May 19, 2016

The Board of Trustees for the Maryland State Retirement and Pension System met at the Conference Center at the Maritime Institute, 692 Maritime Boulevard, Building 4, Room A111/A113, Linthicum Heights, Maryland 21090 beginning at 4:35 p.m.

The Trustees present included:

Nancy K. Kopp, Chairman, Presiding Peter Franchot, Vice Chairman

David Blitzstein
David Brinkley
Eric Brotman

James Bush, Jr.

James C. DiPaula Kenneth Haines

Sheila Hill

F. Patrick Hughes Theresa Lochte Richard Norman

Agency Staff members attending included: R. Dean Kenderdine, Executive Director/Board Secretary

Robert Burd

Margaret Bury
Antionette Butcher

Michael Golden

Dimitri Grechencko Ira Greenstein Angie Jenkins Andrew Palmer

Janet Sirkis

Assistant Attorneys General present included: Kathy Brady, Rachel Cohen and Jody Shaw

Other attendees included: Bernadette Benik and John Kenney

Consent Agenda

On a motion made by Mr. Hughes and seconded by Ms. Hill, the Board approved the consent agenda, which included:

- April 19, 2016 Open Meeting Board Minutes
- May 6, 2016 Investment Committee Meeting Report

Allegany County
Sheriff's Department
- Transfer from
Employees' Pension
System to Law
Enforcement
Officers' Pension
System

R. Dean Kenderdine reported that the Board of County Commissioners of Allegany County ("County") is requesting that the Board of Trustees approve its request to withdraw eligible Officers of the Allegany County Sheriff's Department from the Employees' Pension System and transfer them to the Law Enforcement Officers' Pension System.

Mr. Kenderdine reported that the signed resolution from the County was provided in the Board agenda packet and that with the Board's approval the provisions outlined in the resolution, shall become effective July 1, 2016.

On a motion made by Mr. Hughes and seconded by Ms. Hill, the Board of Trustees approved the request of the Board of County Commissioners of Allegany County to withdraw eligible Officers of the Allegany County Sheriff's Department from the Employee's Pension System and transfer them to the Law Enforcement Officers' Pension System.

Recommendation by the Investment Committee regarding Asset Allocation

Mr. Hughes as Chairman of the Investment Committee reported on the Committee's deliberations concerning the System's asset allocation at its May 6, 2016 meeting. The recommendations by the general investment consultant, the Meketa Group included three new asset allocation policy options, as well as a hypothetical asset allocation using 7.25% as the

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targeted rate of return, with different risk and return profiles. Meketa and Staff recommended adopting Policy A, which involves the following changes to the current asset allocation:

Asset Class	Class Policy A Allocation Net Changes	
Intl. Developed Markets Equity	-1%	
Private Equity	+1%	
Absolute Return	-1%	
TIPS	+1%	

The following table summarizes the different policy options:

Asset Allocation Policy Options¹

	Current Policy (%)	Policy A (%)	Policy B (%)	Policy C (%)	7.25% Target Policy	Target Rang (%)
Growth/Equity:	47	47	47	47	38	+/-5
U.S. Equity	16	16	16	14	13	
Intl. Developed Markets Equity	13	12	1.1	11	9	
Intl. Emerging Markets Equity	8	8	8	9	6	
Private Equity	10	11	12	13	10	
Rate Sensitive:	20	21	22	23	32	+/+5
Investment Grade Bonds	0	0	0	0	7	
Long-term Government Bonds	10	10	11	11	12	
MBS/Corporate Bonds	6	6	6	6	7	
TIPS	4	5	5	6	6	
Credit:	9	9	9	8	8	+ - 4
High Yield Bonds/Bank Loans	6	6	6	5	5	
Emerging Market Debt	3	3	3	3	3	
Real Assets:	15	15	15	16	14	+/-4
Real Estate	10	10	11	11	10	
Commodities	3	3	2	0	2	
Natural Resources/Infrastructure	2	2	2	-5	2	
Absolute Return	9	8	7	6	8	+/- 4
Expected Return (%)	7.80	7.79	7,83	7.93	7,25	
Standard Deviation (%)	12.1	12.0	12.0	12.0	10.1	
Prob. of Achieving 7.55% over 20 Yrs.	53,2	53.2	53.7	55.2	44.1	
Hedge Fund Maximum (%)	≤17	≤16	S 15	≤14	≤ 16	

Expected return and standard deviation are based upon Meketa Investment Group's 2016 Annual Asset Study. Private equity maintains range +1-4% and cash 0-5%

Also, consistent with the recommendation to decrease exposure to Absolute Return by 1%, Meketa and Staff also recommended reducing the cap on hedge fund exposure at the total fund level from 17% to 16%.

