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Introduction: The study reported herein is part of the review by the Federation of Citizens Associations of the Fairfax County FY2013 Proposed Budget. In particular, this study is a review of the pension funds not from the point of view of whether the pension is too generous or too stingy to the employee, but from the point of view of whether it is adequately funded and adequately being managed.

We consider here the Fairfax County Uniformed Retirement System (URS, Fund 600, for firemen, etc.), the Fairfax County Employees' Retirement System (FCERS, Fund 601, for employees not otherwise covered), the Fairfax County Police Officers Retirement System (PORS, Fund 602), the Educational Employees' Supplementary Retirement System (ERFC, Fund 691, for teachers) and the Other Post-Employment Benefits (OPEB for teachers, Fund 692, and OPEB, Fund 603, for employees not otherwise covered). We do not consider the Virginia Retirement System (VRS), which is at the State level.

Summary: Under the County's reported actuarial assumptions, the pension funds are under-funded¹. The assumptions could have a significant impact on the difference between assets and liabilities; therefore, the actuarial values of assets and liabilities should be reported for other economic scenarios, including those with returns on investment equal to the record over the last ten, twenty and thirty years. Alternative computations should also be made based on a high inflation rate, which so many financial experts are currently predicting.

Because the pension fund already is a major cost to the County, the switch to a defined-contribution plan should be evaluated². The switch could be for new employees only or for new and current employees for all future years, as was done in the Federal government. The change would decrease pension costs, relieve the County of the burden of the uncertainty in the economy, and prevent the escalation of benefits that has occurred in the past decade. The cost of the pension might also be decreased if benefits did not start until Social Security benefits start. County employees might then want to continue to work for the County for 40 years as do private-sector employees, instead of 30 years.

The pension costs have increased significantly over the past decade, primarily because so many benefits were added to the retirement plans when the return on investment was high (i.e., from 2001 to 2008). Now that the return on investments is low, these added benefits (e.g., paying the employee's contribution to the VRS) should be re-considered.

The OPEB reports should be made to conform to those of the other funds in which the unrealized capital gains are separated from the realized capital gains, interest income, and dividend income.

Our recommended Federation Budget Resolutions are listed in Appendix A.

Discussion: Budget data on the pensions was taken from the County web site <http://www.fairfaxcounty.gov/dmb/>, its subsidiaries such as http://www.fairfaxcounty.gov/dmb/archives/budget_archives.htm for budgets for prior years, and from <http://www.fairfaxcounty.gov/finance/CAFR.htm> for the Comprehensive Annual Financial Reports. FY 2011, which is the most recent CAFR, has data up to and including FY2010 as listed under the Required Supplementary Information. The reporting format changes somewhat from year to year, so it will not always be

¹ The County is aware of the funding shortfall. FY 2013 Advertised Budget Plan (Vol. 2), Page 431, cites the funding as being "outside the corridor" of 90% to 120% so that payments into the funds must be adjusted.

² Our Report -050 shows that a defined-contribution plan may be more beneficial to the employee than the current defined-benefit plan.

found in the same format or the same page. Additional pertinent information can be found in Section G (Retirement Plans) and in Section H (Other Post Employment Benefits, OPEB).

Pension data on income and expenses is found in Volume 2 of the budget documents, under the title Trust Funds. The funds are numbered 600, 601, 602, 603, 691 and 692. Data for each fund can be retrieved individually. The tables used most were those at the end of each of these .pdf files.

The first question is: Are the projected pension assets sufficient to cover the projected liabilities? The CAFR shows the actuarial assets and liabilities for each year for each fund (Exhibit 1). The OPEB funds are relatively new; therefore, not much data is available. The actuarial dollar values are the net present value of the assets (contributions and the investment earnings from those contributions) and liabilities (amounts to be paid to retirees in the future). The word “actuarial” implies that the employee count, age, life expectancy, and years of service are factored into the computation.

