




Benefit Administration Enterprise Risk Profile					
Enterprise Risk	Executive Oversight	Board Oversight	Category		
Benefit Administration	Deputy Executive Officer, Customer Service and Support	Pension & Health Benefits Committee	Strategic		
Strategic Plan Goal		Reduce Complexity: Reduce complexity across the enterprise by simplifying programs to improve service and/or reduce cost.			
Functional Objective	To ensure accurate and timely benefits and information to members, retirees, and beneficiaries.				
Risk Statement	CalPERS members, retirees, and beneficiaries may not receive timely and/or accurate benefits.				
Risk Analysis:					
The noted risk analysis is based on an understanding that the complexity of the Benefit Plan Design results in inherent risks that may impact benefit calculations and increase costs. In addition, we are dependent upon the employers to submit and maintain accurate membership and payroll data in a timely manner.					
<i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓
	Rare	Major	Medium	High Impact Low Probability	↔
Risk Driver #1: Untimely and inaccurate employer reporting					
Controls in Place:					
1.1 Automated controls to edit and confirm employer data 1.2 Tools and reports for employers to identify and fix data issues 1.3 Employer training through various mediums 1.4 Employer Response Team 1.5 Quality assurance reports 1.6 Business partner identity account management 1.7 Public Agency audits 1.8 Automated penalties for employers for untimely and inaccurate reporting 1.9 Employer self-service education tools					
Risk Driver #2: Lack of team member knowledge and awareness of relevant laws, regulations, and policies					
Controls in Place:					
2.1 Comprehensive training for CalPERS team members 2.2 Team member communication tools 2.3 Required second approvals and peer reviews 2.4 Documentation and regular updates of desk procedures and process documents 2.5 Audits of internal processes 2.6 Quality assurance programs 2.7 Lean process improvement 2.8 Compliance reviews 2.9 Enterprise Data Management 2.10 Continuous refresh of training content based on team member feedback and work outcomes					

Risk Driver #3: Inaccurate benefit and system calculations
Controls in Place:
3.1 System testing 3.2 Clear procedures and process documents 3.3 Audits of internal processes 3.4 Quality assurance programs 3.5 Documentation of system functionality 3.6 System edits and audits 3.7 Reconcile Retirement Roll 3.8 Identification and correction of data issues 3.9 Lean process improvement 3.10 Risk-targeted system reports
Risk Driver #4: Increase to the complexity of the benefit plan design due to external influences
Controls in Place:
4.1 Board engagement and influence 4.2 Legislative impact analyses 4.3 Various employer and stakeholder communication tools 4.4 CEM Complexity Score Maintenance
Risk Driver #5: Inability to implement statutory and regulatory changes
Controls in Place:
5.1 Legislative impact analyses 5.2 Statutory and regulatory changes and implementation process 5.3 Various employer and stakeholder communication tools
Risk Driver #6: Acts of Fraud
Controls in Place:
6.1 Restricted account escalation process 6.2 Fraud reports 6.3 MSS & Contact Center Authentication 6.4 Automated second-approver controls 6.5 Semi-annual myCalPERS User Access Rights review 6.6 Benefit verification 6.7 Ethics Helpline
Future Mitigations:
<ul style="list-style-type: none">• Additional death match vendors• Fraud Work Group

Business Continuity Enterprise Risk Profile						
Enterprise Risk	Executive Oversight		Board Oversight		Category	
Business Continuity	Deputy Executive Officer, Operations and Technology		Finance & Administration Committee		Operational	
Strategic Plan Goal		Risk Management: Cultivate a risk-intelligent organization.				
Functional Objective	CalPERS' ability to resume business following a major business interruption.					
Risk Statement	Inability to recover timely and resume business functions following a business interruption event.					
Risk Analysis:						
<p>The limitations to updating and testing recovery plans and the complexity of interdependencies of the systems used create potential risks despite the existence of an enterprise-wide prioritized list of critical functions in the CalPERS Master Enterprise Business Continuity Plan (BCP). The pandemic tested and validated the business continuity plan which is now moving to the operational level. The program currently has an annual maintenance schedule and will be audited every three years as a new mitigation to show how CalPERS continue to monitor and manage it internally. We continue to validate, test, and apply continuous improvement to our Division and Enterprise Business Continuity Plans, as well as document and apply lessons learned during an exercise to the appropriate policy, procedure in the Business Continuity Program.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>						
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓	
	Rare	Moderate	Low	High Impact Low Probability	↔	
Risk Driver #1: Inaccurate and/or outdated data from divisions						
Controls in Place:						
1.1 Annual review of individual division BCPs. 1.2 Biennial testing of individual division BCPs with critical functions 1.3 California Office of Emergency Services (Cal OES) checklist						
Risk Driver #2: Inability to restore critical business systems within expected timeframes						
Controls in Place:						
2.1 Mature virtual business continuity infrastructure and Telework Program Policy 2.2 Disaster recovery exercises 2.3 Dedicated offsite Emergency Operations Center 2.4 Migrated backup and disaster recovery to cloud-based technologies 2.5 Alignment of disaster recovery objectives with enterprise and individual division BCPs 2.6 IT service operations support a fully functional remote command center						
Risk Driver #3: System changes are not recorded and reported timely to the disaster recovery vendor						
Controls in Place:						
3.1 Disaster recovery exercises (system/data recovery) 3.2 System backup, replication, and recovery is automated						


