

<b>SUBJECT:</b> Performance-Based Incentive Compensation	<b>SECTION:</b> Compensation	<b>HRS POLICY NUMBER:</b> 4.150
<b>EFFECTIVE DATE:</b> March 15, 1985 (Amended by <del>May 22, 2013</del> <b>April 24, 2014</b> board action)	<b>FOR USE BY:</b> All Associates	
<b>CONTACT:</b> <del>HRS Project Specialist</del> <b><u>Assistant Director, HRS</u></b>		

**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:

<b>Month employed by the 5<sup>th</sup> business day</b>	<b>PBI Pro-rata (No. of months)</b>	<b>% (Prorata/12)</b>
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 for that fiscal year based on the duration of the leave.

### **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. ~~For example, the salary in effect during June 20145 will be used to determine the associate's incentive payment in the fall.~~

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)

- ~~• If the STRS Ohio four-year smoothed actuarial return for pension assets in the fiscal year is less than +7.75%, the Incentive Compensation for each Eligible Associate will be reduced by 10%. This 10% reduction is added to the table above if the STRS Ohio Total Fund has a negative Absolute Return in the fiscal year.~~
- A minimum of **510%** 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** for a one and five 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 30<sup>th</sup>.

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 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 2014	Recommendation FY 2015
Co-Chief Investment Officer	00.0%	
Deputy Executive Director, Investments	00.0%	<u>125%</u>
Assistant Director, Investments	00.0%	<u>125%</u>
Director Investment Operations	00.0%	<u>125%</u>
Director, Domestic Equities	00.0%	<u>125%</u>
Director, Quantitative Equities and Risk Management	00.0%	<u>125%</u>
Director, Midwest Region	00.0%	<u>125%</u>
Director, Western Region	00.0%	<u>125%</u>
Director, Eastern Region	00.0%	<u>125%</u>
Director, Southern Region	00.0%	<u>125%</u>
Director, Alternative Investment	00.0%	<u>125%</u>
Director, Fixed Income	00.0%	<u>125%</u>
Director, International Equities	00.0%	<u>125%</u>
Portfolio Manager, Fixed Income and Opportunistic/Diversified	00.0%	<u>125%</u>
Portfolio Manager, EAFE Value	70.0%	<u>100%</u>
Portfolio Manager, Fixed Income	70.0%	<u>100%</u>
Portfolio Manager, Equities	70.0%	<u>100%</u>
Portfolio Manager, Quantitative Equities	70.0%	<u>100%</u>
Portfolio Manager, EAFE Quantitative	70.0%	<u>100%</u>
Portfolio Manager, International	70.0%	<u>100%</u>
Portfolio Manager, Emerging Markets	70.0%	<u>100%</u>
Portfolio Manager, Real Estate Securities	70.0%	<u>100%</u>
Managing Director, International Real Estate	70.0%	<u>100%</u>
Asset Management Director	70.0%	<u>100%</u>
Acquisition Director	70.0%	<u>100%</u>
Strategy Research Manager, Equity	70.0%	<u>100%</u>
Senior Economist	50.0%	<u>80%</u>
Consulting Analyst	50.0%	<u>80%</u>
Head Trader, Domestic Equities	50.0%	<u>80%</u>
Head Trader, International	50.0%	<u>80%</u>
Assistant Portfolio Manager, Equities	50.0%	<u>80%</u>
Assistant Portfolio Manager, International	50.0%	<u>80%</u>
Assistant Portfolio Manager, Fixed Income	50.0%	<u>80%</u>
Assistant Portfolio Manager, Quantitative Equities	50.0%	<u>80%</u>
Assistant Portfolio Manager, Alternative Investments	50.0%	<u>80%</u>
Portfolio Manager Eastern Region	50.0%	<u>80%</u>
Senior Asset Management Officer 2	50.0%	<u>80%</u>
Senior Acquisition Officer 2	50.0%	<u>80%</u>
Manager, Real Estate Securities Portfolio	50.0%	<u>80%</u>
Manager, International Real Estate	50.0%	<u>80%</u>

