MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF LOUISIANA

MINUTES OF THE MEETING
OF THE BOARD OF TRUSTEES — FEBRUARY 23, 2017

The Board of Trustees of the Municipal Employees' Retirement System of Louisiana met in regular session on Thursday, February 23, 2017 at 9:00 A.M. at the Municipal Employees' Retirement System, 7937 Office Park Boulevard, Baton Rouge, Louisiana.

PRESENT:

Mr. Mike Sands, Chairman
Ms. Andrea Mahfouz, Vice Chairman
Mayor Clarence Fields, Trustee
Ms. Mary O. Vice, Trustee
Mayor Greg Jones, Trustee
Ms. Amy Mathews, State Treasurer's Office
Mr. Rick McGimsey, Commissioner of Administration

UNABLE TO ATTEND:

Mayor Donald Villere, Trustee
Representative J. Kevin Pearson, Chairman,
House Retirement Committee
Senator Barrow Peacock, Chairman,
Senate Retirement Committee

IN ATTENDANCE:

Warren Ponder, Executive Director
Susita Suire, Retirement Benefits Administrator
Nancy LaGarde, Chief Financial Officer
Christopher Saik, Chief Investment Officer
Aaron Lally, Investment Consultant
Gustavo Bikkesbakker, Investment Consultant
Gary Curran, G.S. Curran Actuary

The Chairman called the meeting to order.

The Chairman asked Ms. Vice to open the meeting with a prayer and the Chairman led everyone in the pledge of allegiance.

The Chairman asked Ms. Suire to call roll. A quorum was present.

The Chairman asked for approval of the minutes of the meeting held on January 26, 2017.

Mayor Fields moved that the minutes of the meeting held on January 26, 2017 be approved; the motion was seconded by Mayor Jones. The motion carried without objection or opposition. A copy of these minutes are attached and made a part of these minutes.

The Chairman asked for approval of the Plan A and Plan B retirements (a list was provided to the Board Members).

Ms. Vice moved that the Plan A and Plan B retirements be approved; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Aaron Lally and Gustavo Bikkesbakker presented the Board with a copy of the Preliminary Performance Report for the month of January 2017. The performance of the portfolio as of January 31, 2017 was up 1.6%. Domestic equities were up 2.0%, developed equities were up 3.1%, emerging market equities were up 5.9%. U.S. core bonds were up 0.2%, treasury inflation protected securities were up 0.9%, foreign bonds were up 2.4%, and high yield bonds were up 1.1%. Core real estate and natural resources remained flat, private debt was up 0.9%, private equity, and non-core real estate remained flat and hedge funds were up 0.2%. A copy of this report is attached and made part of these minutes.

Aaron Lally and Gustavo Bikkesbakker gave the Board a report on the preliminary secondary market pricing for MERS' illiquid assets.

Christopher Saik presented the Board with the Quarterly Act 1004 Summary for December 31, 2016.

Mr. Ponder will draft a letter to the Chairman of the Firefighters' Retirement System concerning the Gainesville property for Mr. Sands' signature.

Mayor Jones moved to accept the CIO and investment report; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Ms. Vice moved to enter executive session to discuss the *Municipal Employees' Retirement System of Louisiana v. Robert L. Rust,* Docket No. 646,239, Section 24, 19th Judicial District Court, Parish of East Baton Rouge; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Mayor Fields moved to return to regular session; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Ms. LaGarde presented the budget report for January 31, 2017 detailing the budgeted amount.

Ms. Vice moved to transfer $24,000 from the capital equipment account to the office equipment and maintenance account for expensed items; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Ms. Vice moved to approve $8,800 for office furniture for the new offices; the motion was seconded by Mayor Fields. The motion carried without objection or opposition.

Ms. LaGarde presented the cash flow report to date to the Board.

Ms. LaGarde updated the Board that the 6-30-2016 GASB 68 has been uploaded to the website and all municipalities have been notified.

Ms. LaGarde updated the Board that there are new statewide agreed upon procedures put in place by the Legislative Auditor's office for the upcoming fiscal year.

Ms. Vice moved to accept the CFO report; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Ms. Suire updated the Board that a memo was sent to the new Mayors elected in January congratulating them and offering the retirement system's services for their municipality.

Ms. Suire updated the Board that the City Court and Marshal's office with the City of Opelousas will begin contributing on their supplemental earnings effective January 29, 2017.

Ms. Mahfouz moved to approve Hawthorne, Waymouth, and Carroll to perform the retirement system's Trustee elections; the motion was seconded by Mayor Jones. The motion carried without objection or opposition.

As of this date, the retirement system has not received any nominations for the upcoming Trustee vacancy.

The MERS newsletter was uploaded to the website February 10th.

Ms. Suire mailed the first quarterly update memo to the municipalities. Several municipalities have called with questions regarding proper procedures concerning the retirement system. Ms. Suire visited the new clerk at the Town of Brusly upon his request.

