal audits
2. not all eligible members reported	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ <i>TRS Update</i> newsletter 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ internal audits
3. member salaries paid from miscellaneous funds unreported (federal, private, statutory minimum, non-educational/general local, educational/general local, new member)	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ <i>TRS Update</i> newsletter 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ internal audits
4. ineligible/under reported/over reported salaries (used in final average salary calculation)	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ maintain current TRS webpage for employers ▪ mass emails 	<ul style="list-style-type: none"> ▪ <i>TRS Update</i> newsletter ▪ annual statements sent to members ▪ internal audits

EMPLOYER REPORTING RISK REPORT

Risk Description	Mitigations	
5. pension and TRS-Care surcharges for retirees unreported	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ <i>TRS Update</i> newsletter 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ internal audits
6. retirement not revoked when retirees return to work without break in service	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ automated system edits/ reports 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ <i>TRS Update</i> newsletter ▪ internal audits
7. years of service credit manipulated (over reported/ under reported service credit)	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ automated system edits/ reports ▪ mass emails 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ <i>TRS Update</i> newsletter ▪ annual statements sent to members ▪ internal audits
8. annuities not forfeited when retirees work in excess of limits provided by law	<ul style="list-style-type: none"> ▪ internal and external training ▪ ongoing communication ▪ automated system edits/ reports 	<ul style="list-style-type: none"> ▪ maintain current TRS webpage for employers ▪ mass emails ▪ <i>TRS Update</i> newsletter ▪ internal audits
9. Benefit Accounting staffing issues due to staff retirements	<ul style="list-style-type: none"> ▪ internal training ▪ cross-training 	<ul style="list-style-type: none"> ▪ additional FTEs ▪ maintain current staffing levels
10. external fraud (i.e., eligibility, compensation, service credit)	<ul style="list-style-type: none"> ▪ internal and external training ▪ automated system edits/ reports ▪ maintain current TRS webpage for employers ▪ internal audits ▪ mass emails 	<ul style="list-style-type: none"> ▪ <i>TRS Update</i> newsletter ▪ sample testing ▪ criminal investigations and prosecution ▪ ongoing communication
11. inability to provide appropriate customer service due to increased number of reporting entities	<ul style="list-style-type: none"> ▪ internal training ▪ cross-training 	<ul style="list-style-type: none"> ▪ additional FTEs
12. unable to appropriately analyze increased volume of data	<ul style="list-style-type: none"> ▪ training 	<ul style="list-style-type: none"> ▪ planning

EMPLOYER REPORTING RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
Increase number of topic-specific training sessions with reporting entities either through onsite meetings or webinars (Risk 1, 2)	Benefit Accounting	11/2013		Complete	Training videos and other materials were made available online.
District reviews (Risk 1, 2, 3, 4, 5, 6, 7, 8, 10)	Internal Audit	Ongoing		In Progress	Developing audit plans; three initial district reviews have been performed and are being evaluated.
External audits (SAO) (Risk 1, 2, 3, 4, 5, 6, 7, 8, 10)	Benefit Accounting, Internal Audit	Ongoing		Planned	
Implement TEAM Program (Risk 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12)	CMT, Executive Management	9/2015		In Progress	
Self-audit tool for reporting entities (Risk 5)	Internal Audit, Benefit Accounting	9/2014		In Progress	Next step of the process is to have the tool reviewed by Legal.
Supplement with additional staff to mitigate department retirements (Risk 9, 11)	Benefit Accounting	8/2014	12/2014	In Progress	Recently filled three positions, two more TEAM backfill positions are pending.

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
Internal and external training (All risks)	Benefit Accounting	Scheduled and ad-hoc training as needed.
Ongoing communication with reporting entities (Risk 1, 2, 3, 4, 5, 6, 7, 8, 10)	Benefit Accounting	Communicate with reporting entities via phone calls and email.

INVESTMENT ACCOUNTING RISK REPORT

RISK OWNER

Don Green

REPORTING DATE

June 2014

GOALS

- Maintain the integrity of investment information – reporting and disclosure, accuracy, completeness and valuation.
- Ensure TRS investment fundings and distributions are appropriately and accurately delivered and received.

OVERALL RISK

Materially inaccurate investment information and reports would result in board and Legislature decisions being made on flawed data and adverse or qualified audit opinions.

OBJECTIVES

- Ensure accurate and sufficient investment reporting for Comprehensive Annual Financial Report (CAFR) and management
- Verify that partnership investments are valued in accordance with TRS valuation guidelines
- Ensure that wire transfers of funds are complete and made as requested
- Accurately calculate incentive compensation awards

SUMMARY

One risk related to unauthorized access to spreadsheets was closed due to the implementation of a more robust reconciliation process and transfer of risk to State Street. The remaining risks are being appropriately mitigated and the owner accepts all risks with existing mitigations. No additional mitigation strategies are planned at this time. Key mitigations include State Street SOC1, General Ledger Sub-Ledger reconciliation, reconciliation of partnership market values, funding approval policies and procedures, and daily wire reconciliation.

RISK DETAILS

Risk Description	Mitigations
1. State Street's investment accounts are incompletely or incorrectly mapped to TRS general ledger (GL) accounts	<ul style="list-style-type: none"> ▪ semi-annual detail review of mapping of State Street's investment accounts to TRS GL accounts ▪ monthly summary review ▪ written policies and procedures
2. TRS GL account balances do not match State Street GL account balances	<ul style="list-style-type: none"> ▪ tie-out between State Street's sub-ledger and TRS GL ▪ written policies and procedures

