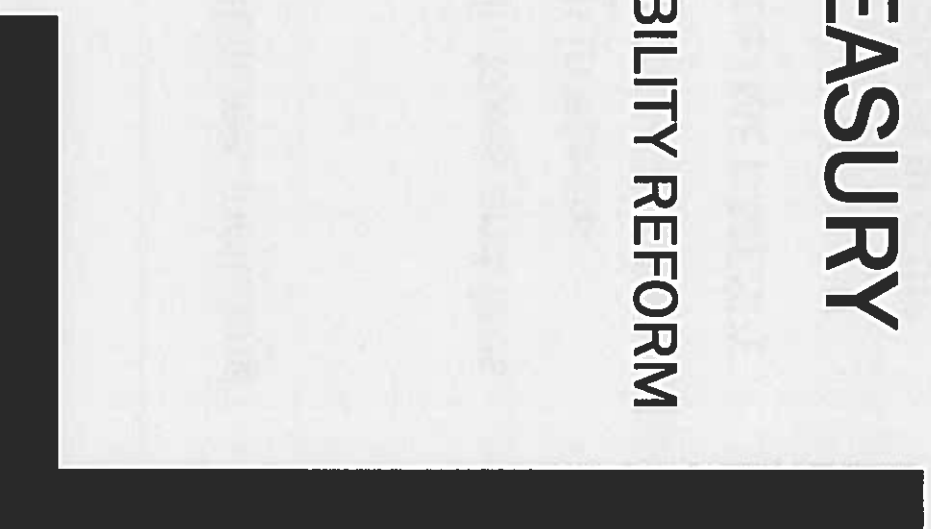




# DEPARTMENT OF TREASURY

## PRESENTATION TO THE FINANCIAL LIABILITY REFORM COMMITTEE

March 8, 2017



# Michigan Treasury has a broad range of responsibilities

Michigan Treasury has a wide range of responsibilities, including:

- State and local tax policy
- Economic and revenue forecasting
- Administration and collection of \$24 billion in taxes and fees
- Pension and Other Investments ~ \$82 billion in assets
- Local government and school financial health
- Higher education student financial assistance (MET, MESP)
- Managing the State's balance sheet
- Managing the State's relationship with Wall Street and the rating agencies

# Bureau of Investments

## Our Mission

*The Bureau of Investments continually strives to provide quality investment management services, broad professional expertise, and independent advice to the State Treasurer as fiduciary of the State of Michigan Retirement Systems, and various Michigan trust funds and the State's common cash.*

- Fiduciary responsibility to retirees
- Goal is risk-adjusted returns – other public policy goals should be reflected in state spending and tax priorities
- Long-term investors – liabilities will be paid out over decades, performance should not be measured on short-term market swings
- In a low return environment focusing on fees is critical

# Bureau of Investments

## Investment Goals

- Maintain sufficient liquidity to pay benefits
- Meet or exceed the actuarial assumption over the long term
- Perform in the top half of the public plan universe over the long term
- Diversify assets to reduce risk
- Exceed individual asset class benchmarks over the long term

# Assets Under Management

Ending Market Value Report  
*As of December 31, 2016*

State of Michigan Defined Benefit

\$62,240,188,059

State of Michigan Defined Contribution

\$7,219,551,934

**TOTAL Retirement related**

**\$69,459,739,993**

Other Major Funds

\$8,229,918,033

State Treasurer's Common Cash

\$4,756,643,104

**TOTAL UNDER MANAGEMENT**

**\$82,446,301,130**

# Assets Under Management

## Market Value By Plan

As of December 31, 2016

(in millions)

	Pension Plan Market Value	Retiree Health Market Value	Combined Market Value	% of Total
Teachers	\$43,481	\$4,439	\$47,920	77.0%
State Employees (closed)	10,997	1,662	12,659	20.3%
State Police	1,285	121	1,406	2.3%
Judges (closed)	<u>254</u>	<u>1</u>	<u>255</u>	<u>0.4%</u>
<b>TOTAL</b>	<b>\$56,017</b>	<b>\$6,223</b>	<b>\$62,240</b>	<b>100%</b>

