Commonwealth of Pennsylvania
State Employees' Retirement System

2011 Annual Strategic Investment Plan

Prepared by the SERS Investment Office in consultation with:

Rocaton Investment Advisors, Inc. - Cambridge Associates - The Townsend Group

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Section 1
Introduction

Description and Purpose of Investment Plan

Plan Purpose

The 2011 Annual Strategic Investment Plan provides the strategic direction of the SERS' investment program. The Plan was developed jointly by SERS' Investment Staff and consultants after careful analysis of major quantitative and qualitative factors, including the unique needs, preferences, objectives, and constraints of SERS, and expected long–term market conditions. Since these factors vary over time, SERS' Investment Staff and consultants update this Plan annually in order to make appropriate adjustments to the investment program.

Investment Background

Significant themes within the Investment Plan include the ongoing focus on asset allocation and diversification to maintain an acceptable level of risk.

Studies have shown that asset allocation alone accounts for up to 95% of variance in quarterly returns for a typical large pension fund.

This Investment Plan seeks to achieve the actuarial long–term assumed rate of return that is currently 8.0%, within acceptable levels of risk. The expected returns continue to derive from a wide variety of underlying asset classes. *Public stocks* continue to have an important role in the Fund's target allocation. The public equity allocation incorporates traditional long–only portfolios in large cap, mid cap, and small cap globally.

The *fixed income* structure continues to be diversified as well with the core component invested in Treasuries, Treasury Inflation Protected Securities (TIPS) and with specialty managers that invest in mortgages, asset–backed securities and corporate bonds. There is also a specialty component which includes high yield and commercial mortgage–backed securities. Lastly, there is an allocation to emerging market debt invested in both dollar denominated and local currency debt.

It is anticipated that due to increasing benefit payments and the need to fund private equity and real estate capital calls, fixed income may at times be relied upon to provide ample liquidity to meet cash flow needs during a market correction in order to avoid selling other assets at distressed prices.

Outside of traditional stocks and bonds, the Fund has for some time been diversified across asset classes such as real estate, private equity, venture capital, inflation protection and absolute return (funds–of–hedge funds). In each asset class, investments have been broadened to include non–U.S. investments in recognition of the globalization of financial markets.

Comments on the State of the Markets

Investor psychology continues to play a significant role in the movement of the financial markets. Global stock markets have alternated between risk on – risk off trades. The oscillations have been partly due to the gyrations in the economic outlook, with concerns over both European sovereign debt and deflation waxing and waning. The normally lackluster month of September has been anything but lackluster, with a financial markets rally generating the highest September returns in the past 70 years. This rally continued through October.

Mixed economic news has contributed significantly to volatility in the financial markets. Positive developments include (i) a strong rebound in corporate profits; (ii) strong emerging markets growth earning them recognition as the next growth engine for global economic recovery; (iii) an improved global banking system coupled with the extension of credit, and finally; (iv) improvement in the export of U.S. manufactured goods.

However, nagging signs still remind investors that the economic recovery remains fragile.

The most notable of these signs is persistently high unemployment; the unsettled housing market is another. Other warning signs include (i) rising government debt; (ii) limited monetary options at the Federal Reserve Bank's disposal; (iii) weak economic growth in the developed world, and; (iv) an unsustainably high U.S. fiscal deficit. The general consensus is that the global growth recovery may remain subdued for several years.

One of the consequences of the financial crisis has been the passage of financial reform legislation, while another is ongoing debate regarding the Bush–era tax cuts. Regardless, tax increases are likely inevitable to cover the debt issued to institute the bailout programs. This dramatic increase in debt is expected to eventually result in higher inflation that would have to be met with a more hawkish stance in monetary and fiscal policy.

All of this means continued uncertainty and volatility for the financial markets. The general expectation is muted performance over at least the next few years. While banks are currently lending, a wave of refinancing beginning in 2012 might negatively impact current investments in real estate and alternative investments.

In 2010, the fixed income market has seen positive returns from price appreciation. This performance is attributable to global monetary easing, fiscal stimulus and declining interest rates. These lower interest rates have allowed the corporate sector to restructure their debt, thereby strengthening their balance sheets. Similarly, private equity and venture capital have experienced a healthy rebound and are currently producing positive cash flow for the Fund. Conversely, both U.S. and non–U.S. stocks, and commodities, have experienced heightened volatility. These different market movements continue to illustrate the benefits of diversification. Under the 2011 Plan, diversification will continue to be the cornerstone of SERS' investment strategy.

Comments on the State of SERS

The "great recession" has had a significant impact on the structure of the Fund. Allocations to asset classes drifted significantly away from pre–established targets resulting in significant over–weights to illiquid asset classes such as private equity, venture capital and real estate. Due to limited employer contributions, the Fund has had to rely more heavily on liquidating assets to meet benefit payment requirements. As a result, the Fund has had limited free cash to rebalance the portfolio, relying instead on public market movements to move the asset allocation toward the long–term goals. There has been significant press coverage on the under–funding of state pension funds and the need for reform. Pennsylvania's legislature recently passed pension reform legislation (HB 2497) to address this very issue. This legislation clarified expected employer contribution levels which will make developing long–term investment strategy more manageable. While there is more clarity on the future level of employer contributions, the Fund will have to continue to rely on liquidating assets to meet benefit payments. This process will continue to impact SERS' ability to rebalance toward long–term asset allocation targets in any meaningful way.

SERS current asset allocation is over–weight to alternative investments that are the highest expected returning assets. Longer–term, the Fund should benefit from these alternative investments.

Development and Transition to the Asset Allocation Policy

Over the past 15 years many new investment strategies and structures have been incorporated into the Fund to enhance diversification and improve the Fund's risk–adjusted performance. Most of the changes required a number of years to fully execute. The 2011 Plan, as with past Investment Plans, includes a target asset allocation policy intended to be phased in over five years. This time horizon is necessary since it will take years to reduce exposures to the illiquid alternative investments and the fund–of–hedge funds. It should be noted that it is likely that the Plan may not reach its targets at the end of the period due to the illiquid nature of some exposures, and the need to generate significant levels of cash from public markets assets to meet benefit payments.

While a five–year target has been put forward, it is also proposed that a more dynamic approach to asset allocation be implemented over the ensuing years. This approach would commit assets to fixed income investments as interest rates eventually rise. In so doing, the Fund would benefit from higher and consistent earnings to achieve the desired rate of return while reducing the overall risk of the portfolio.

As in past Annual Plans, many of the asset classes contain initiatives to research potentially interesting strategies and investments. The initiatives contained in the 2011 Plan are, for the most part, potential refinements to existing strategies. For instance, there are initiatives to: (i) research adding a dedicated small cap emerging markets stock exposure; (ii) research stocks in "frontier;" or pre–emerging markets; (iii) broaden the timber mandate and research investment in farmland.

Plan Enactment

The Plan is based upon the percentage weightings for each asset class, and the percentage weightings for each portfolio or management style within each asset class. The creation of an efficient portfolio is a function of the percentage weightings contained in this document. Specific dollar amounts referenced in the Plan are for illustration only; percentage asset allocation targets define the Plan's foundation.

Approval of this Plan by the Board authorizes the SERS Investment Staff and SERS investment consultants to begin researching initiatives contained within the Plan and report findings and recommendations to the Board for consideration. The Board has the full power to invest SERS' assets, and may revise or amend this Plan at any time. The Investment Staff and investment consultants will monitor SERS' needs and market conditions, and will propose any modifications to this Plan to the Board for consideration.

Section 2
Total Fund Projections

SERS' Strategic Asset Allocation Policy

Asset allocation is the most important decision driving the long–term returns of a fund. A significant and often–cited study on this topic demonstrates that asset allocation alone accounts for 95% of the variance in quarterly returns for a typical large pension fund (Brinson, Hood, and Beebower, "Determinants of Portfolio Performance," *Financial Analysts Journal*, July/August 1986).

SERS' proposed asset allocation policy is depicted in Table I. The table contains the 2010 Plan Strategic Target and the 2011 Proposed Strategic Target. There are several changes proposed based on the reduction in expected returns.

The "Proposed Strategic Target" column in Table I contains SERS' proposed strategic asset allocation objectives as a percentage of the Total Fund.

Based on Rocaton's Capital Market Assumptions, generating an expected long–term return of 8% requires increasing the target allocation to stocks, alternative investments and real estate, and decreasing the target allocations to fixed income and inflation protection. These changes have the effect of generating a long-term expected return of 8% while modestly reducing the overall expected liquidity profile.

Table I

SERS' Asset Allocation Policy

2010 Plan Strategic Target		Proposed Strategic Target
35.5%	Stocks	39.0%
12.0%	Alternative Investments	15.0%
7.0%	Real Estate	8.0%
32.5%	Fixed Income	26.0%
4.0%	Inflation Protection	3.0%
9.0%	Absolute Return	9.0%
0.0%	Cash	0.0%
100.0%		100.0%

Table II provides greater detail about the diversification and long–term target allocation of the seven asset classes. The target allocation to the Stocks asset class increases from 35.5% to 39%. Specific allocation changes to stocks are one percentage point increases to U.S. and non–U.S. stock allocations, raising both from 11.5% to 12.5%, and a 1½ percentage point increase to the emerging markets target, raising it from 7.5% to 9%. The fixed income allocation target is reduced from 32.5% to 26%. Within fixed income, the core component is reduced from 15.5% to 10% and non–U.S. fixed income from 5% to 4%.

As noted earlier, proposed target allocation changes include increasing alternative investments from 12% to 15% and the real estate target from 7% to 8%. The final change to the proposed 2011 strategic target is the one percentage point reduction to the inflation protection strategy from 4% to 3%.