Ms. Suire and Mr. Ponder updated the Board that the Town of Independence has paid their balance due for employer contributions, employer interest, and actuarial residual.

Gary Curran gave the Board education on lowering the actuarial assumed rate of return. After the educational session and discussion, the Board will delay their decision on adopting a plan to lower the assumed rate of return. A plan will be adopted no later than June 29, 2017.

After discussion, Mayor Fields moved to set the July 1, 2017 – June 30, 2018 employer rates as follows:

Plan A	24.75%
Plan B	13.25%

The motion was seconded by Mayor Jones. The motion carried without objection or opposition.

Ms. Mahfouz moved to adopt the following policy:

> Post-DROP option and beneficiary will be chosen at the date a member enters the DROP program. This decision is irrevocable with the exception that if the member's beneficiary deceases before the member terminates employment, the post-DROP benefit will be calculated at the maximum benefit.

The motion was seconded by Ms. Vice. The motion carried without objection or opposition.

Ms. Mahfouz moved to rescind the following Board policy:

> The mayors of all municipalities that joined the system prior to May 9, 2001 are presumed to work at least an average of thirty-five hours per week and are required to become and be members of the system. For municipalities that join the system on or after May 9, 2001, the mayor of such a municipality is required to notify the system of the average number of hours worked each week. Mayors who work an average of at least thirty-five hours a week must become and be a member of the system. Mayors who work less than an average of thirty-five hours a week may not participate in the system.

The motion was seconded by Mayor Fields. The motion carried without objection or opposition.

Ms. Vice moved to approve the Staff Education Policy; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition. A copy of this policy is attached and made part of these minutes.

Ms. Mahfouz to approve the attached changes to the Personnel Policy; the motion was seconded by Mayor Fields. The motion carried without objection or opposition. A copy of these changes are attached and made part of these minutes.

The formulation of Board evaluations and setting goals for the Executive Director has been deferred by the Personnel Committee until their next meeting.

Mr. Ponder informed the Board that at the end of the 6-30-2017 fiscal year the educational conference fund will be closed and the funds will be transferred to the trust fund.

Mr. Ponder updated the Board that no bills have been filed as of today that will affect the retirement system. The Board asked Mr. Ponder to have the retirement system's bill that will be introduced into this year's regular Legislative session to add a retiree seat to the Board be changed so that the seat is voted for by both retirees and active members.

Mr. Ponder reminded the Board that their personal financial disclosures are due by May 15th.

Mr. Ponder updated the Board that the office renovations should be completed in approximately 4 to 6 weeks.

Ms. Vice moved to adjourn; the motion was seconded by Ms. Mahfouz. The motion carried without objection or opposition.

Michael Sander

APPROVED

Susita Suire

ATTEST

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM
ADMINISTRATIVE BUDGET
AS OF JANUARY 31, 2017

EXPENSES	ANNUAL BUDGET	YTD ACTUAL	YTD DIFFERENCE $	YTD %	MTH OF JANUARY ACTUAL	
Personnel Expenses						
Salaries	$969,090.00	$413,744.85	$555,345.15	42.69%	$62,750.20	
Employer Retirement	$218,193.00	$92,028.64	$126,164.36	42.18%	$14,011.94	
Health Insurance	$69,500.00	$38,846.03	$30,653.97	55.89%	$6,394.03	
Subtotal Personnel Expenses	**$1,256,783.00**	**$544,619.52**	**$712,163.48**	**43.33%**	**$83,156.17**	
Operating Expenses						
Building & Ground Maintenance	$20,600.00	$13,884.50	$6,715.50	67.40%	$951.80	
Office Equipment & Maintenance	$66,000.00	$52,756.33	$13,243.67	79.93%	$7,824.64	
Office Supplies	$81,953.00	$32,833.00	$49,120.00	40.06%	$4,104.18	1
Telecommunications/Utilities	$31,320.00	$19,154.35	$12,165.65	61.16%	$2,147.02	
Insurance	$76,026.00	$63,925.95	$12,100.05	84.08%	-	
Subtotal Operating Expenses	**$275,899.00**	**$182,554.13**	**$93,344.87**	**66.17%**	**$15,027.64**	
Professional Services						
Audit	$100,000.00	$40,000.00	$60,000.00	40.00%	-	
Professional Services	$31,650.00	$26,297.55	$5,352.45	83.09%	$1,626.50	2
Actuarial	$91,620.00	$53,595.00	$38,025.00	58.50%	$7,635.00	
Legal-Administrative	$10,000.00	$3,897.00	$6,103.00	38.97%	$1,566.00	3
Legal-Securities Litigation	$206,000.00	$140,110.82	$65,889.18	68.01%	$33,376.94	4
Subtotal Professional Services	**$439,270.00**	**$263,900.37**	**$175,369.63**	**60.08%**	**$44,204.44**	
Travel Expenses						
Travel - Board Meetings & Conventions	$35,000.00	$22,258.94	$12,741.06	63.60%	$112.33	
Subtotal Travel Expenses	**$35,000.00**	**$22,258.94**	**$12,741.06**	**63.60%**	**$112.33**	
TOTAL OPERATING EXPENSES	$1,800,952.00	$1,013,332.96	$787,619.04	56.27%		
Capital Equipment & Services	$107,845.00	$18,430.75	$89,414.25	17.09%	-	
TOTAL ADMINISTRATIVE EXPENSES	**$1,908,797.00**	**$1,031,763.71**	**$877,033.29**	**54.05%**	**$142,500.58**	