# Assets Under Management

## Defined Contribution Plans As of December 31, 2016

Fund	Descriptions	Assets
Target Date Fund	11 Age-related options	\$994,515,270
Tier 1	7 Index funds	2,844,219,552
Tier 2	11 Actively-managed funds	3,033,327,371
Tier 3	20,000+ choices	<u>159,806,750</u>
TOTAL		\$7,031,868,943

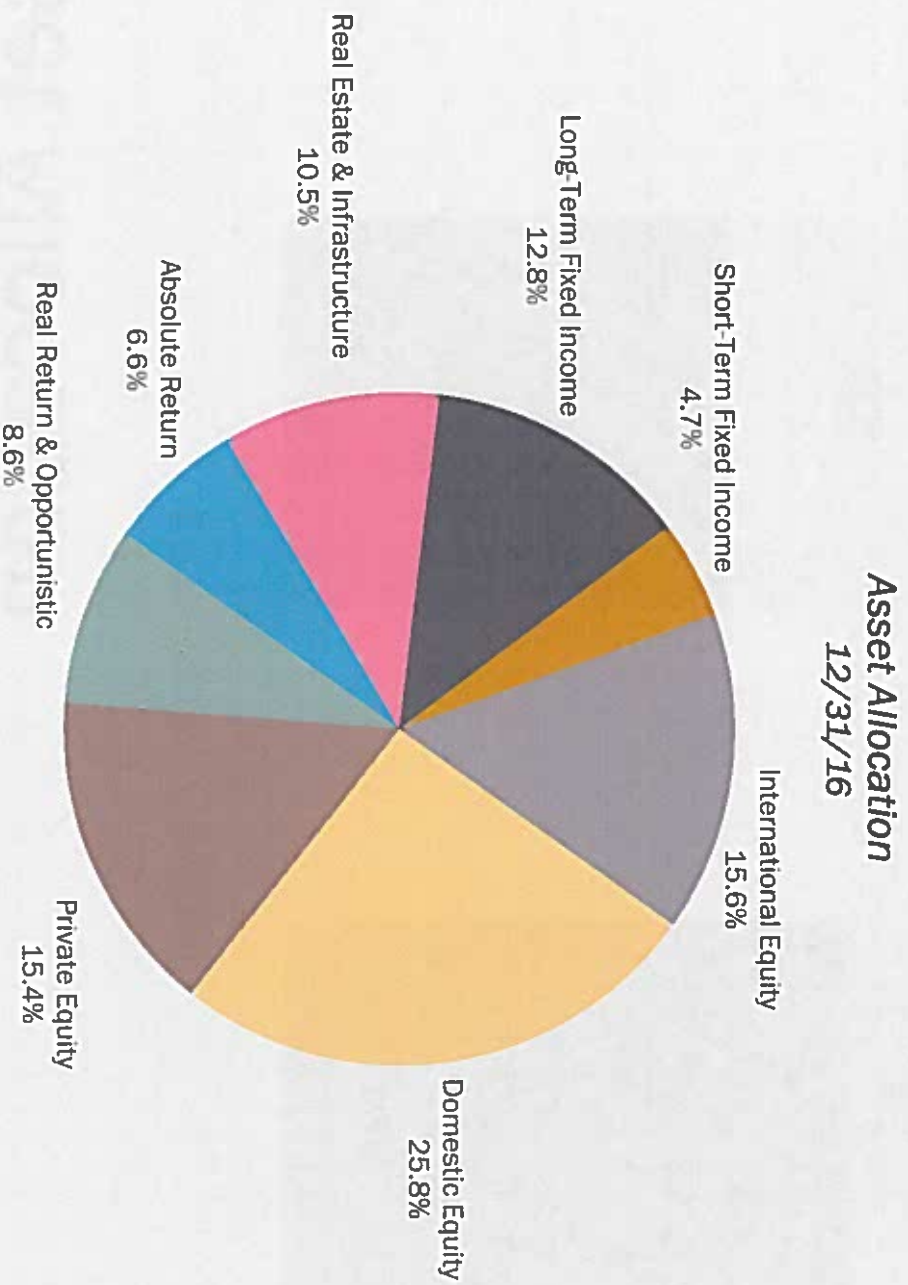
# Investment Returns

## Investment Returns As of December 31, 2016

Teachers' Plan	Annualized Returns	Peer Median Return
1 year	7.4%	7.9%
3 years	7.1%	5.3%
5 years	10.0%	8.9%
7 years	9.4%	8.4%
10 years	5.9%	5.3%