Table II

SERS' Asset Allocation Policy

2010 Plan Strategic Target		Proposed Strategic Target
35.5%	Stocks	39.0%
5.0%	Global Stocks	5.0%
11.5%	Domestic Stocks	12.5%
11.5%	Non–U.S. Stocks	12.5%
7.5%	Emerging Market Stocks	9.0%
12.0%	Alternative Investments	15.0%
7.0%	Real Estate	8.0%
32.5%	Fixed Income	26.0%
15.5%	Core Domestic Fixed Income	10.0%
4.0%	High Yield Fixed Income	4.0%
5.0%	Non–U.S. Fixed Income	4.0%
4.0%	TIPS	4.0%
4.0%	Emerging Markets Debt	4.0%
4.0%	Inflation Protection	3.0%
9.0%	Absolute Return	9.0%
0.0%	Cash	0.0%

Ten–Year Expectational Inputs by Asset Class

The three key expectational inputs required to model an efficient investment portfolio are: 1) expected returns, 2) expected volatility, and 3) correlation. A set of ten–year expectational inputs has been utilized that were derived by SERS' general consultant, Rocaton Investment Advisors. The inputs are based on the long–term history of each asset class, the building blocks of each asset class, the current shape of the U.S. Treasury yield curve and the impact on all asset classes assuming that the yield curve reverts to a normal shape and level. They also incorporate future expectations which take into account actual and expected changes in asset class behavior due to changes in market conditions.

The *first* key input is the "Expected Return." The expected return column in Table III represents the expected annualized long–run rate of return for each asset category. These returns are a reflection of the current market conditions coupled with longer–term expected returns. Specifically, the impact of current interest rates on other asset classes have been incorporated in these expected returns.

For the expected nominal returns in this table, an underlying inflation assumption of 2.4% was employed on an annualized basis, which remains lower than the actuarial inflation assumption of 3%.

The *second* key input is the "Expected Volatility" that refers to the standard deviation of returns, an indicator of the likely dispersion of returns in any given year, often referred to as "risk." Due to dynamic market conditions, the long–run expected returns for each asset class will not be consistent for every year covered by the Plan.

Table III

Ten–Year Expected Returns and Standard Deviations

	Expected Return	Expected Volatility
Domestic Stocks	7.5%	19.1%
Non–U.S. Stocks	7.5%	19.7%
Emerging Markets Stocks	8.5%	26.6%
Alternative Investments	9.5%	27.7%
Real Estate	6.9%	12.4%
Core U.S. Fixed Income	4.0%	5.1%
Emerging Market Debt	5.3%	10.1%
High Yield Fixed Income	6.3%	11.8%
Non–U.S. Fixed Income	4.2%	9.2%
TIPS	4.6%	7.2%
Commodities	4.2%	12.3%
Absolute Return	7.1%	8.0%

Note: To estimate global strategies for modeling purposes, equal amounts of domestic and non–U.S. capital market assumptions are used.

The *third* key expectational input involves long–run correlation assumptions, shown in Table IV, which quantify the relationships between asset class return patterns. These correlations run between +1 and –1. The higher the positive correlation number, the greater the likelihood that the two asset classes will move in the same direction and magnitude of return and therefore have a limited benefit to diversification. Conversely, the greater the negative correlation number, the greater the likelihood that the two asset class returns will move in opposite directions and the greater the likelihood of achieving diversification. Numbers centering around zero indicate no common pattern of returns.

Table IV

Correlation Matrix

	Dom Stock	Int'l Stock	EM Stocks	Alt Inv	Real Estate	U.S. Core FI	High Yield	EM Debt	Int'l FI	TIPS	Comm	ARS
Domestic Stocks	1.00											
Non–U.S. Stocks	0.8	1.00										
Emerging Mkts Stocks	0.4	0.8	1.00									
Alternative Investments	0.6	0.5	0.3	1.00								
Real Estate	0.4	0.4	0.2	0.8	1.00							
Core U.S. FI	–0.1	–0.1	–0.1	–0.2	–0.1	1.00						
High Yield FI	0.5	0.5	0.3	0.1	0.1	0.5	1.00					
Emerging Market Debt	0.4	0.4	0.4	0.2	0.2	0.5	0.6	1.00				
Non–U.S. FI	–0.1	0.0	0.0	–0.3	–0.3	0.6	0.4	0.1	1.00			
TIPS	–0.1	0.2	0.3	0.1	0.0	0.0	–0.1	0.0	0.1	1.00		
Commodities	0.2	0.4	0.5	0.4	0.3	–0.3	–0.1	0.3	–0.1	0.5	1.00	
Absolute Return	0.6	0.4	0.2	0.5	0.5	0.3	0.7	0.6	0.0	–0.2	0.0	1.00

Risk/Reward of the Total Portfolio

The "efficient frontier" contains portfolios with the highest expected return for a specified level of risk, or the lowest level of risk for a specified expected return. The measure of risk is the standard deviation of expected annual returns.

The efficient frontier curve in Chart I was derived based on the Re–sampled Efficient Frontier technique developed by Dr. Richard Michaud. The results are based on the average of over 500 samples of possible asset mixes that are expected to deliver the highest level of return for any given level of risk.

There were two group constraints imposed on the model to develop the 2011 Plan asset allocation. These were:

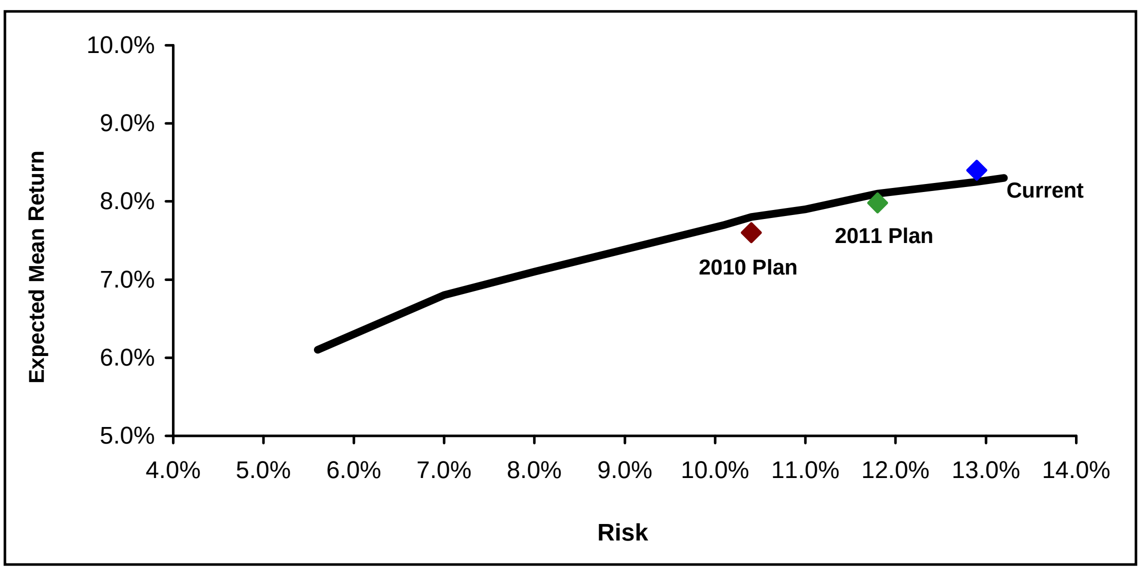
1. The allocation to high yield and emerging market debt is less than or equal to 10% of the total Fund;
2. U.S. stocks must equal non–U.S. stocks.

These constraints are used to ensure proper allocation and risk posture to market benchmarks and to control liquidity requirements. As a result the 2011 Plan is marginally below the efficient frontier.

Chart I plots three portfolios. Each of the portfolios risk/return estimates are based on Rocaton's September 2010 Capital Market Assumptions. The 2010 Strategic Plan allocation falls below the prior 8% return due to the reduction in the expected return estimates from the prior year. The 2011 Plan achieves the desired return, but at higher risk. The Current portfolio lies above the efficient frontier due to the current over–allocation to alternative investments and exceeds the actuarial return assumption.

Chart I

Risk/Reward



Total Fund Asset Allocation Trend: 2011 through 2015

SERS will seek to implement the 2011 Investment Plan over a period of five years. This transition trend considers assumptions from multiple sources, specifically:

- the Actuary's estimates of employee contributions and benefit payments;
- an assumed employer contribution rate of 8% of payroll. This rate serves as a proxy of the historic normal cost calculated by the Actuary;
- Rocaton's capital market assumptions projecting the estimated growth of stocks, fixed income, inflation protection and the absolute return asset classes;
- alternative investment and real estate capital calls, distributions and market value projections provided by Cambridge Associates and the Townsend Group;
- forecasted cash receipts from planned redemptions from the absolute return managers.

There are no secondary sales of private equity or real estate investments included in the analysis.

It is expected that the Fund's asset allocation strategy will evolve over the usual five–year timeframe. The Plan calls for achieving the long–term percentage allocation targets for each asset class by the end of 2015, but given the current allocations to illiquid asset classes, market movements, interest rate trends, actual employer contributions and net capital calls, the five–year targets could vary from the forecasted asset allocation trend. Based on the 2011 Plan allocation, the proposed transition to the long–term asset allocation targets is reflected in Table V and Chart II.

SERS' unaudited asset allocation as of September 30, 2010 is markedly different from the proposed 2011 strategic target for the Fund. This is largely due to the major shifts expected to take place in stocks, absolute return, fixed income and alternative investments. As a whole, presently stocks are 12 percentage points and fixed income is 10.5 percentage points below the strategic target, with absolute return and alternative investments being almost 9 percentage points and 10 percentage points over–weight, respectively. In order to allocate fixed income assets efficiently in a potentially rising interest rate environment, it is proposed that allocations be made on a dynamic basis as interest rates rise, thereby locking–in higher yields (buying at lower prices) and potentially reducing the level of risk in the portfolio.

