Risk Management Committee

June 2016

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

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

AGENDA

**June 16, 2016 – 1:45 p.m.
TRS East Building, 5th Floor, Boardroom**

1. Consider the approval of the proposed minutes of the April 7, 2016 committee meeting – Karen Charleston

2. Receive report on Enterprise Risk Management – Jay LeBlanc and Michelle Pagán

3. Risk Management Program Review Report – Jay LeBlanc and Cristi Woods

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
April 7, 2016

The Risk Management Committee of the Board of Trustees of the Teacher Retirement System of Texas met on April 7, 2016 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:
Nanette Sissney, TRS Trustee	Rebecca Smith, TRS
Anita Palmer, TRS Trustee	Heather Traeger, TRS
Dolores Ramirez, TRS Trustee	Katy Hoffman, TRS
Brian Guthrie, TRS	Kyle Weigum, TRS
Ken Welch, TRS	Dan Junell, TRS
Carolina de Onís, TRS	Lynn Lau, TRS
Britt Harris, TRS	Dr. Keith Brown, Investment Advisor
Jerry Albright, TRS	Steve Huff, Fiduciary Counsel, Reinhart Boerner Van Deuren s.c.
Jase Auby, TRS	Steve Voss, Aon Hewitt
Chi Chai, TRS	Philip Mullins, Texas Retired Teachers Association
James Nield, TRS	Ernie Sanders, HPE
Karen Morris, TRS	Ann Fickel, Texas Classroom Teachers Association

Ms. Charleston called the meeting to order at 1:07 p.m. All committee members were present.

1.   Consider the approval of the proposed minutes of the November 19, 2015 committee meeting – Committee Chair.

On a motion by Mr. Corpus, seconded by Mr. Barth, the committee approved the proposed minutes of the November 19, 2015 meeting, as presented.

2.   Review the Investment Risk Report – Jase Auby.

Mr. Auby introduced Mr. James Nield, TRS Deputy Chief Risk Officer. He summarized TRS' compliance with certain key risk measures for the pension trust fund. He reported that TRS was in full compliance with all seven key measures, which addressed the following — asset allocation, value at risk (the absolute risk measure), tracking error (the relative risk measure), various leverage measures, trust liquidity, counterparty exposures, and derivatives exposures. Mr. Auby devoted the remainder of his report to presenting detailed information about each of the seven key measures and TRS' compliance with them during the reporting period, the fourth quarter of calendar year 2015 as of December 31, 2015. In response to a question from Dr. Brown regarding a cash tracking error, Mr. Auby stated that the cash tracking error accounts for inflows and outflows for the trust on a daily basis. He stated for Dr. Brown that the maximum gross and net strategic partners leverage were 400% and 125%, respectively. In response to a question from Dr. Brown as to whether the liquidity level in the portfolio could become too high, Mr. Auby stated that there was

an illiquidity budget in the trust, which was allocated to real estate, private equity, and energy and natural resources – the illiquid assets. He stated that the current illiquidity level was appropriate and could go slightly higher; but at a certain level, there could be too many illiquid assets in the trust.

Mr. Auby concluded his presentation by reporting that, as of December 31, 2015, TRS' investment exposures complied with the Investment Policy Statement. He stated that TRS was overweight in real return, underweight in global equity and stable value. All of TRS' risk metrics, he stated, were within established parameters for the reporting period.

Without further discussion, the meeting adjourned at 1:25 p.m.

APPROVED BY THE **RISK MANAGEMENT COMMITTEE** OF THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE 16TH DAY OF JUNE 2016.

ATTESTED BY:

_____   _____
Dan Junell   Date
Secretary to the TRS Board of Trustees

Tab 2

Enterprise Risk Management Report

Jay LeBlanc & Michelle Pagán

Teacher Retirement System of Texas
Stoplight Report – June 2016

🟢 ↔ 403(b)	🔵 ↔ Accounting & Reporting	🔵 ↔ Budget	🔵 ↔ Business Continuity	🔵 ↔ Communications & External Relations
🔵 ↔ Credit	🔵 ↑ Customer Service	🟠 ↔ Employer Reporting	🔵 ↔ Ethics & Fraud Prevention	🔵 ↔ Facilities Management & Planning
🟢 ↔ Governmental/ Association Relations & Legislation	🟡 ↓ Health Care Plans Administration	🟡 ↓ Information Security & Confidentiality	🔵 ↔ Investment Accounting	🟢 ↔ Investment Operations
🟡 ↑ Legacy Information Systems	🟢 ↔ Liquidity/Leverage	🟢 ↔ Market	🔵 ↔ Open Government	🔵 ↑ Pension Benefit Administration
🔵 ↔ Pension Funding	🔵 ↔ Procurement & Contracts	🟠 ↔ Records Management	🔵 ↔ Regulatory, Compliance & Litigation	🔵 ↓ Talent Continuity
🟠 ↔ TEAM Program	🟠 ↑ TRS-ActiveCare Affordability	🔴 ↔ TRS-Care Funding		

STOPLIGHT RISK LEVEL (Threat to Achieving TRS Goals & Objectives)				
HIGH	**ELEVATED**	**CAUTION**	**GUARDED**	**LOW**
🔴	🟠	🟡	🔵	🟢

EXPECTED RISK LEVEL TREND (NEXT 12-24 MONTHS)		
INCREASE	**DECREASE**	**REMAIN CONSTANT**
↑	↓	↔

Stoplight Report Changes

Risk Level Color/Trending Changes	November 2015	June 2016
■ Facilities Management & Planning	🔵 ⬆️	🔵 ↔️
■ Investment Accounting	🟢 ↔️	🔵 ↔️
■ Investment Operations	🔵 ↔️	🟢 ↔️
■ Legacy Information Systems	🟡 ↔️	🟡 ⬆️
■ Procurement & Contracts	🔵 ⬇️	🔵 ↔️
■ TEAM Program	🟡 ⬆️	🟠 ↔️

Teacher Retirement System of Texas
Risk Heat Map – June 2016

Impact

- 5 Major
- 4 Significant
- 3 Moderate
- 2 Minor
- 1 Not Significant

Likelihood

- 1 Not Likely
- 2 Slight
- 3 Probable
- 4 Highly Likely
- 5 Expected
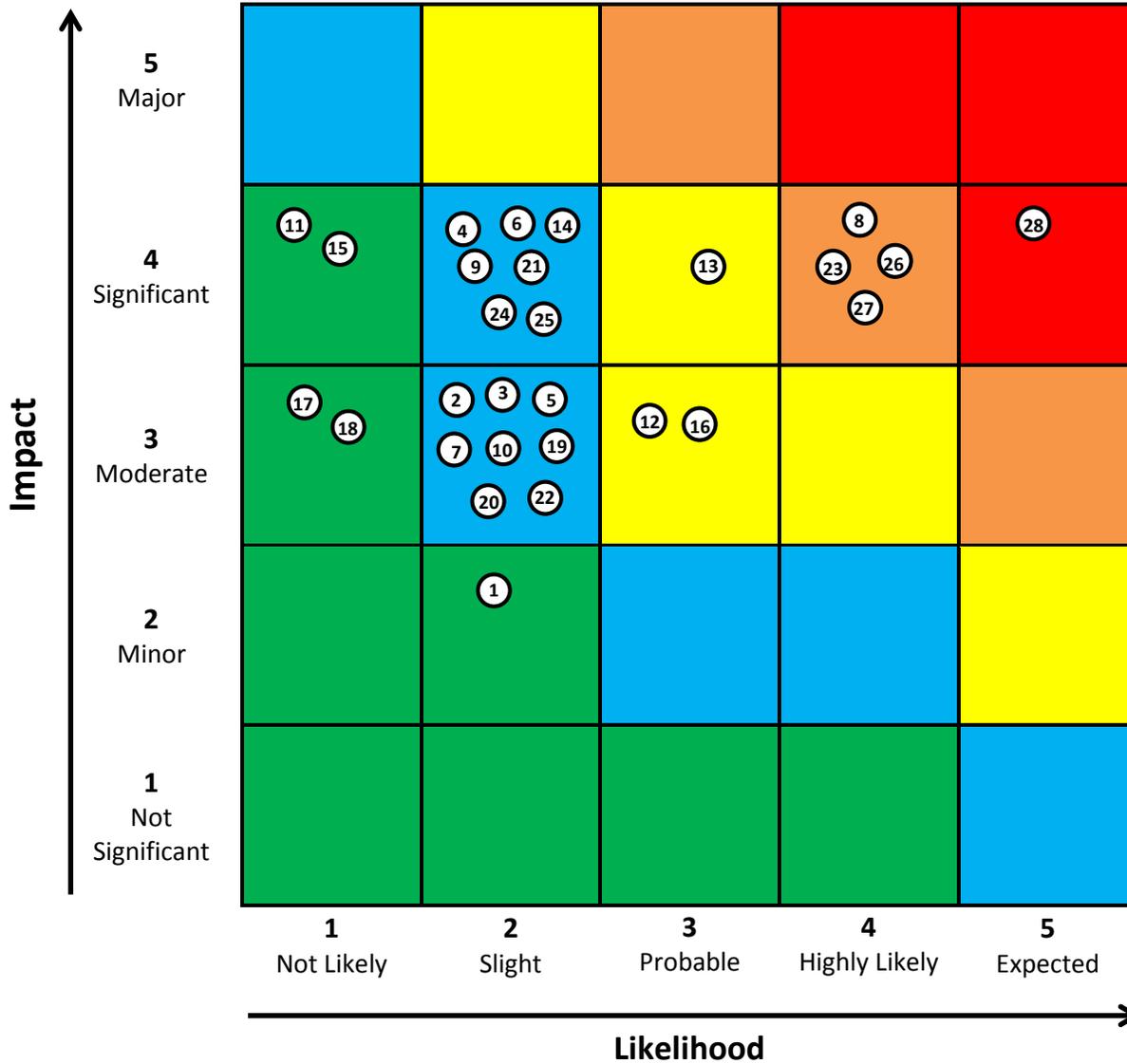
Risk Category (Risk Score)

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

3

Teacher Retirement System of Texas
Risk Level & Trend Summary

Risk Category	11/2014	6/2015	11/2015	6/2016
403(b)	🟢 ↔	🟢 ↔	🟢 ↔	🟢 ↔
Accounting & Reporting	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Budget	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Business Continuity	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Communications & External Relations	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Credit	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Customer Service	🟢 ↔	🟢 ↔	🔵 ↑	🔵 ↑
Employer Reporting	🟠 ↔	🟠 ↔	🟠 ↔	🟠 ↔
Ethics & Fraud Prevention	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Facilities Management & Planning	🔵 ↑	🔵 ↑	🔵 ↑	🔵 ↔
Governmental/Association Relations & Legislation	🟢 ↔	🟢 ↔	🟢 ↔	🟢 ↔
Health Care Plans Administration	🔵 ↔	🔵 ↔	🟡 ↓	🟡 ↓
Information Security & Confidentiality	🟡 ↔	🟡 ↔	🟡 ↓	🟡 ↓
Investment Accounting	🟢 ↔	🟢 ↔	🟢 ↔	🔵 ↔
Investment Operations	🟡 ↓	🔵 ↔	🔵 ↔	🟢 ↔

Risk Category	11/2014	6/2015	11/2015	6/2016
Legacy Information Systems	🟡 ↔	🟡 ↔	🟡 ↔	🟡 ↑
Liquidity/Leverage	🟢 ↔	🟢 ↔	🟢 ↔	🟢 ↔
Market	🟢 ↔	🟢 ↔	🟢 ↔	🟢 ↔
Open Government	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Pension Benefit Administration	🟢 ↔	🟢 ↔	🔵 ↑	🔵 ↑
Pension Funding	🔵 ↓	🔵 ↔	🔵 ↔	🔵 ↔
Procurement & Contracts	🔵 ↔	🔵 ↔	🔵 ↓	🔵 ↔
Records Management	🟡 ↔	🟡 ↔	🟠 ↔	🟠 ↔
Regulatory, Compliance & Litigation	🔵 ↔	🔵 ↔	🔵 ↔	🔵 ↔
Talent Continuity	🔵 ↓	🔵 ↓	🔵 ↓	🔵 ↓
TEAM Program	🟡 ↑	🟡 ↓	🟡 ↑	🟠 ↔
TRS-ActiveCare Affordability	🟠 ↑	🟠 ↔	🟠 ↑	🟠 ↑
TRS-Care Funding	🔴 ↔	🔴 ↔	🔴 ↔	🔴 ↔

Risk Profile Updates

Changes made to:	Goal/Risk Description	Risk Score	Risk Level/ Trend	Comments	
				Risk Level	**Trend**
▪ Accounting & Reporting				✓	
▪ Credit					✓
▪ Employer Reporting					✓
▪ Health Care Plans Administration	✓				✓
▪ Information Security & Confidentiality					✓
▪ Investment Accounting	✓	✓	✓		✓
▪ Investment Operations		✓	✓	✓	
▪ Legacy Information Systems			✓		✓
▪ Open Government					✓
▪ Pension Funding				✓	✓
▪ Procurement & Contracts			✓	✓	✓
▪ Regulatory, Compliance & Litigation					✓
▪ TEAM Program		✓	✓	✓	✓
▪ TRS-ActiveCare Affordability					✓
▪ TRS-Care Funding	✓			✓	✓

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
403(b)	Rebecca Merrill	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.	2,2	⬅➡ (green)	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.	Legislation impacting the 403(b) program is not anticipated. New mitigations are planned for fiscal year 2016; however, the trend is expected to remain 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.	3,2	⬅➡ (blue)	Although there are challenges ahead in the implementation of new systems 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.
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	⬅➡ (blue)	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.

*Light purple shading indicates risk category had a risk assessment this reporting period.