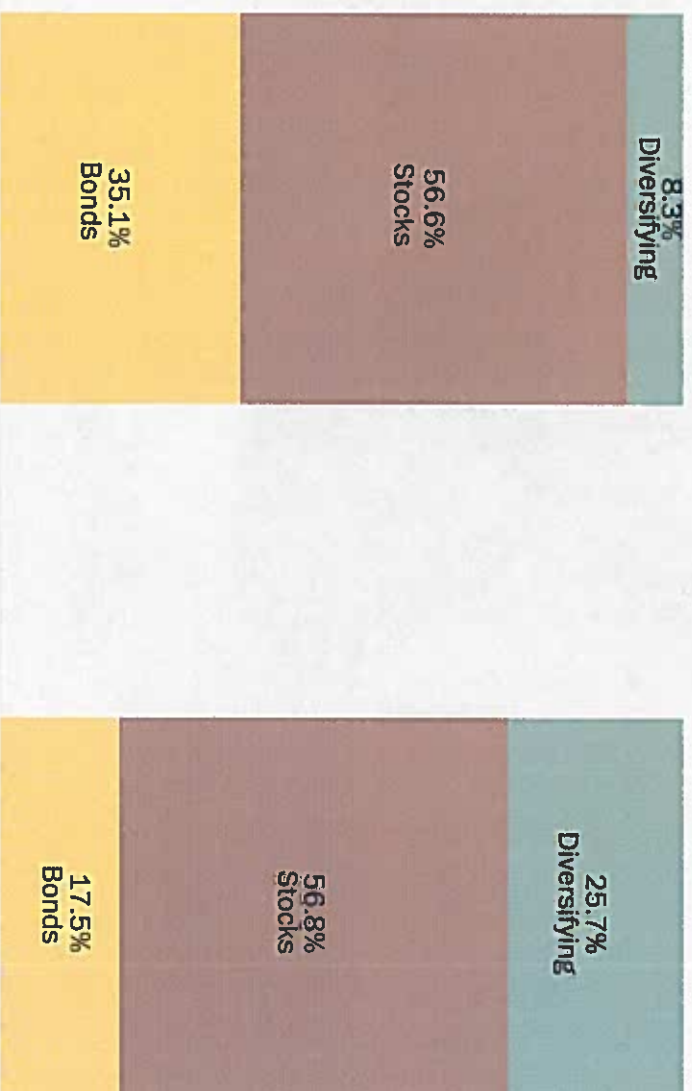
- Long-term investment returns have been excellent compared to other large U.S. public pension funds
- Earned \$25.6 billion over the past 5 years
- Added \$5.7 billion above the average large public plan returns over the past 10 years
- Earned 9.3% return on assets since 1978

# Asset Allocation



# Asset Allocation

## 1996 - 2016 Comparison



Bonds: Fixed Income and Short Term  
Stocks: Private, International, and Domestic Equities  
Diversifying: Real Estate & Infrastructure, and Absolute, Real Return & Opportunistic

