#### COMMONWEALTH OF PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

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DATE:

August 3, 2007

**SUBJECT:** Adjustments to the Current Investment Office Incentive Compensation

Plan Policy

TO:

Members of the Board

FROM:

Jeffrey B. Clay, Executive Director

Based on the Committee's discussion at the June 21, 2007 Personnel Committee meeting, it was determined that the Board would be more comfortable rolling the existing Investment Office Incentive Compensation Plan Policy forward from last year in lieu of implementing the changes recommended by McLagan, most specifically the multiplier. Included for your review are:

- 1. The Proposed Changes to the Investment Office Incentive Compensation Plan for 2007-2008 that highlights the substantive changes to the plan.
- 2. PSERS' Investment Office Incentive Compensation Plan Policy for the fiscal year ending June 30, 2008. This document has the more substantive changes from the 2007 policy black-lined for convenience in review; and

The more material changes included:

- 1. The addition of a provision in the separation clause on page two to allow for prorata payments of incentives for Investment Office staff who separate from service due to retirement or death; otherwise, individuals who voluntarily resign before the end of the incentive plan year will forfeit any payout.
- 2. With the approval of the Investment Professional Classification Structure at the last meeting, staff added the Portfolio Manager level to the incentive plan and set their target incentive level at 40%, which is 5% above the Senior level staff.
- 3. Increased the Managing Directors' target incentive level from 40% to 45% to maintain the structural integrity of the plan. As now structured, the Junior level has a target incentive level of 25%, and the target incentive level increases by 5% a position level. The creation of the new position (Portfolio Manager) necessitated this change.

Otherwise, changes were made to address the individuals promoted at the last Board meeting and incentive weights by position. As an example of incentive weights by position, for the Total Fund incentive the weights were designed so that the CIO has the highest percentage of his incentive based on the total fund performance and the Junior level has the lowest percentage of his incentive based on the total fund performance.

If you have any questions or comments, please contact me at 717-720-4678.

# PSERS' INVESTMENT OFFICE INCENTIVE COMPENSATION PLAN POLICY FOR THE FISCAL YEAR ENDING JUNE 30, 2008 APPROVED: AUGUST 3, 2007

#### PURPOSE, STRATEGY, AND OBJECTIVES

The PSERS' Investment Office supports the fiduciary responsibility of the Board of Trustees by investing Fund assets to maximize risk-adjusted returns and meet long-term retirement liabilities. The Board has determined that a strong in-house investment program is in the long-term best interest of the Fund. To encourage the growth and vitality of this program, the Board has approved a compensation strategy to attract, motivate, and retain qualified investment professionals. The strategy offers the potential to earn an annual incentive, based on performance. The incentive plan reinforces the Fund's investment objectives and does not expose the fund to any additional risk.

The objectives of the investment incentive compensation plan are as follows:

- 1. Within established risk parameters, obtain consistent, long-term investment performance that meets or exceeds the Policy Index and compares favorably with similar funds.
- 2. Align the economic/financial interests of the Fund's stakeholders, i.e. members/retirees and its investment professionals.
- 3. Encourage the growth and vitality of the in-house investment program.
- 4. Maintain a competitive cost structure by emphasizing internal asset management.
- 5. Attract, motivate, and retain top-caliber investment professionals.

The following policy establishes the working details of the Investment Office Incentive Compensation Plan. The policy addresses the following topics:

- 1. Participation
- 2. Performance Measurement and Target Award Levels
- 3. Performance Calculation
- 4. Communication
- 5. Implementation

#### 1. PARTICIPATION

#### A. ELIGIBILITY

All full-time investment professionals who are assigned significant or complete responsibility for portfolio performance and/or portfolio oversight are eligible to participate in the incentive compensation plan. The Board shall approve any additional investment professional positions to the plan.

Investment Office staff become eligible for participation in the plan after they have demonstrated satisfactory performance for a minimum of six consecutive months. At the discretion of the Chief Investment Officer, the requirement may be shortened or waived for highly skilled managers who have the requisite experience to contribute immediately

upon hire, or lengthened for those managers who require additional experience to assume full portfolio management and/or portfolio oversight responsibilities.

#### B. INCENTIVE PLAN CYCLE

The incentive plan cycle will be from July 1 through June 30 of each year (the Fund's fiscal year). Incentive payouts will be made as soon as is practical after the fiscal year investment data becomes available.

For new employees, the incentive period shall begin as of July 1 of the year the employee becomes eligible for participation in the Investment Office Incentive Compensation Plan. For newly approved incentives, the inception date for those incentives will be as of July 1 of the year approved by the Board. Board approval is required for the addition of new employees to the Investment Office Incentive Compensation Plan during the fiscal year. In addition, Board approval is also required if current employees are assigned a significant change in portfolio responsibilities requiring a change in their incentive structure during the fiscal year.

#### C. SEPARATION

Investment staff who separate from service due to retirement or death during the incentive plan cycle will earn a pro-rata share of their incentive based on the performance of the Total Fund and their Portfolio Level (Trading Level) objectives (excluding supervisory incentives) through the end of the quarter of separation. For example, if a Managing Director leaves at the end of August in the plan year, then he/she would be eligible for 1/6 (2 months of service/12 months in plan year) of his/her Total Fund and Portfolio Level (Trading Level) incentives (excluding supervisory) based on the one-year, three-year, and five-year results through September 30. No plan participate will be eligible for their qualitative incentive unless they are employed during June of each plan year. Otherwise, Investment staff who voluntarily resign during the incentive plan cycle will forfeit any payout in that plan year.

Investment staff who under-perform their identified performance measures for three consecutive years may be terminated from employment. No incentive payouts will be made under these circumstances. The three-year period will renew following significant changes in a manager's portfolio responsibilities. The Chief Investment Officer and the Board reserve the right to dismiss an employee for unsatisfactory investment performance or for other reasons at any time.

#### 2. PERFORMANCE MEASUREMENT AND TARGET AWARD LEVELS

Appropriate performance measurement provides an important link between overall investment strategy and individual portfolio objectives. Measurement must be selected that is consistent with these objectives and is easy to track.

The Board determines target incentive compensation opportunities for each eligible position. Target incentive compensation opportunities reflect competitive cash compensation levels and the Personnel Committee's assessment of the optimal mix of base salary and incentive

compensation opportunity. The competitive market for salary and incentive compensation purposes is the same (i.e., the Board-approved compensation comparator group).

For the Plan year ending June 30, 2008, six target incentive tiers will be used as shown below. Target incentive and tiers may change in subsequent years. Target incentive levels will vary by position based on differing levels of accountability, responsibility, and competitive pay requirements. Target incentive opportunities are expressed as a percentage of base salary at the end of the incentive fiscal year (June 30) as follows:

Target		Target
Incentive		Incentive Level
Tier	Representative Positions	(% of 6/30 salary)
1	Chief Investment Officer (CIO)	50.0%
2	Managing Directors (Director)	45.0%
3	Portfolio Managers (PM)	40.0%
4	Senior Level Staff	35.0%
5	Intermediate Level Staff	30.0%
6	Junior Level Staff	25.0%

Incentives provided will be based either on quantitative measures and/or qualitative measures.