RISK SCORE		STOPLIGHT RISK LEVEL					EXPECTED RISK LEVEL TREND (NEXT 12-24 MONTHS)		
IMPACT	**5**-Major, **4**-Significant, **3**-Moderate, **2**-Minor, **1**-Not Significant	**HIGH**	**ELEVATED**	**CAUTION**	**GUARDED**	**LOW**	**INCREASE**	**DECREASE**	**REMAIN CONSTANT**
LIKELIHOOD	**5**-Expected, **4**-Highly Likely, **3**-Probable, **2**-Slight, **1**-Not Likely	🔴	🟠	🟡	🔵	🟢	⬆	⬇	⬅➡

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

Teacher Retirement System of Texas
Risk Profiles – June 2016

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
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	↔	The 2015 Disaster Recovery Exercise was conducted at the co-location site on October 9-10. All IT systems were successfully restored within the established Recovery Time Objectives. Staff from three core business units verified recovery data quality and performed critical function processes to effectively illustrate continuity capabilities.	Over the next 12-24 months the risk level is not expected to change. Until TEAM is fully implemented, the recovery process for older technologies may continue to be a challenge.
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 at least one credit agency. Credit ratings expected to remain stable.
Customer Service	Barbie Pearson	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.	3,2	↑	High quality customer service is provided by Benefit Services departments based on internal and external feedback. Overall, telephone customer service measures are meeting and routinely exceeding expectations. The addition of Benefit Accounting increases the number and type of customers served. Tools currently used to measure the quality of service and customer satisfaction of reporting entities will need to be reviewed and enhanced to ensure we are delivering superior service to these customers.	Expect increased risk as TEAM requires more subject matter expert involvement while phases are implemented. The implementation of TRUST Phase 1 will increase the need for consistent and managed communication with reporting entities and members. Recent audit findings for reporting entities have unearthed reporting errors that may be increased in volume with full payroll reporting requirements. We expect to see a trend in employment after retirement issues and eligibility determinations resulting in increasing demands for customer service.

Teacher Retirement System of Texas
Risk Profiles – June 2016

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
Employer Reporting	Barbie Pearson	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.	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 2017. TRS staff will complete Employer Certification in June 2016. As of May 2, 2016 we have multiple Reporting Entities beginning the certification process and have one Reporting Entity that has completed their certification.
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 Management & Planning	Don Green	Provide a physical work environment that is safe and enhances productivity.	Inadequate facilities management or ineffective space utilization 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.	TRS has engaged GSC Architects to assist with space planning and design. With their assistance, we have completed redesign of the fourth and fifth floors of the east building and are working on a redesign of the Telephone Counseling Center.

Teacher Retirement System of Texas
Risk Profiles – June 2016

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.	4,1	↔ (green)	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 Plans Administration	Katrina Daniel	Administer retiree and active member health care programs that are valued by enrollees.	Inadequate administration of the health care programs could possibly affect the delivery of health benefits to those who depend on them.	3,3	↓ (yellow)	Much of the administration of the programs is outsourced. Contract monitoring and controls mitigate this risk.	The risk level of this category has been elevated to caution, but the trend is expected to decrease over time as HIB builds internal bench strength for contract oversight.
Information Security & Confidentiality	Chris Cutler 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.	4,3	↓ (yellow)	Depending on the scope of an unauthorized or unintentional release of confidential data, this could have a high impact on TRS. With the existing mitigation strategies in place and new strategies being implemented by the newly formed Information Security Department and Enterprise Security Team the likelihood is fairly low; however, due to the broad landscape of cyber threats and nature of information security, we remain aware that this risk is likely to occur.	Trending for this risk category is trending lower. This trend reflects our increased focus and organization around information security and the information security program. Positive progress continues to be made in how we identify, classify, transmit and monitor our data. While this trend continues to be positive, we should never get comfortable that enough security or mitigating strategies are in place.
Investment Accounting	Don Green	• Ensure all TRS Investments are properly and completely accounted for • Ensure investments are valued correctly • Ensure investment fees are accurately reported and disclosed • Ensure cash flows into and out of the Fund	TRS investments are not properly accounted for, valued correctly or properly reported, and investment-related cash is not properly controlled.	4,2	↔ (blue)	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.	Statement No. 72 of the Governmental Accounting Standards Board (GASB): Fair Value Measurement and Application becomes effective with the FY 2016 CAFR. The pronouncement puts additional control and reporting requirements surrounding the verification of investment fair value on TRS and Investment Accounting and increased the risk of non-compliance or an adverse audit opinion.

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
		• are complete and properly controlled • Accurately calculate performance incentive pay (PIP)					
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.	4,1	🟢↔	Though these processes are operationally complex, compensating controls make this risk very unlikely. Therefore, the threat to TRS not achieving its investment goals and objectives is low.	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.	4,1	🟢↔	Though these processes are operationally complex, compensating controls make this risk very unlikely. Therefore, the threat to TRS not achieving its investment goals and objectives is low.	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	• 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.	4,1	🟢↔	Though communication of inaccurate information, to both internal and external parties, could result in a threat to TRS investment decisions, compensating controls make this risk very unlikely, indicating that the risk is low.	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.

(Left vertical header spanning the three bottom rows: **Investment Operations**)

Teacher Retirement System of Texas
Risk Profiles – June 2016

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
Legacy Information Systems	Chris Cutler	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.	3,3	🟡 ⬆	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 risk is 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, however some functionality will be reduced during the transition to TRUST. The TEAM Program will help provide improved delivery mechanisms such as online self-service applications and web-based functionality preferred by our members and business users. Staff resources are becoming a growing concern as key legacy system support staff are eligible to retire and not easily replaced.
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.	3,1	🟢 ⬌	Trust is highly liquid and minimally levered.	Trust use of liquidity and leverage is monitored daily and is projected to remain stable.
Market	Jase Auby	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.	Limits remain appropriate and risk is well within min/max range.
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 open records requests and requests seeking personal financial information about TRS' key employees and attorney-client privileged communications in outside-counsel fee bills for legal services rendered in TRS investment matters.	Hired new open records specialist who has broad experience handling open records requests and working on a variety of state government matters. Legal frequently consults with executive management regarding language for board agendas and other open meetings issues. New legislation gives trustees more flexibility to attend educational summits regarding TRS' strategic partnerships.

Teacher Retirement System of Texas
Risk Profiles – June 2016

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
Pension Benefit Administration	Barbie Pearson	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.	3,2	⬤↑	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. Implementation of TRUST Phase 1 will result in changes for reporting entities and how some services are delivered. Multiple departments will also have competing priorities with testing and participating in requirements gathering activities.	Expect trend to increase if major legislative changes are passed, a larger than usual number of members retire, and/or TEAM requires more subject matter expert involvement than anticipated. The implementation of TRUST Phase 1 will increase the need for consistent and managed communication with reporting entities and members. Recent audit findings for entities have unearthed reporting errors that may increase in volume with full payroll reporting requirements. We expect to see a trend in employment after retirement issues and eligibility determinations resulting in increasing demands for customer service.
Pension Funding	Brian Guthrie	Sustain a financially sound pension trust fund.	A lack of sound funding for the plan could lead to insufficient assets to pay for long-term benefits and financial obligations.	4,2	⬤↔	While the impact of a loss of pension funding would be significant, the likelihood of such an event is relatively low. The FY 2015 Actuarial Valuation determined the fund had a funding period of 33 years, which does not meet the standard for actuarial soundness. Additionally, the fund is deferring about $4 billion in investment losses that – absent an offsetting gain – will be recognized over the next 5 years. The uptick in funding period, however, was expected given the ramp up in contributions to the ultimate contribution rate in FY 2017. The plan continues to remain on track to achieve full funding over the long term. Achieving full funding depends on the investment assumption being met, the current contribution levels continuing indefinitely, and any benefit enhancements receiving appropriate and timely funding. Finally, there	Currently, the risk of a fiscally unsound pension fund is remaining constant. With the most recent experience study, the Board adjusted assumptions for mortality, interest rates, and pay growth. The result is a higher UAAL and funding period. However, the increases were moderate; therefore, the risk of a fiscally unsound pension fund is not expected to increase or decrease.

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Risk Level	Trending
						continues to be parties interested in changing the plan's funding and defined benefit status. Therefore, the risk is guarded.	
Procurement & 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.	3,2	⬌	Impact is listed at 3 (moderate) because in the event the overall risk were to occur, it could 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, however our contract monitoring system is not adequate. We are unable to determine contract values, monitor deliverables, and report. We must report procurement activities regularly and we are subject to audit by multiple audit entities, both internal and external.	Current contract monitoring and reporting will continue to be inadequate until a contract monitoring system can be developed or procured. The trending will remain stable until this issue is addressed.
Records Management	Don Green	Manage the creation, use, maintenance, retention, preservation, and destruction of records to improve efficiency of recordkeeping, ensure access to public information, and reduce cost.	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.	4,4	⬌	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. Due to recent audit findings and succession planning issues, the risk level has been increased to "Elevated" from "Caution."	The risk level will remain elevated over the next 12-24 months. Activities to mitigate the risk include the following: 1. Realignment was done in June 2015 to the Chief Administrative Officer. 2. An Awareness Campaign is planned to give a higher profile to Records Management in the organization. 3. Department assessments to review where each work team stores their electronic records. 4. Standardized records repositories in SharePoint for short and medium-term retention records, and FileNet for long-term retention records.

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
							5. Increased staffing in Records to handle the projects and for succession planning. 6. Create a cross-functional group to review Records Management policy, and program scope; to coordinate records across the agency. 7. A certification process on exiting employees and contractors. 8. Different levels of training are planned to aid in understanding the importance of records management.
Regulatory, Compliance & Litigation	Carolina de Onís	• 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 government, retirement age, health plans, etc.).	Hired an additional compliance employee to assist the Chief Compliance Officer with regulatory compliance matters; consulting frequently with outside counsel; board policies on procurement and litigation adopted; legal hold policy adopted; hired new procurement and contracting staff with extensive experience in administering state procurements and contracts; new contract administration policy issued by the executive director; updating contract administration manual; enhancing compliance software systems; received IRS tax-qualification determination; monitoring proposed IRS regulations; onboarding new pension benefits attorneys; completed statutory four-year rule review; new investment attorneys have been trained; and retaining existing expertise.
Talent Continuity	Janet Bray	Attract, retain and develop a highly competent staff.	The delivery of member services and pension fund management could be	4,2	↓	Maintaining a qualified, competent workforce is important for TRS to achieve its goals and objectives. Turnover in the workforce is inevitable,	We anticipate overall workforce continuity risks decreasing over the next 12-24 months due to various Human Resources (HR) initiatives.

14

Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	**Trending**
			negatively impacted by turnover, the inability to retain qualified staff, lack of a sufficient knowledge transfer program, and an inconsistent performance management process.			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.	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.
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.	4,4		The Impact rating was decreased from a 4 on the last report to a 3 for this report. The Likelihood rating remained the same at a 3. This puts the average risk score at a 9.0 versus a 12.0 on the last report.

This would reflect a lower risk level, however due to the criticality of this phase of the TEAM Program, the CMT and ROC determined any risks or issues that may materialize before the September "Go Live" represent a significantly higher Risk Threat Level. Thus the risk level has been set to an "Elevated" (Orange) level. | The number of key TEAM risks decreased from 17 on the previous report to the current 15. This net decrease of 2 risks was the result of 3 risks being closed and 1 risk being added.

The Risk Trend will "Remain Constant" even though the overall risk score has decreased. This due to the fact that TEAM is entering a critical part of the project schedule and we are seeing some signs of increased risk. An example of increased risk is the identification of critical requirement updates that are needed for Phase 1 deployment. |
| TRS-ActiveCare Affordability | Katrina Daniel | Facilitate financial soundness of TRS-ActiveCare in order to provide affordable health care benefits. | Inadequate funding by the state and participating entities and/or unanticipated external forces could affect affordability. | 4,4 | | Given the static state and district contributions and rising healthcare costs, the risk level remains elevated. Inadequate funding would jeopardize the fund's ability to provide public school employees with affordable health care. | District and State minimum contribution requirements to the fund have been static since the inception of the plan, while overall healthcare continues to rise. A Joint Interim Committee is reviewing funding and plan design options related to affordability prior to the 2017 legislative session. |
| TRS-Care Funding | Katrina Daniel | Facilitate long-term soundness of TRS-Care in order to provide | Inadequate funding and/or unanticipated external forces would | 4,5 | | The fund is projected to be depleted in the 2016-2017 biennium. The risk level has been elevated to high. Inadequate | The fund is projected to decline each year and become insolvent. House Bill 2 provided supplemental funding for |

Teacher Retirement System of Texas Risk Profiles – June 2016							
Risk Category	Risk Owner	Goal	Overall Risk	Risk Score	Risk Level & Trend	Comments	
						Risk Level	Trending
		sustainable retiree health care benefits.	affect solvency of the program over the current biennium and future years, requiring significant premium increases or benefit reductions.			funding would jeopardize retirees having access to sustainable health care.	the 2016-2017 biennium. A Joint Interim Committee is reviewing funding and plan design options to improve the solvency of the plan prior to the 2017 legislative session.

Risk Assessments

- Updated risk assessments

  - Business Continuity
  - Communications & External Relations
  - Customer Service
  - Facilities Management & Planning
  - Governmental/Association Relations & Legislation
  - Investment Accounting
  - Investment Operations

  - Open Government
  - Pension Benefit Administration
  - Procurement & Contracts
  - Records Management
  - Regulatory, Compliance & Litigation
  - Talent Continuity
  - TEAM Program

Summary for this Reporting Period

- 14 Stoplight Report risk assessments completed
- 2 Risk Categories increased their risk levels
- High Risk Area
  - TRS-Care Funding
- Elevated Risk Areas
  - Employer Reporting
  - Records Management
  - TEAM Program
  - TRS-ActiveCare Affordability
- Action items to further mitigate higher risks are detailed in the Appendix

ERM Activities for December 2016

- Risk Assessments
  - Stoplight Report
  - TEAM Program Projects
  - Ad-hoc Requests
- Strategic Planning

Tab 3

Risk Management Program Review Report
Teacher Retirement System of Texas

December 29, 2015

Conducted By:
Scott Olson, Risk Manager

December 29, 2015

Mr. Brian Guthrie
Executive Director
Teacher Retirement System of Texas
1000 Red River Street
Austin, TX 78701

Agency #323

Re: Risk Management Program Review (RMPR)

Dear Mr. Guthrie:

The State Office of Risk Management (SORM) conducted a Risk Management Program Review (RMPR) of the Teacher Retirement System of Texas (TRS) on December 18, 2015. The consultation was conducted under the authority of Texas Labor Code, Title V, Subtitle A, Chapter 412, and is designed to assist your state agency in the development and implementation of comprehensive risk management programs that meet Risk Management for Texas State Agencies (RMTSA) guidelines.

