


Memorandum

To: STRS Ohio Board
From: Michael J. Nehf 
Date: March 17, 2016
Subject: **Berkshire Fund IX, L.P.**

In accordance with the Investment Staff Guidelines and Procedures concerning Private Equity, I am informing you of our plan to invest \$75 million (plus reasonable closing costs, expenses and reinvestment capital) in Berkshire Fund IX, L.P. (BF IX or the Fund) prior to our making any legally binding commitments to the Fund. The proposed \$5.0 billion fund will be managed by an affiliate of Boston Massachusetts-based Berkshire Partners (Berkshire or the Firm).

Berkshire IX will focus on investing in established middle-market companies which operate in the business services, consumer products, retail, manufacturing, transportation, and communications sectors. The Fund will principally focus on companies based in North America, but it can invest up to 35% of capital internationally. Target companies typically have enterprise values of \$200 million to \$2 billion and require \$50 million to \$500 million in equity.


Berkshire Partners was founded by Bradley M. Bloom, J. Christopher Clifford, Carl Ferenbach, Richard K. Lubin and Russell Epker in 1984. The co-founders previously worked together at Thomas H. Lee Partners. The co-founders were joined by Garth Greimann in 1989. Messrs. Bloom and Lubin remain active partners. Today, Berkshire employs over 100 professionals, including 46 dedicated private equity investment staff and nine Stockbridge professionals. Berkshire has 22 managing directors who have an average tenure of 16 years. Three of the managing directors are dedicated to Stockbridge (the marketable securities investment business of the Firm) and 16 managing directors are dedicated to the private equity strategy. The investment team is supported by three senior advisors (former managing directors) and six advisory directors. There has been no turnover among the senior investment team except for retirements since the Firm's inception. Berkshire operates out of a single office in Boston, Massachusetts.

The Firm has compiled a very impressive investment track record. Since the Firm's inception in 1984, it has made 151 investments with a total cost basis of \$7.9 billion. Combining the realized investments with the current value of the unrealized investments results in a total value of \$19.4 billion, a 2.5x multiple of cost.

The Firm's investor base is comprised of many well respected organizations. The list of limited partners that have backed and continue to support Berkshire include many Ivy League endowments and several fund-of-funds, including Commonfund Capital, which all have deep experience in the industry. Berkshire's loyal following has made accessing the Firm's funds very difficult. Over five years ago STRS Ohio identified Berkshire as its top manager prospect. Through an active outreach over the years, STRS Ohio was finally able to invest with one of the most difficult buyout managers to access.

It is recommended that STRS Ohio commit \$75 million (plus reasonable closing costs, expenses and reinvestment capital) to Berkshire Fund IX, L.P. Their reputation, expertise, and track record in their targeted industries should continue to put them in a position to achieve attractive returns. Cliffwater is aware of and does not have any objections to STRS Ohio's intention to commit to the Fund. The investment will be classified as a Domestic Private Equity investment. As outlined in the 2016 Investment Plan, we have targeted to commit \$400 million to \$900 million to private equity funds this year. This investment along with the others being presented this month will bring fiscal year to date commitments to \$1,025 million.

Memorandum

To: STRS Ohio Board
From: Michael J. Nehf 
Date: March 17, 2016
Subject: **Hermes GPE PEC III, L.P.**

In accordance with the Investment Staff Guidelines and Procedures concerning Private Equity, I am informing you of our plan to invest \$75 million in Hermes GPE PEC III (PEC III or the Fund), a \$300 million vehicle being formed by London-headquartered Hermes GPE (Hermes, or the Firm). Hermes, which has extensive co-investment experience, will pursue co-investments in the mid-market buyout space, sourced from managers in which the Firm and its investors have a relationship. The Program will seek to acquire 20 to 30 positions in co-investments diversified by geography, sector, and vintage.

Hermes is an independent private asset investor focused on private equity, private infrastructure, and private debt with roughly \$7 billion in AUM principally through their relationship with the British Telecom Pension Scheme that has outsourced its private equity investing to Hermes. Hermes GPE was formed by the merger of Gartmore's private equity practice into Hermes' private equity team in 2010. The combination of the two firms was quite synergistic as Hermes' private equity strategy was focused on making fund investments and Gartmore was primarily focused on making co-investments. Gartmore was founded in 1969 by British & Commonwealth and went through several ownership changes, including being owned by Nationwide Insurance for a period. The investment team focused on private equity consists of 17 professionals located in London, New York, and Singapore.

Hermes is seeking to continue its strategy of making co-investments as an important element of enhancing the returns on its overall private equity program. Given the investment team's length of experience in the private equity arena and being long-term investors in co-investments, they see significant amount of deal flow from GPs. An important part of their sourcing strategy is to proactively approach the GPs to let them know they are interested in co-investing and the characteristics of the investments they are seeking. The Hermes team is very well regarded in the GP community as a preferred partner, in part due to their responsiveness, their thorough and transparent diligence process, and their flexibility on investment size.

The Firm has generated a net IRR of 28.0% on 52 realized co-investments. In aggregate, Hermes has completed 129 co-investments sourced from 66 different GPs dating back to 2001. STRS Ohio's first commitment of \$75 million to the Firm in Hermes GPE PEC II is performing well. The fund, which includes the British Telecom Pension Scheme and the London Pensions Fund Authority as investors, has completed 29 investments through the end of September, 2015 and two of these investments have been profitably realized. The PEC II portfolio is nicely diversified with 11 investments in North America, 10 investments in Europe, and 8 investments in the rest of the world. STRS Ohio's net IRR on this investment stands at 24.3%.

It is recommended that STRS Ohio commit \$75 million to Hermes GPE PEC III. The commitment will be classified as a Global/International Private Equity investment. The Firm's sourcing advantage as a result of its position as a long-term, respected investor in the co-investment space, the strong historical return generated on realized investments and LP-friendly terms makes a commitment to the Fund attractive. Cliffwater is aware of and does not have any objections to STRS Ohio's intention to commit to the Fund. As outlined in the 2016 Investment Plan, we have targeted to commit approximately \$400 million to \$900 million to private equity funds during fiscal 2016. The commitments being presented this month will bring fiscal year to date commitments to approximately \$1,025 million.