## Attachment A

### Maximum Eligible Incentive Compensation

Position Title	Maximum Incentive	
	Current FY 2014	Recommendation FY 2015
Senior Securities Analyst, Fixed Income	42.5%	<u>60%</u>
Senior International Economist	42.5%	<u>60%</u>
Senior Securities Analyst, Equities	42.5%	<u>60%</u>
Senior Securities Trader	42.5%	<u>60%</u>
Senior Quantitative Analyst, Equities	42.5%	<u>60%</u>
Senior Securities Analyst, International	42.5%	<u>60%</u>
Senior Real Estate Analyst	42.5%	<u>60%</u>
Senior Analyst, Alternative Investments	42.5%	<u>60%</u>
Senior Asset Management Officer	42.5%	<u>60%</u>
Senior Acquisition Officer	42.5%	<u>60%</u>
Senior Quantitative Analyst, International	42.5%	<u>60%</u>
Senior Real Estate Officer	42.5%	<u>60%</u>
Quantitative Analyst, Equities	35.0%	<u>50%</u>
Securities Analyst, Equities	35.0%	<u>50%</u>
Quantitative Analyst, International	35.0%	<u>50%</u>
Securities Analyst, International	35.0%	<u>50%</u>
Real Estate Analyst	35.0%	<u>50%</u>
Securities Trader	35.0%	<u>50%</u>
Securities Analyst, Fixed Income	35.0%	<u>50%</u>
Analyst, Alternative Investments	35.0%	<u>50%</u>
Economist	35.0%	<u>50%</u>
Real Estate Officer	35.0%	<u>50%</u>
Acquisition Officer	35.0%	<u>50%</u>
Asset Management Officer	35.0%	<u>50%</u>
Manager, Investment Operations	30.0%	<u>35%</u>
Senior Due Diligence Officer	22.5%	<u>35%</u>
Junior Analyst, Alternative Investments	25.0%	<u>30%</u>
Junior Securities Analyst, International	25.0%	<u>30%</u>
Junior Securities Analyst, Equities	25.0%	<u>30%</u>
Junior Securities Analyst, Fixed Income	25.0%	<u>30%</u>
Junior Quantitative Analyst, International	25.0%	<u>30%</u>
Junior Quantitative Analyst, Equities	25.0%	<u>30%</u>
Junior Real Estate Analyst	25.0%	<u>30%</u>
Junior Economist	25.0%	<u>30%</u>
Junior Securities Trader	25.0%	<u>30%</u>
Due Diligence Officer	22.5%	<u>30%</u>
Senior Property Manager	22.5%	<u>25%</u>
Treasury Management Analyst	17.5%	<u>20%</u>
Cash Manager	17.5%	<u>20%</u>

	Incentive Allocation Percentages													
	Co-CIO & Assistant Director		Strategy Committee Member <sup>1</sup>		Portfolio Manager, Asst. PM, Analysts <sup>2</sup>		Asst. Portfolio Manager & Analyst <sup>2</sup>		Real Estate Regional Director		Sr. Real Estate Officers <sup>2 3</sup>		Real Estate Officer <sup>4</sup>	
<b>Portfolio/Industry, if applicable</b> <sup>64</sup>			60%		70%		75%		15%		30%		30%	
1 Year Relative Performance			5%		10%		40%		15%		30%		30%	
5 Year Relative Performance			55%		80%		66%							
<b>Asset Class</b>	70%		20%		20%		20%		75%		60%		66%	
1 Year Relative Performance	7%		2%		2%		2%		5%		5%		5%	
5 Year Relative Performance <sup>65</sup>	63%		18%		18%		18%		70%		55%		60%	
<b>Total Fund</b>	30%		20%		10%		5%		10%		10%		6%	
1 Year Relative Performance	40%		10%		5%		2.5%		5.0%		5.0%		2.5%	
5 Year Relative Performance	20%		10%		5%		2.5%		5.0%		5.0%		2.5%	
<b>Total Incentive Allocation</b>	100%		100%		100%		100%		100%		100%		100%	

The above chart 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 above for 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 asset class category for real estate positions. Refer to Attachment D for an example of an incentive calculation and how these allocation percentages are used.

The Sr. Economist which does not have individual asset class responsibilities has 100% allocation to Total Fund. The Sr. International Economist has a 50% allocation to Total Fund and 50% to the Total International Asset Class. The Deputy Executive Director - Investments has a 60% allocation to Total Fund and a 40% allocation to the individual asset classes.

<sup>1</sup> Currently includes the following positions: Director - Domestic Equities, Director - Fixed Income, Director - Alternative Investments, Director - International Equities, and Director - Investment Operations. There are other positions held on the Strategy Committee that are not listed here because they are included in a different column or footnote above.

