

California Public Employees Retirement System

Enterprise Risk Management – Top Residual Risk Report
as of Oct 25, 2013

Summary of Top Residual Risks for this Reporting Period

Risk Category	Risk Domain	FY2013-14 Residual Risk				
		Nov-12	Jan-13	May-13	Oct-13	Current Trend
Strategic	Health Care Costs	▲	▲	▲	▲	➡
Strategic	Pension Funding (Asset Liability Management)	---	---	■	■	➡
Strategic	Municipal Bankruptcy	---	---	⬢	⬢	➡
Strategic	Human Resources Management	▲	▲	▲	▲	⬇
Strategic	Stakeholder Perception	▲	▲	▲	▲	➡
Operational	Business Continuity Management	▲	▲	▲	▲	⬇
Operational	Information Security	▲	▲	▲	▲	⬇
Financial	Financial Controls & Systems	▲	▲	▲	▲	⬇
Financial	Investment Risk Management	■	■	■	■	➡
Financial	Investment Controls and Systems	⬢	⬢	■	■	⬇
Financial	Actuarial Policies and Practices	▲	▲	▲	▲	⬇
Compliance/Ethics	Laws, Rules, and Regulations	▲	▲	▲	▲	⬇
Compliance/Ethics	Policy and Procedures	▲	▲	▲	▲	➡
Compliance/Ethics	Ethical Conduct and Standards	---	---	---	▲	➡

	Minimal
	Medium
	Elevated
	High

	Decrease
	Remain constant
	Increase

Residual risk reports on each category highlighted above are provided in detail in the following pages.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Strategic	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Health Care Costs					

Risk Statement

This domain identifies risks in the health care environment that may impact increases in health care benefit costs and may erode CalPERS ability to provide its members with high quality, cost effective health care services and adversely impact CalPERS as the preferred health care choice for employers and employees.

- Key Risks**
- * rising cost of health care
 - * demographic shifts
 - * health care inefficiencies
 - * contracting agency participation

Management's Mitigation Strategies

1. Implement the Board approved Health Benefit Purchasing Review Initiatives (3-5 year strategic plan). Initially focus on the following:
 - Health Plan risk adjustment.
 - Evidence Based Medicine, Practice and Protocols.
 - Value Based Purchasing.
 - Development and implementation of specialized networks.
 - Align medical and pharmacy benefits across health plans to close clinical gaps in care, improve shared-decision making, control expensive specialty drugs.
 - CalPERS specific contractual provisions, including performance measures for both Medical and Pharmacy.
 - Incorporate the Institute for Health Care Improvement "Triple Aim" principles into health benefits.
 - Introduction of new innovative approaches to reduce health care cost trends through new regional health plans to remain competitive in the California healthcare industry.
 - Intensive Case Management to reduce unwarranted care
 - Use patient centered medical home approach and principles to assess health plan disease management, care coordination and intensive case management programs for members with multiple chronic conditions.
 - Healthy lifestyles education and outreach programs for all members
2. Focus on the top 3 cost drivers (inpatient hospital, outpatient hospital and specialty drugs) and work with the health plans to develop targeted strategies to address these drivers (Ongoing).
3. Manage new PPO & HMO contracts.
4. Implement Dependent Eligibility Verification project (2015).
5. Improve transparency of provider costs and distribute better information to stakeholders.
6. Continue purchaser collaboration efforts (i.e., PBGH, Covered California).

Comments

ERMD reviewed the risk domain in accordance with standard practice. The mitigation strategies are a long term plan for 3-5 years. Mitigation strategies are monitored with minimum change in residual risk ranking expected this year. Residual risk ranking is expected to stay constant at the moderate level for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Strategic	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Pension Funding (Asset Liability Management)	--	--			

Risk Statement

This domain identifies risks that may impact CalPERS pension plan sustainability including ability to provide promised retirement benefit for members which is affordable and attractive to employers, and maintain low volatility in contributions and funding levels through the management of asset and liabilities.

Key Risks

- * investment risk and return
- * liability management
- * pension financing - contribution

Management's Mitigation Strategies

1. Continued development of a risk model for the asset/liability framework to identify risk levels. Using this Asset-Liability Management Risk Model educate the Board.
2. Make recommendations on how pension funding methods and policies impact this risk.
3. Propose Flexible de-risking at the Asset Liability Management Model Workshop in November and recommend changes to the asset allocation.

