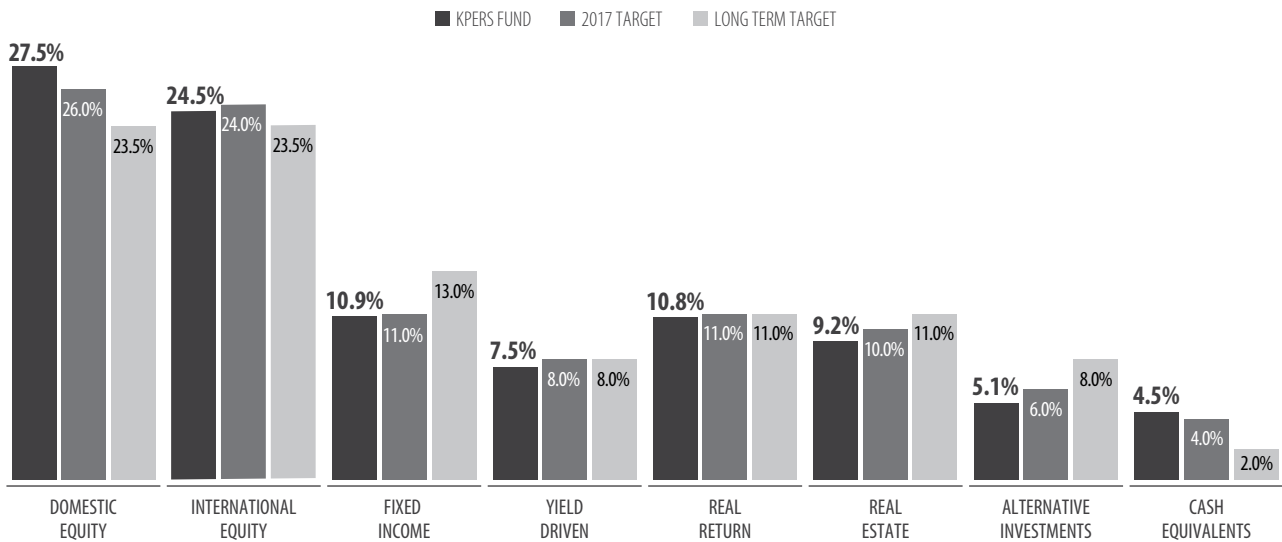


INVESTMENT **SECTION**

CHIEF INVESTMENT OFFICER'S REVIEW

The Kansas Public Employees Retirement System investment portfolio represents all contributions to the plan, from both members and their employers, as well as net earnings on these assets. Total assets at the end of Fiscal Year 2017 were \$18.449 billion. The System's investment portfolio is managed for the long term, in

order to generate adequate returns to pay the benefits promised to members. In order to achieve that goal, the assets receive the benefit of a broadly diversified investment portfolio which includes domestic and non-U.S. stocks, bonds, real estate, timber, infrastructure, alternative investments and cash equivalents.



BASIS OF PRESENTATION

The investment performance data is calculated by the Retirement System's custodial bank and prepared by the Retirement System's Investment Division staff. In Fiscal Year 2017, the System's custodial bank was State Street Bank and Trust. Performance calculations were prepared using time-weighted rates of return, gross of fees, unless otherwise indicated.

ASSET ALLOCATION

Portfolio investments are diversified among eight different asset classes for asset allocation and investment performance purposes, including: domestic equity; international (non-U.S.) equity; fixed income; "yield driven" assets; "real return" assets; real estate; alternative investments; and cash equivalents. (NOTE: For financial reporting purposes, as reported in the Financial Section and the Investment Summary in the Investment Section, investments are categorized by the underlying security.)

The Board of Trustees, working with the System's general investment consultant, Pension Consulting Alliance (PCA) and investment staff, last completed an asset/liability study in January 2016. The Board reviewed several investment policy options during the asset/liability study, all of which contained an emphasis on improving funding progress over time. At the conclusion of the asset/liability study, the Board re-adopted the System's existing

long-term asset allocation targets. The risk philosophy implied by the asset allocation policy targets places significant emphasis on managing and improving the funded status of the Retirement System over time. Subsequent to the completion of the asset/liability study, the Board has increased the cash equivalents target to 4 percent and reduced the fixed income target to 11 percent. This adjustment was necessitated by reductions in State of Kansas employer contributions to the Retirement System for Fiscal Years 2016 through 2019.

The allocation to equity investments (primarily publicly traded stocks) continues to comprise the largest portion of the Retirement System's investment portfolio. This allocation reflects the System's long-term investment orientation and the expectation that equities will provide attractive real returns over time. Equity investments allow the investment portfolio to participate in the investment returns produced by companies seeking to grow and profit from their business activities. Equity investments are made globally, sourcing investment return from both domestic and foreign companies, and diversifying the accompanying investment risk across a broad spectrum of economies, currencies, economic sectors and industries. Fixed income investments are also an important component of the System's asset mix. Due to its relatively low correlation with equities, the fixed income portfolio serves to diversify the risk of equity investing and also provides a source of current income.

The yield driven asset class is designed to house those assets which derive a significant part of their expected return from income and have moderate exposure to growth risk but also provide a degree of diversification. The yield driven asset class consists of the System's strategic fixed income portfolios, a portfolio which is invested in bank loan securities and investments in domestic Real Estate Investment Trusts (REITs) and Master Limited Partnerships (MLPs).

The majority of the real return asset category is made up of Treasury Inflation Protected Securities (TIPS) and Global Inflation Linked Bonds (GILBs). The asset class also houses the System's investments in timber and infrastructure assets. In Fiscal Year 2017, the System funded new commitments to two infrastructure funds and one timber fund.

Real estate investments generate returns in a different manner than equities or fixed income investments, since real estate follows a different (and typically longer) market cycle. Because it moves in a different market cycle than publicly traded stocks and bonds, real estate provides diversification advantages, as well as some inflation protection, to the investment portfolio. The System's real estate portfolio is heavily weighted to "core" real estate, which means that it also produces an attractive current income.

