



ENTERPRISE RISK MANAGEMENT ACCOMPLISHMENTS REPORT

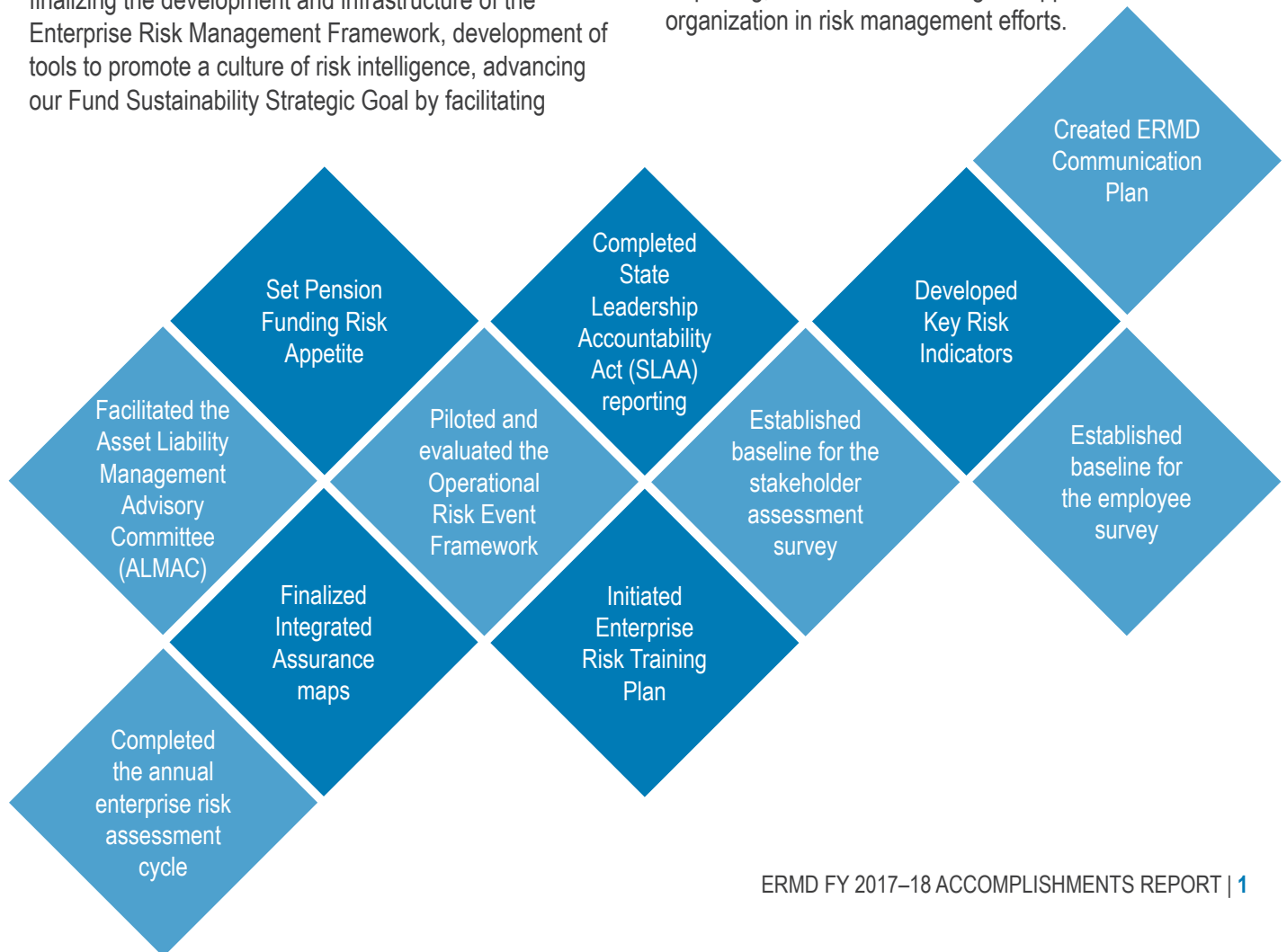
{ A YEAR AT A GLANCE } 2017-18

The Enterprise Risk Management Division (ERMD) is pleased to report that our team completed the initiatives outlined in the fiscal year 2017-18 Enterprise Risk Management Plan approved by the Risk & Audit Committee (Committee) in June 2017. These efforts were accomplished in collaboration with our internal business partners throughout the enterprise in pursuit of our strategic goal of strengthening the long-term sustainability of the fund and cultivating a risk-intelligent organization.

