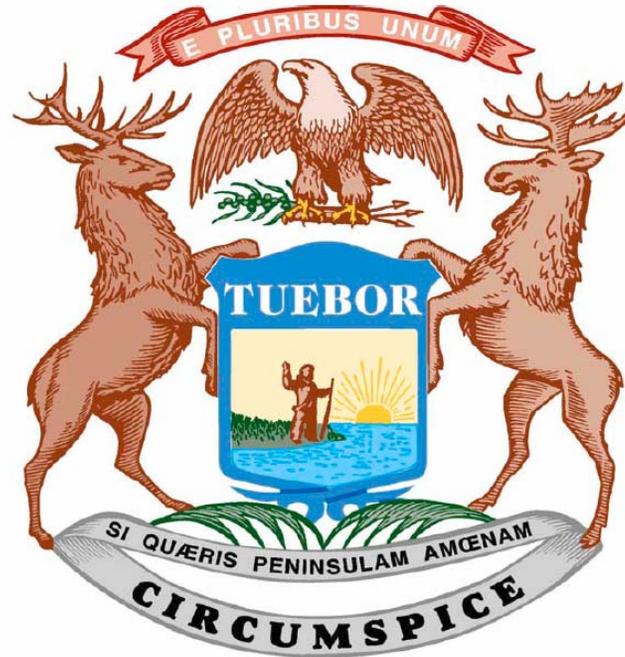




Michigan Department of Treasury Bureau of Investments



Jon M. Braeutigam

Chief Investment Officer

Bureau of Investments

March 11, 2010



Today's Topics:

- **The Bureau of Investments**
- **MPSERS High Level Plan Overview**
- **MPSERS Asset Allocation**
- **Stock and Bond Markets 2009 Review**
- **MPSERS Returns**