1 Postage for mailing 1099's
2 G.S. Curran calculations for Town of Independence.
3 Tarcza ($1,006) & Trey Jones ($560) - Legal Consulting
4 Preis Gordon - Fletcher/RBS ($24,100 & $8,714) & Kean Miller -SNTech ($520.00)

MERS CASH SUMMARY

ACCOUNT BALANCE SUMMARY

DATE	DESCRIPTION	AMOUNT	
	SYSTEM CASH		
1/31/2017	Northern Trust Cash Balance	$1,826,489.66	
2/14/2017	Capital One Operating Account Cash Balance	$235,145.36	
2/14/2017	Capital One Retirement Payroll Cash Balance - Plan A	$10,463,936.45	1
2/14/2017	Capital One Retirement Payroll Cash Balance - Plan B	$5,224,985.14	1
2/15/2017	Capital One Education Account Cash Balance	$5,927.43	
	SUBTOTAL SYSTEM CASH	$17,756,484.04	
	DROP ACCOUNTS		
2/15/2017	Capital One Drop Balance -Plan A	$20,830,870.26	
2/15/2017	Capital One Drop Balance -Plan B	4,542,385.53	
	SUBTOTAL DROP ACCOUNTS	$25,373,255.79	

1 Higher balance due to receipt of Ad Valorem and Revenue Sharing for Months of January through May.

MERS INVESTMENT CASH FLOWS

JANUARY 1, 2017 TO JANUARY 31, 2017

CASH ACTIVITY

DATE	DESCRIPTION	AMOUNT	SUBTOTAL
12/1/2017	**Northern Trust Beginning Balance**	**$21,225,474.98**	
	INVESTMENT TRANSFERS IN		
1/9/2017	Scoggin - Redemption	$7,606,239.99	
1/9/2017	KBI - Redemption	$18,750,000.00	
1/10/2017	Fixed Income	$3,821.89	
1/12/2017	Republic Business Credit - Income Distribution	$328,947.99	
1/18/2017	Sentinel - Income Distribution	$183,676.55	
12/30/2016	Franchise Equity II - Income Distribution	$37,125.00	
	SUBTOTAL TRANSFERS IN	**$26,909,811.42**	
	INVESTMENT TRANSFERS OUT		
1/10/2017	NT TIPS - Purchase	($25,315,428.54)	
1/10/2017	NT EAFE - Purchase	($18,750,000.00)	
1/24/2017	Blue Bay Direct Lending Fund - Capital Call	($142,118.94)	
1/27/2017	NT Agg Bond Fund - Purchase	($3,250,000.00)	
	SUBTOTAL TRANSFERS OUT	**($47,457,547.48)**	
	OTHER INCOME/TRANSFERS IN		
12/5/2016	Miscellaneous Investment Income	$8,506.26	
	SUBTOTAL OTHER INCOME	**$8,506.26**	
	OTHER EXPENSES/TRANSFERS OUT		
1/5/2017	Northern Trust Short Term Investmets Sweep Fee	($1,095.05)	
1/5/2017	Kean Miller - SNTech	($520.00)	
1/10/2017	Meketa Consulting Fee	($16,666.67)	
1/10/2017	Attorney Fees (50%) - JP Morgan Sale	($7,031.02)	

CASH ACTIVITY

DATE	DESCRIPTION	AMOUNT	SUBTOTAL
1/24/2017	Barrow Hanley - Management Fees	($70,874.00)	
	SUBTOTAL OTHER EXPENSES	**($96,186.74)**	
1/31/2017	**Northern Trust Ending Balance**	**$590,058.44**	

FEBRUARY CASH ACTIVITY

	KBI - Redemption	$325,303
	Blue Bay Direct Lending Fund - Distribution	$816,149.94
	Franchise Capital Partners II	$78,401
	Compass Island - Management Fees	($41,749.06)
	NT Agg Bond Fund	$50,213.48
	NT TIPS	$1,041.49
	NT EAFE	$2,338.34
	Miscellaneous Investment Income	$4,733.03
	Northern Trust Balance as of 2/15/2017	**$1,826,489.66**

