Howard County
MARYLAND

PENSION OVERSIGHT COMMISSION
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June 4, 2015

Mr. Allan Kittleman, County Executive
Howard County Government
3430 Court House Drive
Ellicott City MD 21043

Dr. Calvin Ball, Chairperson
Howard County Council
3430 Court House Drive
Ellicott City MD 21043

Dear Mr. Kittleman and Dr. Ball:

Enclosed is, for your review, the Annual Report of the Pension Oversight Commission for the Howard County Retirement Plan and the Howard County Police and Fire Employees' Retirement Plan. The Annual Report is presented as one document for both Plans and covers the fiscal year 2014, ending June 30, 2014.

Howard County Code Section 1.482(c)(1) requires the Pension Oversight Commission to submit an annual report of the status of the plans to the County Executive and the County Council, and the County Council to review and accept by resolution the annual report submitted by the Oversight Commission. Please kindly inform the Commission when this action will take place.

Should you have any questions, please feel free to contact us.

Sincerely,

Jeffrey M. Huber
Chairman

cc: Commission File
Toshie Kabuto
Todd Snyder
Mitchell Stringer
Vananzo Eaton
Teresa Reider
Scott Southern

Enclosure: Annual Report

Introduction

One of the Duties and Responsibilities of the Pension Oversight Commission (Commission) is to:

> …submit an annual report of the status of the Howard County Retirement Plan and the Police and Fire Employees' Retirement Plan (Plans) to the County Executive and the County Council. The County Council shall review and accept by resolution the annual report submitted by the Oversight Commission. The report shall include:
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> i. The Commission's assessment of the appropriateness of the actuarial assumptions used;
> ii. A statement of revenues, including contributions, investment earnings, and forfeitures;
> iii. The cost of the plans, including an analysis of fees, commissions and expenses;
> iv. An evaluation of the administration of the plans; and
> v. Any proposal or amendment of the plans that the Commission may wish to recommend.
>
> *(Howard County Code Section 1.482*

These five sections are addressed in the Commission's Annual Report. Please note that the Commission plans to organize annual meetings in fiscal year 2016 with the actuary and the investment consultant to improve the process and efficiency in preparing the annual report on the status of the plans.

The first section covered in the Annual Report is section v (Recommendations) given their importance as they relate to the governance and long term sustainability of the Plans.

Recommendations

1. The Commission recommends developing a formal policy to re-confirm the Plans' investment consultant and establish independent reviews at least once in every 5 years to ensure that the County would receive excellent package of the services available in the market at competitive fees.

   While the Commission is not in a position to opine on the quality of services provided by the current investment consultant, as the consultant plays a significant role in the plans management. It is prudent for the County to conduct an independent review periodically.

2. The Commission recommends the County assesses whether hiring an internal investment professional would be beneficial and cost effective in the oversight of the Plans. Given the significant asset level of the Plans ($750 million as of June 30, 2014), the reliance on a third party investment consultant and the Plans' increasing allocations to sophisticated alternative investments (e.g. hedge funds and private equity funds), an internal investment professional could enhance the Plans' investment capabilities in terms of investment due diligence and risk controls. The Commission believes an internal investment professional could work in conjunction with an investment consultant and not replace the consultant.