TRS Stoplight Report Category

INVESTMENT ACCOUNTING RISK REPORT

Risk Description	Mitigations	
3. TRS investment accounts are misstated or misclassified in financial statements	<ul style="list-style-type: none"> ▪ tie-out between State Street’s sub-ledger and TRS GL 	<ul style="list-style-type: none"> ▪ written policies and procedures
4. TRS financial statements not in compliance with GASB or notes are omitted for significant disclosure items	<ul style="list-style-type: none"> ▪ familiarity and continuous monitoring of accounting standard changes (e.g., GASB requirements) ▪ communication between General Accounting 	<ul style="list-style-type: none"> ▪ continuous monitoring of investing activities (e.g., by attending Internal Investment Committee) ▪ written policies and procedures
5. under or over reporting of values of investments	<ul style="list-style-type: none"> ▪ reconciliation of partnership statements to State Street’s reports (RALI report and Private Edge report) ▪ director’s review of various reconciliations 	<ul style="list-style-type: none"> ▪ on-site visits to State Street ▪ TRS Security Valuation Guide ▪ written policies and procedures ▪ State Street SOC1 (formerly SAS 70) review
6. incomplete reporting of values of TRS partnerships	<ul style="list-style-type: none"> ▪ reconciliation of partnership statements to State Street’s reports (RALI report and Private Edge report) 	<ul style="list-style-type: none"> ▪ director’s review of various reconciliations ▪ written policies and procedures
7. funding of private market investments exceeds commitments	<ul style="list-style-type: none"> ▪ tracking and comparing cumulative funded amount to the commitment amount ▪ written policies and procedures 	<ul style="list-style-type: none"> ▪ more rigorous implementation process including comparison to State Street and general partner reports
8. partnership financial statements do not follow accounting standards	<ul style="list-style-type: none"> ▪ annual review of partnerships' audited financial statements 	<ul style="list-style-type: none"> ▪ written policies and procedures
9. partnership financial statements are materially misstated and misstatements are not detected by TRS	<ul style="list-style-type: none"> ▪ annual review of partnerships' audited financial statements ▪ written policies and procedures 	<ul style="list-style-type: none"> ▪ review quarterly financial statements for reasonableness ▪ IMD reviews statements
10. data entry errors in spreadsheets	<ul style="list-style-type: none"> ▪ monthly reconciliation with State Street ▪ written policies and procedures 	<ul style="list-style-type: none"> ▪ spreadsheets reside on network drives with limited access
11. State Street wires funds without TRS authorization	<ul style="list-style-type: none"> ▪ wire process is fully automated requiring initiation by an authorized person in IMD ▪ systematic routing throughout the approval process ending with authorized approval in the financial division ▪ quarterly internal audits 	<ul style="list-style-type: none"> ▪ authorized approvals set by board and governed by TRS 477 and FTTOP approved by CFO ▪ funding process is reviewed quarterly by Internal Audit and tested for compliance
12. State Street does not wire funds requested by TRS	<ul style="list-style-type: none"> ▪ written agreement between TRS and State Street regarding wiring of funds 	<ul style="list-style-type: none"> ▪ daily reconciliation of funds wired between Investment Accounting’s wire log and State

TRS Stoplight Report Category

INVESTMENT ACCOUNTING RISK REPORT

Risk Description	Mitigations	
	<ul style="list-style-type: none"> ▪ State Street’s confirmation of funds wired ▪ quarterly internal audits 	<ul style="list-style-type: none"> ▪ Street’s wire report ▪ written policies and procedures
13. State Street wires amount/person/account different from the amount/person/account on the approved funding request	<ul style="list-style-type: none"> ▪ written agreement between TRS and State Street regarding wiring of funds ▪ daily reconciliation of funds wired between Investment Accounting’s wire log and State Street’s wire report ▪ State Street has fiduciary responsibility and bears the risk 	<ul style="list-style-type: none"> ▪ Investment Accounting’s review of information accuracy in funding request ▪ callback requirements ▪ written policies and procedures ▪ State Street’s confirmation of funds wired ▪ quarterly internal audits
14. State Street does not credit incoming wires to TRS	<ul style="list-style-type: none"> ▪ written agreement between TRS and State Street regarding wiring of funds ▪ State Street’s confirmation of funds wired ▪ quarterly internal audits 	<ul style="list-style-type: none"> ▪ daily reconciliation of funds wired between Investment Accounting’s wire log and State Street’s wire report
15. TRS fails to timely detect wiring errors or mistakes made by State Street	<ul style="list-style-type: none"> ▪ State Street’s confirmation of funds wired ▪ written policies and procedures ▪ State Street has fiduciary responsibility and bears the risk 	<ul style="list-style-type: none"> ▪ daily reconciliation of funds wired between Investment Accounting’s wire log and State Street’s wire report ▪ quarterly internal audits
16. fraud (e.g., portfolio manager’s collusion with GP or alteration of funding request information)	<ul style="list-style-type: none"> ▪ segregation of duties – IMD can only request funding and Investment Accounting can only authorize State Street to wire funds ▪ list of authorized signatures in the Board-approved Incumbency Certificate ▪ State Street’s confirmation of funds wired ▪ wire process is fully automated requiring initiation by an authorized person in IMD 	<ul style="list-style-type: none"> ▪ daily reconciliation of funds wired between Investment Accounting’s wire log and State Street’s wire report ▪ Investment Accounting’s review of information accuracy in funding request ▪ callback requirements ▪ written policies and procedures
17. State Street does not maintain accurate historical investment information	<ul style="list-style-type: none"> ▪ custodial contract 	<ul style="list-style-type: none"> ▪ review State Street SOC1 (formerly SAS 70)
18. fund new investment not approved by Internal Investment Committee or completed by TRS Legal	<ul style="list-style-type: none"> ▪ include signature approval page from contract with initial funding 	<ul style="list-style-type: none"> ▪ fundings require IMD manager approval
19. external manager fee paid for the incorrect amount	<ul style="list-style-type: none"> ▪ reconcile external manager fees on the invoice with income summary received from State 	

INVESTMENT ACCOUNTING RISK REPORT

Risk Description	Mitigations
	Street
20. incentive compensation awards are not calculated correctly	<ul style="list-style-type: none"> ▪ calculations are reviewed and approved by Human Resources and Internal Audit
21. incorrect data is used to calculate incentive compensation awards	<ul style="list-style-type: none"> ▪ performance results are calculated and provided independently by State Street ▪ underlying data is reviewed and approved by Human Resources and Internal Audit

Action Item	Owner	Target Date	Revised	Status	Comments
None at this time.					

Monitoring Activities			
Key Mitigation	Monitored By	Monitoring Process	Comments
General Ledger Sub-Ledger Reconciliation (Risk 2, 3)	Investment Accounting	Process to tie general ledger fee to all subsidiary documents sent by State Street.	
Reconciliation of partnership market values (Risk 5, 6)	Investment Accounting	Maintain independent partnership market values that are tied to State Street market values each month.	
State Street SOC1 (Risk 5, 17)	Investment Accounting	Annually review report and submit questions to State Street.	Report is typically available in April and State Street submits a bridge letter noting that controls have not materially changed since the last SOC1 report.
Funding approval policies and procedures (Risk 11, 12, 13, 14, 15, 16)	Investment Accounting	Funding process is controlled by the State Street FTOP which is based on the Board's approved controls detailed in the TRS 477.	The controls cover the Financial division, IMD, and State Street activities.
Daily wire reconciliation (Risk 11, 12, 13, 14, 15, 16)	Investment Accounting	Verify each wire is properly and appropriately recorded in State Street's systems.	
Quarterly Internal audits (Risk 11, 12, 13, 14, 15)	Internal Audit	Continuous testing of funding process. Results of testing provided by Internal Audit.	

TRS Stoplight Report Category

INVESTMENT OPERATIONS RISK REPORT

RISK OWNER

Sylvia Bell

REPORTING DATE

June 2014

GOALS

OVERALL RISKS

OBJECTIVES

- Maintain the integrity of the transaction settlement and position information for optimal investment management decisions.
- Maintain the integrity of investment information - reporting and disclosure, accuracy, completeness and valuation.
- Develop and disseminate customized investment reporting for both management and governance to enhance making better strategic and tactical investment decisions.

- Inefficient or ineffective transaction settlement or position management process could result in losses to the fund.
- Performance reports contain material inaccuracies.