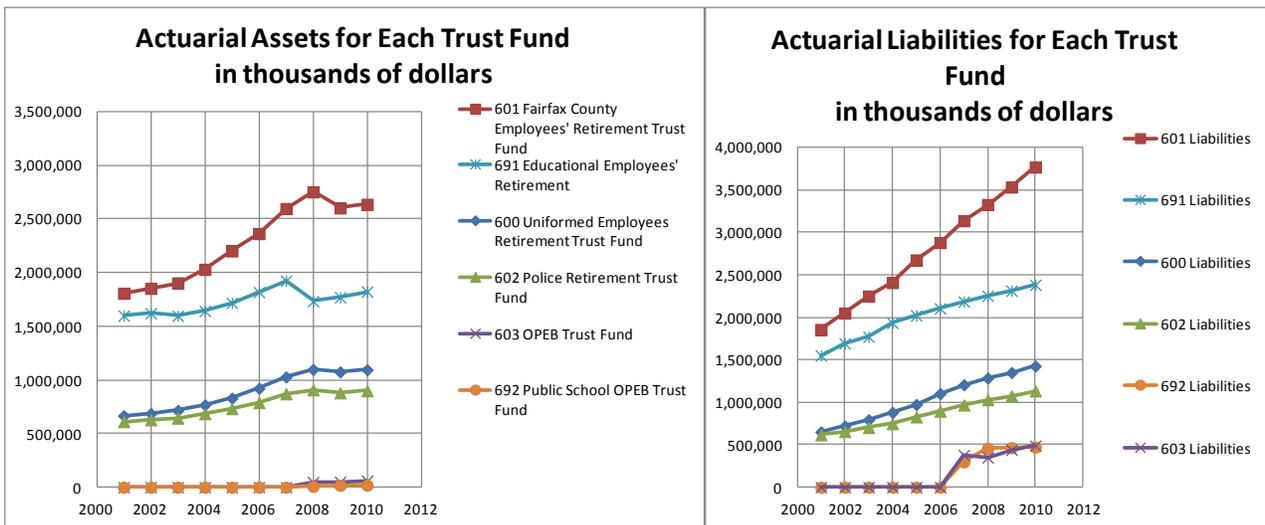


Exhibit 1: Actuarial Assets and Liabilities for Each of the Pension Funds

The difference between the actuarial assets and actuarial liabilities can best be seen if the two are on the same graph (Exhibit 2, right-hand side). The much greater liabilities than assets for the two OPEB funds is evident in Exhibit 1, so they were not repeated in the right-hand part of Exhibit 2. The total assets and total liabilities, on the left of Exhibit 2, shows that the sum of the liabilities has been rising at a faster rate than the assets, especially since 2006. On average since 2001, liabilities have increased \$585M per year, whereas assets have increased only \$246M per year. The FY2010 budget (Volume 2) predicted a \$162M decrease in the gap between assets and liabilities; however, the gap has continued to increase. Because the actuarial assets and liabilities are reported only up to FY2010, we cannot compare this decrease to the current or projected gap. The \$162M is 5% of the FY2010 gap.

During the last decade, when high ROI's were obtained by the pension funds, the high ROI's were not used to decrease the County's pension contributions; instead, they were used to increase benefits. For example, the Deferred Retirement Option Plan (DROP)³ was introduced in 2005 and the Other Post Employment Benefits (OPEB) was introduced in 2007. Before FY2008, the teachers paid 5% into the VRS; now, the County pays the teacher's VRS contribution, thereby doubling the County contribution. A post-retirement health-insurance benefit was added in 2003. Originally, approximately one-third of the legacy ERFC benefit ended when Social Security payments started. Since 2004, the employee can have the entire legacy ERFC continue until death. The newer ERFC 2001 has

³ For information on the increased benefits, see <http://www.fairfaxcounty.gov/finance/cafr.htm>

always had the full benefits continue until death⁴. In FY2008, the police officer's contribution to the pension was decreased from 12% to 11%⁵. These escalations of benefits, and others that we may have missed, have not been rescinded during the economic downturn; therefore, we have the consistently increasing gap between actuarial assets and liabilities.