The System's alternative investments, which consist primarily of investments in private partnerships that make venture capital investments, pursue leveraged buyout strategies or own private debt, represent the higher end of the investment risk/return spectrum. Private equity managers pursue higher growth opportunities in pursuit of higher returns, with commensurate investment risk.

The System also holds cash equivalents investments, primarily to facilitate investment transactions and the cash flows needed to pay benefits.

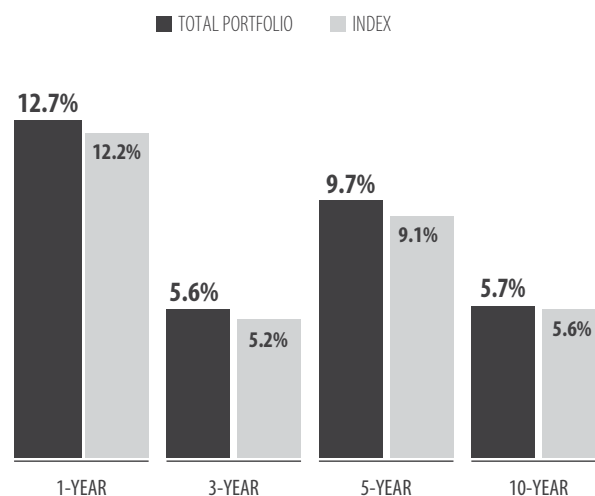
INVESTMENT POLICY

The Board of Trustees has adopted a Statement of Investment Policy, Objectives and Guidelines (the Statement), which serves as a guide to the implementation of the System's broad investment objectives. The Statement complements state statutes and documents the principles and standards that guide the management of the System's assets. It is binding upon all persons with authority over the assets, including investment managers, custodians, consultants, staff and the members of the Board of Trustees.

The Statement is the product of the Board's careful and prudent study and is reviewed annually and updated as needed. It sets forth the investment policies, objectives, and guidelines which the Board of Trustees judges to be appropriate and prudent, in consideration of the needs of the System, and to comply with K.S.A. 74-4901 et seq., to direct the System's assets. Although the System is not subject to the provisions of the Employee

Retirement Income Security Act of 1974, as amended (ERISA), the Board intends to abide by the provisions of ERISA to the greatest extent practicable. As such, this Statement is written to be consistent with ERISA. Among other things, the Statement establishes the criteria against which the System's investment managers are to be measured. In addition, it serves as a review document to guide ongoing oversight of the investment of the Fund as a yardstick of compliance with K.S.A 74-4901 et seq.

TIME WEIGHTED TOTAL RETURN *Total Portfolio*

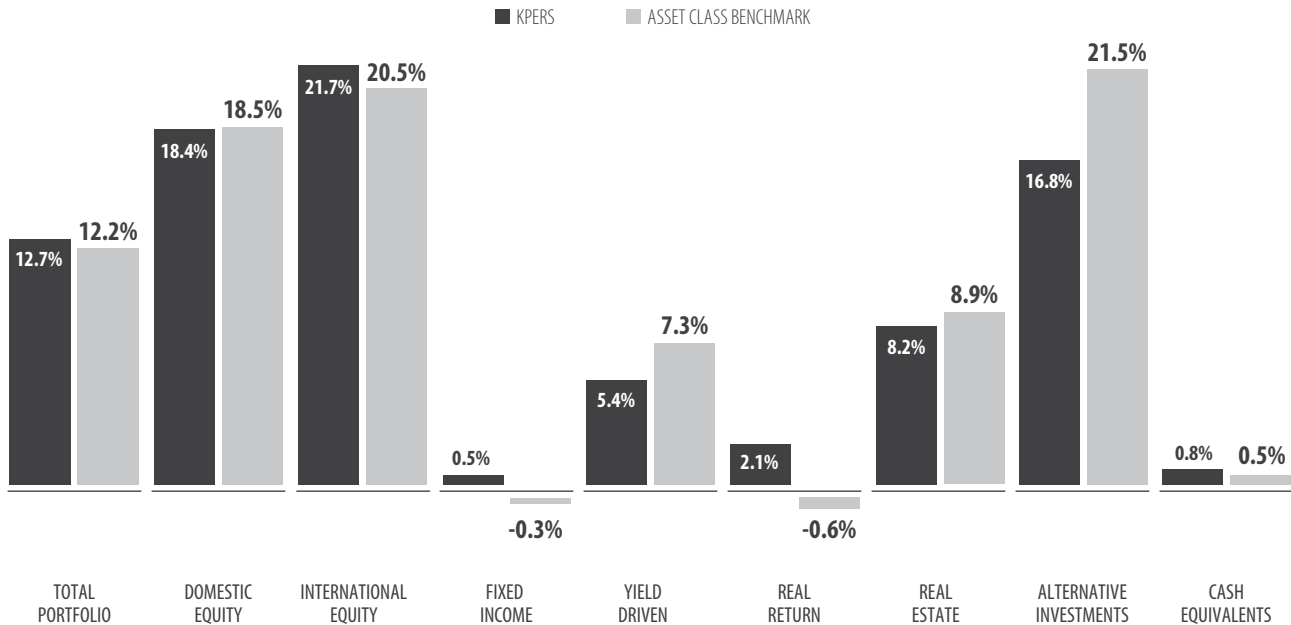


FISCAL YEAR 2017 INVESTMENT PERFORMANCE

The Retirement System's total investment portfolio experienced a 12.7 percent total return for the one year ending June 30, 2017. The 12.7 percent return outperformed the KPERS Policy Index by 0.5 percent for the fiscal year. For the three years ending June 30, 2017, the System's total investment portfolio has produced an average annualized return of 5.6 percent, which outperformed the Policy Index by 0.4 percent. The System has enjoyed a robust 9.7 percent total return during the five years ending June 30, 2017, exceeding the Policy Index Benchmark by 0.6 percent. For the ten-year time period, total return has been a more moderate 5.7 percent, exceeding the Policy Index by 0.1 percent. As of June 30, 2017, the System's total return on total assets ranked above the median of the Wilshire TUCS universe for all pension plans for all time periods reported. The System's total return ranking was in the top quartile for the 4, 5 and 7-year trailing time periods. For the twenty-five year time period ending June 30, 2017, the System's assets have produced an average annualized total return of 8.5 percent, exceeding the historical 8 percent actuarial return assumption. The System's Board of Trustees took action to reduce the actuarially assumed rate of return from 8 percent to 7.75 percent in November 2016.