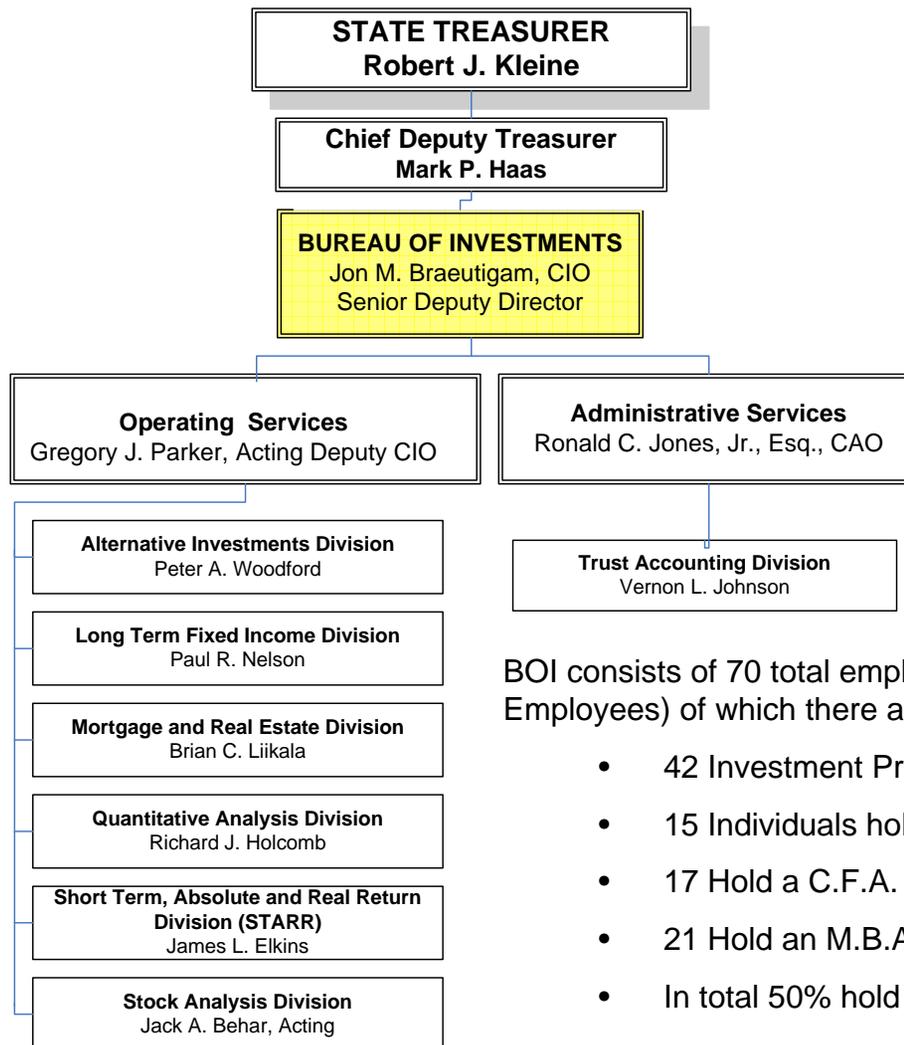
BOI ~ Mission Statement

- ***The Bureau of Investments provides quality investment management services, professional expertise, and advice to the State Treasurer as fiduciary of the State of Michigan Retirement Systems and Michigan boards and agencies. The Bureau strives to provide consistent and cost-effective management of funds to achieve competitive investment returns that meet objectives within an acceptable level of risk for the benefit of employees, retirees, and citizens of the State of Michigan.***



Bureau of Investments (BOI)

As of January 31, 2010



BOI consists of 70 total employees (0.13% of total State Employees) of which there are:

- 42 Investment Professionals
- 15 Individuals hold a C.F.A. and an M.B.A.
- 17 Hold a C.F.A.
- 21 Hold an M.B.A.
- In total 50% hold an M.B.A. or C.F.A. or both.



BOI Investment and Cash Position

As of December 31, 2009

SMRS	\$47,097,038,312
<i>OTHER MAJOR FUNDS</i>	
<i>Human Services</i>	
Children's Trust	\$22,063,712
<i>Lottery</i>	
State Lottery	340,773,352
<i>Management and Budget</i>	
401K and 457 Combined Plans	4,642,681,277
<i>Military & Veterans Affairs</i>	
Veterans' Trust	48,830,438
<i>Natural Resources</i>	
Game and Fish Lifetime License Trust	15,186,053
Game and Fish Protection Trust	123,275,222
Natural Resources Trust	545,377,374
Nongame Fish and Wildlife Trust	6,521,348
State Park Endowment	146,200,518
<i>Multiple Agencies</i>	
Gifts, Bequests, and Deposits Fund	15,529,741
Children With Special Needs	19,549,447
<i>Transportation</i>	
Mackinac Bridge Authority	41,919,459
<i>Treasury</i>	
MESP (TIAA-CREF - 529 Plan)	2,125,503,664
Michigan Higher Education Assist. Authority	1,562,593
MET I	232,684,984
MET II	522,189,585
SUBTOTAL FOR TRUST AND AGENCY FUNDS	\$8,849,848,770
<i>COMMON CASH</i>	
State Treasurer's Common Cash	\$2,602,990,379
TOTAL UNDER MANAGEMENT	\$58,549,877,461



Plan Membership Summary

As of September 30, 2009

MEMBER TYPE	MPERS
Retirees & Benef. Receiving Benefits	171,922
Current Employees Vested	123,855
Current Employees Non-Vested	144,353
Inactive Employees Entitled To, But Not Yet Receiving Benefits	14,454
Total MPERS Members	451,584



Plan Membership Ratio

As of September 30, 2009

Ratio of Active/Retiree	MPSERS
Year 2009	1.56:1
Year 2008	1.67:1
Year 2007	1.82:1
Year 2006	1.94:1
Year 2005	2.08:1

Source: Pension Plans Component Unit Financial Reports Fiscal Year Ended September 30, 2009