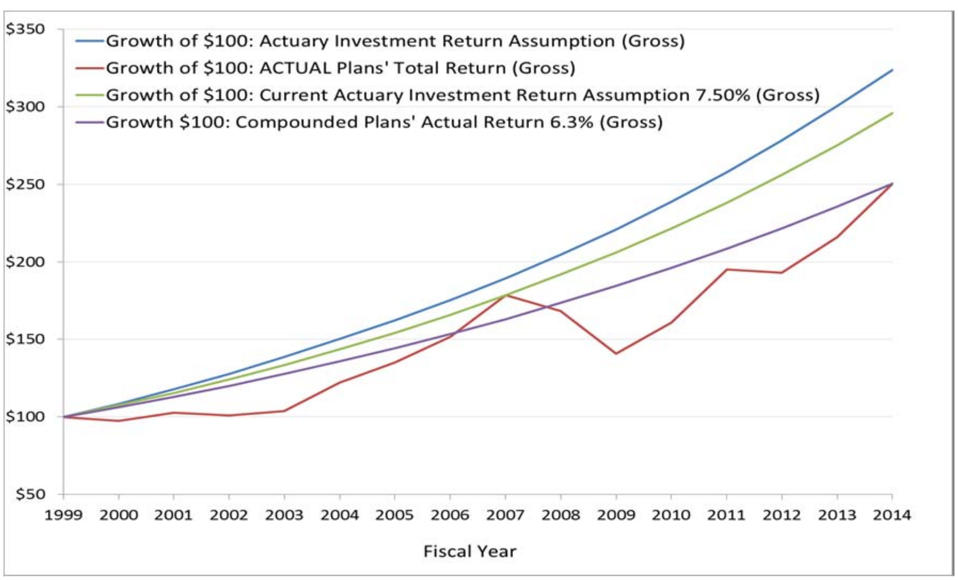
3. The Commission recommends the adoption of the Code of Conduct for Members of a Pension Scheme Governing Body issued by the CFA Institute which is attached in this report. The conduct of those who govern pension schemes significantly impacts the lives of a number of people, both as dependent on pensions or ultimate supporter of the pensions as tax payers. It is therefore critical that Plans are managed by a strong, well-functioning governing body in accordance with fundamental ethical principles of integrity, independence, fairness, and competence. This code of conduct is considered to be the best practice in the industry and adopting the code will demonstrate a commitment to serving the best interests of participants and beneficiaries.

4. The Commission recommends there be a requirement for “clear reporting to show how and when pension plans will be fully funded.” (This is a policy recommendation from the Pension Funding Task Force which was established in 2012 by the National Governors Association, National Conference of State Legislatures, Council of State Governments, National Association of Counties, National League of Cities, U.S. Conference of Mayors, the International City/County Management Association and the Government Finance Officers Association.)

5. The Commission recommends that the County Executive and County Council would meet with the Commission within 45 days after their receipt of an annual report from the Commission to facilitate the review and acceptance process of the annual report according to *Howard County Code Section 1.482*.

6. A reoccurring recommendation by the Commission is to consider lowering the Plans’ investment return assumption. The investment return assumption serves as the discount rate used to compute the present value of the Plans’ future liabilities. (A decrease in this rate increases the Plans’ net pension liabilities.) As of July 1, 2014, this rate was 7.50% net of fees and expenses. The Commission believes the Plans’ investment return assumption continues to be too aggressive for the following the reasons:
    - The return assumption is higher than the long term return forecast presented by Summit. The Commission believes the Summit used reasonable and appropriate assumptions to produce its long term return forecast of 6.25%. Even though the discount rate was lowered to 7.50% from July 1, 2014, it is still 1.25% higher than the expected rate of return based on the existing asset allocations in the policy portfolio. Please see Actuarial Review Section (pages 4-6) for details on Summit’s return forecast.

    - The historical disconnect between the return assumption and the actual investment returns of the Plans since fiscal year 2000. The chart below highlights this disconnect



Source for the Plans’ actual performance (red line) is from Summit Strategies Group.

The blue line shows the growth of $100 using the Actual Investment Return Assumptions used by the Plans. Over time, the assumptions have been lowered from 8.50% in 2000 to the current

7.50%. The green line shows the growth of $100 if 7.50% had been applied since 2000. The purple line shows the growth of $100 compounding at the actual gross returns of the Plans. The red line shows the growth of $100 using the actual annual returns of the Plans. There has been an over estimation of the Investment Return Assumption over this 15 year period, and therefore an under estimation of the net pensions liabilities.

The Commission recommends that the Commission consider whether a 6.25% to 6.50% Investment Return Assumption would better reflect the future long-term returns and the Plans' net pension liabilities.

