



Audits and Risk Management Committee

Item number 6 – Open session

Subject: Enterprise Risk Management Report

Presenter(s): Phillip Burkholder & Lynn Bashaw

Item type: Information

Date and time: September 25, 2024 – 15 minutes

Attachment(s): Attachment 1 – Heat Map

Attachment 2 – Risk Score Report

PowerPoint presentation(s): Enterprise Risk Management Report

Item purpose

The purpose of this item is to provide the Audits and Risk Management Committee with the semi-annual Enterprise Risk Management (ERM) Report reflecting the current risk landscape and updates as of June 30, 2024.

Recommendation

This is an information item only.

Executive summary

Since the December 31, 2023, ERM Report was presented to the board in March 2024, 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.

Overall, three of the 10 risk categories have a residual risk above the low or very low risk range compared to the last reporting period which had five risk categories above the low or very low residual risk range. During this reporting period, staff adjusted the overall risk rating for four risk categories. All four of these risk categories (Pension funding – Actuarial, Reputational, Transformational change, and Third parties) saw reductions in their residual risk scores while only two of these risk categories (Transformational change, and Third Parties) saw a reduction in their inherent risk scores. Both Reputational and Third parties risk categories saw their residual

scores go from the medium risk range to the low risk range. The inherent risk score for Third parties decreased, taking it from the high risk range to the medium risk range. All other reductions kept their inherent risk scores in the same risk range. 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 accomplished the following risk-related activities during this reporting period:

- The annual branch risk assessments were completed for fiscal year ended June 30, 2024.
- The semi-annual State Leadership Accountability Act (SLAA) Implementation Plan¹ was submitted to the Department of Finance on June 17, 2024.
- The Annual Enterprise Risk and Compliance training was completed by staff with 100% compliance.
 - 78% of respondents agreed/strongly agreed that “I learned something valuable.”
 - 90% of respondents agreed/strongly agreed that “I am confident I can manage risks effectively by using internal controls.”
 - 92% of respondents agreed/strongly agreed that “I recognize the steps I can take to help manage risks in my work.”
 - 93% of respondents agreed/strongly agreed that “If I know of a risk concern, I would report it.”

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. At the May 2024 Audits and Risk Management Committee (ARM Committee) meeting, the ARM Committee approved moving the semi-annual risk report to the ARM Committee, to better support the ERM program’s maturity plan and to align with the ARM Committee’s responsibilities. The board affirmed this change at their July 2024 meeting.

Staff’s quarterly risk review includes enterprise-level risks and sub-risks, while considering internal and external factors which could be catalysts for emerging and existential risks. The

¹ The State Leadership Accountability Act Implementation Plan is an internal status report submitted to the Department of Finance every six months following the submission of the SLAA Report that is submitted every December of odd calendar years. [The SLAA Report](#) is posted to CalSTRS.com.

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 Audits and Risk Management Committee. 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 June 30, 2024, 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, three 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 three risk categories with residual risk scores in the medium or higher ranges:

- Category 4 - Pension Administration: overall residual risk score of 25 (medium).
- Category 6 - Information Security: overall residual risk score of 38 (high).
- Category 9 - Transformational Change: overall residual risk score of 24 (medium).

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

Category 2 – Pension Funding – Actuarial: displays a decrease in the residual risk score to reflect the board adopting new actuarial assumptions that reflect recent experience and align with long term expectations.

Category 8 – Reputational: displays a decrease in the overall residual risk score to reflect the progress that was made on testing and additional strategies being implemented to further mitigate risks for the Pension Solution project. The reduction also accounts for the current phase and progress of the project and more accurately reflects how risk would materialize at this stage of the project.

Category 9 – Transformational Change: displays a decrease in both the overall inherent and residual risk scores to reflect the progress and current phase of the Pension Solution project. For example, the project is on track to reach the implementation goal, new business subject matter expert resources have been onboarded and are performing well, vendor resources are performing as expected, and the expanded Project Management Office team with the new vendor team has established frequent meetings with each workstream team to ensure proper processes are being established and followed.

Category 10 – Third Parties: displays a decrease in both the overall inherent and residual risk scores to reflect the progress that has been made on Third Party Risk Management framework within the organization.

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 emerging² and existential³ risks. 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 and existential risk landscape as of June 30, 2024, since the [March 2024 board meeting](#).

