### Benefit Administration
#### Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit Administration</td>
<td>Deputy Executive Officer, Customer Service and Support</td>
<td>Pension &amp; Health Benefits Committee</td>
<td>Strategic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Plan Goal</th>
<th>Reduce Complexity: Reduce complexity across the enterprise by simplifying programs to improve service and/or reduce cost.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Functional Objective</th>
<th>To ensure accurate and timely benefits and information to members, retirees, and beneficiaries.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Risk Statement</th>
<th>CalPERS members, retirees, and beneficiaries may not receive timely and/or accurate benefits.</th>
</tr>
</thead>
</table>

### 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.

The following are high-level entity controls; and is not an exhaustive list of all controls in place.

#### Residual Risk

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rare</td>
<td>Major</td>
<td>Medium</td>
<td>High impact</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low Probability</td>
<td></td>
</tr>
</tbody>
</table>

### Risk Driver #1: 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

### 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
### 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 enhancements
- 3.7 Reconcile Retirement Roll
- 3.8 Identification and correction of data issues
- 3.9 Lean process improvement

### 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
## Business Continuity

### Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Continuity</td>
<td>Deputy Executive Officer, Operations and Technology</td>
<td>Finance &amp; Administration Committee</td>
<td>Operational</td>
</tr>
<tr>
<td><strong>Strategic Plan Goal</strong></td>
<td>![Lock Icon] <strong>Risk Management:</strong> Cultivate a risk-intelligent organization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Functional Objective</strong></td>
<td>CalPERS’ ability to resume business following a major business interruption.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk Statement</strong></td>
<td>Inability to recover timely and resume business functions following a business interruption event.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Risk Analysis:

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 following are high-level entity controls; and is not an exhaustive list of all controls in place.

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rare</td>
<td>Moderate</td>
<td>Low</td>
<td>High Impact</td>
<td>Down</td>
</tr>
</tbody>
</table>

### 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

### Future Mitigations:

- Virtual Command Center analysis and development

### 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 situation

**Controls in Place:**

4.1 Incident Command System
4.2 Incident Management Team
4.3 Annual drills
4.4 Annual emergency tabletop 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

<table>
<thead>
<tr>
<th>Risk Driver #5: Dependency on the State Controller's Office (SCO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls in Place:</strong></td>
</tr>
<tr>
<td>5.1 Documented workarounds to the SCO functions</td>
</tr>
<tr>
<td>5.2 SCO Disaster Recovery Exercise</td>
</tr>
<tr>
<td>5.3 Virtual Private Network (VPN) tunnel to SCO disaster recovery site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Driver #6: Mass regional disaster event impacting access to Emergency Operations Center</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls in Place:</strong></td>
</tr>
<tr>
<td>6.1 Access data applications through cloud-based systems</td>
</tr>
<tr>
<td>6.2 Transition plan for long term displacement (greater than six months)</td>
</tr>
<tr>
<td>6.3 External conference bridge lines for communication</td>
</tr>
<tr>
<td>6.4 VPN connectivity from anywhere to CalPERS systems at the cloud-based disaster recovery site</td>
</tr>
<tr>
<td>6.5 Cloud-based Contact Center functionality that would allow agents to take calls from anywhere</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Driver #7: Inability to keep stakeholders informed following a major business interruption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls in Place:</strong></td>
</tr>
<tr>
<td>7.1 Stakeholder Relations maintains a stakeholder key personnel contact database</td>
</tr>
<tr>
<td>7.2 CalPERS manages social media outlets (Facebook, Twitter, Instagram)</td>
</tr>
</tbody>
</table>

**Future Mitigations:**

- Communication plan to keep stakeholders informed regarding major business interruptions and recovery times
# Governance and Control Environment

## Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and Control Environment</td>
<td>Chief Compliance Officer, Chief Financial Officer</td>
<td>Risk &amp; Audit Committee</td>
<td>Operational</td>
</tr>
</tbody>
</table>

### 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:

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.