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay elevated for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Strategic	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Municipal Bankruptcy	--	--			

Risk Statement

This domain identifies risks related to and arising out of municipal bankruptcy that may impact employers and members pension or health plan terms including benefits, contributions or premiums, or other actions that threaten the integrity and soundness of the system.

- Key Risks**
- * bankruptcy
 - * legal/legislation
 - * termination authority & valuation
 - * employer contributions
 - * financial
 - * stakeholder perception

- Management's Mitigation Strategies**
1. Actively defend the integrity and soundness of the system in bankruptcy court; sponsor legislation to strengthen system protection.
 2. Policy analysis to determine under what circumstances CalPERS might want to initiate termination proceedings.
 3. Ensure actuarial policies minimize the probability that large single year rate increases will be necessary.
 4. Establish a centralized collection process that monitors outstanding contribution payments, provides notification for past due amounts and applies interest/penalties for delinquent accounts.

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay high for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Strategic	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Human Resources Management	▲	▲	▲	▲	▼

Risk Statement
This domain identifies risks that may impact the availability of an adequate knowledgeable workforce with sufficient training and skills to meet organizational goals and objectives. This includes recruitment, hiring, succession planning, and labor relations.

- Key Risks**
- * pre-employment screening
 - * knowledge transfer
 - * automation infrastructure
 - * staff development
 - * performance compensation
 - * competency modeling/management
 - * turnover

Management's Mitigation Strategies

1. Initiate an enterprise-wide, five-year strategic workforce development and implementation plan that would include; succession planning, an automated Human Resources system, staff training and mentoring, and other talent management initiatives.
2. Some tactical examples of Talent Management strategies throughout the enterprise are listed below:

Talent Acquisition:
Focused recruitment efforts (ITSB/INVO)

Pre-employment Screening:
Enhanced pre-employment screening activities.

Knowledge Transfer and Change Management:
Document processes and procedures;
Utilize knowledge transfer strategies and create transition plans;
Provide education and training

Automation Infrastructure:
Automate HR processes to enhance employee self-service and reduce manual processes

Staff Development:
Review and advise on functional training curriculum;
Identify skill gaps and implement training to mitigate gaps

Succession Planning:
Administer an Executive succession plan and process;
Create Executive Learning Development Plans (development opportunities);
Document and track in GoLearn (LMS)

Performance Compensation:
Develop and document business rules for determining and issuing incentive pay;
Implement 3rd party review of incentive compensation program

Competency Modeling/Management:
Focused training on key management issues

Turnover:
Focus on employee engagement tools;
Succession planning, mentoring, and knowledge transfer strategies

Comments
ERMD reviewed the risk domain in accordance with standard practice. Mitigation strategies are a long term workforce development plan for 5 years. This is the first year of integration for the Strategic Workforce Development Program. Mitigation strategies are monitored with minimum change in residual risk ranking expected this year. Residual risk ranking is expected to stay constant at the medium level for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Strategic					
Stakeholder Perception	▲	▲	▲	▲	➡

Risk Statement

This domain identifies risks that may impact effective communications and relationships with key stakeholders who require a high level of confidence in CalPERS. These critical partnerships are necessary in order to successfully deliver retirement and health benefits to CalPERS members.

Key Risks

* stakeholder management	* communications
* governmental relations	* public perception/reputation

