

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.		 very high 41-50  high 31-40  medium 21-30  low 11-20  very low 1-10	
						Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.			
Strategic Goals	Goal 1: Trusted stewards (G1: TS)		Strategic Objectives	A, B, C, D, E		Risk Responses	Avoid		
	Goal 2: Leading innovation and managing change (G2: LI)			A, B, C, D, E, F			Reduce		
	Goal 3: Sustainable organization (G3: SO)			A, B, C, D			Share		
						Accept			
1 Pension Funding - Investments						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Fund performance objectives not achieved as set in the Investment Policy and Management Plan.						23	↓ -2	18	↓ -3
<p>The overall inherent risk score for the category decreased by two points to 23, which is in alignment with the medium-risk range (orange band) of the heat map. In addition, the overall residual risk score decreased by 3 points to 18, which is in alignment with the low-risk range (yellow band) of the heat map. These decreases reflect a recent reassessment of both inherent and residual scores in terms of the impact of the headquarters expansion and pension solution project resources on investment operations now that the Pillars project has been successfully completed. Based on the reassessment, it was determined that these projects do not directly impact investment returns and the scores were updated to reflect this consideration. From a mitigation standpoint, the CalSTRS team is in the process of implementing a tool to enhance monitoring and oversight of portfolio performance. Staff is also working to develop an implementation strategy for an enhanced Regulatory Oversight Program within the Investments Branch.</p> <p>In November 2022, the Investments Branch presented the annual Investment Cost Report and the Collaborative Model Savings Report to the board. The Cost Report was based on 2021 calendar year information and found that CalSTRS continues to manage the portfolio at a lesser comparable cost than peers.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	35%	The fund will not achieve the actuarially expected return over the long term (30 years/absolute return), which may prevent CalSTRS from reaching full funding by 2046.	G1: TS	A, B, C	Reduce	20	No Change	16	No Change
B	45%	CalSTRS will not be able to implement strategies and tools necessary to manage risk associated with a more complex and volatile investment environment, which may hinder Investments Branch ability to capitalize on value added investment opportunities.	G1: TS	A, B, C, D	Reduce	32	↓ -4	24	↓ -8
C	20%	The fund will not add value above the total fund benchmarks return over the long term (Relative return), which may create stakeholder uncertainty in CalSTRS ability to effectively manage risk and implement investment strategies.	G1: TS	A, B, C	Reduce	12	No Change	9	No Change
2 Pension Funding - Actuarial						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Actuarial methodologies and assumptions vary from experience.						22	No Change	20	No Change
<p>The overall residual risk score for this category remains at 20 and in alignment with the low-risk range (yellow band) of the heat map. In May 2023, staff presented the June 30, 2022 actuarial valuation to the board and despite the negative investment return in fiscal year 2021-22, the funded status improved slightly and the funding plan is still on track to reach full funding by 2046. Staff is currently preparing the next Review of Funding Levels and Risk report which will take an in depth look at the risks and challenges to funding the system. Work has also begun on the next experience study, which will examine the economic and demographic actuarial assumptions to ensure they remain reasonable and appropriate. The experience study will be presented to the board in January 2024. The board adopted a new asset allocation as part of the ALM process in May 2023 and, based on the capital market assumptions adopted earlier, it is anticipated that no change will be recommended to the current 7% assumed investment return in the experience study.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	80%	Over the long-term actual experience significantly differs negatively from actuarial assumptions, which could result in the inability to achieve full funding by 2046.	G1: TS	A	Reduce	24	No Change	24	No Change
B	10%	There is a risk that actuarial assumptions negatively differ from actuarial experience, caused by incorrect information underlying the actuarial assumptions, which could result in the inability to achieve full funding.	G1: TS	A	Reduce	18	No Change	9	No Change
C	10%	Inappropriate measures of actuarial obligations and costs, caused by invalid actuarial methodologies, could result in the inability to achieve full funding by 2046.	G1: TS	A	Reduce	9	No Change	6	No Change