3.3 System changes are reported to the vendor as part of the IT Change Management Process
Risk Driver #4: Inability to react to an emergency
Controls in Place:
4.1 Incident Command System 4.2 Incident Management Team 4.3 Annual drills 4.4 Annual emergency table top exercise 4.5 Team member location application 4.6 CalPERS Emergency Hotline 4.7 Partner with federal and local safety responders 4.8 Emergency supply inventory at Headquarters and offsite Emergency Operations Center 4.9 Daily attendance tracking 4.10 State of Emergency and disaster tracking and mapping
Risk Driver #5: Dependency on the State Controller's Office (SCO)
Controls in Place:
5.1 Documented workarounds to the SCO functions 5.2 SCO Disaster Recovery Exercise 5.3 Virtual Private Network (VPN) tunnel to SCO disaster recovery site
Risk Driver #6: Mass regional disaster event impacting access to Emergency Operations Center
Controls in Place:
6.1 Access data applications through cloud-based systems 6.2 Transition plan for long term displacement (greater than six months) 6.3 External conference bridge lines for communication 6.4 VPN connectivity from anywhere to CalPERS systems at the cloud-based disaster recovery site 6.5 Cloud-based Contact Center functionality that would allow agents to take calls from anywhere
Risk Driver #7: Inability to keep stakeholders informed following a major business interruption
Controls in Place:
7.1 Stakeholder Relations maintains a stakeholder key personnel contact database 7.2 CalPERS manages social media outlets (Facebook, Twitter, Instagram) 7.3 Communication plan in place to keep stakeholders informed regarding major business interruptions and recovery times

Climate Change Enterprise Risk Profile					
Enterprise Risk	Executive Oversight		Board Oversight		Category
Climate Change	Chief Financial Officer Chief Investment Officer		Finance & Administration Committee Investment Committee		Strategic
Strategic Plan Goal		Fund Sustainability: Strengthen the long-term sustainability of the pension fund.			
Functional Objective	To ensure CalPERS develops resiliency to mitigate the impacts of climate risk.				
Risk Statement	Failure to meet investment returns, employer's inability to pay required contributions, and disruption to CalPERS' operations.				
Risk Analysis:					
<p>There is an inherent risk that climate change can affect fund assets and disrupt operations for CalPERS and employers. Climate risk is multifaceted and includes elements that could impact CalPERS on a long-term and short-term basis such as drought, wildfires, heat, and sea level rise. CalPERS has united with other large institutional investors to address the impacts of climate-risk. Additionally, CalPERS is raising awareness of the importance of addressing climate risk with stakeholders. Research and efforts to manage the effects of climate change are ongoing.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑/↓
	Possible	Major	High	High Impact High Probability	↔
Risk Driver #1: Climate-related financial risks to the fund					
Controls in Place:					
1.1 Coalition co-founder of Climate Action 100+ and member of global investment networks 1.2 Integration of climate risk across investment portfolio 1.3 Divestments in companies (specific to thermal coal companies SB185) that fail to indicate adoption of clean energy initiatives 1.4 Five-year Strategic Plan with investment managers to integrate sustainability measures 1.5 All asset classes are being evaluated to map carbon footprint 1.6 Monitor transition and physical risks to include in reporting framework as developed by the Taskforce on Climate-Related Financial Disclosure (TCFD) 1.7 Proxy voting 1.8 Integration of Environmental, Social, and Governance (ESG) risk analysis at the Total Fund level					
Risk Driver #2: Ineffective advocacy efforts with regulators and standard-setters policy makers					
Controls in Place:					
2.1 Advocacy efforts with policy makers, major companies, and coalitions with international organizations such as the United Nations (Net Zero Alliance)					


Risk Driver #3: Climate-related financial risks that negatively impact employer’s ability to make required contributions

Controls in Place:


- 3.1 Active participant in organizations to promote ESG goals
- 3.2 Communicate the importance of climate risk management to fund sustainability
- 3.3 Pension Outlook tool provides employers the ability to perform contribution payment analysis using varied investment return assumptions
- 3.4 Climate-Related Risk Disclosure Advisory Group established by the Governor to help with a state-wide strategy that will mitigate risk for employers as well as support CalPERS’ fiduciary duty to generate sustainable risk adjusted returns

