

# Investment Office Roadmap and Target Operating Model Update

Theodore Eliopoulos, Chief Investment Officer  
Wylie Tollette, Chief Operating Investment Officer

Investment Committee

May 15, 2017



# INVO 2020 Vision

## 2020 Focus:

- ✓ Reduce cost, complexity, and risk
- ✓ Fewer, but more strategic partnerships with external managers.



## Mission

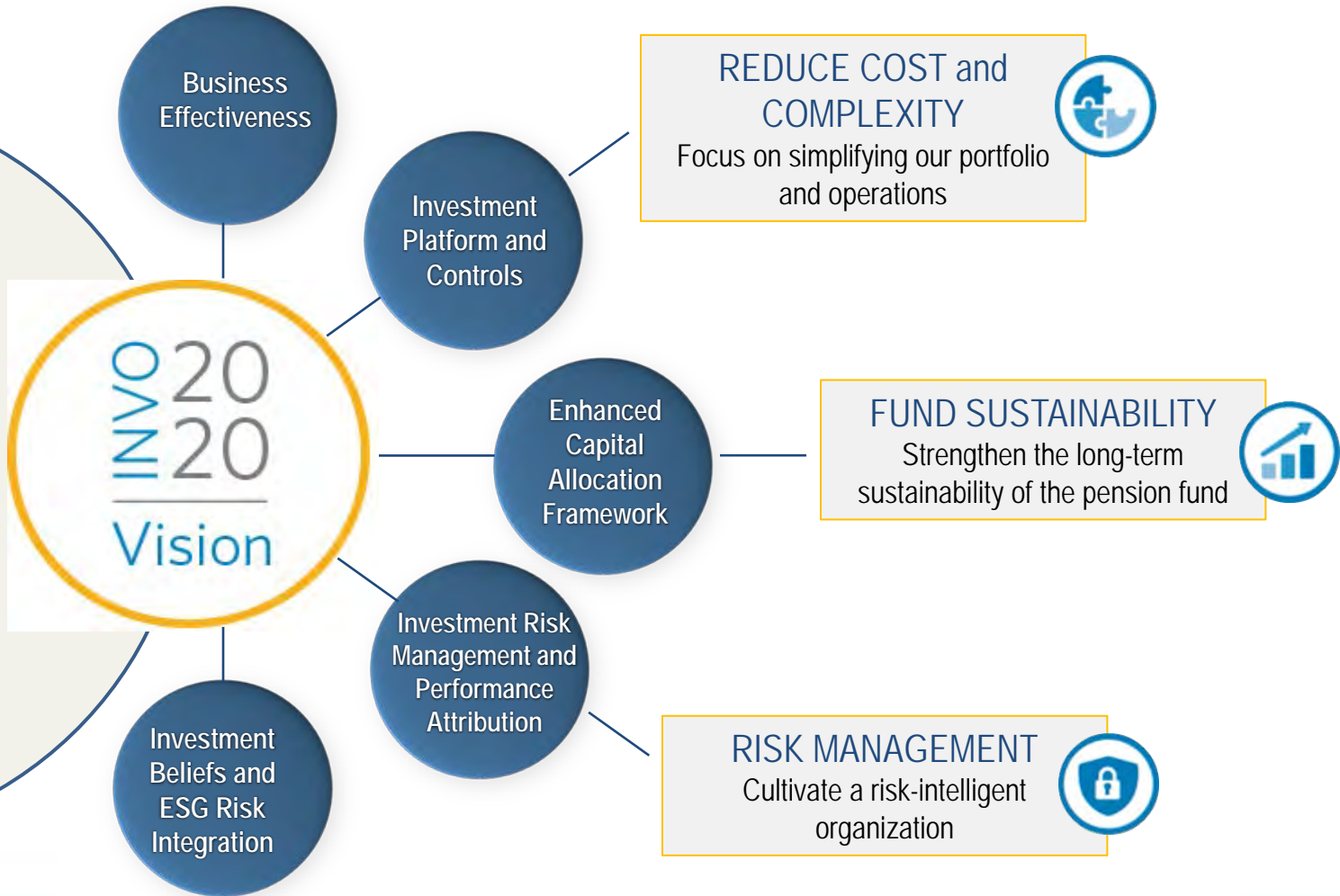
Manage the CalPERS investment portfolio in a **cost-effective, transparent and risk-aware** manner in order to generate returns to pay benefits.