- No loss of Trust Assets (Securities, Derivatives, Cash)
- Optimize cost and efficiency
- Materially accurate investment performance reporting

SUMMARY

The risks identified for this risk category are being appropriately mitigated and the owner accepts all risks. No additional mitigation strategies are planned at this time. Key mitigations include: daily reconciliations of trade activity, positions and performance returns; formalized and documented processes such as external manager transitions, system development and administration, and monthly metrics review; and, monitoring against Service Level Agreement (SLA) with the custodian.

RISK DETAILS

Risk Description	Mitigations
Loss of Assets (Assets include Fixed Income, Equities, Cash, Limited Partnership/Direct Investments, Derivatives)	
Public Securities	
1. Failed settlement of trades	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Governance process/SLA ▪ Metrics reporting/ Issue tracking software
2. Unauthorized trading	<ul style="list-style-type: none"> ▪ Annual permission review ▪ Separation of duties ▪ Reconciliations/review

INVESTMENT OPERATIONS RISK REPORT

Risk Description	Mitigations	
3. Improper processing of corporate actions	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Metrics reporting/ Issue tracking software
4. Violation of internal/external regulations	<ul style="list-style-type: none"> ▪ Third party pre and post trade compliance at all levels ▪ Investment Policy Statement ▪ Daily compliance reporting 	<ul style="list-style-type: none"> ▪ Independent Chief Compliance Officer responsible oversight ▪ Investment Manager Agreements
Cash		
5. Failed settlement of trades	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Metrics reporting/ Issue tracking software
6. Failure to follow wiring instructions	<ul style="list-style-type: none"> ▪ Automated workflow system ▪ Reconciliations/review 	<ul style="list-style-type: none"> ▪ Metrics reporting/ Issue tracking software ▪ Governance process
7. Improper fee calculation	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Metrics reporting/ Issue tracking software
Limited Partnerships		
8. Violation of partnership covenants	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Metrics reporting 	<ul style="list-style-type: none"> ▪ Governance process/SLA
Derivatives		
9. Violation of internal/external regulations	<ul style="list-style-type: none"> ▪ Third party pre and post trade compliance at all levels ▪ Investment Policy Statement ▪ Regulatory compliance 	<ul style="list-style-type: none"> ▪ Independent Chief Compliance Officer oversight ▪ Investment Manager Agreements
10. Unauthorized trading	<ul style="list-style-type: none"> ▪ Annual permission review ▪ Separation of duties 	<ul style="list-style-type: none"> ▪ Reconciliations/review
Increased Cost or Inefficiency		
11. Incur overdrafts and other expenses	<ul style="list-style-type: none"> ▪ Daily cash reconciliation process managed jointly with custodian 	<ul style="list-style-type: none"> ▪ Governance process
12. Failure to make margin or collateral calls	<ul style="list-style-type: none"> ▪ Daily cash and collateral reconciliation process ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Daily cash, margin and collateral reporting
13. Failure to transition assets on time	<ul style="list-style-type: none"> ▪ Formalized account opening and transition process ▪ Post transition Investment Operations reporting 	<ul style="list-style-type: none"> ▪ Detailed tracking of securities settlement status on T+1
14. Failure to optimize software and subscriptions	<ul style="list-style-type: none"> ▪ Investment Management Division annual goal setting ▪ Formalized project management process ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Regular dialogue and updates with Enterprise IT and end-users ▪ Detailed process documents

INVESTMENT OPERATIONS RISK REPORT

Risk Description	Mitigations	
Inaccurate Investment Performance Reporting		
15. Improper calculation methodologies	<ul style="list-style-type: none"> ▪ Third-party calculation of performance with internal verification 	<ul style="list-style-type: none"> ▪ Investment Operations daily, weekly, monthly and quarterly verification by profit center
16. Improper valuation	<ul style="list-style-type: none"> ▪ Third party pricing via price source hierarchy ▪ Governance process/SLA 	<ul style="list-style-type: none"> ▪ Metrics reporting/ Issue tracking software
17. Improper trade booking	<ul style="list-style-type: none"> ▪ Reconciliations/review ▪ Metrics reporting/ Issue tracking software 	<ul style="list-style-type: none"> ▪ Governance process/SLA

Action Item	Owner	Target Date	Revised	Status	Comments
No actions required at this time.					

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
Reconciliation of positions and trades (Risk 1, 2, 5, 17)	Investment Operations	Reconcile positions and trades between State Street (accounting book of record) and Bloomberg trading system (investment book of record).
Governance process in SLA (Risk 1, 3, 5, 6, 7, 8, 11, 12, 16, 17)	Investment Operations	Formalized governance with custodian that includes reporting and monitoring of key processes.
Formalized, repeatable processes (Risk 6, 11, 12, 13, 14)	Investment Operations	Execution of formalized process with checklists and milestones.

OPEN GOVERNMENT RISK REPORT

RISK OWNER

Carolina de Onís

REPORTING DATE

June 2014

GOAL

Ensure compliance with laws and rules related to open records and meetings.

OVERALL RISK

Non-compliance could lead to penalties and fines or voiding of board actions.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts many of the risks with existing mitigations, but others require further mitigation. Additional mitigation strategies are in progress or planned to further reduce risks related to confidentiality, litigation, open records requests, and staffing. Key mitigations include training, policies and procedures, and technology.

RISK DETAILS

Risk Description	Mitigations	
1. failure to consider open records and records management laws in development of policies	<ul style="list-style-type: none"> ▪ training ▪ policy review schedules ▪ structured legislative implementation process 	<ul style="list-style-type: none"> ▪ participation in continuing education ▪ automated subscription services
2. failure to comply with or coordinate applicable administrative rules, policies, procedures and laws	<ul style="list-style-type: none"> ▪ training ▪ policy review schedules ▪ structured legislative implementation process ▪ participation in continuing education ▪ automated subscription services 	<ul style="list-style-type: none"> ▪ cross-departmental communication and coordination during policy review ▪ cross-departmental oversight during implementation
3. lack of education on laws, rules and policies	<ul style="list-style-type: none"> ▪ training ▪ priority on hiring knowledgeable staff ▪ publications and newsletters 	<ul style="list-style-type: none"> ▪ dissemination of updates and changes ▪ participation in professional associations
4. unauthorized public disclosure of confidential information, including accidental disclosures	<ul style="list-style-type: none"> ▪ training ▪ policies and procedures ▪ secondary review prior to disclosure ▪ separate repositories for confidential information presented to the board 	<ul style="list-style-type: none"> ▪ updating technologies ▪ dedicated job functions and positions for protecting information ▪ statutory protection against accidental disclosure ▪ software tools for redacting information

