



Agenda Item 8a

October 19, 2015

ITEM NAME: Enterprise Risk Reports – Investment Committee

PROGRAM: Administration

ITEM TYPE: Information

EXECUTIVE SUMMARY

Enterprise-wide risk assessments are periodically performed to identify, analyze, monitor, and mitigate risks on an on-going basis. Results of these assessments are presented to the Board of Administration through an Enterprise Risk Management Dashboard (Dashboard) and Top Risk Reports. This month, each Board Committee that oversees a Dashboard risk is receiving an update from staff. The purpose of the agenda item is to obtain the Committee's input and perspective on staff's assessment of each risk and associated mitigation activities. Additionally, this information will enrich the collaborative enterprise assessment and management of risks and inform the annual recalibration of the Dashboard, scheduled to be presented to the Risk and Audit Committee in November 2015.

STRATEGIC PLAN

Enterprise risk management supports CalPERS 2012-2017 Strategic Plan Goal B: Cultivate a high-performing, risk-intelligent and innovative organization. To achieve this goal, management across the enterprise continues to contribute to a robust risk management framework that includes consideration of risk in decision-making, planning, and prioritization of business activities to achieve strategic and operational objectives.

BACKGROUND

Enterprise risk management is a vital function in facilitating risk identification and risk monitoring activities that inform and support decision-making and resource allocation priorities at both the strategic and operational levels across the enterprise.

Integrated Assurance is a structured approach to aligning and coordinating assurance processes within in an enterprise to optimize risk and governance oversight. In the Integrated Assurance model, management is referred to as the "first line of defense" which ensures risks are assessed and managed properly

within day-to-day operations. The Risk and Audit Committee directly oversees integrated assurance functions, including Enterprise Risk, Enterprise Compliance, and Audit services, referred to as the second and third lines of defense in the Integrated Assurance model. In addition, the Risk and Audit Committee, as set forth in its Delegation Resolution, provides oversight and approval of the enterprise risk management framework, including the assessment and management of the entire landscape of risks as an interconnected and interrelated risk portfolio.

The role of each Board committee is to ensure their respective functions are carried out in accordance with their Delegation Resolutions and include oversight and management of risks related to the delegated duties. A Benefit/Risk section is in each agenda item presented to Board committees to ensure risk consideration in committee actions and information. Also, to further enhance the assessment and management of enterprise risk, the respective Committees' risks are being presented in a series of agenda items for discussion and input.

Please refer to Attachment 1 for a graphical depiction of committee roles, responsibilities, and relationships as they relate to risk management.

ANALYSIS

Risks Overseen by the Investment Committee

The Investment Committee's (Committee) responsibilities include the review and approval of portfolio performance, asset allocation, investment transactions, investment manager performance, investment policies, and the oversight of investment risks. More specifically, Section (B) (13) of the Delegation Resolution for the Investment Committee, Delegation No: IC-14-01 states the Committee "Oversees the investment office risk assessment and control environment". Section (B) (18) notes the Committee is to "Oversee the management of risks related to the duties delegated to the Committee."

In support of these stated authorities, the Committee is the oversight body for three of the 30 risk domains listed on the Dashboard.

- Attachment 2 displays the Risk Category, domain, associated sub-risks, status and trends for the risk domains under the authority of this Committee.
- Attachment 3 provides a graphical depiction of recent trend data for risks overseen by the Committee.
- Attachment 4 depicts a heat map of the Dashboard risks, including the top ten.
- Attachment 5 displays the INVO 2015-17 Roadmap strategic objectives; three specifically address the risk domains overseen by the Committee.

The Investment Office (INVO) senior leadership created the INVO 2015-17 Roadmap (Roadmap), a 2-Year business plan currently expressed through five strategic objectives. Each strategic objective has multiple underlying projects and initiatives designed to improve internal asset and investment risk management capabilities and reduce operational risk.

The five strategic objectives in the Roadmap are supported by 36 projects and initiatives developed by INVO senior leadership after careful consideration of the results from the 2015 Target Operating Model Risk Assessment. The risk assessment process included a survey of INVO staff, industry benchmarking of key functions by an outside consultant, and the identification of key risk drivers based on Operating events. The May 2015 Dashboard rank and trend information, as displayed in the Attachments, integrated these results. Proposed rankings for the November Dashboard, as outlined below, are informed by progress on Roadmap initiatives, newly identified Operating events and associated risks and mitigation efforts, and approves any resultant change in risk levels related to the Investment Operating Model.

Risks Overview and Recommended Rank

To provide the Committee with the assurance that these risks are being considered and addressed through daily activities, brief overviews of the risk domains and associated mitigation strategies are listed below.

Asset Allocation is one of the top ten risks and overall rank has remained at the Moderate-level since October 2014. The consistent ranking reflects the fact that identified mitigation strategies are a long-term effort while acknowledging the Board of Administration is responsible for the selection of the strategic asset allocation and actuarial assumptions. These selections are based on information and analysis provided through the Asset Liability Management (ALM) Workshops, delivered by the Financial, Investment, and Actuarial offices.