The quantitative measures may include one, two, or all three of the following:

#### 1. Total Fund Incentive

The Board recognizes that the efforts of all of the participants will help determine the overall success of the Fund. As such, each participant, unless otherwise noted below, is eligible for an incentive based on the absolute and relative performance of the Fund as noted below.

Performance versus the Policy Index (Absolute Performance) – 75.0% of Total Fund Incentive

The policy index is a customized index established as a benchmark for the Fund that is based on the overall asset allocation of the Fund. It is established each year in conjunction with the asset allocation approved by the Board. The performance of the Fund, gross of fees, will be compared to the policy index on a one-, three-, and five-year basis. To the extent that the Fund meets or exceeds the policy index, the following are the percentages earned by year:

- 1-Year Total Fund performance exceeds policy index 20.0%
- 3-Year Total Fund performance exceeds policy index 30.0%
- 5-Year Total Fund performance exceeds policy index 50.0%

Performance versus Peer Universe (Relative Performance) – 25.0% of Total Fund Incentive

The performance of the Total Fund, net of fees, for the one-, three-, and five-year periods ending June 30 will be compared to a representative universe of public defined benefit pension plans. To the extent that the Fund outperforms the median of the representative universe, the following are the percentages earned by year:

- 1-Year Total Fund performance exceeds median 20.0%
- 3-Year Total Fund performance exceeds median 30.0%
- 5-Year Total Fund performance exceeds median 50.0%

"Representative Peer Universe" is hereby defined as a peer universe of all of the defined benefit public pension funds generated from the Wilshire Compass total fund database two and one-half months after the close of the year. If the database does not have at least 50 funds for the relevant measurement periods, then reports should be run again over the next month until at least 50 funds have reported their performance. If after the next month 50 funds have not reported, then the results obtained after three and one-half months will be used and reported to the Board. For purposes of running these reports, Wilshire Associates, Inc. shall be responsible for providing the Fund the official final report on the comparison with the peer universe for all relevant time periods.

The Total Fund Incentive shall "build out" over the five-year period from the time the employee becomes eligible for this incentive as follows for both the absolute and relative incentives:

- Year 1 100.0% earned based on performance in Year 1
- Year 2 50.0% earned for one-year and two-year total fund returns
- Year 3 20.0% earned for one-year; 30.0% earned for two-year; and 50.0% earned for three-year total fund returns
- Year 4 20.0% earned for one-year; 30.0% earned for three-year; and 50.0% earned for four-year total fund returns
- Year 5 as specified in the current policy.

#### 2. Portfolio Level (Trading Level) Incentive

Portfolio managers will earn an incentive based on the relative performance of the portfolios they manager versus a pre-determined benchmark. Active portfolios are expected to exceed their benchmarks as described below. Passive, or Index, portfolios are expected to have returns within a pre-established basis point band (described below) as variations from the index returns being tracked may occur due to tracking errors, trading costs, and other factors. Unless otherwise noted in this plan, portfolio-level performance will be measured on a rolling three-year basis. The Internally Managed Alpha Generation Program, new portfolios, or new employees with less than a three-year history at the adoption of this policy, managers will be evaluated on actual performance to date. Incentives will be calculated based on a single year's performance in the first year and on two years' performance in the second year, until a three-year performance history has been established.

Individuals with oversight responsibility of the external public market managers, the Public Market Emerging Investment Manager Program, private real estate, and private markets will earn an incentive based on the net performance of the portfolios they oversee versus pre-determined benchmarks. Incentives for individuals with oversight responsibility of the external public market managers and less than a three-year history upon entrance into the incentive plan will build out as follows: Year 1 – 100.0% based on one-year performance; Year 2 – 50.0% based on the two-year performance, 50.0% based on one-year performance; Year 3 – as specified in the current policy. Incentives for the private real estate and private markets programs will be based on relative returns since inception unless otherwise specified.

Traders will earn an incentive based on trading performance compared against the median performance of trading desks as calculated by PLEXUS as well as their ability to minimize net losses due to trading errors, both measured annually. In addition, Traders also assist with the Internally Managed Alpha Generation Program and will be eligible for an incentive based on the performance of that program.

#### 3. <u>Supervisory Incentive</u>

Participants with supervisory responsibilities will be eligible to earn an incentive based on the percentage of the eligible participants within the supervisor's area of responsibility that earn their incentive payout based on portfolio level (trading level) incentives earned.

The qualitative component of performance is based on each eligible participant's overall contribution, considering results and behaviors, including the participant's overall professionalism, cooperation, teamwork, initiative, motivation, and willingness to help achieve individual, asset class, and Fund-level goals that may or may not be pre-assigned. This portion of a participant's incentive will be determined by the professional's immediate supervisor based on the participant's annual performance review.

The measures, standards, and maximum award levels are outlined on the following pages, by position.

#### **CHIEF INVESTMENT OFFICER**

The Chief Investment Officer position is responsible for the overall management and administration of the Fund's internal and external investment program.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 25.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Supervisory Incentive Incentive of 5.0% of base salary can be earned based on the performance of the individual managing directors in earning their portfolio level (trading level) quantitative incentives. The percentage of the supervisory incentive earned will be based on the summation of the following formula, by managing director: Percentage of supervisory incentive earned times 20%.
- 2. Qualitative Incentive Incentive of 20.0% of base salary can be earned based on annual review the CIO's performance by the Executive Director.

### MANAGING DIRECTOR OF EXTERNAL PUBLIC MARKETS, RISK, AND COMPLIANCE

This is a Managing Director level position in the Investment Office responsible for overseeing the Public Market Equity, Fixed Income, and Commodity asset classes of the Fund's investment program. The Managing Director of External Public Markets, Risk, and Compliance is responsible for working with the Chief Investment Officer in the development of the investment policies and procedures, in addition to supervising the Portfolio Managers of Managers, Senior Investment Analysts, and Compliance Officers. Work involves supervision of professional and support staff. Work is performed with a high degree of independence under the general direction of the Chief Investment Officer. The Managing Director of External Public Markets, Risk, and Compliance reports to the Chief Investment Officer and makes presentations to the Board of Trustees on investment performance and other related matters.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 20.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. External Public Market Manager Performance Incentive of 8.0% of base salary can be earned based on the net performance of each external public market manager (excluding Public Market Emerging Investment Manager managers) exceeding their benchmark (i.e. Russell 1000 Growth, Russell 2000 Value) for the past one-year and three-year periods. The expectation to earn 100.0% of the incentive is for the blended number of managers outperforming their benchmark to equal or exceed 60% over the one-year and three-year periods. Should the blended number be at or below 40.0%, the incentive earned would be 0.0%. In between 40.0% and 60.0%, a portion of the incentive would be earned. The following is the mathematical calculation of the percentage of incentive earned:
  - [(# of external public market managers exceeding their benchmark for the one-year and three-year measurement periods / total number of external public market managers for the one-year and three-year measurement periods) 40.0%] / 20.0%
    - o the resulting percentage is not to be less than 0% nor greater than 100.0%.