MERS CONTRIBUTION SUMMARY

FYE 2017

CONTRIBUTION ACTIVITY

MONTH	EMPLOYER CONTRIBUTIONS	MEMBER CONTRIBUTIONS	NET TRANSFERS IN/OUT	REFUNDS	TOTAL ACTIVITY
		PLAN A			
Jul-16	2,956,973	1,340,868	50,604	(257,712)	4,090,732
Aug-16	3,752,645	1,477,831	21,101	(458,909)	4,792,669
Sep-16	3,092,485	1,215,759	(115,793)	(272,234)	3,920,216
Oct-16	3,816,152	1,504,427	94,362	(399,224)	5,015,716
Nov-16	3,146,983	1,238,925	(28,483)	(353,337)	4,004,089
Dec-16	3,126,039	1,231,075	25,777	(257,223)	4,125,668
Jan-17	3,846,679	1,507,884	(580,285)	(275,976)	4,498,302
Feb-17					
Mar-17					
Apr-17					
May-17					
Jun-17					
SUBTOTAL PLAN A	**$23,737,954.56**	**$9,516,768.00**	**($532,715.77)**	**($2,274,614.34)**	**$30,447,392.45**
		PLAN B			
Jul-16	596,246.94	294,882.32	(5,692.27)	(116,938.25)	768,498.74
Aug-16	696,631.34	300,529.64	-	(161,104.22)	836,056.76
Sep-16	622,348.23	267,841.00	(1,550.00)	(57,687.94)	830,951.29
Oct-16	758,887.36	326,718.42	-	(123,616.22)	961,989.56
Nov-16	579,871.34	247,612.19	-	(75,555.82)	751,927.71
Dec-16	719,359.39	311,039.44	-	(95,351.66)	935,047.17
Jan-17	741,424.40	319,862.80	-	(95,000.50)	966,286.70
Feb-17					

Mar-17					
Apr-17					
May-17					
Jun-17					
SUBTOTAL PLAN B	**$4,714,769.00**	**$2,068,485.81**	**($7,242.27)**	**($725,254.61)**	**$6,050,757.93**
TOTAL SYSTEM	**$28,452,723.56**	**$11,585,253.81**	**($539,958.04)**	**($2,999,868.95)**	**$36,498,150.38**

MERS RETIREMENT BENEFITS SUMMARY

FYE 2017

RETIREMENT BENEFITS ACTIVITY

MONTH	RETIREMENT PAYROLL	DROP PAYROLL	TRANSFERS TO DROP	TOTAL ACTIVITY
		PLAN A		
Jul-16	4,825,103	552,428	898,455	6,275,987
Aug-16	4,875,198	473,542	375,963	5,724,703
Sep-16	4,868,199	236,531	222,767	5,327,496
Oct-16	4,866,927	673,541	214,439	5,754,907
Nov-16	4,892,672	449,713	417,901	5,760,285
Dec-16	4,900,866	357,519	204,686	5,463,071
Jan-17	4,947,702	447,604	660,989	6,056,295
Feb-17	4,981,535	997,000	224,117	6,202,652
Mar-17				
Apr-17				
May-17				
Jun-17				
SUBTOTAL PLAN	**$39,158,201.95**	**$4,187,878.11**	**$3,219,316.65**	**$46,565,396.71**
		PLAN B		
Jul-16	855,035	66,322	45,737	967,094
Aug-16	873,788	79,281	130,984	1,084,052
Sep-16	884,279	27,688	102,834	1,014,801
Oct-16	886,182	104,926	56,626	1,047,734
Nov-16	882,348	115,652	67,379	1,065,380
Dec-16	884,114	78,962	72,142	1,035,217

Jan-17	887,352	72,443	134,831	1,094,626
Feb-17	905,166	138,662	255,567	1,299,395
Mar-17				
Apr-17				
May-17				
Jun-17				
SUBTOTAL PLAN	**$7,058,264.02**	**$683,935.32**	**$866,100.08**	**$8,608,299.42**
TOTAL SYSTEM	**$46,216,465.97**	**$4,871,813.43**	**$4,085,416.73**	**$55,173,696.13**

Municipal Employees' Retirement System

1/26/2017

Contribution Rate Fiscal		2017	2018
Plan A	Minimum	23.25%	24.75%
	FDA Payment	.50%	
	Net Payment	22.75%	
Plan B	Minimum	11.25%	13.25%
	FDA Payment	.25%	
	Net Payment	11.00%	

FDA Account Balances:

	June 30, 2016	Expected June 30, 2017 (adjusted for withdrawal and interest)
Plan A:	$ 8,421,235	$ 8,112,406
Plan B:	$ 3,233,725	$ 3,286,730

Percentage of fiscal 2018 Payroll of the Expected June 30, 2017 FDA balance

Plan A: 4.51%

Plan B: 4.53%

PLAN A fiscal 2018

Minimum ER Rate: 24.75% | **Estimated FDA Balance: $ 8,112,406**

Rate Reduction	Estimated Account Reduction
.25%	$ 466,550
.50%	$ 933,100
.75%	$ 1,399,650
1.00%	$ 1,866,200
1.25%	$ 2,332,750
1.50%	$ 2,799.300