Governance and Control Environment					
Enterprise Risk Profile					
Enterprise Risk	Executive Oversight		Board Oversight		Category
Governance and Control Environment	Chief Compliance Officer, Chief Financial Officer		Risk & Audit Committee		Operational
Strategic Plan Goal		Risk Management: Cultivate a risk-intelligent organization.			
Functional Objective	To establish good governance and a strong control environment.				
Risk Statement	Lack of a strong internal control environment, which includes documentation and testing, could result in increased non-compliance and litigation risk, operational risks due to inefficiency and improper activity, loss of authority or reputation, and/or incurred penalties.				
Risk Analysis:					
<p>There is a need to strengthen documentation of CalPERS' standards, processes, and structures to sustain and maintain a strong control environment while promoting the organization's integrity and ethical culture. The inherent risks associated with a remote work environment may impact efforts to promote a culture of integrity and ethics. While the organization has done much to strengthen the internal control environment and culture, enterprise governance continues to mature through an integrated assurance approach.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓
	Possible	Moderate	High	High Impact High Probability	↔
Risk Driver #1: Lack of strong governance impacts organizational maturity, decision making, and efficiency					
Controls in Place:					
1.1 Policy Management Framework 1.2 Board review of committee delegations 1.3 Team member delegated authority framework 1.4 Formalized committees (Senior Leadership Council, Integrated Assurance Risk Council, and Asset Liability Management Advisory Committee) 1.5 Biennial board self-assessment evaluation 1.6 Implementation of the Insight tool for streamlined Board oversight 1.7 Enterprise Data Management Communication Plan, Information Assets Classification Policy, and Data Glossary Revisions and Posting					
Future Mitigations:					
<ul style="list-style-type: none"> Automated Policy Management Tool Refine Data Glossary governance process (FY 2020-21 Data Management business plan initiative) Board actions to enhance governance of the system 					


Risk Driver #2: Lack of oversight and monitoring of controls
Controls in Place:
2.1 Enhanced roles and responsibilities for Integrated Assurance 2.2 State Leadership Accountability Act report 2.3 Third-party assurance 2.4 Program area quality assurance processes 2.5 Embedded Compliance and Risk Liaisons 2.6 Operational Risk Event reporting process 2.7 Information Security Risk Profile 2.8 Telework Program Policy
Risk Driver #3: Unclear roles and responsibilities around applicable laws and regulations
Controls in Place:
3.1 Mandated and business-related training 3.2 Annual risk and compliance communication and training plans 3.3 Embedded Compliance and Risk Liaisons 3.4 Compliance and ethics discussion guides 3.5 Operational policies and procedures 3.6 Code of Conduct 3.7 Equal Employment Opportunity (EEO) Office oversight of EEO related laws and regulations
Future Mitigations:
<ul style="list-style-type: none">Continually evolve communication content to address emerging themes and risk mitigation topics
Risk Driver #4: Ineffective controls and monitoring activities to prevent unethical behavior
Controls in Place:
4.1 Core values 4.2 Policies, regulations, and ethical behavior standards 4.3 Personal Trading Regulation 4.4 Monitoring regulated employee trading activities 4.5 Escalation procedures for Personal Trading Regulation violations 4.6 Compliance reviews of complex, cross-branch functions 4.7 State Whistleblower Hotline and CalPERS Ethics Helpline 4.8 Monitoring of mandated trainings 4.9 Monitoring of myCalPERS, accounting and invoice functions, and investment trade settlement 4.10 Internal audits 4.11 Internal investigation 4.12 Compliance Activities Reporting 4.13 Code of Conduct
Future Mitigations:
<ul style="list-style-type: none">Compliance AwarenessCentralization of fraud reporting and administration

Health Care Administration Enterprise Risk Profile					
Enterprise Risk	Executive Oversight		Board Oversight	Category	
Health Care Administration	Chief Health Director, Health Policy and Benefits Branch		Pension & Health Benefits Committee	Strategic	
Strategic Plan Goal		High-Quality Affordable Health Care: Improve health care quality, cost, and affordability			
Functional Objective	To offer high-quality, accessible, affordable, and sustainable health care.				
Risk Statement	Inability to offer high-quality, accessible, affordable, and sustainable health care at a competitive price.				
Risk Analysis:					
There are substantial inherent risks from rising health care and pharmaceutical costs; however, CalPERS is mitigating these risks well and continues to offer high-quality and affordable health care, as evidenced by the 2021 and 2022 Health Care Plan Premiums.					
<i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓
	Unlikely	Moderate	Low	High Impact Low Probability	↔
Risk Driver #1: Inability to ensure high-quality health care benefits for members					
Controls in Place:					
<ol style="list-style-type: none"> 1.1 Contract management, audits, and periodic business review corrective action plans 1.2 Monitoring member experience through the annual Health Plan Member Survey (HPMS) 1.3 Clinical performance measures with financial penalties for plans if targets are not met 1.4 Grievance and appeals process for members 1.5 Active engagement with other California public purchasers to ensure alignment on clinical quality initiatives 					
Future Mitigations:					
<ul style="list-style-type: none"> • Evaluate current health plan performance measures, align performance measures with other health care purchasers, and adjust as needed • Update health plan contract requirements as needed • Evaluate and improve health data quality and management • Evaluate and improve behavioral health access and quality • Develop and implement additional clinical quality improvement programs • Evaluate, develop, and implement initiatives to support health equity 					
Risk Driver #2: Failure to secure members access to care when and where they need it					
Controls in Place:					
<ol style="list-style-type: none"> 2.1 Grievance and appeals process for members 2.2 Monitoring member access through the annual Health Plan Member Survey (HPMS) 2.3 Maintain and continue to improve the provider directory utility to allow members to easily locate providers through CalPERS health plans 					
Future Mitigations:					
<ul style="list-style-type: none"> • Update health plan contract performance measures as needed • Evaluate and improve provider directory data quality and management • Evaluate and improve behavioral health access and quality • Assess and implement telehealth access initiatives • Evaluate, develop, and implement initiatives to support health equity 					