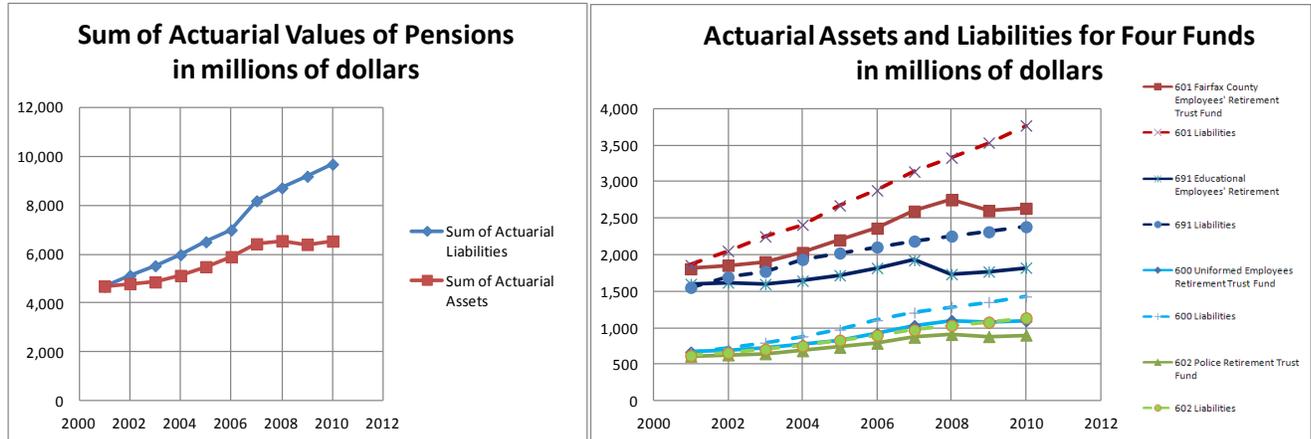


Exhibit 2: Actuarial Assets and Liabilities for the Sum and Selected Pension Accounts

The future of the pension funds should be of great concern. There are 303 current retirees per year in Funds 600 to 602 (=8493/(83-55)); there are 890 current employees per year covered by these same funds (26,687/30). The number of retirees will increase by almost a factor of three in the not-too-distant future. Tax revenues must increase greatly to cover this impending increase.

Because the pension funds constitute a major cost to the County and the cost must be increased to balance assets and liabilities, a lower-cost system should be evaluated. For example, the pensions might be switched to a defined-contribution plan rather than the current defined-benefit plan. The switch could be for new employees only; however, a switch might be made also for current employees for all future years, as was done in the Federal government.

The second question is: Are the imbalances in the funds sensitive to the economic assumptions needed to compute the actuarial assets and liabilities? The key assumptions made in computing the actuarial values are (see, for example, Pg 72 of FY2011CAFR):

- a. A rate of return on the investment of present and future assets of 7.5 percent per year compounded annually, including an inflation component of 4.0 percent.
- b. Projected annual salary increases of 4.0 to 6.5 percent, including an inflation component of 4.0 percent
- c. Post-retirement benefit increases of 3.0 percent compounded annually.

The CAFR's for each year use different percent salary increases, but the other two factors remain the same.

⁴ Jeanne M. Carr, Executive Director/CIO of ERFC, (JMCarr@fcps.edu) says that the changes to ERFC have not changed the actuarial liabilities of the ERFC.

⁵ <http://www.fairfaxcounty.gov/dmb/adopted/FY2008/pdf/Volume1/00189.pdf>

The assumptions made in computing the actuarial values can be compared to what has happened to the investments over the last decade (Exhibit 3). The effect of terrorist attack of 9/11 in 2001 is evident in the drop from 2001 to 2002

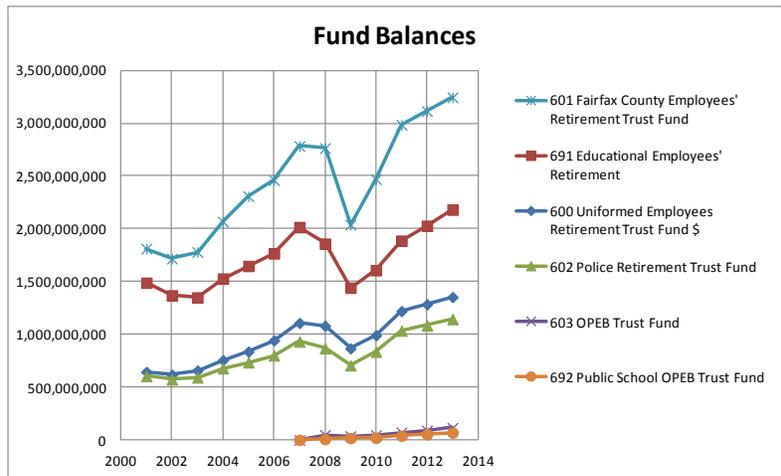


Exhibit 3: History of the Values of the Assets

2002. The effect of the collapse of the housing market is evident in the drop from 2008 to 2009. (The fund balances are as of June 30 in the year indicated.)