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.		 very high 41-50	
						Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.		 high 31-40  medium 21-30  low 11-20  very low 1-10	
Strategic Goals Goal 1: Trusted stewards (G1: TS) Goal 2: Leading innovation and managing change (G2: LI) Goal 3: Sustainable organization (G3: SO)		Strategic Objectives A, B, C, D, E A, B, C, D, E, F A, B, C, D		Risk Responses Avoid Reduce Share Accept					
3 Pension Funding - Contribution Rate						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Insufficient contribution rates to amortize unfunded actuarial obligation.						20	No Change	15	No Change
<p>The overall residual risk score for this category remains at 15 and in alignment with the low-risk range (yellow band) of the heat map. In May 2023, staff presented the June 30, 2022 actuarial valuation to the board and it was determined that current contribution levels were sufficient to keep the funding plan on track to reach full funding by 2046. As a result the board elected to maintain the same contribution rates for fiscal year 2023-24 as were in effect for fiscal year 2022-23 for both the state and employers. Several factors could put pressure on CalSTRS' ability to collect sufficient contributions to reach full funding: investment volatility is the most significant pressure and despite the large increase in the number of active teachers CalSTRS experienced in fiscal year 2021-22, continued declines in enrollment in K-12 public schools could impact the ongoing appropriateness of CalSTRS 3.5% payroll growth assumption. These pressures will be examined further in the Review of Funding Levels and Risk report in November 2023 as well as in the experience study that will be presented to the board in January 2024.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	70%	The board's limited authority to change contribution rates per AB 1469 could result in insufficient contributions to reach full funding by 2046.	G1: TS	A	Reduce	24	No Change	20	No Change
B	30%	Failure of the board to exercise their authority to adequately fund the Defined Benefit Program to its fullest extent could result in insufficient contributions to reach full funding by 2046.	G1: TS	A, D	Reduce	12	No Change	6	No Change
4 Pension Administration						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Untimely or inaccurate delivery of benefits and services due to inadequate or failure of processes, technology systems, staff actions or data.						35	No Change	25	No Change
<p>The overall residual risk score for this category remains at 25 and in alignment with the medium-risk range (orange band) of the heat map. Staff continue to assess potential impacts of the Pension Solution Project delays in relation to extending the maintenance timeframe of the current legacy system, START. Technology Services remains proactive in the identification and monitoring of potential challenges in retaining or recruiting resources with the necessary technical skills to extend the lifespan of the legacy system. Staff continue to monitor and track the workload of resources needed to support legislated enhancements related to AB1667 and SB868 during the current moratorium on START enhancements.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	30%	CalSTRS is unable to ensure accurate and timely benefits due to the aged pension administration system's (START) failure to pay benefits timely.	G2: LI	A, C	Reduce	45	No Change	32	No Change
B	30%	During the transition period, the loss of mainframe knowledgeable staff may result in the inability to continuously maintain START and properly service members until the new pension administration system is fully operational.	G2: LI	A	Reduce	45	No Change	32	No Change
C	20%	Inability to deliver timely benefits and services due to incomplete, inaccurate and late employer reporting.	G2: LI	A	Reduce	21	No Change	15	No Change
D	20%	Inaccurate benefit payments caused by current system limitations, manual processes and unknown system defects.	G2: LI	A	Reduce	24	No Change	16	No Change

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.		very high	41-50
						Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.		high	31-40
Strategic Goals Goal 1: Trusted stewards (G1: TS) Goal 2: Leading innovation and managing change (G2: LI) Goal 3: Sustainable organization (G3: SO)		Strategic Objectives A, B, C, D, E A, B, C, D, E, F A, B, C, D		Risk Responses Avoid Reduce Share Accept					
5 Financial Reporting						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Inaccurate financial information and/or weaknesses in internal controls may result in significant non-compliance with accounting standards and jeopardize an unmodified audit opinion.						20	No Change	8	No Change
