

Incentive Design Proposals

Second Reading

August 16, 2016

Eric Gonzaga, Principal

Bill Gentry, Managing Director

Executive Compensation Consulting

Contents

Material originally presented to the Performance, Compensation and Talent Management Committee ("PCTMC") as the "first reading" in June 2016

- Purpose
- Incentive Design Proposals
- Incentive Metrics & Weights
 - Chief Executive Officer ("CEO")
 - Chief Investment Officer ("CIO")
- Policy Amendments
- Recap of Proposals
- Select Reference Material

Incentive design proposals apply to the Chief Executive Officer and Chief Investment Officer for the FY16-17 performance period, which began on July 1, 2016.

CalPERS's Staff intends to develop similar FY16-17 incentive arrangements for other incentive eligible classifications. These arrangements will reflect the same approach, concepts and methodologies proposed for the CEO and CIO (with varying degrees of customization to ensure role appropriateness).

Please refer to Slide 18 for insights into the FY16-17 incentive structure for other incentive eligible classifications.

Grant Thornton serves as the Board of Administration's consultant on compensation matters. The concepts and strategies reflected in this document were developed by Grant Thornton through our discussions and meetings with the Board and select representatives of management (staff) and our independent assessment of CalPERS's situation. Staff's role in this process was limited to responding to our data requests or providing feedback.

Purpose

Enhance alignment of FY16-17 incentive structure for the CEO and CIO with business needs and risk considerations

- **Existing incentive structure evolved over time, as driven by changing needs**
- **Unintended consequences:**
 - Design and administrative complexity
 - Lack of transparency
 - Misalignment with "big picture" business needs and objectives
- **Incentive design proposal objectives:**
 - Reduce complexity, improve transparency
 - Change behaviors
 - Establish common definitions of success and commonality of incentive compensation outcomes, driving performance priorities horizontally and vertically across CalPERS
 - Enhance the sensitivity between incentive compensation and risk considerations
 - Create a framework that can be used for other incentive eligible employees or FY16-17

Incentive Design Proposals

Summary of FY16-17 Incentive Proposals

FY16-17 Incentive Design Strategy and associated metrics focus on three key performance areas

Mission	Operational Effectiveness	Stakeholders & Customers	Proposals (Metrics, Measurement, Payout Ratios)
		✓	A. Stakeholder Engagement
		✓	B. Customer Service
	✓		C. Overhead Operating Costs as a % of Total Operating Costs
✓			D. Relative Total Fund Investment Performance
	✓		E. Investment Office CEM (relative performance and cost comparisons)
✓	✓	✓	F. Key Business Objectives (Individual)
✓	✓	✓	G. Management Discretion, including adherence to risk management framework
✓	✓	✓	H. Policy Amendments
✓	✓	✓	I. CEO and CIO Incentive Metrics and Weights

Design enhancements under consideration for FY17-18 performance period

- Health Care Metric (second dimension of a Mission-based metric)
- Customer Experience Metric (evolution of Customer Service metric)
- Risk reduction and mitigation (rebalancing base salary and incentive pay, adding quantitative risk metric(s))
- Long-term incentive Program (funding defined as percentage of annual incentive award value; settlement value determined by five-year absolute total fund performance (e.g., "skin in the game" and holding power (retention)))

A. Stakeholder Engagement

Proposals: Questions, Scoring, Payout Ratios

Incentive Payout Ratio is a step function (no interpolation between intermediate values)

Proposal: FY16-17 Stakeholder Engagement Questions (reviewed annually)

No change since June >>>>	Question 1	Question 2	Question 3
	Is CalPERS sensitive to the needs of Stakeholders?	Does CalPERS do a good job of keeping its stakeholders informed?	On a scale of one to ten, how would you rate CalPERS being effective in engaging and communicating with stakeholders?
Employer AVG (range) since 2014	74% (68-79%)	73% (65-78%)	67% (3-year unavailable)
Member AVG (range) since 2014	79% (76-81%)	69% (66-72%)	65% (3-year unavailable)
Combined AVG	71% (Response Scores convert into percentages for incentive purposes, i.e., 6.7 = 67%)		