In the subsequent closeout report we provide a review of CalPERS' successes in risk management such as, finalizing the development and infrastructure of the Enterprise Risk Management Framework, development of tools to promote a culture of risk intelligence, advancing our Fund Sustainability Strategic Goal by facilitating

cross-program Asset Liability Management efforts, and reducing risk across the enterprise through advancements in risk awareness training and communications.

The ERMD team views ourselves as champions of CalPERS risk management by promoting a risk-intelligent culture and building trust among our stakeholders. Through the final enhancement of the enterprise risk management framework we see our role in reporting evolving as well. We plan to bring more data-driven exception-based reporting in the year to come to complement and bolster our Enterprise Performance Reporting, as well as continuing to support the organization in risk management efforts.





FUND SUSTAINABILITY



OBJECTIVE (2017–22 STRATEGIC PLAN)

Fund the System through an integrated view of pension assets and liabilities by leading facilitation of the asset liability management (ALM) process.

INITIATIVES 1

Facilitate the Asset Liability Management Advisory Committee (ALMAC) to assist the Board in making decisions throughout the ALM cycle.

Key Activities Accomplished

The Enterprise Risk Management Division (ERMD) facilitated the ALM process to aid the Board in making decisions on the discount rate, asset allocation, and amortization schedules. The Chief Risk Officer chaired the Asset Liability Management Advisory Committee (ALMAC) meetings that include the Chief Executive Officer and senior leadership from the Financial, Investment, Actuarial and Communications and Stakeholder Services, and Legal offices that act as

an oversight body for ALM. Inclusion of these diverse enterprise functions in the ALM process fostered broader discussion considering all inherent, and often opposing, risk considerations and promoted timely outreach and engagement with stakeholders.

INITIATIVE 2

Conduct discussions with the Board to set Pension Funding Risk Appetite.

Key Activities Accomplished

The Board reviewed various tolerance scenarios during the ALM workshop in November 2017, and then settled on a risk appetite for pension funding during the December 2017 Board meeting. The ALM process culminated in Board adoption of a reduction in the discount rate to 7%, approval of the strategic asset allocation, and a shortened amortization period to build a more solid path forward for the long-term future of the fund.



RISK MANAGEMENT

2 Pilot Groups



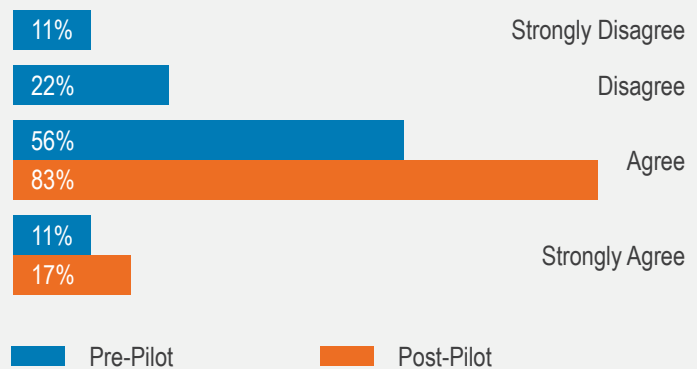
Customer Services and Support



Operations and Technology



I understand what Internal Controls are



Sources: Pre & post Operational Risk Event survey

OBJECTIVE

Mature enterprise internal control systems to provide Integrated Assurance Teams and Board with enhanced tools and heightened assurance.