The overall residual risk score for this category remains at 8 and in alignment with the very low risk range (blue band) of the heat map. The score reflects staff's ongoing confidence in the effectiveness of CalSTRS internal controls over financial reporting and considers that there were no significant accounting standards of a material nature implemented in the last year.									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response	Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
A	100%	Information received from subsidiary systems is recorded incorrectly in the general ledger, which could result in the financial statements being materially misstated and the external auditors issuing a modified opinion.	G2: LI	A, C	Reduce	20	No Change	8	No Change
6 Information Security						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Loss of information security or compliance violations as a result of unauthorized or unintentional breaches.						49	No Change	38	No Change
The overall residual risk score for this category remains at 38 and in alignment with the high-risk range (red band) of the heat map. Security remains the highest residual score in our risk matrix, signifying the real and credible threat of the highly volatile cyber security landscape. A recent cybersecurity incident by a third-party service provider has been investigated and mitigating controls applied to reduce the residual effects of the incident. Information Security remains a constant focus for the organization and staff remain confident in the mitigation efforts to control this risk, including ongoing monitoring of CalSTRS systems and staff education in the blended work environment. The Annual Independent Cybersecurity Assessment was initiated in August 2023 and is scheduled to complete in December 2023. Results of the assessment are scheduled to be presented at the March 2024 board meeting in closed session.									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response	Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
A	88%	A highly volatile cyber-risk landscape and a limited number of staff could result in an information security breach or incident at CalSTRS.	G3: SO	D	Reduce	50	No Change	40	No Change
B	4%	The absence of proper Information Security Program management and oversight could result in an information security breach or incident at CalSTRS.	G3: SO	D	Reduce	36	No Change	24	No Change
C	4%	A lack of employee security awareness could result in an information security breach or incident at CalSTRS.	G3: SO	D	Reduce	40	No Change	24	No Change
D	4%	A highly volatile cyber-risk landscape and insufficient resources could result in increased cyber-fraud risk as it relates to a security breach or incident at CalSTRS.	G3: SO	D	Reduce	40	No Change	27	No Change

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.		very high	41-50
						Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.		high	31-40
medium		21-30							
low		11-20							
very low		1-10							
Strategic Goals	Goal 1: Trusted stewards (G1: TS)	Strategic Objectives	A, B, C, D, E	Risk Responses	Avoid				
	Goal 2: Leading innovation and managing change (G2: LI)		A, B, C, D, E, F		Reduce				
	Goal 3: Sustainable organization (G3: SO)		A, B, C, D		Share				
					Accept				
7	Operational				Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change	
Inability to achieve business objectives due to lack of compliance with internal controls, lack of accessibility to technology systems, or loss of critical staff knowledge.					32	↑ 1	19	No Change	
The overall inherent risk score for the category increased by one point to 32. This increase is a result of the combination of two sub-risks related to disruptions to business operations as both shared identical mitigation strategies, and the removal of one sub-risk due to the organization's successful operationalization of the Pillars Project which was established to support the implementation of CalSTRS Collaborative Model. In addition, two sub-risks reflect lowered residual scores as a result of an organizational increase in staffing retention rates. Furthermore, an in-depth reevaluation of the remaining sub-risks resulted in their reweighting, with particular emphasis placed on the combined sub-risk, ultimately contributing to the slight increase in the inherent risk score. The overall residual risk score did not change this period and remains in alignment with the low-risk range (yellow band) of the heat map.									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response	Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