Proposal: Stakeholder Engagement Scoring and Payout Matrix (reviewed annually)

Combined Result (AVG)	Performance Level	Incentive Payout Ratio	Comments
> 75%	Maximum	1.50 (150%)	<i>Requires 3% improvement above 3-yr average</i>
> 73% to 75%	One-up from Goal	1.25 (125%)	
> 71% to 73%	Goal	1.0 (100%)	<i>Must exceed 3-yr average, driving continuous improvement</i>
> 69% to 71%	One-down from Goal	.75 (75%)	
> 67% to 69%	Threshold*	.50 (0%)	<i>Set above minimum result (trailing three-years)</i>

*Below Threshold: Incentive Ratio = 0

B. Customer Service

Proposals: Dimensions, Scoring, Payout Ratios

Incentive Payout Ratio is a step function (no interpolation between intermediate values)

Proposal: Customer Service Performance Dimensions for FY16-17 Incentive Awards (reviewed annually)

<i>No change since June >>>></i>	Service Dimension 1	Service Dimension 2
	Percentage of benefit payments issued to our customers within established service levels	Customer service with CalPERS services as measured by surveys and other methods
Most recent performance YR	95% (range: 90-97%)	91% (range: 85-95%)
Combined AVG	93% (Combined Result will be determined via averaging convention)	
CalPERS's Expectations	90% (long-term expectation: 98%)	85% (long-term expectation: 95%)
CalPERS's Combined AVG	87.5% (long-term expectation: 96.5%)	

Proposal: Customer Service Scoring and Payout Matrix (reviewed annually)

Combined Result (AVG)	Performance Level	Incentive Payout Ratio	Comments
= >95%	Maximum	1.50 (150%)	<i>Aligns with long-term "stretch" expectations</i>
94% to <95%	One-up from Goal	1.25 (125%)	
92% to <94%	Goal = Prior Year Results	1.0 (100%)	<i>Reflects prior-year performance, recognizing strength of past results</i>
90% to <92%	One-down from Goal	.75 (75%)	
88% to <90%	Threshold*	.50 (0%)	<i>Set .5% above PCTMC's minimum performance expectations</i>

*Below Threshold: Incentive Ratio = 0

C. Overhead Operating Costs as a % of Total Operating Costs ("OOC")

Proposals: Scoring, Payout Ratios

The PCTMC approved OOC as the Operational Effectiveness Metric in June; today's proposal asks for approval of the identified OOC Performance Goals (%) and the corresponding incentive payout ratios. The annual assessment process will include a Staff led discussion on the financial or organizational benefit or consequence of OOC results, as well as potential adjustments for extraordinary items of non-recurring nature that the PCTMC might wish to consider in its assessment of operational effectiveness

Proposal: OOC Payout Matrix

OOC Results	Performance Level	Incentive Payout Ratio
33.8%	Maximum	1.5 (150%)
34.3%	One-up from Goal	1.25 (125%)
34.9%	Goal = 3-yr AVG	1.0 (100%)
35.9%	One-down from Goal	.75 (75%)
36.4%	Threshold	.50 (50%)
>36.4%	Below Threshold	0 (0%)

- Total Overhead Operating Costs ("OOC") identify all administrative costs not mapped directly to Product and Service Delivery Operating Costs ("PSDOC")
- $OOC = OOC / (OOC + PSDOC)$
- 5-year Trend: 34.1% to 35.2%
- OOC Results will be reviewed/reset annually
- Payout ratios for intermediate results will be determined by interpolation

Cost Profile and OOC (Budget FY16-17)

CalPERS Budget	FY 2016-17 Annual
Benefit Programs Policy and Planning	25,647
Executive Office	6,603
Financial Office	29,978
General Counsel (Less Office of Audit Services)	18,599
Office of External Affairs	10,560
Operations and Technology	142,015
Overhead Operation Costs (OOC)	233,402 36.9%
Actuarial Office	9,301
Customer Services and Support	109,182
Office of Audit Services	7,611
Third Party Administer Fees*	272,809
Product/Service Delivery Operating Costs (PSDOC)	398,903 63.1%
Total Operating Costs (TOC)	632,305 100.0%
Investment Office	161,796
Other	25,017
Enterprise Projects Budget	40,882
Headquarters Builds Costs	31,295
Investment External Management Fees	896,705
Other Costs	1,155,695