Table V

SERS' Projected Asset Allocation Trend

Unaudited 9/30/10		**2011**	**2012**	**2013**	**2014**	**2015**
26.8%	Stocks	30.0%	32.5%	35.5%	37.0%	39.0%
25.1%	Alternative Investments	24.5%	22.5%	19.5%	15.5%	15.0%
9.0%	Real Estate	9.5%	9.5%	9.0%	8.5%	8.0%
15.4%	Fixed Income	17.5%	18.5%	20.0%	25.0%	26.0%
3.9%	Inflation Protection	3.0%	3.0%	3.0%	3.0%	3.0%
17.9%	Absolute Return	15.5%	14.0%	13.0%	11.0%	9.0%
1.9%	Cash	0.0%	0.0%	0.0%	0.0%	0.0%

Chart II

2015 Target Asset Allocation

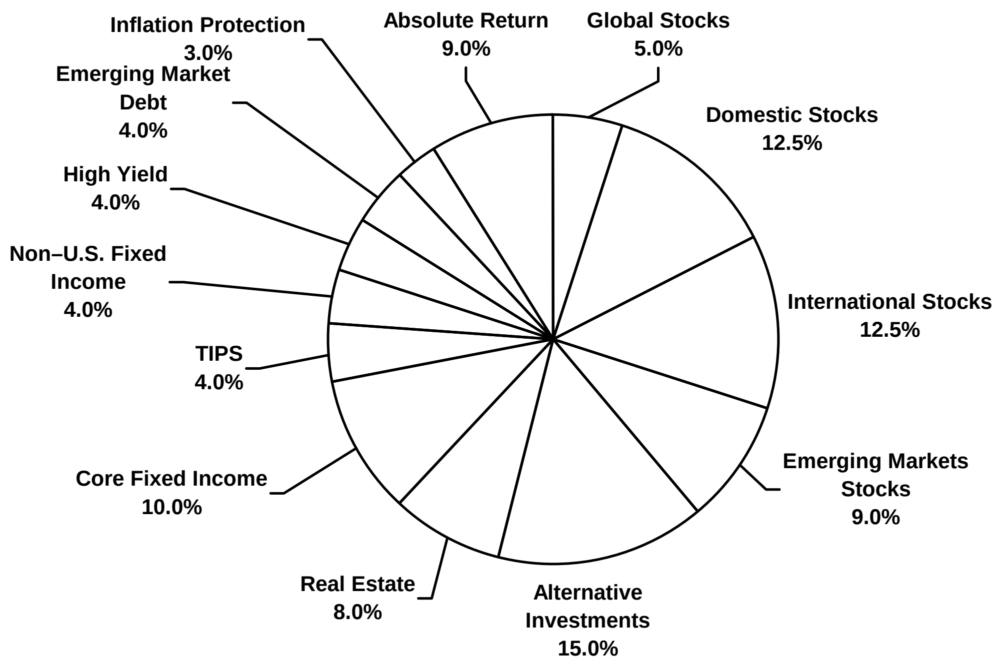
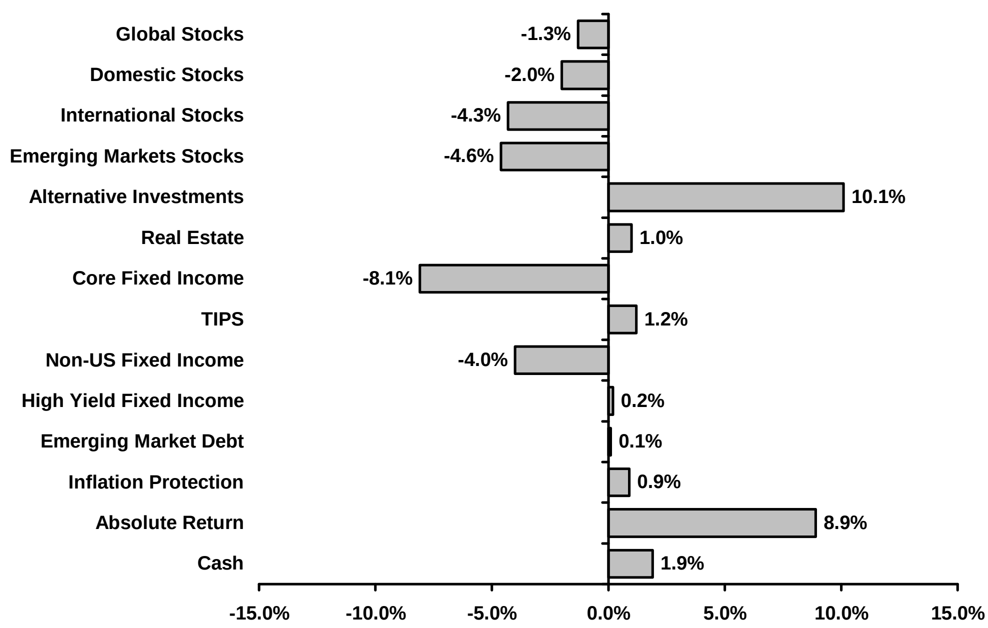


Chart III

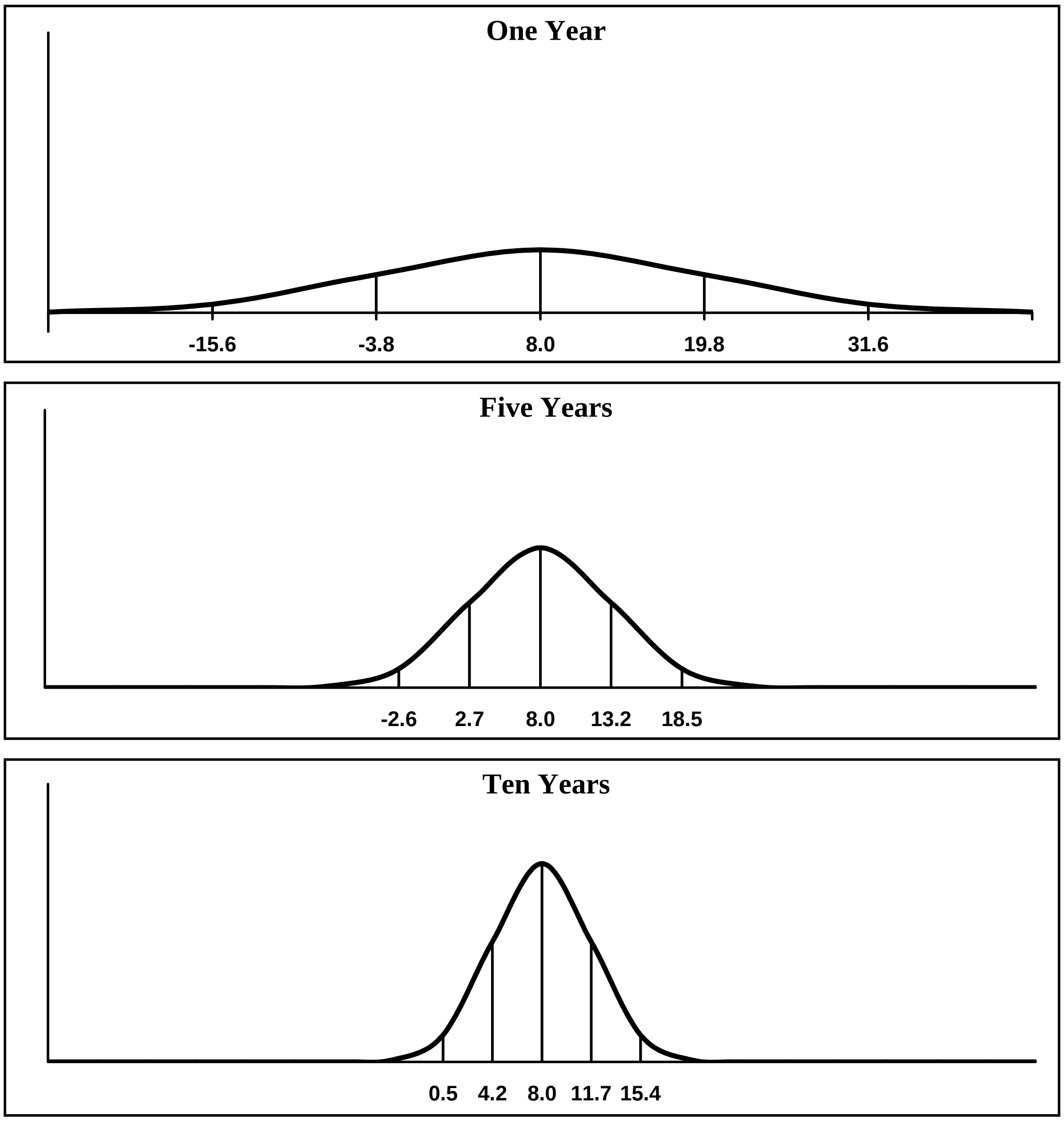
Variance of September 30, 2010 (Unaudited) Allocation From 2015 Target Asset Allocation



Return Distributions over One, Five and Ten Years

While an expected long–term return of 8.0% is the *most likely* scenario based on the asset allocation policy for the Fund, SERS' asset allocation policy could result in a wide range of potential total returns for the Fund. We analyzed the range of possible total returns for the Fund by generating a distribution of these returns over one–year, five–year and ten–year horizons, as illustrated in Chart IV.

Chart IV



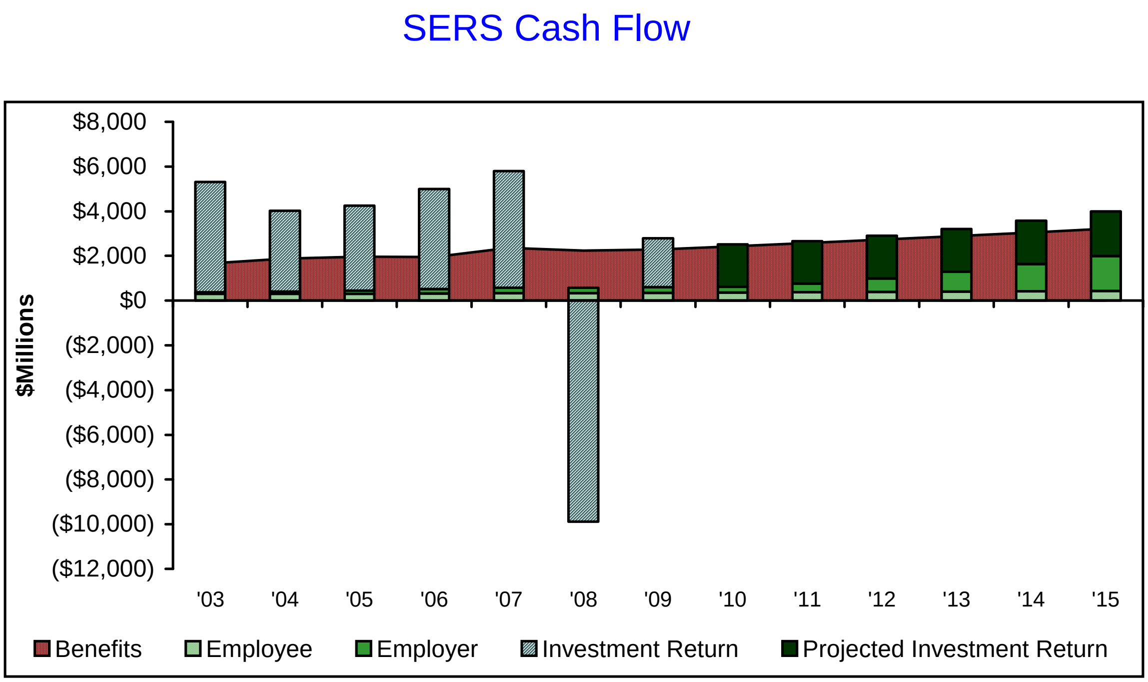
The dispersion of returns narrows significantly as the length of time covered by the analysis increases; extreme returns in any given year should tend to offset each other over a longer timeframe.