The following observations were reviewed and discussed during the consultation:

- Number of workers' compensation claims:
  - FY16 (YTD) – 0 Claims
  - FY15 – 2 Claims
  - FY14 – 1 Claim
  - FY13 – 0 Claims

- A breakdown of the Injury Frequency Rate (IFR) for TRS is below:
  - FY16 (YTD) – 0
  - FY15 – 0.32
  - FY14 – 0.16
  - FY13 – 0

- The total medical and income benefits paid to date to claimants that were injured in the following fiscal years are listed below:

- o FY16 (YTD) - $0
- o FY15 - $1K
- o FY14 - $2K
- o FY13 - $0

- Workers' compensation claim cost per full-time equivalent employee (FTE):
  - o FY16 (YTD) - $0/FTE
  - o FY15 - $1.30/FTE
  - o FY14 - $3.17/FTE
  - o FY13 - $0/FTE

Noteworthy observations made during this consultation include the following:

- TRS has a strong safety culture. The agency takes a proactive approach to safety and their workers compensation numbers reflect that.

- First aid kits and AED units are located throughout both buildings and are ready for use.

- TRS recently conducted a fire drill. Overall the drill went very well. TRS included the Austin Fire Department in the exercise which is outstanding.

- TRS has a safety committee that meets on a quarterly basis. There are currently 40 members that actively participate.

During this consultation, SORM discussed and verified completion of recommendations generated as a result of the RMPR conducted on May 9th and 10th, 2012. **The following recommendation has been fully implemented by TRS, and is now closed:**

12-05-01   Automatic Fire-Extinguishing System in the Kitchen

As a result of this consultation, the following new recommendations are made to help maintain or improve the effectiveness of your risk management program:

16-12-01   Safety: Fire Safety – Fire Pump Room (East Garage) & Facilities Control Room (West Building)

It was noted during the consultation that there were fluorescent lighting fixtures that were less than 7 feet from the floor in the Fire Pump Room (East Garage) and in the Facilities Control Room (West Building). These lights should be equipped with a cover/guard to protect the bulbs from being accidentally broken. SORM recommends TRS install covers/guards on all fluorescent lighting fixtures to meet the OSHA standards.

Lamps for general illumination shall be protected from accidental contact or breakage. Protection shall be provided by elevation of at least 7 feet from normal working surface or by a suitable fixture or lampholder with a guard.

Reference: OSHA 1910.305(F), Subpart S, Electrical

16-12-02   **Safety: Inspection – East and West Buildings**
The eyewash stations located in both the East and West Buildings are not being inspected on a regular basis. SORM recommends inspecting eyewash stations and drench showers in accordance with OSHA and ANSI standards.
Proper maintenance and weekly testing is necessary to ensure that Emergency Drench Showers and Eyewash Stations are functioning safely and properly. Weekly testing helps clear the supply lines of sediment and bacteria build-up that is caused from stagnant water.
References: OSHA, 29 CFR 1910.151(c); ANSI Z358.1-2009

16-12-03   **Safety: Fire Safety – Cafeteria, Outside Wellness Room, & East Garage**
It was noted during the consultation that a number of the escutcheon plates were missing on sprinkler heads located throughout both buildings. Without this plate the sprinkler head may not operate as designed. SORM recommends installing an escutcheon plate around the deficient sprinkler heads.
Reference: NFPA 13 – Standard for the Installation of Sprinkler Systems

16-12-04   **Risk Management: Policies/Procedures – Indoor Air Quality Policy**
TRS should develop an Indoor Air Quality (IAQ) management policy. As was discussed, the policy should include guidelines for building occupant responsibilities, good housekeeping practices, building maintenance recommendations, and a procedure for handling indoor air quality complaints. The IAQ policy should designate a coordinator who investigates and monitors all indoor air quality issues. For more information please refer to the websites below:
https://www.sorm.state.tx.us/risk-management/indoor-air-quality-seminar-texas-senate-bill-599
http://www.capitol.state.tx.us/tlodocs/78R/billtext/pdf/SB00599F.pdf
Reference: RMTSA Guidelines, Volume III, Section Two, Subchapter 7.15; Texas Health and Safety Code, Subtitle C, Title 5, Chapter 385, Section 297.7(b).

We request that the appropriate staff review this document, specify the actions that TRS plans to take, and project the estimated date of completion for each recommendation. Please provide your response to me by **January 29, 2016** via fax, U.S. mail, or email scott.olson@sorm.state.tx.us. My direct fax number is (512) 370-9050.

Please convey my sincere appreciation to Ms. Cristi Woods, Mr. Jay LeBlanc, Mr. Mark Bennett, and the rest of the staff at TRS for their cooperation and assistance during the consultation. If you have any questions or concerns regarding the information detailed in this report, please call me at (512) 936-1568.

Sincerely,

Scott G. Olson
Risk Manager
State Office of Risk Management

cc: Mr. Jay LeBlanc, Risk Management & Strategic Programs, TRS
        Ms. Cristi Woods, Safety Officer, TRS

Important Dates & Resources

Statewide Automobile Insurance Program Seminar – January 28, 2016

- https://www.sorm.state.tx.us/insurance-and-bonds/2016-sorm-automobile-symposium

SORM Training Calendar

SORM Safety Videos

Workers' Compensation Healthcare Network

State Risk Management Employment Opportunities

SORM Contact Information

www.sorm.state.tx.us
(512) 475-1440

Aaron Parker	Senior Insurance Manager	512-936-1561	aaron.parker@sorm.state.tx.us
Maureen Clement	Continuity Planning Consultant	512-936-1477	maureen.clement@sorm.state.tx.us
Michelle Hammett	Training Coordinator	512-936-1537	michelle.hammett@sorm.state.tx.us

APPENDIX

Risk Report Details

BUSINESS CONTINUITY RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Rebecca Merrill	🔵 ↔	June 2016

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 disaster recovery plans and procedures. 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.

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 annually
2. BCPs and DRPs are not current or incomplete (Action Item 5)	▪ annual review and updates to BIAs and BCPs based on meetings with business units ▪ co-location testing	▪ disaster recovery testing and update of plans based on testing
3. BCPs and DRPs are not communicated to affected department staff	▪ communicate with team leader and alternate team leader as needed ▪ BCP Awareness Presentation	▪ 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	▪ annual review and updates to BIAs and BCPs based on meetings with business units to identify critical functions ▪ review and update IMT Plan annually	▪ disaster recovery testing and update of plans based on testing ▪ share critical systems list with IT ▪ co-location provides additional recovery options

TRS Stoplight Report Category

1

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
5. lack of testing critical functions identified in the BIA	▪ annual review and updates to BIAs and BCPs based on meetings with business units to identify critical functions ▪ review and update IMT Plan annually	▪ disaster recovery testing and update of plans based on testing ▪ cross-training for disaster recovery testing
6. business continuity provider and vendors cannot provide nor guarantee services for business resumption of critical systems (AT&T, IBM--Sungard, co-location, ViON)	▪ annual contract review ▪ disaster recovery testing ▪ emergency purchasing flexibility ▪ co-location/replication technology options ▪ backup natural gas generator	▪ 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	▪ contract provisions ▪ data is deleted/scrubbed from vendor's resources after recovery testing and documented in DRPs ▪ TRS security implemented during recovery of data	▪ Business Associate Agreements (BAA) ▪ firewall encryption ▪ encryption of TRS data ▪ storage with encryption at rest
8. data loss between mainframe backups (24-hour period)	▪ more frequent synchronization ▪ tape-based recovery	▪ future TEAM technical architecture configuration
9. data loss between network/ imaging backups (6-hour period) (Action Item 5)	▪ near real time synchronization ▪ co-location/replication technology options ▪ data loss reconciliation for Imaging system ▪ future TEAM technical architecture configuration	▪ IT BCP plan allows for recovery of some business data ▪ remote access to available systems during recovery
10. failed telecommunications with business partners or external entities	▪ BCPs provide external contact information ▪ virtual private networks over direct paths ▪ review and update IMT Plan annually	▪ multiple paths to Internet ▪ contract with large multi-site business continuity/ recovery services vendor
11. lack of hardware/software to recover critical systems after an incident	▪ 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	▪ emergency purchasing flexibility ▪ TRS owns recovery infrastructure ▪ co-location/ replication technology options ▪ lessons learned from disaster recovery tests
12. fail-back process to return to TRS is difficult to test	▪ co-location/replication technology options ▪ emergency purchasing flexibility	▪ future TEAM technical architecture configuration ▪ contract provisions
13. lack of staff to recover critical systems after an incident	▪ mainstream software ▪ disaster recovery procedures	▪ improved offsite access to systems ▪ use vendor's remote resources

TRS Stoplight Report Category

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
	• cross-training for disaster recovery testing • co-location/replication technology options	• review and update IMT Plan annually • emergency call list
14. long-term (>6 weeks) continuity of operations strategy does not exist	• co-location/replication technology options • extend use of the contracted disaster recovery site • research/partner with other agencies/business • secondary agency location • send designated travel team to purchase out-of-state or internationally • emergency purchasing flexibility	• contract provisions • future TEAM technical architecture configuration • use of portable temporary structures • VPN and teleworking capabilities • identify workarounds/ alternate tools and resources • reach out to peer public pension funds
15. data backup media is not available	• multiple sites for storing tapes • multiple copies available • surplus of backup tapes	• co-location/replication technology options • storage snapshots • vendor procedures
16. members are not able to communicate with TRS to complete business processes	• communication system testing • disaster recovery contract includes phone capacity • utilize social media and external media sources	• alternate website for communicating TRS contact information
17. critical vendors do not have BCPs or DRPs in place	• contract with large multi-site business continuity/ recovery services vendor	• contract provisions • annual contract provision review
18. recovery data cannot be unencrypted	• maintain necessary information in multiple secure locations	• co-location/replication technology options • disaster recovery testing
19. risk management staff is not available	• IMT plan outlines roles and responsibilities • cross-training	• review and update IMT Plan annually
20. business unit staff are not available for recovery and continuation of business	• team lead alternates assigned • documented BCP • provide guidance and/or identify resources for personal preparation • documentation	• review and update IMT Plan annually • communicate personal issues between recovery team members • delegation chart • custodial authorizations
21. insufficient IT staffing for recovery and continuity shifts (Action Item 5)	• cross-training • detailed DRPs	• policies and procedures • alternates test and exercise procedures
22. ineffective communication methods between TRS staff in the event of an incident	• TRS Alert for text, phone, and email communication • TRS weatherline	• manual call trees • multiple cell phone service providers • TRS website

TRS Stoplight Report Category

BUSINESS CONTINUITY RISK REPORT

Risk Description	Mitigations	
23. business unit staff have not identified or do not have sufficient tools, procedures, resources to begin recovery at disaster recovery site	▪ identify and provide tools, procedures, resources needed within BCP during annual review with business units ▪ purchase needed supplies	▪ duplicate resources stored at Incident Command Center ▪ define business unit needs within contract
24. citywide electrical grid failure	▪ backup generators	▪ coordinate with city leaders
25. unable to settle and execute approved trades	▪ automated process within Bloomberg ▪ manual process for faxing ▪ secured email tunnel to State Street for settlement instructions	▪ workflow includes approvals ▪ manual process for trade approval ▪ communication via phone calls
26. unable to access systems (Bloomberg, Factset)	▪ Bloomberg Anywhere ▪ phone calls ▪ faxing	▪ online resources ▪ web portals ▪ mobile devices with apps
27. lose connectivity (VPN, remote desktop)	▪ co-location/replication technology options ▪ phone calls ▪ faxing ▪ mobile devices with apps	▪ recovery site ▪ Bloomberg Anywhere ▪ alternate web sites ▪ webmail
28. lose connectivity with key service providers (e.g., State Street)	▪ manual procedures (phone calls, faxes) ▪ provider disaster recovery plans	▪ fail-over redundant connectivity line
29. loss of liquidity (exchange goes down)	▪ market mechanisms in place ▪ provider disaster recovery plans	▪ find other investment opportunities (long-term)
30. IMT is not aware of their roles and responsibilities (new risk)	▪ tabletop exercise ▪ review and update IMT Plan annually	▪ agency training and awareness

Action Item	Owner	Target Date	Revised	Status	Comments
1. During the 2015 BIA/BCP process, the Business Continuity Coordinator will: ▪ Provide a self-assessment for personal issues that can prevent participation in disaster	Risk Management	1/2015	3/2016	Complete	FEMA resource is found on the Safety Committee intranet site.

TRS Stoplight Report Category

BUSINESS CONTINUITY RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
recovery/business continuity activities					
2. Perform a series of disaster recovery tests	IT, Business Units, Risk Management	12/2015		Complete	Progressive system testing was conducted in February, May, and July. The DR exercise including business units was conducted in October 2015.
3. Confirm critical vendors' business continuity/disaster recovery plans exist	Risk Management	12/2014	12/2015	Complete	Each of the business units are currently managing this risk within their contract management activities. Critical vendors have certified via contract terms that BC/DR plans are maintained. Contract sponsors are receiving vendor BC plans for review and through vendor acknowledgements during the initial contract term and subsequent annual contract performance evaluations.
4. Conduct a business continuity exercise	Risk Management, Information Technology	12/2015		Complete	Business units participated in the October 2015 DR exercise and successfully tested recovery and continuity plans.
5. Disaster recovery plans/procedures inventory (Risk 2, 9, 21)	Risk Management, Information Technology	6/2016		In Progress	

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
BIA/BCP annual reviews and updates (Risk 1, 2, 4, 5, 23)	BC/DR Coordinator	• 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.

TRS Stoplight Report Category

BUSINESS CONTINUITY RISK REPORT

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Disaster recovery testing (Risk 1, 2, 4, 5, 6, 11, 18)	BC/DR Coordinator, Information Technology	Planning and participation in exercise. Post-exercise report to Risk Oversight Committee.
Disaster recovery plans (Risk 1, 2, 4, 5, 6, 11)	Information Technology	Review plans and update as needed after each disaster recovery exercise.
Review and update IMT plan (Risk 1, 4, 5, 10, 13, 19, 20, 30)	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, 10, 11, 12, 14, 16, 17, 23)	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.