Note: The 20% in the denominator represents the width of the band whereby the incentive is scaled from 0.0% to 100.0% (60.0% - 40.0%). As such, at 40% or less of the managers outperforming their benchmark, 0.0% of the incentive will be earned and at 60.0% or more of the managers outperforming their benchmark, 100.0% of the incentive will be earned.

As an example, assume that there are 45 portfolios in the one-year period and 35 portfolios in the three-year period being measured. Of those, 20 outperform on a one-year basis and 24 outperform on a three-year basis. The calculation for the percentage of the incentive earned would be as follows:

(20 + 24) / (45 + 35) = 55.0% (blended percentage of managers outperforming their benchmark for the one-year and three-year periods)

55.0% - 40.0% / 20.0% = 75.0% of the incentive is earned

- c. Supervisory Incentive Incentive of 5.0% of base salary can be earned based on the performance of the Senior Investment Analyst: External Public Markets, Risk & Compliance and the Junior Compliance Officer in earning their External Public Market Manager Performance quantitative incentive. This will be based on the percentage of the External Public Market Manager Performance incentive earned by the Senior Investment Analyst: External Public Markets, Risk & Compliance and the Junior Compliance Officer.
- 2. Qualitative Incentive Incentive of 12.0% of base salary can be earned based on the annual review of the Managing Director of External Public Markets, Risk & Compliance's performance by the Chief Investment Officer.

### SENIOR INVESTMENT ANALYST: EXTERNAL PUBLIC MARKETS, RISK, AND COMPLIANCE

This is a Senior level position responsible for assisting the Managing Director of External Public Markets, Risk, and Compliance in managing and monitoring PSERS' external public market investment managers, assisting in external public market manager searches, completing site visits, for holding monthly conference calls with underperforming portfolio managers who have been placed on probation, overseeing the corporate governance process, completing special projects, and assisting the Compliance Officer.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. External Public Market Manager Performance Incentive of 13.0% of base salary can be earned based on the net performance of each external public market manager (excluding Public Market Emerging Investment Manager managers) exceeding their benchmark (i.e. Russell 1000 Growth, Russell 2000 Value) for the past one-year and three-year periods. The expectation to earn 100.0% of the incentive is for the blended number of managers outperforming their benchmark to equal or exceed 60.0% over the one-year and three-year periods. Should the blended number be at or below 40%, the incentive earned would be 0.0%. In between 40.0% and 60.0%, a portion of the incentive would be earned. The following is the mathematical calculation of the percentage of incentive earned:
  - [(# of external public market managers exceeding their benchmark for the one-year and three-year measurement periods / total number of external public market managers for the one-year and three-year measurement periods) 40.0%] / 20.0%
    - o the resulting percentage is not to be less than 0.0% nor greater than 100.0%.

Note: The 20.0% in the denominator represents the width of the band whereby the incentive is scaled from 0.0% to 100.0% (60.0% - 40.0%). As such, at 40% or less of the managers outperforming their benchmark, 0% of the incentive will be earned and at 60.0% or more of the managers outperforming their benchmark, 100.0% of the incentive will be earned.

As an example, assume that there are 45 portfolios in the one-year period and 35 portfolios in the three-year period being measured. Of those, 20 outperform on a one-year basis and 24 outperform on a three-year basis. The calculation for the percentage of the incentive earned would be as follows:

(20 + 24) / (45 + 35) = 55.0% (blended percentage of managers outperforming their benchmark for the one-year and three-year periods) 55.0% - 40.0% / 20.0% = 75.0% of the incentive is earned

2. Qualitative Incentive – Incentive of 10.0% of base salary can be earned based on the annual review of the Senior Investment Analyst's performance by the Managing Director of External Public Markets, Risk & Compliance.

#### JUNIOR COMPLIANCE OFFICER

This is a Junior level position responsible for assisting the Managing Director of External Public Markets, Risk, and Compliance and Senior Investment Analyst: External Public Markets, Risk, and Compliance in monitoring PSERS' internal and external public markets investment programs for compliance with the investment objectives and guidelines.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 6.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. External Public Market Manager Performance Incentive of 9.0% of base salary can be earned based on the net performance of each external public market manager (excluding Public Market Emerging Investment Manager managers) exceeding their benchmark (i.e. Russell 1000 Growth, Russell 2000 Value) for the past one-year and three-year periods. The expectation to earn 100.0% of the incentive is for the blended number of managers outperforming their benchmark to equal or exceed 60.0% over the one-year and three-year periods. Should the blended number be at or below 40%, the incentive earned would be 0.0%. In between 40.0% and 60.0%, a portion of the incentive would be earned. The following is the mathematical calculation of the percentage of incentive earned:
  - [(# of external public market managers exceeding their benchmark for the one-year and three-year measurement periods / total number of external public market managers for the one-year and three-year measurement periods) 40.0%] / 20.0%
    - o the resulting percentage is not to be less than 0.0% nor greater than 100.0%.

Note: The 20.0% in the denominator represents the width of the band whereby the incentive is scaled from 0.0% to 100.0% (60.0% - 40.0%). As such, at 40.0% or less of the managers outperforming their benchmark, 0.0% of the incentive will be earned and at 60.0% or more of the managers outperforming their benchmark, 100.0% of the incentive will be earned.

As an example, assume that there are 45 portfolios in the one-year period and 35 portfolios in the three-year period being measured. Of those, 20 outperform on a one-year basis and 24 outperform on a three-year basis. The calculation for the percentage of the incentive earned would be as follows:

(20 + 24) / (45 + 35) = 55.0% (blended percentage of managers outperforming their benchmark for the one-year and three-year periods) 55.0% - 40.0% / 20.0% = 75.0% of the incentive is earned

2. Qualitative Incentive – Incentive of 10.0% of base salary can be earned based on the annual review of the Junior Compliance Officer's performance by the Managing Director of External Public Markets, Risk & Compliance.

#### MANAGING DIRECTOR OF EQUITIES

This Managing Director level position oversees and supervises all PSERS internally managed equity portfolios and the Internally Managed Alpha Generation Program (a cross-index return enhancement program). In addition, this position is responsible for the development of investment strategies for the PSERS internally managed equity portfolios. The Managing Director of Equities oversees the management of all PSERS internal equity portfolios with the objective of meeting established relative performance goals while ensuring compliance with specific investment guidelines for each portfolio. Additionally, the Managing Director of Equities recommends and initiates special studies and projects which will improve PSERS investment policies, practices, and guidelines.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 20.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 10.0% of base salary can be earned based on the performance of the internally managed S&P 500 Index Portfolio. This portfolio is expected to track the return of the S&P 500 Index within a band of +10 basis points and -10 basis points. A dollar-weighted incentive will be earned for performance within the band. Because this portfolio is not designed to maximize returns, performance that is above or below the band is considered unsatisfactory and no payout will be made for performance outside the parameters established above. Full payout of the incentive will be earned when the portfolio performs in accordance with the parameters established above.
- c. Portfolio Level Incentive Incentive of 10.0% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.
- d. Supervisory Incentive Incentive of 5.0% of base salary can be earned based on the performance of the individual portfolio managers in earning their portfolio level quantitative incentives. The percentage of the supervisory incentive earned will be based on the summation of the following formula, by portfolio manager: Percentage of portfolio level incentive earned (excluding Total Fund incentive) times 50.0%.