## Vision

- The Investment Beliefs and CalPERS Core Values are the guiding principles underlying our investment decisions.
- We operate with a focus on **repeatable, predictable, and scalable** portfolios and practices.
- We seek **alignment of interests** with our primary stakeholders, our business partners, and ourselves.
- We use clearly articulated **performance, risk, and cost metrics** to evaluate our value-add to the funds.
- Our investment and business activities are supported by a **solid platform of effective risk management and controls**.

# INVO 2020 Vision | Enterprise Alignment

2017-2022  
CalPERS  
Strategic  
Plan





# INVO 2020 Vision | Steps

## Refined Strategic Objectives

**2015-16**

*Better alignment with goals of the broader organization*

*New Mission and Vision statements*

*More active Liquidity management*

## Enhanced Governance and Organizational Structure

**2016-17**

*Formalize Trust Level Investment Decision Making*

*Disciplined Risk and Attribution Review*

*Review Benchmarks, key unintended risks, asset class roles*

## Enhanced Trust-level Decision Making

**2017-18**

*Refine Trust-level Capital Allocation*

*Better Exploit Structural Alpha*

*Asset Allocation aligned with liabilities (Risk Factor work)*

*Legacy Portfolio Mgmt.*

## Scalable, Repeatable, and Reliable Processes

**2018-19**

*More flexible portfolio structure (unitized)*

*Begin to implement new private asset business models, if appropriate*

*Legacy Portfolio Mgmt.*

## Factor-based Portfolio and Investment Process

**2019-20**

*Reduced risk and improved sustainability*

*Active Leverage Management*

*Fewer, but more strategic, partners*



# INVO 2020 Vision | Enhanced Governance

*Four subcommittees support the Investment Strategy Group role as the primary deliberative body for investment strategies and decisions*



## Trust-Level Risk and Attribution

**Co-Chairs: Kevin Winter, Michael Krimm**

Ensures investment risks are intended, understood, and compensated



## Portfolio Allocation

**Chair: Eric Baggesen**

Provides an organized approach to making asset class rebalance and dynamic position decisions



## Governance and Sustainability

**Co-Chairs: Dan Bienvenue, Anne Simpson**

Ensures ESG risk considerations are integrated into the investment-decision making process



## Trust-Level Investment Review

**Chair: Paul Mouchakka**

Provides a trust-level decision process and framework for the review of non-core programs, business models, assets and investments



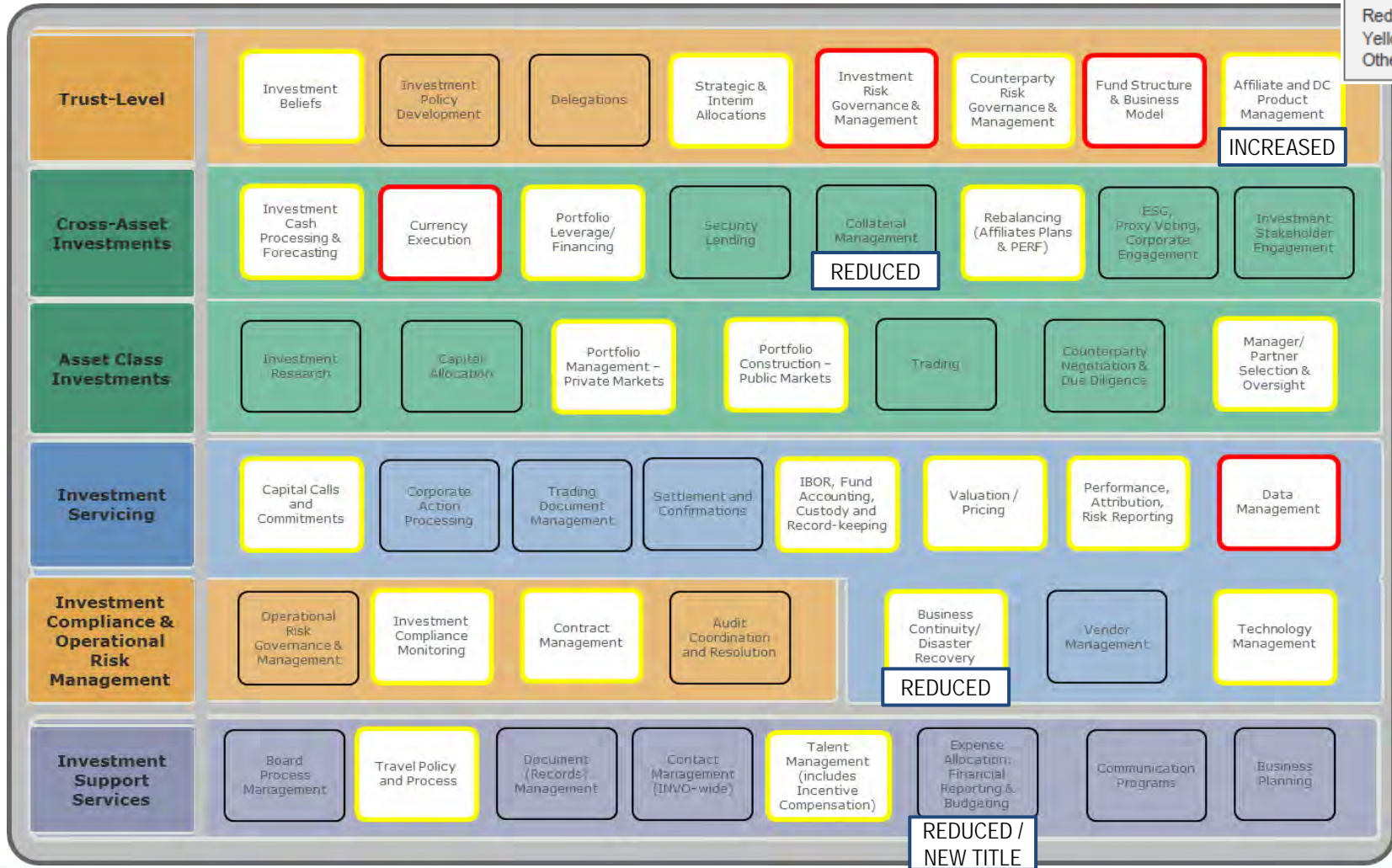
# INVO 2020 Vision | 2016-17 Roadmap Update

