MPSERS Pension Explainer: There is Less than a 50% Chance that Michigan Will Earn a 7% Rate of Return for Teachers

Despite the proposed reduction to MPSERS' assumed rate of return, the chances of investments earning an expected 7.5% or even 7.0% are less than 50%. If investments underperform targeted expectations, total amortization payments will grow by billions of dollars. The state should reconsider how risky it wants the MPSERS investment goal to be.



1. MPSERS has Consistently Underperformed Its 8% Assumed Return¹

- Since 1997, MPSERS has achieved an average investment return of 7.2%, well below the 8% assumed rate of return for this period of time.
- The 15-year average return (6.5%) and 10-year average return (5.8%) are also significantly less the 8% assumed return for the MPSERS portfolio of assets.

2. The Global Economy Has Entered a "New Normal" of Low Investment Returns

- Markets have changed in significant ways over the past two decades:
 - The investment return on low risk, fixed income assets has been dramatically reduced;
 - Real estate assets are more volatile than before the housing bubble burst;
 - International growth and competition has shifted sources of investment yield; and
 - In the wake of the 2007-09 financial crisis, the Federal Reserve has implemented new monetary polices to try and support economic growth.
- There have also been major socio-demographic changes, including the aging of the Baby Boomer generation and the growth of non-participation in the labor force.
- Future financial markets will simply not reflect the way markets have looked over the past two decades, and investment returns are going to be less than in the past.²

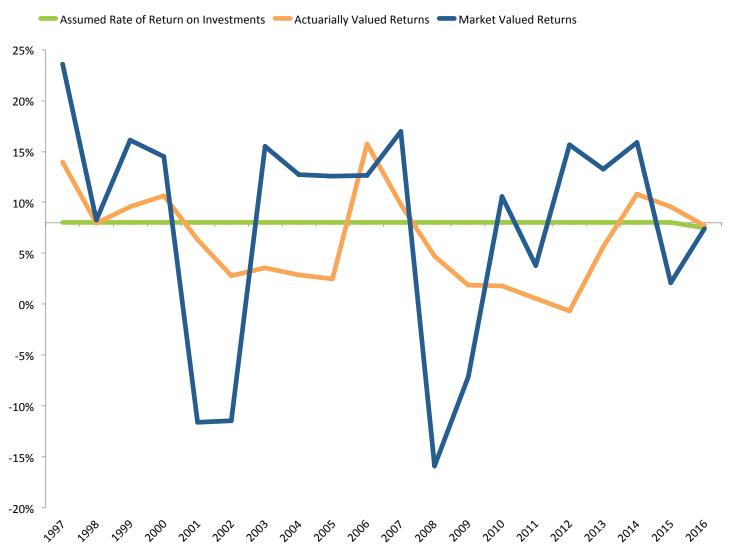
3. MPSERS is Unlikely to Meet Its Assumed Rate of Return

The Probability of Michigan Averaging Various Rates of Returns Over the Next Two Decades

Average Investment Return	MPSERS Assumptions ³	JP Morgan Assumptions ⁴	Research Affiliates Assumptions ⁵	BNY Mellon Assumptions ⁶	Total Required Pension Debt Payments, 2017-2038
9.0%	16%	13%	5%	15%	\$39 billion
8.0%	29%	25%	13%	27%	\$56 billion
7.5%	38%	33%	18%	35%	\$68 billion
7.0%	47%	42%	25%	45%	\$76 billion
6.5%	56%	51%	34%	53%	\$84 billion
6.0%	65%	61%	42%	62%	\$92 billion
5.0%	80%	76%	62%	78%	\$105 billion

Source: Pension Integrity Project at Reason Foundation Monte Carlo analysis of forecast by asset class

MPSERS Investment History: 1997-2016



Source: Reason Foundation Analysis of MPSERS Comprehensive Annual Financial Reports

¹ MPSERS CAFR Reports, 1997-2016

² "<u>Diminishing Returns: Why Investors May Need to Lower Their Sights,</u>" Mckinsey Global Institute, May 2016

³ "Asset/Liability Study: Michigan Public School Employees' Retirement System," RVK, Inc., September 2014

⁴ "2017 Long-Term Capital Market Assumptions," JP Morgan Asset Management, October 2016.

⁵ "Global Asset Classes: 10-Year Expected Returns," Research Affiliates, February 2017

⁶ "10-Year Capital Market Return Assumptions Calendar Year 2016," BNY Mellon Fiduciary Solutions, November 2015.