D. Relative Total Fund Performance

Proposal Summary

Concepts underlying approved proposals will be implemented for other investment eligible staff at discretion of the CIO. Design proposals are within a representative range of observed industry practices, including paying incentive awards for negative performance (GT 2016 Survey)

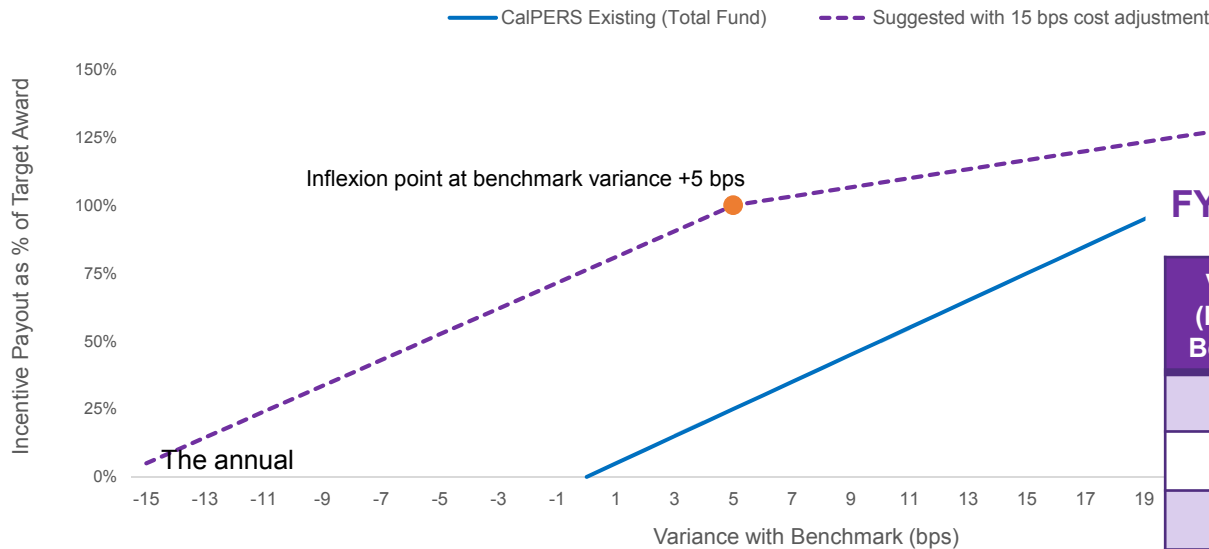
#	Proposal	Comment
4.1	Change Total Fund measurement period from three years to five years to better reflect long-term focus, duration of business cycle, and to allow more time for adverse risk outcomes to become known	<ul style="list-style-type: none"> • Effective immediately for FY16-17 and subsequent performance cycles • INVO will implement a five-year measurement period for all asset categories given the benefits of "going long..." (same effective date as for Total Fund) • Incentive awards based on investment performance for all employees, including new hires, will rely on the five-year period (exception: employees hired to execute new investment strategies, as determined by the CIO)
4.2	Expand Performance Zone and Payout Range (Incentive Curve), reducing motivation for participants to engage in excessive risk taking	<ul style="list-style-type: none"> • Incorporate a static cost adjustment factor into the benchmark return, eliminating the need for two dimensions of investment performance (what is reported, what is used to determine incentive payments) and the associated redundancies and work streams • Please refer to the incentive curve illustration on the following slide for details
4.3	Recognize the value of non-positive returns and why they can result; non-adherence to risk management framework will result in reduction or elimination of incentive award payment regardless of investment returns	<ul style="list-style-type: none"> • Consider corrective actions when absolute and relative returns are negative • Potential responses include no adjustment, reduction, elimination or deferral • If the PCTMC exercises its authority absent of risk considerations, the maximum reduction will be capped at the target incentive award value • Incentive awards will be reduced or eliminated for non-adherence to CalPERS's risk management framework, as identified by the CIO and approved by the CEO