<sup>2</sup> Includes Consulting Analyst, Senior Analyst, Junior Analyst, Quantitative Analyst, Treasury Management Analyst, Alternative Investment Analyst, Securities Analyst, Assistant Portfolio Manager, Real Estate Analyst, Senior Property Manager, Cash Manager, Head Trader - International Equities, Manager - Investment Operations and Sr. Due Diligence Officer positions. 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, ~~with a remaining and a 10% allocation~~ to the 1 year and a 40% allocation to the 5 year within the Portfolio/Industry level.

<sup>3</sup> Includes Managing Director - International Real Estate, Asset Management Director, Sr. Asset Management Officer 2, Senior Asset Management Officer, Asset Management Officer, Acquisition Director, Sr. Acquisition Officer 2, Senior Acquisition Officer and Acquisition Officer positions. The Managing Director - International Real Estate position has a 7% allocation to the 1 year and a 23% allocation to the 5 year within the Portfolio/Industry level.

~~<sup>4</sup> Includes Acquisition Officer, Sr. Acquisition Officer, Asset Management Officer, and Sr. Asset Management Officer positions.~~

<sup>64</sup> For the liquid asset classes, individuals with 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.

<sup>65</sup> New 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.

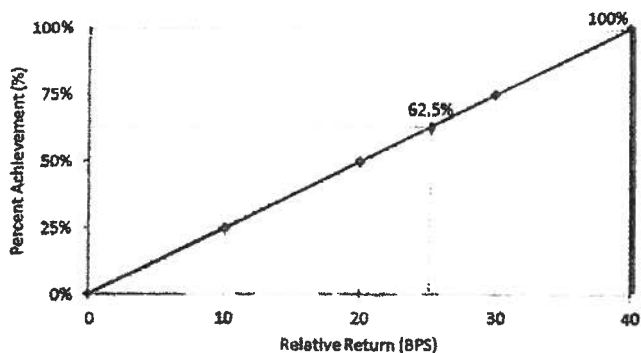
**Incentive Compensation:** The amount of the incentive payout that is earned by an Eligible Associate.

**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).

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%	<del>5%</del> 2.5% 5% <del>2.5%</del>
Total Fund - five year net of fees	9.00%	8.00%	+100 bps	+40 bps	100.0%	<del>5%</del> 2.5% 5% <del>2.5%</del>
Total Domestic Equities - one year	-12.10%	-12.30%	+20 bps	+35 bps	57.1%	2.0%
Total Domestic Equities - five year	12.50%	12.20%	+30 bps	+35 bps	85.7%	18.0%
Large Cap Value Portfolio - one year	-8.30%	-7.90%	-40 bps	+50 bps	0.0%	10.0%
Large Cap Value Portfolio - five year	14.08%	13.70%	+38 bps	+50 bps	76.0%	<del>60%</del> 66.0% 45.6% <del>49.4%</del>
Total Percentage Earned					100.0%	<b>72.1%</b> <del>70.9%</del>
bps = basis points						

<sup>1</sup> (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%.

<sup>2</sup> (D) is obtained from the Individual PBI Incentive Memo.

<sup>3</sup> Rounded to one decimal place.

Assume the investment associate is eligible for maximum incentive compensation of ~~80%~~70%. The percentage of incentive earned is calculated as follows:

Maximum Incentive Eligible	<u>80%</u> <del>70%</del>
Percentage Earned (from Chart 1 above)	x <u>72.1%</u> <del>70.9%</del>
Incentive Earned	<u>57.68%</u> <del>49.6%</del>

### 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 <u>57.68%</u> <del>49.6%</del>
Incentive Payment	\$ <u>57,680</u> <del>49,600.00</del>

Attachment D (continued)  
Example 2

**Example 2 – Negative Absolute Return and 4-year smoothed actuarial return less than +7.75%**

Incentive earned is reduced if the STRS Ohio Total Fund Absolute Return is negative. ~~An additional reduction of 10% occurs if the 4-year smoothed actuarial return is less than +7.75%.~~

Assume that the STRS Ohio Total Fund Absolute Return is -3.50% for the fiscal year. Also ~~assume that the 4-year smoothed actuarial return is 6.80% for the fiscal year.~~

Incentive Earned (Base Case above)	\$ <u>57,680,496.00</u>
* Reduction = <u>1525%</u> x \$ <u>57,680,496.00</u>	\$ <u>(8,652,124.00)</u>
Total Incentive Payment	\$ <u>49,028,372.00</u>