TRS Stoplight Report Category

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Howard Goldman	⬤ ⬌	June 2016

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.	- 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:

- Updating TRS publications to reflect legislative changes.
- Managed the 2015 board election process.
- Website Redesign Committee developing Statement of Work to select a vendor to redesign TRS' website.
- Launched project to develop new agency communications plan.
- Began internal education process relating to website accessibility.
- Updating agency writing style guide and graphic style guide.
- Developed social media strategy.

RISK DETAILS

Risk Description	Mitigations	
1. inaccurate, insufficient, or misleading information is released to the news media	- coordinate with subject matter experts - approval process for releasing information - policies and procedures	use software tool to monitor articles and make corrections as needed or respond to inaccuracies in a timely manner

TRS Stoplight Report Category

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Risk Description	Mitigations	
	- write op-eds - 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	- review reporters' reputations and past reports - provide statements to telephone counseling center - refer to previous responses to ensure consistency - request clarifications/retractions from reporters - share policy updates with all employees - respond to letters, phone calls, and email messages
2. inaccurate, insufficient, or misleading information is released to the public (Action Item 1)	- 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 - respond to letters, phone calls, and email messages	- policies and procedures - 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
3. TRS-related information is not disseminated to TRS members and retirees in a timely and effective manner	- post information to TRS website, social media outlets, and send email notices - coordination with subject matter experts - policies and procedures - provide statements to telephone counseling center	- adhere to time management tools for publications - collaborate with associations, legislators, and other stakeholders to communicate accurate information - respond to letters, phone calls, and email messages
4. inaccurate, insufficient, or misleading TRS-related information is disseminated to TRS employers	- communicate via employer email distribution list including superintendents, TRS *Update* newsletter, TRS website, and social media outlets - coordinate with subject matter experts - policies and procedures - 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 - approval process for releasing information
5. unauthorized release of confidential information	- policies and procedures - restrict access - coordinate with subject matter experts	- include language in contracts regarding usage of information - annual TRS-wide training
6. inaccurate, insufficient, or misleading TRS-related information is disseminated to TRS employees	- coordinate with subject matter experts - policies and procedures - approval process for releasing information	- make corrections as needed or respond to inaccuracies in a timely manner - internal newsletter

TRS Stoplight Report Category

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Risk Description	Mitigations	
	- post information to TRS website, intranet, social media outlets, and send email notices - internal meetings	- 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	- vendor support - contract provisions - website and/or social media postings - IT coordination	- provide statement to telephone counseling center - policies & procedures - send email messages - backup team
8. inappropriate, inaccurate, or negative social media comments posted and/or left unattended	- monitor social media comments - social media filter tool - backup team	- policies and procedures - respond in a timely manner
9. vendor error during live webcasts	- vendor support - contract provisions - website and/or social media postings	- provide statement to telephone counseling center - procedures - monitor webcasts
10. excessive volume of comments from Facebook/Twitter (e.g. comments go viral)	- adjust staffing - prepared messages/ statements/fact sheets to respond to comments - notify telephone counselors	- post information to TRS website, intranet, social media outlets, and send email notices - procedures - monitor comments
11. unauthorized contact/ interviews with the news media	- track TRS-related media interviews through web-based software - training and discussions - share policy updates with all employees	- contact media to discuss TRS policies and procedures - policies and procedures - disciplinary action
12. unauthorized TRS information disseminated by TRS staff (e.g., blogs, public events, panels, associations)	- Staff External Communications Policy - Social Media Policy & Guidelines - training and discussions	- policies and procedures - disciplinary action
13. negative perceptions are not responded to in a timely manner	- post information to TRS website, social media outlets, and send email notices - coordination with subject matter experts - respond to letters, phone calls, email messages, and media inquiries	- member surveys to identify negative perceptions - collaborate with associations, legislators, and other stakeholders to communicate accurate information
14. materials cannot be printed due to equipment failure or insufficient	- hiring staff with appropriate skills - request participation in equipment vendor procurement	- increased use of outside printers - post digital version to website - increased use of e-publications

TRS Stoplight Report Category

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Risk Description	Mitigations	
expertise to fully utilize equipment (Action Item 2)	▪ software updates are coordinated with Communications, Print Shop, and IT	▪ training ▪ equipment repairs
15. vendors fail to fulfill contract obligations	▪ subcontracting services ▪ seek compensation/ withhold payment ▪ staff assists with contract responsibilities	▪ work with vendor to remediate issues ▪ contract performance assessment ▪ terminate contract
16. not able to maintain technical expertise/ experience due to rapidly changing technology	▪ networking with professional colleagues ▪ update internal procedures ▪ training	▪ hire consultants/ contractors ▪ attend association meetings
17. information is inaccessible to persons with disabilities	▪ 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	▪ 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

Action Item	Owner	Target Date	Revised	Status	Comments
1. Develop new messages and statements in anticipation of potential problems (Risk 2)	Communications Staff	6/2014	5/2016	Complete	
2. Develop graphic design guidelines for document creation (Risk 14)	Communications Staff	8/2016		Planned	

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Policies and/or procedures (Risk 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17)	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 *Chalkboard* article relating to the policy.

TRS Stoplight Report Category

COMMUNICATIONS & EXTERNAL RELATIONS RISK REPORT

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Track TRS-related media interviews through web-based software (Risk 11)	Communications Staff	Scan all TRS-related articles and blogs on a daily basis.

TRS Stoplight Report Category

CUSTOMER SERVICE RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Barbie Pearson	🔵⬆	June 2016

GOAL	OVERALL RISK	OBJECTIVES
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.	• Minimize amount of time members spend waiting to speak to a counselor. • Maintain a Benefit Counseling Department quality average score at the "successful" rating.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts a majority of the risks. Additional mitigation strategies are planned to further reduce the risks related to backlogs and disruption of or interruption in customer service levels. Key mitigations include cross-training/training, Quality Assurance Program, surveys, and the verification process.

RISK DETAILS

Risk Description	Mitigations	
1. employee staffing level inadequate	▪ hiring process ▪ budget approved for additional staff ▪ workforce management ▪ streamline work processes ▪ overstaffing positions ▪ placement in salary range based on experience	▪ cross-training ▪ backfills ▪ documented processes and procedures ▪ skills-based testing ▪ quarterly postings ▪ ongoing recruitment activities
2. turnover (e.g., staff retirements, resignations, terminations)	▪ succession planning ▪ hiring additional staff ▪ streamline work processes ▪ cross-training ▪ backfills ▪ documented processes and procedures ▪ workforce management ▪ placement in salary range based on experience	▪ Organizational Change Management (OCM) project (TEAM) (i.e., stakeholder interviews) ▪ delegating and development of staff ▪ merit increases ▪ recognition programs ▪ touchpoint meetings with supervisors ▪ overstaffing positions

TRS Stoplight Report Category

CUSTOMER SERVICE RISK REPORT

Risk Description	Mitigations	
3. spikes in retirement/other service areas due to legislative changes or outside factors create backlog (Action Item 5)	- cross-training - prioritize workload - streamline work processes - workforce management - overtime	- proactive member communication - documented processes and procedures - TRS rule changes - refresher training - timely training on changes
4. Benefit Services staff provides incorrect information to member or reporting entity	- timely training on changes - Quality Assurance Program - performance evaluations/ feedback - interdepartmental communication - periodic quality checks - formal approval process of written materials - system edits and reports - internal audits and quarterly testing - routine staff meetings *TRS Update* - email communication - bulletin messages	- ongoing feedback on accuracy and quality of counseling from members and retirees - documented processes and procedures - surveys - reviewing website - verification process - reviewing forms, publications and letters - decision repository - refresher training - TRS Laws & Rules - team leader/manager coordination
5. conflicting priorities due to TEAM Program implementation impacts service levels	- backfills - streamline work processes - cross-training - resource planning - workforce management	- Benefit Services touch point meetings - delegating and development of staff - OCM project - prioritize workload
6. disruption of or interruption in customer service levels between Phase 1 and Phase 2 during transitional phase of TEAM Program implementation (Action Item 1, 2, 3, 4)	- ongoing member communication - interdepartmental communication - thorough testing of new system before it's placed in production	- Decommissioning Legacy Systems Project (TEAM) - TEAM Connect web page - documented processes and procedures to include interim procedures
7. lack of knowledge of TRS laws and rules	- training - cross-training - procedures *TRS Update*	- TRS Laws & Rules - routine staff meetings - email communication

TRS Stoplight Report Category

CUSTOMER SERVICE RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
1. Develop interim processes for Phase 1 (Risk 6)	Benefit Services Core Program Team	5/2015	9/2016	Planned	This action item has been incorporated into business procedures and training.
2. User acceptance testing for Phase 1B (Risk 6)	Core Program Team	6/2015	7/2016	Planned	For Phase 1B only.
3. Business Procedures and Training Project (TEAM) (Risk 6)	BPT Project Team	9/2015	10/2016	Planned	This is for Phase 1B training and includes having all TRS staff trained for Go Live Phase 1B.
4. Training (Risk 6)	Benefit Services	9/2015	9/2016	Planned	All business staff should have training completed for Phase 1B prior to Go Live.
5. Customer service training on soft skills (Risk 3)	Benefit Services Human Resources	8/2016		Planned	All business staff would receive group training, either conducted by Human Resource trainers or by a vendor.

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Cross-training/Training (Risk 1, 2, 3, 4, 5, 7)	Benefit Services Management	Training with new staff and refresher and cross-training with existing staff; within and across departments.
Quality Assurance Program (Risk 4)	Benefit Counseling	Monthly call reviews and coaching sessions.
Surveys (Risk 4)	Benefit Counseling, Communications	Review survey results and take action when necessary.
Verification Process (Risk 4)	Benefit Services	Ongoing secondary review.

TRS Stoplight Report Category

FACILITIES MANAGEMENT & PLANNING RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Don Green	🔵 ↔	June 2016

GOAL	OVERALL RISK	OBJECTIVES
Provide a physical work environment that is safe and enhances productivity.	Inadequate facilities management or ineffective space utilization 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.	• Identify areas of opportunity to refresh and update TRS facilities to provide a safe, productive and desirable work environment. • Research and decide on options regarding effective space utilization. • Review and evaluate safety measures and implement additional measures as needed.

SUMMARY

Mitigations are appropriate for the risks identified during the recent risk assessment. However, other opportunities for improvement were identified to further mitigate the risks. These additional mitigations are listed in the action items section of this report. Recent activities include:

- Remodeled 4th floor to improve space utilization and work environment.
- Completed construction on 5E to improve space utilization and work environment.
- Initiated planning to improve work environment in Telephone Counseling Center.

RISK DETAILS

Risk Description	Mitigations	
1. physical violence against employees/visitors (i.e., geographic location, downtown events, London office) (Action Item 11)	▪ education and awareness ▪ restricted badge access ▪ physical security	▪ policies and procedures ▪ cameras
2. unauthorized access to building (Action Item 11)	▪ restricted badge access ▪ criminal background checks ▪ cameras	▪ education and awareness ▪ physical security ▪ communication

TRS Stoplight Report Category

FACILITIES MANAGEMENT & PLANNING RISK REPORT

Risk Description	Mitigations	
3. insufficient resources (e.g., number of security staff or qualified security staff) (Action Item 11, 12)	▪ budget quarterly meetings ▪ create recruitment plan	▪ workforce plan
4. not complying with state/federal laws (e.g., ADA, fire codes, workers' comp., etc.)	▪ education and awareness ▪ annual testing & inspections ▪ code & compliance resources	▪ policies and procedures ▪ routine assessments
5. theft (parking lot and within secured office areas)	▪ education and awareness ▪ physical security ▪ policies and procedures	▪ restricted badge access ▪ cameras
6. 816 Congress security is outside of TRS control	▪ education and awareness ▪ restricted badge access ▪ communicate with building management	▪ physical security ▪ contract provisions related to security ▪ cameras
7. failure to alert staff of safety-related issues (i.e., intercom)	▪ TRS Alert ▪ Risk Management handbook	▪ Safety Committee quarterly meetings ▪ Safety Committee intranet site
8. system failure (e.g., security, fire suppression, backup generator)	▪ maintenance of systems ▪ testing ▪ redundancy	▪ contract management ▪ insurance
9. competing priorities for space (Action Item 5, 7)	▪ define priorities ▪ organizational change management ▪ shared jobs/work space	▪ telework program ▪ conducting assessments of alternative work programs
10. ineffective use of space (Action Item 7)	▪ planning ▪ organizational change management ▪ telework program	▪ shared jobs/workspace ▪ conducting periodic reviews of alternative work programs
11. not striking appropriate balance between employee needs and business needs (e.g., poor morale, culture shock)	▪ collect and monitor employee feedback through surveys and discussions (workplace dynamics survey, Survey of Employee Engagement, huddles) ▪ organizational change management	▪ technology changes ▪ seek buy-in ▪ find innovative ways to meet employee needs
12. ineffective contract management process (e.g., bottlenecks, incorrect vendors, contracts not available) (Action Item 15)	▪ standardized wording ▪ procedure/process development	▪ contract oversight ▪ training

TRS Stoplight Report Category

FACILITIES MANAGEMENT & PLANNING RISK REPORT

Risk Description	Mitigations	
13. Facilities staff not being made aware of building maintenance issues	- communication - service request process - written procedures	- SharePoint web page - Security reports
14. failing to project and/or update future spacing needs	- workforce plan - budget meetings - LAR process	- TEAM Program - emerging technology
15. work disruptions due to re-model projects	- communication - planning - project management	- scheduling during off-peak hours - alternative work sites - telework program
16. insufficient parking (Red River & 816 Congress) (Action Item 13)	- carpools - information gathering during vehicle registration - alternative work schedules	- public transportation - telework
17. terrorist attack (new risk) (Action Item 14)	- terrorism insurance - communication - share emergency contact information - telework	- register with U.S embassy - return to U.S. - TRS Alert
18. kidnapping (new risk)	register with U.S. embassy	foreign travel insurance

Action Item	Owner	Target Date	Revised	Status	Comments
1. Provide safety education and awareness training opportunities to staff	Risk Management	9/2015		Complete	Approximately 120 TRS staff and contractors attended the Summer Safety Training Series which included Reporting Hazards/Injuries, Personal Safety/ Situational Awareness, CPR/AED and Defensive Driving. RM will continue to coordinate workplace training during the 4th quarter each year. TRS Workplace Violence Policy - annual review and update process completed and distributed to workforce.
2. Research panic button and Incident notification System options	Risk Management	6/2015		Complete	E-Panic research is complete. Software application has been implemented in several high risk areas, including 816 Congress.

