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Long-term Incentive Program Design Discussion and Recommendations

June 18, 2019

Today’s Agenda

- Review decisions made at February meeting
- Discuss GT’s Long-term Incentive Program design recommendations

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Definitions

Term	Definition
CAGR	▪ Acronym for "compound annual growth rate." CalPERS Total Fund returns for the Long-term Incentive Program (LTIP) will be measured using a CAGR formula, which takes into consideration the compounding of returns over each entire five-year performance period. ▪ Measuring returns using a CAGR formula provides a more accurate representation of performance than using "average annual returns," which is a measure that can overstate performance when there are negative returns over an extended performance period.
Expected Rate of Return	▪ The CalPERS' expected rate of return for Total Fund performance in the first year of each LTIP five-year performance period will serve as the "target" (goal) performance level for the entire five-year period. ▪ E.g.: if the CalPERS expected rate of return is 7.0% in Year 1 of a performance period, "target" (goal) performance would be equal to 7.0% annual returns over five years (measured using the compound annual growth rate).

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Definitions (continued)

Term	Definition
Initial LTIP Value	▪ The initial LTIP award value amount will be allocated in Year 1 of each five-year performance period, upon which payouts will be based at the end of that five-year performance period. ▪ Initial LTIP award values will be calculated based on the lower of: (i) a participant's actual annual incentive payout in Year 1; or (ii) their annual incentive range target in Year 1. ▪ The initial LTIP award value will be subject to a Payout Multiplier (see below) based on CalPERS' Total Fund returns over the five-year performance period.
Payout Multiplier	▪ A multiplier used to determine each participant's actual award payout at the end of each five-year performance period. It ranges from 0% to 150% of the initial LTIP award value based on CalPERS' Total Fund returns over the performance period (see page 10 for additional information).

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Definitions (continued)

Term	Definition
Performance Period	▪ The period of time over which performance will be measured to determine the Payout Multiplier (a five-year performance period is being presented as Grant Thornton's recommendation for CalPERS).
Total Fund Returns	▪ Total Fund returns will be measured using the "net time-weighted rate of return" of Total Fund performance over a five-year period.

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Decisions Made at February 2019 Meeting

- CalPERS Performance, Compensation & Talent Management Committee ("PCTMC") adopted compensation "Option C"
- Option C makes the following changes to compensation for investment management positions covered by the Board's compensation-setting authority:
  - Increases salary midpoints to market 50th to 75th percentile
  - Adjusts and consolidates annual incentive ranges
  - Introduces a Long-term Incentive Program (LTIP)

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LTIP Recommendations Overview

- GT recommends an LTIP with the following features:
  - Measure Total Fund returns over five years
  - Target (goal) performance for entire period is based on the expected rate of return in Year 1 of that period
  - Initial LTIP award values are calculated based on the lower of: (i) an employee's actual annual incentive earned in Year 1; or (ii) their annual incentive range target in Year 1
  - LTIP actual award payouts for the first five-year performance period will occur at the end of Year 5; LTIP awards may then be granted annually with overlapping five-year performance periods
  - Actual LTIP award payouts can range from 0%-150% of the Initial LTIP award value based on Total Fund performance and related thresholds

The appendix beginning on slide 18 provides a detailed narrative description of all LTIP components.

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LTIP Design Recommendations

LTIP Recommendations – Performance Levels

The table below shows proposed performance levels for Total Fund returns over five years:

Performance Level	Total Fund Returns
Maximum Performance = Expected Rate of Return x 120%	8.4%
Target Performance = Expected Rate of Return in Year 1	7.0%
Threshold Performance = Expected Rate of Return x 80%	5.6%

- Performance will be measured as the compound annual growth rate (“CAGR”) of Total Fund returns over the five-year performance period
- Target performance for each five-year period is based on the Expected Rate of Return in the first year of the given period

Slides 21 and 22 in the appendix describe this in further detail.

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LTIP Recommendations – Payout Multiplier

Performance Level	5-Year Total Fund Return Level	Payout Multiplier
Maximum Performance[1]	8.40%	1.5 (or 150%)
Performance between target and maximum	--	*Interpolated*
Target (“Goal”) Performance	7.00%	1.0 (or 100%)
Performance between target and minimum	--	*Interpolated*
Threshold Performance[2]	5.60%	0.5 (or 50%)

[1] Multiplier capped at 1.5 for returns above maximum
[2] No payouts will occur for returns below threshold

Slides 23 and 24 in the appendix describe this in further detail.