Evaluation of the administration of the plans

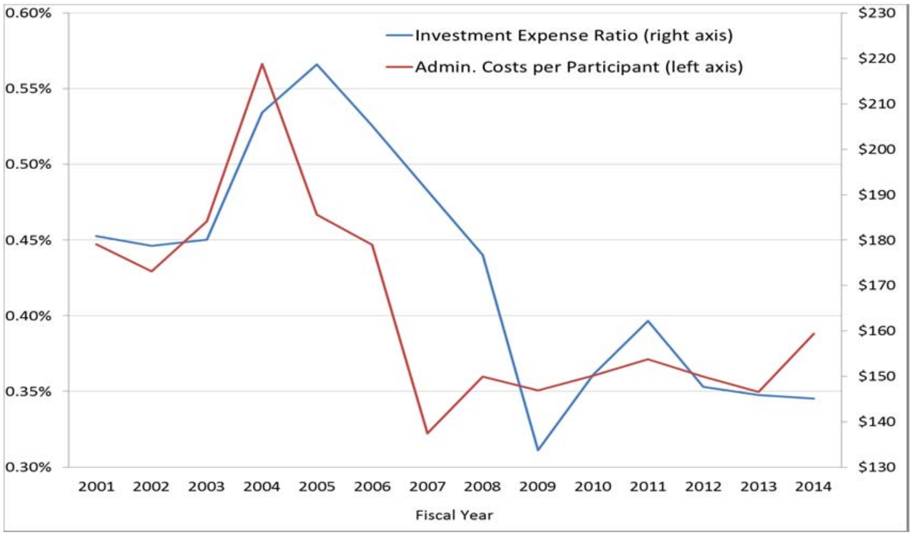
The Commission's evaluation of the administration of the plans is summarized in the first five recommendations in the above Recommendations section.

Statement of revenues, investment earnings, and forfeitures

The Plans' investment earnings were $103 million for fiscal 2014 which was a record for the Plans. The Plans' net appreciation from investments accounted for $84 million of the $103 million. The Plans' total contributions from employees were $43.1 million which was a $3.8 million increase from the previous year, 2013. The Plans' total payout to recipients was $26.8 million which was a $3.4 million increase from the previous year.

Analysis of fees, commissions and expenses

The Commission feels the Plans' fees and expenses appear to be reasonable and in line with the Plans' recent past.



The Commission does not have information that breaks out commissions paid, and believes commissions are included in investment expenses.

Actuarial Review

County's Pension Contributions

The Commission reviewed the Actuarial Valuation Reports dated July 1, 2014 submitted by Bolton Partners Inc. The principle objective of the reports is to determine the county's plan contributions for the fiscal year 2016 (starting July 1, 2015). According to the reports, there are no significant changes to the county's contribution amounts comparing to those recommended in the fiscal year 2015. The recommended contribution amounts for the fiscal year 2016 are $21,908,101 for the Howard County Police and Fire Employees' Plan (the "Police and Fire Plan") and $13,106,918 for the Howard County Retirement Plan (the "Employees Plan"), respectively. Last year's contributions were $21,934,844 for the Police and Fire Plan and $13,364,996 for the Employees Plan. The contribution ratios, as measures by the contribution amount relative to the payroll, are 30.0% for the Police and Fire Plan and 12.4% for the Employees Plan, respectively.

Funded Ratios

The funded ratios, as reported in the Auditor's Report for the fiscal year 2014, are 83% for the Police & Fire Employees' Retirement, and 92% for the County Employees' Retirement Plan, respectively. The ratios are calculated using the market value of the plan assets as of June 30, 2014 and the present value of the plan liabilities. A ratio of less than 100% indicates that plan assets are less than estimated plan liabilities.

For the funded ratio calculation, the value of pension assets is simply determined based on the market value of the assets on the valuation date. Determining the value of pension liabilities is, however, more difficult and would require the following two components of assumptions: (1) the expected future cash stream of pension benefit payments and (2) the discount rate used to determine the present value of the expected future cash stream.

The expected future cash stream of the benefit payments is determined by the actuary with a set of assumptions, such as future salary increases, future mortality rates and disablement rates to mention a few examples. The details of the assumptions that the actuary used to calculate the future cash stream of the pension benefit payments are listed in the experience reports, most recently issued on June 26, 2014.

Once the actuary determines the expected future cash stream of payments, a discount rate is applied to calculate the present value of all the future benefit payments to determine the pension liabilities on the valuation date. As the pension benefits are long-term in nature, the present value of the pension liabilities is extremely sensitive to the level of discount rate. The higher the discount rate is, the lower the present value of the pension liabilities would be. To determine the pension liabilities for the fiscal year 2014, the discount rate used is 7.75% although the rate was lowered to 7.50%, which became effective July 1, 2014. The discount rate is selected based on the expected long-term rate of investment return of the plans.