As a long–term investor, SERS focuses more on the return dispersion of the ten–year period rather than the one–year period. For example, SERS' total return in 2007 was positive 17.2%, while the Fund's total return for 2008 was negative 28.7%, demonstrating the volatility associated with shorter time intervals.

The "tightness" of the range for the ten–year period should provide a level of comfort that the probability of SERS realizing a ten–year return of less than 0.5% is low, and a return of less than zero is likely to be very remote. While the total Fund return over the past 10 years underperformed the 8.5% actuarial return assumption due to the two worst market corrections since the Great Depression, performance was well within the expected range of returns. Performance over the past 15, 20, 25 and 30 years have exceeded the actuarial return assumption.

Projection of Contributions, Income, and Benefits

Chart V



Based on the December 2009 actuarial valuation performed by the Hay Group, Chart V projects the steady increase in benefit obligations along with employee contributions. Employer contributions are estimates based on amounts reflected in the pension reform bill (HB 2497). Investment returns continue to be reflected at the actuarial 8% return assumption.

As in the past, SERS continues to be in a "negative cash flow" position as virtually all of contributions and investment returns are required to cover benefits in 2010 and 2011. Thereafter, while the Fund remains in a negative cash flow position, the increase in employer contributions alleviates having to disburse all of the investment gains. Longer term, this may allow the total Fund to potential grow in value.

As a mature pension plan, SERS' benefit payments will continue to exceed employer and employee contributions into the Fund over the period covered by the 2011 Plan and into the foreseeable future.

This situation of paying out more in benefits than is taken in through employer and employee contributions is normal for a mature pension plan. The ability to pay an increasing amount of benefits through investment earnings is the desired result of a successful investment program.

Section 3
Plan Summaries

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Plan Summaries

Stock Asset Class Plan Summary

Role of Stock Asset Class within the SERS Fund

The objective of meeting SERS' long–term liabilities has been accomplished through a significant exposure to the stock market. This exposure to stocks was rewarded as stocks historically generated a premium over fixed income. Although the stock premium may fluctuate over time, and stock return can be volatile, ownership of the corporations that propel the world's economies should continue to be a profitable investment over the long term. The 2011 Plan recommends a 37.0% allocation to stocks.

The stock asset class is managed on a total return basis and focuses on exposure to the return streams from the following stock strategies:

Strategy	Description
Global	U.S. and non–U.S. developed markets, large/mid cap
U.S.	U.S. developed markets, large/mid/small cap
Non–U.S. developed markets	Non–U.S. developed markets, large/mid/small cap
Emerging markets	Emerging markets, large/mid cap

Global Stocks

Long–Term Strategy

Allocate 5% of the Fund to global stocks.
The benchmark for the global stock strategy is the MSCI World Index. This index currently is weighted 49% U.S. large/mid cap stocks and 51% non–U.S. developed markets large/mid cap stocks. Active global stock strategies have the flexibility to respond to stock opportunities as they emerge in countries and industries around the world. Skilled investors are more likely to find winners when drawing from the 8,834 companies located worldwide, than from a geographic subset of the stock universe. Also, global portfolios can limit exposure to stocks in markets or industries going through a bad period. Thus active global stock strategies have the potential for excess return over an index.

2011–2012 Global Stock Initiative

Review the active global stock allocation.
SERS has two active global stock portfolios. One of the global stock portfolios, focused on industry capital cycles rather than the macro business cycle, is well–diversified resulting in a low tracking error to the MSCI World Index. The other global stock portfolio, focused on growth, has high geographic and sector concentrations, resulting in a high tracking error to the MSCI World Index. The returns of these two portfolios have been complementary.

SERS plans to:

- Research increasing the allocation to active global stocks strategy to 8% of the Fund.
- Develop a target weight for each global stock portfolio. The portfolio target weights will be determined by style and confidence in the investment product.

U.S. Stocks

Long–Term Strategy

Allocate 12.5% of the Fund to U.S. stocks.
The benchmark for the U.S. stocks strategy is the Russell 3000 Index. The Russell 3000 Index contains approximately 3,000 U.S.

companies, representing 98% of the investable U.S. stock market.

The 12.5% of the Fund allocation to U.S. stocks breaks down to an allocation of 10% to large cap (benchmarked to the S&P 500 Index), and 2.5% to mid/small cap (benchmarked to the Russell 2500 Index). These allocations are designed to approximate the capitalization structure and risk profile of the Russell 3000 Index.

Within U.S. stocks, maintain the following structure:

Allocate 10% of the Fund to U.S. large cap stocks.

The benchmark for the U.S. large cap stocks is the S&P 500 Index. The large cap segment of the U.S. stock market is considered to be efficient, and therefore challenging for active managers to add value. The U.S. large cap stock market is characterized by abundant and readily available information, good liquidity, and a large number of analysts covering these securities. SERS uses an S&P 500 Index fund, and the large cap component of a Russell 3000 Index fund, and an enhanced index strategy for this efficient segment of the market.

The enhanced S&P 500 index strategy uses a structured investment process to control capitalization and sector exposures similar to the S&P 500 Index while holding a large number of stocks that are expected to produce excess return. The objective of the S&P 500 enhanced index strategy is to maintain close performance tracking to the S&P 500 Index, while adding incremental value from stock–specific bets in the form of under–weighting or over–weighting relative to the S&P 500 Index, and from holding stocks outside the S&P 500 Index.

Allocate 2.5% of the Fund to U.S. mid/small cap stocks.

The benchmark for the U.S. mid/small cap stocks is the Russell 2500 Index. SERS has four active strategies for mid/small cap stocks in the U.S. as this segment of the stock market is viewed as being less efficient than large cap. This inefficiency stems from the theory that there is limited analyst coverage and less information.

SERS uses a mix of strategies for the U.S. mid/small cap stock component. The strategies include an actively managed private business value portfolio. Two managers invest in companies based in Pennsylvania or with significant Pennsylvania operations. There is a quantitative portfolio benchmarked to the Russell Microcap Growth Index. There is also the mid/small cap component of a Russell 3000 Index fund.

2011–2012 U.S. Stocks Initiative

Develop a target weight for each U.S. stock portfolio.

The portfolio target weights will be determined by style and confidence in the investment product.

Non–U.S. Stocks

Long–Term Strategy

Allocate 21.5% of the Fund to non–U.S. stocks.

The 21.5% allocation to non–U.S. stocks includes an allocation of 10.6% to large/mid cap stocks in developed markets (benchmarked to the MSCI EAFE Index), 1.9% to small cap stocks in developed markets (benchmarked to the MSCI EAFE Small Cap Index), and 9.0% to stocks in emerging markets (benchmarked to the MSCI Emerging Markets Index). The benchmark for non–U.S. stocks is 65.5% MSCI EAFE Investable Market Index/34.5% Emerging Markets Index Standard.

The 6,265 non–U.S. companies comprise 57.3% of the world stock market capitalization and provide a broad universe of investment opportunities. In a variety of industries, there are companies based outside the U.S. that are growing more rapidly, developing innovative products and setting aggressive standards.

There will be periods when economic activity is growing faster in foreign countries, especially in developing countries, providing many non–U.S. companies with a tailwind for earnings. Non–U.S. stocks have the potential for enhanced returns from active management in this less efficient asset class.

Within non–U.S. stocks, target the following structure:

Allocate 10.6% of the Fund to non–U.S. developed markets large/mid cap.
The benchmark for large/mid cap stocks in non–U.S. developed markets strategies is the MSCI EAFE Index.

Large/mid cap active strategies seek stock opportunities in countries and industries in non–U.S. markets. Managers mainly select large and mid cap stocks from non–U.S. developed markets. Large/mid cap active strategies add alpha through active investment decisions, resulting in a portfolio's over– or under–weighting of stocks, and thus as a fall out, to industries, and countries, relative to the MSCI EAFE Index.

Allocate 1.9% of the Fund to non–U.S. developed markets small cap.
The benchmark for the non–U.S. developed markets small cap is the MSCI EAFE Small Cap Index. SERS uses two dedicated small cap managers to invest in non–U.S. developed markets. Active investment in small cap stocks offers the opportunity to capture excess returns in this inefficient segment of the market.

Allocate 9.0% of the Fund to emerging markets strategies.
The benchmark for the emerging markets strategies is the MSCI Emerging Markets Index. Emerging markets are generally regarded as less efficient than developed markets and historically have been more volatile than developed markets. Returns have been influenced by capital flows into and out of these markets; however, longer term, emerging markets can be attractive to those investors seeking to access the financial returns derived from rapidly expanding economies. Due to the high return volatility associated with emerging markets, SERS employs a structure diversified by investment advisor, style and type. The strategies include traditional passive and active global emerging markets mandates, as well as special situations in emerging markets where longer–term commitments are made to limited partnerships for private placements with public companies.