TIME WEIGHTED TOTAL RETURN BY ASSET CLASS

Fiscal Year 2017



FINANCIAL MARKET AND PERFORMANCE OVERVIEW

Fiscal Year 2017 was a strong period for the investment performance of risk assets, with all four quarters producing positive total returns for the Retirement System’s investment portfolio. During the fiscal year, the System’s total investment portfolio produced a 12.7 percent total return, exceeding both the Policy Index and the actuarial return assumption. All forms of equity assets (domestic, international, and private equity) contributed strong double-digit total returns, led by the international equity portfolio with a 21.7 percent total return. Although Fiscal Year 2017 was a weaker time period for fixed income assets, all asset classes contributed positive returns to the portfolio. Despite a somewhat volatile set of geopolitical events during the fiscal year (including the UK’s decision to leave the European Union and the U.S. and French presidential elections), financial markets remained relatively calm throughout the year, with volatility levels in the domestic equity market reaching record lows in early 2017. The outlook for global economic growth brightened in the second half of the fiscal year, particularly for the Eurozone. This was in sharp contrast with Fiscal Year 2016, during which high levels of global financial market volatility made it very difficult for the production of positive investment performance from publicly traded securities. Despite the Federal Reserve’s moves to raise interest rates by 25 basis points three times during Fiscal Year 2017, global monetary policy remained widely accommodative and global interest rates remained at historically low levels, which was supportive for the valuation levels of risk assets.

INVESTMENT STAFF

The System employs a staff of nine investment professionals to provide oversight and management of the assets and external investment managers. Under the oversight of the Chief Investment Officer (CIO), responsibility for the portfolio is assigned to the respective investment teams. The Deputy CIO for Public Markets has oversight responsibility for the publicly traded asset classes, and oversees the System’s active domestic and international equity investments, as well as the System’s cash equivalents manager. The Investment Officer for Public Markets oversees the yield driven investment portfolios, and the passive domestic and international equity portfolios. The Assistant Investment Officer has oversight responsibility for the core fixed income and TIPS/GILB portfolios in the real return asset class. The Deputy CIO for Private Markets manages the System’s real estate and private equity investments, as well as the allocations to timber and infrastructure. The Chief Investment Officer and the four Investment Officers are supported by a team of four Investment Analysts who provide research support and assistance in managing the portfolios. Investment staff are focused on bringing a consistent, disciplined management process to all aspects of oversight of investment managers, compliance monitoring, and risk management.

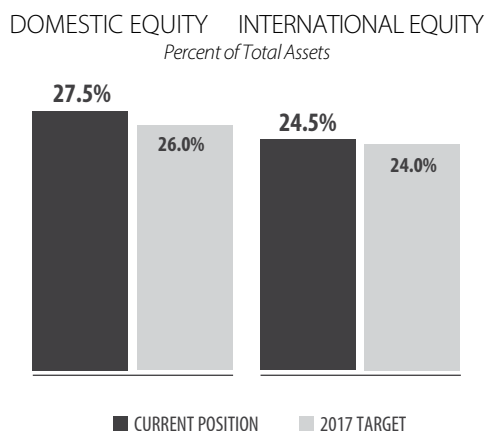
PUBLIC EQUITY INVESTMENTS

Public equity investments represent the largest strategy allocation within the System’s portfolio. As of June 30, 2017, the market value

of the System's global equity portfolio was \$9.6 billion. The strategy is executed through external managers investing domestically and internationally. Active strategies are utilized for approximately 37.3 percent of the public equity portfolio, focusing entirely on international equities. The balance of the global equity portfolio is passively managed to replicate the return of broad market indices.

PORTFOLIO STRUCTURE

The following graphs describe the current and target allocations at June 30, 2017:



DOMESTIC EQUITY

Domestic equities represent 52.8 percent of the total public equity portfolio and 27.5 percent of total assets. Domestic equity investments are benchmarked against the Russell 3000 index. It is the System's view that consistent outperformance over time through active management is extremely difficult when investing in U.S. equities. Therefore, 100 percent of the domestic equity portfolio is passively managed in an index strategy. This passive exposure is designed to replicate the return on the Russell 3000 index and is implemented through two investment managers.

INTERNATIONAL EQUITY

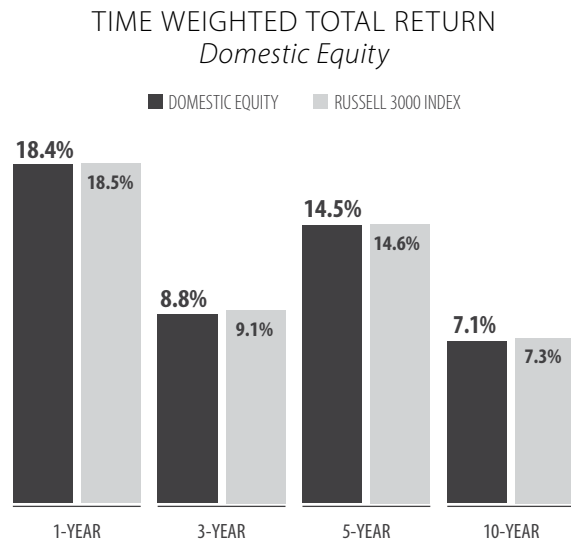
International equities represent 47.2 percent of the total public equity portfolio and 24.5 percent of total assets. International equity investments are benchmarked against the MSCI All Country World – Ex U.S. Net Index. Equity investments in companies domiciled outside of the United States offer the potential to add value through prudent active management. Therefore, 79.1 percent of this portfolio is actively managed. The System has retained five active managers to invest across the non-U.S. developed markets and emerging markets. The balance of the international equity portfolio is invested to replicate the return on the MSCI All Country World – Ex U.S. Net Index.