*The following are high-level entity controls; and is not an exhaustive list of all controls in place.*

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Possible</td>
<td>Moderate</td>
<td>High</td>
<td>High Impact</td>
<td>High Probability</td>
</tr>
</tbody>
</table>

**Risk Driver #1: Lack of strong governance impacts organizational maturity, decision making, and efficiency**

**Controls in Place:**

1.1 Policy Management Framework
1.2 Annual 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:**

- 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 compliance communication plans
- 3.3 Embedded Compliance and Risk Liaisons
- 3.4 Compliance and ethics discussion guides
- 3.5 Operational policies and procedures
- 3.6 Compliance and Risk communication and training plans
- 3.7 Equal Employment Opportunity (EEO) Office oversight of EEO related laws and regulations

**Future Mitigations:**
- Develop communication content
- Code of Conduct

### 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

**Future Mitigations:**
- Compliance Awareness
- Centralization of fraud reporting and administration
- Code of conduct
# Health Care Administration
## Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Administration</td>
<td>Chief Health Director, Health Policy and Benefits Branch</td>
<td>Pension &amp; Health Benefits Committee</td>
<td>Strategic</td>
</tr>
</tbody>
</table>

### 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 2020 and 2021 Health Care Plan Rates.

The following are high-level entity controls; and is not an exhaustive list of all controls in place.

### Residual Risk

<table>
<thead>
<tr>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlikely</td>
<td>Moderate</td>
<td>Low</td>
<td>High Impact</td>
<td>Low Probability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Risk Driver #1: Inability to ensure high-quality health care benefits for members

#### Controls in Place:

1.1 Contract management, audits, and periodic business review corrective action plans
1.2 Monitoring member satisfaction 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

#### Future Mitigations:

- Evaluate current health plan performance measures and adjust as needed
- Update health plan contract measures 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:

2.1 5-year contracts with health plans
2.2 Grievance and appeals process for members
2.3 Monitoring member access through the annual Health Plan Member Survey (HPMS)
2.4 Maintain and continue to improve the provider directory utility to allow members to easily locate providers through CalPERS health plans

#### Future Mitigations:

- Continue 5-year contracts with health plans
- Update health plan contract performance measures as needed
- Evaluate and improve provider data quality and management
- Evaluate and improve behavioral health access and quality
- Assess and implement telehealth access initiatives as needed
### Risk Driver #3: Failure to provide affordable care

#### Controls in Place:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Annual negotiations of Health Plan Premiums (Rate Development Process) completed in June providing agencies the opportunity to plan for the next calendar year well in advance.</td>
</tr>
<tr>
<td>3.2</td>
<td>Evaluation of health plan choices across public agency regions</td>
</tr>
<tr>
<td>3.3</td>
<td>Periodic regional geographic assessment</td>
</tr>
<tr>
<td>3.4</td>
<td>Monetary penalties for health plans that fail to meet professional, facility, ancillary and total cost trend performance measures</td>
</tr>
<tr>
<td>3.5</td>
<td>Transitioning of eligible enrollees over 65 to Medicare plans</td>
</tr>
<tr>
<td>3.6</td>
<td>Contractual provisions that promote and maintain healthy lifestyles</td>
</tr>
<tr>
<td>3.7</td>
<td>Benefit design and plan requirements designed to ensure care is delivered at the most cost-effective site of care</td>
</tr>
<tr>
<td>3.8</td>
<td>Medical and pharmacy benefit alignment across health plans to close clinical gaps in care, improve shared-decision making, control specialty drugs, and support preventive care</td>
</tr>
<tr>
<td>3.9</td>
<td>Annual market check of PBM prescription drug pricing by independent consultant</td>
</tr>
<tr>
<td>3.10</td>
<td>Active engagement in state and federal legislative and regulatory processes</td>
</tr>
<tr>
<td>3.11</td>
<td>Actuarially-determined reserves in the Health Care Fund (HCF)</td>
</tr>
<tr>
<td>3.12</td>
<td>Periodic evaluation and revision, as necessary, of the HCF Reserve Policy</td>
</tr>
</tbody>
</table>

#### Future Mitigations:

- Update health plan contract measures as needed
- Evaluate and improve health data quality and management
- Increase health plan competition in low competition areas
- Implement risk mitigation
- Develop and implement pharmaceutical strategies that control or reduce costs
## Information Security
### Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Security</td>
<td>General Counsel, Legal Office</td>
<td>Board of Administration</td>
<td>Operational</td>
</tr>
</tbody>
</table>

#### 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.

The following are high-level entity controls; and is not an exhaustive list of all controls in place.