2011–2012 non–U.S. Stock Initiative

Develop a target weight for each non–U.S. stock portfolio.
The portfolio target weights will be determined by style and confidence in the investment product.

Research and evaluate a dedicated allocation to small cap stocks in emerging markets.
By definition, the small cap segment of emerging markets stocks makes up the bottom 15% of the MSCI Emerging Markets Investable Market Indices by capitalization. This segment of the emerging markets stocks universe is under–researched, and therefore less efficiently priced. Emerging markets small cap stocks provide an opportunity set that is less correlated to emerging as well as developed markets large–cap stocks, and offers the potential for further risk diversification and additional sources of return.

Of SERS' three traditional global emerging markets mandates, two are not precluded from investing in this segment, but do so only on an opportunistic basis. A dedicated allocation to small cap stocks would ensure complete coverage of the entire emerging markets stocks universe at all times.

Research and evaluate investing in frontier markets.
"Frontier markets" are defined as less developed, pre–emerging markets. These markets span Asia, the Middle East and sub–Saharan Africa, Eastern Europe and South

America. They tend to be small and illiquid, even by emerging market standards, and are not yet large enough or wealthy enough to be included in any standard emerging market benchmark.

Frontier markets represent a potential source of return due to robust economic growth and market inefficiencies. Frontier markets exhibit very low correlations among themselves and with developed and emerging markets that makes them a potentially viable source of diversification.

The SERS Fund currently has minimal exposure to stocks in frontier markets via its emerging markets stock portfolios. The SERS Fund has some exposure to frontier markets via emerging market debt in the fixed income asset class.

Alternative Investments Asset Class Plan Summary

Role of Alternative Investments within the SERS Fund

Alternative investments are expected to provide long–term returns materially exceeding those of SERS' public markets exposure, and offer diversification benefits. Alternative investments consist of two major clusters of investments at opposite ends of the non–marketable investments continuum: private equity and venture capital, both of which take the form of limited partnership interests:

A. Private equity primarily refers to investments in the equity and subordinated debt of established companies, accomplished by means of domestic and non–U.S. leveraged buyouts, distressed debt investing, and acquisition of secondary partnership interests. For asset allocation purposes, SERS separately tracks distressed debt and non–U.S. investing.

B. Venture capital describes the financing of young, non–public growth companies that lack ready access to commercial debt and equity infusion. These investments are made in: i) seed stage companies in their conceptual phase, ii) early stage companies after a product has been developed and marketed but before material revenues are realized, and iii) late stage companies with demonstrable revenue and near– to medium–term opportunities for strategic sale or initial public offering of stock. Performance and allocations to investments in Pennsylvania and those with a significant Pennsylvania connection are also tracked separately.

The performance of SERS' alternative investments is measured against Cambridge Associates benchmarks, which are based on return data from the majority of private equity and venture capital funds raised since 1981. Access to certain top tier funds is constrained by very high demand. Thus, a custom benchmark that excludes funds to which SERS has no access is utilized to better reflect SERS' investment universe.

Long–Term Strategies for Alternative Investments

Sustain and manage alternative investments to the established allocation target.

Alternative investments can and have produced relatively high risk–adjusted returns over long periods of time. The 2011 Plan includes a 15% target allocation for the foreseeable future. As of September 30, 2010, exposure was 25%.

The strategy acknowledges that a convergence of significant events, such as high capital call volume, limited distributions, low relative performance of SERS' other asset classes, and other factors, may result in unintended overexposure for a protracted period of time. Recent experience offers a prime example: the financial crisis of 2008–2009 and subsequent recession triggered a major downturn in the public markets and later affected almost all financial markets, public and private. These exogenous factors significantly contributed to the current over–allocation position of the Alternative Investments portfolio. The pace and size of commitment recommendations has been and will continue to be moderated to respond to such circumstances. No commitments were made over the fifteen month period from October 2008 through year–end 2009. Throughout 2010 $250 million of commitments will be made to extremely high quality existing SERS managers. Nevertheless, a material reduction of alternative investments exposure will not be immediate. Indeed, it may take five or more years to reduce exposure to the 15% target allocation.

Ensure proper diversification of investment strategies, and explore new strategies.
Within the recommended 15% allocation, SERS seeks to build and maintain a diversified portfolio. The long–term goal is to achieve 45% exposure to private equity, 20% to venture capital, 25% to non–U.S., and 10% to distressed investing. Table VI depicts the portfolio's current allocation. Achieving 25% non–U.S. exposure will occur as unfunded commitments are invested in Asia (e.g., China and India), Europe, and Latin America.

Invest in superior return opportunities with existing fund sponsors, and cease less productive relationships.
General partner selection has the most profound influence over investment returns for the long–term. Stable management teams with a consistent record of top quartile returns tend to repeat their superior performance. SERS should strive to invest only with teams likely to produce top quartile performance. The Discretionary Reserve Fund and the Discretionary Reserve for Secondary Investments were established to facilitate SERS' participation in superior return opportunities often denied to public pension plan investors. These discretionary reserves distinguish SERS from its public fund peers, and should remain a part of the Investment Office marketing and negotiation arsenal. Agility, rigorous due diligence and aggressive marketing by SERS' Staff are still critical in achieving access to superior return opportunities in private equity and venture capital.

Although SERS has approximately $2.3 billion of committed capital yet undrawn, modest commitments to the most attractive opportunities available to SERS will help offset expected declines in distributions in the next decade. Proposed commitments to be made in 2011 will not have a material adverse impact on allocation and cash flow, e.g., the recommended $250 million in new commitments should result in approximately $50 million of additional funded capital next year.

Maintaining exposure to the very best opportunities created by SERS' core portfolio managers is of paramount importance despite existing over–exposure to alternative investments and availability of undrawn committed capital. Both Staff and Cambridge recommend that SERS should continue committing capital on a highly selective basis, albeit substantially moderated, to renew productive, valuable fund sponsor relationships, maintain diversification, and support a net cash generative alternative investment portfolio. The alternative investment environment is not static: teams spin–out, succession occurs, and new fund sponsors and strategies emerge. SERS has periodically refreshed its stable of alternative investment managers. As a result, the quality of the portfolio remains high. However, more than two decades of adding new

Table VI

Diversification Analysis
As % of NAV
(as of March 31, 2010)

Sub–Asset Classes*	
Private Equity	41%
Venture Capital	22%
Non–U.S.**	18%
Distressed	12%
Industry	
Consumer/Retail & Services	22%
Healthcare/Biotech	20%
Information Technology	13%
Financial Services	9%
Software	8%
Manufacturing	7%
Other	7%
Energy	6%
Media/Communications	6%
Electronics	3%

*In addition, Pennsylvania–related investments accounted for 5% and Other 2% of the AI portfolio.
**This represents funds expressly organized to invest outside the U.S.; however, actual exposure to underlying non–U.S. company investments is approximately 33%.

relationships and re–committing to existing productive relationships have resulted in 349 active partnerships and 138 general partner relationships in the SERS portfolio. Administrative and management responsibilities have also been compounded by the growing number of funds, prompting the Board two years ago to endorse outsourcing some non–core portfolio management.

2011–2012 Alternative Investments Initiatives

Target fund sponsors in the alternative investments portfolio expected to optimize returns and diversification.

About 50 fund sponsors from among more than 130 existing relationships comprise the core for future private equity and venture capital investing. Identifying the core relationships has enabled Staff to prioritize resources and focus oversight and due diligence activities. Key considerations in maintaining the core portfolio include monitoring: (i) track record and expected future performance, (ii) suitability of investment strategy, (iii) execution and realization of investment strategy, and (iv) team composition and stability.

Commit modestly to a select group of core SERS managers raising capital in 2011.

Many sponsors of the funds comprising SERS' core portfolio are or will be raising new pools of investment capital over the next 12–24 months. After refraining from making commitments for the fifteen month period from late 2008 through 2009, SERS began to cautiously commit additional capital in order to generate continuous distributions from the program in future years. Continuing with a $250 million budget will enable 10–12 commitments of modest but meaningful size over the course of 2011. These will be paced to comport with cash flow expectations, macroeconomic conditions, and material adverse changes in the overall SERS portfolio and pension framework. It is estimated that 26 of the core fund sponsors will be raising new investment funds in 2011. Given these are all offerings from our highest ranked managers, it is expected that they will be attractive new opportunities. However, the very cautious $250 million commitment budget being recommended will only accommodate commitments to a fraction of these opportunities. Potential commitments, therefore, should represent not only excellent opportunities, but those that provide the best strategic fit and risk profile.

Continue to monitor the secondary markets in event of a need for liquidity.

Existing alternative investments that are not elements of the core portfolio could be divested when conditions are favorable. However, secondary market discounts through the first half of 2010 continued to be unacceptably large. Until pricing is attractive or liquidity constraints compel disposition regardless of price, Staff and outsourced resources will continue their fiduciary duty of on–going oversight of non–core assets.

Exploit existing third party contractual relationships to efficiently manage non–core investments.

Staff will continue oversight of the Cambridge Associates and DLJ MB Advisors, Inc. (a/k/a, Credit Suisse Customized Funds Investment Group) relationships as they mature. Appropriate oversight management of the assigned non–core alternative investments will be assessed.

Real Estate Asset Class Plan Summary

Role of Real Estate

Real Estate is used by the Fund to:

a) Provide a competitive total return which is expected to fall between those of stocks and bonds;
b) Reduce total portfolio risk by diversifying the portfolio; and
c) Provide a hedge against the effects of inflation.

The following vehicles are used to access opportunities in the various sectors of commercial real estate:

Private Market Real Estate

Separate accounts – Separate accounts are the preferred structure because they provide SERS with better control, liquidity, alignment of interests, and lower cost.

Core open–end funds – This strategy enables SERS to maintain a diversified base of core assets in relatively liquid funds.

Opportunity funds – This strategy allows SERS to access high return investments that cannot be effectively made by the separate accounts. This strategy is diversified by manager, strategy, and vintage year.

Public Real Estate Securities

Real Estate Investment Trusts (REITs) – This strategy was initiated to capitalize on the growth of this sector (most recently in overseas markets) and to provide a high dividend yield and liquidity.