**REVIEW OF
PERFORMANCE-BASED
INCENTIVE PROGRAM FOR
FISCAL 2017**

By: John Morrow

The proposed STRS Ohio Performance-Based Incentive Program for Fiscal 2017 is presented in its entirety with all recommended changes marked. Proposed additions are underlined and in bold print. Proposed eliminations are identified by a ~~strikethrough~~.

This draft will be reviewed during the March 2016 meeting with a request for Board approval anticipated during the April 2016 meeting.

SUBJECT: Performance-Based Incentive Compensation	SECTION: Compensation	HRS POLICY NUMBER: 4.150
EFFECTIVE DATE: March 15, 1985 (Amended by April 46, 2015 <u>21, 2016</u> board action)	FOR USE BY: All Associates	
CONTACT: Assistant Director, HRS		

Purpose:

The STRS Ohio Retirement Board ("Board") is committed to the internal management of its investment assets as it is the most cost effective alternative for achieving the investment objectives for the System. In order to maintain a successful internal management program, it is necessary to provide a compensation plan that is designed to attract, retain, motivate and reward above-average investment talent.

Investment Compensation Philosophy:

To attempt to compete effectively for investment talent, the total compensation (base salary and Incentive Compensation) for PBI-eligible investment associates and investment associates in salary schedules 308 through 317 will utilize the benchmark of the median compensation of a blended peer group weighted 50% to large/leading public funds and 50% to national private sector firms. The Executive Director is responsible for ensuring this objective is met and that the STRS Ohio annual operating budget submitted to the Board is adequate to achieve this objective. The STRS Ohio Salary Schedule is increased by a factor of 1.2X for investment associates in pay grades 308 through 317.

Summary:

The Performance-Based Incentive Program ("Program") in conjunction with base salary is designed to motivate, attract, reward, and retain highly qualified investment associates for achieving and sustaining outstanding investment performance based on a written yearly plan of objectives. The Program is intended to provide incentive compensation for Eligible Associates based on the results of the Total Fund, Asset Class and Individual Portfolio performance and the Eligible Associate's individual goals. These objectives are aligned with the achievement of the organization's overall long-term investment performance, since STRS is a long-term investor.

Board Approval:

The Program and any Incentive Compensation under the Program are subject to review and approval on an annual basis by the Board, Ohio Administrative Code Rule 3307-01-05.

GUIDELINES:

Eligibility

Only full-time exempt Investment Department associates who make direct portfolio or asset class decisions or perform analysis that facilitate or implement portfolio decisions may be eligible to participate in this Program. The relative degree of value added is reflected in the compensation percentage at each level. Eligible positions and their respective maximum incentive percentages are listed on Attachment A, titled "Maximum Eligible Incentive Compensation by Position". The maximum incentive percentages for any eligible new positions not listed on Attachment A will be determined by Human Resources and the

Executive Director and will be added to Attachment A upon review and approval by the Board. Part-time associates are not eligible to participate in the Program.

Associates newly employed into an eligible position in the Investment Department during the fiscal year (July 1 – June 30) will be eligible to receive pro-rated Incentive Compensation for that period based on the date of employment. The Eligible Associate must be employed in the eligible position by the fifth business day of the month to receive a full month's credit.

Pro-ration is determined as follows:

Month employed by the 5 th business day	PBI Pro-rata (No. of months)	% (Prorata/12)
August	11	92%
September	10	83%
October	9	75%
November	8	67%
December	7	58%
January	6	50%
February	5	42%
March	4	33%
April	3	25%
May	2	17%
June	1	8%

An Eligible Associate who receives more than one rating of less than "5 - or Fully Successful" based on a 1-10 scale) on a STRS Ohio annual associate performance appraisal at any time during the fiscal year will be ineligible for Incentive Compensation for the corresponding year.

Any Eligible Associate who is promoted or transfers to another position within the Investment Department will have their Maximum Eligible Incentive Compensation adjusted for that year. The Maximum Eligible Incentive Compensation will be based on the Maximum Eligible Incentive Compensation for each position in which the Eligible Associate was employed during the fiscal year, weighted by the amount of time the Eligible Associate was employed in each position for that year.

An Eligible Associate who takes a paid or unpaid leave of absence of more than twelve weeks during the fiscal year shall receive earned Incentive Compensation on a pro-rated basis **factoring the number of leave days beyond twelve weeks in the calculation for the fiscal year.**

In the event of a death or disability of an Eligible Associate, any incentive compensation payment will be pro-rated to the end of month of the last day worked and based on the full year results.

Incentive Compensation

The Maximum Eligible Incentive Compensation for Eligible Associates is outlined in Attachment A.

Incentive Compensation will be calculated on the Eligible Associate's annual base salary in effect on the final full pay period of the fiscal year.

Annual compensation (base salary plus Incentive Compensation earned) of an investment associate in any calendar year cannot exceed two times the maximum amount of pay grade 317.