D. Relative Total Fund Performance, cont'd.

Incentive Curve Illustration

"BPS" means basis point, equaling one hundredth of one percent. The embedded cost adjustment of 11.5 bps reflects the current cost methodology, while the incentive award threshold of -15 bps allows for cost inflation in future periods without necessitating a change in the incentive curve

CalPERS Existing Total Fund Incentive Curve vs. Suggested (embedded 15 bps cost adj. and target set at +5 bps)



FY16-17 Total Fund Payout Matrix

Variance (bps) from Benchmark	Existing Payout Ratio	Proposed Payout Ratio
+35	1.50 (150%)	1.50 (150%)
+30	1.50 (150%)	1.41 (141.7%)
+20	1.00 (100%)	1.25 (125%)
+5	.25 (25%)	1.00 (100%)
0	0 (0%)	.76 (76.3%)
-15	0 (0%)	.05 (5.0%)

Payout ratio for intermediate results will be determined by interpolation

Build-out of Cost Adjustment

Cost Item	BPS
Global Equities	6.0
INVO Expenses	4.7
Fixed Income	0.8
Total	11.5

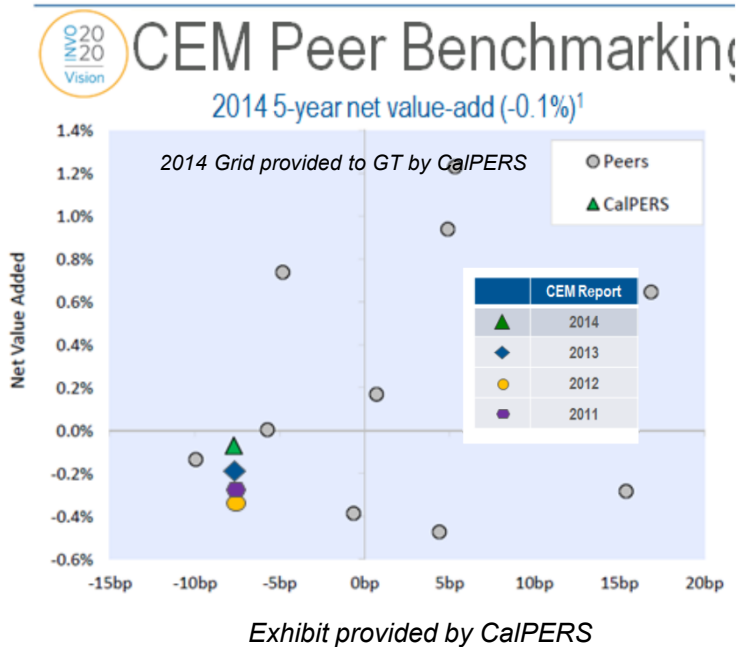
Static cost adjustment factor to be applied to the policy benchmark and validated annually for each trailing five-year performance period by Wilshire

E. Investment Office CEM

Proposals: Methodology, Scoring, Payout Ratios

INVO CEM Methodology

INVO CEM Payout Matrix



Net Value Added (Bold Line identifies 0)

<p>Max = 1.50 (150%) CalPERS outperforms US Benchmark on Net Value Added (Returns) and Cost by 0.2% and 5 bps, respectively</p> <p>Entry = 1.00 (100%) CalPERS outperforms US Benchmark on Returns and Cost by .001% and 1 bps, respectively</p>	<p>.50 (50%) CalPERS outperforms US Benchmark on Returns</p>
<p>.50 (50%) CalPERS outperforms US Benchmark on Cost</p>	<p>0 (0%) CalPERS underperforms US Benchmark on Returns and Cost</p>

Variance (bps) in Cost Per Unit (Bold Line identifies 0)