PLAN B fiscal 2018

Minimum ER Rate: 13.25% | **Estimated FDA Balance: $ 3,286,730**

Rate Reduction	Estimated Account Reduction
.25%	$ 188,048
.50%	$ 376,097
.75%	$ 564,145
1.00%	$ 752,193
1.25%	$ 940,242
1.50%	$ 1,128,290

Effect of un-liquidated actuarial losses on assets (assuming future 7.5% returns)

NC% increase (years labeled are the years in which the increase affects the minimum recommended employer contribution rate)

		1 Yr.	Cumulative
Plan A:	**2019**	**2.85%**	**2.85%**
	2020	**2.33%**	**5.18%**
	2021	**2.65%**	**7.83%**
	2022	**1.23%**	**9.06%**
Plan B:	**2019**	**1.52%**	**1.52%**
	2020	**1.24%**	**2.76%**
	2021	**1.38%**	**4.14%**
	2022	**.63%**	**4.77%**

AGENDA ITEM #14 - POLICY

The mayors of all municipalities that joined the system prior to May 9, 2001 are presumed to work at least an average of thirty-five hours per week and are required to become and be members of the system. For municipalities that join the system on or after May 9, 2001, the mayor of such a municipality is required to notify the system of the average number of hours worked each week. Mayors who work an average of at least thirty-five hours a week must become and be a member of the system. Mayors who work less than an average of thirty-five hours a week may not participate in the system.

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

10555 N. Glenstone Place • Baton Rouge, Louisiana 70810 • (225) 769-4825

Gary S. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

Gregory M. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

MEMORANDUM

To: Board of Trustees
Municipal Employees' Retirement System

From: Gary S. Curran, FCA, MAAA, ASA
G. S. Curran & Company, Ltd.

Date: February 22, 2017

Re: Valuation Interest Rate

Background:

The current rate of interest at which all future payments from the plan are discounted is 7.5%. This means that all invested funds are assumed to earn (on average over time) compound interest of 7.5% per year. If the fund earns less than this amount in the short run, contributions will rise to cover the shortfall. In the long run, a failure to earn the assumed rate of return would jeopardize the ability of the fund to pay promised benefits.

Any assumption is subject to error, but the rate of return assumption is probably the one single assumption that the valuation is most sensitive to. Hence, great care is required in choosing the proper assumed rate of return. Several inputs are available to determine the rate. First, inputs from the system's asset consultants and the system's asset allocation can be used to determine future return expectations. In addition, other consultants' return expectations can be considered. Prior history of system results cannot be used as the sole basis in determining future expected outcomes, but they may be considered as a factor in arriving at future results. In addition, the system may consider the magnitude and direction of assumptions chosen by other funds as a guide to general expectations of future returns. Finally, the choice of an assumed rate of return must comply with the relevant standards set by the actuarial and accounting professions.

Process:

In order to determine future expected returns, we have gathered information from your current consultant and other national consultants. The information includes the expected rate of return for each asset class as given in your asset allocation as well as the variance, and correlation coefficients for each asset class together with the weighting for each class in the investment policy statement. The information was combined in order to produce an expected geometric rate of return for the portfolio over a "long" time frame (i.e., 20 to 30 years). In addition, we have gathered information from numerous other consultants to produce consensus values for each of the categories listed above. By using these results we were able to produce consensus estimates for the "long term" expected geometric portfolio rate of return.

We have also collected data from other public retirement systems to determine the general level of current valuation interest rates and the future direction of these rates. While the selection of a rate should not be based on rates selected by other systems, it is helpful to understand the current thinking of other funds. In making our calculations we have assumed that investment expenses, not including manager expenses, would be 0.04% of assets. This essentially covers the consulting and custodial fees. We have also assumed that managers in aggregate will produce sufficient alpha to offset their fees.

Past Fund Performance:

Geometric average market rates of return for the retirement system for various periods are given below.

	Plan A	Plan B
1 Year	-2.9%	-2.9%
3 Years	1.9%	1.6%
5 Years	1.0%	0.8%
10 Years	2.8%	2.7%
15 Years	3.7%	3.5%
20 Years	4.9%	4.7%
25 Years	5.8%	5.7%

What other funds are doing:

NCPERS surveyed 159 state, local, and provincial governmental pension funds between September and November of 2016 and found that nearly 40% of the funds had decreased their assumed rate of return in 2016; a further 30% said they were considering making a downward revision. Of those that lowered their target, the average reduction was 0.26%. A selection of recent articles regarding changes in the assumed rate of return from **Pensions and Investments** and other publications are given below with the date of the article.