The	total	maximum	incentive	for	this	position	will	not	exceed	45.0%	of base	salary.

### PORTFOLIO MANAGER: S&P 400 INDEX, S&P 600 INDEX, AND THE INTERNALLY MANAGED ALPHA GENERATION PROGRAM

This Portfolio Manager level position is responsible for managing the PSERS S&P 400 Index and PSERS S&P 600 Index portfolios and generating ideas for the Internally Managed Alpha Generation Program in accordance with Board established investment objectives and guidelines. Portfolio management includes but is not limited to researching and analyzing data, initiating all purchase and sale transactions, electing and monitoring of corporate actions, reviewing daily US cash balances, calculation and accountability for portfolio performances, reconciliation functions and documentation.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 16.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 15.0% of base salary can be earned based on the performance of the internally managed S&P 400 Index and S&P 600 portfolios.

The S&P 400 Index portfolio is expected to track the return of the S&P 400 Index within a band of +25 basis points and -25 basis points. A dollar-weighted incentive will be paid for performance within the band. Because this portfolio is not designed to maximize returns, performance that is above or below the band is considered unsatisfactory.

The S&P 600 Index portfolio is expected to track the return of the S&P 600 Index within a band of +35 basis points and -35 basis points. A dollar-weighted incentive will be paid for performance within the band. Because this portfolio is not designed to maximize returns, performance that is above or below the band is considered unsatisfactory.

Full payout of the incentive will be earned when both portfolios perform in accordance with the parameters established above. Otherwise, a dollar-weighted incentive, based on the quarterly market values of the portfolios, will be paid for the portfolios meeting its established performance parameters.

c. Portfolio Level Incentive – Incentive of 9.0% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

### PORTFOLIO MANAGER: MSCI ALL-COUNTRY WORLD EX. U.S. INDEX AND INTERNALLY MANAGED ALPHA GENERATION PROGRAM

This Portfolio Manager level position is responsible for managing the PSERS MSCI All-Country World ex. U.S. Index portfolio and generating ideas for the Internally Managed Alpha Generation Program in accordance with Board established investment objectives and guidelines. Portfolio management includes but is not limited to researching and analyzing data, initiating all purchase and sale transactions, electing and monitoring of corporate actions, reviewing daily US cash balances, calculation and accountability for portfolio performances, reconciliation functions and documentation.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 16.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 15.0% of base salary can be earned based on the performance of the internally managed MSCI All-Country World ex. U.S. Index.

The MSCI All-Country World ex. U.S. Index Portfolio is expected to track the return of the MSCI All-Country World ex. U.S. Index within a band of +60 basis points and -10 basis points. A dollar-weighted incentive will be paid for performance within the band. Because this portfolio is not designed to maximize returns, performance that is above or below the band is considered unsatisfactory.

Full payout of the incentive will be earned when the portfolio performs in accordance with the parameters established above.

c. Portfolio Level Incentive – Incentive of 9.0% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### MANAGING DIRECTOR OF FIXED INCOME

This Managing Director level position supervises the other PSERS Fixed Income Department portfolio managers and the support staff of the fixed income division. In addition, this position is responsible for the development of investment strategies for the PSERS internally managed fixed income portfolios. This includes conducting credit research; analyzing and interpreting economic data; designing portfolio structure; security selection; and, trade execution. The Managing Director of Fixed Income should oversee the management of all the internally managed fixed income portfolios with the objective of providing for consistent positive excess performance relative to an established benchmark and also to ensure compliance with the specific investment guidelines for each portfolio.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 20.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 17.0% of base salary can be earned based on the performance of the internally managed U.S. Core Fixed Income Portfolio. The U.S. Core Fixed Income Portfolio is an actively managed fixed income portfolio that is expected to outperform the Lehman Brothers (LB) Aggregate Bond Index over the long term by 30 basis points or more. The maximum incentive will be paid if the excess return equals or exceeds 30 basis points. The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.
- c. Portfolio Level Incentive Incentive of 1.5% of base salary can be earned based on the performance of the internally managed LIBOR-Plus Short-Term Investment Pool. The LIBOR-Plus Short-Term Investment Pool is an actively managed fixed income portfolio that is expected to track the return of the 3-month LIBOR Total Return Index within a band of +10 basis points and -10 basis points. A dollar-weighted incentive will be paid for performance within the band. Because this portfolio is not designed to maximize returns, performance that is above or below the band is considered unsatisfactory and no payout will be made for performance outside the parameters established above. Full payout of the incentive will be earned when the portfolio performs in accordance with the parameters established above.
- d. Portfolio Level Incentive Incentive of 1.5% of base salary can be earned based on the performance of the internally managed Healthcare Portfolio. The Healthcare Portfolio is an actively managed domestic fixed income portfolio that is expected to outperform Treasury Bills by 50 basis points. The

maximum incentive will be paid if the excess return equals or exceeds 50 basis points. The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

Full payout of the incentive will be earned when all of the portfolios perform in accordance with the parameters established above. Otherwise, a dollar-weighted incentive, based on quarterly market values of the portfolios, will be paid for the portfolios meeting its established performance parameters.

e. Supervisory Incentive – Incentive of 5.0% of base salary can be earned based on the performance of the individual portfolio managers in earning their portfolio level quantitative incentives. The percentage of the supervisory incentive earned will be based on the summation of the following formula, by portfolio manager/analyst: Percentage of portfolio level incentive earned times 50.0%.

#### PORTFOLIO MANAGER: S&P 500 ENHANCED INDEX

This Portfolio Manager level position requires the incumbent to assume the responsibility for all phases of portfolio management with regard to the portfolio and other related assignments which have been or may be assigned by the Managing Director of Fixed Income. The position requirements include effective ongoing analysis of credit criteria regarding current as well as potential security selection through the utilization of primary research sources available to the Fixed Income Group. Management of structural components including security selection, asset mix, maturity and duration fine-tuning as well as the proper balance of ratings by the major rating agencies. Knowledge of hedging techniques will be required in the management of certain portfolio situations. Additionally, compliance requirements must be monitored at all times to keep the portfolio within the mandated guidelines.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 16.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 24.0% of base salary can be earned based on the performance of the internally managed Enhanced S&P 500 Index Portfolio. The maximum incentive will be paid if the excess return equals or exceeds 30 basis points. The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### PORTFOLIO MANAGER - TIPS ACCOUNT