Actuarial Assumption (a) above, concerning the assumed 7.5% return on investment, can be tested against data for the last ten years. The return on investment has certainly not been constant; however, the average increase in the year-to-year return on investment of the pension funds has exceeded that of the Standard and Poor's 500 (Exhibit 4) – thanks to the investment advisors (Exhibit 5). (The time offset of the peaks and valleys of the curves in Exhibit 4 is due to the reporting periods. The S&P values are Dec 31 values; the pension values are July 1 values.) The average return on investment from 2001 to 2011, including the unrealized capital gains, is 5.6% per year, whereas the average for the S&P 500, including dividends, is 0.3%. The S&P 500, which is usually not considered to be volatile, is seen to be more volatile than the pension funds, surely because a significant percent of the pension fund is invested in

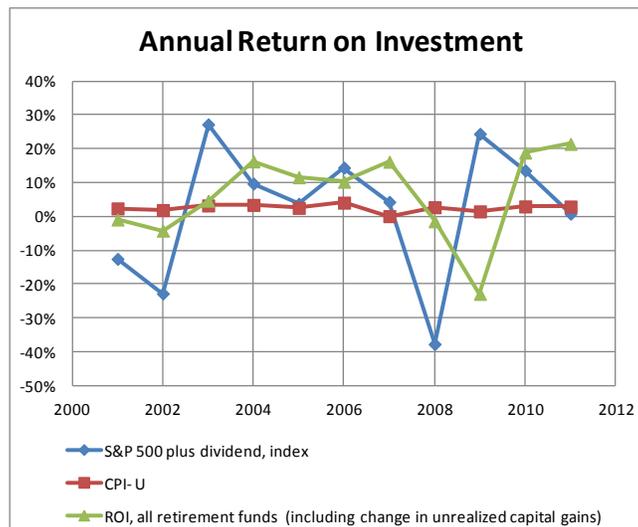


Exhibit 4: Annual Return on Investment as Compared to S&P 500 and the Consumer Price Index

bonds rather than stocks. The average Consumer Price Index (CPI-U) changed over this same period by 2.5%. (CPI-U includes the effect of food and fuel prices; the CPI does not.)

To aid the Board of Supervisors in assessing the status of the pension funds, the account performances should be re-

Averages for periods ending June 30, 2011 backward	Number of years back			
	1	3	5	10
	600 Uniformed Employees Retirement Trust Fund	19.9%	5.1%	6.2%
601 Fairfax County Employees' Retirement Trust Fund	19.8%	5.4%	6.5%	7.1%
602 Police Retirement Trust Fund	20.7%	7.6%	6.7%	6.6%
603 OPEB Trust Fund	18.3%	11.9%		
691 Educational Employees' Retirement	18.6%	4.1%	4.9%	5.5%
692 Public School OPEB Trust Fund	13.8%	21.8%		
All pension funds	21.4%	3.6%	5.0%	6.2%
CPI- U	2.9%	2.5%	2.0%	2.5%
S&P 500 plus dividend, index	0.8%	12.5%	-1.5%	1.7%

Exhibit 5: Comparison of Various Investment Alternatives

computed with historical returns on investment and inflation rates, over the past 10, 20 and 30 years, in addition to the rates currently being used in the actuarial computations. The counter argument is that the values will be overly influenced by two catastrophic events: 9/11 and the housing collapse; however, we cannot be assured that another catastrophe will not happen (e.g., war in the Middle East). In addition, the current recession could last years. Even in good times, the long-term growth rate of the S&P 500, including dividends, is only approximately 2.65% above the CPI-U rate (Exhibit 6).

A thoroughly offsetting factor could be inflation, so the balance between assets and liabilities should also be re-computed for a high inflation rate – a phenomenon forecast by many economists. The increase in the pension adjustment for retirees is limited to 4% per year (Pg 68 of FY2009CAFR). If inflation were to exceed this 4% limit and the investment values were to stay ahead of inflation, the retirees would be paid in dollars of less value so that the present rate of contributing to the pension fund would be greater than needed under a high-inflation scenario.

