



Regular Meeting

Item Number 9 – Open Session

Subject: Enterprise Risk Management Report

Presenter(s): Lynn Bashaw / Phillip Burkholder

Item Type: Information

Date & Time: March 7, 2024 – 15 minutes

Attachment(s): Attachment 1 – ERM Heat Map

Attachment 2 – Risk Score Report

PowerPoint(s): Enterprise Risk Management Report

Item Purpose

The purpose of this item is to provide the Teachers' Retirement Board (board) with the semi-annual Enterprise Risk Management (ERM) Report reflecting the current risk landscape and updates as of December 31, 2023.

Recommendation

This is an information item only.

Executive Summary

Since the June 30, 2023 ERM Report was presented to the board in September 2023, staff continue their efforts to identify, assess and mitigate enterprise-level risks, including emerging and existential risks, that may impact CalSTRS' ability to accomplish its strategic goals, objectives and project deliverables and are taking the necessary actions to manage those risks.

Consistent with the last reporting period, half of the 10 risk categories have a residual risk above the low or very low risk range. During this reporting period, staff adjusted the risk ratings for three risk categories. While the Pension Funding Investments risk category saw an increase of its inherent and residual risk scores, Pension Funding Actuarial saw a decrease to its residual risk score. Neither of those score adjustments resulted in a risk range shift for the overall risk category. The residual risk score for both remain in the low range. Transformational Change saw a decrease in its inherent risk score and a material decrease in its residual score, taking it from

the high-risk range to the medium-risk range for residual risk. The frequent movement of these risk categories on the heat map reinforces the dynamic nature of the current risk environment. While the risk environment continues to shift, staff remain confident that the ongoing risk mitigations and ongoing efforts to assess emerging and existential risks enables CalSTRS to continue to deliver on its mission. Staff will continue to identify and report on opportunities to mature the ERM Program to ensure the organization remains prepared for current and future risks.

Overall, based on management’s review of identified risks and the associated mitigation efforts, the risks for all 10 risk categories are adequately managed and reflected appropriately on the ERM Heat Map.

Staff accomplished the following risk-related activities during this reporting period:

- The biennial State Leadership Accountability Act report was submitted to the Department of Finance on December 15, 2023.
- An ERM team member earned the Governance, Risk and Compliance Professional certification from OCEG¹.
- The 18-month maturity plan of the ERM and Enterprise Compliance Services programs, was presented to the ARM Committee, in support of strategic plan Goal 1, Objective E.
- Six education presentations were conducted across various business areas, including Member Service Centers. These presentations focus on ERM activities and emphasize the importance of engaging in risk discussions to elevate organizational awareness and to enhance the risk culture at CalSTRS.
- ERM completed the review of the annual branch risk assessments submitted by all the branches within CalSTRS.

Background

As part of the ERM framework, CalSTRS Executive Risk and Compliance Committee, Risk Champions Network and the ERM team review and discuss enterprise-level risks and mitigations on a quarterly basis and provide an ERM Report to the board semi-annually. Staff’s quarterly review includes enterprise-level risks and sub-risks, while considering internal and external factors which could be catalysts for emerging and existential risks. The board is also provided with a list of emerging and existential risks that management evaluates and monitors, as a regular item in the Chief Executive Officer’s report, at every board meeting, except for the two meetings that staff normally provide this semi-annual ERM Report to the board.

Management’s activities to mitigate risks include assessment and adjustment of business processes and internal controls as appropriate to avoid risks or ensure effectiveness of ongoing mitigation efforts, deployment of resources as necessary and identification of risk transfer opportunities and acceptance of risks where the cost of mitigation exceeds the potential benefit.

¹ OCEG is a global nonprofit organization and community. They inform, empower, and help advance the careers of their 150,000+ members who work in governance, strategy, risk, compliance, security and audit.