This Portfolio Manager level position requires the incumbent to assume the responsibility for all phases of portfolio management with regard to the portfolio and other related assignments which have been or may be assigned by the Managing Director of Fixed Income. The position requirements include effective ongoing analysis of credit criteria regarding current as well as potential security selection through the utilization of primary research sources available to the Fixed Income Group. Management of structural components including security selection, asset mix, maturity and duration fine-tuning as well as the proper balance of ratings by the major rating agencies. Knowledge of hedging techniques will be required in the management of certain portfolio situations. Additionally, compliance requirements must be monitored at all times to keep the portfolio within the mandated guidelines.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 16.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive –Incentive of 24.0% of base salary can be earned based on the performance of the internally managed TIPS Portfolio. The maximum incentive will be paid if the excess return versus the Lehman TIPS Index equals or exceeds 30 basis points. The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### MANAGING DIRECTOR OF TRADING AND DERIVATIVE STRATEGIES

This Managing Director level position is responsible for supervising all equities, futures, options, and currency trading activity that takes place on PSERS' Trading Desk. This includes single order and program trades for all internal domestic equity portfolio managers and external domestic equity managers. This position is responsible for developing strategies and executing all transition trades when manager are hired and terminated. This position is also responsible for training staff and developing trading strategies.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 20.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Trading Level Incentive Incentive of 7.5% of base salary can be earned based on the performance of trading desk in executing trades for the internal accounts, external accounts, and liquidation accounts. The payout will be equally weighted among the internal accounts, the external accounts, and the liquidation accounts. The PLEXUS scores result in the following payout for each account:

PLEXUS Score	PLEXUS ranking	Payout of Base Salary
50+	Top ½ Universe	2.50%

- c. Trading Level Incentive This position will also be eligible for an additional incentive payout of 7.50% of base salary, payable if the net loss on trading errors does not exceed 0.01% of the total principal on the stock traded during the fiscal year. If the net loss on trading errors is greater than or equal to 0.01% of the total principal stock on the stock traded, no incentive will be paid.
- d. Portfolio Level Incentive Incentive of 5.0% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

e. Supervisory Incentive – Incentive of 5.0% of base salary can be earned based on the performance of the individual traders in earning their trading and portfolio level quantitative incentives. The percentage of the supervisory incentive earned will be based on the summation of the following formula, by trader: Percentage of trading/portfolio level incentive earned times 33.34%.

#### SENIOR EQUITY AND DERIVATIVES TRADER

This Senior level position is responsible for executing trades for all PSERS' internal and external portfolios. An expertise in equities, futures, options, and currencies in needed. The ability to make investment decisions for high quantity and large dollar trades is necessary. The Trader must be able to analyze and monitor the financial markets and all economic data to make intelligent investment decisions. The Trader must be an expert in all venues of trading including manual executions from brokers, multiple electronic trading systems, and crossing networks to determine the most cost efficient means to complete a trade. The focus is on lowering overall market impact of securities transactions.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Trading Level Incentive Incentive of 9.0% of base salary can be earned based on the performance of trading desk in executing trades for the internal accounts, external accounts, and liquidation accounts. The payout will be equally weighted among the internal accounts, the external accounts, and the liquidation accounts. The PLEXUS scores result in the following payout for each account:

PLEXUS Score	PLEXUS ranking	Payout of Base Salary
50+	Top ½ Universe	3.00%

- c. Trading Level Incentive This position will also be eligible for an additional incentive payout of 8.00% of base salary, payable if the net loss on trading errors does not exceed 0.01% of the total principal on the stock traded during the fiscal year. If the net loss on trading errors is greater than or equal to 0.01% of the total principal stock on the stock traded, no incentive will be paid.
- d. Portfolio Level Incentive Incentive of 6.0% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### INTERMEDIATE EQUITY TRADER

This Intermediate level position is responsible for executing trades for all PSERS' internal and external portfolios. An expertise in equities, futures, options, and currencies in needed. The ability to make investment decisions for high quantity and large dollar trades is necessary. The Trader must be able to analyze and monitor the financial markets and all economic data to make intelligent investment decisions. The Trader must be an expert in all venues of trading including manual executions from brokers, multiple electronic trading systems, and crossing networks to determine the most cost efficient means to complete a trade. The focus is on lowering overall market impact of securities transactions.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 9.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Trading Level Incentive Incentive of 9.0% of base salary can be earned based on the performance of trading desk in executing trades for the internal accounts, external accounts, and liquidation accounts. The payout will be equally weighted among the internal accounts, the external accounts, and the liquidation accounts. The PLEXUS scores result in the following payout for each account:

PLEXUS Score	PLEXUS ranking	Payout of Base Salary
50+	Top ½ Universe	3.00%

- c. Trading Level Incentive This position will also be eligible for an additional incentive payout of 7.50% of base salary, payable if the net loss on trading errors does not exceed 0.01% of the total principal on the stock traded during the fiscal year. If the net loss on trading errors is greater than or equal to 0.01% of the total principal stock on the stock traded, no incentive will be paid.
- d. Portfolio Level Incentive Incentive of 4.5% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### **JUNIOR EQUITY TRADER**

This Junior level position is responsible for reconciling all equity, futures, options, and currency trades, both domestic and international. A strong background with bank statements, accounting, and settlement procedures is necessary. Must develop an understanding of equity markets, electronic trading systems, and equity trading. Strong organizational skills and attention to detail is essential as the person is required to keep thorough records of trades, correspondence with the custodian bank, brokers, portfolio managers, and other trading desks.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 6.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Trading Level Incentive Incentive of 9.0% of base salary can be earned based on the performance of trading desk in executing trades for the internal accounts, external accounts, and liquidation accounts. The payout will be equally weighted among the internal accounts, the external accounts, and the liquidation accounts. The PLEXUS scores result in the following payout for each account:

PLEXUS Score	PLEXUS ranking	Payout of Base Salary
50+	Top ½ Universe	3.00%

- c. Trading Level Incentive This position will also be eligible for an additional incentive payout of 7.50% of base salary, payable if the net loss on trading errors does not exceed 0.01% of the total principal on the stock traded during the fiscal year. If the net loss on trading errors is greater than or equal to 0.01% of the total principal stock on the stock traded, no incentive will be paid.
- d. Portfolio Level Incentive Incentive of 2.5% of base salary can be earned based on the performance of the Internally Managed Alpha Generation Program. The Program will be measured on the excess return of all internally managed index portfolios (NAV weighted average) generated as a result of approved Program strategies. The maximum incentive will be paid if the excess return equals or exceeds 0.30 times the standardized risk (as calculated using Wilshire's formula). The incentive will be scaled from zero to 100% based on the excess return as a percentage of the maximum excess return required to earn the maximum incentive. At zero excess return or less, no incentive will be paid.