PERFORMANCE

The return of the System's domestic equity portfolio was in line with the portfolio's benchmark during Fiscal Year 2017. The domestic equity portfolio produced an 18.4 percent total return

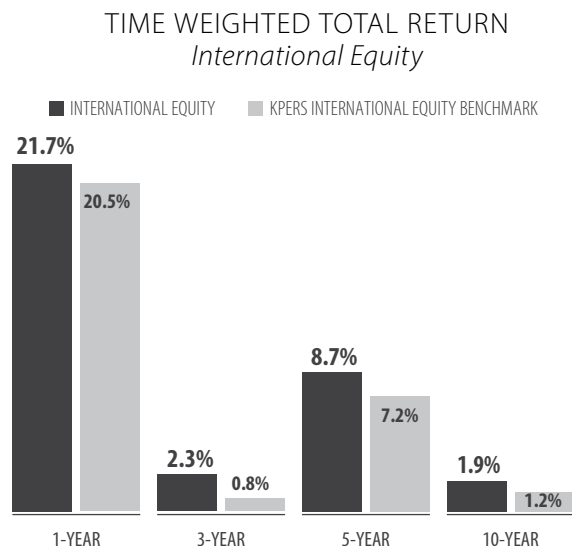
during the fiscal year. Over longer time periods, the return on the domestic equity portfolio was also in line with its benchmark, as expected, given its purely passive approach.

The following chart reports the performance of the domestic equity portfolio:



The international equity portfolio performed well on both an absolute and relative basis during Fiscal Year 2017. Returns were strongly positive in Fiscal Year 2017, outperforming the strategy benchmark. The international equity portfolio produced a total return of 21.7 percent for the fiscal year, relative to the 20.5 percent return for the benchmark. Over longer time periods, the international equity portfolio has produced strong relative returns, as active management has added value relative to the benchmark.

The following chart reports the performance of the international equity portfolio:

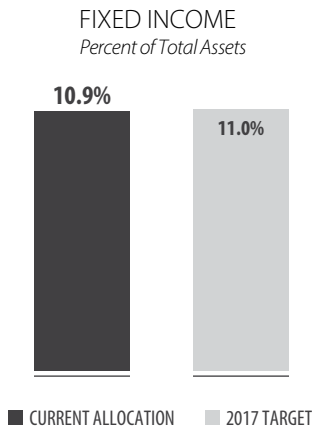


FIXED INCOME INVESTMENTS

As of June 30, 2017, the Retirement System’s fixed income portfolio had a market value of \$2.012 billion, representing 10.9 percent of the total assets of the System. The portfolio is structured with external managers investing through an active core fixed income U.S. mandate. The strategy is managed by two investment managers.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2017.



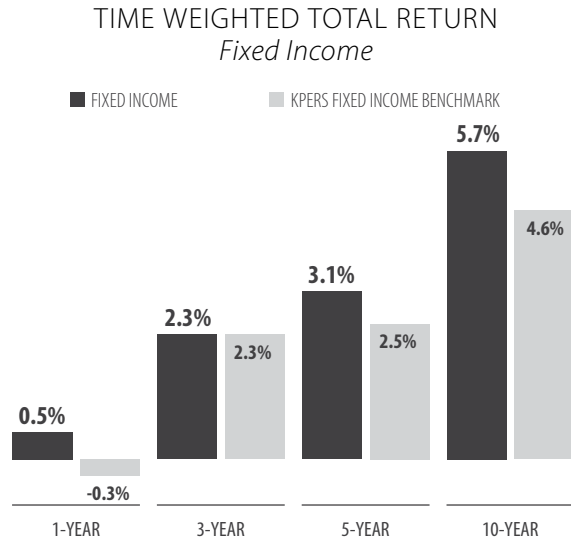
CORE U.S. FIXED INCOME

The fixed income portfolio is invested in core U.S. strategies through two active investment managers. The portfolio’s objective is to provide diversification to other assets in the System’s portfolio and to preserve capital while providing current income. The core fixed income U.S. strategies are primarily invested in traditional investment grade securities. The fixed income portfolio utilizes the Barclays Capital U.S. Aggregate Index as the benchmark.

PERFORMANCE

The core U.S. fixed income portfolio outperformed its benchmark during Fiscal Year 2017, and has provided positive relative performance across all longer-term time periods reported. Overall, the fixed income portfolio’s positioning in the investment grade corporate segment of the market drove performance during Fiscal Year 2017.

The following chart reports the performance of the fixed income portfolio:

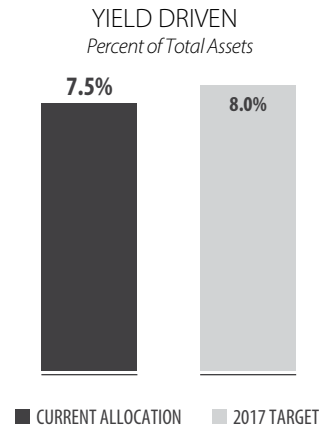


YIELD DRIVEN INVESTMENTS

Yield driven investments represent one of the newer strategy allocations within the System’s investment portfolio. As of June 30, 2017, the System’s yield driven portfolio had a market value of \$1.383 billion representing 7.5 percent of total assets. The strategy is actively managed by two strategic fixed income managers, one bank loan manager, two REIT managers, and one MLP manager. The yield driven asset class is designed to produce current income and an element of diversification away from equity risk, while also maintaining some degree of correlation with equities.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2017:



STRATEGIC FIXED INCOME

The strategic fixed income strategy represents approximately 50.7 percent of the total yield driven portfolio and 3.8 percent of total assets. The strategy is currently measured against the Barclays U.S. High Yield 2% Issuer Cap Index. The strategic fixed income portfolio maintains a minimum investment of 70 percent in high yield corporate debt securities. The System’s two strategic fixed income managers produced positive returns for Fiscal Year 2017.

REAL ESTATE INVESTMENT TRUSTS (REITS)

REITs represent 18.6 percent of the yield driven asset class and 1.4 percent of the System’s total assets. This strategy is benchmarked against the MSCI U.S. REIT Index. The publicly traded real estate securities portfolio is implemented by managers which actively invest in domestic REITs, real estate operating companies (REOCs) and related investment vehicles. The domestic REIT strategy is actively managed by two investment managers. REITs struggled during Fiscal Year 2017 as interest rates rose, producing flat or negative returns for the yield driven portfolio.