Management's Mitigation Strategies

1. Stakeholder Relations is in the final stages of conducting a Stakeholder Relations Risk Assessment. (The Baseline was completed June 2011; the follow-up survey is complete and results will be presented in October 2013. Survey will be sent out to CalPERS Employees, Employers, Members every six months for three years.
2. We are currently implementing the brand voice and visuals throughout CalPERS communications.
3. We have created a Sales Coordination Group consisting of staff from across CalPERS sales and outreach areas that meets regularly to reduce risks related to stakeholder perceptions.
4. Our Strategic Marketing Council, consisting of the Deputy Executive Officers responsible for External Affairs, Benefit Programs Policy & Planning, and Customer Services & Support provides staff direction to address marketing efforts across the organization. The council will be looking at our current efforts in the area of marketing for Long-Term Care, Open Enrollment, and Supplemental Income Plans.
5. We will proactively inform Legislative leaders, key committee chairs and vice chairs, and consultants about issues that could impact CalPERS reputation. (This is an ongoing initiative, being conducted by the Office of Government Affairs on a regular basis).
6. We will Develop and implement a communications strategy to increase visibility and public presence of CalPERS leadership, in the media and among stakeholders. STRL staff is researching, enhancing calendars and recommending to leadership opportunities for expanded outreach.
7. We are enhancing our social media strategies by raising our voice in the electronic conversation through monitoring and engaging with our stakeholder groups via their social media channels. The Office of Stakeholder Relations is leading this effort with consultation from PAOF Web and the Brand Management Team.
8. We are improving the usability and experience of our web site for a better customer service experience.
9. We are expanding our ability to be more transparent and keeping our members and stakeholders informed through various webinars and webcasts, including live Board meetings on the Web.
10. We are proactively involved with the media, stakeholders, and the legislature on important topics, such as pension reform, municipal bankruptcies, and Long-Term Care.
11. We are developing relationships with academia, California business community and financial industry partners, through thought leadership initiatives to support the effectiveness of our retirement, health and investment programs.
12. We are developing a framework for coordinated engagement and leadership in industry policy.

Comments

ERMD reviewed the risk domain in accordance with standard practice. Stakeholder perception is expected to remain at the residual risk moderate level with most risk events being external and uncontrolled by CalPERS. Mitigation strategies are monitored for execution and delivery of services with minimum change in residual risk ranking expected this year. Residual risk ranking is expected to stay at the medium level for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Operational	Nov-12	Feb-13	May-13	Oct-13	Current Trend
Business Continuity Management					

Risk Statement

This domain identifies risks that may impact CalPERS ability to effectively plan for recovery and business continuity in the event of a disaster, hazard situation, or other business interruption.

- Key Risks**
- *disaster planning
 - *business continuity planning
 - *disaster recovery
 - *disaster recovery - availability
 - *delivery of services
 - *compliance with laws & regulations

Management's Mitigation Strategies

Disaster Planning
Update and maintain emergency response and crisis communication plans

Business Continuity Planning
Develop and maintain business continuity plans that identify critical functions and associated business resumption priorities.

Disaster Recovery
Integrate business continuity and disaster recovery plans for holistic emergency management response.

Disaster Recovery - Availability
Continue to exercise and refine the Disaster Recovery planning and testing program.

Delivery of Services
Identify critical services to CalPERS members and stakeholder and develop emergency response communication plans.

Compliance with Laws & Regulations
Determine if waiver is necessary for compliance with mission critical laws, rules, and regulations while resuming business operations.

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay medium for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Operational	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Information Security					

Risk Statement

This domain identifies risks that may impact information security that protects access to employer and member personal health and financial data, and prevents loss of information assets. Includes compliance with CalPERS information security policies and state requirements.

Key Risks

- *policy
- *confidentiality
- *integrity
- *availability

Management's Mitigation Strategies

Reduce security risks and vulnerabilities through improving protection from denial of services attacks, enhancement of data loss prevention technologies, improving our patch management processes to reduce vulnerabilities to viruses, and performing a remote access assessment (June 2014).

Phase 2 of Security Roadmap Program will address six areas of improvement, which when implemented, will significantly reduce risks and improve information security throughout CalPERS. The six initiatives are outlined below:

- Network Access Control (NAC)
- Patch Management
- Enterprise Identity Management
- Remote Access Assessment
- eDiscovery
- Data Loss Prevention, Phase 2

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay medium for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Financial	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Financial Controls & Systems					

Risk Statement

This domain identifies risks that may impact the effectiveness of CalPERS financial controls to ensure accurate accounting for plan assets and liabilities. This includes policies and processes, implementation and management of controls for decision making, and use of assets, including appropriate authorizations, segregation of duties and delegation of authority.

- Key Risks**
- * treasury management
 - * financial management of MyCalPERS
 - * investment expense reconciliation

- Management's Mitigation Strategies**
- Develop and implement the following 9 key activities:
1. Develop roadmap to align Treasury Management with FINO strategic business objectives.
 2. Implement a new Accounting Book of Record for Private Equity.
 3. Develop cash forecasting process, consistent polices and accounting among trust.
 4. Ongoing development of financial reports in myCalPERS System to identify process problems, quality assurance issues and ensure the transfer of all generated financial activity into PeopleSoft.
 5. Document reconciliation processes along with roles and responsibilities for Absolute Return Strategies and Corporate Governance.
 6. Work collaboratively and cross-divisionally to implement new/changes to programs to ensure accurate recording and reporting of financial activity.
 7. Continue development of financial and cash management reports for PERF to improve financial forecasting and more accurate estimates.
 8. Continue to incorporate future requests for changes and refinements into monthly investment expense report.
 9. Improve investment reconciliation process to identify investment and Fund Accounting Books of Record for public market assets.