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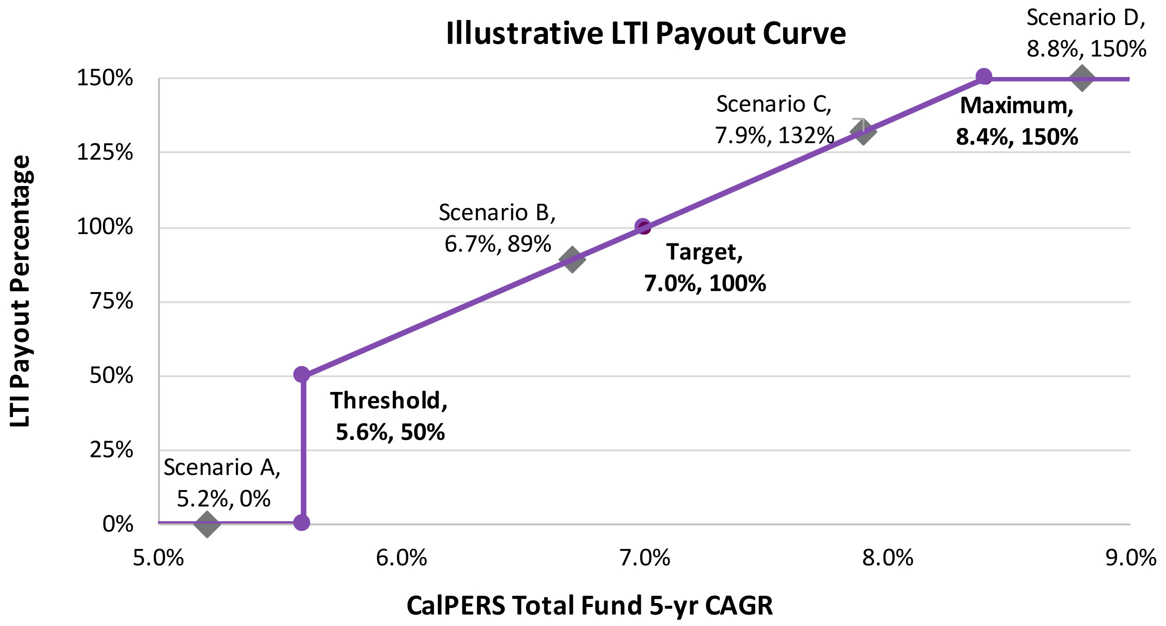
LTIP Recommendations – Payout Curve

- The graph to the right shows the proposed performance and payout levels
- Hypothetical scenarios have been included to illustrate potential performance and payout outcomes
- Data labels list returns first and corresponding payout level second



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LTIP Design Recommendations – Employee LTIP Levels

- GT recommends employees' Initial LTIP values be based on the lower of (i) their actual annual incentive earned in Year 1, or (ii) their target annual incentives in Year 1

Classification	Annual Incentive Range (% of Salary)	Initial LTI Value
Associate Investment Manager	0 – 40% (27% target)	Lower of 27% or Actual Annual Incentive
Investment Manager	0 – 60% (40% target)	Lower of 40% or Actual Annual Incentive
Investment Director	0 – 75% (50% target)	Lower of 50% or Actual Annual Incentive
Managing Investment Director	0 – 105% (70% target)	Lower of 70% or Actual Annual Incentive
Chief Operating Investment Officer	0 – 75% (50% target)	Lower of 50% or Actual Annual Incentive

- Final LTIP payouts will range from 0% to 150% of Initial LTIP values based on Total Fund returns over the five-year performance period

Slides 25 – 27 in the appendix describe this in further detail

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LTIP Design Recommendations – Illustrative Example

- The tables on the following pages provide an illustrative example of the proposed LTIP mechanics:

Step 1 – Initial LTIP award value for a Hypothetical Investment Manager

CalPERS Fiscal Year	Base Salary	Annual Incentive Information (% of Salary)		Initial LTIP Value *(Lower of Target and Actual Annual Incentive)*		
		Target	Actual	Award #	% of Salary	$ Value
‘19 – ’20	$190,000	40%	35%	#1	35%	$66,500
‘20 – ’21	$200,000	40%	45%	#2	40%	$80,000
‘21 – ’22	$210,000	40%	50%	#3	40%	$84,000

Slides 25 – 27 in the appendix describe this in further detail.