In preparation for the next Strategic Asset Allocation selection during the 2017 ALM Workshop, Committee and staff are engaged in a series of workshops designed to provide an examination of risks and volatility attached to the market opportunity set available to CalPERS. At the July 2015 Board offsite, dialogue focused on identifying Portfolio Priorities. These priorities are focused on translating Investment and Pension Beliefs into benchmark selection and portfolio construction. In conjunction with the Portfolio Priorities work stream, INVO staff continues to engage the Committee in the evaluation of the roles, uses, and implications of CalPERS' policy benchmarks. The selection of benchmarks is an essential element of managing both the Asset Allocation and Investment Risk Management risk domains.

These engagements are being tracked and managed through the INVO Roadmap process and include upcoming Agenda items, presentations, and further dialogue with the Committee. Additional Roadmap initiatives and corresponding objectives aimed at mitigating this risk domain include:

- Role of Private Markets – Refine the expected and desired risk, return and yield characteristics and roles of all private asset classes within the Total Fund
- Investment Strategy Group (ISG) Restructure – Improve the understanding and ownership of Trust-level investment risk and performance, as well as the risk and performance impact of rebalancing asset class weights.

Challenges associated this risk domain relate to achieving the target rate of return in today's investment environment. These challenges include an increased focus on liquidity and income due to the cash flow requirements of CalPERS, reduced return expectations across many asset classes driven by extraordinary monetary policies across many economies, and increasing complexity of interrelated global financial markets. For this reason, the risk domain is proposed to remain at Moderate with projected trend of Upward.

Investment Systems & Controls is also one of the top ten risks and overall rank has remained at the Moderate-level since October 2014, when it was lowered from Elevated to Moderate. Over the last year, significant progress has been made in strengthening the investment infrastructure and systems through the use of the Public Markets Portfolio Management system, Artemis, and Private Equity Accounting and Reporting System. Current efforts aimed at enhancing the investment platform and internal controls environment include the following Roadmap initiatives and corresponding objectives:

- Data Management, Core Capabilities – Establish the core capabilities and a governance/architecture model needed to better manage investment data.
- Rebalancing Automation – Begin the expansion of Artemis; a system currently used for processing cash flows, rebalancing, and communicating trades from the Affiliate Funds to the PERF.
- Execution Services Strategy – Explore, evaluate and propose improvements to governance, organization, oversight and protocols in order to improve efficiencies and controls in execution processes across securities, derivatives, lending and currency markets.
- Disaster Recovery / Business Continuity – Establish and maintain a desired level of business continuity capabilities to assure key investment activities are sustained (recovered) during disasters.

Increased complexity and attendant risk associated with a complex business model that includes 200+ managers and more than 700 individual portfolios

present challenges to mitigating this risk in the near-term. The high number of relationships and overall account structures require significant manual processes, and create inefficiencies for unitized pools. For these reasons, the risk domain is proposed to remain at Moderate with projected trend of Constant.

Investment Risk Management has remained at the Moderate-level since October 2014. Although the likelihood was assessed as lower probability than Asset Allocation and Investment Systems & Controls, INVO senior leadership have directed multiple Roadmap initiatives at this risk in an effort to better define, measure, manage, and report the variety of risks associated with CalPERS portfolios. The assigned Roadmap initiatives and corresponding objectives include:

- Performance Measurement and Attribution – Provide timely, standard analytic reports and analyses that accurately measure performance, risk and exposures to assist in managing portfolios, monitoring risk and performance drivers as well as improve reporting to the Board.
- Liquidity Operations – Improve and operationalize the reporting and management of fund Liquidity

Additionally, INVO staff is exploring the use of Risk factors to construct the asset mix of the Portfolio in a way that provides a greater understanding and ability to measure risks specifically relevant for CalPERS. INVO staff and the Actuarial Office are partnering to model and analyze risk factors embedded in liabilities in anticipation of use at the next ALM workshop.

Today's market and associated volatility, and the total risk the organization has chosen to be exposed to through asset allocation and policy benchmarks present challenges to mitigating this risk in the near-term. For this reason, the risk domain is proposed to remain at Moderate with projected trend of Constant.

Conclusion

Through the prior stated actions, INVO senior leadership strives to provide the Committee with confidence that risk is being managed through daily activities and is a driver of our strategic initiatives. Staff seeks to provide the Committee with sufficient visibility into actions planned or taken to address the risks so it may appropriately administer its delegated authorities. As the investment environment and associated risks evolve, staff will continue to seek the Committee's input on identified risks, ranking, and corresponding mitigation strategies to ensure resources and efforts are prioritized accordingly.

BUDGET AND FISCAL IMPACTS

Funding for risk management activities is provided through the approved enterprise operating budget.

BENEFITS / RISKS

Each committee's focus on its respective risks will assist the Board to more effectively oversee enterprise risk and ensure it is being appropriately managed. The committee overseeing individual risks will have the opportunity to bring different considerations and input to the assessment of risks to further ensure management has appropriate and robust risk response strategies to achieve business objectives and reduce unwanted risk.

Failure to monitor risks, trends, and mitigations may reduce the likelihood of attaining the benefits of effective enterprise risk management. Without regular reassessment and updates, risk information may fail to guide effective deployment of resources and significant risks may not be managed appropriately.

ATTACHMENTS

- Attachment 1 – Risk Management - Committee Roles and Responsibilities
- Attachment 2 – Dashboard for the Investment Committee
- Attachment 3 – Risk Management Heat Map Trends – Investment Committee
- Attachment 4 – Risk Management Enterprise Heat Map
- Attachment 5 – INVO Roadmap Strategic Objectives

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