Comments

- Performance/returns defined as five-year Total Fund pursuant to third party's methodology (CalPERS's data inputs will be validated)
- One-year lag in results vis-à-vis current period (also extending the performance measurement period)
- INVO CEM Payout Ratio for Quadrant 3 (upper left) equals the average of the Payout Ratios calculated for Net Value Added and Cost using interpolation and the specified Entry and Maximum data points

F. Key Business Objectives

Proposal: Key Business Objectives

CalPERS's performance needs often will extend beyond the scope of the proposed incentive metrics. Incentive eligible Staff can receive the opportunity to earn all or part of their incentive award for attainment of goals identified by Key Business Objectives (structured as a standalone incentive metric(s) or as an award modifier)

- Each year the CEO (CIO with CEO review for INVO Staff) will identify and assign each incentive eligible classification a performance objective reflective of individual, branch or functional needs
- Individual performance objectives, or "Key Performance Objectives", will focus on results or activities (milestones) representative of multi-year efforts that are mission critical but are not easily measured over a single performance period (other examples of Key Business Objectives include alignment or attainment of investment strategies with CalPERS's investment philosophies as articulated by ESG or in other Board approved policies)
- Key Business Objectives will be limited to one to three for any given year

G. Management Discretion

Background and Proposal

The CEO's authority to oversee and approve the compensation of employees other than the CIO shall, to the extent permissible, be expanded to include the ability to implement discretionary adjustments to incentive awards.

- Discretionary adjustments serve as an important pay strategy in the CEO's tool box (and CIO for INVO Staff), ensuring that pay appropriately reflects a balanced and thoughtful view of performance
- Discretion serves as the last line of defense in preserving and enforcing the PCTMC's philosophies, preferences and objectives for CalPERS's incentive compensation programs
- Incentive awards earned for attainment of goals for mission, operational investment, stakeholder, or Key Business Objectives will be subject to
 - **Positive Adjustment** for exemplary performance up to the individual's maximum total incentive payout ratio not to exceed 1.50
 - **Negative adjustment (or elimination)** for behaviors or adverse risk-related results that adversely affect CalPERS's, its employees, or the service or product delivery or experience provided to any stakeholder or customer
- The application and impact of any adjustments will be as determined by the CEO (or subject to CEO approval for adjustments recommended by the CIO for INVO Staff), who will inform the Board of any such adjustments affecting the incentive awards of those classifications who report directly to the CEO or CIO

The accompanying policy changes document subsumes this proposal and if approved will govern the application of the use of Key Business Objectives for incentive awards effective with the FY16-17 performance period

H. Policy Amendments

Approval of the previously mentioned proposals will result in changes to CalPERS's Compensation Policies document, creating opportunities for "perimeter" design improvements

- Investment Performance Measurement Periods (add to *Multi-Year Performance Awards and Multi-Year Performance Award Calculation (Quantitative Measures)* sections, with itemized quantitative measure types and the corresponding measurement periods)
- Negative Absolute Performance (add to *Authority to Defer, Reduce or Eliminate Performance Awards* section)
- Eligibility Key Business Objectives (add to *Performance Plan Elements* section)
- Discretionary Performance Adjustments (add to *Performance (Incentive) Award* section)
- Pro-rata award language for IO3 (address mid-year promotions to ensure equitable treatment)
- Removal of Appendices (addressed in separate procedural materials, as opposed to policy)

I. Incentive Framework for CEO and CIO

Proposed FY16-17 Metrics and Weights

PCTMC approves incentive strategies for CEO and CIO, who develop and implement incentive strategies for their respective teams

Proposal: CEO and CIO Metrics and Weights

Participant Classification	# of Metrics	Operational Effectiveness (OOCF) ¹	INVO CEM	Stakeholder Engagement (SE) / Customer Service (CS)	Investment Returns (Five-year Total Fund)	Key Business Objectives
Payout % of Target <i>(Min/Threshold/Target/Max)</i>		0/50/100/150	0/50/100/150	0/50/100/150	0/50/100/150	0/50/100/150 (CIO)
CEO	4	25%	15%	Average of SE = 20% CS = 20%	20%	+/- Discretionary adjustment
CIO	5	10%	20%	SE = 20%	40%	10%