Strategic Objective	2016-17 Initiative Goals	2016-17 Highlights
<p><b>Business Effectiveness</b></p>	<ul style="list-style-type: none"> <li>• Continue progress in reducing complexity</li> <li>• Claim compliance with Global Investment Performance Standards (GIPS)</li> <li>• Enhance the efficiency of the investment program</li> </ul>	<ul style="list-style-type: none"> <li>✓ Developed an implementation plan to incorporate GIPS requirements, targeting a July 1, 2017 effective date</li> <li>✓ Developed and communicated the Trust Level Portfolio Management Business Model concept to frame INVO's role in strategic asset-liability management and dynamic asset allocation</li> </ul>
<p><b>Enhanced Capital Allocation Framework</b></p>	<ul style="list-style-type: none"> <li>• Implement CalPERS short-term investment fund group (STIF)</li> <li>• Improve understanding and ownership of trust-level investment risk and performance decisions</li> <li>• Evaluate private market currency strategy</li> </ul>	<ul style="list-style-type: none"> <li>✓ Developed STIF investment guidelines and procedures, and re-allocated necessary positions</li> <li>✓ Developed operating model and governance for the Strategic AA Overlay Portfolio</li> <li>✓ Presented a proposed framework for managing private asset currency exposures to the Portfolio Allocation Subcommittee</li> <li>✓ Completed and presented a role and benchmark study to the Investment Committee</li> </ul>

# INVO 2020 Vision | 2016-17 Roadmap Update

Strategic Objective	2016-17 Initiative Goals	2016-17 Highlights
<b>Investment Beliefs &amp; ESG Risk Integration</b>	<ul style="list-style-type: none"> <li>• Incorporate ESG risk considerations into the investment decision-making process</li> <li>• Improve diversity of corporate boards, External Managers and Investment Office investment decision makers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Established three Governance &amp; Sustainability Subcommittee “working groups” focused on proxy voting, financial markets, and research</li> <li>✓ Hosting a May Diversity Forum designed to better capitalize on the abilities of the diverse modern workforce</li> </ul>
<b>Investment Platform &amp; Controls</b>	<ul style="list-style-type: none"> <li>• Expand Operational Due Diligence capabilities</li> <li>• Enhance data management</li> </ul>	<ul style="list-style-type: none"> <li>✓ Recommended enhancements to trade-flow and pre-trade compliance controls</li> <li>✓ Built, tested, and deployed Global Equity pilot software prototype (Artemis)</li> </ul>
<b>Investment Risk Management &amp; Performance Attribution</b>	<ul style="list-style-type: none"> <li>• Strengthen the risk and attribution oversight and review process in the Risk and Attribution Subcommittee</li> <li>• Enhance risk governance processes</li> </ul>	<ul style="list-style-type: none"> <li>✓ Presented enhanced performance attribution frameworks for Total Plan, Public Assets, Real Assets, and Affiliates programs</li> <li>✓ Transitioned Total Fund risk reporting to the Investment Risk and Performance Team</li> </ul>