MASTER LIMITED PARTNERSHIPS (MLPS)

MLPs represent 19.4 percent of the yield driven asset class and 1.5 percent of the System’s total assets. The strategy is benchmarked against the Alerian MLP Index. The MLP sector offers attractive current yields and long-term growth prospects. The MLP portfolio is comprised of diversified energy sectors including companies focused on “midstream,” gathering and processing, infrastructure and natural gas pipelines and storage. The System currently has one active MLP investment manager. MLPs produced modestly positive total returns for Fiscal Year 2017, as MLP investments were adversely affected by both energy prices and rising interest rates.

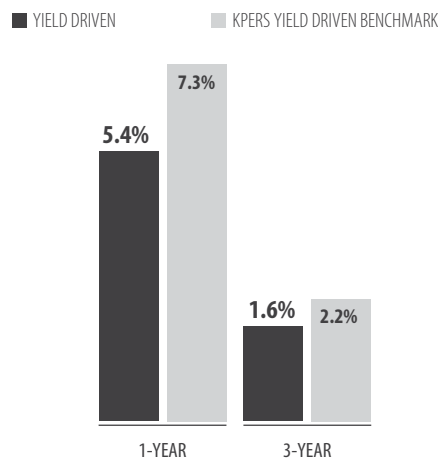
BANK LOANS

The bank loan allocation represents 11.3 percent of the yield driven asset class and 0.8 percent of the System’s total assets. The strategy is managed by one manager and is measured against the Credit Suisse Leveraged Loan Index. The strategy is intended to generate current yield through credit exposure to senior-secured, U.S. dollar denominated bank loans. The bank loan portfolio produced strong absolute and relative performance in the yield driven asset class during Fiscal Year 2017, with a 9.2 percent total return.

PERFORMANCE

The yield driven portfolio produced a total return of 5.4 percent in Fiscal Year 2017, underperforming the asset class benchmark return of 7.3 percent.

TIME WEIGHTED TOTAL RETURN
Yield Driven



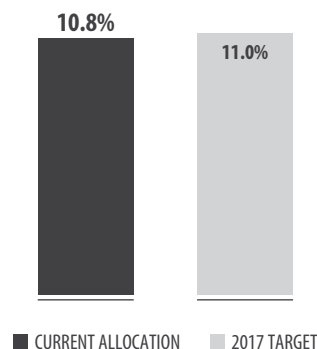
REAL RETURN INVESTMENTS

The real return portfolio is designed to provide the System with a hedge against future inflationary episodes. This strategy utilizes both public and private market investments. Public market exposure is global and achieved primarily through inflation linked fixed income securities issued by governments and their agencies in the U.S. as well as in developed countries around the world. Exposure in the private markets is currently achieved through investments in timber and infrastructure. The real return portfolio represents 10.8 percent of the System’s total assets and had a market value of \$2.0 billion as of June 30, 2017.

PORTFOLIO STRUCTURE

The following graph describes the current and target allocations at June 30, 2017:

REAL RETURN
Percent of Total Assets



U.S. TREASURY INFLATION LINKED BONDS (TIPS)

The TIPS portfolio represents 40.7 percent of the real return portfolio and is benchmarked against the Barclays U.S. TIPS Index. This passively managed exposure is designed to replicate the return on domestic inflation linked bonds. It is the System’s view that the minimal excess return available through active management of TIPS is not sufficient to compensate for the incremental costs of active management fees. The TIPS portfolio performed in line with its benchmark during Fiscal Year 2017, as expected.

GLOBAL INFLATION LINKED BONDS (GILBS)

The GILB portfolio represents 38.6 percent of the real return portfolio and is benchmarked against the Barclays World ILB Index (U.S.D Hedged). The GILB portfolio provides global diversification by broadening the opportunity set to capture unexpected inflation within investment-grade sovereign bonds. GILBs’ sources of excess return include the identification of mispricing due to the direction of global interest rates, the shape of each country’s yield curve, global breakeven inflation and relative value in global nominal bonds. The GILB portfolio outperformed its benchmark in Fiscal Year 2017 while also providing diversification. Low levels of global inflation had an impact on returns from inflation linked bonds, and the inflation linked portion of the real return portfolio produced a total return of 0.9 percent in Fiscal Year 2017.

TIMBER

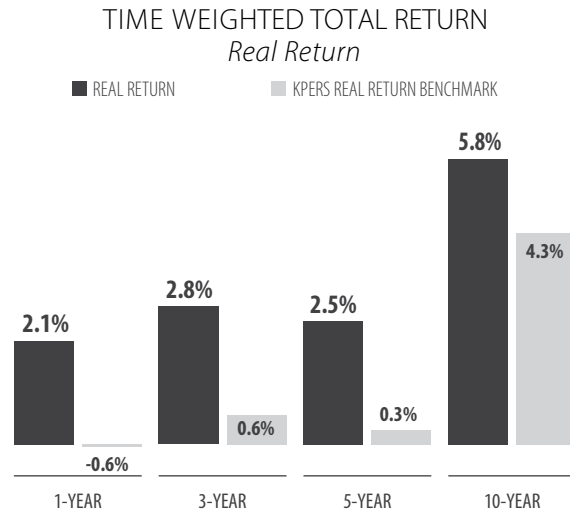
Timber investments are a component of the System’s real return asset allocation due to their historically high correlation to inflation. The System is diversified within timber markets located in Idaho and throughout eight states in the southern U.S. During Fiscal Year 2017, the System approved a commitment to a second timber manager to further diversify the timber portfolio. Over time, timber investments are expected to provide the System with current cash yields and modest capital appreciation. For Fiscal Year 2017, the System’s timber investments produced a 7.4 percent total return, underperforming the strategy benchmark. For the three years ending June 30, 2017, however, the timber portfolio has outperformed the strategy benchmark, and produced a 7.6 percent total return.

INFRASTRUCTURE

The System’s three infrastructure managers have been successful in operating their infrastructure investments. The System’s infrastructure portfolio is well diversified, with investments in Australia, the United Kingdom and throughout North and South America, and invested across multiple sectors, including renewable power, toll roads, electric utilities, sea ports and energy. The infrastructure portfolio produced a total return of 8.8 percent for the fiscal year, and outperformed the strategy benchmark.