#### MANAGING DIRECTOR OF PRIVATE MARKETS

This Managing Director level position is responsible for managing, supervising, and monitoring PSERS' Private Markets program which includes real estate, venture capital, private debt, private equity, stock distributions, and the Public Market Emerging Investment Manager Program. This responsibility entails supervising the portfolio managers and analysts; monitoring and evaluating the investment performance of external investment managers, including determining and recommending investment objectives and standards by which investment performance may be measured; providing the portfolio managers and analysts with analytical and strategic support in the development of their portfolios; evaluating investment strategies, trends in data which affect the Fund's Private Markets Program; direct management of active internal portfolios; recommending to the CIO, the Finance Committee, and the Board certain changes and alternatives to the investment guidelines and in the allocation of alternative assets; developing and maintaining comprehensive automated systems for investment analysis and tracking.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 20.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 20.0% of base salary can be earned based on the performance of the private markets portfolio. The private markets portfolio is expected to exceed the median performance of the venture capital/private equity industry listed in the Investment Benchmarks Reports on Venture Capital and Buy-outs produced by Venture Economics. The benchmark will be a weighted average scaled between the median and the 40<sup>th</sup> percentile return (with the highest percentile return being 1 and the lowest percentile return being 100) of the type of fund and vintage year of PSERS' The incentive will be scaled from zero to 100% based on the percentile ranking of the private markets portfolio. At median return or less, no incentive will be paid. If the percentile ranking is between the median and 40<sup>th</sup> percentile return, a pro-rata share of the maximum incentive will be paid. For example, if the percentile ranking of the private markets portfolio is at the 47<sup>th</sup> percentile, then 30% of the incentive will have been earned [(50-47)/(50-40)]. Performance at the 40<sup>th</sup> percentile or better will earn 100% of the eligible incentive. Performance will be measured on a calendar year basis due to the timing of the Venture Economics report. Payouts will be made after the close of the fiscal year.

c. Supervisory Incentive – Incentive of 5.0% of base salary can be earned based on the performance of the individuals supervised by the Managing Director of Private Markets in earning their portfolio level quantitative incentives. The percentage of the supervisory incentive earned will be based on the summation of the following formula, by portfolio manager: Percentage of portfolio level incentive earned times 20%.

#### SENIOR INVESTMENT ANALYST: REAL ESTATE PORTFOLIO MANAGEMENT

This Senior level position is responsible for processing capital calls and fees for private equity, venture capital, real estate, and private debt partnerships within the investment portfolio. This role includes the verification of all calculations applicable to PSERS' portion of the capital call. In addition, this position is also accountable for the asset management of the majority of the direct real estate portfolio of PSERS.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 23.0% of base salary can be earned based on the performance of the total real estate partnership portfolio. The incentive will be based on the total real estate partnership portfolio, on a weighted venture year basis, exceeding the National Council of Real Estate Investment Fiduciaries (NCREIF) Index. Payouts will be scaled between the NCREIF Index and the NCREIF Index plus 100 basis points from 0% to 100% of the full amount. Performance will be measured on a fiscal year 3rd quarter to 3rd quarter basis due to the timing of the NCREIF report.

Portions of the incentive payouts for this position will be calculated on the calendar year, but paid after the fiscal year end.

#### SENIOR INVESTMENT ANALYST: REAL ESTATE PARTNERSHIP PORTFOLIO

This Senior level position is responsible for analyzing real estate and private debt investment proposals for Fund investment consideration, coordinating the process to secure Board approval and negotiating the partnership legal documents for the Fund's benefit. Responsibilities also include monitoring the Fund's real estate and private debt partnership investments by reviewing the Annual Financial Statements and Quarterly Reports for accuracy, ensuring compliance with the limited partnership agreement or other legal documents, participating in partnership investor meetings and teleconferences, reviewing partnership distributions, capital calls, and valuations for accuracy, and resolving problems relating to any partnership issues.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 23.0% of base salary can be earned based on the performance of the total real estate partnership portfolio. The incentive will be based on the total real estate partnership portfolio exceeding the National Council of Real Estate Investment Fiduciaries (NCREIF) Index on a weighted venture year basis. Payouts will be scaled between the NCREIF Index and the NCREIF Index plus 100 basis points from 0% to 100% of the full amount. Performance will be measured on a fiscal year 3rd quarter to 3rd quarter basis due to the timing of the NCREIF report.

### SENIOR INVESTMENT ANALYST: PRIVATE EQUITY/VENTURE CAPITAL/PRIVATE DEBT (1)

This Senior level position is responsible for analyzing international and domestic private equity, venture capital, and/or private debt investment proposals for Fund investment consideration, coordinating the process to secure Board approval and negotiating the partnership legal documents for the Fund's benefit. Responsibilities also include monitoring the Fund's international and domestic private equity, venture capital, and/or private debt partnership investments by reviewing the Annual Financial Statements and Quarterly Reports for accuracy, ensuring compliance with the limited partnership agreement or other legal documents, participating in Advisory Board meetings, partnership investor meetings and teleconferences, reviewing partnership distributions, capital calls, and valuations for accuracy, and resolving problems relating to any partnership issues.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 23.0% of base salary can be earned based on the performance of the private markets portfolio. The private markets portfolio is expected to exceed the median performance of the venture capital/private equity industry listed in the Investment Benchmarks Reports on Venture Capital and Buy-outs produced by Venture Economics. The benchmark will be a weighted average scaled between the median and the 40<sup>th</sup> percentile return (with the highest percentile return being 1 and the lowest percentile return being 100) of the type of fund and vintage year of PSERS' The incentive will be scaled from zero to 100% based on the percentile ranking of the private markets portfolio. At median return or less, no incentive will be paid. If the percentile ranking is between the median and 40<sup>th</sup> percentile return, a pro-rata share of the maximum incentive will be paid. For example, if the percentile ranking of the private markets portfolio is at the 47<sup>th</sup> percentile, then 30% of the incentive will have been earned [(50-47)/(50-40)]. Performance at the 40<sup>th</sup> percentile or better will earn 100% of the eligible incentive. Performance will be measured on a calendar year basis due to the timing of the Venture Economics report. Payouts will be made after the close of the fiscal year.

### SENIOR INVESTMENT ANALYST: PRIVATE EQUITY/VENTURE CAPITAL/PRIVATE DEBT (2)

This Senior level position is responsible for analyzing international and domestic private equity, venture capital, and/or private debt investment proposals for Fund investment consideration, coordinating the process to secure Board approval and negotiating the partnership legal documents for the Fund's benefit. Responsibilities also include monitoring the Fund's international and domestic private equity, venture capital, and/or private debt partnership investments by reviewing the Annual Financial Statements and Quarterly Reports for accuracy, ensuring compliance with the limited partnership agreement or other legal documents, participating in Advisory Board meetings, partnership investor meetings and teleconferences, reviewing partnership distributions, capital calls, and valuations for accuracy, and resolving problems relating to any partnership issues.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 23.0% of base salary can be earned based on the performance of the private markets portfolio. The private markets portfolio is expected to exceed the median performance of the venture capital/private equity industry listed in the Investment Benchmarks Reports on Venture Capital and Buy-outs produced by Venture Economics. The benchmark will be a weighted average scaled between the median and the 40<sup>th</sup> percentile return (with the highest percentile return being 1 and the lowest percentile return being 100) of the type of fund and vintage year of PSERS' The incentive will be scaled from zero to 100% based on the percentile ranking of the private markets portfolio. At median return or less, no incentive will be paid. If the percentile ranking is between the median and 40<sup>th</sup> percentile return, a pro-rata share of the maximum incentive will be paid. For example, if the percentile ranking of the private markets portfolio is at the 47<sup>th</sup> percentile, then 30% of the incentive will have been earned [(50-47)/(50-40)]. Performance at the 40<sup>th</sup> percentile or better will earn 100% of the eligible incentive. Performance will be measured on a calendar year basis due to the timing of the Venture Economics report. Payouts will be made after the close of the fiscal year.