Performance Measures

The following performance measures will be applied to every Eligible Associate’s Incentive Plan:

- Only quantitative goals will be utilized. Subjective goals will not be used.
- If the STRS Ohio Total Fund does not earn a positive Absolute (actual) Return in the fiscal year, the Incentive Compensation for each Eligible Associate will be reduced as follows:

STRS Ohio Total Fund Absolute Return	Reduction
-0.01% to -2%	10%
-2.01% to -4%	15%
-4.01% to -6%	20%
-6.01% to -8%	25%
-8.01% to -10%	35%
-10.01% to -12%	50%
-12.01% or lower	50% (however payment deferred for one year)

- A minimum of 10% of every Eligible Associate’s Incentive Plan will be based on the Total Fund Net Relative Return allocated 50% to the 1-year period and 50% to the 5-year period. The Net Relative Return that must be met for full incentive achievement will be based on the Board’s current Net Relative Return Objective as defined in the annual Statement of Investment Objectives and Policy.
- No associate will earn their Maximum Eligible Incentive Compensation unless the Total Fund Net Relative Return meets or exceeds the current Net Relative Return Objective as defined in the annual Statement of Investment Objectives and Policy in the fiscal year. The costs (difference between gross and net of fee performance goals) are reported annually by CEM Benchmarking Inc. on a calendar year basis and are reflected on the Board’s Trustee Summary performance report prepared by the Investment Consultant.
- All incentive goals except those based on Total Fund, real estate and alternative investments will be based on gross Relative Returns (before all investment management costs, both internal and external). Total Fund will be based on Net Relative Returns net of all investment management costs (internal and external). Real estate and alternative investments will be based on Relative Returns net of external management fees as per industry convention but no costs deducted for internal management.

Quantitative incentive goals are established for the associate’s responsibilities, Individual Portfolio and the Asset Class by the supervisor and asset head and approved by the Deputy Executive Director - Investments. The asset head may take into consideration the tracking risk of the Individual Portfolio and Asset Class goals in the Board’s Investment Policy (refer to the Statement of Investment Objectives and Policy) which is reviewed annually. In order to encourage success in the new role when an associate is promoted or laterally transferred, the associate’s long-term performance may be transferred to the new position provided it does not disadvantage them from being eligible to earn the maximum incentive for their new position. For general guidelines on allocating the incentive goals to individual positions, see Attachment B. These guidelines are in place to achieve consistency among the Asset Classes. Since

STRS Ohio invests for the long-term, incentive goals at the Asset Class and Individual Portfolio/industry levels will generally include results on a 1 and 5 year basis. Industry standard Geometrically Linked Annualized Returns will be used.

Using a Linear Basis to calculate the PBI, the Relative Return (in basis points) is divided by the Maximum Incentive Hurdle (in basis points) for the Total Fund, Asset Class and Individual Portfolio. This demonstrates the Board's policy to exceed expectations in the Asset Classes and Individual Portfolios as compared to their specific benchmarks. These performance figures and hurdles are found on the Incentive Compensation Performance worksheet (Attachment E), which is updated annually through June 30th.

Relative Return calculations will be rounded to the nearest whole basis point and no decimals will be used (e.g., 3.5 basis points will be rounded to 4 basis points and 2.4 basis points will be rounded to 2 basis points).

See Attachment D for an example of an associate's incentive calculation.

Program Administration

Incentive goals are established annually based on the Board's Statement of Investment Objectives and Policy and are submitted for review to the Deputy Executive Director—Investments. The Deputy Executive Director – Investments will submit the individual goals for all Eligible Associates to the Executive Director, after review and approval by Human Resource Services and Internal Audit generally in June, for the next incentive period for final review and approval. Once approved, the Executive Director issues an individual PBI memo that is provided to each Eligible Associate outlining the individual goals generally no later than one month after the start of the fiscal year. See Attachment F for a Sample of an Individual PBI Memo.

At the end of the incentive period, the performance of the Total Fund, Asset Classes and Individual Portfolios are evaluated in comparison to the benchmarks and compiled on the Incentive Compensation Performance worksheet. Performance results of the Asset Classes and Total Fund will be examined annually by a third party performance verification firm. The asset heads will confirm each Eligible Associates' overall percentage earned of their Maximum Eligible Incentive Compensation based on their incentive goals and the Incentive Compensation Performance worksheet. The Deputy Executive Director—Investments reviews all calculations of performance and the proposed payments. (Refer to Attachment D for an example of the Incentive Calculation.) The Internal Audit Department will review each of the individual incentive calculations to verify the Program is in compliance with Board policy. Once the internal audit review is complete, the Executive Director will review and approve all individual Incentive Compensation and then submit the recommended Incentive Compensation to the Board in September for final approval. Any administratively applied geographical pay differential will be noted. Approved Incentive Compensation will be forwarded to Human Resource Services for the final processing and payment.

Payment

Incentive payments (via direct deposit according to the banking distribution currently on file) will be made separate from regular earnings following the end of the fiscal year generally no later than the first Monday of the month following the month in which Incentive Compensation is approved by the Board.

Eligible Associates must be employed by STRS Ohio on the date of payment **(except in the case of a death or disability)** in order to be eligible for the Incentive Compensation.

Governance

The Program may be interpreted, amended, rescinded and/or terminated by the Board at any time. Participation in the Program in one year does not confer the right to participate in the current or any other year and does not confer the right to continued employment.

ATTACHMENTS/REFERENCES:

- A – Maximum Eligible Incentive Compensation by Position
- B – General Guidelines for Allocating Incentive Goals
- C – Definitions
- D - Incentive Calculation Example (For Illustration Purposes only)
- E - Incentive Compensation Performance Worksheet (For Illustration Purposes only)
- F – Sample of Individual PBI Incentive Memo (For Illustration Purposes only)

Attachment A

Maximum Eligible Incentive Compensation

Position Title	Maximum Incentive
	Current FY 20167
Deputy Executive Director, Investments	125%
Assistant Director, Investments	125%
Director Investment Operations	125%
Director, Domestic Equities	125%
Director, International Equities	125%
Director, Fixed Income	125%
Director, Alternative Investments	125%
Director, Midwest Region	125%
Director, Western Region	125%
Director, Eastern Region	125%
Director, Southern Region	125%
Portfolio Manager, Equities	100%
Portfolio Manager, International	100%
Portfolio Manager, Fixed Income	100%
Portfolio Manager, Quantitative Equities	100%
Portfolio Manager, Alternative Investments	100%
Portfolio Manager, EAFE Quantitative	100%
Portfolio Manager, EAFE Value	100%
Portfolio Manager, Emerging Markets	100%
Managing Director, International Real Estate	100%
Asset Management Director	100%
Acquisition Director	100%
Senior Economist	80%
Consulting Analyst	80%
Head Trader, Domestic Equities	80%
Head Trader, International	80%
Assistant Portfolio Manager, Equities	80%
Assistant Portfolio Manager, International	80%
Assistant Portfolio Manager, Fixed Income	80%
Assistant Portfolio Manager, Quantitative Equities	80%
Assistant Portfolio Manager, Alternative Investments	80%
Senior Asset Management Officer 2	80%
Senior Acquisition Officer 2	80%
Manager, International Real Estate	80%