Risk Driver #3: Failure to provide affordable care	
Controls in Place:	
3.1	Annual negotiations of Health Plan Premiums (Rate Development Process) completed in July providing agencies the opportunity to plan for the next calendar year well in advance.
3.2	Evaluation of health plan choices across public agency regions
3.3	Periodic regional geographic assessment
3.4	Monetary penalties for health plans that fail to meet professional, facility, ancillary and total cost trend performance measures
3.5	Transitioning of eligible enrollees over 65 to Medicare plans
3.6	Contractual provisions that promote and maintain healthy lifestyles
3.7	Benefit design and plan requirements designed to ensure care is delivered at the most cost-effective site of care
3.8	Medical and pharmacy benefit alignment across health plans to close clinical gaps in care, improve shared-decision making, control specialty drug spending, and support preventive care
3.9	Annual market check of PBM prescription drug pricing by independent consultant
3.10	Active engagement in state and federal legislative and regulatory processes
3.11	Actuarially-determined reserves in the Health Care Fund (HCF)
3.12	Periodic evaluation and revision, as necessary, of the HCF Reserve Policy
3.13	Active engagement with major public purchasers to align on affordability initiatives
3.14	Risk mitigation for Basic plans
3.15	Competition study to evaluate the portfolio impact of new plan and service area expansion proposals
Future Mitigations:	
	<ul style="list-style-type: none">• Update health plan contract measures as needed• Evaluate and improve health data quality and management• Increase health plan competition in low competition areas• Develop and implement pharmaceutical strategies that control or reduce costs• Refine risk mitigation strategies• Assess efficiency of each health plan network for future changes to the portfolio• Conduct comprehensive competitive re-procurement of the PBM and HMO contracts with a focus on innovative and efficient networks that promote high-quality, affordable care

Information Security Enterprise Risk Profile					
Enterprise Risk	Executive Oversight		Board Oversight	Category	
Information Security	General Counsel, Legal Office		Board of Administration	Operational	
Strategic Plan Goal		Risk Management: Cultivate a risk-intelligent organization.			
Functional Objective	To ensure CalPERS information assets are safeguarded.				
Risk Statement	Failure to protect and secure information assets.				
Risk Analysis:					
Due to a constant changing environment, there are substantial inherent risks associated with information security. CalPERS is actively managing this risk; however, the ever-changing environment requires the identification of developing risks and continual development of mitigations and controls in response to those risks.					
<i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓
	Possible	Major	High	High Impact High Probability	↔
Risk Driver #1: Inability to identify and protect all business systems, applications, and information assets					
Controls in Place:					
1.1 Information Systems Security and Confidentiality Acknowledgement Agreement (ISSCA) 1.2 Sending Electronic Information Agreement (SEIA) 1.3 Information Security Control Standards (SAM, SIMM, NIST) 1.4 Privacy impact assessments 1.5 Annual HIPAA risk assessment 1.6 myCalPERS Change Advisory Board (MCAB) 1.7 Integrated Assurance Workgroup 1.8 Business relationship meetings 1.9 Information security education and awareness 1.10 ISOF participation in internal governance committees' decisions 1.11 Physical Security Policy 1.12 Badge Card Policy 1.13 Two-factor authentication requirements in confidential areas 1.14 Enhanced practices for protected health information 1.15 Member Self Service information security controls 1.16 All data storage capable devices are encrypted and either sanitized (wiped) or destroyed 1.17 Certified confidential document destruction bins 1.18 Enterprise-wide badge access reviews 1.19 Perform third-party audit and internal audits 1.20 Business Associate Agreements (BAA) 1.21 Cloud Service Provider SOC II requirement 1.22 Contractor security awareness training requirement 1.23 Independent security assessments and audits 1.24 Risk transfer strategies 1.25 Contracts include a Criminal Background Check Certification form 1.26 Enterprise data governance committees					