Timber

Separate accounts – The timber strategy provides the portfolio with stable returns and diversification. Timber differs from commercial real estate in that it is renewable, deriving its investment return from the biological growth of the trees and the ultimate sale of the timber.

Long–Term Strategy for Real Estate

Maintain a tactical approach to investing that keeps SERS at the forefront of new trends as institutional real estate investment markets continue to evolve.

SERS has been a tactical investor in real estate, a strategy that has served the Fund well during periods of market recovery and expansion. SERS committed capital through the latest market peak, so it is now well positioned with approximately $350 million unfunded investment commitments to high quality managers. These unfunded commitments ensure that SERS has a material amount of capital available for investment now that real estate markets have corrected as a result of the global financial crisis and recession. In addition, from calendar year 2009 through YTD 2010, SERS has invested $425 million into new and existing real estate investments.

Real estate markets peaked in 2007–2008, primarily due to capital market forces and peaking operating fundamentals. In late 2008 and 2009, real estate markets experienced the most severe correction in history. Magnified by leveraged capital structures, values declined by 38% from peak pricing. The severity of the global recession is expected to take a toll on real estate operating fundamentals for another 12–24 months, creating strong headwinds against a robust recovery.

Domestically, a liquidity gap will create opportunities for SERS. Distress in the market is beginning to occur, however, it is being delayed to some extent by artificially low interest rates and the hesitancy of lenders to take the losses necessary to remove bad loans from their balance sheets. When the large volumes of outstanding commercial real estate loans mature, owners will find themselves unable to refinance at comparable loan amounts and interest rates. In addition, troubled lenders may not be able to fund previously made unfunded loan commitments.

Enhance diversification of the asset class.
The real estate portfolio is currently invested in three distinct sectors: 1. *Private Market Real Estate* (separate accounts, core open–end commingled funds, and opportunity funds); 2. *Public Real Estate Securities* (shares of REITs); and 3. *Timber* (direct and fund investments in timberland). This approach provides the ability to tactically rebalance the program.

2011 – 2012 Real Estate Initiatives

Despite a major correction in the real estate markets, SERS' real estate portfolio remains in an over–funded position at 9% of the total portfolio.
In 2008–2009, public stocks and other asset classes declined in value at a rate faster than real estate. As a result, SERS' real estate is at a level above its 8% target allocation. A focus in 2011 will be to limit new investments to capture unique opportunities resulting from a material correction in real estate values and operating conditions, as well as to enhance overall program diversification.

As market conditions improve, SERS plans to selectively sell underperforming separate account assets if the conditions warrant or redeem from open–end commingled fund positions. This will serve three purposes:

1. Generate liquidity for the Fund,
2. Reduce the size of the real estate portfolio and,
3. Create capacity for the separate account portfolios to better capitalize on future market opportunities.

SERS will begin to see more capital distributions from the portion of the real estate portfolio composed of opportunity fund investments as market conditions improve. This will help toward the goal of rebalancing the portfolio.

New investment to the asset class will be limited to previously approved partnership and separate account commitments. Unfunded partnership commitments of approximately $350 million and separate account investments require funding for ongoing operations such as tenant improvements and maintenance requirements.

Make efforts to increase the overall liquidity of the real estate portfolio to help meet SERS' cash needs as they arise.
Although the real estate portfolio is inherently illiquid, there are measures that can be implemented to enhance the overall liquidity of the portfolio. These measures include:

- Reducing new limited partnership investments for at least one year. These investments typically lock SERS into a ten– to twelve–year investment, thereby affording SERS no control over liquidation. In addition, this will serve to reduce overall portfolio fees as these investment structures are the most expensive real estate investment vehicles available to SERS.

  SERS will continue to benefit from these higher return potential investments through the $350 million of unfunded commitments to our existing portfolio of opportunity funds.

- Within the direct separate account portfolios, focusing only on purchasing new investments that do not require the participation of an outside partner if such an investment would require SERS to enter into an agreement that would limit flexibility in investment decision–making.

- Limiting the use of any type of third–party debt that contains prepayment limitations and/or yield maintenance provisions that may restrict SERS' ability to sell the investment.

- Monitoring REIT exposure, use of separate accounts, and use of open–end funds to control fund liquidity.

Fund SERS' existing separate accounts to allow those managers to participate in new investments.

SERS' five existing separate account advisors manage investments which comprise 67% of the total real estate portfolio. Many of these investments are owned unencumbered and are managed by our advisors solely for SERS' benefit. This method of investing is a low–cost alternative and provides SERS with a measure of liquidity.

Over the years these separate accounts have expanded and contracted in size as the advisors purchased and sold investments when opportunities became available. During the past few years the accounts have been relatively dormant, with reduced new investment and selective selling of non–strategic assets. In 2011 the existing separate account advisors will have the ability to make selective new investments within the discretionary guidelines that are in effect, and as always, will be able to draw capital on an as–needed basis to provide for the operational needs of exiting property investments.

Establish an investment program in the farmland sector.

The macro trends affecting the demand for US–produced farm products continue to remain very strong. Institutional investment in farmland has become more mainstream. The sector has continued to grow, develop and offer a greater variety of risk/reward profiles and opportunities for investment. Investment returns over the long–term continue to be strong.

Coupled with SERS' existing investment program in timberland, farmland could prove to enhance portfolio diversification and returns, as well as build out SERS real estate investments in natural resources.

Investment options available to SERS include both open–end commingled funds and separate accounts. During 2011, SERS' Staff and consultant will present research findings on this asset class and our recommendation for the appropriate course of action.

With limited amount of capital available, continue to grow SERS' private real estate exposure to overseas markets from current levels (near 9%).

Globalization continues to open up new markets overseas to real estate investors. In addition, many overseas markets appear to have economies that weathered the recent capital markets crisis better and appear likely to return to growth more quickly than the United States. Finally, a growing body of research confirms the diversification benefit and return premium associated with investing in non–U.S. markets. The number of overseas opportunities available to investors like SERS has more than tripled in the last three years.

In the past, SERS used commingled funds to access overseas markets, either through global allocators or through targeted investments in Asia and Latin America. In 2011, SERS will review other options available, including a growing number of commingled funds targeting specific regions, individual countries, or unique strategies within individual countries. Additionally, to maintain reasonable liquidity, other structures will be explored, including some open–end vehicles.

Broaden the timberland investment mandate to permit investment in all of the United States.

During the April 2010 Board meeting, Forest Investment Associates, who manages SERS' $200 million timberland separate account, made a presentation to the Board and recommended that the geographical restriction of only investing in timberland in the eastern half of the U.S. be lifted, permitting investing across the country. The purpose of this was to open up new investment opportunities for SERS and increase our portfolio diversification; however, market pricing was not conducive to immediate investment.

During 2011, an update on the benefits of a broadened mandate and the authority for FIA to expand the geographical investment in timberland will be presented to the Board for consideration.

Fixed Income Asset Class Plan Summary

Role of Fixed Income Asset Class within the SERS Fund

The Fixed Income asset class is employed by the Fund to:

1) generate current income from interest payments;
2) increase the value of the Fund through the reinvestment of those interest payments;
3) serve as a hedge against inflation and/or deflation; and
4) diversify the overall Fund.

Long–Term Strategy for Fixed Income

The long–term proposed strategic target of the Fixed Income asset class is 26% of the Fund.

The allocation to fixed income reflects its multifaceted role within the overall Fund. Fixed income serves to meet short to intermediate–term cash flow requirements, to hedge inflation/deflation risk, to further diversify the Fund, and to seek higher total return through higher yielding strategies. There are currently three distinct segments to the SERS' fixed income portfolio:

A. The Core Segment is currently composed primarily of investment grade, relatively liquid, public domestic securities, including Treasury Inflation Protected Securities (TIPS);

B. The High Yield Segment is composed primarily of less liquid, public and private securities that are credit sensitive and below investment–grade quality; and

C. The Emerging Market Debt Segment is composed primarily of less liquid public and private securities in the developing countries of the world.

The asset class is benchmarked against a blended index of the Barclays Aggregate Index, the Custom TIPS index, the Citigroup High Yield Market Index, and the J.P. Morgan Emerging Market Bond Index.

The 2011 Plan continues to recommend further diversification and expansion of the fixed income portfolio, with the core fixed income segment undergoing the most transformation.

The target allocation for the core fixed income segment is 10% of the total Fund. Core fixed income, considered the most conservative segment within the asset class, provides liquidity and diversification for the overall Fund. Traditionally, the segment has been benchmarked and managed to the Barclays Aggregate benchmark. This benchmark represents the investable universe of U.S. government, agencies, corporations and other securities. The index is weighted based upon the outstanding debt of each issuer. The expected return and risk characteristics of a core fixed income program that meets SERS' liquidity and return expectations are not closely aligned to the traditional benchmark.

2011–2012 Fixed Income Initiatives

The 2011 Annual Plan continues the core fixed income restructuring process that began in the 1st quarter of 2010. Recognizing the deep and liquid core fixed income investment opportunities outside of the U.S., it makes sense to move from the current U.S.–centric focus to a global one that better reflects the opportunity set. Therefore, the investable universe could consider Treasuries, global fixed income, customized portfolios, structured products, opportunistic strategies, and non–benchmark centric securities.

Beyond Core Fixed Income, the 2011 Plan intends to explore the merits of an opportunistic bucket within the fixed income asset class that takes advantage of the numerous mis–pricing of complex, or out–of–favor securities. Examples might include busted convertible bonds, private distressed securities, and mezzanine opportunities. Protection against rising interest rates in a record–low rate environment should also be explored.

Transform the existing U.S.–centric based core fixed income portfolio to a global one.
The Core Segment of fixed income consists primarily of domestic strategies that invest in relatively liquid, investment–grade, U.S. dollar denominated fixed income securities. These securities are interest rate sensitive and provide some protection against inflation and/or deflation as well as additional diversification for the Fund.

Changing the existing core fixed income program to focus on global opportunities instead of merely domestic ones should be considered.
This would offer additional diversification and possible improvement of the current risk/reward profile. The transformation would involve evaluating new managers and strategies, as well as changing the benchmark.