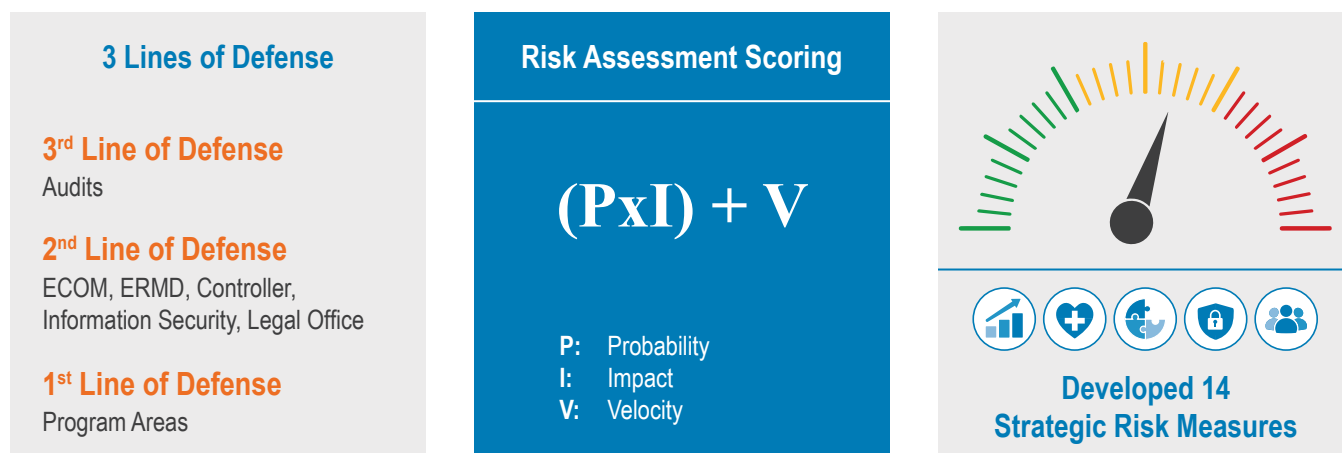
INITIATIVE 1

Pilot and evaluate the Operational Risk Event Framework.

Key Activities Accomplished

Developed, piloted, and evaluated the Operational Risk Event reporting framework. The purpose of the Operational Risk Event reporting framework is to improve the monitoring and analysis of internal control effectiveness, and cultivate a risk-intelligent

organization. The pilot was conducted in partnership with two program areas, Customer Service and Support and Operations Support Services Division, during a three-month period, September 2017 through December 2017. Major accomplishments include the creation of training materials, report submission template, SharePoint database and reports. Pre- and post-survey data confirms that the pilot resulted in increased team member knowledge of operational risk events, event reporting, and team member roles and expectations. ERMD will continue to partner with the program areas to implement Operational Risk Event reporting across the enterprise over the next twenty-four months.



INITIATIVE 2

Finalize Integrated Assurance maps aligned to the Enterprise Risks.

Key Activities Accomplished

Updated and enhanced the Integrated Assurance maps. The maps show an aggregate view of assurance across the enterprise to identify gaps and overlaps in controls for each Enterprise Risk across the three lines of defense. The maps will be used to better understand the current state of internal control performance and allow internal leadership to make data-based decisions on future mitigation and internal audit efforts.

OBJECTIVE

Collaborate with the enterprise in the identification, assessment, and monitoring of risk within the Board's appetite.

INITIATIVE 1

Complete the annual enterprise risk assessment cycle including enterprise risks, appetites, and tradeoffs to guide risk-intelligent decision-making.

Key Activities Accomplished

Completed the 2017-18 annual enterprise risk assessment cycle by working cross-functionally with senior leaders to update eight enterprise risk profiles.

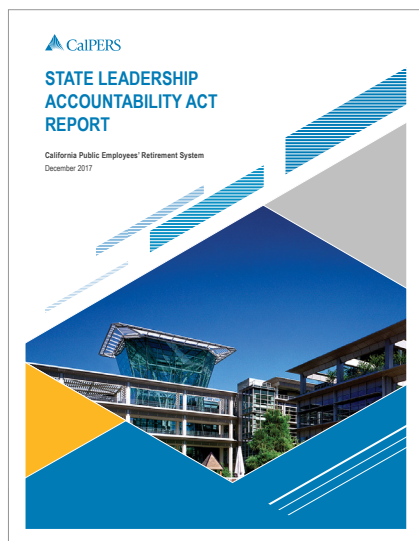
Senior leaders and executives also participated in a risk scoring exercise to evaluate and prioritize the enterprise risks. The Enterprise Risk Dashboard for fiscal year 2017–18 was updated to reflect the current rating of the top risks, risk categories, and risk statements. The annual enterprise risk assessment allows for all CalPERS Senior Leaders to communicate and collaborate on assessing the current state of risk and devise cross-functional opportunities to help mitigate risk at all levels of the organization. Additionally, the risk reports allow for the CalPERS Board and executive team to make data-driven decisions on new projects and resource allocations.

INITIATIVE 2

Develop Key Risk Indicators in conjunction with Enterprise Key Performance Indicators.