1.27 Data Steward Committee
1.28 Senior Leadership Council
1.29 Enterprise data management policies
1.30 Contracts include Protection of Information Assets language
1.31 Quarterly phishing email education and training
1.32 Information Asset Classification Policy
Future Mitigations:
<ul style="list-style-type: none"> Implement FY 2020-25 information security strategic initiatives
Risk Driver #2: Failure to timely detect an information security event
Controls in Place:
2.1 Annual mandatory information security and privacy training
2.2 24x7 Security Operations Center
2.3 Role-based security training
2.4 Receive and analyze cyber intelligence reports
2.5 Third party threat hunting
2.6 Third party web and application penetration testing
Future Mitigations:
<ul style="list-style-type: none"> Implement FY 2020-25 information security strategic initiatives
Risk Driver #3: Inability to contain, respond, and recover from an information security incident
Controls in Place:
3.1 Require third parties to have specified insurance
3.2 All applicable contracts include Business Continuity language
3.3 HIPAA Practice Manual
3.4 5-year Information Security Strategy
3.5 Incident Response Plan that outlines roles and responsibilities
3.6 Security Incident and Event Management (SIEM) procedures
3.7 Badge Card Access Procedure
Future Mitigations:
<ul style="list-style-type: none"> Implement FY 2020-25 information security strategic initiatives
Risk Driver #4: Failure to communicate an information security event to the appropriate parties
Controls in Place:
4.1 HIPAA and privacy officer
4.2 Building safety and security communications
4.3 Information security and privacy awareness communications
4.4 Fraud Management reporting procedures
4.5 Incident Response Plan includes internal and external reporting
Future Mitigations:
<ul style="list-style-type: none"> Implement FY 2020-25 information security strategic initiatives

Long-Term Care Enterprise Risk Profile						
Enterprise Risk	Executive Oversight	Board Oversight			Category	
Long-Term Care	Chief Health Director	Pension & Health Benefits Finance & Administration Committee Investment Committee			Strategic	
Strategic Plan Goal		High-Quality Affordable Health Care: Improve health care quality, cost, and affordability				
Functional Objective	To ensure the sustainability of the long-term care program at a price point that is affordable to policy holders.					
Risk Statement	Inability to fund future obligations of the long-term care program in a manner that is affordable to policy holders.					
Risk Analysis:						
CalPERS has performed extensive analysis on actual and projected claims experiences, varied investment return scenarios, and actuarial assumptions. Ongoing work is being completed that includes examination of options to improve investment returns, premium increases, and optional benefit reductions to address affordability and ensure sustainability of the Long-Term Care Program. This will require further analysis and dialogue with the Board.						
<i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i>						
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓	
	Unlikely	Moderate	Low	High Impact High Probability	↔	
Risk Driver #1: Investments underperform the assumed rate of return on a long-term basis						
Controls in Place:						
1.1 Annual valuation of long-term care program 1.2 Asset Liability Management cycle 1.3 Asset manager specializing in long-term care investments						
Future mitigations						
<ul style="list-style-type: none"> Implement rate increase in 2021 and a potential second rate increase in Fall 2022 Request for Proposal for a future aging in place/managed care option 						
Risk Driver #2: Actual experience deviates significantly from the actuarial assumptions						
Controls in Place:						
2.1 External Audits evaluate the Long-Term Care financial status annually 2.2 Actuarial Experience Study 2.3 Continue review of pricing assumptions with internal and external actuaries						
Future Mitigations:						
<ul style="list-style-type: none"> Annual review of actuarial assumptions Annual review of LTC program to determine continued sustainability and affordability options. 						
Risk Driver #3: Increased premiums become unaffordable for policy holders						
Controls in Place:						
3.1 Continue review of pricing assumptions with internal and external actuaries. 3.2 Optional benefit modifications to address affordability issues for 2021 rate increase						


Future Mitigations:
<ul style="list-style-type: none">Review new asset allocation to ensure the portfolio is performing as expected Optional benefit modifications, including a managed care/aging in place solution to reduce policy holder premiums
Risk Driver #4: Long term effects of COVID-19 could add costs to healthcare potentially if there are long term health issues.
Controls in Place:
4.1 Actuarial review of claims data 4.2 Annual review of actuarial assumptions
Future Mitigations:
<ul style="list-style-type: none">Actuarial valuation of the CalPERS 20/21 LTC experience with COVID impactsMonitor claims and policyholder data for possible COVID impacts

