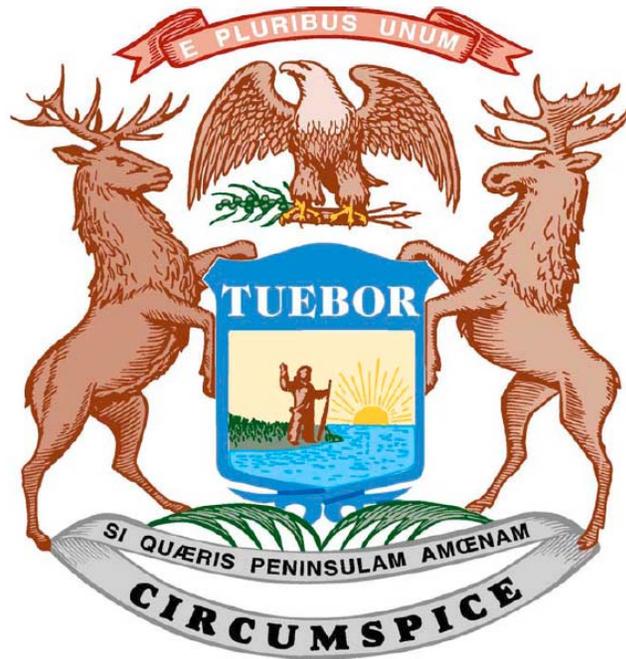




# Michigan Department of Treasury Bureau of Investments



**Jon M. Braeutigam**

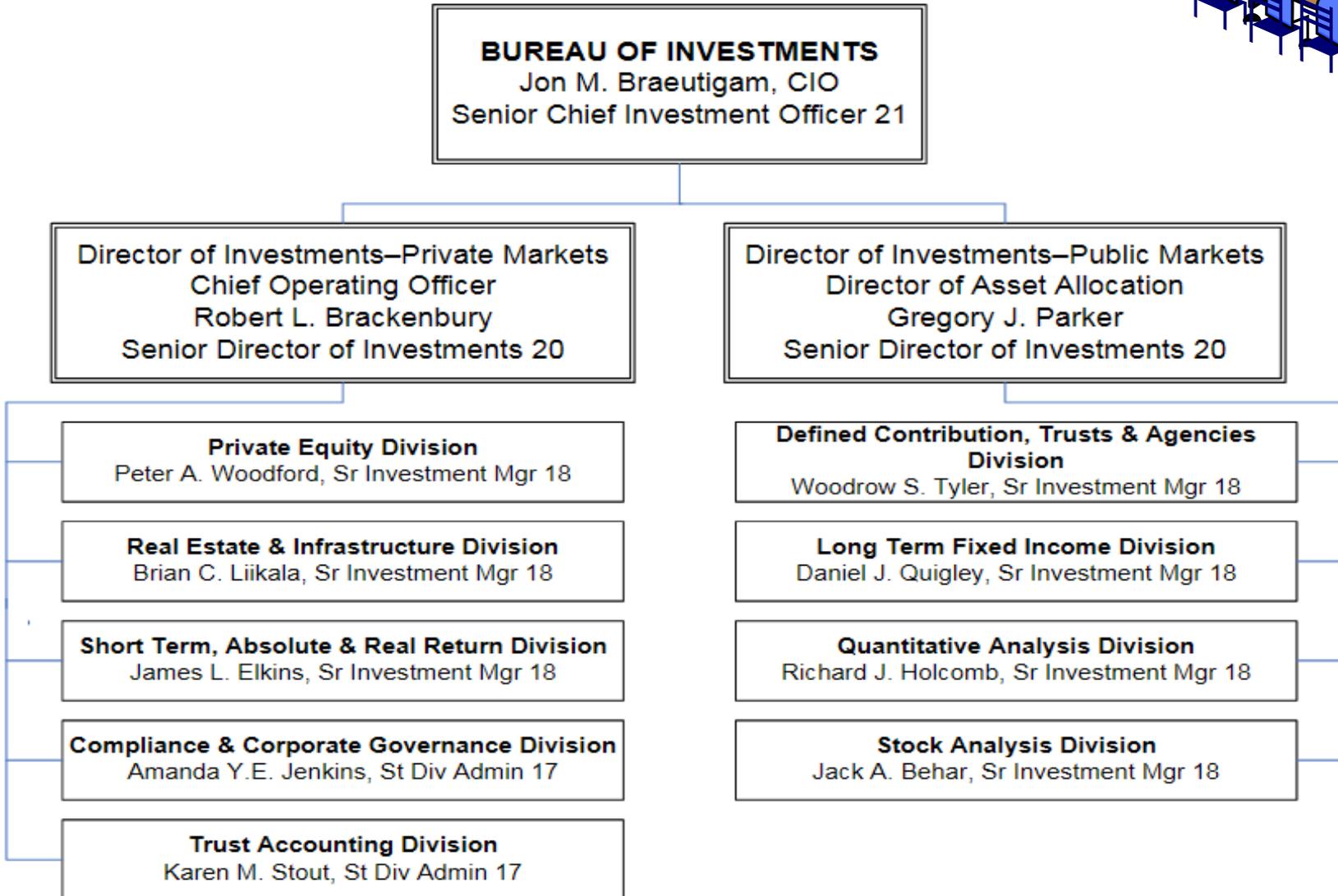
Chief Investment Officer

March 19, 2015



# Bureau of Investments (BOI)

## As of December 2014





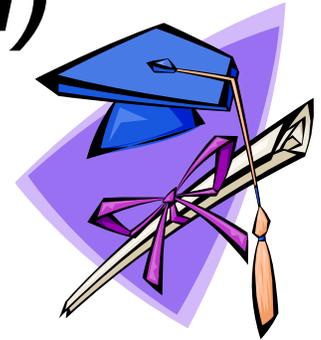
## ***Executive Summary***

- The market value of the MSERS plan is up and the funding ratios are improving.
- Over the past year the plan substantially beat peers and most asset classes ranked and earned returns in excess of their performance benchmark.
- The market value of the MSERS plan is different than the actuarial value. If the market value of plan assets does not decline, then the actuarial value will trend up in future years.



# ***Bureau of Investments (BOI)***

## ***As of February 2015***



- 77 BOI Employees
- 44 Investment Professionals
- 35 Individuals with a Masters Degree or higher
- 18 C.F.A.
- 9 other professional designations
- Total of \$77.4 billion assets under management