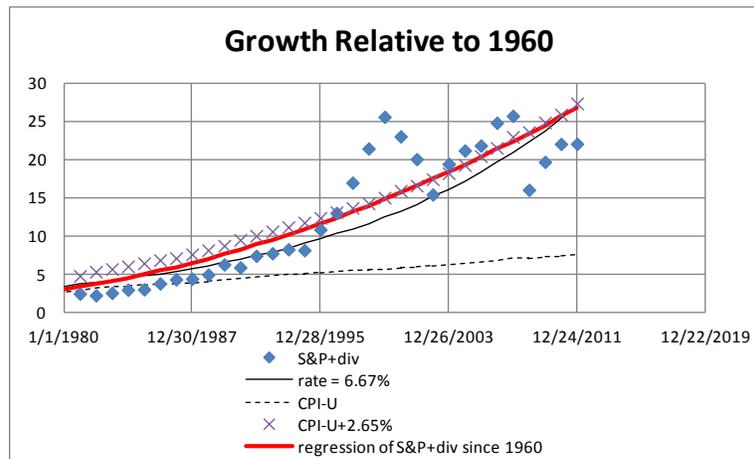


Exhibit 6: Compound Growth Rate of the Stock Market

The history of the County contributions to the pension funds (Exhibit 7 and 8) shows the considerable variation from year to year⁶. The trend toward increasing contributions for non-education employees is evident (Exhibit 8). The increases occurred not only during the 9/11 and 2008-2009 stock-market slumps. The contributions to both the education and non-education far exceed the approximately 5% of salaries that private-sector companies contribute to

⁶ The data was taken from Volume 1 of the budget documents in the section called “Non-Departmental Program Area”.

their pension funds. The recent Aon report⁷ compares the County benefits only to those of other government, not to private-sector benefits; nevertheless, the County benefits equal or exceed those of the other governments (see Appendix B).

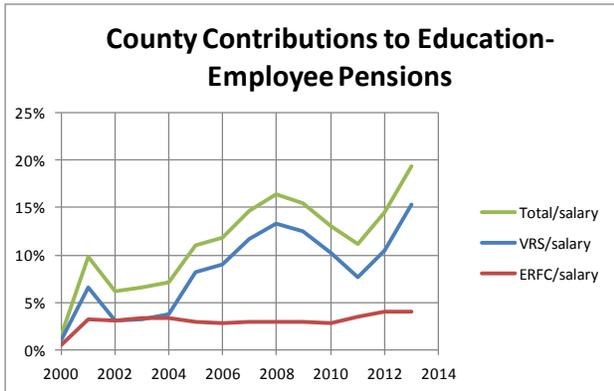


Exhibit 7: Percent of Salaries Paid to Education-Employee Pension Funds

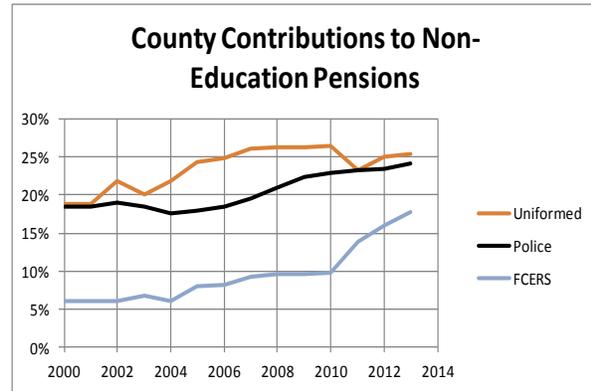


Exhibit 8: Percent of Salaries Paid to Non-Education-Employee Pension Funds

⁷ Aon-Hewitt: FAIRFAX COUNTY POST-RETIREMENT BENEFITS REVIEW. JANUARY, 2012

Appendix A: Proposed Resolutions⁸

Resolution 1: Re-evaluate the actuarial assets and liabilities under historical rates of inflation and return on investment (high priority)

WHEREAS the actuarial values of the assets and liabilities depend on the assumed values of inflation and return on investment,

WHEREAS the Board of Supervisors should be informed of potential shortfalls and surpluses, and
WHEREAS the currently assumed values of the rates of inflation and return on investment differ significantly from what has been experienced over the past thirty years, especially the last ten years, and from the longer-term S&P 500 rate

Therefore

BE IT RESOLVED that the Federation recommends that the actuarial values be re-computed under alternative assumptions, including (1) the last 10-, 20- and 30-year average values for the rate of return of the pension and the average inflation rate over those years, and (2) the high inflation rates anticipated by many economists.