Pension Funding Enterprise Risk Profile					
Enterprise Risk	Executive Oversight	Board Oversight		Category	
Pension Funding	Chief Financial Officer, Chief Actuary, Chief Investment Officer	Finance & Administration Committee, Investment Committee		Strategic	
Strategic Plan Goal		Fund Sustainability: Strengthen the long-term sustainability of the pension fund.			
Functional Objective	To ensure the sustainability of the pension system to deliver retirement benefits.				
Risk Statement	Failure to meet pension benefit obligations.				
Risk Analysis:					
<p>Pension Funding risk drivers are complex and interconnected. While the long-term objective is to be 100% funded with less volatility, higher returning investment strategies tend to increase volatility. Adopting a more conservative portfolio allocation, on the other hand, though likely to reduce volatility and lessen the impact to the Fund of a severe drawdown, would typically also mean lower returns, which may in turn lead to higher contribution requirements from employers. It is worth noting that the purpose of the controls/mitigations enumerated below is less about prevention and more about positioning the Fund to weather these events as/when they occur, given that the risk drivers we enumerate are largely outside the control of CalPERS. Current mitigations are strong, but our ability to fully and effectively mitigate the effects of these risk drivers remains uncertain.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>					
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓
	Possible	Major	Medium	High Impact High Probability	↔
Assets: Risk Drivers					
1a: Financial markets suffer a severe downturn					
1b: Investments underperform the assumed rate of return on a long-term basis					
1c: Low funded status along with benefit payments exceeding contributions limit investment options					
1d: Government constraints and regulations reduce portfolio diversification					
1e: Employer ability to pay contributions is strained by the financial effects of business disruption from health, natural disaster, and/or market volatility that negatively impacts their revenue and budget					
1f: Portfolio size and complexity challenges efficient investment processes and limits investment universe					
1g: More portfolio risk to achieve the same rate of return in the future					
Controls in Place:					
1a, 1b, 1c, and 1f. Strategic Asset Allocation Targets and Ranges					
1a, 1b, and 1c. Investment Management Committee focused on portfolio allocation, trust level review, risk and attribution, and sustainability					
1a, 1b, and 1c. Integrated trust-level processes, including Trust-Level Portfolio Management and Investment Risk and Performance, which bring trust-level perspective, transparency, and accountability					
1a, 1b, and 1c. Trust-level processes designed to manage liquidity and leverage throughout the business cycle					
1a, 1b, and 1c. Cost-effective trust-level risk mitigation strategies					
1b, 1f, and 1g. Asset Liability Management (ALM) process ensures cyclical and strategic review of assets, liabilities, and long-term capital market assumptions to recalibrate discount rate and asset mix as needed					

<p>1a. and 1b. CalPERS Board reporting controls in place, including monthly investment performance and risk reporting, and biannual (February and August) CalPERS Trust-Level Review</p> <p>1f and 1g. ALM Policy and cross-enterprise Asset Liability Management Advisory Committee to facilitate strategic decision making</p> <p>1a. Funding Risk Mitigation Policy</p> <p>1b. Actuarial Amortization Policy</p> <p>1b. Contribution Allocation Policy</p> <p>1c. Communicating value of pre-paying pension obligations to strengthen the Fund and reduce individual employer costs in the future</p> <p>1d. Monitoring and evaluating proposed legislation to assess potential impacts</p> <p>1d. Legislative and stakeholder outreach to clear obstacles and constraints</p> <p>1e. Enhanced employer contracting process</p> <p>1e. Employer contract termination process</p> <p>1e. Outreach to employers and associations to educate them on Unfunded Actuarial Liabilities pay down strategies</p> <p>1e. Extension under Actuarial Amortization Policy due to a severe financial hardship</p> <p>1f. INVO Target Operating Model</p> <p>1f. Investment Office Operating Committee to focus on governance, processes, compliance, and operational efficiency</p> <p>1f. Disciplined investment processes and teamwork to focus efforts on repeatable, predictable, and scalable portfolios and practices</p> <p>1f. Expanding private equity external managers may lead to improved diversification</p>
<p>Future Mitigations:</p> <ul style="list-style-type: none"> • Integrated approach to managing plan risks
<p>Liabilities: Risk Drivers</p>
<p>2a: Actual experience deviates significantly from the actuarial assumptions</p>
<p>2b: Benefit design enhancements or member contribution reduction</p>
<p>2c: Employer contribution rate increases insufficient to reduce unfunded liabilities over time</p>
<p>Controls in Place:</p>
<p>2a. Actuarial Assumption Policy</p> <p>2b. Outreach and education to employers, labor leaders, and legislators regarding cost impacts of enhanced benefit design and value of pre-paying pension obligations</p> <p>2b. and 2c. Actuarial Cost Method Policy, Actuarial Amortization Policy</p> <p>2c. Increased employer education</p> <p>2c. ALM Process</p>
<p>Additional Risk Drivers</p>
<p>3a: Pension reform legislation or referendums that reduce employer obligation to honor pension contracts</p>
<p>3b: Judicial decisions that alter benefits or contributions</p>
<p>3c: Changes to actuarial standards</p>
<p>Controls in Place:</p>
<p>3a. Engagement with member, retiree, and employer associations</p> <p>3b. Engagement with legislative leaders and consultants</p> <p>3c. Development and promotion of support materials demonstrating the sustainability and value of the System</p> <p>3d. Provide technical expertise and industry thought-leadership to ensure sound decision-making</p>

