

## Long-Term Expected Rates of Return

As the Plan's Investment Policy Statement notes, the asset allocation is the single most important determinant of achieving the stated investment goals. In accordance with MERS' Investment Policy Statement, the Office of Investments reviews annually the long-term asset class assumptions and incorporates the necessary changes in order to develop the Plan's strategic asset allocation. The Plan's strategic asset allocation is a long-term proposition, so capital market forecasts are developed using an investment horizon in excess of twenty years. The desired goal of the strategic asset allocation process is to construct a portfolio that adequately balances risk while also providing a reasonable probability of achieving the long-term actuarial required return necessary to fund the Plan's liabilities, currently 7.35%.

The MERS' Board adopts and implements an asset allocation policy based on a number of factors, including:

- Historical and expected long-term capital market risk (volatility) and return for each asset class
- Expected correlations of returns among various asset classes
- An assessment of future economic conditions, including growth, inflation, and interest rate levels
- Various risk/return scenarios
- Liquidity requirements with a focus on ensuring monthly pension obligations are met

The following criteria is used in assessing an asset class for inclusion in the portfolio:

- Sufficient size and liquidity to permit an investment by the Fund
- Staff, investment manager, or consultant expertise to ensure proper due diligence and cost effective implementation
- Incorporation of the asset class contributes to the return enhancement and/or further diversification of the Fund
- Ability to readily measure performance and risk against appropriate benchmarks

The Defined Benefit Plan is invested in the Total Market Portfolio which is a mixture of three broad asset classes: Global Equities, Global Fixed Income and Private Investments. Long-term expected returns are developed for each of these asset classes. These assets are combined at the target allocation weight to produce the long-term expected rate of return for the portfolio. Real rates of return can be calculated by subtracting the long-term expected inflation assumption. The current target allocation, inflation assumption, and best estimates of arithmetic real rates of return for each asset class and portfolio are summarized in the following table:

Many local governments are also invested in the Total Market Portfolio for their OPEB obligations. Other municipalities have different investment choices depending on their individual preferences and expected need for resources to fund their OPEB obligations.

\*The Total Market Portfolio has three main asset classes:

Asset Class	Target Allocation	Target Allocation Gross Rate of Return	Long Term Expected Gross Rate of Return	Inflation Assumption	Long Term Expected Real Rate of Return
Global Equity	60.0%	7.45%	4.47%	2.50%	2.97%
Global Fixed Income	20.0%	4.90%	0.98%	2.50%	0.48%
Private Investments	20.0%	9.50%	1.90%	2.50%	1.40%
<b>TOTAL</b>	<b>100.00%</b>		<b>7.35%</b>		<b>4.85%</b>

## Asset Class Summary

The Global Equity allocation is the largest driver of return and risk for the Fund. The portfolio is designed to provide long-term capital appreciation, generate current income, and provide a hedge against inflation. Global equity assets are diversified across geographic regions, investment styles, and market capitalization to diversify risk. A core portion of the global equity portfolio is invested in highly liquid equity securities including, but not limited to, U.S. large cap equities, U.S. mid cap equities, and developed ex U.S. large and mid-cap equities. The portfolio may also include higher risk investments such as small cap equities, micro cap equities, emerging market equities, and frontier market equities.

The Global Fixed Income allocation plays a vital role for the Fund. The core of the portfolio includes investment grade securities such as U.S. Treasuries, corporate bonds, and global investment grade debt. This portfolio is designed to provide downside protection, diversification, stable income, and liquidity. The core fixed income portfolio is expected to preserve capital and provide liquidity that may be used for portfolio rebalancing in stressed market environments. The Global Fixed Income portfolio may also include higher risk investments such as high yield bonds, emerging market debt, structured credit investments, and other below investment grade securities.

The Private Investments portfolio provides diversification, capital appreciation, and a hedge against inflation for the overall Fund. These investments are more illiquid than public market investments, thus requiring a longer time horizon and higher returns as compensation for illiquidity risk. The Private Investments portfolio includes three distinct asset classes: Private Equity, Real Assets, and Diversifying Strategies. The primary role of the Private Equity portfolio is to provide the Fund with capital appreciation. This allocation complements the public equity portfolio by accessing wider universe of investment opportunities and making equity investments in companies before they become publically traded. The Real Assets portfolio provides the Fund with some degree of protection against inflation while also providing diversification. This portfolio is comprised of investments in physical assets that can be managed and sold to generate income. The Diversifying Strategies allocation is expected to provide the Fund with downside protection and diversification. This allocation targets strategies that exhibit low correlation with traditional asset classes, specifically equities, and should outperform during stressed equity markets.