MPERS Funded Ratio

Years Ending September

Year	Market Value of Assets	Actuarial Value of Assets	Actuarial Accrued Liability	Funded Ratio Based on Market Value
2009	\$34,498	\$44,703	\$56,685	60.9%
2008	\$39,066	\$45,667	\$54,608	71.8%
2007	\$48,363	\$45,335	\$51,107	94.6%
2006	\$42,995	\$39,893	\$49,136	87.5%
2005	\$39,216	\$38,211	\$48,206	81.4%
2004	\$36,289	\$38,784	\$46,317	78.3%
1983	\$6,285	\$6,035	\$8,434	74.5%
<i>MPERS Estimated Market Value Funded Ratio</i>				
12/31/2009	\$36,789	- - -	\$56,685	64.9%

(\$ in Millions)



SMRS Market Value by Plan

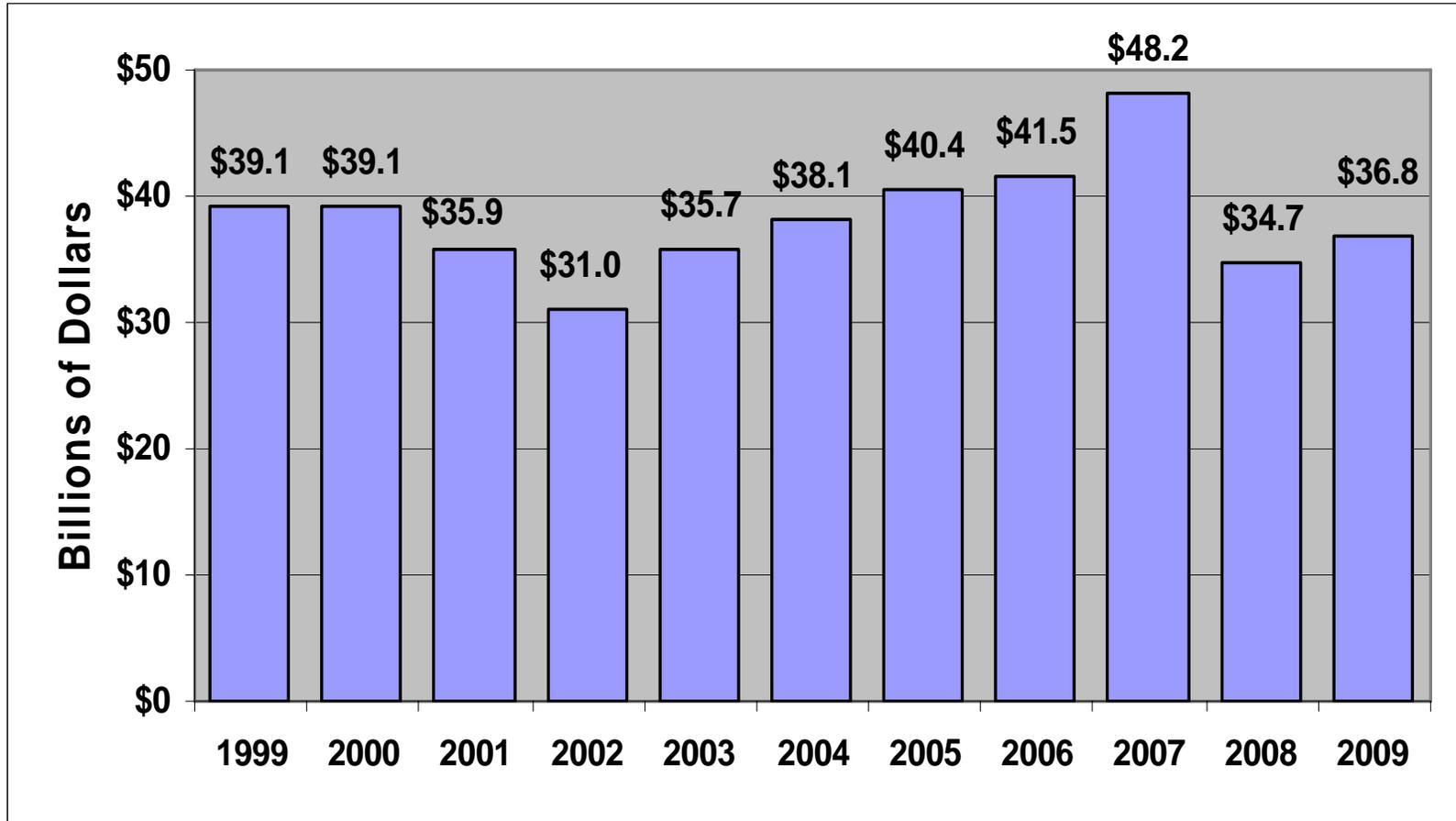
As of December 31, 2009

	Market Value	
	<i>(In Millions)</i>	%
Public School Employees	\$36,789	78.1%
State Employees	9,054	19.2%
State Police	1,014	2.2%
Judges	240	0.5%
TOTAL	\$47,097	100.0%



MPSEERS Market Value

\$36.8 Billion



Years Ending December 31



MPERS

Contributions and Distributions

FY 2009

Contributions

Members	\$357.2
Employer	<u>1,000.4</u>

Total Contributions \$1,357.6

Pension Benefit Distributions 3,278.1

Net (\$1,920.5)

- Equal to (per quarter on average) (\$480.1)
- Or about 5.2% of total market value of fund



MPERS Asset Allocation

As of December 31, 2009

Asset Allocation By Market Value

(In Millions)

<u>Investment Strategies</u>	<u>12/31/2009</u>		<u>Target Allocation</u>	
			<u>Target</u>	<u>Range</u>
Domestic Equity	\$13,742	37.4%	34%	24% - 48%
Alternative Investments	6,978	19.0%	16%	10% - 17%
Fixed Income	6,714	18.3%	17%	12% - 25%
International Equity	4,829	13.1%	17%	12% - 20%
Real Estate	3,012	8.2%	11%	8% - 14%