OPEN GOVERNMENT RISK REPORT

Risk Description	Mitigations	
	<ul style="list-style-type: none"> ▪ encryption and protection capability and procedures 	<ul style="list-style-type: none"> ▪ Information Security Manual
5. failure to timely provide requested public information	<ul style="list-style-type: none"> ▪ calendars ▪ color-coded filing system ▪ policies and procedures ▪ provide more public information on the Internet 	<ul style="list-style-type: none"> ▪ multi-mailbox search ▪ coordination with other departments ▪ technology tools and adequate staffing ▪ training
6. unauthorized and/or accidental destruction, removal, or alteration of public or confidential information	<ul style="list-style-type: none"> ▪ automated system controls ▪ security authorization required for altering, deleting or accessing information ▪ records retention training 	<ul style="list-style-type: none"> ▪ training ▪ backup tapes ▪ policies and procedures ▪ Information Security Manual
7. failure to destroy information in accordance with records retention schedule	<ul style="list-style-type: none"> ▪ training ▪ policies and procedures 	<ul style="list-style-type: none"> ▪ limited liability ▪ annual purge, including disposition log
8. inadequate staffing for processing open records requests	<ul style="list-style-type: none"> ▪ cross-training ▪ adjust response time based on workload ▪ develop production schedules based on number and volume of requests ▪ increase FTEs 	<ul style="list-style-type: none"> ▪ automated tools (e.g., redacting and tracking software) ▪ provide more public information on the Internet ▪ intern program
9. issues with implementation of new technologies	<ul style="list-style-type: none"> ▪ software upgrades ▪ training on software 	<ul style="list-style-type: none"> ▪ funding for technology ▪ ongoing communication with vendor
10. potential civil litigation as a result of open records requests	<ul style="list-style-type: none"> ▪ adequate legislation ▪ compliance with existing laws 	<ul style="list-style-type: none"> ▪ pursuing available remedies
11. criminal violations relating to open records and confidentiality laws	<ul style="list-style-type: none"> ▪ training ▪ timely responses to requests ▪ board and staff education and training 	<ul style="list-style-type: none"> ▪ culture of adhering to confidentiality laws ▪ policies and procedures ▪ leadership awareness
12. criminal violations for failing to comply with open meetings act	<ul style="list-style-type: none"> ▪ knowledgeable general counsel ▪ educated and trained staff ensuring compliance ▪ policies and procedures 	<ul style="list-style-type: none"> ▪ technology tools ▪ educate staff ▪ board training
13. voiding of board actions	<ul style="list-style-type: none"> ▪ knowledgeable general counsel ▪ educated and trained staff ensuring compliance ▪ policies and procedures 	<ul style="list-style-type: none"> ▪ technology tools ▪ educate staff ▪ board training

OPEN GOVERNMENT RISK REPORT

Risk Description	Mitigations	
14. failure to properly post or to comply with meeting notices (e.g., timing, verbiage, substance of wording versus content of deliberation)	<ul style="list-style-type: none"> ▪ use of technology for managing, enforcing and communicating posting deadlines ▪ policies and procedures 	<ul style="list-style-type: none"> ▪ redundancy in the process and responsibilities ▪ training for participants in board meetings
15. problems with use of technology to facilitate and communicate meetings and access and manage meeting materials (e.g., webcasting, videoconferencing)	<ul style="list-style-type: none"> ▪ policies and procedures ▪ testing and monitoring technology prior to meetings ▪ contract provisions 	<ul style="list-style-type: none"> ▪ due diligence in selecting contractor ▪ maintain awareness of latest technology options ▪ training
16. failure to communicate and manage legal holds for open records requests - identifying and retaining documents and releasing the hold	<ul style="list-style-type: none"> ▪ identify and maintain responsive information 	<ul style="list-style-type: none"> ▪ notify personnel of legal holds

Action Item	Owner	Target Date	Revised	Status	Comments
Additional online training regarding confidential information and information awareness (Risk 3, 4, 6, 11)	Human Resources, Information Security, Management	6/2013		Complete	The Information Awareness Quiz and Confidentiality/HIPAA Training are web-based and issued agency-wide on an annual basis. Both the quiz and training require acknowledgement of completion. The Confidentiality/ HIPAA Training was recently updated to include recent revisions to the Omnibus Bill.
Develop departmental HIPAA training and method for tracking completion (Risk 4, 6)	Management, Human Resources	6/2015		In Progress	Departmental HIPAA training has been developed for the Health & Insurance Benefits department. This training will be used to develop similar training for other departments accessing HIPAA information.
Complete hiring of additional staff to help process public information requests and media	Legal Services, Communications	5/2013	7/2013	Complete	A new Open Records attorney has been hired and has been handling requests since July 2013.

OPEN GOVERNMENT RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
inquiries (Risk 5, 8)					It was decided in 2013 not to hire additional communications staff at that time to process media inquiries related to open records requests.
Replenish staffing levels due to recent departures (Risk 5, 8)	Legal Services	6/2014		In Progress	Senior Legal Specialist for open records resigned and the position is vacant.
Implement technology tool to process, track, and better respond to public information requests (Risk 5, 9)	Legal Services	6/2013		Complete	Software has been installed, configuration has been done, two training sessions have been held, and the tool is being used to process requests.
Identifying and resolving technical issues with software interfacing through better communication with vendor (Risk 5, 9)	Legal Services	Ongoing		In Progress	
Evaluate and investigate P8 Records Manager capabilities for application to e-records repositories (Risk 7)	Records Management	8/2014	8/2015	Planned	Cross-reference Records Management action item for Risk #2, 5, 9, 10.
Seek opportunities to recover actual costs incurred in processing open records requests (Risk 8)	Legal Services	9/2015		Planned	
Review litigation hold procedures and recommend changes, if any, including developing and implementing training as needed (Risk 16)	Legal Services	9/2014		Planned	Cross-reference Records Management action item for Risk #6.
Legal will update the frequency of communicating legal holds with business units (Risk 16)	IMD, Legal Services	3/2014	12/2014	In Progress	Action item description revised to better reflect the mitigation strategy for the risk. Cross-reference Records Management action item for Risk #6.

OPEN GOVERNMENT RISK REPORT

Monitoring Activities		
Key Mitigation	Monitored By	Monitoring Process
Training (Risk 4, 6, 7, 11)	Information Security, Human Resources	Online training regarding confidential information is provided to new employees as part of orientation to existing employees annually. An information awareness quiz is also provided annually. Recently implemented online training for employees on records management. Completion of training is tracked using SharePoint.
Policies and Procedures (Risk 4, 5, 6, 7, 14)	Legal Services, Information Security, Management, Records Management,	Policies and procedures are reviewed and updated as needed. Conducted an annual refresher training for staff on records management policies and procedures.
Technology (Risk 4, 8, 9, 14, 15)	Legal Services	Automated software tools for redacting sensitive or confidential information. Use software to track open records requests.

RECORDS MANAGEMENT RISK REPORT

RISK OWNER

Marianne Woods Wiley

REPORTING DATE

June 2014

GOAL

Preserve and destroy TRS records through adherence to laws and rules, and by applying TRS records management policies and practices.

OVERALL RISK

An ineffective records management program could result in loss or accidental release of records, loss of credibility, delays in accessing/destroying records, and increased scrutiny and oversight.