To assess the appropriateness of the discount rate used for the pension liability calculations, the Commission reviewed (1) the long-term capital market assumptions by the Summit Strategies

Group provide in the presentation dated September 30, 2014 and (2) the plans' policy asset allocations set by the Retirement Plan Committee effective in June 30, 2012. Table below provides a summary of the review. In the table, the expected return for each asset class is based on the Summit Strategies Group's long-term expected return assumption listed in the presentation dated September 20, 2014—this is the latest such information received by the Commission—and the current policy asset allocations as well as the actual asset allocations as of December 31, 2014.

First, in the Commission's view, the Summit Strategies Group's long-term capital market assumptions as presented in September 2014 are reasonable given under the current low rate environments and low risk premiums offered in various asset classes. Secondly, the Commission assessed the expected rate of investment return based on the target weight of each asset under the policy asset allocation. The expected rate of return of the policy portfolio would be 6.25% using the Summit Strategies Group's long-term capital market assumptions, (see table below).

Table 1. Expected Long-Term Investment Return

	Asset Allocation		**Long-Term Return Assumptions**		**Expected Rate of Return**	
	Target Weight	**Actual Weight (12/31/14)**	**Expected Sector Return**	**Expected Alpha Return**	**Based on Target Weight**	**Based on Actual Weight**
Large Cap Composite	16.90%	20.65%	5.50%	0.50%	1.01%	1.24%
Non-Large Cap Composite	5.60%	6.97%	5.25%	0.75%	0.34%	0.42%
Intl. Developed Mrkts Composite	14.60%	13.01%	6.75%	0.75%	1.10%	0.98%
Emerging Markets Composite	7.90%	6.06%	8.50%	1.00%	0.75%	0.58%
Fixed Income Composite	32.50%	32.83%	3.75% 1/	0.25%	1.30%	1.31%
Real Estate Composite	5.00%	4.45%	8.5% 2/		0.43%	0.38%
Private Equity Composite	10.00%	6.00%	8.97% 3/		0.90%	0.54%
Hedge Fund Composite	7.50%	9.11%	5.75% 4/		0.43%	0.52%
Cash Composite	0.00%	0.92%	2.75%		0.00%	0.03%
Total	100.00%	100.00%			**6.25%**	**5.99%**

Source: Summit Strategies Group, Economic & Capital Market Review, 9/30/2014

Note: 1/ Core plus Fixed Income
2/ Non-Core Real Estate
3/ Weighted average of 14% Private Debt (expected return 7.25%) and 86% of Private Equity (expected return 9.25%) based on Summit Strategies Group's Private Equity presentation on 2/27/2014

Furthermore, according to the Summit Strategies Group's presentation dated December 31, 2014, the portfolio is overweight in the large and non-large cap equity, hedge funds and underweight in international developed and emerging markets equity, private equity and real estate sectors. Based on the current tactical allocations, which are different from the policy allocations, the expected rate of return of the actual portfolio would be 5.99%.

Based on the analysis above, the Commission notes that the 7.75% discount rate used to assess the present value of the pension liabilities for the fiscal year 2014 is higher than the long-term rate of investment returns presented by Summit to the plans. Even though the discount rate was lowered to 7.50% from July 1, 2014, it is still 1.25% higher than the expected rate of return based on [Summit's estimates applied to] the existing asset allocations in the policy portfolio.

Funded Ratio Sensitivity

The independent auditor provided the estimates of the net pension liability for the fiscal year 2014 if different discount rates were used. According to the estimates, if the discount rate is lowered to 6.75% from 7.75 %—this is closer to the policy portfolio's expected rate of return of 6.25%—the net pension liabilities for both plans would be substantially higher and the funded ratios would be 73% instead of 83% for the Police and Fire Plan and 81% instead of 92% for the Employees' Plan (Table 2). Applying a 5.99% discount rate (which is the expected rate of return for the actual portfolio) would result in a further reduction of funding ratios.

Table 2. Net Pension Liabilities Sensitivity to Changes in the Discount Rate

	1% Decrease (6.75%)	FY2014 Discount Rate (7.75%)	1% Increase (8.75%)
Net Pension Liability FY2014			
Police and Fire Plan	148,935,936	81,979,316	26,560,368
Employees Plan	77,422,576	29,255,083	(11,000,826)
Funded Ratio			
Police and Fire Plan	73%	83%	94%
Employees Plan	81%	92%	103%

Source: Financial Statements, June 30, 2014 and 2013