Notes/Comments

- 1) OOCF standards for Overhead Operating Costs as a Percentage of Total Operating Costs
- 2) Maximum incentive award, including discretionary adjustments, capped at 150% of target award value
- 3) CEO/CIO framework establishes concepts and structures that will encompass their respective teams. PCTMC will receive an update from Staff in August

Will include completion of the Board-approved annual work plan for the CIO and other INVO Leaders, including Global Governance and ESG Strategic Plan objectives

I. Incentive Framework for CEO and CIO, cont'd.

CIO Target Compensation Illustration

Base Salary (a)	\$503,500	
Target Bonus % of Base Salary (b)	50%	<i>(Maximum is 75% of Base Salary, or 150% of Target Bonus)</i>
Target Bonus \$ Value (c = a x b)	\$251,750	<i>(= Base Salary x Target Bonus % of Base Salary)</i>

Incentive Metrics	FY15-16 Existing Program		FY16-17 Proposed Program	
	Assigned Weights	Target Bonus Value	Proposed Weights	Target Bonus Value
	(d)	(e = c x d)	(f)	(g = c x f)
Total Fund Performance*	50%	\$125,875	40%	\$100,700
Enterprise Business Plan*	40%	\$100,700	0%	\$0
Leadership* / Key Business Objectives	10%	\$25,175	10%	\$25,175
Enterprise Operational Effectiveness	0%	\$0	10%	\$25,175
Investment Office CEM	0%	\$0	20%	\$50,350
Stakeholder Engagement	0%	\$0	20%	\$50,350
Total	100%	\$251,750	100%	\$251,750

*Identifies existing incentive metrics. Actual Bonus Value for FY15-16 will be approved by the PCTMC meeting in November.

At Grant Thornton's request, Staff "back-tested" Total Fund Performance using the existing and proposed incentive curves for three different five-year measurement periods. Staff analyzed Total Fund Performance prior to the 2008 financial crisis, during the 2008 financial crisis (straddle), and subsequent to the 2008 financial crisis. Staff reported that the Payout Ratios were identical for each period given extreme volatility (two cycles resulted in no payout, one cycle resulted in a payout ratio of 1.5). For the FY15-16 performance period, the incremental incentive award value generated by the proposed incentive curve (\$100,700 x 1.27) as compared to the existing incentive curve (\$125,875 x 1.06) for a consistent five-year measurement period is approximately (\$5,500).

Recap of Proposals

We ask that the PCTMC consider the following proposals for approval at the conclusion of today's session

FY16-17 CEO & CIO Incentive Proposals

Mission	Operational Effectiveness	Stakeholders & Customers	Metrics (numeric identifiers map to incentive design proposals)
		✓	A. Stakeholder Engagement
		✓	B. Customer Service
	✓		C. Overhead Operating Costs as a % of Total Operating Costs
✓			D. Relative Total Fund Investment Performance
	✓		E. Investment Office CEM (relative performance and cost comparisons)
✓	✓	✓	F. Key Business Objectives (Individual)
✓	✓	✓	G. Management Discretion, including adherence to risk management framework
✓	✓	✓	H. Policy Amendments
✓	✓	✓	I. CEO and CIO Incentive Metrics and Weights



Select Reference Material

Incentive Framework other Incentive Eligible Participants FY16-17 Straw-dog Design Framework

Key Business Objectives for INVO Managing Investment Directors and Investment Directors will include Global Governance and ESG Strategic Plan objectives identified in the annual work plan