OBJECTIVE

Improve compliance with the retention schedules with respect to e-records.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts many of the risks with existing mitigations, but others require further mitigation. Additional mitigation strategies are in progress or planned to further reduce risks related to e-records, records repositories, and legal holds. Key mitigations include training session with records liaisons and employees, annual purge process, ongoing communication with records liaisons, and reviewing and monitoring email and network drive storage reports. Recent activities include:

- Implemented online training for employees
- Implemented the disposal for backup tapes
- File plans implemented in limited number of departments
- More active monitoring of email and network storage volumes and providing online access to management for review
- Annual purge
- Developed procedure to review and delete e-records accounts (email and network drive) for terminated/terminating employees

RISK DETAILS

Risk Description

Mitigations

1. noncompliance with retention schedule, policies and procedures

- | | |
|---|---|
| <ul style="list-style-type: none"> ▪ communication with employees regarding retention periods and purge process ▪ annual refresher training for employees ▪ annual purge process | <ul style="list-style-type: none"> ▪ training sessions with records liaisons ▪ review and monitor email and network drive storage reports |
|---|---|

RECORDS MANAGEMENT RISK REPORT

Risk Description	Mitigations	
2. lack of time and resources to properly manage records	<ul style="list-style-type: none"> ▪ file plans and standardized folder structures ▪ future planning for automating process ▪ streamline process 	<ul style="list-style-type: none"> ▪ dedicated staff to help manage records (Investment Management Division)
3. lack of understanding of retention schedule and policies	<ul style="list-style-type: none"> ▪ communication with employees regarding retention periods and purge process ▪ streamline process ▪ current and future planning for automating process ▪ utilizing existing software with records management features 	<ul style="list-style-type: none"> ▪ annual purge process ▪ training sessions with records liaisons ▪ annual refresher training for employees ▪ file plans and standardized folder structures ▪ consult with records management and legal services staff
4. records retention schedule is not updated or maintained and does not correlate with records actually maintained	<ul style="list-style-type: none"> ▪ training sessions with records liaisons and employees ▪ annual purge process 	<ul style="list-style-type: none"> ▪ review schedules periodically ▪ communication with records liaisons
5. records laws and TSL rules are complex and not easily understood and implemented	<ul style="list-style-type: none"> ▪ ongoing communication with TSL 	<ul style="list-style-type: none"> ▪ consult with legal services
6. failure to manage legal holds – identifying, retaining and releasing documents – resulting in retaining records too long or disposing of them prematurely	<ul style="list-style-type: none"> ▪ Legal Services sends follow-up reminders ▪ file plans and standardized folder structures ▪ identify and maintain responsive information 	<ul style="list-style-type: none"> ▪ implemented automated open records ▪ researching discovery and legal hold tools ▪ notify personnel of legal holds
7. over-reliance on expanding IT resources to retain records (e.g. physical equipment, staff)	<ul style="list-style-type: none"> ▪ apply retention schedule ▪ annual refresher training for employees ▪ annual purge process 	<ul style="list-style-type: none"> ▪ budget process ▪ file plans and standardized folder structures ▪ training sessions with records liaisons
8. numerous repositories for records and data that require technical proficiency for end users to operate and are difficult to manage for compliance	<ul style="list-style-type: none"> ▪ file plans and standardized folder structures ▪ streamline process ▪ departmental training 	<ul style="list-style-type: none"> ▪ future planning for enterprise architecture for standardized repositories
9. technology used is not available or reliable for accessing or managing records (e.g., old media, expired licenses)	<ul style="list-style-type: none"> ▪ up-to-date backup procedures ▪ emergency purchasing flexibility ▪ coordination between legal and IT on policy 	<ul style="list-style-type: none"> ▪ disaster recovery/ business continuity exercises ▪ backup tape retention and disposition policy ▪ contract for services
10. improper use of new technologies to communicate, create, and maintain TRS records (e.g., mobile devices, cloud-based)	<ul style="list-style-type: none"> ▪ policies and procedures ▪ training and education on appropriate use of technology 	<ul style="list-style-type: none"> ▪ encryption ▪ research, awareness and implementation of new technologies

RECORDS MANAGEMENT RISK REPORT

Risk Description	Mitigations	
storage, removable media, etc.)	<ul style="list-style-type: none"> ▪ specialized expertise 	<ul style="list-style-type: none"> ▪ annual refresher training for staff
11. third parties who generate and hold TRS records fail to comply with TRS policy and procedures	<ul style="list-style-type: none"> ▪ awareness of documentation kept by third parties ▪ contract provisions 	<ul style="list-style-type: none"> ▪ contract management ▪ business associate agreements ▪ purchasing specifications in RFP

Action Item	Owner	Target Date	Revised	Status	Comments
Annual refresher training for staff on records management policies and procedures (Risk 1, 3, 5)	Records Management	8/2014		Complete	Training implemented in March 2014.
Develop automated workflow to streamline the review and disposition of e-records accounts (email and network) for terminating/terminated employees (Risk 1, 7)	Records Management, IT, Management, Human Resources	6/2014		In Progress	
Complete file plans (Risk 2, 5, 7)	Investment Management Division (IMD)	12/2013		Complete	
Evaluate and investigate P8 Records Manager capabilities for application to e-records repositories (Risk 2, 5, 8, 9)	Records Management	8/2014	8/2015	Planned	Cross-reference Open Government action item for Risk #7.
Update retention schedule to correlate with records actually maintained (Risk 4)	IMD, Records Management	8/2014		In Progress	Records Management is reviewing the first draft.
Review litigation hold procedures and recommend changes, if any, including developing and implementing training as needed (Risk 6)	Legal Services	9/2014		Planned	Cross-reference Open Government action item for Risk #16.
Advising on the implementation of policy and procedures for disposition of backup tapes (Risk 6)	Legal Services	6/2013		Complete	Legal consulted with outside counsel to ensure that the policy and procedures are implemented in compliance with TRS' legal obligations.
Legal will update the frequency of communicating	IMD, Legal Services	3/2014	12/2014	In Progress	Action item description revised to

RECORDS MANAGEMENT RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
legal holds with business units (Risk 6)					better reflect the mitigation strategy for the risk. Cross-reference Open Government action item for Risk #16.
Implement technology tool to process, track, and better respond to public information requests (Risk 6)	Legal Services	6/2013		Complete	Software has been installed, configuration has been done, two training sessions have been held, and the tool is being used to process requests.
Advising on the implementation of new IT technologies for retention and disposition capabilities to ensure that they comply with records management policies (Risk 7, 8)	Legal Services, IT, Records Management	8/2016		Planned	
Implement records retention schedule in repositories for records and data (Risk 8)	IMD	12/2014	12/2015	Planned	

Monitoring Activities			
Key Mitigation	Monitored By	Monitoring Process	Comments
Review and monitor email and network drive storage reports (Risk 1)	Records Management, IT, Management	Review to determine if departments are complying with the records retention schedule.	
Training sessions with records liaisons and employees (Risk 1, 3, 4, 5, 7, 10)	Records Management	Conduct annual training sessions.	Training sessions include review of the purge process and past history.
Annual purge process (Risk 1, 3, 4, 7)	Records Management	Analyze purge results	Review volume and record series not purged.
Ongoing communication with records liaisons (Risk 4)	Records Management	Communication with liaisons includes annual purge, training, retention schedule amendments, and other records management topics.	