Attachment A

Maximum Eligible Incentive Compensation

Position Title	Maximum Incentive
	Current FY 20167
Senior International Economist	60%
Senior Securities Trader	60%
Senior Securities Analyst, Equities	60%
Senior Securities Analyst, International	60%
Senior Securities Analyst, Fixed Income	60%
Senior Quantitative Analyst, Equities	60%
Senior Quantitative Analyst, International	60%
Senior Analyst, Alternative Investments Alternative Investments Senior Analyst	60%
Senior Real Estate Analyst	60%
Senior Asset Management Officer	60%
Senior Acquisition Officer	60%
Senior Real Estate Officer	60%
Economist II	50%
Securities Trader II	50%
Securities Analyst II, Equities	50%
Securities Analyst II, International	50%
Securities Analyst II, Fixed Income	50%
Quantitative Analyst II, Equities	50%
Quantitative Analyst II, International	50%
Analyst, Alternative Investments Alternative Investments Analyst II	50%
Real Estate Officer	50%
Acquisition Officer	50%
Asset Management Officer	50%
Senior Due Diligence Officer 2	50%
Manager, Investment Operations	35%
Senior Due Diligence Officer	35%
Junior Economist I	30%
Junior Securities Trader I	30%
Junior Securities Analyst I, Equities	30%
Junior Securities Analyst I, International	30%
Junior Securities Analyst I, Fixed Income	30%
Junior Quantitative Analyst I, Equities	30%
Junior Quantitative Analyst I, International	30%
Junior Analyst, Alternative Investments Alternative Investments Analyst I	30%
Real Estate Analyst	30%
Due Diligence Officer	30%
Senior Property Manager	25%
Treasury Management Analyst	20%
Cash Manager	20%

General Guidelines for Allocating Incentive Goals

The chart below is used as a general guideline for allocating the incentive goals to individual positions. This attachment is referenced on page 3 of the PBI Program document.

The allocation percentages listed below for the one year Asset Class and Total Fund performance represent minimum allocation levels. However, each Associate is generally expected to have on a combined basis, an effective weight on one year performance of at least 32%. The Portfolio/Industry group may include goals related to Individual Portfolios, industry sectors, analyst groups or other appropriate subsets within the relevant Asset Class. Private direct real estate is included in the Portfolio/Industry category for real estate positions. Refer to Attachment D for an example of an incentive calculation and how these allocation percentages are used.

	Incentive Allocation Percentages		
	Assistant Director	Strategy Committee Member ¹	All Other PBI Eligible Positions ²
Portfolio/Industry, if applicable³	50%	60%	70%
1 Year Relative Performance	5%	5%	10%
5 Year Relative Performance	45%	55%	60%
Asset Class	20%	20%	20%
1 Year Relative Performance	2%	2%	2%
5 Year Relative Performance ⁴	18%	18%	18%
Total Fund	30%	20%	10%
1 Year Relative Performance	15%	10%	5%
5 Year Relative Performance	15%	10%	5%
Total Incentive Allocation	100%	100%	100%

Notes:

¹Currently includes the following positions: Director, Domestic Equities; Director, Fixed Income; Director, Alternative Investments; Director, International Equities; Director, Investment Operations. There are other positions held on the Strategy Committee that are not listed here because they are included in the first column or this footnote below. The Deputy Executive Director, Investments has a 60% allocation to Total Fund and a 40% allocation to the individual asset classes. The Sr. Economist has a 50% allocation to Total Fund and a 50% allocation to the individual asset classes.

²The Sr. International Economist has a 50% allocation to Total Fund and 50% to the Total International Asset Class. The Head Trader, Domestic Equities and Sr. Securities Trader, Equities positions have a 4% allocation to the 1 year and a 36% allocation to the 5 year within the Asset Class level; and a 10% allocation to the 1 year and a 40% allocation to the 5 year within the Portfolio/Industry level. The Managing Director, International Real Estate position has a 7% allocation to the 1 year and 23% allocation to the 5 year within the Portfolio/Industry level and a 5% allocation to the 1 year and a 55% allocation to the 5 year within the asset class level. Real Estate Acquisition positions have a 33% allocation to the 1 year and 37% allocation to the 5 year within the Portfolio/Industry group.

³ For the liquid asset classes, individuals within 3 years or less of experience on an assigned Portfolio/Industry have the entire allocation to the Portfolio/Industry category based on the actual number of months on the Portfolio/Industry.

⁴New Eligible Associates in the liquid asset classes have a 1 Year Asset Class Relative Performance goal in the first eligible fiscal year and this increases by an additional year until the 5 Year Relative Performance period is met. Effectively the entire allocation to the Asset Class category in the first eligible fiscal year is on the 1 Year Relative Performance.

Absolute Return: The STRS Ohio actual return (income plus appreciation/depreciation expressed as a percentage) that is earned over a certain period of time.

Asset Class: A collection of securities that have conceptually similar claims on income streams and have returns that are highly correlated with each other. The current asset classes used by STRS Ohio include liquidity reserves, fixed income, domestic equities, international equity, real estate and alternative investments.

Eligible Associate: A full-time exempt investment department associate who makes direct portfolio or asset class decisions or performs analysis that facilitates or implements portfolio decisions.