\* The 1525% Reduction is **based on the chart on page 3.** calculated as follows:

Total Fund Return -3.50% <sup>1</sup>	15%
4-year smoothed actuarial return < +7.75% <sup>2</sup>	10%
Total Reduction	25%

<sup>1</sup> Per the second bullet point and chart on page 3

<sup>2</sup> Per the third bullet point on page 3

**STRS INCENTIVE PERFORMANCE WORKSHEET**  
Annualized Returns through June 30, 2013

Attachment E  
(For Illustration Purposes Only)

Liquidity Reserve Portfolio	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Liquidity Reserve Actual		0.14%	0.15%	0.20%	0.30%	1.69%
90 Day T-Bill		0.11%	0.06%	0.16%	0.12%	0.55%
Relative Performance	1 bps	3	9	4	18	114

1-Year	3-Year	5-Year
0.14%	0.16%	0.49%
0.11%	0.11%	0.20%
3	5	29

Total Fixed Income	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Total Fixed Income Actual		0.82%	7.69%	5.18%	13.28%	4.97%
Barclays US Universal		0.24%	7.36%	4.78%	10.80%	4.93%
Relative Performance	35 bps	58	33	40	268	4

1-Year	2-Year	3-Year	5-Year
0.82%	4.20%	4.53%	6.31%
0.24%	3.74%	4.09%	5.53%
58	46	44	78

Total Domestic Equities	Maximum Incentive Hurdle	2013	2012	2011	2010	2009	1/10 - 6/10
Total Domestic Equities Actual		20.15%	3.56%	33.18%	14.94%	-25.45%	-6.48%
Russell 3000		21.46%	3.84%	32.37%	15.72%	-26.57%	-6.05%
Relative Performance	35 bps	(131)	(28)	81	(78)	112	(43)

1-Year	2-Year	42 Months	3-Year	5-Year
20.15%	11.55%	13.33%	18.34%	7.26%
21.46%	12.31%	13.72%	18.63%	7.25%
(131)	(76)	(39)	(29)	1

Large Cap Analyst	Maximum Incentive Hurdle (bps)	2013	2012	2011	2010	2009	1/10 - 6/10	1 month 6/13	2/13-6-13
Russell 1000		22.09%	-2.07%	30.06%	15.37%	-22.06%	-6.29%	-1.30%	8.64%
Relative Performance	50 bps	85	(645)	(188)	13	463	11	6	59

1-Year	42 Months	4-Year	5-Year
22.09%	11.36%	15.73%	6.94%
21.24%	13.60%	17.77%	7.12%
85	(224)	(204)	(18)

Large Cap Growth	Maximum Incentive Hurdle	2013	2012	2011	1/10 - 6/10
Russell 1000 Growth		11.79%	7.91%	37.61%	-6.75%
Relative Performance	50 bps	(528)	215	260	90

1-Year	2-Year	3-Year	42 Months
11.79%	9.83%	18.41%	13.30%
17.07%	11.27%	18.68%	13.21%
(528)	(144)	(27)	9

Large Cap Value	Maximum Incentive Hurdle	2013	2012	2011	2010	2009	1/10 - 6/10
Russell 1000		24.91%	0.53%	26.56%	12.44%	-18.57%	-8.69%
Relative Performance	50 bps	367	(365)	(538)	(280)	812	(229)

1-Year	42 Months	3-Year	5-Year
24.91%	11.22%	16.69%	7.79%
21.24%	13.60%	18.63%	7.12%
367	(238)	(194)	67

Mid Cap Growth	Maximum Incentive Hurdle	2013	2012	2011	2010	2009	1/10 - 6/10
Russell Midcap Growth		14.49%	9.25%	47.83%	18.66%	-32.06%	-5.76%
Relative Performance	75 bps	(839)	1,224	458	(264)	(173)	(245)

1-Year	2-Year	42 Months	5-Year
14.49%	11.84%	17.19%	8.31%
22.88%	9.18%	15.40%	7.61%
(839)	266	179	70

Mid Cap Value Active	Maximum Incentive Hurdle	2013	2012	2011	2010	1/09 - 6/09
Russell Midcap Value		26.38%	-1.62%	35.02%	21.13%	9.70%
Relative Performance	75 bps	73	(125)	74	(778)	651

1-Year	3-Year	54 Months
26.38%	19.47%	19.94%
27.65%	19.53%	20.00%
73	(6)	(6)