<https://www.oceg.org/about/>

Discussion

Through ongoing ERM efforts, CalSTRS monitors 10 risk categories and their respective sub-risks using an enterprise risk matrix which generates the data for the ERM Heat Map and Risk Score Report. The ERM Heat Map provides management and the board a graphic display of the inherent and residual risks for each risk category. The visual overview shows the effectiveness of mitigation strategies and activities to manage inherent risks, as revealed by the difference between the inherent and residual risk scores. The Risk Score Report provides a more detailed summary of the overall inherent and residual risk scores for these risk categories as well as risk scores for the individual sub-risks within each of the categories. The detail allows management and the board to recognize how the sub-risk scores and consideration of priority weightings determine the overall risk category’s inherent and residual risk score. The specifics for each report are described below.






ERM Heat Map

The ERM Heat Map as of December 31, 2023, which is provided in Attachment 1, includes an inherent and residual risk score plotted on the map for each of the 10 risk categories based on the following risk score calculation:

Risk Score Calculation = Impact x (Probability + Velocity)

The risk score calculation includes impact which gauges the potential severity of the risk for the organization, probability which rates how likely the risk is to occur and a velocity metric which considers how fast a risk may impact CalSTRS. The X-axis (Risk Categories) on the ERM Heat Map displays the 10 risk categories. Above each category is a bar depicting the inherent risk score on the left (the darker gray bar) and a bar depicting the residual risk score on the right (the lighter gray bar). The dotted lines and black arrows reflect, if any, period-over-period movement of the risk category since the prior reporting period. The Y-axis displays the 50-point risk score scale for the 10 risk categories as follows:

Risk Score Key:

	very high	41-50
	high	31-40
	medium	21-30
	low	11-20
	very low	1-10

During this reporting period, half of the risk categories have residual risk scores above the low or very low risk range (yellow or blue) band of the heat map. In total, there are five risk categories with scores medium or higher ranges:

- Category 4 - Pension Administration with an overall residual risk score of 25 (medium).
- Category 6 - Information Security with an overall residual risk score of 38 (high).
- Category 8 - Reputational with an overall residual risk score of 22 (medium).

- Category 9 - Transformational Change with an overall residual risk score of 28 (medium).
- Category 10 - Third Parties with an overall residual risk score of 21 (medium).

In addition, there were three risk categories that experienced a risk score change from the prior period. The three categories with period-over-period changes are:

- Category 1 – Pension Funding Investments: displays an increase in both the overall inherent and residual risk scores to reflect the direct correlation to market volatility observed during the first quarters of fiscal year 2023/24.
- Category 2 – Pension Funding Actuarial: displays a decrease in the residual risk score to reflect the completion of the Asset Liability Management process which reaffirmed that two of the current key economic assumptions, inflation and long-term investment return, remained consistent with future expectations. This risk had increased in recent years when there was concern the 2.75% long-term inflation assumption might need to be lowered to reflect lower long-term inflation expectations. Higher inflation in the last 2 years combined with a reaffirming of the 2.75% assumption as part of the Asset Liability Management process helped lower this risk.
- Category 9 – Transformational Change: displays a decrease in the overall inherent risk score and a material residual risk score decrease to reflect the newly agreed upon project schedule for the pension administration system and the new contract signed with Sagitec. These risk score changes resulted in lowering the overall risk category scores from the high to medium risk rating. In addition, filling vacant positions has strengthened the team’s ability to support the “Go-Live in Fall 2025” schedule. These factors drove decreases in inherent and residual risk scores across four of the six sub-risks.

Additional details regarding the changes described above, as well as the overall comments for each risk category, are provided in Attachment 2 – Risk Score Report.

Emerging and Existential Risks

As staff continue to mature the ERM Program, one area of focus is to continually evolve the identification and assessment of emerging and existential risks (see definitions of emerging and existential risks in the March 2022 [Enterprise Risk Management Report](#).) Every reporting period, staff regularly assess potential risks and estimated timeframes of impacts to the organization.

The Emerging Risk Universe Map provided below, has been revised to show the emerging risk landscape as of December 31, 2023.