Short Term	783	2.1%	2%	1% - 7%
Absolute & Real Return	731	2.0%	3%	0% - 5%
TOTAL	<u><u>\$36,789</u></u>	<u><u>100.0%</u></u>	<u><u>100.0%</u></u>	



MSPERS Total Plan Universe

Peer Asset Allocation Comparison

(for major asset categories)

	<u>Equities Domestic</u>	<u>Equities Foreign</u>	<u>Fixed Income</u>	<u>Real Estate</u>	<u>Private Equity</u>	<u>Cash Equivalent</u>						
5th Percentile	66.18	26.24	38.07	10.22	19.61	11.80						
25th Percentile	42.66	20.64	29.80	5.70	11.61	7.61						
50th Percentile	37.17	17.75	25.71	3.51	4.39	3.28						
75th Percentile	27.78	12.65	20.68	1.44	0.02	1.45						
95th Percentile	10.95	0.00	4.27	0.00	0.00	0.23						
Total Public School	37.61	43	13.13	74	18.25	84	8.19	11	18.97	6	2.13	70



MPERS by Asset Class

As of January 31, 2010

Domestic Equity

\$13,151 Million in managed funds
31 Strategies
Approximately 1,467 Stocks

Real Estate

\$3,874 Million in managed funds
30 Sponsors
53 Partnerships
Over 2,000 properties

Alternative Investments

\$8,653 Million in managed funds
83 Sponsors
251 Partnerships
3,442 Companies

Short Term Investments

\$679 Million in managed Funds



MPERS by Asset Class

As of January 31, 2010

Fixed Income

\$6,835 Million in managed funds

9 Strategies

Representing 2,849 Positions

Absolute and Real Return

(and Opportunistic)

\$786 Million in managed funds

20 Strategies

International Equity

\$4,616 Million in managed funds

8 Strategies

Representing 6,300 Stocks

Trust Accounting

Accurately accounted for \$36 billion
in Investments - Comprehensive
Annual Financial Report (CAFR)