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

RISK OWNER

Carolina de Onís

REPORTING DATE

June 2014

GOALS

- Adhere to and analyze current laws, rules, and policies (e.g., maintain tax qualification status).
- Render competent advice on legal risk management and awareness, manage litigation risks, and negotiate contracts to address risks.

OVERALL RISK

Non-compliance with laws and rules could lead to penalties, fines, liability and litigation; impaired ability to conduct business; burdensome oversight; third-party investigations/audits; adverse legislation; increased scrutiny; or loss of tax qualification status.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts all risks. Additional mitigation strategies are in progress or planned to ensure risks related to SEC Regulation M Rule 105, international market regulations, and the contract administration manual remain at an acceptable risk level. Key mitigations include internal and/or external counsel, regular review of plan terms, audits, technology solutions, internal procedures, monitoring regulators/information resources, communication, and training.

RISK DETAILS

Risk Description	Mitigations	
1. failure to recognize changes in federal law that require modifications in plan provisions to maintain plan qualification status	<ul style="list-style-type: none"> ▪ retain both in-house and outside counsel with specialized expertise in applicable tax laws ▪ participate in multiple retirement related associations 	<ul style="list-style-type: none"> ▪ receive notice or guidance from actuary ▪ periodically apply for a revised determination from IRS regarding the plan's qualified status
2. failure to operate in accordance with plan terms and requirements of federal and state law in order to maintain plan qualification status	<ul style="list-style-type: none"> ▪ perform operational audits to test controls or determine need for controls ▪ modify software applications to automatically enforce Internal Revenue Code (IRC) limits ▪ internal audits ▪ internal procedures 	<ul style="list-style-type: none"> ▪ regularly scheduled reviews of TRS rules to ensure that they continue to support compliance with federal and state law ▪ keep TRS departments informed of changes to plan year limits ▪ internal and external counsel
3. failure to monitor or obtain a revision to proposed state legislation that has a detrimental effect on plan qualification status	<ul style="list-style-type: none"> ▪ executive director and the director of governmental relations monitor legislation that may impact TRS and assign bills to appropriate 	<ul style="list-style-type: none"> ▪ use the authority under Section 825.506, Government Code, to adopt rules that ensure compliance with federal plan qualification

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Risk Description	Mitigations	
	<ul style="list-style-type: none"> TRS staff for review ▪ in-house attorneys evaluate proposed state legislation to assess possible effects on qualification status 	<ul style="list-style-type: none"> requirements by effectively modifying adopted state legislation
4. failure to pursue appropriate recoveries	<ul style="list-style-type: none"> ▪ redundant sources of information ▪ retained custodian to file domestic securities class action claims ▪ internal review and monitoring of custodian 	<ul style="list-style-type: none"> ▪ analysis of foreign recovery opportunities ▪ opt-out analysis of domestic actions to increase recoveries ▪ internal and external counsel
5. failure to request IRS determination letter as appropriate	<ul style="list-style-type: none"> ▪ monitor IRS communications/ pronouncements ▪ internal and external tax counsel ▪ networking 	<ul style="list-style-type: none"> ▪ multiple staff monitor determination letter requirements
6. failure to comply with Dodd-Frank requirements	<ul style="list-style-type: none"> ▪ monitor SEC and CFTC requirements ▪ multiple staff monitor Dodd-Frank 	<ul style="list-style-type: none"> ▪ internal and external investment counsel ▪ networking
7. failure to comply with federal securities laws	<ul style="list-style-type: none"> ▪ monitor SEC and CFTC requirements ▪ multiple staff monitor securities laws 	<ul style="list-style-type: none"> ▪ internal and external investment counsel ▪ networking
8. failure to comply with investment policies	<ul style="list-style-type: none"> ▪ internal and external compliance systems ▪ auditor's review of investment compliance ▪ communication 	<ul style="list-style-type: none"> ▪ review training needs ▪ internal investment counsel
9. failure to comply with ethics policies	<ul style="list-style-type: none"> ▪ training ▪ annual compliance certification ▪ risk of personnel actions 	<ul style="list-style-type: none"> ▪ internal counsel ▪ clear drafting and guidance in policies ▪ reviewed by fiduciary counsel
10. failure to comply with state laws	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ monitor sources of information ▪ communication 	<ul style="list-style-type: none"> ▪ networking ▪ clear advice
11. failure to comply with or recognize foreign laws	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ monitor sources of information ▪ communication 	<ul style="list-style-type: none"> ▪ networking ▪ clear advice
12. failure to manage litigation risks appropriately	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ communication 	<ul style="list-style-type: none"> ▪ internal procedures ▪ appropriate technology
13. failure to have appropriate language in investment contracts to allocate risk	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ clear guidelines 	<ul style="list-style-type: none"> ▪ networking ▪ management involvement

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Risk Description	Mitigations	
14. failure to comply with SEC Regulation M Rule 105 requirements	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ networking ▪ communication 	<ul style="list-style-type: none"> ▪ develop policy and/or training ▪ researching technology options
15. failure to comply with international market regulations	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ clear advice ▪ monitor sources of information ▪ networking ▪ communication ▪ resources and services 	<ul style="list-style-type: none"> ▪ researching technology and information service options ▪ retained international tax advisor ▪ custodian bulletins ▪ electronic compliance alerts ▪ other custodian
16. failure to comply with personal trading policies	<ul style="list-style-type: none"> ▪ training ▪ automated trade pre-clearance system ▪ require trade confirmations ▪ reconciliations of personal trading ▪ internal counsel 	<ul style="list-style-type: none"> ▪ analysis of personal trading to identify abusive trading ▪ procedures for handling of material non-public information (and information barriers)
17. inclusion of ultra vires provisions in contracts	<ul style="list-style-type: none"> ▪ internal and external counsel ▪ certification of purchasing staff ▪ legal research including attorney general opinions 	<ul style="list-style-type: none"> ▪ training ▪ standard forms and guidelines ▪ due diligence questionnaires
18. failure to use prudent processes to identify qualified vendors	<ul style="list-style-type: none"> ▪ training ▪ communication ▪ clear advice ▪ fiduciary counsel can be consulted 	<ul style="list-style-type: none"> ▪ internal counsel ▪ certification of purchasing staff ▪ standard forms and guidelines ▪ due diligence forms
19. failure to comply with the contract administration manual	<ul style="list-style-type: none"> ▪ communication ▪ internal counsel 	<ul style="list-style-type: none"> ▪ internal procedures ▪ consultation with purchasing

Action Item	Owner	Target Date	Revised	Status	Comments
Develop training (Risk 14)	Legal Services	6/2014		In Progress	
Researching technology options (Risk 14, 15)	Legal Services, Investment Management Division	6/2014		In Progress	

TRS Stoplight Report Category

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
Follow-up with Contract Management regarding training, audit compliance, and revising manual to streamline requirements (Risk 19)	Legal Services, Contract Management	1/2015		Planned	Coordination between Legal Services and Purchasing.