Consider reducing the existing Treasury Inflation–Protected Securities (TIPS) allocation in favor of higher–yielding alternatives.
The primary advantage of TIPS is that their return offers protection against both expected and unexpected inflation, as the securities' coupon payments are directly tied to the rate of inflation. Therefore, TIPS maintain the purchasing power of the investor.

Unfortunately, the yield on TIPS is currently very small due in part to fear of deflation and the Fed's stated position to keep interest rates low for an extended period. While TIPS should benefit from unanticipated inflation, the cost of this protection appears quite high at this time.

Research short–duration high yield.
Bond prices are inversely related to interest rates. In a rising interest–rate environment, bond prices decline. To mitigate the impact of interest–rate risk (duration), a focus on debt instruments with relatively short maturity dates can add value. These securities are less impacted by interest rate changes and are more credit sensitive. Shorter–duration securities return interest and principal cash flows more quickly. This allows the Fund to potentially invest the cash into higher–yielding opportunities, or to increase the cash position of the Fund.

Allow the existing advisors greater latitude for their investment strategies where warranted.
This greater degree of freedom can allow the advisor to hedge risks more effectively. For example, in a rising interest rate environment, relaxing the requirement that the advisor closely match the benchmark's duration profile can add value.

Permitting the advisors greater investment discretion and becoming less benchmark constrained should also be examined.

Consider an opportunistic bucket that provides access to higher expected returns of public and private fixed income assets.
The current High Yield component focuses on debt instruments offering higher return premiums and different risk characteristics than traditional core fixed income securities. Returns are less dependent upon interest rate exposure and more dependent upon company– or industry–specific events, competition and the economy. These debt instruments either carry low credit ratings or are unrated. This segment of the portfolio is benchmarked against the Citigroup High Yield Market Index.

This initiative is a continuation of 2010's initiatives and programs (For example, the asset–backed portfolio funded in the first quarter of 2010). Expanding the opportunity set to include out–of–favor or complex fixed income assets offers the possibility of higher returns, as well as less correlation with other fixed income strategies. These securities include mezzanine, distressed, asset–backed, etc.

Inflation Protection Strategy Plan Summary

Role of the Inflation Protection Strategy within the SERS Fund

The primary purpose of the Inflation Protection strategy is twofold: 1) to provide a more reliable hedge against inflation; and 2) to provide additional diversification to the total Fund. Exposure to inflation protection assets is achieved primarily through investments in commodities, commodity–related stocks and inflation–sensitive bonds. Commodities tend to have a different return pattern from broad stocks and bonds, thereby providing diversification and lowering risk to the overall Fund.

Long–Term Strategy for Inflation Protection

The long–term target allocation of the Inflation Protection strategy is 3% of the Fund consisting of active management.

The Inflation Protection strategy is comprised of:

- an active component that is composed of a multi–asset portfolio offering strong performance in rising inflation environments. This may include commodities, global stocks, inflation–linked and other types of fixed income securities; and
- a fund–of–funds product that invests in commodities.

The Inflation Protection strategy's performance is measured against a customized benchmark which consists of the S&P GSCI Index and the returns of a defined group of inflation–sensitive assets.

Diversified Inflation Protection Portfolio

The Fund employs an actively managed diversified portfolio of inflation–sensitive investments to enhance the Inflation Protection strategy. These investments include actively managed commodities, commodity–related stocks, and inflation–sensitive bonds. The long–term allocation to this portfolio is 1½% of the Fund.

The diversified inflation protection portfolio over/under weights inflation sensitive investments within the portfolio. Tactical allocation shifts occur across as well as within asset classes. The manager actively allocates exposures across different securities to obtain exposure to areas that offer strong relative performance in rising inflation environments.

The benchmark for this multi–asset portfolio is a blend of various MSCI equity indices, the HSBC Climate Change (Equity) Index, the S&P GSCI Index, the S&P GSCI Precious Metals Total Return Index, and the Barclays Capital US TIPS 1–10 Year Index.

Commodity Fund–of–Funds

As part of the 2007 Investment Plan, Staff researched an initiative to consider reallocating a portion of SERS' Inflation Protection assets from passive to active management to add diversification, as well as to reduce the effect of negative roll–yields. The Board approved the reallocation in March 2007, and an actively–managed commodity fund–of–funds was added to the Inflation Protection strategy in June 2007.

Managed by a long–standing SERS advisor, this customized product is a multi–manager commodity portfolio representing 1½% of the Fund, and currently employing five underlying commodities specialist managers. These managers take an active, long–biased approach to investing within the global commodity markets to provide inflation protection and diversification.

The benchmark for the fund–of–funds strategy is constructed using the performance of specific contracts within the various commodity sub–sectors.

2011–2012 Inflation Protection Initiative

There are no new initiatives proposed.

Absolute Return Strategies Plan Summary

Role of Absolute Return Strategies within the SERS Fund

SERS has employed absolute return strategies in the portfolio for over a decade. SERS' initial foray into absolute return strategies was a research initiative in the 1996 Annual Plan. The program was funded in 1999 through a relatively modest allocation in four market–neutral hedge funds. In 2002, with the goal of diversifying the sources of alpha, SERS adopted a highly diversified fund–of–hedge funds approach to this program, which is currently broadly invested in over 250 unique underlying managers, employing eight major strategies and over 21 different sub–strategies.

Absolute return strategies were coupled with S&P 500 and MSCI EAFE swaps to attain exposure to the public markets. These two components were referred to as the SERS portable alpha program, a strategy that was viewed as an alternative to traditional long–only active management in large cap stocks.

SERS' absolute return strategies program currently comprises 24% of the overall Fund. However, in order to achieve SERS' liquidity goals to rebalance the overall portfolio towards its long–term targets, this program is being systematically reduced towards a long–term target allocation of 9% of Fund assets.

Long–Term Strategy

SERS' recently modified objective with the absolute return strategies program is designed to achieve absolute returns that generally have either low or uncorrelated returns to many markets. SERS' absolute return strategies are designed to seek out a broad range of global investment opportunities, strategies, and management styles to identify and exploit market opportunities. This approach helps to reduce risk and stabilize expected returns for the Fund. The program is a conservative, well–diversified, expected low–volatility investment strategy modeled to generate modest annual returns.

Utilizing the fund–of–hedge funds approach allows SERS to achieve greater levels of manager oversight, with the fund–of–hedge funds managers providing enhanced due diligence, portfolio monitoring, and state–of–the–art risk management systems.

2011–2012 Absolute Return Strategy Initiatives

Review the current investment trends in currency management.

Between May 1996 and January 2007, SERS employed a currency overlay program utilizing two managers to hedge the effects of currency translation arising from investment in non–U.S. stock markets. Recently there has been a shift away from hedging currency exposures to trading currencies as a means of generating excess returns. Pensions & Investments, in its September 20, 2010 edition, ran an article pointing out that currencies are morphing into a market more akin to stocks where alpha and beta are being separated. In 2011, Staff and Consultant will research the potential benefits of an active currency strategy and report their findings to the Board.

Review the absolute return program.

SERS has been an active investor in absolute return funds since 1999. The program has morphed from a market–neutral, long–short equity strategy to the current absolute return structure. In addition, the Fund has invested in separate hedge funds to diversify return streams.

Staff and consultant will review the absolute return structure and report to the Board the lessons learned on structures, diversification, liquidity, valuations, benchmarking, the maturation of the strategy and the industry and the role absolute return can play in a diversified institutional portfolio.

Cash Plan Summary

Role of Cash Asset Class within the SERS Fund

Historically, the Cash asset class has been employed by the Fund to provide for SERS' liquidity needs as well as accumulate funds for future permanent investment.

The asset class emphasizes the use of higher credit quality debt instruments which are liquid and have short maturities and durations, or which have floating rates and have historically been invested in the Treasury's Short–Term Investment Fund (STIF), and more recently, in a portfolio managed by NISA.

Long–Term Strategy for Cash

Ensure adequate liquidity to meet transactional needs.

On an asset allocation basis, cash has the lowest expected return of all asset classes. Therefore, since SERS is a long–term investor, other than cash required to meet immediate needs, the objective is to minimize exposure to this asset and maintain a long–term allocation to the Cash asset class of zero.

Cash payments to meet the Fund's benefit payments and other obligations are sourced through employee and employer contributions, limited partnership distributions, and raising cash from public market managers from time to time. Contributions are a predictable source of cash flow, but are inadequate to meet continuing benefit obligations. Distributions from limited partnerships are unpredictable and dependent on market conditions and terms of partnership agreements. Accordingly, raising cash from public market equity, fixed income, and fund–of–hedge funds managers is required to meet monthly cash flow requirements.

2011 – 2012 Cash Initiatives

Continue to Evaluate Participation in the Security Lending Program.

In 2008, SERS temporarily restructured its participation in the Security Lending program. The restructuring was necessitated as an action to enhance the Fund's liquidity profile and was due primarily to the seizing up of credit markets and the absence of fair values for the underlying investments in the collateral investment pool. In 2011 Staff will continue to monitor the program using a measured approach to determine the utility of participating in the program and whether to:

- Continue to reduce exposure,
- Maintain current levels of participation, or
- As markets stabilize and visibility improves, return to full participation.

Corporate Governance Summary

Role of Corporate Governance within the SERS Fund

SERS has been a long–time advocate of good corporate governance practices which serves to protect and preserve the assets of the Fund. The Department of Labor has opined that pension fund fiduciaries have an obligation to engage in specific corporate governance activities such as proxy voting. Investor voting rights are considered to be assets of the Fund.

SERS is a shareowner in each of the companies it holds in its stock portfolios. Attention to corporate governance promotes responsible business practices that serve as an integral component to a company's long–term value creation.