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LTIP Design Recommendations – Illustrative Example (continued)

Step 2 – Calculate Payouts *(returns listed below are hypothetical and shown for illustrative purposes; our example assumes an expected rate of return of 7.0% for each period)*

Award #	CalPERS Fiscal Year – Hypothetical Total Fund Returns								Payout Result	
	'19 – '20	'20 – '21	'21 – '22	'22 – '23	'23 – '24	'24 – '25	'25 – '26	'26 – '27	CAGR[1]	Payout
#1	13.5%	11.3%	9.6%	6.8%	6.1%	*Award #1 Payout*			9.43%	1.50 or 150%
#2		11.3%	9.6%	6.8%	6.1%	4.3%	*Award #2 Payout*		7.59%	1.21 or 121%
#3			9.6%	6.8%	6.1%	4.3%	2.0%	*Award #3 Payout*	5.73%	0.55 or 55%

[1] CAGR – Compound Annual Growth Rate

Slides 28 – 30 in the appendix provide further detail on calculating an LTIP payout.

LTIP Design Recommendations – Illustrative Example (continued)

<u>Step 3 – Calculate LTIP Payout</u>

LTIP Award Info		Initial LTIP Award Value		Total Fund Performance		Final LTIP Payout
Award #	Fiscal Years	% of Sal.	$ Value	CAGR	Payout	
#1	'19 – '24	35%	$66,500	9.43%	1.50 or 150%	$99,750
#2	'20 – '25	40%	$80,000	7.59%	1.21 or 121%	$96,800
#3	'21 – '26	40%	$84,000	5.73%	0.55 or 55%	$46,200

Slides 28 – 30 in the appendix provide further detail on calculating an LTIP payout.

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Other LTIP Design Considerations

LTIP Design Recommendations – Other Considerations

Design Area	Overview and GT Commentary
Existing Policy Provisions	▪ GT recommends certain existing policy provisions related to annual incentives apply to LTIP, with certain alterations to address the nuances of the LTIP. Proposed changes for the following topics are detailed in the appendix on slides 31 and 32: – LTIP Eligibility – Pro-rata Awards – Action Upon Unsatisfactory Performance
LTIP: CEO and CIO Positions	▪ To promote a unified focus across the investment office, GT recommends the CEO and CIO positions eventually participate in the LTIP plan. The Committee may want to consider this at a future meeting.

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Appendix – Detailed Design Description

Design Foundation

Inclusion of a Long-Term Incentive Program (LTIP) in a compensation package is a common asset management and investment industry practice which can contribute to the retention of highly-qualified investment professionals and incent sustained performance over a multi-year period.

An LTI program also maintains a substantial amount of “pay at risk,” which aligns with the purpose of most incentive programs, including that of CalPERS. The purpose section of the board’s Compensation Policy for Executive and Investment Management Positions states *“Moreover, compensation systems must be carefully structured to both recognize labor market force and reinforce maximum performance through placing a substantial portion of total compensation at risk.”*

The intent of adding an LTIP for all investment management positions within the Investment Office at CalPERS is to establish a unified focus on total fund return levels that contribute to the long-term sustainability of the fund, while maintaining a substantial amount of “pay at risk” to incent strong performance.

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Design Foundation (cont'd)

To achieve the unified focus on sustained total fund return levels, we recommend an LTIP that measures the compound annual growth rate of absolute total fund returns over rolling five-year performance periods. The compound annual growth rate is a formula that provides a representation of performance by including the impact of compounding performance over a multi-year period. This tends to provide a more accurate representation of total fund performance than using average annual returns which treat returns each year independently of each other. Additionally, average annual returns can overstate performance relative to compound growth rates when there are negative returns over an extended performance period.

Measuring absolute performance aligns the incentive with the needs of the beneficiaries (e.g. places focus on the funding of pension obligations). This is balanced with the annual incentive plan, which incentivizes for relative returns, aligning performance against peers.

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Section 1: Setting Performance Levels

Like the design of the annual incentive program performance levels, the LTIP performance levels should include a goal/target, a threshold, and a maximum. The threshold and maximum performance levels are typically set an equal distance from the goal/target.

The goal/target is the desired level of achievement where target payout occurs, the threshold is the minimum point at which a reduced payout occurs, and the maximum is a stretch achievement where a payout above target occurs. Payout does *not* occur if performance is below threshold. Alternatively, payouts cannot *exceed* a defined "cap," regardless of performance achieved above the maximum performance level. The relation of payout to performance is described in more detail in *Section 2: Setting Payout Multipliers*, slides 23 and 24. The stated approach is a common methodology for balancing risk and reward in investment-related compensation plans.