TRS Stoplight Report Category

FACILITIES MANAGEMENT & PLANNING RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
3. Research specialized training for TRS security officers	Security, Risk Management	8/2015		Complete	RM completed initial research and results were provided to Security August 2016. DPS Level 2 training for non-commissioned Security was determined to be the appropriate course.
4. Obtain quotes to repair building intercom system	Facilities	8/2015		Complete	Investigated modifications to the fire alarm system to allow it to be used as an emergency communication system. It was determined that the existing fire alarm system does not offer applicable modifications. Additional deficiencies were identified in the October 2015 fire drill and the January 2016 shelter in place drill. The Facilities department has initiated vendor evaluations and is obtaining quotes.
5. Incorporate space planning discussions during quarterly budget meetings (Risk 9)	Chief Financial Officer (CFO)	Ongoing		In Progress	
6. 5th Floor East Remodel Project	CFO	7/2015		Complete	
7. Develop plan and obtain approval for East Building Remodel Project (Risk 9, 10)	CFO	5/2017		In Progress	
8. 2nd Floor West Partial Remodel Project	CFO	9/2015		Complete	
9. Contract Administration Manual revision (Risk 10)	Director of Strategic Initiatives	7/2015		Complete	(DSI) The new Contract Administration Policy (CAP) was adopted in January 2016. Contract Sponsors and contracting support staff from Facilities attended mandatory CAP Orientation training in February 2016.
10. Parking Lot/Garage assessment	Facilities	6/2015		Complete	

TRS Stoplight Report Category

FACILITIES MANAGEMENT & PLANNING RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
11. Security training is pending procurement and scheduling (Risk 1, 2, 3)	Security, Risk Management	8/2017		In Progress	
12. DPS assessment (Risk 3)	Facilities	8/2016		Planned	
13. Research state parking lot options (Risk 16)	Facilities, IMD	6/2016		In Progress	
14. Research emergency notification options for international offices (Risk 17)	IMD, Risk Management	6/2016		Planned	
15. Develop written internal departmental process flows that are consistent with the Procurement & Contracts team's procedural guidance (Risk 12)	Facilities, Procurement & Contracts, Risk Management	11/2016		Planned	

Monitoring Activities

Key Mitigation	Monitored By	Monitoring Process
Periodic tests of security system components. (Security-related risks)	Security	Quarterly inspection, cleaning, and testing of all components of the security system, including badge readers and cameras, by a licensed third party contractor.
Monitor issues that arise during the quarterly budget meetings and/or procurement and contracting activities (Risk 3, 6, 8, 12)	General Accounting, Budget	
Assess the telework program (Space-related risks)	Human Resources	

TRS Stoplight Report Category

GOVERNMENTAL/ASSOCIATION RELATIONS & LEGISLATION RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Ray Spivey	🟢 ↔	June 2016

GOAL	OVERALL RISK
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.

SUMMARY

Two risks on inadequate communications and perception of lobbying were identified. Based on the mitigations in place, the risk owner accepts both risks. No additional mitigation strategies are planned at this time. Proactive communication is a key mitigation.

RISK DETAILS

Risk Description	Mitigations	
1. inadequate communications with Legislature and other external groups	• coordinate releasable information with TRS directors, including notifying Governmental Relations of any communications to external groups by other TRS divisions	• plan key TRS meetings with external groups and continually update group contact lists • follow-up with person-to-person communications • proactive communication
2. perception of lobbying	• presentation on statutes to the board • proactive communication	• maintain constant awareness of no lobbying

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

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Proactive communications (all risks)	Governmental Relations	Maintain contact with our stakeholder groups and provide timely responses to requests or inquiries.

TRS Stoplight Report Category

INVESTMENT ACCOUNTING RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Don Green	🔵 ↔	June 2016

GOALS	OVERALL RISK
• Ensure all TRS Investments are properly and completely accounted for • Ensure investments are valued correctly • Ensure investment fees are accurately reported and disclosed • Ensure cash flows into and out of the Fund are complete and properly controlled • Accurately calculate performance incentive pay (PIP)	TRS investments are not properly accounted for, valued correctly or properly reported, and investment-related cash is not properly controlled.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts all the risks. Key mitigations include monthly reconciliation of custodian accounting, ongoing communication with custodian and their teams, and ongoing monitoring of GASB, GFOA and other reporting requirements.

RISK DETAILS

Risk Description	Mitigations	
1. custodian bank is unable to account for investments	▪ long-term custodian contract ▪ ongoing communication with custodian accounting team ▪ detailed review of custodian bank SOC 1 review of internal controls	▪ monthly reconciliation of custodian accounting ▪ annual due diligence of custodian accounting operations performed by TRS Investment Accounting
2. investment accounting information loaded into TRS systems does not match custodian investment accounting values	▪ monthly reconciliation of custodian accounting	▪ ongoing communication with custodian accounting team
3. partnership fees are not properly reported and disclosed	▪ investment accounting fee reconciliation to custodian bank and general partner financial reports ▪ leverage consultant relationships to gather fee information and assess for reasonableness	▪ ongoing monitoring of GASB, GFOA and other reporting requirements ▪ leverage Institutional Limited Partners Association (ILPA) guidelines for consistent fee reporting from general partners

TRS Stoplight Report Category

INVESTMENT ACCOUNTING RISK REPORT

Risk Description	Mitigations	
4. TRS investments are valued incorrectly	▪ regular review of monthly valuations ▪ detailed reconciliations of partnership valuations	▪ detailed review of custodian pricing reports ▪ ongoing communication with custodian pricing teams
5. unauthorized cash flows out of TRS	▪ multiple layers of review and oversight required for each external cash flow ▪ daily reconciliation of cash movements	▪ quarterly review of cash movements performed by TRS Internal Audit
6. TRS financials not in compliance with GASB, GFOA, and other regulatory requirements	▪ ongoing monitoring of GASB, GFOA and other reporting requirements ▪ education and planning for GASB and other regulatory standard changes	▪ Certified Public Accountants (CPAs) on staff ▪ custodian communication and notification of changes
7. performance incentive pay awards are not properly calculated	▪ detailed policy and procedures are in place ▪ multiple layers of review documented	▪ detailed review of results by Internal Audit

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

Monitoring Activities	
Key Mitigation	Monitored By
Monthly reconciliation of custodian accounting	Investment Accounting
Ongoing communication with custodian and their teams	Investment Accounting
Ongoing monitoring of GASB, GFOA and other reporting requirements	Investment Accounting

TRS Stoplight Report Category

INVESTMENT OPERATIONS RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Sylvia Bell	🟢 ↔	June 2016

GOAL	OVERALL RISKS	OBJECTIVES
Maintain the integrity of transaction, position, and investment reporting information in a risk-controlled environment for optimal investment management decisions.	• Inefficient or ineffective transaction or position management processes which could result in losses to the fund. • Investment reports contain material inaccuracies.	• No loss of Trust Assets (Securities, Derivatives, Cash) • Optimize cost and efficiency • Materially accurate investment reporting

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk 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/Private Securities & Partnerships		
1. failures in trade/transaction processing	▪ reconciliations/review ▪ governance process/SLA	▪ metrics reporting/issue tracking software ▪ trade automation
2. unauthorized trading or transaction processing	▪ annual permission review ▪ separation of duties	▪ multi-factor authentication ▪ reconciliations/review
3. violation of internal/external regulations	▪ third-party pre- and post-trade compliance ▪ Investment Policy Statement ▪ daily compliance reporting	▪ independent Chief Compliance Officer responsible for oversight ▪ Investment Manager Agreements
Cash		
4. failures in trade/transaction processing	▪ reconciliations/review ▪ governance process/SLA	▪ metrics reporting/issue tracking software

TRS Stoplight Report Category

INVESTMENT OPERATIONS RISK REPORT

Risk Description	Mitigations	
5. failure in cash disbursement and receipt controls	▪ automated workflow system ▪ reconciliations/review	▪ metrics reporting/issue tracking software ▪ governance process
Derivatives		
6. failures in trade/transaction processing	▪ reconciliations/review ▪ governance process/SLA	▪ metrics reporting/issue tracking software ▪ trade automation
7. violation of internal/external regulations	▪ third-party pre- and post-trade compliance ▪ Investment Policy Statement ▪ regulatory compliance	▪ independent Chief Compliance Officer responsible for oversight ▪ Investment Manager Agreements
8. unauthorized trading or transaction processing	▪ annual permission review ▪ separation of duties	▪ multi-factor authentication ▪ reconciliations/review
Increased Cost or Inefficiency		
9. incur overdrafts and other expenses	▪ daily cash reconciliation process managed jointly with custodian	▪ governance process
10. failure to make margin or collateral calls	▪ daily cash and collateral reconciliation process ▪ governance process/SLA	▪ daily cash, margin and collateral reporting
11. failure to transition assets timely & accurately	▪ formalized account opening and transition process ▪ detailed tracking of securities settlement status on T+1	▪ governance process/SLA ▪ post-transition Investment Operations reporting
12. failure to optimize software and subscriptions	▪ Investment Management Division annual goal setting ▪ formalized project management process ▪ governance process/SLA	▪ regular dialogue and updates with Enterprise IT and end-users ▪ detailed process documents
Inaccurate Investment Reporting		
13. improper calculation methodologies	▪ third-party calculation of performance with internal verification ▪ governance process/SLA	▪ Investment Operations daily, weekly, monthly and quarterly verification by profit center

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

TRS Stoplight Report Category

INVESTMENT OPERATIONS RISK REPORT

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Reconciliation of positions and trades (Risk 1, 2, 4, 5, 6, 8, 9)	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, 4, 5, 6, 10, 11, 12, 13)	Investment Operations	Formalized governance with custodian that includes reporting and monitoring of key processes.
Formalized, repeatable processes (Risk 5, 9, 10, 11, 12)	Investment Operations	Execution of formalized process with checklists and milestones.

TRS Stoplight Report Category

OPEN GOVERNMENT RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Carolina de Onís	🔵 ↔️	June 2016

GOAL	OVERALL RISK
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.

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, records retention, legal holds, open records requests, technology, and legislation. 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	- policy review schedules - participation in continuing education - structured legislative implementation process - review and amend retention schedules	- training - automated subscription services - Legal and Records Management review of new and existing policies
2. lack of education on laws, rules and policies	- priority on hiring knowledgeable staff - publications and newsletters - automated subscription services	- dissemination of updates and changes - participation in professional associations - training
3. unauthorized disclosure of confidential information, including accidental disclosures (Action Item 1)	- training, including development of department specific HIPAA training - policies and procedures - secondary review prior to disclosure - separate repositories for confidential information presented to the board - encryption and protection capability and procedures - new model non-disclosure agreement - updating technologies	- dedicated job functions and positions for protecting information - statutory protection against accidental disclosure - software tools for redacting information - Information Security Manual - cloud computing policy - data protection project - mobile device policy

TRS Stoplight Report Category

OPEN GOVERNMENT RISK REPORT

Risk Description	Mitigations	
4. unauthorized and/or accidental destruction, removal, or alteration of public or confidential information (Action Item 9, 10)	▪ automated system controls ▪ records management training ▪ secondary review and/or approval required before scheduled destruction/ removal of certain information	▪ backup tapes ▪ policies and procedures ▪ security authorization required for altering, deleting or accessing information ▪ Information Security Manual
5. failure to timely provide requested public information (Action Item 3)	▪ calendars ▪ ongoing development and update of structured filing system (file plans) ▪ compliance with policies and procedures ▪ multi-mailbox search	▪ coordination with other departments ▪ technology tools and adequate staffing ▪ FOIAXpress ▪ provide more public information on the Internet ▪ training
6. failure to destroy information in accordance with records retention schedule (Action Item 4, 9, 10)	▪ records management training ▪ policies and procedures ▪ annual purge process, including disposition log	▪ ongoing development & update of structured filing system (file plans) ▪ limited liability
7. inadequate staffing for processing open records requests (Action Item 2)	▪ cross-training ▪ adjust response time based on workload ▪ develop production schedules based on number and volume of requests	▪ automated tools (e.g., redacting and tracking software) ▪ provide more public information on the Internet ▪ intern program
8. issues with implementation of new technologies (Action Item 3)	▪ software upgrades ▪ training on software ▪ funding for technology	▪ ongoing communication with vendor ▪ integrate new technology into open records process
9. civil litigation as a result of open records requests	▪ adequate legislation ▪ compliance with existing laws	▪ pursuing available remedies ▪ outside counsel
10. criminal violations relating to open records and confidentiality laws (Action Item 11)	▪ timely responses to requests ▪ board and staff education and training ▪ secondary review and/or approval required before releasing certain information	▪ policies and procedures ▪ culture of adhering to confidentiality laws ▪ leadership awareness ▪ restricted/limited access to confidential information
11. criminal violations for failing to comply with Open Meetings Act	▪ adequate legislation ▪ educate and train staff and board ▪ timely coordination of trustee schedules related to TRS business	▪ Legal review and advice ▪ policies and procedures ▪ technology tools ▪ timely approval of certified agendas
12. voiding of board actions	▪ educate and train staff and board ▪ policies and procedures	▪ technology tools ▪ agenda coordination among departments