PERFORMANCE

The System’s real return portfolio outperformed its benchmark in Fiscal Year 2017, producing a 2.1 percent total return against a benchmark return of -0.6 percent. Infrastructure and timber were the strongest performing investment strategies in the asset class. The real return portfolio has also outperformed its benchmark over the three-, five-, and ten-year time periods ending June 30, 2017.

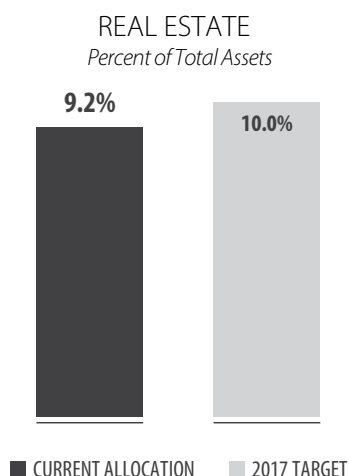


REAL ESTATE INVESTMENTS

As of June 30, 2017, the real estate portfolio had a market value of \$1.696 billion, representing 9.2 percent of the total fund. The real estate portfolio is primarily designed to provide diversification to the broader portfolio, while also providing a meaningful current income. Capital appreciation is a tertiary objective of current real estate investment activities.

PORTFOLIO STRUCTURE

The System’s real estate portfolio is classified into two categories: “core” and “noncore.” The “core” portion of the portfolio is targeted at a 65 percent allocation, while the “noncore” segment is targeted at a 35 percent allocation.



CORE REAL ESTATE

The largest segment of the real estate portfolio is “core” real estate. This portion of the portfolio is expected to produce steady current income in the form of investment yield while also providing portfolio diversification, and serving as an inflation hedge. The Retirement System’s core portfolio currently consists of:

- A separate account containing one directly owned commercial property in the U.S.
- Full commitments to seven commingled funds.

The System completed the gradual liquidation of the separate account real estate portfolio and reinvestment of the proceeds into pooled real estate investment funds during Fiscal Year 2017. This strategy is expected to result in improved liquidity, enhanced portfolio diversification, lower management fees and a reduction in the single event risk associated with owning individual real estate assets.

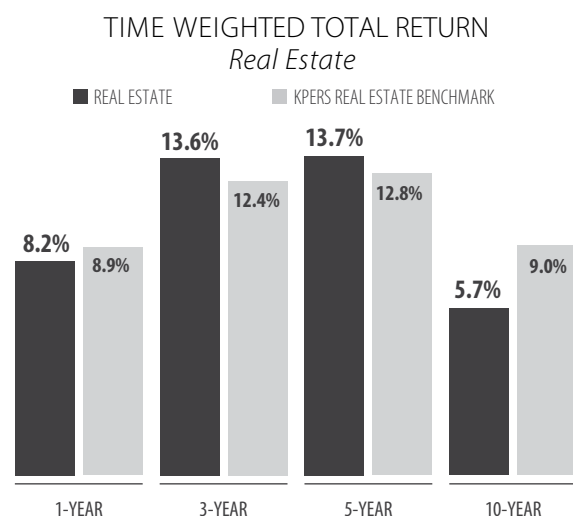
NON-CORE REAL ESTATE

The “non-core” segment consists of investments that generally involve some element of property lifecycle risk (such as positioning, leasing and development) while also utilizing greater leverage (debt) than core strategies. While providing elements of inflation protection and a diversification benefit to the broader portfolio, the System expects non-core real estate investments to produce meaningful capital appreciation and higher overall long-term returns than core investments. The non-core portfolio consists of investment funds employing a diversity of strategies and property types, both domestically and internationally.

REAL ESTATE PERFORMANCE

The System’s real estate portfolio underperformed its benchmark in Fiscal Year 2017. The core real estate portfolio produced a total return of 7.8 percent, lagging its benchmark slightly by 0.1 percent, while the non-core real estate portfolio underperformed

its benchmark by 1.6 percent, with a total return of 9.3 percent. In total, the System’s real estate portfolio produced a total return of 8.2 percent, which underperformed the benchmark return by 0.7 percent. Overall, most of the System’s real estate fund investments continued to benefit from the stable economic landscape, with the majority generating positive returns. However, both core and non-core real estate returns have moderated from the very robust levels of the recent past.



ALTERNATIVE INVESTMENTS

At June 30, 2017, the System’s alternative investment portfolio had a fair market value of \$932.4 million, representing 5.1 percent of the total portfolio. Since the inception of the alternative investment program in 1997 through June 30, 2017, the System has committed \$3.4 billion to 106 funds with 59 general partners.

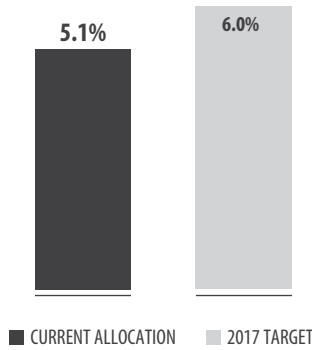
PORTFOLIO STRUCTURE

The alternative investment portfolio consists primarily of interest in private partnerships that provide equity and debt to companies. The portfolio contains two primary sub-portfolios based on investment period. Each portfolio has its own set of directives, guidelines, external fund managers and consultants who provide advice on investment strategy and investment selection during its investment period. The largest portfolio is the Private Equity Program (PEP), representing 98.8 percent of the market value of the asset class. The PEP portfolio actively seeks new commitments to private equity funds in three styles: buyout, venture capital/growth equity and special situations. Since the inception of PEP in 2007, the System has committed \$2.3 billion to 52 funds with 27 general partners.

The second portfolio is the Alternative Investment Portfolio (AIP) which represents 1.2 percent of the market value of the asset class. From 1997 to 2001, AIP made commitments to 54 funds with 35 general partners across five styles: buyout, venture capital, mezzanine, distressed debt and natural resources. As this is a mature portfolio, the remaining funds in the AIP portfolio are currently pursuing exit strategies for their existing holdings.