- The large investment pool is an advantage for the MSERS



# ***MRSERS Funded Ratio***

## ***\$12.1 Billion as of 12/31/14***

<b>Year</b>	<b>Market Value of Assets</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Accrued Liability</b>	<b>Funded Ratio Based on Actuarial Value</b>
<b>2013</b>	<b>\$9,923</b>	<b>\$9,438</b>	<b>\$15,648</b>	<b>60.3%</b>
<b>2012</b>	<b>\$9,272</b>	<b>\$9,447</b>	<b>\$15,654</b>	<b>60.3%</b>
<b>2011</b>	<b>\$8,655</b>	<b>\$10,212</b>	<b>\$15,597</b>	<b>65.5%</b>
<b>2010</b>	<b>\$8,940</b>	<b>\$10,782</b>	<b>\$14,860</b>	<b>72.6%</b>
<b>2009</b>	<b>\$8,583</b>	<b>\$11,107</b>	<b>\$14,234</b>	<b>78.0%</b>
<b>2008</b>	<b>\$9,786</b>	<b>\$11,403</b>	<b>\$13,766</b>	<b>82.8%</b>
<b>2007</b>	<b>\$12,103</b>	<b>\$11,344</b>	<b>\$13,162</b>	<b>86.2%</b>
<b>1983</b>	<b>\$1,842</b>	<b>\$1,752</b>	<b>\$2,369</b>	<b>74.0%</b>
<b><i>MRSERS Estimated Market Value Funded Ratio</i></b>				
<b>12/31/2014</b>	<b>\$12,097</b>	<b>- - -</b>	<b>\$15,648</b>	<b>77.3%</b>