TRS Stoplight Report Category

OPEN GOVERNMENT RISK REPORT

Risk Description	Mitigations	
13. failure to coordinate agenda items prior to posting or properly post meeting notices, and deviating from posted agenda items (e.g., timing, verbiage, substance of wording versus content of deliberation) (Action Item 6)	- use of technology for managing, enforcing and communicating posting deadlines - secretary of state training - redundancy in the process and responsibilities - general counsel participation - adherence to posted agenda items	- training for staff and board - policies and procedures - agenda coordination among departments - planning for and timely submission of board meeting materials
14. demands of and problems with use of technology for conducting teleconferences, videoconferences, or webcasts for open meetings	- policies and procedures - testing and monitoring technology prior to meetings - IT/Communications/vendor coordination - contract provisions	- due diligence in selecting contractor - maintain awareness of latest technology options - training
15. failure to communicate and manage legal holds for open records requests - identifying and retaining documents and releasing the hold (Action Item 8, 9)	- Legal Services sends follow-up reminders - file plans and standardized folder structures - identify and maintain affected information - legal hold guidelines	- implemented automated open records - researching discovery and legal hold tools - notify personnel of legal holds - email retention and e-discovery project

Action Item	Owner	Target Date	Revised	Status	Comments
1. Develop departmental HIPAA training and method for tracking completion (Risk 3)	Management, Human Resources	6/2015	12/2016	In Progress	Departmental HIPAA training has been developed for Health & Insurance Benefits, Information Technology, Benefit Counseling, and Internal Audit. The development of HIPAA training for the remaining divisions/departments will coincide with completion of the Data Protection Project. Cross-reference Information Security & Confidentiality risk report.
2. Replenish staffing levels due to recent departures (Risk 7)	Legal Services	6/2016		In Progress	
3. Identifying and resolving technical issues with software updates (Risk 5, 8)	Legal Services	Ongoing		In Progress	

TRS Stoplight Report Category

OPEN GOVERNMENT RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
4. Evaluate and investigate P8 Records Manager capabilities for application to e-records repositories (Risk 6)	Records Management	8/2014	8/2016	In Progress	Cross-reference Records Management risk report.
5. Seek opportunities to recover actual costs incurred in processing open records requests	Legal Services	9/2015		Close	Move to Regulatory, Compliance & Litigation risk category.
6. Review plan and develop or enhance written procedures for internal coordination of agenda items (Risk 13)	Executive, Legal Services	7/2015	7/2016	Planned	
7. Review litigation hold procedures and recommend changes, if any, including developing and implementing training as needed	Legal Services	9/2014	9/2015	Complete	Cross-reference Records Management risk report.
8. Legal will update the frequency of communicating legal holds with business units (Risk 15)	IMD, Legal Services	3/2014	7/2016	In Progress	Cross-reference Records Management risk report.
9. Records management training, education and awareness program (Risk 4, 6, 15)	Records Management	8/2016		Planned	RFO to be developed. Cross-reference Records Management risk report.
10. Conduct e-records assessments (Risk 4, 6)	Records Management	8/2016		Planned	Two-year project. RFO responses have been received 2/10/16. Contract execution April 2016. Cross-reference Records Management risk report.
11. Clarify legislation regarding aggregated participant information (Risk 10)	Legal Services	6/2017		Planned	

TRS Stoplight Report Category

OPEN GOVERNMENT RISK REPORT

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Training (Risk 2, 3, 4, 6, 10)	Information Security, Human Resources, Records Management	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. Online training for employees on records management has also been developed. Completion of training is tracked using SharePoint.
Policies and Procedures (Risk 3, 4, 5, 6, 10, 11, 12, 13, 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 3, 4, 5, 8, 10, 11, 12, 13, 14, 15)	Legal Services	Automated software tools for redacting sensitive or confidential information. Use software to track open records requests.

TRS Stoplight Report Category

PENSION BENEFIT ADMINISTRATION RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Barbie Pearson	⬤⬆	June 2016

GOAL	OVERALL RISK	OBJECTIVE
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.	Process 98% of initial annuity payments to TRS retirees when first due.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts a majority of the risks. Additional mitigation strategies are planned to further reduce risks related to manual processes and inflexible systems, intentional misreporting, compliance with employment after retirement, inconsistent administration of the pension plan, reliance on legacy systems, conflicting priorities, disruption with accuracy and timeliness of benefit delivery, and inability to monitor employee performance and overall service delivery performance. Key mitigations include quarterly testing, verification process, TRS Policy Decision Repository, cross-training/training, and prioritizing workload.

RISK DETAILS

Risk Description	Mitigations	
1. data entry errors	- system edits and reports - documented processes and procedures - verification process - performance evaluations/feedback - review exception reports - research - separation of duties - secondary review/verification	- internal audits and quarterly testing - periodic quality checks - attend fraud and/or ethics training - audit trails - training - criminal history background checks - disciplinary action - skills-based testing
2. system goes down affecting payment processing (e.g., annuity payroll, refunds, death claims)	- nightly backups - business continuity plan	arrangement with Comptroller to manually process payments
3. comptroller systems go down	rely on comptroller's business continuity plan	ongoing communication

TRS Stoplight Report Category

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PENSION BENEFIT ADMINISTRATION RISK REPORT

Risk Description	Mitigations	
4. payments issued incorrectly (manual)	- verification process - review random sample of payments when signing vouchers	- secondary review - review duplicate payment report - quarterly benefit testing by Internal Audit
5. payments issued incorrectly (electronic)	- review random sample of payments when signing vouchers - review duplicate payment report - quarterly benefit testing by Internal Audit - review exception reports - disciplinary action	- research - separation of duties - secondary review/verification - audit trails - training
6. payments are sent late	- training - cross-training	- built-in system schedules - publicize voucher calendars
7. incorrect/incomplete information received from reporting entities	- training - web page dedicated to reporting entities with reporting information, procedures, and instructions	- reporting entity workshops - reporting entities audited by Internal Audit - reporting entity warrant holds
8. collusion between Benefit Services departments to issue a refund, create a retirement or death benefit	- separation of duties - verification process - TRS hiring process - criminal history background checks - system security access controls - TRS Core Values - annual user classification review - internal review of system access when staff moves, adds or changes	- ethics policy - secondary review - audit trails - attend fraud and/or ethics training - policy and procedures training - disciplinary action - notify chief officers when legal orders received regarding staff that indicate possible increased fraud risk
9. member account information altered to benefit internal staff or external individual	- documented policies and procedures - separation of duties - review random sample of payments when signing voucher - annual user classification review - internal review of system access when staff moves, adds or changes - review exception reports	- research - secondary review/verification - audit trails - attend fraud and/or ethics training - criminal history background checks - policy and procedures training - disciplinary action - system security access controls

TRS Stoplight Report Category

PENSION BENEFIT ADMINISTRATION RISK REPORT

Risk Description	Mitigations	
	▪ notify chief officers when legal orders received regarding staff that indicate possible increased fraud risk	▪ TRS Core Values
10. manual processes and inflexible systems allow the possibility of more errors or delays in processing (e.g., alternate payments) (Action Item 1, 7)	▪ verification process ▪ secondary review ▪ separation of duties ▪ coordination with Legal Services	▪ work with IT to resolve system issues ▪ calendar reminders ▪ departmental procedures for manual processes ▪ require written instructions from Legal Services
11. employment after retirement intentional misreporting (internal/external fraud) (Action 2, 8)	▪ training for reporting entities ▪ internal/state audits ▪ focused reporting entity training for issues	▪ SAO fraud hotline ▪ potential for criminal prosecution ▪ self-assessment audit tool
12. receive forged documents (external fraud)	▪ documented policies and procedures ▪ potential for criminal prosecution ▪ quarterly external penetration testing ▪ perimeter and access information security	▪ notarized documents ▪ make management aware of possible problems ▪ original signatures checked
13. difficulty in ensuring compliance with employment after retirement due to complexity of rules (Action Item 2)	▪ internal training ▪ training for reporting entities ▪ annual review of Employment After Retirement brochure ▪ employer audits ▪ self-assessment audit tool	▪ *TRS News* ▪ *TRS Update* ▪ legal services advice ▪ ad-hoc email communications ▪ regular TRS rules review
14. altered or forged warrants	▪ notarized documents ▪ confidentiality policy ▪ documented policies and procedures ▪ management/supervisor oversight/review	▪ research ▪ make management aware of possible problems ▪ forgery process through Comptroller's office
15. inconsistent administration due to complexity of the pension plan (Action Item 1)	▪ documented policies and procedures ▪ TRS Policy Decision Repository ▪ reorganization of Benefit Services to include Benefit Reporting & Payments	▪ centralizing training ▪ automated systems ▪ ongoing review and update of rules, policies, and procedures
16. sustained reliance on legacy information systems (e.g., level of staff effort to maintain systems, performance issues) (Action Item 1)	▪ TEAM Program implementation ▪ system performance monitoring and diagnostics	▪ regular maintenance of systems ▪ documented policies and procedures

TRS Stoplight Report Category

PENSION BENEFIT ADMINISTRATION RISK REPORT

Risk Description	Mitigations	
17. conflicting priorities due to TEAM Program implementation (Action Item 1)	▪ backfills ▪ streamline work processes	▪ cross-training ▪ prioritize workload
18. spikes in retirement or other service areas due to legislative changes create backlog	▪ cross-training ▪ streamline work processes ▪ annual review of productivity standards	▪ prioritize workload ▪ overtime ▪ proactive member communication
19. disruption with accuracy and timeliness of benefit delivery during transitional phase of TEAM Program implementation (Action Item 3, 4, 5)	▪ ongoing member communication ▪ documented processes and procedures including interim processes ▪ TEAM Connect ▪ user acceptance testing ▪ embedding business & technical staff sooner	▪ Organizational Change Management Project (TEAM) ▪ Decommissioning Legacy Systems (DLS) Project (TEAM) ▪ interdepartmental communication ▪ identifying work-arounds
20. inability to monitor employee performance and overall service delivery performance against set metrics during transitional phase of TEAM Program implementation (Action Item 6, 7, 8)	▪ heightened awareness of occurrence ▪ continue to research issue	▪ business representation on DLS project

Action Item	Owner	Target Date	Revised	Status	Comments
1. Eliminate majority of manual processes by automating them in TRUST Phase 1 and 2 (Risk 10, 15, 16, 17)	Benefit Services, HP	5/2018		In Progress	Some implementation will occur during Phase 1 and the remainder in Phase 2.
2. Full payroll with implementation of Phase 1 of TRUST (Risk 11, 13)	Benefit Services, HP	9/2016		In Progress	
3. Develop interim processes for Phase 1 (Risk 19)	Benefit Services, Core Program Team	5/2015	9/2016	Planned	This action item has been incorporated into business procedures and training.
4. User acceptance testing for Phase 1 (Risk 19)	Core Program Team	6/2015	7/2016	Planned	For Phase 1 only.

TRS Stoplight Report Category

PENSION BENEFIT ADMINISTRATION RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
5. Business Procedures and Training Project (TEAM) (Risk 19)	BPT Project Team	9/2015	10/2016	Planned	This is for Phase 1 training and includes having all TRS staff trained for Go Live Phase 1.
6. Replicate current reports in TRUST for performance and turnaround time (Risk 20)	Information Technology, Benefit Services	9/2015	9/2016	In Progress	The majority of the reports will be generated for employee performance in Microsoft Dynamics (CRM). TRUST will provide high-level statistical reporting. For Phase 1 only, Phase 2 will be completed in 5/2018.
7. During detailed level requirements specify employee performance and business processing monitoring reports needed out of the workflows (Risk 10, 20)	Benefit Services, Core Program Team, Core Management Team	2/2015	9/2016	In Progress	Phase 1 reporting only, Phase 2 will be completed 5/2018.
8. Create ad-hoc reports (Risk 11, 20)	Information Technology, Benefit Services	9/2015	9/2016	Planned	For Phase 1 only, Phase 2 will be completed in 5/2018.

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
Quarterly Testing (Risk 1, 4, 5)	Benefit Processing, Internal Audit	Ongoing quarterly testing of benefit payments and resolve any exceptions.
Verification Process (Risk 1, 4, 5, 8, 9, 10)	Benefit Services	Ongoing secondary review.
TRS Policy Decision Repository (Risk 15)	Executive Management	Administrative decisions made to clarify application of laws and rules.
Cross-training/Training (Risk 1, 5, 6, 7, 8, 9, 13, 15, 17, 18)	Benefit Services Management	Training with new staff and refresher and cross-training with existing staff; within and across departments.
Prioritize Workload (Risk 17, 18)	Benefit Processing Management	Weekly management team meetings to review workload and age of documents in order to prioritize.

TRS Stoplight Report Category

PROCUREMENT & CONTRACTS RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Don Green	🔵 ↔	June 2016

GOAL	OVERALL RISKS	OBJECTIVES
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.	• Mitigate Procurement risk associated with processing purchases and contracts. • Mitigate Contract Management risk through effective monitoring processes.

SUMMARY

The risk owner's response is to further mitigate the risks related to the receipt of timely information, non-compliance with purchasing requirements, contract documentation and contract values. Key mitigations include documented processes and procedures, effective communication, review of procurements and contracts, cross-functional participation, and planning.