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk ↑ / ↓</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Possible</td>
<td>Major</td>
<td>High</td>
<td>High Impact</td>
<td>High Probability</td>
</tr>
</tbody>
</table>

### 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
<table>
<thead>
<tr>
<th>1.27</th>
<th>Data Steward Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.28</td>
<td>Senior Leadership Council</td>
</tr>
<tr>
<td>1.29</td>
<td>Enterprise data management policies</td>
</tr>
<tr>
<td>1.30</td>
<td>Contracts include Protection of Information Assets language</td>
</tr>
<tr>
<td>1.31</td>
<td>Quarterly phishing email education and training</td>
</tr>
</tbody>
</table>

**Future Mitigations:**
- Implement FY 2020-25 information security strategic initiatives

**Risk Driver #2: Failure to timely detect an information security event**

<table>
<thead>
<tr>
<th>Controls in Place:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
</tr>
<tr>
<td>2.2</td>
</tr>
<tr>
<td>2.3</td>
</tr>
<tr>
<td>2.4</td>
</tr>
<tr>
<td>2.5</td>
</tr>
<tr>
<td>2.6</td>
</tr>
</tbody>
</table>

**Future Mitigations:**
- Implement FY 2020-25 information security strategic initiatives

**Risk Driver #3: Inability to contain, respond, and recover from an information security incident**

<table>
<thead>
<tr>
<th>Controls in Place:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
</tr>
<tr>
<td>3.2</td>
</tr>
<tr>
<td>3.3</td>
</tr>
<tr>
<td>3.4</td>
</tr>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>3.6</td>
</tr>
<tr>
<td>3.7</td>
</tr>
</tbody>
</table>

**Future Mitigations:**
- Implement FY 2020-25 information security strategic initiatives

**Risk Driver #4: Failure to communicate an information security event to the appropriate parties**

<table>
<thead>
<tr>
<th>Controls in Place:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
</tr>
<tr>
<td>4.2</td>
</tr>
<tr>
<td>4.3</td>
</tr>
<tr>
<td>4.4</td>
</tr>
<tr>
<td>4.5</td>
</tr>
</tbody>
</table>

**Future Mitigations:**
- Implement FY 2020-25 information security strategic initiatives
**Pension Funding**  
**Enterprise Risk Profile**

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension Funding</td>
<td>Chief Financial Officer, Chief Actuary, Chief Investment Officer</td>
<td>Finance &amp; Administration Committee, Investment Committee</td>
<td>Strategic</td>
</tr>
</tbody>
</table>

**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:**

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.

In 2020 the Asset Liability Management Advisory Committee (ALMAC) added language to include risk driver 1e and associated mitigations to highlight risks to employer contributions.

*The following are high-level entity controls; and is not an exhaustive list of all controls in place.*

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible</td>
<td>Major</td>
<td>Medium</td>
<td></td>
<td>High Impact/High Probability</td>
<td>↑</td>
</tr>
</tbody>
</table>

**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

**Controls in Place:**

1a, 1b, 1c, and 1f. Strategic Asset Allocation Targets and Ranges  
1a, 1b, and 1c. Investment Strategy Group 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. Identification of trust-level strategies designed to manage liquidity and leverage throughout the business cycle  
1a, 1b, and 1c. Cost-effective trust-level risk mitigation strategies
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
1a. Funding Risk Mitigation Policy
1b. Actuarial Amortization Policy
1b. Contribution Allocation Policy
1b. Asset Liability Management (ALM) process ensures cyclical review of assets and liabilities to recalibrate discount rate as needed
1c. Communicating value of pre-paying pension obligations to strengthen the Fund and reduce individual employer costs in the future
1d. Monitoring and evaluating proposed legislation to assess potential impacts
1d. Legislative and stakeholder outreach to clear obstacles and constraints
1e. Enhanced employer contracting process
1e. Employer contract termination process
1e. Outreach to employers and associations to educate them on Unfunded Actuarial Liabilities pay down strategies
1e. Extension under Actuarial Amortization Policy due to a severe financial hardship
1f. INVO Roadmap Initiatives and Target Operating Model
1f. ALM Policy and cross-enterprise Asset Liability Management Advisory Committee to facilitate strategic decision making
1f. Investment Office Operating Committee to focus on governance, processes, compliance, and operational efficiency
1f. Disciplined investment processes and teamwork to focus efforts on repeatable, predictable, and scalable portfolios and practices
1f. Reduction in external managers

**Future Mitigations:**

- Seven percent challenge

**Liabilities: Risk Drivers**

2a: Actual experience deviates significantly from the actuarial assumptions
2b: Benefit design enhancements or member contribution reduction
2c: Employer contribution rate increases insufficient to reduce unfunded liabilities over time