A	30%	In the event of a disaster, and/or full or partial disruption to the CalSTRS datacenter, CalSTRS may not be able to provide mission critical business processes to our members due to inaccessibility to technology systems.	G3: SO	A, D	Reduce	36	No Change	24	No Change
B	15%	There is a risk that the transition to a blended working model may result in disruptions to operational, enterprise initiatives, and business goals due to a potential adverse shift in CalSTRS' culture caused by changes to how we communicate and collaborate.	G2: LI G3: SO	D A, D	Reduce	36	No Change	15	No Change
C	15%	CalSTRS lacks the ability to meet critical business functions due to recruitment challenges.	G3: SO	A	Reduce	28	No Change	15	↓ -3
D	10%	CalSTRS is unable to meet critical business functions or maintain service levels due to potential loss of subject matter experts and lack of CalSTRS knowledge transfer.	G3: SO	A	Reduce	32	No Change	21	↓ -3
E	15%	Staff and leadership turnover could result in loss of long-term business stability and sustainability.	G3: SO	A	Reduce	24	No Change	18	No Change
F	5%	CalSTRS may fail to identify risks caused by staff not being fully engaged for various reasons including competing priorities, which could result in CalSTRS being unprepared for future risks.	G1: TS	E	Reduce	36	No Change	15	No Change
G	5%	CalSTRS may not establish or maintain the proper health and safety strategies, measures, training, etc., resulting in compromised employee health and safety.	G3: SO	A	Reduce	32	No Change	21	No Change
H	5%	CalSTRS is unable to complete the Headquarters Expansion Project within the established scope, schedule and budget due to delays with construction (i.e. inspections, approvals or materials) and the additional costs/timeframes associated with those delays.	G3: SO	C	Reduce	24	No Change	15	No Change

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.		very high	41-50
						Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.		high	31-40
Strategic Goals Goal 1: Trusted stewards (G1: TS) Goal 2: Leading innovation and managing change (G2: LI) Goal 3: Sustainable organization (G3: SO)		Strategic Objectives A, B, C, D, E A, B, C, D, E, F A, B, C, D		Risk Responses Avoid Reduce Share Accept					
8 Reputational						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
Loss of confidence in CalSTRS as a respected fiduciary of public funds.						32	↑ 1	22	No Change
<p>The overall inherent risk score for this category increased by one point to 32. Staff removed one sub-risk due to the effectiveness of the organization's mitigations in ensuring candidate qualifications and education are assessed and validated prior to final offer of employment. In addition, the weighting associated with this sub-risk was reallocated to sub-risk B regarding the risks to reputation as a result of transformational efforts. The overall residual risk score did not change this period and remains in alignment with the medium-risk range (orange band) of the heat map.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response	Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
A	25%	A board or staff member engages in unethical behavior resulting in reputational damage.	G3: SO	D, E	Avoid	28	No Change	24	No Change
B	30%	CalSTRS is unable to implement transformational efforts, which could impact stakeholders, members, staff and public confidence.	G2: LI	A	Reduce	40	No Change	24	No Change
C	20%	Investments may be perceived as conducting business in an imprudent and unethical manner due to a lack of transparency in CalSTRS ESG focused investment efforts, resulting in a loss of public trust.	G1: TS G2: LI	A, B, D A	Reduce	30	No Change	24	No Change
D	15%	There is a risk that CalSTRS may need to correct inaccurate reporting of business and financial information which may result in a loss of public trust and harm to our reputation.	G1: TS G2: LI	A, B, D	Reduce	30	No Change	16	No Change
E	10%	CalSTRS is unable to meet member service expectations due to resource constraints resulting from competing priorities.	G2: LI	A	Reduce	21	No Change	12	No Change

Risk Score Report - As of June 30, 2023						Risk Status			
<p>Organizations thrive by taking risks, but falter when risks are not managed effectively. Risks are inherently present in the work we do at CalSTRS, which is why we implement internal controls, to mitigate these inherent risks. However, the possibility of residual risk, after all actions are taken to mitigate risk, does exist.</p> <p>This Risk Score Report identifies the inherent risks and residual risks in each of the risk categories at CalSTRS and any corresponding changes since the last reporting period, December 31, 2022.</p>						<p>Inherent Risk Risk without any actions or controls in place to reduce likelihood or impact.</p>		<p> very high 41-50</p>	