Monitoring Activities			
Key Mitigation	Monitored By	Monitoring Process	Comments
Internal and/or external counsel (All risks)	Legal Services	Conduct performance evaluations; collaborative approach to providing legal services; scope of work in contracts; adherence to professional standards; and regularly review deliverables.	Performance evaluations scheduled for August 2014.
Regular review of plan terms (Risk 2, 3)	Legal Services	Seek IRS determination letter every five years; review with outside counsel; and legal review of legislation.	
Audits (Risk 2, 8)	Internal Audit	Quarterly investment policy testing; regularly meet and communicate with the auditors; and Legal Services is an audit resource.	
IT Solutions (software applications) (Risk 2, 8, 12, 15, 16)	Legal Services, Information Technology	Survey the market; consult with system users; write applications to adhere compliance standards; test system during implementation and on an ongoing basis.	
Internal procedures (Risk 2, 12, 19)	Legal Services, Business Units	Collaborative approach to providing legal services and redundant information sources.	
Monitoring regulators/information sources (Risk 5, 6, 7, 10, 11, 15)	Legal Services	Review subscriptions and access to multiple sources of information.	
Communication (Risk 8, 10, 11, 12, 14, 15, 18, 19)	Legal Services, Executive Council	Regular meetings; collaborative approach to providing legal services; third-party research; and discussions on policy and procedures.	
Training (Risk 9, 16, 17, 18)	Purchasing, Legal Services, Human Resources	Schedule and track employee training; multiple departments involved; use of standard forms; and frequent consultation.	

TEAM PROGRAM RISK REPORT

RISK OWNER

Ken Welch

REPORTING DATE

June 2014

GOAL	OVERALL RISK	OBJECTIVE
Implement cost effective, efficient, and sustainable processes and systems that enable TRS to serve its members, employers, and annuitants.	System design, implementation and functionality of the new processes and systems do not meet the growing demands of TRS in service of its members. Program/project implementation schedule and cost exceeds original estimates.	Implement modern pension and benefit information systems that allow TRS staff to serve our members and deliver accurate benefits effectively and timely by August 2017.

SUMMARY

Risks identified for the TEAM Program involve people, processes, project management, and change. Many of the risks are being appropriately mitigated and management has accepted those risks with existing mitigations. Other risks need further mitigation and action items are in progress for those risks. A summary of activities since the last board reporting in December 2013 include the following:

- TEAM Repository site transitioned to SharePoint 2010.
- A vendor meet and greet was held for agency staff. This proved to be a very successful meeting. Employees were able to meet the vendors and ask questions about specific projects and vendor roles.
- TEAM Advisory Groups 2014 formed as part of the Organizational Change Management (OCM) Project activities.
- TEAM Huddles were held with the Executive and Deputy Directors. These meetings allowed employees to ask questions about the TEAM Program and other agency-related questions. CMT members were in attendance to help facilitate TEAM-related questions.
- TEAM Connect SharePoint website launched in February 2014. The site provides status information on the TEAM Program in a fun and informative environment.
- Two additional projects under the TEAM Program were launched, the Business Procedures and Training Project and the Decommissioning of the Legacy Systems Project.
- The Project Plan for the Financial System Replacement was completed.
- The Business Rules Project is completed and a year ahead of schedule.

TEAM PROGRAM RISK REPORT

RISK DETAILS

Risk Description	Mitigations	
1. conflicting priorities between existing work and TEAM Program-related assignments	<ul style="list-style-type: none"> ▪ prioritize workload ▪ communication ▪ program management services from Provaliant ▪ more resources ▪ extend schedule ▪ willingness to negotiate ▪ Independent Program Assessment (IPA) vendor oversight ▪ intern program 	<ul style="list-style-type: none"> ▪ reallocate workload ▪ approval to backfill positions ▪ weekly TEAM dashboard ▪ clear direction ▪ be aware of legislation and planning ▪ board/management support ▪ OCM project ▪ prioritization for service requests that require IT resources
2. decisions not made timely and/or made at inappropriate level	<ul style="list-style-type: none"> ▪ program/project management action/decision logs ▪ weekly status updates ▪ ESC and CMT charters ▪ assign accountability for action items related to timely decisions ▪ standing agenda item on the weekly ESC meeting agenda to discuss TEAM project issues and decision due dates/milestones ▪ weekly TEAM dashboard ▪ escalate issues if needed 	<ul style="list-style-type: none"> ▪ program management services from Provaliant ▪ clear direction ▪ decision-making to the appropriate management level ▪ direct communication with CMT and ESC ▪ approval to backfill positions ▪ extend schedule ▪ willingness to negotiate ▪ IPA vendor oversight ▪ RACI chart ▪ change management process
3. lack of resources (people)	<ul style="list-style-type: none"> ▪ TRS/TEAM staffing plans ▪ prioritize workload ▪ approval to backfill positions ▪ extend schedule ▪ willingness to negotiate ▪ IPA vendor oversight 	<ul style="list-style-type: none"> ▪ program/project milestones ▪ program management services from Provaliant ▪ weekly TEAM dashboard ▪ resource loaded project schedule ▪ clear direction
4. internal TEAM governance structure operating inefficiently	<ul style="list-style-type: none"> ▪ weekly CMT and ESC meetings ▪ committee assignments ▪ OCM project ▪ continue to review “lessons learned” from other 	<ul style="list-style-type: none"> ▪ effective communication ▪ risk assessments at program and project level ▪ program management services from Provaliant ▪ weekly TEAM dashboard

TEAM PROGRAM RISK REPORT

Risk Description	Mitigations	
	<ul style="list-style-type: none"> ▪ pension systems ▪ IPA vendor oversight ▪ CMT regularly attends Executive Briefing meetings ▪ action/decision logs 	<ul style="list-style-type: none"> ▪ clear direction ▪ RACI chart ▪ status reports
5. inaccurate planning estimates (i.e., cost and schedule)	<ul style="list-style-type: none"> ▪ obtain estimates ▪ periodic reassessments and communication ▪ weekly status meetings 	<ul style="list-style-type: none"> ▪ research vendors and other pension funds ▪ vendor demonstrations
6. failure to manage change (e.g., scope, schedule, budget)	<ul style="list-style-type: none"> ▪ communicate, monitor, and enforce the change control process ▪ new project launch meetings with teams ▪ expectations communicated up front ▪ program management services from Provaliant ▪ weekly TEAM dashboard ▪ clear direction ▪ all projects follow the same organizational structure 	<ul style="list-style-type: none"> ▪ monthly internal budget meetings ▪ quarterly LBB reporting ▪ status reports ▪ reduce scope ▪ more resources ▪ willingness to negotiate ▪ IPA vendor oversight
7. lack of staff acceptance	<ul style="list-style-type: none"> ▪ vendor demonstrations ▪ staff involvement ▪ planning ▪ research ▪ celebrate successes ▪ getting buy-in through involvement 	<ul style="list-style-type: none"> ▪ OCM project ▪ recognition ▪ effective execution of the Communications Plan ▪ personnel position changes ▪ training ▪ TEAM huddles
8. excessive and time consuming Open Records requests	<ul style="list-style-type: none"> ▪ involve Attorney General's office if it becomes too burdensome 	<ul style="list-style-type: none"> ▪ focused legal services resources
9. lack of staff with appropriate skill sets	<ul style="list-style-type: none"> ▪ OCM project (e.g., train the trainer) ▪ use contractors ▪ new FTEs ▪ on-the-job training ▪ embedding staff with vendors 	<ul style="list-style-type: none"> ▪ train existing staff ▪ ability to obtain vendors/ contractors/employees with expertise ▪ resource loaded project schedule ▪ staffing plan
10. change in executive leadership/board resulting in different priorities	<ul style="list-style-type: none"> ▪ communication to new leadership the importance of supporting program and projects 	<ul style="list-style-type: none"> ▪ communicate the value proposition ▪ solicit board support