Stakeholder Confidence Enterprise Risk Profile						
Enterprise Risk	Executive Oversight		Board Oversight		Category	
Stakeholder Confidence	Deputy Executive Officer, Communications and Stakeholder Relations		Finance & Administration Committee		Strategic	
Strategic Plan Goal		Fund Sustainability: Strengthen the long-term sustainability of the pension fund.				
Functional Objective	To ensure CalPERS is recognized as a respected and trusted steward of the system and fiduciary in delivering retirement and health benefits.					
Risk Statement	Inability to maintain stakeholder confidence in CalPERS as a trusted fiduciary.					
Risk Analysis:						
<p>The risk analysis notes an elevation to the inherent risk surrounding Stakeholder Confidence due to system sustainability decisions. Stakeholder confidence is closely correlated to fund sustainability inputs such as discount rate modifications, amortization schedule changes, and investment returns. Although CalPERS has developed a mature engagement strategy that effectively addresses unbalanced reporting and public perception, some risk continues due to the present external environment, as well as public opinion of public defined benefit plans.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>						
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓	
	Unlikely	Moderate	Low	High Impact Low Probability	↔	
Risk Driver #1: Negative, inaccurate, or unbalanced information reporting						
Controls in Place:						
1.1 Proactive, positive narrative of CalPERS actions and policies through all communications channels 1.2 Monitor and report on the perception of CalPERS in the media and on social media to identify opportunities and challenges 1.3 Respond to and correct negative, inaccurate, or unbalanced reporting 1.4 Develop and maintain good working relationships with media outlets 1.5 Author messaging on key CalPERS actions, views, or policy changes 1.6 Experts accurately inform the public and stakeholders 1.7 Enterprise Data Management 1.8 Enterprise Data Management Business Plan Initiative 1.9 Engagement with key leaders in the private sector						
Future Mitigations:						
<ul style="list-style-type: none"> Enterprise Data Management Business Plan Initiative (FY 2021-22) 						
Risk Driver #2: Negative public perception of CalPERS and/or public defined benefit plans						
Controls in Place:						
2.1 Accurate narrative of CalPERS actions and policies through all communication channels 2.2 Report economic impact of CalPERS pension benefits 2.3 Leverage communications through member and employer associations 2.4 Timely fulfillment of Public Record Act requests 2.5 Build and nurture relationships with stakeholders 2.6 Involvement in national public pension associations 2.7 CalPERS communication of advantages of the defined benefit plan 2.8 Asset Liability Management collaboration and communication						

2.9 Develop relationship with California allies across various industries and sectors
Risk Driver #3: CalPERS failure to engage, educate, and inform members, employers, stakeholders, and the CalPERS team
Controls in Place:
3.1 Framework of recurring stakeholder meetings 3.2 Direct member email communication plans, driving member engagement with the CalPERS blog 3.3 Ad hoc stakeholder outreach meetings 3.4 Digital communications 3.5 Employer information and education events 3.6 Member information and education events 3.7 Live webcasts of board meetings and transcripts of those meetings 3.8 Webinars and webcasts, including Board education workshops 3.9 Social media channels 3.10 Survey stakeholder segments to gauge sentiment and orient messaging and efforts 3.11 Share information with all team members to empower them to provide accurate information to their circle of influence. 3.12 Host publicly noticed stakeholder forum as part of annual Board meeting schedule 3.13 Utilize virtual web-conferencing technology to engage with stakeholders and provide uninterrupted services to members and employers
Risk Driver #4: Inability to inform, shape, or implement state and federal legislation
Controls in Place:
4.1 Engage with legislative leaders and consultants on relevant legislative proposals, regulatory issues, and initiatives 4.2 Build alignment and leverage relationships with member and employer associations, coalition groups, and membership organizations 4.3 Develop and nurture relationships between CalPERS and key state and federal policymakers 4.4 Update legislative and congressional briefing packets, as needed 4.5 Hold periodic briefings to educate legislative members on CalPERS issues concerning their constituents 4.6 Monitor, assess, and advocate on proposed legislation 4.7 Provide technical expertise and cost analysis for proposed legislation

Talent Management Enterprise Risk Profile						
Enterprise Risk	Executive Oversight		Board Oversight		Category	
Talent Management	Deputy Executive Officer, Operations and Technology		Performance, Compensation, & Talent Management Committee		Operational	
Strategic Plan Goal		Talent Management: Promote a high-performing and diverse workforce.				
Functional Objective	To successfully recruit, develop, and retain an engaged, diverse, and qualified workforce.					
Risk Statement	Inability to recruit and retain a diverse and qualified workforce compromises the ability to meet business objectives.					
Risk Analysis:						
<p>The lingering uncertainties of COVID-19 and the global pandemic has dramatically impacted the ability to attract and appoint a Chief Investment Officer and other key roles. As of February 2021, state employee retirements rose 15 percent from the same period in 2020 and labor forecasts predict significant turnover of employees across all sectors of the workforce of more than 50 percent. This unprecedented situation continues to challenge team members and team leaders alike increasing the likelihood of team member turnover and possible loss of institutional knowledge. CalPERS is actively investing in team members' professional growth to maintain continuity in the workforce and mitigate talent risks, including ongoing knowledge transfer activities that support retention and employee development. The lack of an end-to-end or otherwise integrated HR system creates manual workload and data gaps between existing solutions and workforce data sets. Although these gaps and lack of automation have been identified and are being addressed, they represent risk to the organization due to the lag in reporting for timely decision-making related to all aspects of the CalPERS workforce and ongoing operational inefficiencies in routine HR work.</p> <p><i>The following are high-level entity controls; and is not an exhaustive list of all controls in place.</i></p>						
Residual Risk	Probability	Impact	Velocity	Rating	Risk ↑ / ↓	
	Unlikely	Moderate	Very Low	High Impact Low Probability	↔	
Risk Driver #1: Skills and competencies of all team members not keeping pace with evolving technology, member, and system needs						
Controls in Place:						
1.1 CalPERS 2018-22 Workforce Plan 1.2 Employee Performance and Development process: EPADs available electronically 1.3 CalPERS Informal Mentoring Program 1.4 Educational, developmental, and training opportunities 1.5 CalPERS Succession Planning Program 1.6 CalPERS competencies: Includes team members and leadership 1.7 Unit-level workforce assessments: Flight risk, retirement risk, and critical risks are being measured and reported in the Workforce Planning Dashboard 1.8 CalPERS Emerging Leader program 1.9 Administer team member engagement survey annually, analyze results, and conduct follow-up activities 1.10 CalPERS Upward Mobility Program 1.11 COVID-19 Survey/Pulse Surveys						