As required by K.S.A 74-4904, a schedule of alternative investments initiated on or after July 1, 1991, is listed on the following pages.

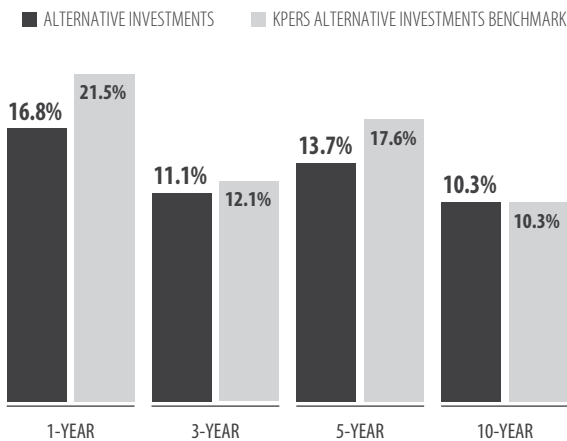
ALTERNATIVE INVESTMENTS
Percent of Total Assets



ALTERNATIVE INVESTMENTS PERFORMANCE

Private equity investments typically span ten years or longer. Therefore, the longer term returns from this asset class are more relevant in assessing its success in adding value to the overall portfolio. The System's long-term performance objective for alternative investments is to exceed the return of the Russell 3000 plus 3 percent. As the chart below shows, the alternative investments portfolio has met that objective over the ten-year time period, with a total return of 10.3 percent

TIME WEIGHTED TOTAL RETURN
Alternative Investments



ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY 1, 1991⁽¹⁾

As of June 30, 2017

Description	Cost	Market Value
Advanced Technology Ventures VI, L.P.	\$8,402,883	\$204,215
Apax Europ IX, L.P.	1,418,938	36,716
Apax Europe V, L.P.	7,519,592	112,819
Apollo Investment Fund VII, L.P.	7,684,458	6,545,206
Apollo Investment Fund VIII, L.P.	32,562,330	40,204,937
Ares Corporate Opportunities Fund III, L.P.	9,430,449	15,714,136
Ares Corporate Opportunities Fund IV, L.P.	17,232,900	23,826,311
Ares Corporate Opportunities Fund V, L.P.	2,887,235	2,887,235
Ares SSF IV, L.P.	20,660,066	15,259,298
Audax Mezzanine Fund III, L.P.	9,962,976	10,106,473
Battery Ventures VI, L.P.	3,338,584	43,001
Beacon Group Energy Fund II, L.P.	1,841,499	530,378
Capital Resource Partners IV, L.P.	4,604,598	435,706
CCMP Capital Investors III, L.P.	30,032,495	39,898,560
Centerbridge Capital Partners II, L.P.	18,005,845	18,700,006
Centerbridge Capital Partners III, L.P.	7,125,441	9,900,002
Clayton Dublier & Rice VI, L.P.	3,032,896	48,120
Crestview Partners III, L.P.	12,963,867	15,162,318
Cypress Merchant Banking II, L.P.	6,889,672	11,520
El Dorado Ventures VI, L.P.	4,537,915	353,463
Encap Energy Capital Fund X, L.P.	21,651,379	22,385,015
Encap Energy Capital IX, L.P.	29,580,166	26,740,352
Encap Energy Capital VIII, L.P.	17,532,084	10,867,630
First Reserve Fund XII, L.P.	18,275,864	7,451,819
FS Equity Partners VII, L.P.	22,370,241	24,963,601
Green Equity Investors VII, L.P.	7,673,999	7,673,999
GSO Capital Solutions Fund, L.P.	7,817,086	5,426,652
GSO Capital Solutions Fund II, L.P.	25,041,403	27,701,025
Halpern Denny Fund III, L.P.	1	—
HD Access Inc.	244,886	244,886
Hellman & Friedman VII, L.P.	9,125,221	17,352,630
Hellman & Friedman VIII, L.P.	1,949,150	2,550,983
JMI Equity Fund VII, L.P.	11,347,337	13,037,625
Littlejohn Fund II, L.P.	386,206	75,247
Montagu IV, L.P.	12,692,552	17,335,833
Montagu V, L.P.	3,385,207	3,691,331
New Enterprise Associates 13, L.P.	8,334,976	13,474,430
New Enterprise Associates 16, L.P.	1,500,000	1,500,000
Oak Hill Capital Partners, L.P.	1,187,040	70,762
OCM Opportunities Fund III, L.P.	904,886	6,232
OCM Opportunities Fund VIIb, L.P.	—	1,807,140
OneLiberty Fund IV, L.P.	1,155,056	1,134,818

ALTERNATIVE INVESTMENTS INITIATED ON OR AFTER JULY 1, 1991⁽¹⁾ (CONTINUED)

As of June 30, 2017

Description	Cost	Market Value
OneLiberty Ventures 2000, L.P.	12,493,019	3,936,138
Pine Brook Capital Partners, L.P.	13,109,971	11,176,238
Pine Brook Capital Partners II, L.P.	34,770,734	42,492,340
Platinum Equity Capital Partners III, L.P.	21,050,364	32,040,296
Platinum Equity Capital Partners IV, L.P.	6,280,479	7,694,592
Quad-C Partners IX, L.P.	1,416,015	1,433,525
Snow Phipps II, L.P.	15,875,558	24,664,442
Snow Phipps III, L.P.	9,691,044	10,213,246
TA XII, L.P.	18,451,825	21,539,184
TCV IV, L.P.	6,910,657	22,598
TowerBrook Investors III, L.P.	6,394,130	7,037,642
TowerBrook Investors IV, L.P.	5,458,857	9,959,663
TPG Growth II, L.P.	19,290,316	42,261,050
TPG Growth III, L.P.	20,895,273	22,504,084
TPG Partners VI, L.P.	13,815,205	13,029,313
TPG Partners VII, L.P.	22,795,895	25,573,643
VantagePoint Venture Partners III, L.P.	7,072,782	129,001
VantagePoint Venture Partners IV, L.P.	10,007,728	3,001,548
Vestar Capital Partners IV, L.P.	1,439,283	338,504
Vista Equity Partners Fund IV, L.P.	13,051,774	28,194,547
Vista Equity Partners Fund V, L.P.	64,953,712	73,411,660
Vista Equity Partners Fund VI, L.P.	34,643,986	35,070,384
Warburg Pincus Equity Partners, L.P.	—	113,604
Warburg Pincus Private Equity X, L.P.	14,556,847	26,802,708
Warburg Pincus Private Equity XI, L.P.	34,658,556	52,891,486
Warburg Pincus Private Equity XII, L.P.	17,855,078	20,119,673
Wellspring Capital Partners V, L.P.	7,620,129	11,247,676
Windjammer Mezzanine & Equity Fund II, L.P.	—	23,200
	<u>\$846,848,596</u>	<u>\$932,394,415</u>

(1) Investment values quoted without spin-offs or distributions.