RISK DETAILS

Risk Description	Mitigations	
1. lack of TRS-specific expertise	• cross-training and rotation of duties • one-on-one and team meetings • monitor staffing levels	• generate opportunities for cross-training, team building and professional development to minimize turnover
2. failure to receive information in a timely manner (Action Item 2, 3, 4)	• effective communication • monitor statute/rule changes and reporting requirements • documented processes and procedures	• planning • update TRS procedures • inform staff of new requirements and convey existing procedures as opportunities arise
3. internal fraud and/or collusion (e.g., staff creates false invoice/ purchase request/vendor or collusion with vendor/contractor on health care contracts)	• documented processes and procedures • review procurements • annual ethics compliance statement • cross-functional participation on major contracts • audits • maintain proper controls	• segregation of duties • management oversight • screen prospective employees • contract review • fraud training

TRS Stoplight Report Category

PROCUREMENT & CONTRACTS RISK REPORT

Risk Description	Mitigations	
4. business units fail to comply with purchasing requirements including pursuing justification rather than competitive process (Action Item 2, 3, 4)	▪ state procurement manual ▪ contract management guide ▪ effective communication ▪ training business units	▪ TRS voluntarily complies with state processes and rules ▪ contract administration policy ▪ audits
5. failure to maintain complete contract documentation (Action Item 2, 3, 4)	▪ effective communication ▪ checklists ▪ contract administration policy	▪ quality assurance function for contracts ▪ audits ▪ training
6. unable to determine contract values and monitor deliverables against the contract (Action Item 5)	▪ ensure financial system replacement solution supports contract management system	
7. inaccurate contract value determination (Action Item 2, 3, 4)	▪ during renewal/ amendment determine proper value and assess if re-procurement is needed	▪ training with contract sponsors ▪ contract administration policy

Action Item	Owner	Target Date	Revised	Status	Comments
1. Ensure sufficient resources exist throughout the TEAM Program development	Procurement & Contracts	Ongoing		Complete	
2. Develop procurement and contracting procedures (Risk 2, 4, 5, 7)	Procurement & Contracts	10/2016		In Progress	Utilize a project manager to assist with the development of procedures.
3. Develop procurement and contracting training (procurement staff) (Risk 2, 4, 5, 7)	Procurement & Contracts	10/2016		In Progress	Planning includes requesting assistance from Human Resources.
4. Develop procurement and contracting training (agency staff) (Risk 2, 4, 5, 7)	Procurement & Contracts	10/2016		In Progress	Planning includes requesting assistance from Human Resources.
5. Research contract management tool options (Risk 6)	Procurement & Contracts	12/2016		Planned	Resource tool funding - IT and TEAM budgets

TRS Stoplight Report Category

PROCUREMENT & CONTRACTS RISK REPORT

Monitoring Activities			
Key Mitigation	**Monitored By**	**Monitoring Process**	**Comments**
Cross-Training (Risk 1)	Procurement & Contracts Manager	Systematically ensure that multiple team members have the knowledge to perform each team task.	Ad-hoc as needed; standard processes, clauses are in place to create efficiencies.
One-on-one and team Meetings (Risk 1)	Procurement & Contracts Manager	Actively solicit feedback from team members regarding workload levels and any possible issues affecting the Procurement and Contracts Team.	Ad-hoc as needed to discuss and comment on efficiencies.
Monitor staffing levels (Risk 1)	Procurement & Contracts Manager	Review overtime reports and workload metrics to determine appropriate staffing levels.	Reports are submitted to support and justify requests for additional positions.
Documented processes and procedures (Risk 2, 3)	Purchasing Staff, Contract Administration Manager, Procurement & Contracts Manager	Maintain documented processes and procedures. Note any changes to current Procurement and Contracts Team processes and/or procedures and ensure that these are captured in the team procedures and/or Contract Administration Policy.	Ad-hoc as needed; Contract Administration Policy is typically updated annually.
Effective communication (Risk 2, 4, 5)	Procurement & Contracts Manager, Contract Administration Manager	Ensure that e-mail, Intranet, and/or phone are used to share necessary information in a timely manner to meet the need(s) at hand. Meet one-on-one or as a team to verify priorities and gauge workloads.	Daily communication via multiple methods. Discuss workload, priorities, and other procurement issues.
Review of procurements (Risk 3)	Procurement & Contracts Manager, Contract Administration Manager	Ensure all procurements are in accordance with established processes and procedures.	Standardized forms, checklists, and spreadsheets for contracts allows reviewer to easily identify missing or required information; pre-contract and post-contract reviews are conducted.
Contract review (Risk 3, 5, 7)	Procurement & Contracts Manager, Contract Administration Manager	Perform periodic review of contracts to ensure that contract requirements, appropriate documentation, deliverables, and payments are in accordance with the terms of the contract and contained in the contract file.	Contracts greater than $25,000 require completion of a risk assessment questionnaire, which is numerically scored to determine level of monitoring throughout the contract period.

TRS Stoplight Report Category

PROCUREMENT & CONTRACTS RISK REPORT

Monitoring Activities			
Key Mitigation	**Monitored By**	**Monitoring Process**	**Comments**
Cross-functional participation (Risk 3)	Divisional Management, Legal Services, Internal Audit, Procurement & Contracts Manager	Active involvement throughout the contracting process by Divisional Management, Legal Services, Internal Audit, and Procurement.	Cross-functional participation from various departments has been very effective.
Planning (Risk 2)	Procurement & Contracts Manager, Procurement and Contracts Staff	Maintain regular contact with contract sponsors to obtain knowledge and status of upcoming contracts.	Routine communication ensures planning can begin on future contracts.

TRS Stoplight Report Category

RECORDS MANAGEMENT RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Don Green	🟠 ↔	June 2016

GOAL	OVERALL RISK	OBJECTIVE
Manage the retention and disposition of 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.	Improve compliance with the retention schedules with respect to e-records.

SUMMARY

The risk owner's response is to mitigate the higher risks that come from the challenge of e-records. Key mitigations cover on-going actions of communication and training sessions with records liaisons and employees, the annual purge process, monitoring the metrics of the unstructured repositories, and simplifying the records retention schedules. Recent activities include:

- Online training for employees
- Continued active monitoring of email and network storage volumes including online access to management for review
- Annual purge with emphasis on e-records
- Ongoing review and deletion of e-records accounts (email and network drive) for terminated/terminating employees

RISK DETAILS

Risk Description	Mitigations	
1. noncompliance with retention schedule, policies and procedures (Action Item 8, 9)	▪ communication with employees regarding retention periods and purge process ▪ annual refresher training for employees ▪ automated workflow for e-Records of terminated employees	▪ training sessions with records liaisons ▪ review and monitor email and network drive storage reports ▪ annual purge process
2. lack of time and resources to properly manage records (Action Item 1, 8, 9)	▪ file plans and standardized folder structures ▪ future planning for automating process	▪ dedicated staff and departmental records liaisons ▪ streamline process

TRS Stoplight Report Category

RECORDS MANAGEMENT RISK REPORT

Risk Description	Mitigations	
3. lack of understanding of retention schedule, policies, laws and TSL rules (Action Item 8)	- communication with employees regarding retention periods and purge process - current and future planning for automating process - utilizing existing software with records management features - streamline process	- annual purge process - annual refresher training for employees - file plans and standardized folder structures - training sessions with records liaisons - consult with records management and legal services staff
4. records retention schedule is not current (Action Item 10)	- training sessions with records liaisons and employees - annual purge process	- review schedules periodically - communication with records liaisons
5. records as actually maintained do not correlate with the retention schedule (Action Item 8, 9, 10)	- review schedules periodically - annual purge process - training sessions with records liaisons and employees	- communication with records liaisons - data protection project - use of standardized file structures
6. failure to communicate and manage legal holds - identifying and retaining documents and releasing the hold (Action Item 4, 5)	- Legal Services sends follow-up reminders - identify and maintain affected information - file plans and standardized folder structures - notify personnel of legal holds	- email retention and e-discovery project - implemented automated open records - researching discovery and legal hold tools - legal hold guidelines
7. over-reliance on expanding IT resources to retain records (e.g., physical equipment, staff) (Action Item 5)	- apply retention schedule - annual refresher training for employees - annual purge process - management monitors electronic storage usage - training sessions with records liaisons	- file plans and standardized folder structures - Records Management Policy - budget process - automated workflow for e-Records of terminated employees
8. numerous repositories for records and data that require technical proficiency for end users to operate and are difficult to manage for compliance (Action Item 1, 5, 6, 8, 9)	- file plans and standardized folder structures - streamline process - departmental training	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)	- up-to-date backup procedures - contract for services - proper identification and timely migration of information	- disaster recovery/ business continuity exercises - emergency purchasing flexibility - backup tape retention and disposition policy - coordination between legal and IT on policy
10. improper use of technologies to communicate, create, and maintain TRS records (e.g., mobile devices,	- updating policies and procedures - research, awareness and implementation of new technologies	- training and continuing education on records management policy and information security policy - encryption

TRS Stoplight Report Category

RECORDS MANAGEMENT RISK REPORT

Risk Description	Mitigations	
cloud-based storage, removable media, etc.)	▪ specialized expertise	
11. third parties who generate and hold TRS records fail to comply with TRS policy and procedures	▪ awareness and monitoring of documentation kept by third parties ▪ contract management ▪ internal audit of key third-party vendors	▪ business associate agreements ▪ purchasing specifications in RFP ▪ non-disclosure agreements ▪ contract provisions
12. lack of understanding the nature of the problem in managing e-records (e.g., not keeping enough for regulatory/e-discovery vs. being overwhelmed by volume) (Action Item 8, 9)	▪ communication with management ▪ legal hold guidelines ▪ IMD vendor vault contract	▪ executive director has set priority to manage e-records

Action Item	Owner	Target Date	Revised	Status	Comments
1. Evaluate and investigate P8 Records Manager capabilities for application to e-records repositories (Risk 2, 8)	Records Management	8/2014	8/2016	In Progress	Cross-reference Open Government risk report.
2. Update retention schedule to correlate with records actually maintained	IMD, Records Management	8/2014	8/2015	Close	Close action item, other mitigation strategies are being pursued.
3. Review litigation hold procedures and recommend changes, if any, including developing and implementing training as needed	Legal Services	9/2014	9/2015	Complete	Cross-reference Open Government risk report.
4. Legal will update the frequency of communicating legal holds with business units (Risk 6)	IMD, Legal Services	3/2014	7/2016	In Progress	Cross-reference Open Government risk report.
5. Advising on the implementation of new automated systems for retention and disposition capabilities to ensure that they comply with records management policies (Risk 6, 7, 8)	Legal Services, IT, Records Management	8/2016		In Progress	Implementation of new automated systems applies to TRUST and FSR TEAM projects. Records Management RFO in progress.

TRS Stoplight Report Category

RECORDS MANAGEMENT RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
6. Implement records retention schedule in repositories for records and data (Risk 8)	IMD	12/2014	12/2016	Planned	
7. Formulate and propose e-Records Project	Records Management	12/2015		Complete	
8. Records management training, education and awareness program (Risk 1, 2, 3, 5, 8, 12)	Records Management	8/2016		Planned	RFO to be developed. Cross-reference Open Government risk report.
9. Conduct e-records assessments (Risk 1, 2, 5, 8, 12)	Records Management	8/2016		Planned	Two-year project. RFO responses have been received 2/10/16. Contract execution April 2016. Cross-reference Open Government risk report.
10. Implement management certification of retention schedule (Risk 4, 5)	Records Management	4/2017		Planned	Coincides with annual purge cycle.

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, 8)	Records Management	Conduct annual training sessions.	Training sessions include review of the purge process and past history.
Annual purge process (Risk 1, 3, 4, 5, 7)	Records Management	Analyze purge results	Review volume and record series not purged.
Ongoing communication with records liaisons (Risk 4, 5)	Records Management	Communication with liaisons includes annual purge, training, retention schedule amendments, and other records management topics.	

TRS Stoplight Report Category

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Carolina de Onís	🔵 ↔️	June 2016

GOAL	OVERALL RISK
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.

SUMMARY

Mitigations are appropriate to address the level of risk for this risk category and the risk owner accepts a majority of the risks. One mitigation strategy to train TRS foreign travelers and assignees is in progress to further mitigate the risk of failure to comply with or recognize state and foreign laws. 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	▪ retain both in-house and outside counsel with specialized expertise in applicable tax laws ▪ participate in multiple retirement related associations ▪ attendance at seminars and conferences	▪ receive notice or guidance from actuary ▪ periodically apply for a revised determination from IRS regarding the plan's qualified status ▪ review proposed IRS guidance and comment as warranted
2. failure to operate in accordance with plan terms and requirements of federal and state law in order to maintain plan qualification status	▪ 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	▪ 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 request IRS determination letter as appropriate	▪ monitor IRS communications/ pronouncements ▪ internal and external tax counsel ▪ networking	▪ multiple staff monitor determination letter requirements

TRS Stoplight Report Category

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Risk Description	Mitigations	
4. failure to monitor or inform the legislature that a revision is needed to state legislation that has a detrimental effect on plan qualification status	▪ Executive Director and the Director of Governmental Relations monitor legislation that may impact TRS and assign bills to appropriate TRS staff for review ▪ in-house attorneys evaluate proposed state legislation to assess possible effects on qualification status	▪ use the authority under Section 825.506, Government Code, to adopt rules that ensure compliance with federal plan qualification requirements by effectively modifying adopted state legislation
5. failure to pursue appropriate recoveries	▪ redundant sources of information ▪ retained custodian to file domestic securities class action claims ▪ internal review and monitoring of custodian ▪ internal policies and procedures	▪ analysis of foreign recovery opportunities ▪ opt-out analysis of domestic actions to increase recoveries ▪ internal and external counsel
6. failure to comply with Dodd-Frank requirements or other federal securities laws	▪ monitor SEC and CFTC requirements ▪ multiple staff monitor securities laws ▪ chief compliance office ▪ receive regulatory alerts	▪ internal and external investment counsel ▪ networking ▪ attendance at seminars and conferences
7. failure to comply with investment policies	▪ internal and external compliance systems ▪ internal investment counsel ▪ communication ▪ enhanced compliance staffing	▪ review training needs ▪ Chief Compliance Officer (CCO) and auditor's review of investment compliance
8. failure to comply with ethics policies	▪ enhanced training ▪ annual compliance certification ▪ clear drafting and guidance in policies ▪ inter-departmental coordination	▪ internal counsel ▪ risk of personnel actions ▪ reviewed by CCO and fiduciary counsel ▪ periodic review of ethics policies
9. failure to comply with or recognize state and foreign laws (Action Item 3)	▪ internal and external counsel ▪ monitor sources of information ▪ attendance at seminars and conferences ▪ external consultants	▪ networking ▪ clear advice ▪ communication ▪ in-house legal education
10. failure to manage litigation risks appropriately	▪ internal and external counsel ▪ communication	▪ internal policies and procedures ▪ appropriate technology
11. failure to have appropriate language in investment contracts to allocate risk	▪ internal and external counsel ▪ networking and association memberships ▪ clear guidelines and policies	▪ attendance at seminars and conferences ▪ management involvement

TRS Stoplight Report Category

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Risk Description	Mitigations	
12. failure to comply with international market regulations	- internal and external counsel - monitor sources of information - other custodian and vendor resources and services - attendance at seminars and conferences - electronic compliance alerts	- communication - clear advice - researching technology and information service options - retained international tax advisor - custodian bulletins
13. failure to comply with personal trading policies	- training - automated trade pre-clearance system - reconciliations of personal trading - analysis of personal trading to identify abusive trading	- internal counsel - require trade confirmations - procedures for handling of material non-public information (and information barriers) - reviewing and updating personal trading policy
14. failure to use prudent processes to identify qualified vendors	- training - communication - clear advice - fiduciary counsel can be consulted - internal counsel - contract administration-policy updated and adopted	- certification of purchasing staff - standard forms and guidelines - due diligence forms - board policy on procurement adopted - contract administrator - internal audit
15. failure to comply with the contract administration policy	- communication - internal counsel - internal procedures - board policy on procurement adopted - continuing education of purchasing staff - training	- consultation with purchasing - contract administration policy updated and adopted - internal audit - addition of more experienced and qualified staff

Action Item	Owner	Target Date	Revised	Status	Comments
1. Follow-up with Contract Management regarding training, audit compliance, and revising manual to streamline requirements	Legal Services, Contract Management	1/2015	9/2015	Complete	Coordination among Legal Services, Purchasing, and internal business areas.
2. Researching technology options	Legal Services, Investment	Ongoing		Complete	

TRS Stoplight Report Category

REGULATORY, COMPLIANCE & LITIGATION RISK REPORT

Action Item	Owner	Target Date	Revised	Status	Comments
	Management Division				
3. Enhance training for TRS foreign travelers and assignees (Risk 9)	Legal Services	4/2016		Complete	Regulatory and tax matters.