Resolution 2: Evaluate changing the pensions from defined-benefit to defined-contribution plans (high priority)

WHEREAS, under the current assumptions used by the County, the actuarial assets are less than the actuarial liabilities, indicating that the Fairfax County's defined-benefit pensions are currently under-funded;
WHEREAS the County's pension costs are already a major component of the County's expenses;
WHEREAS the County desires decreasing expenditures, not raising taxes, to meet budget limitations; and
WHEREAS most solvent private companies, as well as the Federal government, have reduced their pension expenses by changing from defined-benefit plans to defined-contribution plans

Therefore

BE IF RESOLVED that the Federation requests that the County evaluate switching from the current defined-benefit plan to a new defined-contribution plan. The switch could be for new employees only; however, a switch should also be evaluated if the new plan is applied to all employees for all of their future years, as was done in the Federal government.

Resolution 3: Project the actuarial liabilities for the next 30 years (high priority)

WHEREAS the growth in actuarial liabilities continues to exceed the growth in actuarial assets, estimates of future actuarial liabilities are needed for budgeting purposes,

WHEREAS approximately 300 employees per year are currently under the 600, 601 and 602 plans

WHEREAS currently approximately 900 employees per year retire under these same plans

WHEREAS the this threefold in number of retirees will require a great increase in total pension expenditures

WHEREAS some modifications to the retirement plans may be necessary to offset a great increase in pension expenditures

WHEREAS private-sector employees work until approximately age 65 before being able to afford to retire

⁸ The County did not put any net money into the VRS in FY2011 and FY2012. These payments will be made, with 7.5% interest, over ten years, starting in FY2013. See:

http://www2.timesdispatch.com/rtd/news/state_regional/state_regional_govtpolitics/article/VRSS15_20100314-222207/330443/
The County payment to the VRS is approximately \$61M, because the County has a policy of paying the employee's contribution to the plan. The \$122M paid back over 10 years at 7.5% interest amounts to approximately \$18M per year.

Therefore

BE IT RESOLVED that Federation requests that the County forecast and report the expected actuarial liabilities, year by year, over the next 30 years.

BE IT FURTHER RESOLVED that the Federation requests that the County determine the reduction in cost associated with delaying payment of retirement benefits until age 65, with the annual payment being limited to what is currently earned with 30 years of service.

Resolution 4: Apply proceeds from high returns on investment to the reduction in required County contributions (high priority)

WHEREAS actuarial liabilities are increasing faster than actuarial assets, thereby increasing the underfunding of the pension plans; and

WHEREAS at least some of the underfunding is due to new retirement benefits being added when high returns on investment have been experienced;

Therefore

BE IT RESOLVED that Federation requests that no retirement benefits be added or increased while the pensions are underfunded or while the County contribution to the County and State pension funds exceeds some threshold amount such as 10% of the wages.

BE IT FURTHER RESOLVED that the Federation requests that the County review the benefits added during the past decade and, where possible, rescind some or all of the benefits added during this period.

Resolution 5: Apply proceeds from high returns on investment to the reduction in required County contributions (high priority)

WHEREAS actuarial liabilities are increasing faster than actuarial assets, thereby increasing the underfunding of the pension plans; and

WHEREAS at least some of the underfunding is due to new retirement benefits being added when high returns on investment have been experienced;

Therefore

BE IT RESOLVED that Federation requests that no retirement benefits be added or increased while the pensions are underfunded or while the County contribution to the County and State pension funds exceeds some threshold amount such as 10% of the wages.

BE IT FURTHER RESOLVED that the Federation requests that the County review the benefits added during the past decade and, where possible, rescind some or all of the benefits added during this period.

Appendix B: Conclusions from the Aon Report

In January 2012, Aon Hewitt, consultants to Fairfax County, published a review of the Fairfax County Post-Retirement programs⁹. The review compared the Fairfax County benefits to those of other governments, including the Federal government and adjacent county governments. The Executive Summary lists four conclusions that are pertinent to the analysis performed herein:

- The County Employees' Retirement System benefit plans are very strong, being more generous than those of your competitor group. This is primarily driven by the defined benefit plan where benefits exceed those of most competitors.
- The County Employees' Retirement System benefits exceed the minimum retirement income needed to support the employee's current lifestyle in retirement.
- The Police Officers Retirement System provides benefits that are comparable to, though slightly lower in value than, the average of the competitor group.
- The Uniformed Retirement System provides benefits that are comparable to, though slightly greater in value than, the average of the competitor group.

⁹ <http://www.fairfaxcounty.gov/hr/pdf/fairfaxcountyretirementbenefitsbenefitsstudy.pdf>