- California Teachers' Retirement System: reduce rate from 7.50 % to 7.25% (1/26/17)
- Illinois Teachers' Retirement: reduce rate from 7.50% to 7.00% (8/26/16)
- Colorado Public Employees' Retirement: reduce rate from 7.50% to 7.25% (1/30/17)
- South Dakota Retirement System: reduce rate from 7.25% to 6.75% (1/24/17)
- New York State Common Retirement: reduce rate from 7.50% to 7.00% (9/04/15)
- Kentucky State Retirement: reduce rate from 7.50% to 6.75% (12/03/15)
- Alabama State Retirement System: reduce rate from 8.00% to 7.75% (10/01/16)
- Florida Retirement System: reduce rate from 7.70% to 7.65% (10/27/16)

The Missouri Employees' Retirement System is lowering its rate by 0.15% per year from 7.65% to 7.05%. The reduction made to the rate by the Florida Retirement System was against the advice of all three of their consultants who had recommended a reduction to 7.00%. The CIO and Investment consultants for the California Public Employees' Retirement System (CALPERS) have told the board that 7.5% is too high (11/16/16).

In December of 2016 the National Association of State Retirement Systems issued their Public Funds Survey which collected data as of the end of fiscal 2015. This survey showed that at that time the median assumed rate of return was 7.5%, but the subsequent information shows that the majority of funds have either reduced their rate since the survey or were considering doing so.

Future Performance:

We believe that the information given above related to the past performance of this fund and the expectations of future performance expressed by other funds can give insight and context to the assumed rate of return to be used by this fund. In comparing assumed rates for various funds, a variety of factors

can lead to significantly different results. These factors include the asset allocations of the funds, the use of passive versus active management, the selection of individual managers, and the appetite of the system for investment risk.

When reviewing the past performance of the fund, it is important to note that future performance may be quite unlike the past. In attempting to forecast future fund performance, some view of the past is indispensable, but future conditions may vary significantly from those of the past. Among the factors which may change over time are such things as GDP growth, government debt and borrowing, Federal Reserve Policy, government spending, changes in productivity, trade imbalances, economic recessions, and governmental policies on a range of issues. To the extent that macroeconomic factors change, both real rates of return and inflation can vary from past trends. Typical inputs in forecasting future performance include real rates of return by asset class as well as expectations for inflation. Estimates for these factors are made by investment consultants and governmental entities.

Data Inputs:

The data inputs we have collected as part of our process in determining recommendations for the assumed rate of return included the asset allocation given in the system's investment policy statement, the expected rates of returns and standard deviations for each asset class together with correlation coefficients for each asset class. We have used information provided by your consultants as well as information provided by various other investment consultants.

According to the system's Investment Policy Statement, the asset allocation for the system is as follows:

	MERS Policy Target
Core Fixed Income	18%
High Yield Bonds	5%
Foreign Bonds	5%
U.S. Equities*	28%
International Equities	12%
Emerging Markets Equities	10%
Private Equities**	5%
Real Estate	4%
Commodities†	6%
TIPS	7%

* Includes Large, Mid, and Small Cap Equities
** Includes Private Equity and Private Debt
† Includes Infrastructure and Natural Resources

Estimated Geometric Nominal Rates of Return provided by Meketa are as follows:

	Est. Real Return
Core Fixed Income	3.50%
High Yield Bonds	6.00%
Foreign Bonds	2.40%
U.S. Equities	7.50%
International Equities	7.30%
Emerging Markets Equities	9.80%
Private Equities	7.76%
Real Estate	5.70%
Commodities	7.60%
TIPS	3.50%

Estimated Standard Deviations provided by Meketa are as follows:

	Standard Variations
Core Fixed Income	4.00%
High Yield Bonds	12.50%
Foreign Bonds	9.00%
U.S. Equities	18.00%
International Equities	20.00%
Emerging Markets Equities	26.00%
Private Equities	21.60%
Real Estate	12.50%
Commodities	19.50%
TIPS	7.50%

Correlation Coefficients provided by Meketa are as follows:

Asset Class	Core Fixed Income	High Yield	Foreign Bonds	U.S. Equities	Int'l Equities	Emerging Markets Equities	Private Equities	Real Estate	Real Estate	Commod.
Core Fixed Income	1.00									
High Yield Bonds	0.20	1.00								
Foreign Bonds	0.60	0.25	1.00							
U.S. Equities	0.05	0.70	0.25	1.00						
International Equities	0.05	0.70	0.45	0.90	1.00					
Emerging Markets Equities	0.05	0.70	0.35	0.80	0.90	1.00				
Private Equities	0.05	0.65	0.20	0.85	0.80	0.75	1.00			
Real Estate	0.20	0.50	0.35	0.50	0.45	0.40	0.45	1.00		
Commodities	0.20	0.53	0.38	0.60	0.58	0.55	0.50	0.53	1.00	
TIPS	0.80	0.30	0.60	0.00	0.15	0.15	0.05	0.10	0.20	1.00

The inflation estimate provided by Meketa is 2.60%

In addition to information supplied by Meketa, we have done an alternative calculation of the projected rates of return using input values collected from five other consulting firms and have averaged the results to determine a "consensus" set of values.