Geometrically Linked Annualized Returns: The compounding of period-to-period returns calculated using a time weighted rate of return method. Annualized returns are the equivalent to the annual return which, if earned in each year of the indicated multi-year period, would produce the actual cumulative return over such period.

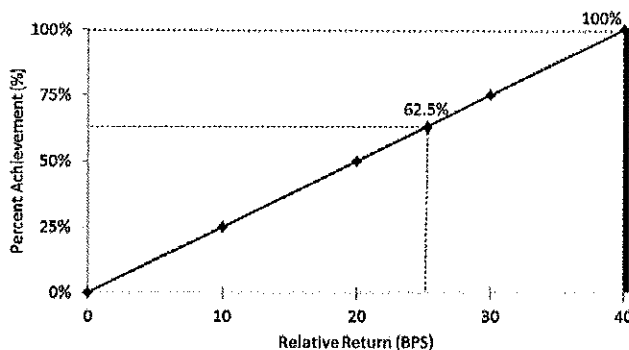
Incentive Compensation: The amount of the incentive payout that is earned by an Eligible Associate.

Incentive Plan: The Performance-Based Incentive Compensation Program that is documented as HRS Policy Number 4.150 and is approved and reviewed by the Board annually.

Individual Portfolio: A pool of assets for which the Eligible Associate has responsibility. Within an Asset Class, there can be several individual portfolios used to accomplish the objectives and goals at the asset class level.

Linear Basis: The mathematical relationship of direct proportionality that, when plotted on a graph, traces a straight line. The Net Relative Return or Relative Return (in basis points) is divided by the Maximum Incentive Hurdle (in basis points) to determine the Percentage Achievement.

Linear Chart Example



Maximum Eligible Incentive Compensation: This is the highest incentive percentage that can be earned by an Eligible Associate and is based on full 100% achievement of the associate's incentive goals. Eligible positions and their respective maximum incentive percentages are listed on Attachment A.

Maximum Incentive Hurdle: For Total Fund and each Asset Class, this equals the Board's return objectives (or Expected 5-Year Management Returns) as defined in the annual Statement of Investment Objectives and Policy.

Net Relative Return: The Relative Return that is achieved after all investment management costs have been deducted. This includes external manager fees, investment department salaries, incentive compensation, benefits, and the allocation of ITS costs and other expenses. The investment management costs are reported annually on a calendar year basis by CEM Benchmarking, Inc.

Relative Return: The return that is achieved over a period of time compared to a benchmark over the same period of time. The relative return is the difference between the Absolute Return earned by STRS Ohio and the return achieved by the benchmark.

Total Fund: The Total Fund includes all discretionary assets managed by STRS Ohio for the benefit of participants in the State Teachers Retirement System of Ohio. Six primary asset classes make up this composite and both internally and externally managed accounts are used.

Incentive Calculation Example

Attachment D (For Illustration Purposes only) Example 1

This example is for illustration purposes:

- Actual fiscal year performance and incentive hurdles are on the Incentive Performance Worksheet (Attachment E).
- Associate's incentive goals are on the Individual PBI Incentive Memo (Attachment F).

Chart 1							
Example Returns/Hurdles:		(A)	(B)	(C) (1)	(D) (2)	(C) x (D) (3)	
Incentive Goals	STRS Actual	Benchmark	Relative Performance	Max Incentive Hurdle	Percent Achieved	Associate's Allocation	Percentage Earned
Total Fund - one year net of fees	6.40%	5.90%	+50 bps	+40 bps	100.0%	5.0%	5.0%
Total Fund - five year net of fees	9.00%	8.00%	+100 bps	+40 bps	100.0%	5.0%	5.0%
Total Domestic Equities - one year	-12.10%	-12.30%	+20 bps	+35 bps	57.1%	2.0%	1.1%
Total Domestic Equities - five year	12.50%	12.20%	+30 bps	+35 bps	85.7%	18.0%	15.4%
Mid Cap Value Portfolio - one year	-8.30%	-7.90%	-40 bps	+50 bps	0.0%	10.0%	0.0%
Mid Cap Value Portfolio - five year	14.08%	13.70%	+38 bps	+50 bps	76.0%	60.0%	45.6%
						100.0%	72.1%
Total Percentage Earned							72.1%
bps = basis points							
¹ (C) = (A) / (B). If the result is greater than 100%, the percent of goal achieved is 100%. If the result is less than 0%, the percent of goal achieved is 0%.							
² (D) is obtained from the Individual PBI Incentive Memo.							
³ Rounded to one decimal place.							

Assume the investment associate is eligible for maximum incentive compensation of 100%. The percentage of incentive earned is calculated as follows:

Maximum Incentive Eligible	100.00%
Percentage Earned (from Chart 1 above)	x 72.10%
Incentive Earned	72.10%

Example 1 – Base Case

Assume the investment associate's base salary on June 30 is \$100,000. The calculation of the associate's actual incentive payment is as follows:

Base Salary	\$ 100,000.00
Incentive Earned	x 72.10%
Incentive Payment	\$ 72,100.00

Attachment D (continued)
Example 2

Example 2 – Negative Absolute Return

Incentive earned is reduced if the STRS Ohio Total Fund Absolute Return is negative.

Assume that the STRS Ohio Total Fund Absolute Return is -3.50% for the fiscal year.

Incentive Earned	\$ 72,100.00
* Reduction = 15% x \$72,100	<u>\$ (10,815.00)</u>
Total Incentive Payment	\$ 61,285.00

* The 15% Reduction is based on the chart on page 3.