Finally, Meketa recommended several changes to the benchmarks shown in the table below:

Asset Class	Current Benchmark	Proposed Policy Benchmark ¹	Proposed Implementation Benchmark
Equity:			
Public Equity	43% Russell 3000, 35% MSCI World (ex. U.S.), 22% MSCI EM	44% Russell 3000, 33% MSCI World (ex. U.S.), 22% MSCI EM	
Private Equity State Street Private Equity Composite		MSCI ACWI + 200 bp	State Street Private Equity Composite

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Rate Sensitive	50% Barclays Long-	48% Barclays Long-	
	Term Government,	Term Government,	
	15% Barclays	14% Barclays	
	Securitized,	Securitized,	
	15% Barclays	14% Barclays	
	Corporate,	Corporate,	
	20% Barclays US TIPS	24% Barclays US TIPS	
Credit:	67% US, 33% Non-US	67% US, 33% Non-US	
U.S. Credit	80% Barclays US High	80% Barclays US High	
	Yield,	Yield,	
	20% S&P/LSTA	20% S&P/LSTA	
	Leveraged Loan	Leveraged Loan	
Non-U.S. Credit	50% JP Morgan GBI-	50% JP Morgan GBI-	
	EM Global Diversified,	EM Global Diversified,	
	25% JP Morgan EMBI	25% JP Morgan EMBI	
	Global Diversified,	Global Diversified,	
	25% JPMorgan CEMBI	25% JPMorgan CEMBI	
	Broad	Broad	
Real Assets:	Dynamically weighted:	67% RE, 20%	Dynamically weighted
	RE, Commodities,	Commodities, 13%	RE, Commodities,
	NR/IS	NR/IS	NR/IS
Real Estate	Dynamically weighted:	85% NCREIF ODCE (1	
	NCREIF ODCE (1	quarter lag, gross),	
	quarter lag, gross),	15% FTSE	
	FTSE EPRA/NAREIT	EPRA/NAREIT	
	Developed (net)	Developed (net)	
Commodities	Bloomberg Commodity	Bloomberg Commodity	
Natural Resources	CPI-U + 500 bp	CPI-U + 500 bp (capped	75% S&P Global
& Infrastructure	(capped at 10%)	at 10%)	Natural Resources,
	01 7/07 (5)	2	25% DJ-Brookfield
			Infrastructure
Absolute Return	HFRI Fund of Funds	3 month T-bill + 500 bp	HFRI Fund of Funds
	Conservative + 100 bp		Conservative + 100 br

¹ Weight adjustments are based on proposed policy A

The proposed Policy Benchmark should be used to evaluate the long-term asset allocation policy decisions made by the Board of Trustees.

The proposed Implementation Benchmark should be used for the evaluation of Staff's ability to implement the System's policy, taking into account shorter-term tracking error effects of the long-term Policy Benchmark.

Meketa also recommended changing the way the underweight to Real Assets was allocated. In calculating the benchmark, the underweight to private market assets is allocated across certain public markets, given the time that is required to allocate capital to private markets. Currently, the underweight to the entire Real Assets bucket is allocated to the Rate Sensitive asset class. Meketa recommended that only the underweight to the Real Estate component of Real Assets be allocated to Rate Sensitive, given that the other components can be represented in the public markets.

On a motion made by Ms. Hill and seconded by Mr. Blitzstein, the Board approved the Investment Committee's recommended changes regarding asset allocation and benchmarks.