Key Activities Accomplished

Completed development of Strategic Risk Measures (SRMs) to serve as leading indicators by monitoring when a risk poses a threat to achieving the organization's strategic goals. Risk drivers were identified at the strategic goal level to assist in the development of the risk measures by cross-functional teams. ERMD partnered with the Enterprise Strategy and Performance Division (ESPD) to ensure the



SRMs were developed in conjunction with existing strategic performance measures. The SRMs will serve as a communication and reporting tool in support of enterprise risk management by indicating potential risks to the achievement of strategic goals and potential deviations from the Board's risk appetite.

OBJECTIVE

Incorporate standardized risk analysis to promote data-driven decision-making.

INITIATIVE 1

Complete State Leadership Accountability Act (SLAA) reporting.

Key Activities Accomplished

Developed and submitted the State Leadership Accountability Act (SLAA) report to the Department of Finance in December 2017 that was approved in March 2018. The intent of the SLAA reporting process is to provide the Department of Finance with assurance that all levels of management are involved in evaluating, strengthening, and monitoring internal controls. SLAA requires that each state agency: maintain effective systems of internal control; evaluate and monitor the effectiveness of these controls on an ongoing basis; and, biennially report on the adequacy of the agency's systems of internal control. In addition, an

The SPARK

Educational video for all new employees



Inside CalPERS articles

Implementation Plan (previously known as a Corrective Action Plan) is required biannually by June 30th and December 31st, for every control with a status of partially or not implemented. The implementation plan report was completed and filed on June 30, 2018.

OBJECTIVE (2017–22 STRATEGIC PLAN)

Enhance compliance and risk functions throughout the enterprise.

INITIATIVE 1

Initiate Enterprise Risk Training Plan, including modules for CalPERS' new employees and Internal Controls for the Compliance and Risk Liaisons.

Key Activities Accomplished

Developed an enterprise risk training plan to inform CalPERS' team members on the importance of risk management and personal accountability. The plan includes different modules designed for team members at all levels. The first module ERMD released is an educational video for all new employees on the basics of Enterprise Risk Management emphasizing that each team member is personally responsible for risk management. In the next fiscal year, ERMD will deploy a roadshow to further educate team members on risk management.



Stakeholder Survey Result

CalPERS has effective functions and programs to address compliance and risk.

↓ .12

FY 2018–19 Activities

- EdForum
- PERSpective Articles



Team Members Survey Result

I am aware of CalPERS' risk program. I incorporate risk functions into my daily work.

78% of respondents answered "Yes"

FY 2018–19 Activities

- Spark Posts
- Training

Risk Awareness Training



<https://www.youtube.com/watch?v=Ugas8P3oo8w>

INITIATIVE 2

Establish baseline for the stakeholder assessment survey.

Key Activities Accomplished

Conducted a survey of CalPERS' stakeholders in collaboration with CalPERS' Communications & Stakeholder Relations team to assess confidence in risk and compliance functions and programs. The survey results were analyzed in comparison to the established baseline. The analysis showed a slight drop in stakeholder confidence, therefore ERMD is striving to improve the coming year's survey results through the publication of CalPERS Perspective articles and conducting an educational session at EdForum.

INITIATIVE 3

Establish baseline for the employee survey.

Key Activities Accomplished

Conducted a survey of CalPERS' team members in collaboration with CalPERS' Enterprise Compliance team to establish an enterprise baseline for knowledge of risk and compliance functions and programs. The baseline was established with thirty-nine percent of the organization responding to the survey. The survey results showed several opportunities for growth in cultivating a risk-intelligent organization, including the

planned enterprise-wide rollout of the Operational Event Reporting framework and increased social media presence.

INITIATIVE 4

Create ERMD Communication Plan to inform CalPERS' team members on Enterprise Risk Management services, tools, and training.

Key Activities Accomplished

Continued focused communication efforts to inform CalPERS' team members on ERMD services, tools, and training through the communication plan. This plan lays out ERMD's various approaches through a variety of venues: team member training opportunities, social media presence through the intranet and Spark, team member engagement through articles, and external stakeholder outreach through CalPERS' Education Forum. This will further inform CalPERS' team members about risk awareness and strengthen the internal control processes to reduce risk. In the fiscal year 2018–19, ERMD will implement our communication strategies, through targeted efforts in engaging with stakeholders to provide information on how CalPERS is actively managing risk throughout the Enterprise.