Liquidity Reserve Portfolio	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Liquidity Reserve Actual		0.08%	0.12%	0.14%	0.15%	0.20%
90 Day T-Bill		0.02%	0.06%	0.11%	0.06%	0.16%
Relative Performance	1 bps	6	6	3	9	4

1-Year	3-Year	5-Year
0.08%	0.11%	0.14%
0.02%	0.06%	0.08%
6	5	6

Total Fixed Income	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Total Fixed Income Actual		1.66%	4.95%	0.82%	7.69%	5.18%
Barclays US Universal		1.61%	5.20%	0.24%	7.36%	4.78%
Relative Performance	35 bps	5	(25)	58	33	40

1-Year	3-Year	5-Year
1.66%	2.46%	4.03%
1.61%	2.33%	3.81%
5	13	22

Total Domestic Equities	Maximum Incentive Hurdle	2015	2014	2013	2012	2011	5/15-6/15	4/15-5/15
Total Domestic Equities Actual		7.25%	24.46%	20.15%	3.56%	33.18%	-0.11%	0.45%
Russell 3000		7.29%	25.22%	21.46%	3.84%	32.37%	-0.31%	0.14%
Relative Performance	35 bps	(4)	(76)	(131)	(28)	81	20	31

1-Year	3-Year	5-Year
7.25%	17.05%	17.21%
7.29%	17.73%	17.54%
(4)	(68)	(33)

Analyst Select Fund *	Maximum Incentive Hurdle	2015	2014	2013	2012	2011	2/13-6/13
Analyst Select Fund Actual		4.74%	25.49%	22.09%	-2.07%	30.06%	8.64%
Russell 1000		7.37%	25.35%	21.24%	4.38%	31.94%	8.05%
Relative Performance	50 bps	(263)	13	85	(645)	(188)	59

1-Year	3-Year	5-Year	29 Months
4.74%	17.07%	15.37%	15.88%
7.37%	17.73%	17.58%	16.76%
(263)	(66)	(221)	(88)

Concentrated Select Fund	Maximum Incentive Hurdle	2015
Concentrated Select Fund Actual		9.05%
Russell 1000		7.37%
Relative Performance	50 bps	168

1-Year
9.05%
7.37%
168

Large Cap Growth	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Large Cap Growth Actual		13.14%	24.91%	11.79%	7.91%	37.61%
Russell 1000 Growth		10.56%	28.92%	17.07%	5.76%	35.01%
Relative Performance	50 bps	258	(201)	(528)	215	260

1-Year	4-Year	5-Year
13.14%	14.27%	18.60%
10.56%	14.81%	18.59%
258	(54)	1

Large Cap Value	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Large Cap Value Actual		4.56%	23.88%	24.91%	0.53%	26.56%
Russell 1000 Value		4.13%	25.35%	21.24%	4.38%	31.94%
Relative Performance	50 bps	43	(147)	367	(385)	(538)

1-Year	5-Year
4.56%	15.53%
4.13%	16.86%
43	(133)

Mid Cap Growth	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Mid Cap Growth Actual		13.38%	20.50%	14.48%	9.25%	47.83%
Russell Midcap Growth		9.45%	26.04%	22.88%	-2.99%	43.25%
Relative Performance	75 bps	393	(554)	(839)	1,224	458

1-Year	4-Year	5-Year
13.38%	14.33%	20.36%
9.45%	13.24%	18.69%
393	109	167

Mid Cap Value Active	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Mid Cap Value Active Actual		-1.79%	28.46%	28.38%	-1.62%	35.02%
Russell Midcap Value		3.67%	27.76%	27.65%	-0.37%	34.28%
Relative Performance	75 bps	(546)	70	73	(125)	74

1-Year	3-Year	5-Year
-1.79%	17.44%	16.56%
3.67%	19.13%	17.73%
(546)	(169)	(117)

Small Cap Select	Maximum Incentive Hurdle	2015
Small Cap Select Actual		6.08%
Russell 2000		6.49%
Relative Performance	75 bps	(41)

1-Year
6.08%
6.49%
(41)

Quantitative 2000	Maximum Incentive Hurdle	2015	2014	2013	2012	2011	5/13-6/13
Quantitative 2000 Actual		9.10%	22.56%	27.68%	0.01%	40.18%	3.91%
Russell 2000		6.49%	23.64%	24.21%	-2.08%	37.41%	3.47%
Relative Performance	50 bps	261	(108)	347	209	277	44

1-Year	5-Year	26 Months
9.10%	19.07%	16.39%
6.49%	17.08%	15.33%
261	199	108

Domestic Equity Total External	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Domestic Equity Total External Actual		8.60%	24.67%	23.70%	-2.17%	37.29%
Russell Blended Benchmark ¹		6.91%	24.26%	23.20%	-0.20%	35.77%
Relative Performance	60 bps	169	41	50	(197)	152

1-Year	3-Year	5-Year
8.60%	18.76%	17.60%
6.91%	17.85%	17.27%
169	91	33

Total Equities	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Total Equities Actual		4.95%	22.88%	19.26%	-1.20%	29.98%
Total Equity Blended Benchmark ²		4.34%	22.87%	19.33%	-2.28%	28.99%
Relative Performance	50 bps	61	1	(7)	108	99

1-Year	3-Year	5-Year
4.95%	15.43%	14.58%
4.34%	15.22%	14.03%
61	21	55

STRS OHIO INCENTIVE PERFORMANCE WORKSHEET
Annualized Returns through June 30, 2015

Attachment E (continued)

	Maximum Incentive Hurdle	2015	2014	2013	4/12-6/12	11/13-6/14
Global Quantitative		1.53%	23.73%	16.00%	-4.47%	9.46%
MSCI All Country World Index		0.71%	22.95%	16.57%	-5.56%	9.54%
Relative Performance	75 bps	82	78	(57)	109	(8)

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Total International Equities		2.08%	20.68%	17.80%	-11.39%	24.16%
Total International Actual		0.74%	19.90%	16.41%	-12.03%	23.38%
International Blended Benchmark ³						
Relative Performance	100 bps	134	78	139	64	78

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011	2010	9/13-6/14	5/14-6/14
Emerging Active Composite		-4.63%	13.34%	5.22%	-11.22%	28.96%	24.62%	13.80%	6.33%
MSCI Emerging Markets ²		-5.13%	14.49%	3.23%	-15.67%	28.17%	23.48%	15.18%	6.24%
Relative Performance	100 bps	50	(115)	189	445	79	114	(138)	9