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to remain medium for this period and in the near future. Mitigation strategies are monitored with minimum change in residual risk ranking expected this year.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Financial	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Investment Risk Management					

Risk Statement

This domain identifies risks that may impact the management, measurement, monitoring and reporting of investment risk. This includes adequacy of resources, tools and governance structure to measure and manage risk.

Key Risks

* investment risk governance & management

- Management's Mitigation Strategies**
1. Implement new investment risk management system and risk budgeting framework - Barra II implementation completed; new reporting function being rolled out.
 2. Inventory all risk management functions both at the Total Fund and Asset Class level.
 3. Develop an investment risk budgeting framework.
 4. Recruit key senior management positions in Risk Group.
 5. Appointment of Interim Risk Group Senior Investment Officer (SIO) - completed.

Comments

ERMD reviewed the risk domain in accordance with standard practice. Mitigation strategies are monitored with a change in residual risk ranking from orange (elevated) to yellow (moderate) expected when mitigation strategy number 1 is implemented, and a change in the residual risk upward trend to a downward trend when mitigation strategies 2-5 are implemented. For this reporting period, the residual risk ranking is at the elevated level.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Financial	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Investment Controls and Systems					

Risk Statement

This domain identifies risks that may impact CalPERS investment control framework to effectively manage the portfolio, minimize fund expenses, provide for safekeeping of assets, and operate the funds within the context of all relevant legal requirements. This includes investment technology systems that are reliable and provide accurate, relevant data in a secure manner that supports the operations and accounting for investment funds.

- Key Risks**
- * business continuity/disaster recovery
 - * contract management
 - * data management
 - * investment compliance
 - * liquidity & cash management
 - * manager/partner selection & oversight
 - * portfolio management - private markets
 - * incentive compensation
 - * affiliated and DC product management
 - * capital calls and commitments
 - * counterparty negotiation & due diligence
 - * counterparty risk governance & management
 - * external financial reporting support
 - * fund structure design & maintenance
 - * IBOR, fund accounting, custody and record keeping
 - * internal expense reporting & budgeting
 - * investment policy development
 - * investment proposal administration
 - * operational risk governance & management
 - * investment performance, attribution, risk reporting
 - * portfolio construction - public markets
 - * rebalancing (affiliate plans & funds)
 - * trade documentation management
 - * valuation/pricing
 - * vendor management

Management's Mitigation Strategies

1. Completion of the PM2 Project.
2. Implementation of the Private Equity Portfolio Management System and Private Equity Accounting and Data Collection Services.
3. Full implementation of INVO expense tracking and reporting system.
4. Establish investment compliance monitoring program.
5. Develop more robust performance analysis and attribution capabilities. Estimated completion of tasks end by FY 2013/14.
6. Materially complete all initiatives identified in the refreshed Target Operating Model, optimistic completion date FY 2014/15.
7. Completed contract negotiations and implementation planning with selected service providers for private equity IBOR and accounting. Work on the private equity IBOR commencing.
8. Complete Disaster Recovery/Business Continuity Plan testing of Charles River and Aladdin at the Emergency Operations Center.
9. Complete substantial aspects of the policy and process changes for loading real estate appraisal data from Altus into AREIS.
10. Complete substantial aspects of the work needed to establish contractual agreements and policy/procedure changes needed to fully support OTC trading.

Comments

ERMD reviewed the risk domain in accordance with standard practice. Mitigation strategies are monitored with a change in residual risk ranking from orange (elevated) to green (minimal) expected when mitigation strategy number 2 is implemented, and from orange (elevated) to yellow (moderate) when mitigation strategies 1 and 3-11 are implemented. For this reporting period, the residual risk ranking is elevated.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Financial	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Actuarial Policies and Practices					

Risk Statement

This domain identifies risks that may impact actuarial policies relying on assumptions that serve as reasonable forecast of actual economic and demographic conditions and implementation of actuarial methods that are consistent with industry standards.