TEAM PROGRAM RISK REPORT

Risk Description	Mitigations	
11. ineffective communication	<ul style="list-style-type: none"> ▪ effective execution of the Communications Plan ▪ TEAM repository ▪ recorded webinars ▪ training ▪ project interdependency meetings ▪ program manager involvement 	<ul style="list-style-type: none"> ▪ open meetings ▪ solicit employee feedback ▪ OCM project ▪ REO project ▪ program manager liaison between TRS and vendors
12. legislative changes	<ul style="list-style-type: none"> ▪ be aware of legislation and planning ▪ board/management support ▪ communication of upcoming changes 	<ul style="list-style-type: none"> ▪ governmental relations ▪ change control process
13. TEAM Project meetings have too many additional TRS staff attending (inefficient meetings and use of resource time)	<ul style="list-style-type: none"> ▪ developed RACI chart to show roles and responsibilities ▪ identify SMEs needed throughout the projects 	<ul style="list-style-type: none"> ▪ clear/concise agendas with purpose and expected outcome ▪ define Core Project Team as more projects begin
14. lack of patience to adhere to contracted schedule and methodology (TRS schedules and vendor schedules conflict to discuss project-related topics)	<ul style="list-style-type: none"> ▪ work with vendor to bring forward items on the schedule as long as there is no risk of negatively affecting the schedule 	
15. unknown interdependencies in schedule/project	<ul style="list-style-type: none"> ▪ regular project interdependency meetings 	<ul style="list-style-type: none"> ▪ consolidated action/decision logs ▪ interdependency schedule

Action Item	Owner	Target Date	Revised	Status	Comments
Hire TEAM FTEs as outlined in the staffing plan approved by the TRS Board of Trustees (Risk 3)	TEAM Project Sponsors & Managers	Ongoing		In Progress	TRS has filled positions that were allocated during fiscal year 2013 budget. CMT is reviewing staffing plan for 2014 budget and future to determine if staffing plan originally provided is adequate or if additional resources will be needed. This will be an ongoing action item based on the staffing plan priorities.
Hire additional OCM project FTEs and select vendor for specific deliverables if	OCM Project Sponsor &	3/2013	11/2013	Complete	An offer was made to fill the third FTE position. HR is waiting on the background check to be completed. At this

TEAM PROGRAM RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
needed (Risk 7, 9)	Manager				time, HR would like to keep the option for hiring a vendor open.
Hire additional OCM project FTEs (Risk 7, 9)	OCM Project Sponsor & Manager	8/2014		In Progress	All HR OCM openings are filled. A request for one additional FTE—in lieu of a vendor--has been submitted. The target date is August 2014.

Monitoring Activities			
Key Mitigation	Monitored By	Monitoring Process	Comments
Project management (Risk 1, 2, 3, 4, 6)	Program & Project Manager	Minimum weekly program/project meeting to review all risk and mitigation plan updates with the program/project manager and sponsor. The PMO meets with project managers regularly to ensure project consistency. As new projects begin, they will utilize the Service Request Process to help ensure that resources are tracked better.	A project sponsor and project manager is assigned to each project; this has been effective to manage the various concurrent projects.
Weekly reviews (Risk 1, 2, 3, 4, 5, 6)	Project Sponsor	Project manager works with project sponsor regarding the reviewing, monitoring, and updating of the risks on the status reports. Project sponsor reports risks and issues to the CMT and ESC.	Reassessing the list of risks on the status report is completed as needed; issues or changes are communicated to the CMT or ESC. The drop dead lead time date is monitored to ensure the key risk is mitigated.
OCM project (Risk 1, 4, 7, 9, 11)	Project Sponsor, Program & Project Manager	Human Resources (HR) will solicit feedback and suggestions throughout the life of the TEAM Program through meetings, online surveys, advisory groups, focus sessions, and one-on-one interviews. The project sponsor provides regular updates to the CMT and receives feedback. The executive sponsor provides updates to the ESC	Two employee advisory groups meet monthly to provide employee input. Once the new HR FTEs are on board, focus sessions will be conducted to gather input from all Red River employees. A plan for training employees and managers on OCM skills is being developed. Communication from the executive director and deputy director occurs through a combination of all-hands

TEAM PROGRAM RISK REPORT

Monitoring Activities			
Key Mitigation	Monitored By	Monitoring Process	Comments
		and receives feedback. Written weekly project status updates are provided to the TEAM program managers and are added to the weekly risk log/status summary. The IPA vendor also provides feedback regarding OCM efforts.	meetings to update employees about the TEAM Program and department TEAM Huddles to answer department-specific questions and concerns about TEAM. An internal website devoted to employee-friendly communications about the TEAM Program has launched and is regularly updated. HR will continue to interview managers and randomly selected employees of departments most impacted by the TEAM Program and adjust OCM plans as needed based on the input received.
Action and decision logs (Risk 2, 4)	ESC, CMT, Program & Project Manager	Documented action and decisions are received and reviewed weekly by the ESC, CMT, and program and project manager.	Logs provide documented support and quick reference for actions and decisions made that impact a project or the program. Separate logs are in place for the ESC, CMT, and individual projects. Project-level logs are part of the weekly status report.
Risk assessments (Risk 4)	Risk Management, Project Sponsor, Program & Project Manager	Risk assessments are conducted and tracked on the risk log. Results are shared with the ESC, CMT, project sponsor, and program and project manager.	As projects begin, initial risk assessments are conducted. In addition, the risks are reviewed every other month or more frequently if necessary. Team members review the risks and mitigations for addition to the risk log as well as reassessing impact and likelihood.
Meeting minutes (Risk 4, 5)	ESC, CMT, Program & Project Manager	Meeting agenda, minutes and decisions are documented and sent out for review. These are available in the TEAM Repository for all staff.	Minutes are reviewed by all participants and formally approved during meetings. These are an effective communication tool and also provide background and validation of actions taken and decisions made during project meetings.