Future Mitigations:
<ul style="list-style-type: none"> • Separation of the Development Plan from the EPAD • Ongoing system improvements and technology projects are collaboratively managed by HRSD/ITSB
Risk Driver #2: Loss of institutional knowledge
Controls in Place:
<ol style="list-style-type: none"> 2.1 CalPERS Emerging Leader program 2.2 Knowledge transfer stipulation for multi-year consultant contracts 2.3 illuminet 2.4 CalPERS Informal Mentoring Program 2.5 CalPERS Succession Planning Program 2.6 Lean training across the enterprise and on demand 2.7 Knowledge Transfer Workshops and online resources
Future Mitigations:
<ul style="list-style-type: none"> • Implement PRDA recommendations, where possible to streamline data collection and reporting. • Complete the recommendations of the CalPERS Workforce Plan (FY 2018-2022) • Expand DEI Metrics Reporting
Risk Driver #3: Inability to recruit and select qualified candidates
Controls in Place:
<ol style="list-style-type: none"> 3.1 Recruitment Lifecycle Tool Kit 3.2 Recruitment calendar 3.3 Strengthened selection process controls 3.4 Continue to develop targeted recruitment strategies and activities for hard to fill positions with critical positions overlay 3.5 Utilization of skilled, in-house recruiters and external search firms 3.6 Career fairs and advertising in non-traditional mediums 3.7 Salary survey of comparable positions 3.8 Examination and Certification Online System 3.9 Market CalPERS as a destination employer 3.10 Incentive compensation programs and policies 3.11 Utilization of Student Assistants / Graduate Students 3.12 CalPERS Student Internship Program 3.13 Statewide IT Apprenticeship Program 3.14 CalPERS competencies 3.15 Validate HR Workforce Metrics Program
Future Mitigations:
<ul style="list-style-type: none"> • Fully implement reporting functionality of the Start Talent Acquisition Request System to capture, compile, and measure recruitment data (FY 2018-22 Workforce Plan) • Diversity, Equity & Inclusion: Assess use of approved recruitment, screening, and selections tools/techniques on the job.

Risk Drivers #4: Inconsistent levels of support for engagement across the enterprise
Controls in Place:
<ul style="list-style-type: none"> 4.1 Enterprise Enrichment programs 4.2 New employee onboarding including customized onboarding plans for senior leaders and executives 4.3 Diversity and inclusion events 4.4 Innovation platforms (Idea Factory and other Enterprise platforms/forums) 4.5 Annual Employee Engagement Survey 4.6 Implement engagement survey action items (Business Plan Initiative) 4.7 CalPERS Emerging Leader program 4.8 Career Development Day 4.9 Upward Mobility Program 4.10 Chief Diversity Equity and Inclusion Officer
Future Mitigations:
<ul style="list-style-type: none"> • Implement DEI Talent-People Action Plans via Business Plan Initiatives • Implement the DEI Culture Action Plans via Business Plan Initiatives
Risk Drivers #5: Antiquated HRMS
Controls in Place:
<ul style="list-style-type: none"> 5.1 Data mapping and data clean-up of HCM and SCO systems 5.2 Position history and reconciliation with Budget Office 5.3 Automated Entry and Exit Process for all Team Members 5.4 HRSD Data Dictionary 5.5 HCM PeopleSoft Role mapping 5.6 Ongoing HCM PeopleSoft system updates with ESDD
Future Mitigations:
<ul style="list-style-type: none"> • Work with ITSB to identify alternative solutions to bridge the gap with the antiquated HRMS (FY 2021-22) • HRSD Data Dictionary, Phase II in development (FY 2021-22)
Risk Drivers #6: Inability to sustain CalPERS' talent management functional objectives due to prolonged impacts of COVID-19
Controls in Place:
<ul style="list-style-type: none"> 6.1 CEO weekly web-chat/FAQs 6.2 Return to Office Plan 6.3 Telework Program Policy 6.4 Virtual trainings and programs 6.5 Virtual Wellness Programs 6.6 Virtual ACE, APEX and SPARK recognition programs 6.7 COVID-19 SharePoint site
Future Mitigations:
<ul style="list-style-type: none"> • Continue providing core HR supportive services virtually • Telework Policy and Program (FY 2021-22)