Key Risks

- *economic assumptions
- *demographic assumptions
- *actuarial methods
- *risk pool structure

Management's Mitigation Strategies

Regularly review actuarial policies and update as appropriate.

Economic Assumptions
Propose flexible de-risking strategy on the standard deviation of asset/allocation returns

Demographic Assumptions
Complete experience Studies ongoing; include Mortality Projections in actuarial assumptions

Actuarial Methods
Monitor the status

Risk Pool Structure
Recommend a two risk pool structure

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay medium for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Compliance/Ethics	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Laws, Rules and Regulations					

Risk Statement

This domain identifies risks that may impact CalPERS and staff resulting from non-compliance with statutory requirements, specifically non-compliance with relevant laws, rules and regulations, including regulatory reporting and the effectiveness of a compliance management framework as outlined in the United States Federal Sentencing Guidelines (FSG).

Key Risks

- * non-compliance with laws, rules, & regulations
- * Compliance awareness

Management's Mitigation Strategies

Build and develop enterprise compliance program consistent with the FSG by mitigating these risks:

1. Court-imposed programs
2. Whistleblower lawsuits
3. Imposition of fines and sentences
4. Reputation harm

Specific mitigation steps will be taken as follows:

- Developing awareness through enterprise-wide communication of the Integrated Assurance Model using the three lines of defense system
- Developing compliance requirements and methods to assure that applicable laws, rules and regulations are followed and complied with
- Training CalPERS staff on laws, rules, and regulations that impact their operations
- Conducting annual risk-based compliance assessments for the identification of key risks that may impede adherence to laws rules, and regulations
- Reviewing programmatic areas for adherence to laws, rules and regulations
- Monitoring and providing regulatory compliance oversight on Personal Trading Platform, Form 700, Charles River/Black Rock Aladdin Systems, and Ethics Helpline.
- Investigating hotline incidents reported by public and employees that may impact compliance with laws, rules, and regulations

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay moderate for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Compliance/Ethics	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Policy and Procedures					

Risk Statement

This domain identifies risks that may impact compliance with all CalPERS policies and the effectiveness of a policy management framework.

- Key Risks**
- * policy management framework
 - * policy repository
 - * training and awareness
 - * policy oversight and monitoring function
 - * policy compliance
 - * policy universe

- Management's Mitigation Strategies**
1. Establish enterprise policy management function.
 2. Implement Archer Policy Module.
 3. Create and implement communication and training plans.
 4. Establish policy oversight and compliance monitoring function
 5. Implement multi-year project to update all existing policies and create new policies as needed

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay medium for this period and in the near future.

Residual Risk Status Overview

Risk Category/Risk Domain	FY2013-14 Residual Risk				
Compliance/Ethics	Nov-12	Jan-13	May-13	Oct-13	Current Trend
Ethical Conduct and Standards	-	-	-		

Risk Statement

This domain identifies risks that may impact CalPERS and staff resulting from non-compliance with requirements set forth in the United States Federal Sentencing Guidelines (FSG). Specifically, non-compliance with relevant laws, rules, regulations, regulatory reporting and policies/procedures of conduct.

Key Risks

- *non-compliance with policies & procedures
- *incompatible activities
- *awareness and education

Management's Mitigation Strategies

Promote ethical standards, increasing awareness and understanding, supporting an ethical culture by mitigating these key risks:

1. Court-imposed programs
2. Whistleblower lawsuits
3. Imposition of fines and sentences
4. Reputation harm

Specific mitigation steps will be taken as follows:

- Developing awareness through enterprise-wide communication of the Integrated Assurance Model using the three lines of defense system
- Developing compliance requirements and methods to assure that applicable laws, rules and regulations are followed and complied with
- Training CalPERS staff on laws, rules, and regulations that impact their operations
- Conducting annual risk-based compliance assessments for the identification of key risks that may impede adherence to laws rules, and regulations
- Reviewing programmatic areas for adherence to laws, rules and regulations
- Monitoring and providing regulatory compliance oversight on Personal Trading Platform, Form 700, Charles River/Black Rock Aladdin Systems, and Ethics Helpline
- Investigating hotline incidents reported by the public and employees that may impact compliance with laws, rules, and regulations

Comments

ERMD reviewed the risk domain in accordance with standard practice. The residual risk ranking is expected to stay moderate for this period and in the near future.