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Section 1:
Setting Performance Levels (cont'd)

To set performance levels for CalPERS' LTIP, we recommend a methodology which utilizes CalPERS' expected rate of return for the goal/target performance level. At the onset of Year 1 of each five-year performance period, the expected rate of return would be used as the goal/target performance level for that entire five-year performance period.

For example, seven percent would be the goal/target performance level for the first five-year performance period beginning fiscal year 2019-20 (and ending fiscal year 2023-24) since it will be the expected rate of return as of July 1, 2019. The threshold and maximum performance levels would then be set by equally distancing them from the goal/target by using a 20 percent reduction for the threshold and 20 percent increase for the maximum. The practice of setting threshold and maximum performance levels the same percent above and below goal/target performance is a standard practice in incentive design. In this example, the goal performance level of seven percent (expected rate of return) would be multiplied by .80 to set the threshold performance level of 5.6 percent. The goal performance level of 7 percent (expected rate of return) would then be multiplied by 1.20 to set the maximum performance level of 8.4 percent. This is depicted on slide 9.

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Section 2:
Setting Payout Multipliers

Each performance level (goal/target, threshold, and maximum) must be associated with a payout multiplier which would be used at the end of each five-year performance period to calculate an actual LTIP award that would be paid to an eligible participant. A recognized approach is to set a 1.0 multiplier for achieving goal/target performance level, meaning 100 percent of any initial award value would be paid in instances where total fund returns over the five-year performance period equal the target performance level determined in year 1.

A commonly used payout multiplier for performance at threshold is .50, meaning payout would be half of what would be paid for achieving goal/target performance. Although achieving threshold is lower than a desired goal/target, the standard practice of granting a portion of payment at this level is to recognize external factors which may occur that can impact outcomes. Setting appropriate threshold performance levels near goal/target also ensures sufficient returns must be achieved before any payout occurs.

Finally, a commonly used payout multiplier for performance at maximum is 1.50, meaning payout would be one and one-half times what would be paid for achieving goal/target performance. The setting of multiple performance levels ensures a balance of rewarding for a range of performance, while providing competitive pay and discouraging excessive risk taking.

Section 2: Setting Payout Multipliers (cont'd)

The Payout multipliers being recommended for CalPERS' LTIP align with the commonly used multipliers described on slide 23. If the goal/target performance level is achieved, LTIP participants would be awarded 100 percent of their initial LTIP award value (further described in *Section 3: Determining Initial LTIP Award Value*, slides 25 – 27). If the threshold performance level is achieved, the participants would receive half of their initial LTIP award value; and if the maximum performance level is achieved, participants would receive one and one-half times their initial LTIP award value. Performance between levels would result in interpolated awards, consistent with best practice pay for performance and risk mitigation. Slide 10 outlines our recommended payout multipliers as described here and as associated with the recommended performance levels. Slide 11 depicts a graph with four scenarios.

As mentioned in *Section 1: Setting Performance Levels*, actual LTIP payout would <u>not</u> occur if the performance level achieved was lower than the threshold performance level. Also, payout would never exceed one and one-half times the initial LTIP award value, even if performance achieved was above the maximum performance level.

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Section 3:
Determining Initial LTIP Award

We recommend setting the initial LTIP award value for a given year based on *the lower of*:

1) a participant's annual incentive range target in year 1 of the five-performance period; *or*
2) a participant's actual annual incentive earned in year 1 of the five-performance period.

Slide 12 outlines this component of the recommendation.

The initial LTIP award value would be used in conjunction with the payout multiplier described in Section 2 to calculate the actual LTIP award payout at the end of each five-year performance period. This section describes how to determine the initial LTIP award value, and Section 4 describes the process to calculate the actual award payout at the end of the five-year performance period.

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Section 3: Determining Initial LTIP Award (cont'd)

The initial LTIP award value would be calculated *at the end of Year 1* of each five-year performance period. As noted above, it would be calculated based on the annual incentive range target for each participant; *or* their actual incentive earned, if lower than the target.

To describe how the initial LTIP award value would be calculated, this example will use the Investment Manager classification. The annual incentive range for an Investment Manager is 0 – 60 percent of base salary, with a 40 percent target. If the Investment Manager earns their annual incentive range target of 40 percent for their annual incentive award in Year 1 of a given five-year performance period, then 40 percent of base salary would be used to determine the initial LTIP award value.