# SENIOR INVESTMENT ANALYST: PUBLIC MARKET EMERGING INVESTMENT MANAGER PROGRAM AND PRIVATE EQUITY/VENTURE CAPITAL/PRIVATE DEBT

This Senior level position is responsible for the monitoring of investment managers; performance evaluation and reporting; conducting interviews and database management for PSERS Public Market Emerging Investment Manager Program. Also responsible for analyzing venture capital investment proposals for Fund investment considers, coordinating the process to secure Board approval and negotiating the partnership legal documents for the Fund's benefit. Responsibilities also include monitoring the Fund's venture capital partnership investments by reviewing the Annual Financial Statements and Quarterly Reports for accuracy, ensuring compliance with the limited partnership agreement or other legal documents, participating in Advisory Board meetings, partnership investor meetings and teleconferences, reviewing partnership distributions, capital calls, and valuations for accuracy, and resolving problems relating to any partnership issues.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 12.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 12.0% of base salary can be earned based on the net performance of each external public market emerging investment manager exceeding their benchmark (i.e. Russell 1000 Growth, Russell 2000 Value) for the past one-year and three-year periods. The expectation to earn 100% of the incentive is for the blended number of public market emerging investment managers outperforming their benchmark to equal or exceed 60% over the one-year and three-year periods. Should the blended number be below 60%, a portion of the incentive would be earned. The following is the mathematical calculation of the percentage of incentive earned:
  - [(# of external emerging investment managers exceeding their benchmark for the one-year and three-year measurement periods / total number of external emerging investment managers for the one-year and three-year measurement periods) \* 1.667
    - o the resulting percentage is not to be greater than 100%.

**Note**: The reason for using a 1.667 multiplier is to acknowledge that fact that the managers will experience down cycles. The expectation for receiving 100% of this incentive will be that 60% or more of the managers exceed their respective policy benchmarks. The multiplier was arrived at using the following formula: 1/0.60=1.667.

c. Portfolio Level Incentive – Incentive of 11.0% of base salary can be earned based on the performance of the private markets portfolio. The private markets portfolio is expected to exceed the median performance of the venture capital/private equity industry listed in the Investment Benchmarks Reports on Venture Capital and Buy-outs produced by Venture Economics. The benchmark will be a weighted average scaled between the median and the 40<sup>th</sup> percentile return (with the highest percentile return being 1 and the lowest percentile return being 100) of the type of fund and vintage year of PSERS' The incentive will be scaled from zero to 100% based on the percentile ranking of the private markets portfolio. At median return or less, no incentive will be paid. If the percentile ranking is between the median and 40<sup>th</sup> percentile return, a pro-rata share of the maximum incentive will be paid. For example, if the percentile ranking of the private markets portfolio is at the 47<sup>th</sup> percentile, then 30% of the incentive will have been earned [(50-47)/(50-40)]. Performance at the 40<sup>th</sup> percentile or better will earn 100% of the eligible incentive. Performance will be measured on a calendar year basis due to the timing of the Venture Economics report. Payouts will be made after the close of the fiscal year.

#### JUNIOR INVESTMENT ANALYST: PRIVATE EQUITY/VENTURE CAPITAL/PRIVATE DEBT

This Junior level position is responsible for the processing of capital calls and fees for private equity, venture capital, real estate, and private debt partnerships within the investment portfolio of the Fund. This role includes the verification of all calculations applicable to PSERS' portion of the capital call. It also involves the maintenance and reconciliation functions of the private equity/venture capital, real estate, and private debt databases. This position is responsible for the market pricing reporting function involved with the private placements within the real estate portfolio as well as maintaining the private equity/venture capital, real estate, and private debt partnership market values. This position is responsible for updating the databases with the partnerships' portfolio investments. Quarterly reporting and reconciliation processes are performed between PSERS, Portfolio Advisors, and Wilshire Associates.

This position is also responsible for attending the Advisory Board meetings, partnership investor meetings and teleconferences when there are scheduling conflicts with other PSERS staff that would normally attend these events for the closed-end real estate, private equity, venture capital, and private debt funds.

This position is eligible for the following incentives:

#### 1. Quantitative Incentives

- a. Total Fund Incentive Incentive of 6.0% of base salary can be earned based on the absolute and relative performance of the total fund.
- b. Portfolio Level Incentive Incentive of 9.0% of base salary can be earned based on the performance of the total real estate partnership portfolio. The incentive will be based on the total real estate partnership portfolio exceeding the National Council of Real Estate Investment Fiduciaries (NCREIF) Index on a weighted venture year basis. Payouts will be scaled between the NCREIF Index and the NCREIF Index plus 100 basis points from 0% to 100% of the full amount. Performance will be measured on a fiscal year 3rd quarter to 3rd quarter basis due to the timing of the NCREIF report.
- c. Portfolio Level Incentive Incentive of 10.0% of base salary can be earned based on the performance of the private markets portfolio. The private markets portfolio is expected to exceed the median performance of the venture capital/private equity industry listed in the Investment Benchmarks Reports on Venture Capital and Buy-outs produced by Venture Economics. The benchmark will be a weighted average scaled between the median and the 40<sup>th</sup> percentile return (with the highest percentile return being 1 and the lowest percentile return being 100) of the type of fund and vintage year of PSERS' Funds. The incentive will be scaled from zero to 100% based on the percentile ranking of the private markets portfolio. At median return or less, no incentive will be paid. If the percentile ranking is between the median and

40<sup>th</sup> percentile return, a pro-rata share of the maximum incentive will be paid. For example, if the percentile ranking of the private markets portfolio is at the 47<sup>th</sup> percentile, then 30% of the incentive will have been earned [(50-47)/(50-40)]. Performance at the 40<sup>th</sup> percentile or better will earn 100% of the eligible incentive. Performance will be measured on a calendar year basis due to the timing of the Venture Economics report. Payouts will be made after the close of the fiscal year.

#### 3. PERFORMANCE CALCULATION

A third party who is independent from the Investment Office selected by the Fund will be responsible for calculating and reporting performance results annually. In several cases, however, performance data from other industry sources will be provided to this third party for processing and final reporting. Performance of the equity index managers will be based on S&P reported results. Performance of the private markets managers will be based on Venture Economics reported results for private debt/private equity/venture capital and the NCREIF Index for private real estate.

#### 4. COMMUNICATION

The Chief Investment Officer will present at least semi-annual reports to the Finance Committee to coincide with the close of the calendar year and the close of the fiscal year, highlighting manager performance relative to the incentive criteria established for each asset class, and also provide a professional opinion as to reasons for any performance that is below standard.