	Maximum Incentive Hurdle	7/13 - 9/13	2013	2012	2011	2010
EAFE Value		10.67%	14.12%	-9.24%	22.41%	9.87%
MSCI World Ex US 50% Hedged		9.36%	19.87%	-11.24%	22.06%	8.54%
Relative Performance	100 bps	131	(575)	200	35	133

	Maximum Incentive Hurdle	2015	10/13 - 6/14	12/14 - 6/15	5/14 - 6/14
International Value		0.91%	10.68%	3.14%	3.60%
International Blended Benchmark ³		0.74%	10.33%	2.54%	3.50%
Relative Performance	100 bps	17	35	60	10

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Structured EAFE		2.95%	21.17%	20.32%	-10.33%	22.36%
MSCI World Ex US 50% Hedged		2.14%	21.22%	19.87%	-11.24%	22.06%
Relative Performance	30 bps	81	(5)	45	91	30

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011	11/13-6/14
Quantitative EAFE Composite		2.52%	22.46%	20.79%	-10.52%	25.59%	8.18%
MSCI World Ex US 50% Hedged		2.14%	21.22%	19.87%	-11.24%	22.06%	7.21%
Relative Performance	100 bps	38	124	92	72	353	97

	Maximum Incentive Hurdle	7/13 - 9/13	2013	2012	2011	2010
Emerging Markets Opportunity		4.89%	0.96%	-9.53%	28.07%	24.45%
MSCI Emerging Markets		5.90%	3.23%	-15.67%	28.17%	23.48%
Relative Performance	100 bps	(101)	(227)	614	(10)	97

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Internal EAFE Equities		2.77%	22.00%	18.61%	-10.05%	23.10%
MSCI World Ex US 50% Hedged		2.14%	21.22%	19.87%	-11.24%	22.06%
Relative Performance	60 bps	63	78	(126)	119	104

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Internal Emerging Equities		-4.92%	13.43%	3.90%	-10.72%	28.69%
MSCI Emerging Markets		-5.13%	14.49%	3.23%	-15.67%	28.17%
Relative Performance	100 bps	21	(106)	67	495	52

	Maximum Incentive Hurdle	2015	2/14-6/14
Emerging Quantitative		-6.31%	12.94%
MSCI Emerging Markets		-5.13%	13.51%
Relative Performance	100 bps	(118)	(57)

	39 Months	20 Months
1-Year	1.53%	10.71%
	6.54%	6.07%
	82	71
	47	

	1-Year	2-Year	5-Year
	2.08%	10.99%	9.81%
	0.74%	9.90%	8.82%
	134	109	99

	1-Year	5-Year	60 Months 7/09-6/14	22 Months	14 Months
	-4.63%	5.42%	11.22%	4.56%	1.20%
	-5.13%	3.92%	9.54%	4.96%	0.68%
	50	150	168	(40)	52

	51 Months
	10.72%
	10.72%
	0

	1-Year	21 Months	7 Months	14 Months
	0.91%	6.52%	3.14%	3.88%
	0.74%	6.22%	2.54%	3.64%
	17	30	60	24

	1-Year	5-Year
	2.95%	10.49%
	2.14%	9.97%
	81	52

	1-Year	5-Year	20 Months
	2.52%	11.25%	6.40%
	2.14%	9.97%	5.60%
	38	128	80

	51 Months
	10.47%
	9.29%
	118

	1-Year	5-Year
	2.77%	10.49%
	2.14%	9.97%
	63	52

	1-Year	5-Year
	-4.92%	5.18%
	-5.13%	3.92%
	21	126

	17 Months
	4.08%
	5.37%
	(129)

STRS OHIO INCENTIVE PERFORMANCE WORKSHEET
Annualized Returns through June 30, 2015

Attachment E (continued)

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Total Real Estate						
Total Real Estate Actual		14.14%	13.68%	11.75%	13.60%	22.66%
Real Estate Blended Benchmark ¹		11.87%	11.58%	10.57%	12.60%	19.46%
Relative Performance	100 bps	227	210	118	100	320

1-Year	3-Year	5-Year
14.14%	13.18%	15.10%
11.87%	11.34%	13.17%
227	184	193

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Direct Real Estate						
Direct Real Estate Actual		15.95%	12.43%	13.91%	15.29%	20.81%
NPI		12.98%	11.21%	10.73%	12.04%	16.73%
Relative Performance	100 bps	297	122	318	325	408

1-Year	5-Year
15.95%	15.64%
12.98%	12.72%
297	292

	2015	2014	2013	2012	2011
International Real Estate					
International Real Estate Actual	14.55%	16.45%	9.58%	0.73%	20.43%
International Real Estate Benchmark ¹⁰	15.98%	14.21%	13.73%	15.04%	19.73%
Relative Performance	(143)	224	(415)	(1,431)	70
- or -					
International Real Estate Actual	14.55%	16.45%	9.58%	0.73%	20.43%
International Real Estate Benchmark ¹¹	10.50%	10.50%	10.50%	13.40%	13.40%
Absolute Achievement	405	595	(92)	(1,267)	703

1-Year	5-Year
14.55%	12.14%
15.98%	15.72%
(143)	(358)
14.55%	12.14%
10.50%	11.65%
405	49

	2015	2014	2013	2012	2011
Custom Opportunistic Real Estate					
Custom Opportunistic Real Estate Actual	14.56%	39.81%	16.33%	15.81%	18.62%
Custom Opportunistic Real Estate Benchmark ¹⁰	15.98%	14.21%	13.73%	15.04%	19.73%
Relative Performance	(142)	2,560	260	77	(111)
- or -					
Custom Opportunistic Real Estate Actual	14.56%	39.81%	16.33%	15.81%	18.62%
Custom Opportunistic Real Estate Benchmark ¹¹	10.50%	10.50%	10.50%	13.40%	13.40%
Absolute Achievement	406	2,931	583	241	522