Consensus Estimated Real Rates of Return are as follows:

	Est. Real Return
Core Fixed Income	1.41%
High Yield Bonds	4.24%
International Fixed Income	0.44%
U.S. Large Cap Equities	6.17%
U.S. Small/Mid Cap Equities	6.52%
International Equities	6.91%
Emerging Markets Equities	9.80%
Private Equities	9.08%
Real Estate	4.40%
Commodities	5.19%
TIPS (Meketa only)	1.16%

Consensus Estimated Standard Deviations are as follows:

	Standard Variations
Core Fixed Income	4.73%
High Yield Bonds	12.38%
International Fixed Income	8.00%
U.S. Large Cap Equities	17.33%
U.S. Small/Mid Cap Equities	19.45%
International Equities	19.17%
Emerging Markets Equities	25.47%
Private Equities	22.73%
Real Estate	13.13%
Commodities	16.99%
TIPS (Meketa only)	7.50%

Consensus Correlation Coefficients are as follows:

Asset Class	Core Fixed Income	High Yield	Int'l Fixed	Large Cap Equities	Small / Mid Cap Equities	Int'l Equities	EM Equities	Private Equities	Real Estate	Commod.	TIPS
Core Fixed Income	1.00										
High Yield Bonds	0.24	1.00									
International Fixed	0.56	0.21	1.00								
U.S. Large Cap Equities	0.01	0.62	0.18	1.00							
U.S. Small/Mid Cap Equities	-0.05	0.72	0.15	0.94	1.00						
International Equities	0.06	0.62	0.41	0.85	0.80	1.00					
Emerging Markets Equities	0.03	0.62	0.28	0.73	0.75	0.82	1.00				
Private Equities	-0.14	0.65	0.01	0.82	0.84	0.74	0.66	1.00			
Real Estate	0.01	0.24	0.11	0.35	0.31	0.31	0.21	0.45	1.00		
Commodities	0.09	0.41	0.28	0.49	0.54	0.51	0.50	0.53	0.39	1.00	
TIPS (Meketa only)	0.80	0.30	.060	0.00	0.00	0.15	0.15	0.05	0.10	0.20	1.00

Consensus inflation estimate provided is 2.38%

Results:

A simple sum of the cross-products of Meketa's geometric rates of return for each asset class multiplied by the asset allocation for the class with adjustments of 0.04% for non-manager investment expenses produces a rate of return of 6.28%. This assumes annual rebalancing and no return volatility. Including the effect of volatility and annual, efficient rebalancing, we have determined that the expected rate of return on the fund's investment portfolio is 6.85%. These inputs also indicate that there is a 50% probability that the geometric average return will be between 5.62% and 8.09%. Conversely, there is a 25% probability the rate of return will be below 5.62% and a 25% probability the rate will be above 8.09%.

Based on consensus inputs from six national consulting firms (including Meketa), we have determined that the expected rate of return on the fund's investment portfolio is 6.80%. These inputs also indicate that there is a 50% probability that the geometric average return will be between 5.63% and 7.97%. Conversely, there is a 25% probability the rate of return will be below 5.63% and a 25% probability the rate will be above 7.97%.

Although the legislative auditor's office has not issued a comprehensive actuarial review for Municipal Employees' Retirement System, they have completed comprehensive reviews for a number of other state and statewide systems. In these reports, they have used assumptions somewhat more conservative than used here, particularly their assumed rate of inflation of 2.25%. We would expect that when they do issue a comprehensive actuarial report, that their results would be a recommended valuation interest rate that is even lower than what we have derived above.

Recommendations:

In formulating our recommendation, we have reviewed the results of our analysis based on both Meketa's assumptions and the consensus assumptions. We have given consideration to the inflation estimates provided by Meketa and other consultants along with estimates from the Federal Reserve. The results derived from the Meketa and consensus inputs are very close. Based on what we have seen of the reports issued by the legislative auditor's office, it is likely their recommendation would be lower based on a lower assumed rate of inflation and the use of shorter investment time horizon (i.e., 15 years). Certainly, recent inflation rates have been below even the lower end of this range and if these recent rates persist, it could be much less likely these nominal rates of return will be as high as Meketa or even the consensus forecasts project. On the other hand, if rates return to more "normal" levels (i.e., historical averages) then higher nominal rates may be expected. At this time, most of the consultants are showing lower rates of return for the near term (10 years) than for the long range (30 years) forecasts. After reviewing all of the above information, we recommend that the Board set a target assumed rate of return of 7.0% to be achieved over a four-year time frame with a review at the end of that time period to determine whether any further reduction would be required. In formulating a path to achieve the above recommendation, we have also reviewed the pattern of anticipated loss amortizations resulting from the deferred investment losses scheduled to be recognized over the next four years. The anticipated effect on plan costs of these deferred losses will vary over this time frame. For this reason, we are recommending a path of decreases to the assumed rate of return that will coordinate with these losses and reduce volatility in the required employer contributions while achieving the 7.0% target over the four-year time frame. Specifically, we recommend reducing the assumed rate of return by 0.10% in 2017, 0.125% in 2018, 0.10% in 2019, and 0.175% in 2020. This will have the effect of immediately reducing the rate for the June 30, 2017 valuation date to 7.40%. Assumed rates of return for valuations in 2018, 2019, and 2020 would be 7.275%, 7.175%, and 7.0%, respectively.