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Recommendation by the Investment Committee regarding changes to the Optional Retirement Plan Mr. Hughes as Chairman of the Investment Committee reported on the Committee's deliberations concerning changes to the Optional Retirement Plan. The Committee's recommendations related to Fidelity included:

- Approve the move to a fixed 15 basis point fee, which will be calculated quarterly and charged equally in dollars to all participant accounts.
- 2. Approve the return of all revenue sharing generated by the investment line-up.
- 3. Approve the replacement of the Fidelity Cash Reserve fund with the Vanguard Treasury Money Market fund.
 - a. Replacement is recommended due to the high expense ratio (0.37%) for the Fidelity Cash Reserve.
 - b. Assets and future contributions should be mapped to the Vanguard Treasury Money Market fund.
- 4. Approve the replacement of the Blackrock Inflation-Protected Bond fund with the Fidelity Spartan Inflation-Protected Bond Index fund.
 - a. Replacement is recommended due to Blackrock's lagging performance relative to the benchmark and higher expense ratio.
 - b. Lack of confidence in active management in this asset class
 - c. Assets and future contributions should be mapped from Blackrock Inflation-Protected Bond fund to the Fidelity Spartan Inflation-Protected Bond Index fund.
- 5. Approve the addition of a brokerage service to allow participants greater investment choice flexibility.

The recommendations relating to TIAA were amended to allow the Agency's legal counsel an opportunity to review the transition to TIAA's Retirement Choice group annuity contract.

The amended recommendations for TIAA include the following:

- 1. Approve the addition of the Vanguard Treasury Money Market Fund (VUSXX) to TIAA's investment line-up.
- 2. Approve the replacement of the Blackrock Inflation-Protected Bond Fund with the Vanguard Inflation-Protected Securities Fund (VAIPX)
 - Assets and future contributions should be mapped from the Blackrock Inflation-Protected Bond Fund to the Vanguard Inflation-Protected Securities Fund
- 3. Authorize staff and the legal team to further review and consider the possibility of moving to the Retirement Choice contracts and report back to the Investment Committee at the next meeting.

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4. Approve the addition of a brokerage service to allow participants greater investment choice flexibility.

On a motion made by Mr. Brotman and seconded by Ms. Lochte, the Board approved the Investment Committee's recommended changes to the Optional Retirement Plan, subject to legal review prior to implementation.

Recommendation by the Investment Committee regarding changes to the Investment Policy Manual Mr. Hughes as Chairman of the Investment Committee reported on the Committee's deliberations concerning changes to the Investment Policy Manual.

Mr. Hughes reported that at the June 5, 2016 Investment Committee meeting staff recommended repealing COMAR 22.03.05 relating to brokerage services, and updating the General Procurement Policies and Procedures in the Investment Policy Manual ("IPM") to include a new policy for the selection of broker-dealers or futures clearing merchants who provide the System with trading-related services, and allow investment staff greater flexibility in procuring certain products and services.

Mr. Hughes further reported that staff recommended adding an express provision to the Public Market Policies of the IPM regarding an investment manager's reliance on ERISA prohibited transaction exemptions.

Treasurer Kopp asked the Office of the Attorney General to confirm that the repeal of COMAR 22.03.05 relating to brokerage services and the proposed changes to the Investment Policy Manual are consistent with and do not modify the Board's current policies on the procurement of brokerage services. Kathy Brady confirmed that she reviewed this issue in detail and the proposed changes are consistent with and do not modify the Board's policies on the procurement of brokerage services.

On a motion made by Mr. Hughes and seconded by Mr. Haines, the Board approved the Investment Committee's recommendations to (1) repeal COMAR 22.03.05 by submitting notice of proposed action to the Maryland Register; and (2) adopt the recommended changes to the Investment Policy Manual.

Appointment of Members to the Securities Litigation Committee

As mandated by Board Operations Policy, the Board reviewed the proposed committee assignment for the Securities Litigation Committee as submitted by Treasurer Kopp.

On a motion made by Mr. Brotman and seconded by Mr. Bush, the Board approved the recommended committee assignment for the Securities Litigation Committee for the balance of FY2016 as follows:

Securities Litigation Committee

James "Chip" DiPaula, Chairman F. Patrick Hughes Charles Johnson

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CIO Report

Mr. Andrew Palmer reported that the April, 2016 report is positive and the fund is up 12 basis points.