Quantitative 1000	Maximum Incentive Hurdle	FYTD 3/31/13	2012	2011	2010	2009
Russell 1000		15.97%	3.67%	34.53%	15.13%	-25.93%
Relative Performance	50 bps	(214)	(71)	259	(11)	76

9 Months	57 Months
15.97%	7.01%
18.11%	6.92%
(214)	9

Quantitative 2000 Combined	Maximum Incentive Hurdle	2013	2012	2011	2010	2009	5/13-6/13
Russell 2000		27.68%	0.01%	40.18%	21.11%	-25.93%	3.91%
Relative Performance	50 bps	347	209	277	(38)	(92)	44

1-Year	3-Year	5-Year
27.68%	21.42%	9.94%
24.21%	18.67%	8.77%
347	275	117

Domestic Equity Total External	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Russell Blended Benchmark <sup>1</sup>		23.70%	-2.17%	37.29%	19.42%	-25.03%
Relative Performance	60 bps	50	(197)	152	148	75

1-Year	3-Year	5-Year
23.70%	18.44%	8.27%
23.20%	18.63%	7.88%
50	(19)	39

Total Equities	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Total Equity Actual		19.26%	-1.20%	29.98%	14.63%	-26.14%
Total Equity Blended Benchmark <sup>2</sup>		19.33%	-2.28%	28.99%	14.18%	-26.76%
Relative Performance	50 bps	(7)	108	99	45	62

1-Year	2-Year	3-Year	5-Year
19.26%	8.55%	15.27%	5.33%
19.33%	7.98%	14.58%	4.70%
(7)	57	69	63

Total Real Estate	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Total Real Estate Actual		11.75%	13.60%	22.66%	-0.67%	-27.02%
Total Real Estate Blended Benchmark <sup>4</sup>		10.57%	12.60%	19.46%	6.50%	-22.18%
Relative Performance	100 bps	118	100	320	(717)	(484)

1-Year	3-Year	5-Year
11.75%	15.91%	2.45%
10.57%	14.15%	4.27%
118	176	(182)

REITs	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SE NAREIT Equity REITs Index <sup>6</sup>		8.46%	13.74%	35.95%	55.95%	-44.98%
Relative Performance	50 bps	(96)	53	38	49	28

1-Year	3-Year	5-Year
8.46%	18.81%	7.55%
9.42%	18.66%	7.40%
(96)	(5)	15

Global Quantitative	Maximum Incentive Hurdle	2013	4/12-6/12
ICI All Country World Index		16.00%	-4.47%
Relative Performance	75 bps	(57)	109

1-Year	15 Months
16.00%	8.56%
16.57%	7.99%
(57)	57

Total International Equities						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
International Actual		17.80%	-11.39%	24.16%	13.09%	-27.89%
International Blended Benchmark <sup>2</sup>		18.41%	-12.03%	23.38%	11.45%	-27.35%
Relative Performance	100 bps	139	84	78	164	(54)
Emerging Active Composite						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI Emerging Markets		5.22%	-11.22%	28.96%	24.62%	-20.91%
Relative Performance	100 bps	199	445	79	114	691
EAFE Value						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI World Ex US 50% Hedged		14.12%	-9.24%	22.41%	9.87%	-17.62%
Relative Performance	100 bps	(575)	200	35	133	990
Structured EAFE						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI World Ex US 50% Hedged		20.32%	-10.33%	22.36%	9.42%	-25.66%
Relative Performance	30 bps	45	91	30	68	186
Quantitative EAFE Composite						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI World Ex US 50% Hedged		20.79%	-10.52%	25.59%	8.35%	-26.51%
Relative Performance	100 bps	92	72	353	(19)	101
Emerging Markets Opportunity						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI Emerging Markets		0.96%	-9.53%	28.07%	24.45%	-13.75%
Relative Performance	100 bps	(227)	614	(10)	97	1,407
Small EAFE Equities						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI World Ex US 50% Hedged		18.61%	-10.05%	23.10%	9.32%	-23.80%
Relative Performance	60 bps	(126)	118	104	78	372
Small Emerging Equities						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
SCI Emerging Markets		3.90%	-10.72%	28.69%	24.57%	-19.36%
Relative Performance	100 bps	67	495	52	109	846
Alternative Investments						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Alternative Investments Actual		14.51%	6.07%	20.43%	20.04%	-24.59%
Blended Benchmark <sup>5</sup>		21.52%	5.12%	34.32%	17.87%	-24.26%
Relative Performance		(701)	95	(1,389)	217	(33)
Alternative Investments Actual		14.51%	6.07%	20.43%	20.04%	-24.59%
Alternative Investment policy return <sup>7</sup>		8.00%	9.72%	10.00%	10.35%	10.70%
Relative Achievement		651	(365)	1,043	969	(3,529)
Opportunistic/Diversified						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Opportunistic/Diversified Actual		14.62%	2.93%	15.26%	19.84%	
Opportunistic/Diversified Benchmark <sup>9</sup>		20.28%	2.81%	31.08%	14.59%	
Relative Performance		(566)	12	(1,582)	525	
Opportunistic/Diversified Actual		14.62%	2.93%	15.26%	19.84%	
Opportunistic/Diversified policy return <sup>7</sup>		7.00%	7.50%	7.50%	7.50%	
Relative Achievement		762	(457)	776	1,234	
Fund						
	Maximum Incentive Hurdle	2013	2012	2011	2010	2009
Fund Actual		13.66%	2.34%	22.59%	13.54%	-21.66%
Fund Blended Benchmark <sup>5</sup>		14.17%	2.05%	22.36%	13.28%	-20.42%
Relative Performance		-0.51%	0.29%	0.23%	0.26%	-1.24%
not reflected in Total Fund Actual		-0.12%	-0.11%	-0.11%	-0.11%	-0.12%
Relative Performance, net of fees	40 bps	(83)	18	12	15	(136)