Section 3:
Determining Initial LTIP Award Value (cont'd)

Using $1,000 as a hypothetical annual base pay, the initial LTIP award value would be $400 ($1,000 multiplied by .40). In a case where the Investment Manager's annual incentive earned is above their target of 40 percent, the maximum initial LTIP award value would still be based on the annual incentive range target of 40 percent.

Alternately, if that same Investment Manager earned only a 35 percent annual incentive award at the end of Year 1 of a given five-year performance period, their initial LTIP award value would then be restricted to 35 percent of their annual base pay. In this case, using the same hypothetical annual base pay of $1,000, the initial LTIP award value would be $350 ($1,000 multiplied by .35). Slide 13 outlines this concept using three separate fiscal year examples.

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Section 4: Calculating LTIP Award Payout

At the end of each five-year performance period, three factors described in the above three sections would be utilized to calculate the actual LTIP award payout: 1) the performance level achieved based on the absolute total fund returns measured using the compound annual growth rate; 2) the payout multiplier associated with performance level achieved; and 3) the initial LTIP award value determined at the end of Year 1 of the five-year performance period. The following example outlines how these factors are used in conjunction with one another to calculate an actual LTIP award at the end of a given five-year performance period.

The example is depicted in a table on the next slide. It uses an initial LTIP award value based on 40 percent of a hypothetical annual base pay of $1,000, as outlined in the Investment Manager example in Section 3 when the Investment Manager earns their annual incentive award *at or above* their designated 40 percent target. The “Total Fund Returns” column represents example absolute total fund returns measured over a five-year performance period using the compound annual growth rate.

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Section 4: Calculating LTIP Award Payout (cont'd)

Total Fund Returns	Performance Level Achieved	Payout Multiplier	Initial LTIP Award Value in Year 1 *($1,000 annual base pay x .40)*	Actual LTIP Award Payout in Year 5 *(Payout Multiplier x Initial LTIP Award Value)*
8.4%	Maximum	1.50	$400	$600
7.7%		1.25	$400	$500
7.0%	Goal/Target	1.00	$400	$400
6.3%		.75	$400	$300
5.6%	Threshold	.50	$400	$200
<5.6%		0.00	$400	$0

Note: If the Investment Manager in this example earns an annual incentive award *below* their incentive range target, the Initial LTIP Award Value would reflect the hypothetical salary of $1,000 multiplied by the lower annual incentive earned.

This example is simplified with performance examples set exactly between threshold and goal/target and goal/target and maximum. Actual payout would be determined using a method called interpolation to align payout with specific performance achieved.

Section 4: Calculating LTIP Award Payout (cont'd)

Slides 14 and 15 provide additional examples of calculating LTIP award payouts over three consecutive five-year performance periods. The examples on those slides demonstrate how the rolling five-year performance periods overlap, with payouts occurring annually after the first five-year period.

As indicated in *Section 1: Setting Performance Levels*, actual LTIP payout would <u>not</u> occur if the performance level achieved was lower than the threshold performance level. Also, payout would never exceed 1.5 times the initial LTIP award value, even if performance achieved was above the maximum performance level.

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LTIP Policy Provisions

Outlined on this and the next slide are key policy provisions which would be related to the LTIP.

- **LTIP Eligibility:** Participation in the LTIP will be limited to covered investment management positions within the Investment Office. An individual appointed during the first half of the fiscal year (July 1 through December 31) will be eligible to participate in the LTIP five-year performance period which began that year. An individual appointed during the second half of the fiscal year (January 1 through June 30), will become eligible to participate in the LTIP in the subsequent fiscal year. LTIP participants who separate for any reason will be ineligible to receive an award for any incomplete five-year performance period(s). Further, they are only eligible to receive an award for completed five-year performance periods if they are employed on the date the board hears the item and "approves" the associated award payment.

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LTIP Policy Provisions (cont'd)

- **Pro-rata Awards:** LTIP awards may be pro-rated based on months of service for participants who are appointed during the fiscal year. For an eligible participant who started during the first half of the fiscal year (see *Eligible Participants*, above), a pro-rated award would be calculated based on the number of months served during the eligible five-year performance period.

- **Action Upon Unsatisfactory Performance:** Participants must achieve a minimum Overall Performance Rating of "Meets Standards" and have complied with all CalPERS risk management and ethics-related principles, policies, and procedures to be eligible for incentive award payout. In addition to no annual or long-term incentive award payout in the year a participant receives the unsatisfactory rating, the participant will also be ineligible to participate in the five-year performance period that begins the year they receive the unsatisfactory rating. This is because the initial LTIP award value is based on their actual incentive earned, which would be zero in the period an unsatisfactory rating was received.

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