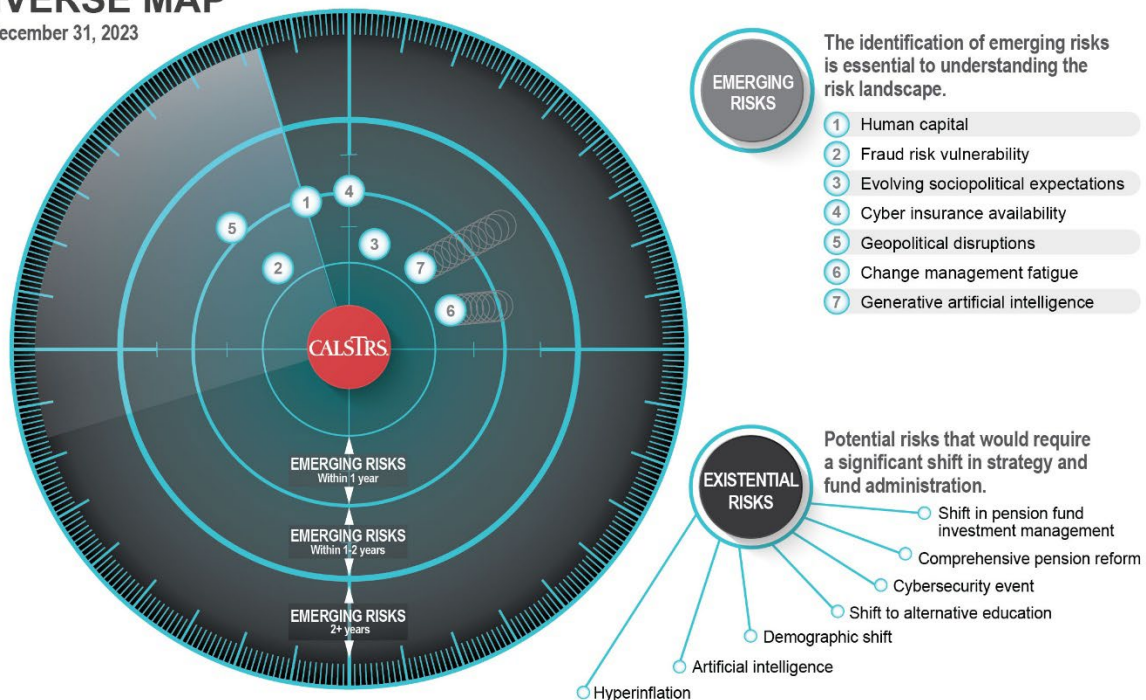
- Ungoverned software as a service was removed from the Emerging Risk Universe Map. Due to the enterprise’s continuous mitigation efforts, this is no longer considered an emerging risk.

- Evolving sociopolitical expectations continues to be a strong point of discussion within the organization and its leaders, however with wars new and old and an economy resilient to its effects, this emerging risk is unchanged.
- Change management fatigue has been brought closer to the “within 1 year” band as the enterprise still contends with completion of the headquarters expansion and the multi-year pension solution project.
- Generative artificial intelligence made the largest move on the Emerging Risk Universe Map due to both the positives and negatives associated with the technology as it continues to proliferate. This move can also be attributed to the competitive advantage that early adopters of artificial intelligence may be achieving in the investment market; however, the enterprise is proceeding with caution regarding adoption of generative artificial intelligence.

Figure 1

EMERGING RISK UNIVERSE MAP

As of December 31, 2023



Ongoing Monitoring

Staff continuously monitor all risk categories and any effects to the strategic plan and project deliverables. We also stay well-informed with national and world events, including economic

trends, and social and political unrest. Any additional risks will continue to be managed to ensure the continuity of CalSTRS' operations, while maintaining the ERM framework at the program level, and cultivating a positive risk culture.

Over the next reporting period, staff will continue to identify and consider emerging and existential risks that need further assessment, validate branch and enterprise-level risk mitigations, and continue coordination efforts with other organizational assurance functions.

Strategic Plan Linkage: Goal 1: Trusted stewards - Ensure a well-governed financially sound trust fund. (FY 2022-25 Strategic Plan).

Board Policy Linkage: Board Governance, Section F. Risk Management Policy.