2008 and 2009 Stock Market Update

<i>Market</i>	<i>Thru 12/31/08</i>		<i>Thru 12/31/09</i>	
	<i>Price Change</i>	<i>12/31/08</i>	<i>Price Change</i>	<i>12/31/09</i>
DJIA	-33.84%	8,776	18.82%	10,428
S&P 500	-38.49%	903	23.45%	1,115
NASDAQ	-40.54%	1,577	43.89%	2,269
BMI-EPAC (USD)	-45.81%	172.2	30.84%	225.3



Bond Market Environment

<i>Market</i>	<i>2009 Yield</i>		<i>2008 Yield</i>	
	<i>Change</i>	<i>12/31/09</i>	<i>Change</i>	<i>12/31/08</i>
30-Year Treasury	196 bp	4.64%	-177 bp	2.68%
10-Year Treasury	162 bp	3.84%	-181 bp	2.22%
5-Year Treasury	113 bp	2.68%	-191 bp	1.55%
2-Year Treasury	37 bp	1.14%	-230 bp	0.77%
Fed Funds	0 bp	0.25%	-400 bp	0.25%



S&P 500 – Last 10 Years





MPSERS FUND

Time-Weighted Rate of Return

Public Funds (DB) > \$1 Billion

As of December 31, 2009

	<u>1 Year</u> <u>Rate</u>	<u>5 Years</u> <u>Rate</u>	<u>10 Years</u> <u>Rate</u>
TOTAL PLAN	12.1	3.6	3.1
Median - Greater than \$1 Billion	18.2	3.3	3.3



MPSERS FUND

Time-Weighted Rate of Return

Public Funds (DB) > \$5 Billion

Close to peer in 3, 5, and 10 year time periods

As of December 31, 2009

	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	
5th Percentile	24.61	3.19	5.43	5.12	
25th Percentile	20.65	-0.67	3.85	3.84	
50th Percentile	16.27	-1.85	3.21	3.28	
75th Percentile	10.57	-3.42	2.59	2.86	
95th Percentile	5.6	-4.73	1.02	1.88	
Total Public School	12.09	68 -1.93	58 3.59	38 3.13	63



MPERS FUND

One Year Returns

Public Funds (DB) > \$1 Billion
Beat peers 4 out of 5 years

	Year Ending									
	<u>12/31/09</u>	<u>12/31/08</u>	<u>12/31/07</u>	<u>12/31/06</u>	<u>12/31/05</u>					
5th Percentile	27.04	-21.54	11.23	15.96	10.57					
25th Percentile	21.35	-24.23	10.25	15.05	8.78					
50th Percentile	18.19	-25.95	9.21	14.40	7.87					
75th Percentile	14.63	-27.66	7.80	13.40	6.99					
95th Percentile	7.22	-30.13	6.31	11.09	5.64					
Total Public School	12.09	82	-24.23	25	11.06	8	15.04	32	9.92	12



Time-Weighted Rates of Return

Individual asset classes doing very well on a relative basis

Asset Class w/Benchmark	CY 2009			
	5 Year		1 Year	
	Rate	Rank	Rate	Rank
Total Plan	3.6%	37	12.1%	82
Median*	3.3%		18.2%	
Domestic Equities	1.1%		30.8%	
S&P 1500 Index	0.7%		27.3%	
International Equities	4.1%		39.7%	
S&P Developed BMI-EPAC net 50/50	4.0%		31.4%	
Private Equity	11.9%		-2.1%	
S&P 500 +300 bp	4.3%		29.2%	

*State Street Universe of Public Funds > \$1 Billion



Time-Weighted Rates of Return

Asset Class w/Benchmark	CY 2009			
	5 Year		1 Year	
	Rate	Rank	Rate	Rank
Real Estate	1.9%		-30.9%	
NCREIF Open Fund Index Net	-0.2%		-30.3%	
Bonds	5.7%		12.1%	
Barclays Govt/Credit	4.7%		4.5%	
Cash Equivalents	2.7%		1.7%	
30-Day T-Bill	2.7%		0.1%	

*State Street Universe of Public Funds > \$1 Billion



Disclaimer



This presentation was given solely for the purpose of explaining the structure and investment process for the State of Michigan Retirement Systems. It should not be interpreted in any way as financial advice.