Emerging Risks

- *Removed fraud risk vulnerability from the emerging risk universe map as the organization is actively managing this risk and as such it is no longer emerging.*
- *Relabeled evolving sociopolitical expectations to increasing political polarization as there is a higher number of global elections occurring in comparison to past election cycles as well as a tightly contested election in the United States. This election cycle can intensify political rhetoric and reinforce grievances, can affect highly consequential geopolitical conflicts, can gridlock critical trade lanes, or cause volatility in equity markets.*
- *Moved geopolitical disruptions to within the 1-year band as the war in Ukraine and tensions in the Middle East continue and the looming threat of China invading Taiwan is ever present.*
- *Removed Generative artificial intelligence from the emerging risk universe map. As mentioned in the July 2024 CEO report, staff continue to explore the effects of generative artificial intelligence (AI), such as ChatGPT, to enhance understanding of both the risks and benefits of this new technology and its potential impact on CalSTRS business operations. Technology Services, Enterprise Risk Management, Legal Services, and Enterprise Strategy Management have engaged in efforts to actively manage this risk. Therefore, this risk is no longer emerging and is being removed from the emerging risk universe map but will be represented in the enterprise risk matrix and reported in future risk score reports.*

Existential Risks

- *Renamed “shift in pension fund investment management” to “shift in pension fund management” as the later more broadly captures the administrative piece of managing a pension fund rather than focus solely on the investment component.*

² Emerging Risks are potential risks to the organization which have not been previously identified, were not yet significant enough to impact the organization or were dormant for an extended period. Their onset may be years in the future or immediate due to unforeseen changes. CalSTRS recognizes that emerging risks’ probability might vary and may have a high impact that threatens meeting our business objectives.

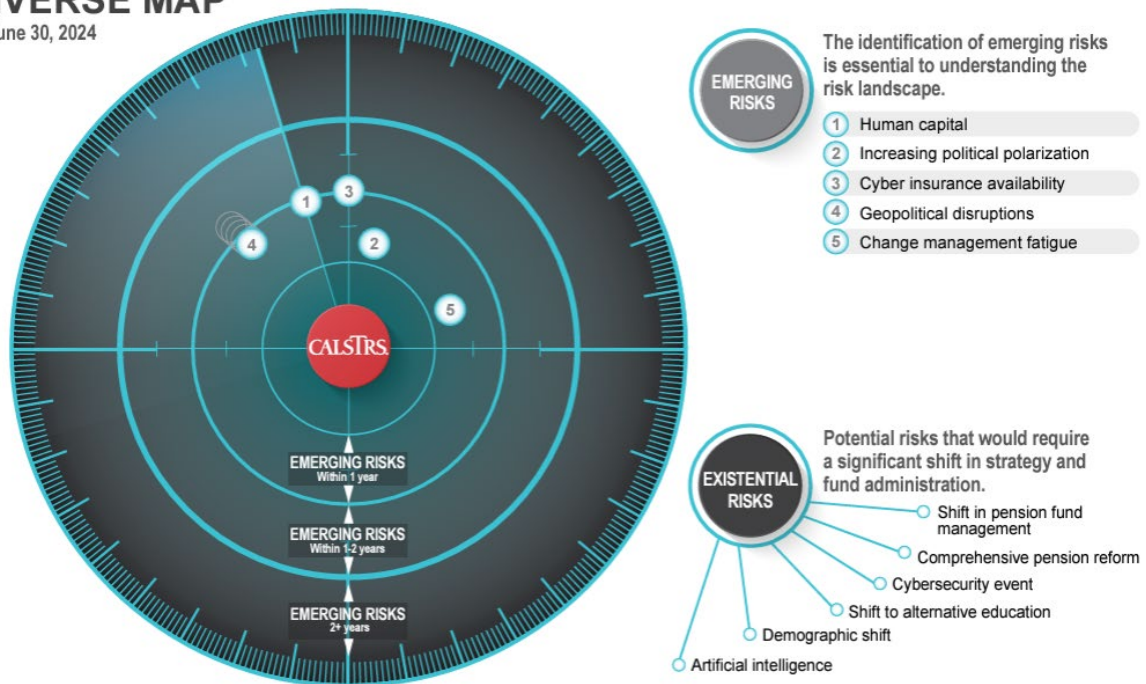
³ Existential risks are potential risks that would require a significant and immediate shift in strategy and how CalSTRS’ administers the fund for members. CalSTRS recognizes that existential risks have a very low probability but would result in an extremely high impact on how we currently do business.

- *Removed Hyperinflation* as the United States Federal Reserve implemented interest rate hikes to counter hyperinflation risks.

Figure 1

EMERGING RISK UNIVERSE MAP

As of June 30, 2024



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, 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, implement recommendations from our maturity plan 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 G. Risk Management Policy.