LOUISIANA RETIREMENT SYSTEMS
ACT 1004 QUARTERLY REPORT SUMMARY
FOR THE PERIOD ENDING 12/31/2016

			CURRENT ASSET ALLOCATION			TOTAL FUND RETURNS				EQUITY RETURNS				FIXED INCOME RETURNS				ALTERNATIVE RETURNS			
RETIREMENT SYSTEM	AUM	CURRENT QTLY RET	EQUITY	FIXED	ALTERN.	1 YEAR	3 YEAR	5 YEAR	10 YEAR	1 YEAR	3 YEAR	5 YEAR	10 YEAR	1 YEAR	3 YEAR	5 YEAR	10 YEAR	1 YEAR	3 YEAR	5 YEAR	10 YEAR
LASERS	$ 10,389,090,569	1.61%	56.80%	14.10%	29.10%	9.10%	3.90%	8.10%	5.30%	10.70%	3.40%	10.00%	4.40%	10.20%	3.10%	4.80%	6.80%	5.90%	5.00%	6.40%	5.80%
SHERIFFS	$ 3,029,247,324	1.40%	60.00%	25.00%	15.00%	7.30%	4.70%	8.90%	5.20%	8.90%	5.40%	12.70%	-	4.80%	3.30%	3.20%	-	6.00%	4.40%	5.70%	-
STATE POLICE	$ 710,906,155	1.26%	62.40%	18.80%	14.00%	7.11%	3.90%	8.71%	4.98%	9.87%	4.36%	11.51%	5.44%	5.84%	2.49%	3.41%	5.19%	1.47%	5.66%	6.66%	2.25%
MUNI POLICE	$ 1,824,034,258	1.11%	55.60%	20.70%	23.10%	7.50%	3.40%	8.50%	3.90%	8.10%	2.90%	10.50%	3.80%	7.50%	2.90%	4.30%	6.00%	6.45%	4.81%	12.37%	-
ROVERS	$ 82,868,679	1.06%	53.48%	28.96%	17.56%	6.90%	2.49%	5.59%	2.56%	7.89%	2.09%	8.81%	3.58%	5.28%	3.02%	3.11%	4.53%	6.78%	2.78%	2.59%	-
DISTRICT ATTORNEY	$ 364,712,015	1.02%	60.51%	31.88%	7.61%	5.15%	3.32%	7.99%	5.10%	13.33%	5.60%	12.18%	5.87%	2.53%	3.82%	2.99%	5.18%	-	-	-	-
FRS	$ 1,420,662,695	1.02%	57.00%	21.20%	21.20%	7.20%	1.70%	4.60%	2.30%	10.00%	3.60%	10.10%	4.80%	3.80%	0.40%	-	-	4.20%	-2.50%	-1.00%	1.60%
CLERKS	$ 521,156,960	0.99%	56.00%	19.00%	25.00%	7.97%	5.23%	9.11%	4.89%	8.74%	4.96%	11.01%	4.16%	6.67%	4.11%	3.57%	5.41%	7.73%	6.75%	8.98%	4.94%
LSERS	$ 1,747,074,605	0.93%	52.00%	31.00%	17.00%	8.55%	3.94%	8.46%	4.97%	10.71%	3.57%	10.82%	4.93%	6.49%	2.88%	2.81%	4.15%	8.86%	9.27%	9.77%	-
TEACHERS	$ 17,100,366,153	0.93%	50.10%	18.90%	29.80%	8.70%	5.10%	9.30%	5.30%	8.30%	4.10%	11.00%	4.40%	6.10%	1.70%	2.30%	4.10%	10.60%	9.80%	11.60%	9.20%
MERS	**$ 789,733,713**	**0.50%**	**48.00%**	**31.00%**	**21.00%**	**5.10%**	**0.80%**	**4.20%**	**2.80%**	**10.90%**	**4.20%**	**9.30%**	**4.60%**	**6.60%**	**1.60%**	**-6.70%**	**-1.10%**	**-0.90%**	**-2.60%**	**3.60%**	**2.40%**
ASSESSORS	$ 330,442,628	0.23%	61.58%	32.90%	5.52%	6.95%	4.00%	8.38%	5.58%	7.59%	4.56%	11.27%	5.53%	5.89%	3.13%	4.14%	5.77%	5.51%	3.12%	1.19%	1.29%
PAROCHIAL	$ 3,553,024,193	-0.25%	54.31%	36.39%	9.30%	7.65%	3.96%	8.97%	5.94%	8.10%	3.78%	11.05%	-	7.68%	3.36%	3.83%	-	5.25%	7.71%	8.90%	-