						<p>Residual Risk Risk remaining after implementing actions and controls to remove or manage risk.</p>		<p> high 31-40</p> <p> medium 21-30</p> <p> low 11-20</p> <p> very low 1-10</p>	
<p>Strategic Goals</p> <p>Goal 1: Trusted stewards (G1: TS)</p> <p>Goal 2: Leading innovation and managing change (G2: LI)</p> <p>Goal 3: Sustainable organization (G3: SO)</p>		<p>Strategic Objectives</p> <p>A, B, C, D, E</p> <p>A, B, C, D, E, F</p> <p>A, B, C, D</p>		<p>Risk Responses</p> <p>Avoid</p> <p>Reduce</p> <p>Share</p> <p>Accept</p>					
9 Transformational Change						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
CalSTRS is unable to accomplish major transformational change initiatives.						39	No Change	33	No Change
<p>The overall residual risk score remains at 33, which is also in alignment with the high-risk range (red band) of the heat map. The highest rated residual sub-risk for this category remains sub-risk A, which relates to potential delays in the successful implementation of the new pension administration system. The Pension Solution project team continues to monitor the efforts of the project by identifying critical path activities and associated metrics to track effectiveness. Staff will reevaluate risk scoring once a vendor contract and updated schedule are approved by the board. Note: Pension Solution will provide an update to the board in September 2023.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	40%	CalSTRS is unable to successfully implement a new pension administration system and transform the associated data and business processes within the established scope, schedule and budget due to ongoing delays.	G2: LI	A	Reduce	45	No Change	41	No Change
B	15%	There is a risk that the vendor's staffing issues and limited pension industry experience may result in schedule delays or cost increases to the Pension Solution project.	G2: LI	A	Reduce	36	No Change	32	No Change
C	15%	Loss of CalSTRS subject matter experts and challenges associated with replacing them may result in the inability to successfully implement Pension Solution.	G2: LI	A	Reduce	36	No Change	21	No Change
D	20%	The procured vendor does not follow the agreed upon project-related processes to provide the results and functionality necessary to meet CalSTRS' business needs.	G2: LI	A	Reduce	41	No Change	36	No Change
E	5%	Lack of cohesive project governance and communication practices within business areas could result in uninformed decision-making on transformational efforts.	G2: LI	A	Reduce	24	No Change	21	No Change
F	5%	Inability of the Pension Solution Project to achieve desired results due to lack of readiness to the transformed business processes.	G2: LI	A, C, F	Reduce	28	No Change	15	No Change
10 Third Parties						Inherent Risk Score	Inherent Period Change	Residual Risk Score	Residual Period Change
CalSTRS failure to appropriately manage risks associated with third parties, resulting in operational disruption, financial loss, reputational damage, compliance violations or failure to reach strategic goals.						32	No Change	21	No Change
<p>The overall residual risk score remains at 21 and in alignment with the medium risk range (orange band) of the heat map. Staff does not expect a decrease in residual risk until the Third-Party Risk Management Program matures further to ensure a consistent, systematic method of governing and controlling third party risk. The Office of General Counsel continues to collaborate with both Enterprise Risk Management and Enterprise Compliance Services to develop a governance process and standards to help strengthen controls for third party risk identification and mitigation for contract managers. Staff continue working collaboratively across the organization to create a governing policy and has begun work to establish third party risk classification tiers to categorize vendors and ultimately determine the level of monitoring and review required. As a result of a recent cybersecurity incident by a third-party service provider, the program development team reevaluated the planned controls to ensure measures are in place to mitigate or prevent these types of events from happening in the future.</p>									
Sub-Risk	Weight	Sub-Risk Statement	Strategic Goal	Strategic Objective	Risk Response				
A	94%	An absence of third-party risk management program governance could result in duplication of efforts or assurance gaps which could result in operational disruption, financial loss, reputational damage, compliance violations or failure to reach strategic goals.	G1: TS G2: LI	E E	Reduce	32	No Change	21	No Change
B	6%	There is a risk that CalSTRS does not perform adequate due diligence of third parties prior to awarding a contract which could result in failure to identify risks involved in outsourcing a specific service(s).	G1: TS G2: LI	E E	Reduce	24	No Change	18	No Change