LIST OF LARGEST HOLDINGS⁽¹⁾

As of June 30, 2017

EQUITIES			FIXED INCOME				
Shares	Security	Fair Value (\$)	Par Value	Security	Description	Fair Value (\$)	
1,044,632	Apple Inc	\$150,447,901	80,000,000	Citigroup Hldg Inc	1.07% 03 Jul 2017	\$80,000,000	
1,501,847	Microsoft Corp	103,522,314	56,085,000	US Treasury N/B	1.125% 30 Sep 2021	54,555,562	
79,529	Amazon.com Inc	76,984,072	54,224,092	Tsy Infl lx N/B	0.125% 15 Apr 2022	53,965,443	
540,240	Johnson + Johnson	71,468,350	50,000,000	Fed Home Ln Discount Nt	0.01% 05 Jul 2017	49,997,000	
467,063	Facebook Inc A	70,517,172	50,000,000	WI Treasury Sec	0.01% 06 Jul 2017	49,996,885	
849,331	Exxon Mobil Corp	68,566,492	50,000,000	US Treasury N/B	0.875% 15 Jan 2018	49,922,000	
385,059	Berkshire Hathaway Inc Cl B	65,217,443	50,000,000	US Treasury N/B	0.875% 31 May 2018	49,820,500	
708,683	JP Morgan Chase + Co	64,773,626	50,000,000	US Treasury N/B	0.625% 30 Apr 2018	49,734,500	
59,513	Alphabet Inc Cl A	55,328,046	50,000,000	US Treasury N/B	0.625% 30 Jun 2018	49,681,500	
60,542	Alphabet Inc Cl C	55,016,332	50,000,000	Treasury Bill	0.01% 29 Mar 2018	49,580,670	

(1) A complete listing of the System's holdings is available at the Retirement System office.

CHANGES IN FAIR VALUE OF INVESTMENTS⁽¹⁾

(In Thousands)

For the Fiscal Year Ended June 30, 2017

	June 30, 2016 Fair Value	Purchases and Other Increases	Sales and Other Decreases	June 30, 2017 Fair Value	Asset Mix Fair Value
Marketable Securities					
Domestic Equities	\$ 5,513,807	\$ 3,578,188	\$ (3,215,445)	\$ 5,876,550	31.62%
International Equities	3,599,589	3,371,999	(2,860,562)	4,111,026	22.12
Total Fixed	4,964,360	9,187,731	(9,336,432)	4,815,659	25.91
Temporary ⁽²⁾ Investments	<u>390,125</u>	<u>28,014,139</u>	<u>(27,663,437)</u>	<u>740,827</u>	<u>3.98</u>
Total Marketable Securities	<u>14,467,881</u>	<u>44,152,057</u>	<u>(43,075,876)</u>	<u>15,544,062</u>	<u>83.63</u>
Real Estate and Alternative Investments					
Real Estate	1,805,745	406,554	(102,010)	2,110,289	11.35
Alternatives	<u>761,716</u>	<u>254,019</u>	<u>(83,341)</u>	<u>932,394</u>	<u>5.02</u>
Total Real Estate and Alternative Investments	<u>2,567,461</u>	<u>660,573</u>	<u>(185,351)</u>	<u>3,042,683</u>	<u>16.37</u>
Total	<u>\$ 17,035,342</u>	<u>\$ 44,812,630</u>	<u>\$(43,261,227)</u>	<u>\$ 18,586,745</u>	<u>100.00%</u>

1) Amounts include changes in unrealized appreciation and exclude interest and dividend accruals.

2) Temporary Investments include short term pools and securities maturing within one year of purchase.

U.S. EQUITY COMMISSIONS

For the Fiscal Year Ending June 30, 2017

Broker Name	Commissions Paid	Shares	Commission Per Share	Percent of Total Commissions
Merrill Lynch Pierce Fenner & Smith Inc.	\$301,673	28,939,588	\$0.01	29.7%
Liquidnet Inc.	87,634	4,046,345	0.02	8.6
UBS Securities LLC	75,412	6,053,960	0.01	7.4
ICBC Financial Services	59,522	5,952,225	0.01	5.9
J.P. Morgan Securities Inc.	56,245	3,617,037	0.02	5.5
Morgan Stanley Co. Inc.	47,094	3,600,862	0.01	4.6
Citigroup Global Markets Inc.	43,039	3,178,203	0.01	4.2
Jefferies & Company Inc.	37,637	2,198,808	0.02	3.7
Investment Technology Group Inc.	37,522	2,987,131	0.01	3.7
Barclays Capital	28,767	1,229,250	0.02	2.8
Raymond James and Associates	27,588	752,685	0.04	2.7
Goldman Sachs & Co.	23,327	1,098,364	0.02	2.3
Wells Fargo Securities, LLC	23,307	676,718	0.03	2.3
ISI Group Inc.	21,005	676,192	0.03	2.1
Stifel Nicolaus & Co. Inc.	16,810	536,743	0.03	1.7
Robert W. Baird Co.	16,091	511,908	0.03	1.7
Green Street Trading, LLC	16,020	524,569	0.03	1.6
RBC Capital Markets	11,173	752,520	0.01	1.1
Other	85,169	8,489,134	0.01	8.4
Total Broker Commissions	<u>\$1,015,035</u>	<u>75,822,242</u>		<u>100.0%</u>