# 2016-17 Roadmap | Target Operating Model (TOM)



**Risk Levels**  
 Red - High (8%)  
 Yellow - Medium (43%)  
 Others - Low (49%)





# TOM | External Evaluation

## TOM Refresh

- Evaluate current TOM structure and functions
- Consultant evaluation of the TOM
  - Peer benchmarking
  - Industry and environmental scan

## Reduce Complexity

- Simplify structure and framework
- Refine and consolidate functions

## Alignment

- Incorporate 2020 Vision and Enterprise goals
- Overlay risk assessment and risk views



# Next Steps



## 2016-17 Roadmap initiatives

- Continue to manage, report, and closeout



## 2017-18 Roadmap initiatives

- Finalize and initiate



## Continue progress on 2020 Vision

- Addressing moderate to high-risk TOM functions
- Enhance Trust-level decision making

# Appendix



# Investment Strategy Group | Committee Members

Investment Strategy Group (ISG)		
Charter Members	Program Area	Alternates
Eric Baggesen, Chair	TLPM	Ronald Lagnado
Dan Bienvenue	GE	John Cole
Curtis Ishii	GFI	Lou Zahorak
Ted Eliopoulos	INVO EXEC	N/A
Kevin Winter	OCS	TBD
Sarah Corr	PE	Mahboob Hossain
Paul Mouchakkaa	RA	Jane Delfendahl
Charter Members: Non-voting	Program Area	Alternates
Wylie Tollette	INVO EXEC	Michael Krimm
Anne Simpson	SI	N/A
Invited Participants	Program Area	
Marcie Frost	EXEO	
Marlene Timberlake D'Adamo	FINO	
Kristin Montgomery	FRAS	
Kit Crocker, Moderator	ICOR	
Matthew Jacobs	LEGO	



# Investment Strategy Group | Subcommittee Members

Governance & Sustainability Subcommittee (GSS)		
Charter Members	Program Area	Alternates
Dan Bienvenue, Co-Chair	GE	N/A
Anne Simpson, Co - Chair	SI	N/A
Don Pontes	ESS	James Andrus
Simiso Nzima	GE	Stuart Hall
Lou Zahorak	GFI	Paul Kramer
Kit Crocker	ICOR	Anna Morrison
Gretchen Zeagler	LAD	N/A
Salony Mehrok	LEGO	Warren Astleford
Megan White	PAOF	N/A
Christine Gogan	PE	Liliya Kamalova
Rina Lessing	RA	Beth Richtman
Divya Mankikar	SI	Tiffany Pokk
Alison Li	TLPM	Dianne Sandoval



# Investment Strategy Group | Subcommittee Members

## (Trust Level) Investment Review Subcommittee (IRS)

<b>(Trust Level) Investment Review Subcommittee (IRS)</b>		
<b>Charter Members</b>	<b>Program Area</b>	<b>Alternates</b>
Paul Mouchakkaa, Chair	RA	N/A
Steve Carden	GE	Ron Chavez
Arnie Phillips	GFI	Justin Scripps
Kit Crocker	ICOR	N/A
Matt Flynn	ISD	TJ Kopkash
Mahboob Hossain	PE	Harshal Shah
Ed Yrure	RA	Juan Gaviria
Dianne Sandoval	TLPM	Bill McGrew
<b>Invited Participants</b>	<b>Program Area</b>	<b>Alternates</b>
Kit Crocker	ICOR	N/A



# Investment Strategy Group | Subcommittee Members

Portfolio Allocation Subcommittee (PAS)	
Charter Members	Program Area
Eric Baggesen, Chair	TLPM
John Cole	GE
Mike Rosborough	GFI
John Rothfield	GFI
Jean Hsu	OCS
Paul Mouchakkaa	RA
Ron Lagnado	TLPM
Invited Participants	Program Area
Kit Crocker	ICOR
Shannon Hoogenbosch	ICS
Todd Eichman	TLPM



# Investment Strategy Group | Subcommittee Members

## (Trust Level) Risk & Attribution Subcommittee (RAS)

Charter Members	Program Area	Alternates
Michael Krimm, Co-Chair	IRP	N/A
Kevin Winter, Co-Chair	OCS	N/A
Steve Carden	GE	Derek Hayamizu
Todd Smith	GFI	Saeed Daroogheha
Sarah Corr	PE	Dennis Knueven
Mike Inglett	RA	Terra Elijah
Todd Eichman	TLPM	Arvind Rao