(\$ in Millions)

Source: Pension Plans Component Unit Financial Reports and Actuarial Valuations, years ending in September



# ***MSERS***

## ***Contributions and Distributions***

### ***FY 2014***

#### **Contributions**

Members	\$47.5
Employer	<u>705.1</u>

**Total Contributions** \$752.6

Pension Benefit Distributions 1,222.9

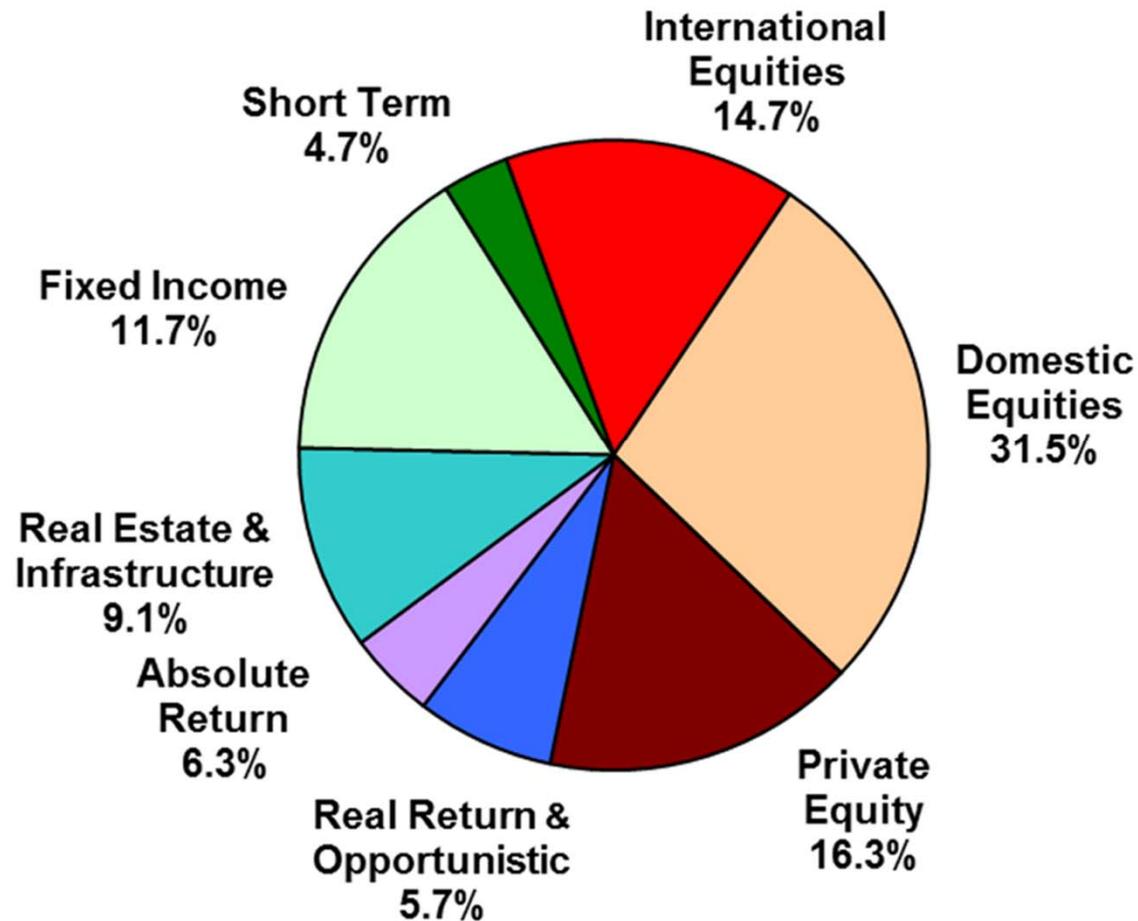
**Net** **(\$470.3)**

- Equal to (per quarter on average) (\$117.6)
- Or about 3.9% of total market value of fund



# ***MRSERS Asset Allocation***

## ***As of December 31, 2014***



Diversification is essential to protect the funds. However, still reliant on equity markets.