Long–Term Strategy for Corporate Governance

SERS continues to be involved in efforts to improve the corporate governance practices of the companies owned within SERS' portfolio to protect and grow the value of these assets. SERS' ongoing corporate governance program includes the following:

Institutional Shareholder Services (ISS) – Continue SERS' partnership with ISS to vote SERS proxies and to review and implement current "best practices" outlined in SERS' proxy voting guidelines, which are updated and approved by the SERS Board annually. SERS Board–approved domestic and non–U.S. proxy voting guidelines and the Fund's proxy votes are regularly updated and available to the public on SERS' website.

Council of Institutional Investors (CII) – Maintain SERS' active membership in CII, which represents 140 pension fund members whose collective assets exceed $3 trillion. CII is recognized as a significant national voice for institutional shareholder interests. By working together with CII, SERS seeks to promote corporate governance reforms at the statutory and regulatory level. SERS will continue its advocacy role in promoting corporate governance reforms by communicating in writing and in person through informal and formal public meetings with legislative, regulatory, legal and related corporate governance oversight entities. These may include the U.S. Congress, Securities and Exchange Commission, Financial Accounting Standards Board, Public Company Accounting Oversight Board, American Bar Association, Delaware Bar Association, National Stock Exchanges, and Regional Stock Exchanges.

2011–2012 Corporate Governance Initiatives

SERS will research the feasibility of engaging companies on issues related to the employment of environmentally sustainable business practices that create or enhance investor value and as a corollary reduce risk of material investment losses.

Section 4
Appendix

Appendix

For informational purposes, the Appendix contains projected asset values and cash flows stated in dollar amounts for the total Fund, separate asset classes, and management styles within each asset class. The projections are based upon the assumption that the long term expected returns are achieved in each and every year; in fact, this will not happen, and these projected dollar amounts are important for illustrative purposes only.

These absolute numbers give a sense of the potential magnitude of growth and general direction of the Fund. They are more important in the aggregate than in the specific and should not be considered as commitments to asset classes. Plan initiatives and market conditions will alter actual results from the projections. The plan is based on percentage weightings as described in the introduction to this report, and not these projected dollar amounts.

SERS Cash Flow Projections
(millions of dollars)

Year	Employee	Employer	Total Employer & Employee Contributions	SERS Investment Return	Benefits and Expenses	SERS Ending Fund Market Value
1990 Actual	175	418	593	111	607	9,764
1991 Actual	183	381	564	2,156	664	11,820
1992 Actual	187	319	506	926	851	12,412
1993 Actual	190	304	494	1,525	781	13,650
1994 Actual	193	343	536	(149)	812	13,225
1995 Actual	202	385	587	3,260	894	16,178
1996 Actual	210	374	584	2,703	943	18,520
1997 Actual	213	324	537	3,173	1,037	21,193
1998 Actual	222	311	533	3,333	1,080	23,979
1999 Actual	224	270	494	4,771	1,248	27,996
2000 Actual	232	168	400	608	1,198	27,806
2001 Actual	240	77	317	(2,174)	1,266	24,683
2002 Actual	304	51	355	(2,631)	1,450	20,957
2003 Actual	308	68	376	4,940	1,656	24,617
2004 Actual	302	106	408	3,614	1,880	26,759
2005 Actual	306	147	453	3,797	1,966	29,043
2006 Actual	317	196	513	4,487	1,943	32,100
2007 Actual	334	242	576	5,227	2,361	35,542
2008 Actual	337	233	570	(9,886)	2,231	23,995
2009 Actual	349	252	601	2,197	2,297	24,496
2010 Estimated	362	261	623	1,892	2,436	24,575
2011 Estimated	376	392	768	1,893	2,583	24,654
2012 Estimated	389	608	997	1,903	2,739	24,814
2013 Estimated	402	885	1,287	1,921	2,898	25,124
2014 Estimated	415	1,214	1,629	1,953	3,055	25,651
2015 Estimated	429	1,563	1,992	2,003	3,215	26,431

This table uses actuarial projections combined with estimated employer contributions based on HB 2497 to demonstrate the general direction of cash flows and Fund growth. Consistent application of actuarial methodologies would generate different specific numbers, but would substantiate the general direction depicted.

Stocks Asset Allocation Projections
(millions of dollars)

Date	Global	U.S.	Non-U.S.	Emerging Mkts	Total Stocks
9/30/2010	**$917**	**$2,537**	**$2,002**	**$1,095**	**$6,552**
12/31/2010					
12/31/2011	$1,233	$2,589	$2,589	$986	$7,396
12/31/2012	$1,241	$2,668	$2,668	$1,489	$8,065
12/31/2013	$1,256	$2,952	$2,952	$1,759	$8,919
12/31/2014	$1,283	$3,078	$3,078	$2,052	$9,491
12/31/2015	$1,322	$3,304	$3,304	$2,379	$10,308
			% of Fund		
9/30/2010	**3.7%**	**10.4%**	**8.2%**	**4.5%**	**26.7%**
12/31/2011	5.0%	10.5%	10.5%	4.0%	30.0%
12/31/2012	5.0%	10.75%	10.75%	6.0%	32.5%
12/31/2013	5.0%	11.75%	11.75%	7.0%	35.5%
12/31/2014	5.0%	12.0%	12.0%	8.0%	37.0%
12/31/2015	5.0%	12.5%	12.5%	9.0%	39.0%
			Year-end cash flow projections (millions of dollars)		
12/31/2011	$231	($182)	$401	($242)	$208
12/31/2012	($105)	($159)	($162)	$383	($43)
12/31/2013	($99)	$39	$36	$90	$67
12/31/2014	($89)	($146)	($148)	$81	($303)
12/31/2015	($79)	($57)	($61)	$78	($119)

Alternative Investments Asset Allocation Projections
(millions of dollars)

Year	Commitments
2011	$250
2012	$550
2013	$700
2014	$950
2015	$950
	% of Total Fund - Year End
2011	24.5%
2012	22.5%
2013	19.5%
2014	15.5%
2015	15.0%
	Net Cash Flow
2011	$259
2012	$975
2013	$1,511
2014	$1,659
2015	$1,288

Real Estate Asset Allocation Projections
(millions of dollars)

Year End	Total Pooled Accounts	Total Separate Accounts	Total SERS Real Estate	Total SERS Fund
2011	$894.5	$1,520.4	$2,414.9	$24,654.0
2012	$845.6	$1,529.8	$2,375.3	$24,814.0
2013	$760.9	$1,541.6	$2,302.6	$25,124.0
2014	$670.1	$1,581.8	$2,251.9	$25,651.0
2015	$547.4	$1,603.5	$2,150.9	$26,431.0

PERCENTAGE OF REAL ESTATE PORTFOLIO

				% of Total Fund
2011	37.0%	63.0%	100.0%	9.8%
2012	35.6%	64.4%	100.0%	9.6%
2013	33.0%	67.0%	100.0%	9.2%
2014	29.8%	70.2%	100.0%	8.8%
2015	25.4%	74.6%	100.0%	8.1%

CASH FLOW PROJECTIONS
(in millions of dollars)

			Net Cash Flow
2011	$16.7	$12.8	$29.5
2012	($108.4)	($93.3)	($201.7)
2013	($137.8)	($91.5)	($229.3)
2014	($137.0)	($64.9)	($201.9)
2015	($160.9)	($85.5)	($246.4)

Fixed Income Asset Allocation Projections
(millions of dollars)

End	Core	TIPS	Non - US Fixed	High Yield	EMD	Total Fixed Income
9/30/2010	$472	$1,261	$0	$1,030	$1,035	$3,799
12/31/2010	$477	$1,274	$0	$1,041	$1,046	$3,837
12/31/2011	$496	$990	$847	$990	$990	$4,314
12/31/2012	$620	$992	$995	$992	$992	$4,591
12/31/2013	$1,005	$1,005	$1,005	$1,005	$1,005	$5,025
12/31/2014	$2,309	$1,026	$1,026	$1,026	$1,026	$6,413
12/31/2015	$2,644	$1,057	$1,057	$1,057	$1,057	$6,872
			Percentage of Fixed Income			**% of Total Fund**
9/30/2010	12.4%	33.2%	0.0%	27.1%	27.3%	16.1%
12/31/2010	12.4%	33.2%	0.0%	27.1%	27.3%	15.6%
12/31/2011	11.5%	23.0%	19.6%	23.0%	23.0%	17.5%
12/31/2012	13.5%	21.6%	21.7%	21.6%	21.6%	18.5%
12/31/2013	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
12/31/2014	36.0%	16.0%	16.0%	16.0%	16.0%	25.0%
12/31/2015	38.5%	15.4%	15.4%	15.4%	15.4%	26.0%
			Cash Flow Projections (millions of dollars)			**Net Cash Flow**
4Q 2010						$0
2011		($327)	$813	($109)	($107)	$270
2012	$100	($42)	$108	($57)	($50)	$59
2013	$347	($31)	($31)	($47)	($39)	$199
2014	$1,215	($24)	($20)	($40)	($33)	$1,098
2015	$233	($15)	($12)	($31)	($24)	$151

Inflation Protection Asset Allocation Projections

(millions of dollars)

Year End	Total SERS Inflation Protection
9/30/2010	$963
12/31/2010	$959
12/31/2011	$737
12/31/2012	$751
12/31/2013	$796
12/31/2014	$824
12/31/2015	$844

	% of Total Fund
9/30/2010	3.9%
12/31/2010	3.9%
12/31/2011	3.0%
12/31/2012	3.0%
12/31/2013	3.0%
12/31/2014	3.0%
12/31/2015	3.0%

	Net Cash Flow
2010	$0
2011	($280)
2012	($30)
2013	$0
2014	($20)
2015	($30)

Absolute Return Asset Allocation Projections
(millions of dollars)

Year End	Total ARS
9/30/2010	$4,355
12/31/2010	$4,188
12/31/2011	$3,823
12/31/2012	$3,480
12/31/2013	$3,263
12/31/2014	$2,829
12/31/2015	$2,389

	% of Total Fund
9/30/2010	17.8%
12/31/2010	17.0%
12/31/2011	15.5%
12/31/2012	14.0%
12/31/2013	13.0%
12/31/2014	11.0%
12/31/2015	9.0%

	Net Cash Flow
2010	($200)
2011	($675)
2012	($625)
2013	($475)
2014	($675)
2015	($650)