**Controls in Place:**

2a. Actuarial Assumption Policy
2b. Outreach and education to employers, labor leaders, and legislators regarding cost impacts of enhanced benefit design and value of pre-paying pension obligations
2b. and 2c. Actuarial Cost Method Policy, Actuarial Amortization Policy
2c. Increased employer education
2c. ALM Process

**Additional Risk Drivers**

3a: Pension reform legislation or referendums that reduce employer obligation to honor pension contracts
3b: Judicial decisions that alter benefits or contribution
3c: Changes to actuarial standards

**Controls in Place:**

3a. Engagement with member, retiree, and employer associations
3b. Engagement with legislative leaders and consultants
3c. Development and promotion of support materials demonstrating the sustainability and value of the System
3d. Provide technical expertise and industry thought-leadership to ensure sound decision-making
Stakeholder Confidence

Enterprise Risk Profile

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Confidence</td>
<td>Deputy Executive Officer, Communications and Stakeholder Relations</td>
<td>Finance &amp; Administration Committee</td>
<td>Strategic</td>
</tr>
</tbody>
</table>

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:

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.

The following are high-level entity controls; and is not an exhaustive list of all controls in place.

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unlikely</td>
<td>Moderate</td>
<td>Low</td>
<td>High Impact</td>
<td>Low Probability</td>
</tr>
</tbody>
</table>

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

Future Mitigations:

• Enterprise Data Management Business Plan Initiative (FY 2020-21)

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 Ad hoc stakeholder outreach meetings
- 3.3 Digital communications
- 3.4 Employer information and education events
- 3.5 Member information and education events
- 3.6 Live webcasts of board meetings and transcripts of those meetings
- 3.7 Webinars and webcasts, including Board education workshops
- 3.8 Social media channels
- 3.9 Survey stakeholder segments to gauge sentiment and orient messaging and efforts
- 3.10 Share information with all team members to empower them to provide accurate information to their circle of influence.
- 3.11 Host publicly noticed stakeholder forum as part of annual Board meeting schedule
- 3.12 Utilize virtual web-conferencing technology to engage with stakeholders and provide uninterrupted services to members and employers during pandemic-related restrictions.

### 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

<table>
<thead>
<tr>
<th>Enterprise Risk</th>
<th>Executive Oversight</th>
<th>Board Oversight</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent Management</td>
<td>Deputy Executive Officer, Operations and Technology</td>
<td>Performance, Compensation, &amp; Talent Management Committee</td>
<td>Operational</td>
</tr>
<tr>
<td>Strategic Plan Goal</td>
<td><strong>Talent Management</strong>: Promote a high-performing and diverse workforce.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Objective</td>
<td>To successfully recruit, develop, and retain an engaged, diverse, and qualified workforce.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Statement</td>
<td>Inability to recruit and retain a diverse and qualified workforce compromises the ability to meet business objectives.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Risk Analysis:

The fiscal impact of COVID-19 may force some team members into early retirement. Twenty-five percent of the workforce was projected to retire by 2022; however, that number may increase due to the pandemic and related statewide budgetary impacts. This unprecedented situation raises further challenges for CalPERS to retain institutional knowledge and fill hard-to-recruit senior level positions. 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 may represent risk to the organization due to the lag in reporting for timely decision-making related to all aspects of the CalPERS workforce.

The following are high-level entity controls; and is not an exhaustive list of all controls in place.

<table>
<thead>
<tr>
<th>Residual Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Velocity</th>
<th>Rating</th>
<th>Risk ↑ / ↓</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unlikely</td>
<td>Moderate</td>
<td>Very Low</td>
<td>High Impact Low Probability</td>
<td>↑</td>
</tr>
</tbody>
</table>

**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

**Future Mitigations:**

- COVID-19 survey
- Separation of the Development Plan from the EPAD
### Risk Driver #2: Loss of institutional knowledge

**Controls in Place:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>CalPERS Emerging Leader program</td>
</tr>
<tr>
<td>2.2</td>
<td>Knowledge transfer stipulation for multi-year consultant contracts</td>
</tr>
<tr>
<td>2.3</td>
<td>illuminet</td>
</tr>
<tr>
<td>2.4</td>
<td>CalPERS Informal Mentoring Program</td>
</tr>
<tr>
<td>2.5</td>
<td>CalPERS Succession Planning Program</td>
</tr>
<tr>
<td>2.6</td>
<td>Lean training across the enterprise and on demand</td>
</tr>
<tr>
<td>2.7</td>
<td>Knowledge Transfer Workshops and online resources</td>
</tr>
</tbody>
</table>