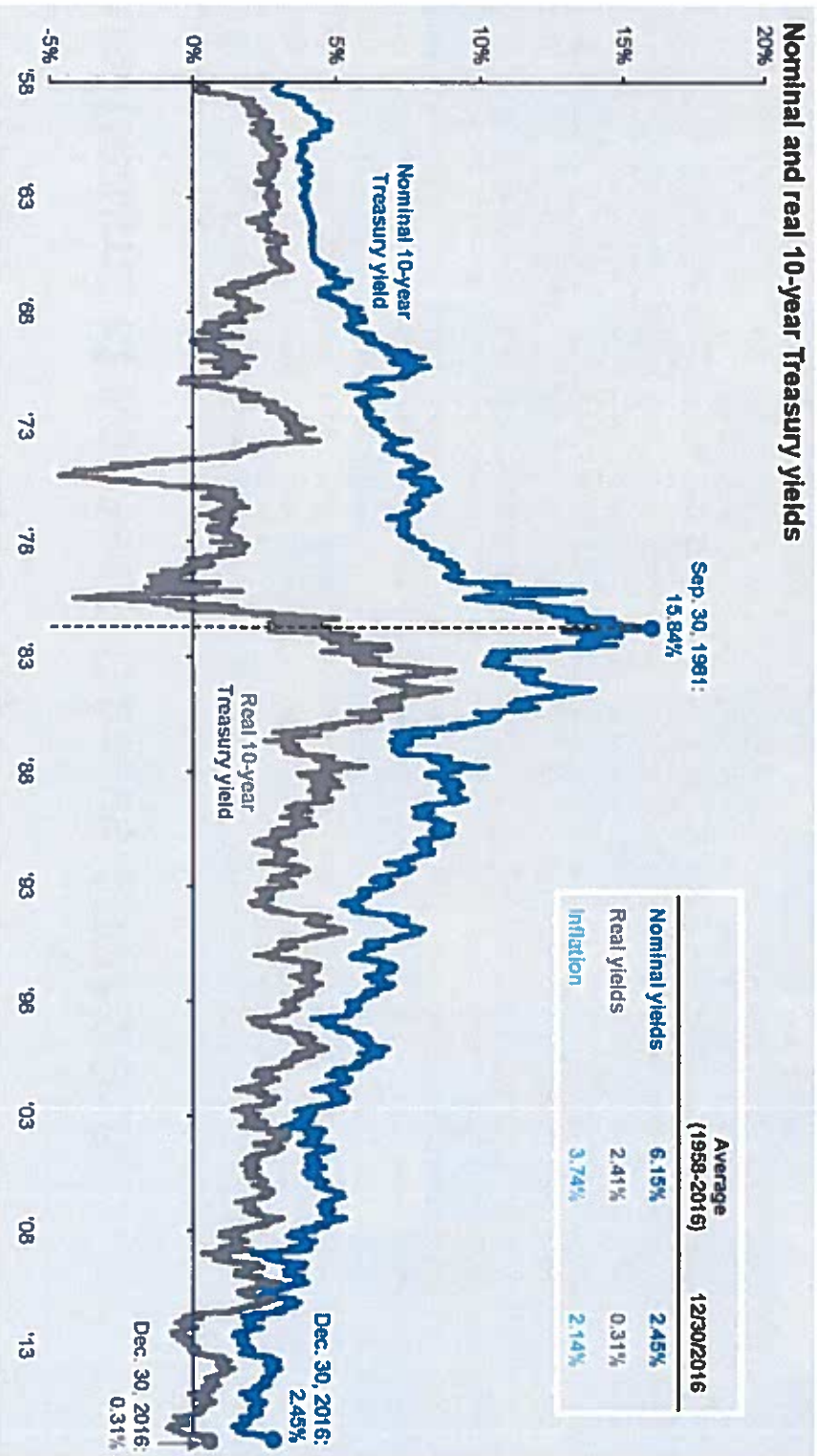
# Diversity is the Key

## Annual Returns of Key Asset Classes 1997-2016

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Best ▲	U.S. Equity	U.S. Equity	Int'l Equity	Gov't Bonds	Corp. Bonds	Gov't Bonds	Int'l Equity	Int'l Equity	Real Estate	Int'l Equity	Int'l Equity	Gov't Bonds	Int'l Equity	U.S. Equity	Real Estate	Gov't Bonds	Int'l Equity	U.S. Equity	U.S. Equity	Real Estate	U.S. Equity
	Hedge Funds	Int'l Equity	U.S. Equity	Real Estate	Real Estate	Corp. Bonds	U.S. Equity	Real Estate	U.S. Equity	Real Estate	Cash	U.S. Equity	U.S. Equity	Real Estate	Gov't Bonds	U.S. Equity	Int'l Equity	Real Estate	U.S. Equity	Real Estate	
	Real Estate	Real Estate	Hedge Funds	Corp. Bonds	Gov't Bonds	Real Estate	Hedge Funds	U.S. Equity	Hedge Funds	U.S. Equity	Gov't Bonds	Int'l Equity	Corp. Bonds	Int'l Equity	Bonds	Real Estate	Gov't Bonds	Gov't Bonds	Gov't Bonds	Corp. Bonds	
	Corp. Bonds	Gov't Bonds	Real Estate	Cash	Cash	Hedge Funds	Real Estate	Hedge Funds	Hedge Funds	Hedge Funds	Corp. Bonds	Int'l Equity	Hedge Funds	Corp. Bonds	Int'l Equity	Gov't Bonds	Int'l Equity	Gov't Bonds	Int'l Equity	Int'l Equity	
	Gov't Bonds	Corp. Bonds	Cash	Hedge Funds	Hedge Funds	Int'l Equity	Corp. Bonds	Corp. Bonds	Int'l Equity	Cash	Corp. Bonds	Hedge Funds	Int'l Equity	Gov't Bonds	U.S. Equity	Hedge Funds	Int'l Equity	Hedge Funds	Hedge Funds	Hedge Funds	