#### 5. IMPLEMENTATION

Nothing contained herein shall act or be construed to restrict the Board's authority and right, at anytime and for any lawful reason, to promote, demote, reassign, reclassify, or determine the eligibility to participate in or terminate from employment, any member of the Investment Staff who is eligible for or participates in the Investment Office Incentive Compensation Plan. Moreover, no contract rights or conditions of employment are granted, intended, or implied by the provisions of the Investment Office Incentive Compensation Plan and any guidelines implementing the same, nor are any employees subject to or eligible to participate in the Investment Office Incentive Compensation Plan intended to be third party beneficiaries thereof. Finally, the Board reserves the right to change the terms and provisions of the Investment Office Incentive Plan, provided that said changes shall not divest a participant in the Plan of any incentives earned prior to the effective date of the amendment.

## PSERS Proposed Changes to the Investment Office Incentive Compensation Plan for 2007-2008

General Changes to Plan	
Revised Separation section on page 2 to provide for a prorata share of an employees incentive if the employee separates from service due to retirement or death.  Employees who resign for other purposes will forfeit any payout for that plan year  Added new position level – portfolio manager	3. Revised the target incentive levels for Managing Directors and added target incentive level for portfolio managers. Portfolio managers were set at 5% above Senior Level staff (40%) while Managing Directors were set 5% above Portfolio Managers (45%)

Position	Specific Changes
Chief Investment Officer	No changes were made.
Managing Director of External Public Markets, Risk, and Compliance	Total fund incentive increased from 18.0% to 20.0%     Portfolio level incentive increased from 5.0% to 8.0%     Increased total maximum incentive from 40.0% to 45.0%
Senior Investment Analyst: External Public Markets, Risk, and Compliance	<ol> <li>Total fund incentive increased from 10.5% to 12.0%</li> <li>Portfolio level incentive increased from 9.5% to 13.0%.</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Junior Compliance Officer	Decreased total fund incentive from 7.5% to 6.0%     Increased portfolio level incentive from 7.5% to 9.0%
Managing Director of Equities	<ol> <li>Total fund incentive increased from 18.0% to 20.0%</li> <li>Portfolio level incentive for internally managed alpha generation program decreased to 7.0% from 10.0%</li> <li>Increased total maximum incentive from 40.0% to 45.0%</li> </ol>
Portfolio Manager: S&P 500 Index	Employee retired; no need to hold position incentive
Portfolio Manager: S&P 400 Index, 600 Index, & Internally Managed Alpha Generation Program	<ol> <li>Total fund incentive increased from 14.0% to 16.0%</li> <li>Portfolio level incentive for internally managed alpha generation program increased from 6.0% to 9.0%</li> <li>Increased total maximum incentive from 35.0% to 40.0%</li> </ol>

Portfolio Manager: MSCI ACW ex. U.S. Index & Internally Managed Alpha Generation Program	<ol> <li>Total fund incentive increased from 14.0% to 16.0%</li> <li>Portfolio level incentive for internally managed alpha generation program increased from 6.0% to 9.0%</li> <li>Increased total maximum incentive from 35.0% to 40.0%</li> </ol>
Managing Director of Fixed Income	<ol> <li>Total fund incentive increased from 18.0% to 20.0%</li> <li>Portfolio level incentive for managing U.S. Core Fixed Income portfolio set at 17.0%.</li> <li>Added portfolio level incentive for managing LIBOR-Plus Short-Term Investment Pool set at 1.5%.</li> <li>Portfolio level incentive for managing Healthcare Portfolio set at 1.5%</li> <li>(Note: Total portfolio level incentive increased from 17% to 20%. Portfolio level incentives, by portfolio, set based on the estimated time commitment to each portfolio.)</li> <li>Increased total maximum incentive from 40.0% to 45.0%</li> </ol>
Co-Portfolio Manager: Fixed Income	Employee retiring; no need to hold position incentive
Portfolio Manager: S&P 500 Enhanced Index	<ol> <li>Total fund incentive increased from 14.0% to 16.0%</li> <li>Portfolio level incentive increased from 21.0% to 24.0%</li> <li>Increased total maximum incentive from 35.0% to 40.0%</li> </ol>
Portfolio Manager: TIPS Account	<ol> <li>Total fund incentive increased from 10.5% to 16.0%</li> <li>Portfolio level incentive increased from 19.5% to 24.0%</li> <li>Increased total maximum incentive from 30.0% to 40.0%</li> </ol>
Managing Director of Trading and Derivative Strategies	<ol> <li>Total fund incentive increased from 18.0% to 20.0%</li> <li>Increased portfolio level incentive for the internally managed alpha generation program from 2.0% to 5.0%</li> <li>Increased total maximum incentive from 40.0% to 45.0%</li> </ol>
Senior Equity and Derivatives Trader	<ol> <li>Total fund incentive reduced from 14.0% to 12.0%</li> <li>Trading level incentive for performance versus PLEXUS increased from 7.5% to 9.0%</li> <li>Trading level incentive based on net loss on trading errors increased from 7.5% to 8.0%</li> </ol>

Intermediate Equity Trader	<ol> <li>Total fund incentive reduced from 10.5% to 9.0%</li> <li>Trading level incentive for performance versus PLEXUS increased from 7.5% to 9.0%</li> </ol>
Junior Equity Trader	<ol> <li>Total fund incentive reduced from 7.5% to 6.0%</li> <li>Trading level incentive for performance versus PLEXUS increased from 7.5% to 9.0%</li> </ol>
Managing Director of Private Markets	<ol> <li>Increased total fund incentive from 18.0% to 20.0%</li> <li>Increased portfolio level incentive from 17.0% to 20.0%</li> <li>Increased total maximum incentive from 40.0% to 45.0%</li> </ol>
Senior Investment Analyst: Real Estate Portfolio Management	<ol> <li>Increased total fund incentive from 10.5% to 12.0%</li> <li>Increased incentive based on partnership portfolio performance from 10.0% to 23.0%</li> <li>Eliminated portfolio level incentive based on controlling aggregate real estate budget since we have liquidated most of the direct real estate holdings</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Senior Investment Analyst: Real Estate Partnership Portfolio	<ol> <li>Increased total fund incentive from 10.5% to 12.0%</li> <li>Increased portfolio level incentive 19.5% to 23.0%</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Senior Investment Analyst: Private Equity/ Venture Capital/Private Debt(1)	<ol> <li>Increased total fund incentive from 10.5% to 12.0%</li> <li>Increased portfolio level incentive from 19.5% to 23.0%</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Senior Investment Analyst: Private Equity/ Venture Capital/Private Debt(2)	<ol> <li>Increased total fund incentive from 10.5% to 12.0%</li> <li>Increased portfolio level incentive from 19.5% to 23.0%</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Senior Investment Analyst: Public Market Emerging Investment Manager Program and Private Equity/Venture Capital/Private Debt	<ol> <li>Increased total fund incentive from 10.5% to 12.0%</li> <li>Increased portfolio level incentive for private market performance from 7.5% to 11.0%</li> <li>Increased total maximum incentive from 30.0% to 35.0%</li> </ol>
Junior Investment Analyst: Private Equity/ Venture Capital/Private Debt	New junior level position