**Future Mitigations:**

- Identify HRSD data sources and collaborate with PRDA to streamline data collection efforts to meet workforce plan strategies.
- Implement the recommendations of the CalPERS Workforce Plan (FY 2018-2022)

### Risk Driver #3: Inability to recruit and select qualified candidates

**Controls in Place:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Recruitment Lifecycle Tool Kit</td>
</tr>
<tr>
<td>3.2</td>
<td>Recruitment calendar</td>
</tr>
<tr>
<td>3.3</td>
<td>Strengthened selection process controls</td>
</tr>
<tr>
<td>3.4</td>
<td>Continue to develop targeted recruitment strategies and activities for hard to fill positions with critical positions overlay</td>
</tr>
<tr>
<td>3.5</td>
<td>Utilization of skilled, in-house recruiters and external search firms</td>
</tr>
<tr>
<td>3.6</td>
<td>Career fairs and advertising in non-traditional mediums</td>
</tr>
<tr>
<td>3.7</td>
<td>Salary survey of comparable positions</td>
</tr>
<tr>
<td>3.8</td>
<td>Examination and Certification Online System</td>
</tr>
<tr>
<td>3.9</td>
<td>Market CalPERS as a destination employer</td>
</tr>
<tr>
<td>3.10</td>
<td>Incentive compensation programs and policies</td>
</tr>
<tr>
<td>3.11</td>
<td>Utilization of Student Assistants / Graduate Students</td>
</tr>
<tr>
<td>3.12</td>
<td>CalPERS Student Internship Program</td>
</tr>
<tr>
<td>3.13</td>
<td>Statewide IT Apprenticeship Program</td>
</tr>
<tr>
<td>3.14</td>
<td>CalPERS competencies</td>
</tr>
<tr>
<td>3.15</td>
<td>Validate HR Workforce Metrics Program</td>
</tr>
</tbody>
</table>

**Future Mitigations:**

- Refine and implement reporting functionality of the Start Talent Acquisition Request System to capture, compile, and measure recruitment data (FY 2018-22 Workforce Plan)

### Risk Drivers #4: Inconsistent levels of support for engagement across the enterprise

**Controls in Place:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Enterprise Enrichment programs</td>
</tr>
<tr>
<td>4.2</td>
<td>New employee onboarding including, customized onboarding plans for senior leaders and executives</td>
</tr>
<tr>
<td>4.3</td>
<td>Diversity and inclusion events</td>
</tr>
<tr>
<td>4.4</td>
<td>Innovation platforms (Idea Factory and other Enterprise platforms/forums)</td>
</tr>
<tr>
<td>4.5</td>
<td>Annual Employee Engagement Survey</td>
</tr>
<tr>
<td>4.6</td>
<td>Implement engagement survey action items (Business Plan Initiative)</td>
</tr>
<tr>
<td>4.7</td>
<td>CalPERS Emerging Leader program</td>
</tr>
<tr>
<td>4.8</td>
<td>Career Development Day</td>
</tr>
<tr>
<td>4.9</td>
<td>Upward Mobility Program</td>
</tr>
<tr>
<td>4.10</td>
<td>Interim Diversity and Inclusion Officer</td>
</tr>
</tbody>
</table>
### Future Mitigations:
- Establish framework for Diversity and Inclusion Program
- Placing a permanent Diversity and Inclusion Officer

### Risk Drivers #5: Antiquated HRMS

#### Controls in Place:
- 5.1 Data mapping and data clean-up of HCM and SCO systems
- 5.2 Position history and reconciliation with Budget Office
- 5.3 Employee separation process restructured within HRSD
- 5.4 Streamline employee separation process (project led by PRDA)

#### Future Mitigations:
- Work with ITSB to identify alternative solutions to bridge the gap with the antiquated HRMS (FY 2020-21)
- HRSD Data Dictionary in development (FY 2020-21)

### Risk Drivers #6: Inability to sustain CalPERS' talent management functional objectives due to prolonged impacts of COVID-19

#### Controls in Place:
- 6.1 Transition to remote working
- 6.2 CEO weekly web-chat
- 6.3 Return to Office Plan
- 6.4 Telework Program Policy
- 6.5 Virtual trainings and programs
- 6.6 Virtual Wellness Programs
- 6.7 Virtual ACE, APEX and SPARK recognition programs
- 6.8 COVID-19 SharePoint site

#### Future Mitigations:
- Continue providing core HR supportive services virtually.