	Cash	Cash	Int'l Equity	Int'l Equity	Int'l Equity	Cash	Gov't Bonds	Gov't Bonds	Cash	Corp. Bonds	Corp. Bonds	U.S. Equity	Cash	Hedge Funds	Gov't Bonds	Gov't Bonds	Int'l Equity	Int'l Equity	Cash	Int'l Equity	
	Int'l Equity	Int'l Equity	Corp. Bonds	U.S. Equity	U.S. Equity	Int'l Equity	Int'l Equity	Int'l Equity	Gov't Bonds	Gov't Bonds	Cash	U.S. Equity	Gov't Bonds	Int'l Equity	Hedge Funds	Int'l Equity	Corp. Bonds	Cash	Corp. Bonds	Gov't Bonds	
	Equity	Equity	Equity	Equity	Equity	Equity	Cash	Cash	Corp. Bonds	Int'l Equity	Int'l Equity	Int'l Equity	Real Estate	Cash	Int'l Equity	Cash	Gov't Bonds	Int'l Equity	Int'l Equity	Cash	
	Int'l Equity	Hedge Funds	Gov't Bonds	Int'l Equity	Int'l Equity	U.S. Equity	Cash	Corp. Bonds	Int'l Equity	Int'l Equity	Int'l Equity	Int'l Equity	Real Estate	Cash	Int'l Equity	Cash	Gov't Bonds	Int'l Equity	Int'l Equity	Cash	
	Worst ▼	Int'l Equity	Hedge Funds	Gov't Bonds	Int'l Equity	Int'l Equity	U.S. Equity	Cash	Cash	Corp. Bonds	Int'l Equity	Int'l Equity	Int'l Equity	Real Estate	Cash	Int'l Equity	Cash	Gov't Bonds	Int'l Equity	Int'l Equity	Cash
	Worst																			Worst	

# Interest Rates and Inflation

## Fixed income



# Conclusion

- Excellent returns historically by focusing on long-term investments
- Challenging markets today primarily due to low interest rates
- Bureau of Investments professionally trained staff up to the challenge

