



Regular Meeting

Item Number 5 – Open Session

Subject: Enterprise Risk Management Report

Presenter(s): Phillip Burkholder & Lynn Bashaw

Item Type: Information

Date & Time: March 1, 2023 – 10 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, 2022.

Recommendation

This is an information item only.

Executive Summary

Since the June 30, 2022 ERM Report was presented to the board in September 2022, 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.

During this reporting period, staff adjusted the overall risk rating for two risk categories and consistent with the last reporting period ended June 30, 2022, a majority of the risk categories have a residual risk above the low or very low risk range. While the Operational risk category saw a reduction of its risk score, the Reputational risk category saw an increase. The frequent movement of these risk categories on the heat map displays the dynamic nature of the current risk environment. While the risk environment continues to shift, staff remain confident that with the ongoing risk mitigations in place and its ongoing efforts to assess and recognize emerging

and existential risks, CalSTRS will be able 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 have accomplished the following risk-related activities during this reporting period:

- The update to the semi-annual State Leadership Accountability Act Implementation Plan was submitted to the Department of Finance on December 6, 2022 and accepted on January 24, 2023.
- Successfully filled two critical vacancies: Director of Enterprise Risk Management & Compliance Services, and Senior Compliance Manager.
- Procured a vendor to assist with the ERM program maturity assessment and future vision for the ERM framework.

Background

As part of the ERM framework, CalSTRS Executive Risk and Compliance Committee, Risk Champions Network (RCN) 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. In addition, commencing July 2022, the board is also provided with a list of the 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 risk 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.

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, 2022, 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:

$$\text{Risk Score Calculation} = \text{Impact} \times (\text{Probability} + \text{Velocity})$$

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, a majority 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 six categories with scores medium or higher ranges:

- Category 1 - Pension Funding-Investments with an overall residual risk score of 21 (medium).
- 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 33 (high).
- Category 10 - Third Parties with an overall residual risk score of 21 (medium).

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

- Category 7 – Operational: displays a decrease in the residual risk score to reflect the organization's successful transition to a hybrid work environment and the removal of the associated sub-risk from the risk matrix. In addition, the overall category score was also affected by the sub-risk associated with the HQE expansion decreasing after the HQE executive steering committee approved the March 28, 2023 revised timeline. Note: staff

is monitoring this sub-risk due to the schedule risks provided in the CEO report at the January board meeting.

- Category 8 – Reputational: displays an increase in the inherent risk score to reflect revision of the sub-risk associated with accurate reporting of CalSTRS data. The revised language resulted in a higher risk rating and ultimately a higher risk category score when coupled with the removal of a lower rated sub-risk associated with pension abuse.

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.

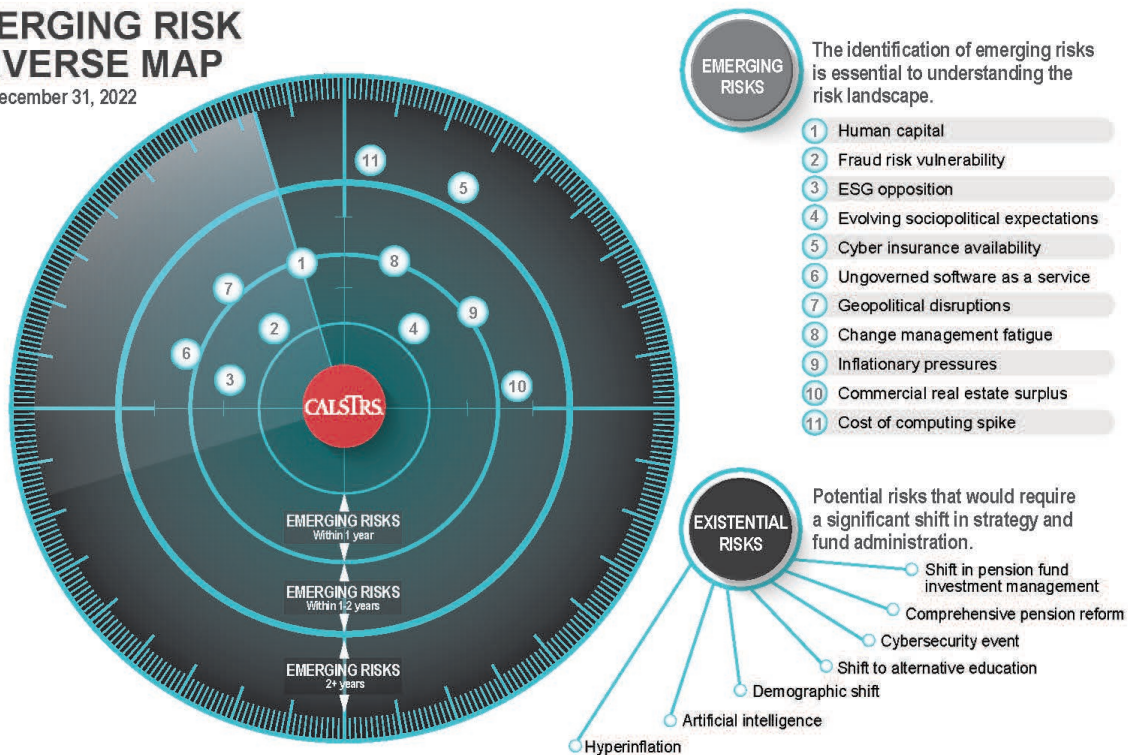
Emerging and Existential Risks

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, 2022 as discussed in the January 2023 CEO report. Specifically, to better summarize the related risks associated with staffing resources for Endemic COVID-19, Blended Workforce Challenges, and Post Pandemic Talent, these emerging risks were combined into a single emerging risk called Human Capital. In addition, staff added Ungoverned Software as a Service, and ESG Opposition as new emerging risks. New Ransomware Attack was removed from the emerging risk list as this is now considered a current risk and the Information Security Office has operationalized mitigating this risk. Bow tie analyses (a process to identify where new or enhanced controls may be worthwhile) will be conducted to determine the potential severity of these topics and whether mitigation currently exists and if so, did any new or enhanced mitigations need to be added.

Figure 1

EMERGING RISK UNIVERSE MAP

As of December 31, 2022



Ongoing Monitoring

Staff is continuously monitoring all risk categories and any effects to the strategic plan and project deliverables. We are also keeping up to date on national and world events, including the economic trends, social and political unrest as well as the ongoing pandemic. 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.