1-Year	5-Year
14.56%	20.68%
15.98%	15.72%
(142)	496
14.56%	20.68%
10.50%	11.65%
406	903

	2015	2014	2013	2012	2011
Alternative Investments					
Total Alternative Investments Actual	7.75%	16.95%	14.51%	6.07%	20.43%
AI Blended Benchmark ⁹	7.29%	25.27%	21.52%	5.12%	34.32%
Relative Performance	46	(832)	(701)	95	(1,389)
- or -					
Total Alternative Investments Actual	7.75%	16.95%	14.51%	6.07%	20.43%
Alternative Investment policy return ⁷	8.00%	8.00%	8.00%	9.72%	10.00%
Absolute Achievement	(25)	895	651	(365)	1,043

1-Year	3-Year	5-Year
7.75%	13.00%	13.01%
7.29%	17.77%	18.19%
46	(477)	(518)
7.75%	13.01%	
8.00%	8.74%	
(25)	427	

	2015	2014	2013	2012	2011
Private Equity					
Private Equity Actual	12.18%	23.52%	14.41%	7.68%	22.65%
Private Equity Benchmark ⁸	8.36%	26.45%	22.68%	6.99%	36.30%
Relative Performance	382	(293)	(825)	69	(1,365)
- or -					
Private Equity Actual	12.18%	23.52%	14.41%	7.68%	22.65%
Private Equity policy return ⁷	9.00%	9.00%	9.00%	10.70%	10.70%
Absolute Achievement	318	1,452	541	(302)	1,195

1-Year	3-Year	5-Year
12.18%	16.60%	15.93%
8.36%	18.90%	19.64%
382	(230)	(371)
12.18%	15.93%	
9.00%	9.68%	
318	625	

	2015	2014	2013	2012	2011
Opportunistic/Diversified					
Opportunistic/Diversified Actual	3.08%	8.83%	14.62%	2.93%	15.26%
Opportunistic/Diversified Benchmark ⁹	6.23%	24.00%	20.28%	2.81%	31.08%
Relative Performance	(315)	(1,517)	(566)	12	(1,582)
- or -					
Opportunistic/Diversified Actual	3.08%	8.83%	14.62%	2.93%	15.26%
Opportunistic/Diversified policy return ⁷	7.00%	7.00%	7.00%	7.50%	7.50%
Absolute Achievement	(392)	183	762	(457)	776

1-Year	3-Year	5-Year
3.08%	8.74%	8.81%
6.23%	16.58%	16.38%
(315)	(784)	(757)
3.08%	8.81%	
7.00%	7.20%	
(392)	161	

	Maximum Incentive Hurdle	2015	2014	2013	2012	2011
Total Fund						
Total Fund Actual		5.45%	16.83%	13.66%	2.34%	22.59%
Total Fund Blended Benchmark ⁵		5.08%	17.53%	14.17%	2.05%	22.36%
Relative Performance		0.37%	-0.70%	-0.51%	0.29%	0.23%
Costs not reflected in Total Fund Actual		-0.12%	-0.12%	-0.12%	-0.11%	-0.11%
Relative Performance, net of fees	40 bps	25	(82)	(63)	18	12

1-Year	3-Year	5-Year
5.45%	11.88%	11.93%
5.08%	12.13%	11.98%
0.37%	-0.25%	-0.05%
-0.12%	-0.12%	-0.12%
25	(37)	(17)

Benchmarks:
¹ The Russell Blended Benchmark is a dollar-weighted calculation of the Russell 1000 and Russell 2000 indexes based on STRS' external holdings in each market cap segment.

² The Total Equity Blended Benchmark is calculated using the policy weights for domestic and international equity and the Russell 3000 and International Blended Benchmark indexes.

³ The International Blended Benchmark is calculated using 80% MSCI World ex USA Index (50% hedged) and 20% of the MSCI Emerging Markets Index. On January 1, 2014, MSCI Emerging Index went to a Net Index from a Gross Index.

⁴ The Real Estate Blended Benchmark is calculated using 85% NCREIF Property Index (NPI) and 15% FTSE NAREIT Equity REITs Index effective July 1, 2012; 85% NPI and 15% Wilshire Reit Index effective October 1, 2007.

⁵ The Total Fund Blended Benchmark index is 31% Russell 3000, 26% International Blended Benchmark, 18% Barclays US Universal, 10% Real Estate Blended Benchmark, 14% Alternative Investments actual return and 1% 90 Day T-Bill as of Jan. 1, 2014. Effective July 1, 2013 - December 31, 2013, Total Fund Blended Benchmark was 33% Russell 3000, 25% International Blended Benchmark, 18% Barclays US Universal, 10% Real Estate Blended Benchmark, 13% Alternative Investments actual return and 1% 90 Day T-Bill.

⁶ The AI Blended Benchmark is calculated monthly and is in two parts per policy: Effective January 1, 2013, Private Equity is the Russell 3000 Index plus 1% and Opportunistic/Diversified is the Russell 3000 Index minus 1%. The Private Equity target weight is 50.0% and the Opportunistic/Diversified target weight is 50.0% effective January 1, 2014.

⁷ The current long-term objective for total alternative investments is 8.0%, private equity is 9.0%, and opportunistic/diversified is 7%. These are based on the 2012 Asset Liability Study.

⁸ The Private Equity Benchmark is calculated monthly and is the Russell 3000 Index plus 1%.

⁹ The Opportunistic/Diversified Benchmark is calculated monthly and is the Russell 3000 Index minus 1%.

¹⁰ The International Real Estate and Custom Opportunistic Real Estate Benchmark is the NCREIF Property Index (NPI) plus 3%.

¹¹ The current long-term objective for International Real Estate and Custom Opportunistic Real Estate is 10.5%.