Monitoring Activities		
Key Mitigation	**Monitored By**	**Monitoring Process**
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.
Regular review of plan terms (Risk 2, 3, 4)	Legal Services	Seek IRS determination letter every five years; review with outside counsel; and legal review of legislation.
Audits (Risk 2, 14, 15)	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, 7, 10, 12, 13)	Legal Services, Information Technology	Survey the market; consult with system users; write applications to adhere to compliance standards; test system during implementation and on an ongoing basis.
Internal procedures (Risk 2, 5, 10, 15)	Legal Services, Business Units	Collaborative approach to providing legal services and redundant information sources.
Monitoring regulators/information sources (Risk 3, 6, 9, 12)	Legal Services	Review subscriptions and access to multiple sources of information.
Communication (Risk 7, 9, 10, 12, 14, 15)	Legal Services, Executive Council	Regular meetings; collaborative approach to providing legal services; third-party research; and discussions on policy and procedures.
Training (Risk 8, 13, 14, 15)	Purchasing, Legal Services, Human Resources	Schedule and track employee training; multiple departments involved; use of standard forms; and frequent consultation.

TRS Stoplight Report Category

TALENT CONTINUITY RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Janet Bray	🔵⬇	June 2016

GOAL	OVERALL RISK	OBJECTIVES
Attract, retain and develop a highly competent staff.	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.	• Develop and maintain a desirable work environment • Develop an effective recruitment/retention strategy and a competitive total rewards package.

SUMMARY

Risks to workforce continuity include staff turnover, including retirements, lack of effective transfer of key institutional knowledge and skills, and lack of a defined agency-wide performance appraisal system. Key mitigations include:

- Monitoring turnover trends, employee engagement surveys and employee feedback to develop targeted action plans.
- Assessing departmental talent continuity needs, career paths and ongoing learning and development needs to develop succession and knowledge transfer programs.
- Developing an integrated talent management system that standardizes performance management, staffing, recruiting, compensation, professional development and workforce planning.
- Implementing a new Human Resource Information System (HRIS), as part of the Financial System Replacement project, to help track and maintain workforce and employee data.

RISK DETAILS

Risk Description	Mitigations	
1. staff turnover (Action Item 2, 3)	▪ TRS Leadership Development Program ▪ cross-training ▪ positive and rewarding work environment ▪ collect and monitor employee feedback regarding areas of concern through surveys and discussion ▪ biennial Workforce Plan	▪ exploring options for a knowledge transfer program ▪ career paths ▪ monitor and assess turnover and retirement trends ▪ executive management support and oversight ▪ exploring succession planning options

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TALENT CONTINUITY RISK REPORT

Risk Description	Mitigations	
2. lack of effective transfer of key institutional knowledge and skills (Action Item 2, 3)	▪ exploring options for a knowledge transfer program ▪ Knowledge Transfer pilot testing ▪ exploring succession planning	▪ conduct learning and development needs assessment ▪ TRS Leadership Development Program
3. lack of defined agency-wide performance management system (Action Item 4)	▪ training and coaching ▪ working toward consistency in performance appraisals across the agency ▪ review current performance appraisal processes	▪ HRIS system (in progress) ▪ track and monitor performance appraisal data ▪ conduct learning and development needs assessment

Action Item	Owner	Target Date	Revised	Status	Comments
1. Develop a template and process for creating divisional talent continuity plans	Human Resources	Ongoing		Closed	Action item is no longer relevant, other mitigations are being pursued.
2. Continual partnering with divisions on workforce needs (Risk 1, 2)	Human Resources	Ongoing		In Progress	
3. Develop and coordinate a succession planning and knowledge transfer program (Risk 1, 2)	Human Resources	8/2016		In Progress	An HR team was created to focus on developing and coordinating a succession planning and knowledge transfer program.
4. Develop standardized processes and procedures for performance appraisals (Risk 3)	Human Resources	12/2014	8/2016	In Progress	Currently piloting three divisions for the performance management system using existing resources. A standardized process will better enhance the agency's ability to track workforce and succession planning.

Monitoring Activities			
Key Mitigation	**Monitored By**	**Monitoring Process**	**Comments**
Monitor organization turnover and assess trends (Risk 1)	Human Resources	Monitor using USPS data and provide individual business unit data to management.	Annual; end of fiscal year, a key measure used to compare TRS to other state entities.
Workforce Plan (Risk 1)	Management	Follow biennial Workforce Plan, review annual turnover data and trends, and update plan as necessary.	Next update is scheduled for spring of 2016.

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TALENT CONTINUITY RISK REPORT

Monitoring Activities			
Key Mitigation	**Monitored By**	**Monitoring Process**	**Comments**
Employee engagement surveys (Risk 1)	Human Resources	Analyze survey data for trends within TRS control. Evaluate results and recommend actions for management's consideration.	Results were positively high as they were in previous years, so no actions recommended.
Evaluate career paths (Risk 1)	Human Resources	Ongoing review of classification and career paths.	Developing structure and process for evaluating classifications and career paths.
Ongoing learning and development needs assessments conducted by departments (Risk 2, 3)	Human Resources; Management	Conduct ongoing assessment of learning and development needs and knowledge gaps. Acquire, develop, and deliver instruction and/or provide resources to address identified gaps.	Management determines if specific instruction and/or resources are needed prior to the learning and development needs assessment conducted by HR.

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TEAM PROGRAM RISK REPORT

RISK OWNER	RISK LEVEL/TREND	REPORTING DATE
Ken Welch	🟠 ↔	June 2016

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 2018.

SUMMARY

Risks identified for the TEAM Program involve people, processes, project management, and change. Management is actively pursuing mitigations for these risks. A summary of activities since the last board reporting in November 2015 include the following:

- Pension Line of Business (LOB) User Acceptance Testing Phase 1A completed.
- LOB Phase 1A completed – Reporting Entity (RE) Portal Certification environment live.
- Several REs have been certified.
- LOB Phase 1B development and testing in progress.
- Data Assessment Project completed early.
- Website Redesign Project Implementation Phase I completed.
- Decommissioning the Legacy System development activities completed.
- User Guides and Training Guides for Phase 1B are currently being reviewed.
- Moved numerous workflows out of the LOB Phase 1 implementation schedule to focus on the quality of the workflows being implemented vs. the quantity. The workflows moved out of Phase 1 remain in scope, but will be implemented after Phase 1.

RISK DETAILS

Risk Description (key risks)	Mitigations	
1. conflicting priorities between existing work and TEAM Program-related	▪ resource plan sent monthly ▪ evaluate and add/ reallocate resources	▪ IT governance process (prioritization for service requests that require IT resources)

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TEAM PROGRAM RISK REPORT

Risk Description (key risks)	Mitigations	
assignments (e.g., audits taking place at the same time as user acceptance testing) (Action Item 1)		
2. ineffective decision-making (i.e., decisions not made timely, decisions made too swift which causes us to revisit, and/or made at inappropriate level)	▪ decision log	▪ escalate issues if needed
3. lack of resources (i.e., people, skill sets, or knowledge bottlenecks) (Action Item 2, 3)	▪ TRS/TEAM staffing plans ▪ review functional areas to identify knowledge bottlenecks	▪ evaluate and add/ reallocate resources
4. plan changes (e.g., legislative, rule, regulatory, federal, etc.)	▪ Plan changes are largely outside the control of the CMT and Program Management; therefore, we accept this risk ▪ governmental relations	▪ be aware of legislation and planning ▪ board/management support ▪ change control process ▪ communication of upcoming changes
5. inaccurate planning estimates (i.e., cost and schedule)	▪ This risk is owned by HP. Planning estimates are dependent on the plans put together by HP and largely outside the control of CMT and Program Management; therefore we accept this risk. ▪ additional personnel ▪ weekly status meetings	▪ obtain estimates ▪ periodic reassessments and communication ▪ process improvement plan for the Pension Line-of-Business (LOB) ▪ research vendors and other pension funds ▪ vendor demonstrations
6. failure to manage change (e.g., scope, schedule, budget)	▪ communicate, monitor, and enforce the change control process	
7. lack of vendor staff with appropriate skill sets	▪ This risk is owned by our vendors; therefore we accept this risk. ▪ ability to obtain people with expertise ▪ realign schedule to optimize staff with the skill set	▪ HP hiring additional resources to provide adequate backup for business analysts ▪ process improvement plan for LOB ▪ on the job training
8. if the schedule were to shift by a month, TRS could not absorb it because TRS resources are maxed out, even though the TRS resource	▪ This risk is owned by HP; therefore we accept this risk. ▪ TRS needs to remove staff from DLR sessions to prevent meeting due date roadblocks	▪ perform impact analysis on TRS resource availability ▪ more communication to eliminate the need for multiple key people in the same meetings

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TEAM PROGRAM RISK REPORT

Risk Description (key risks)	Mitigations	
levels are above their commitment in the RFO		
9. lack of TRS experience with large scale user acceptance testing (UAT)	▪ This risk was transferred to Cognizant. ▪ incremental approach with more than one user acceptance test period ▪ experienced program management vendor Provaliant ▪ identification of a UAT project SME	▪ training ▪ test plan review ▪ involvement of TRS QA team ▪ solid benchmarks measurements ▪ TRS will engage additional resources to provide UAT ▪ QAT project
10. inadequate contingency plan if Phase 1B "Go Live" does not occur immediately after Fiscal Year-End Close (September 2016)	▪ Collect information from every TEAM project on what challenges it would present if the "Go Live" did not immediately follow the TRS Fiscal Year-End Close in the legacy systems.	▪ Create entries in the TEAM Risk Mitigation Log for each challenge presented to a TEAM project by a "Go Live" date not immediately following the TRS Fiscal Year-End Close in the legacy systems.

Risk Description (other risks)	Mitigations	
11. internal TEAM governance structure operating inefficiently (e.g., inability to manage conflicting requirements between user departments)	▪ weekly CMT and ESC meetings ▪ committee assignments ▪ OCM Project ▪ continue to review "lessons learned" from other pension systems ▪ IPA vendor oversight ▪ CMT regularly attends Executive Briefing meetings ▪ effective communication	▪ program/project management action/decision logs ▪ risk assessments at program and project level ▪ program management services from Provaliant ▪ weekly TEAM dashboard ▪ clear direction ▪ RACI chart ▪ status reports
12. TEAM Project meetings have too many additional TRS staff attending (inefficient meetings and use of resource time)	▪ developed RACI chart to show roles and responsibilities ▪ clear/concise agendas with purpose and expected outcome	▪ identify subject matter experts (SMEs) needed throughout the projects ▪ define Core Project Team as more projects begin
13. lack of patience to adhere to contracted schedule and methodology (TRS schedules and vendor schedules conflict to discuss project-related topics)	▪ Project Sponsors and Project Managers will work with the vendor to see if individual items can be brought forward in the schedule as long as there is no risk to negatively affect the schedule and if it makes sense from a knowledge perspective	

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TEAM PROGRAM RISK REPORT

Risk Description (other risks)	Mitigations	
14. change in executive leadership/board resulting in different priorities	▪ communicate to new leadership the importance of supporting program and projects	▪ communicate the value proposition ▪ solicit board support
15. ineffective communication	▪ effective execution of the Communications Plan ▪ TEAM repository ▪ project interdependency meetings ▪ TEAM huddles ▪ program manager liaison between TRS and vendors ▪ Reporting Entity Outreach (REO) Project	▪ recorded webinars ▪ training ▪ program manager involvement ▪ open meetings ▪ solicit employee feedback ▪ OCM Project
16. unknown interdependencies in schedule/project	▪ regular project interdependency meetings ▪ interdependency schedule	▪ consolidated action/decision logs
17. not following TEAM governance process could impact decisions, scope and schedule	▪ HP needs to get their direction through the Project Sponsor and escalate to the CMT if needed.	
18. lack of resources (e.g., conference rooms, training rooms)	▪ use of unconventional spaces ▪ opening up of normally restricted conference rooms ▪ discuss room needs with Staff Services ▪ ongoing communication with leadership team	▪ restricting normally opened conference rooms ▪ identify rooms for training early and prepare additional space as needed ▪ Contingency: use external training facilities (South Cliff)

Action Item	Owner	Target Date	Revised	Status	Comments
1. Hire TEAM FTEs as outlined in the staffing plan approved by the TRS Board of Trustees (Risk 1, 3)	TEAM Project Sponsors & Managers	Ongoing		In Progress	CMT is currently looking at staffing needs for Phase II. If any additional resource needs are identified, they will be presented to the Executive Steering Committee.
2. Review functional areas to identify knowledge bottlenecks (Risk 3)	Adam Fambrough	May 2016	August 2016	In Progress	
3. Evaluate and add/reallocate resources (Risk 3)	Adam Fambrough	Ongoing		In Progress	

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