MARKET INSIGHTS

Interest Rates and Inflation

Nominal and Real 10-year Treasury Yields



Fixed Income

Source: Federal Reserve, BLS, J.P. Morgan Asset Management.

Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month except for December 2014, where real yields are calculated by subtracting out November 2014 year-over-year core inflation. All returns above reflect annualized total returns, which include reinvestment of dividends. Corporate bond returns are based on a composite index of investment grade bond performance.

Guide to the Markets – U.S.

Data are as of 12/31/14.





# S&P 500 – Last 10 Years





# ***MSERS FUND***

## ***Time-Weighted Rate of Return***

### ***Public Funds (DB) > \$10 Billion***

#### ***As of December 31, 2014***

	<u>1 Year</u> <u>Rate</u>	<u>3 Years</u> <u>Rate</u>	<u>5 Years</u> <u>Rate</u>	<u>7 Years</u> <u>Rate</u>	<u>10 Years</u> <u>Rate</u>
<b>TOTAL PLAN</b>	11.3	13.4	11.1	5.3	7.2
Median - Greater than \$10 Billion	6.9	12.1	10.2	5.0	6.6



# Time-Weighted Rates of Return

*Individual asset classes doing very well on a relative basis*

Asset Class w/Benchmark	CY 2014	
	Three Years Rate	One Year Rate
<b>Total Plan*</b>	<b>13.4%</b>	<b>11.3%</b>
Median*	12.1%	6.9%
<b>Domestic Equities</b>	<b>21.3%</b>	<b>14.0%</b>
S&P 1500 Index	20.4%	13.1%
<b>International Equities</b>	<b>10.5%</b>	<b>-1.7%</b>
MSCI ACWI Ex USA	9.4%	-3.6%
<b>Bonds</b>	<b>3.6%</b>	<b>5.7%</b>
Barclays Aggregate	2.7%	6.0%

\*Comparison universe is the State Street Universe comprised of Public Funds greater than \$10 Billion on the Total Plan level and greater than \$1 Billion for asset classes.



# Time-Weighted Rates of Return

Asset Class w/Benchmark	CY 2014	
	Three Years Rate	One Year Rate
<b>Private Equity</b>	<b>16.4%</b>	<b>18.1%</b>
Alternative Blended Benchmark	26.0%	22.9%
<b>Real Estate &amp; Infrastructure</b>	<b>13.2%</b>	<b>19.7%</b>
NCREIF Open Fund Index Net	11.4%	11.5%
<b>Absolute Return</b>	<b>8.5%</b>	<b>5.5%</b>
HFRI FOF Cons 1 month lagged	4.8%	3.6%
<b>Real Return &amp; Opportunistic</b>	<b>12.4%</b>	<b>25.4%</b>
Benchmark	7.2%	6.9%
<b>Cash Equivalents</b>	<b>0.3%</b>	<b>0.3%</b>
30-Day T-Bill	0.0%	0.0%

\*Comparison universe is the State Street Universe comprised of Public Funds greater than \$10 Billion on the Total Plan level and greater than \$1 Billion for asset classes.



## ***U.S. Economy***

- Forecasted for modest higher growth.
- Housing continues to do well.
- Auto sales are doing well.
- Energy – less dependence on foreign sources.
- Yearly deficit projections are falling.
- Consumer debt service is low.
- Stock market near an all time high.
- Labor market is improving.



## ***Still Needed***

- Need to address U.S., states, and municipalities long-term liabilities.
- World is uncertain (Iran, North Korea, Ukraine, Syria, etc.).
- Europe is out of the recession, but banking sector needs reforms.
- Larger emerging market economies are experiencing growing pains.



## ***Conclusion***

- We have experienced a 'Bull Market' since 2009.
- The MSERS fund is growing nicely and beating peers.
- The economy is doing well. Unless there is a major unexpected disruption in the economy, it is anticipated that the market will continue to grow over the longer term.