1-Year	3-Year	4-Year	5-Year
17.80%	9.03%	10.03%	1.11%
18.41%	8.10%	8.93%	0.45%
139	93	110	66
1-Year	3-Year	5-Year	
5.22%	6.40%	3.49%	
3.23%	3.72%	-0.11%	
199	268	380	
1-Year	3-Year	4-Year	5-Year
14.12%	8.23%	8.64%	2.79%
19.87%	9.10%	8.96%	0.43%
(575)	(87)	(32)	236
1-Year	3-Year	5-Year	
20.32%	9.70%	1.43%	
19.87%	9.10%	0.43%	
45	60	100	
1-Year	3-Year	5-Year	
20.79%	10.72%	1.57%	
19.87%	9.10%	0.43%	
92	162	114	
1-Year	3-Year	5-Year	
0.96%	5.37%	4.66%	
3.23%	3.72%	-0.11%	
(227)	165	477	
1-Year	3-Year	5-Year	
18.61%	9.51%	1.82%	
19.87%	9.10%	0.43%	
(126)	41	139	
1-Year	3-Year	5-Year	
3.90%	6.08%	3.70%	
3.23%	3.72%	-0.11%	
67	236	381	
1-Year	3-Year	5-Year	
14.51%	13.51%	5.77%	
21.52%	19.72%	8.90%	
(701)	(821)	(813)	
1-Year	3-Year	5-Year	
14.51%		5.77%	
8.00%		9.75%	
651		(398)	
1-Year	3-Year	4-Year	
14.62%	10.79%	12.99%	
20.28%	17.47%	16.74%	
(566)	(698)	(375)	
1-Year	3-Year	5-Year	
14.62%		12.99%	
7.00%		7.37%	
762		562	
1-Year	3-Year	5-Year	
13.66%	12.56%	4.87%	
14.17%	12.55%	5.15%	
-0.51%	0.01%	-0.28%	
-0.12%	-0.11%	-0.11%	
(83)	(10)	(39)	

Remarks:

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.

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

International Blended Benchmark is calculated using 80% MSCI World ex USA Index (50% hedged) and 20% of the MSCI Emerging Markets Index.

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% REIT Index effective October 1, 2007.

Total Fund Blended Benchmark Index is 36% Russell 3000, 24% International Blended Benchmark, 18% Barclays US Universal, 10% Real Estate Blended Benchmark, Alternative Investments actual return and 1% 90 Day T-Bill as of Jan. 1, 2013.

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 Russell 3000 Index minus 1%. The Private Equity target weight is 54.5% and the Opportunistic/Diversified target weight is 45.5% effective January 1, 2013.

Current long-term objective for total alternative investments is 8.0% and opportunistic/diversified is 7%, which is based on the 2012 Asset Liability Study.

REIT benchmark is calculated using the FTSE NAREIT Equity REITs Index effective July 1, 2012. Prior to this time, the Wilshire REIT Index was used.

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