Mr. Palmer indicated that the rate of return would be discussed at the June Board of Trustees meeting.

Treasurer Kopp thanked Mr. Palmer and staff for a job well done at the 2016 Board of Trustees Education Session, saying it was the best education session thus far.

Executive Director's Report

Mr. Kenderdine reported that the evaluation forms for the trustee education session were provided to each Trustee and encouraged everyone to provide their feedback about the education session.

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Mr. Kenderdine reported that the Agency processed 7,100 estimates under the new option and annuity factors and to date the Agency has received 23 phone calls with mainly clarification questions.

Mr. Kenderdine reported that this is year two of the GASB implementation and that notice of website postings of all data necessary for the PGUs has gone out to them.

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Mr. Kenderdine reported that Margaret Bury has hired Harvey Raitzyk, as Deputy Benefits Administrator. Mr. Raitzyk was Director of the Business Operations Office overseeing the MPAS project. Chandra Puranam has been promoted to Director of the Business Operations Office.

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On a motion made by Ms. Hill and seconded by Ms. Lochte, the Board voted to meet in a Closed Session, beginning at 4:50 p.m., at the Conference Center at the Maritime Institute, 692 Maritime Boulevard, Building 4, Room A111/A113, Linthicum Heights, Maryland 21090, for the purpose of:

- 1. reviewing the April 19, 2016 closed session Board minutes, pursuant to General Provisions Art., § 3-103(a)(1)(i), the exercise of an administrative function; and
- reviewing the Medical Board reports from April 20, April 28, May 4 and May 12, 2016, pursuant to General Provisions Government Art., § 3-305(b)(13), to comply with a specific constitutional, statutory, or judicially imposed requirement that prevents public disclosures about a particular proceeding or matter, namely, General Provisions Art., § 4-312 regarding the prohibition on disclosing retirement records, and General Provisions Art., § 4-329 regarding the prohibition on disclosing medical and personal information.

CLOSED SESSION

The Trustees present included:

Nancy K. Kopp, Chairman, Presiding Peter Franchot, Vice Chairman

David Blitzstein

David Brinkley

Eric Brotman

James Bush, Jr.

James C. DiPaula

Kenneth Haines

Sheila Hill

F. Patrick Hughes

Theresa Lochte

Richard Norman

Agency Staff members attending included: R. Dean Kenderdine, Executive Director/Board Secretary

Robert Burd

Margaret Bury Antionette Butcher Michael Golden

Dimitri Grechencko

Ira Greenstein

Angie Jenkins

Andrew Palmer Janet Sirkis

Assistant Attorneys General present included: Kathy Brady, Rachel Cohen and Jody Shaw

Other attendees included: Bernadette Benik and John Kenney

On a motion made by Mr. Hughes and seconded by Ms. Hill, the Board returned to open session at 4:52 p.m.

OPEN SESSION

The Trustees present included:

Nancy K. Kopp, Chairman, Presiding

Peter Franchot, Vice Chairman

David Blitzstein

David Brinkley

James Bush, Jr.

Robert Hagans

Kenneth Haines

James Harkins

Linda Herman

F. Patrick Hughes

Theresa Lochte

Richard Norman

Thurman Zollicoffer

May 19, 2016

Agency Staff members attending included: R. Dean Kenderdine, Executive Director/Board Secretary

Robert Burd

Michael Golden

Dana Johns

Margaret Bury

Ira Greenstein

Stephen Muturi

Melody Countess

Dimitri Grechenko

Janet Sirkis

Eric Farls

Angie Jenkins

Beau Smith

Assistant Attorneys General present included: Kathy Brady and Rachel Cohen

Also attended by: Larry Jennings, Stefan Strein, Bernadette Benik, Andrew Palmer and Michael Rubenstein.

During the closed session the Board took action on the following:

Closed Session

The Board approved the April 19, 2016 closed session Board minutes.

Minutes

Reports

Medical Board

The Board adopted the medical board reports from April 20, April 28, May

4 and May 12, 2016.

Adjournment

There being no further business before the Board, on a motion made by

Mr. Hughes and seconded by Ms. Hill, the meeting adjourned at 4:53

p.m.

Respectfully submitted,

R. Dean Kenderdine Secretary to the Board