Participant Classification	# of Metrics	Operational Effectiveness	INVO CEM	Shareholder Engagement	Customer Service	Investment Returns	Key Business Objectives
Executives with Key Risk Oversight Responsibilities							
CFO	4	20%	10%	10%	10%	0%	50%
COIO	4	10%	20%	0%	10%		60%
CEO's Direct Reports (20098 Executives) other than the CIO and CFO							
General Counsel	4	20%	10%	10%	10%	0%	50%
Chief Actuary	4	20%	10%	10%	10%		
CIO's Direct Reports and Other key INVO Contributors - Public Assets							
MID	5	0%	20%	0%	0%	Total Fund = 10% (MID), 15% (ID) Asset Class = 10% (MID), 15% (ID) Individual Portfolio = 40% (all)	20%
ID	5	0%	10%	0%	0%		
CIO's Direct Reports and Other key INVO Contributors - Private Assets							
MID	4	0%	20%	0%	0%	Total Fund = 20% (all) Asset Class = 40% (MID), 50% (ID)	20%
ID	4	0%	10%	0%	0%		

Payout percentages for CEO and CIO will apply to other incentive participants up to a maximum of 150% of target or, for Career Executive Direct Reports, 15% of base salary. The PCTMC might choose to discuss the incentive pay discrepancy issue in the future given the misalignment of priorities and focus that it creates across the CEO's Direct Reports.

Please note that the metrics shown for MIDs and IDs also will apply to Investment Managers and Associate Investment Managers, as determined by the CIO.

Risk-based Incentive Strategies

Expanding the incentive curve and changing its slope are fully consistent with "best practice" risk-based incentive strategies, offering "belt and suspenders" to other actions that the PCTMC has approved or will consider for future implementation

Best Practice Strategy	CalPERS's Approach	FY16-17	Future Consideration
1) Those with risk oversight responsibilities should not be paid under the same programs as those they oversee	Carve-out of COIO and CFO and their teams	✓	
2) Multiple metrics	CEO and CIO will earn incentives based on four to five performance categories; other participants will earn incentives across two to five performance categories	✓	
3) Risk-based incentive metrics	Non-adherence to risk management principles, etc. or adverse risk outcomes will reduce or eliminate incentive awards for involved individuals	✓	
4) Extend performance period, allowing more time for adverse risk outcomes to become known	Move from three-years to five years for Total Fund and Asset class level incentives	✓	
5) Reduce performance leverage/acceleration	Expand performance range, reducing slope	✓	
6) Effective use of discretion to avoid unintended windfalls or incentive outcomes that contradict risk outcomes/considerations	Authorize CEO and CIO (with CEO approval) to make discretionary adjustments to incentive awards	✓	
7) Deemphasize value of variable compensation in relation to total compensation	Maintain total compensation levels but rebalance fixed and variable, deemphasizing performance-based pay in total compensation (e.g., "rebalancing" strategy)		✓
8) Deferred compensation with claw backs for adverse risk outcomes	Incremental long-term incentive plan where account balances are adjusted for Total Fund performance and subject to cancellation for non-adherence, etc.		✓

Reference Material

Stakeholder Engagement Survey Details

Customer Service Survey Details

Stakeholder Engagement Survey Details

Employers:

- 10,605 total invitations sent
 - State 2727
 - School 1566
 - PA 6312
- Response rate: 5.1%

Members:

- 50,000 total invitations sent out
- Not filtered by State/School/Public Agency – a true random pull from the member database
- Response rate: 7.1%

Stakeholders:

- 76 phone interviews conducted (no surveys)
 - Taxpayer/Pension Reform groups – 12
 - Peer Pension Funds – 20
 - State Legislative Staff - 16
 - Labor Unions – 23
 - Industry/Employer Partners – 22
 - Academic/Think Tanks – 19

Customer Service Survey Details (2015/16)

Question 10: Benefits Administered within Service Levels

- > 30,000 Retirees added to Service Retirement Roll

Question 11: Customer Satisfaction

- > 40,000 Member Responses
- 1,700 Employer Responses

This presentation is not a comprehensive analysis of the subject matters covered and may include proposed guidance that is subject to change before it is issued in final form. All relevant facts and circumstances, including the pertinent authoritative literature, need to be considered to arrive at conclusions that comply with matters addressed in this presentation. The views and interpretations expressed in the presentation are those of the presenters and the presentation is not intended to provide accounting or other advice or guidance with respect to the matters covered.

For additional information on matters covered in this presentation, contact your Grant Thornton, LLP adviser.