

Frederick A. Costello
Revision A: February 13, 2012

Introduction: The school budget will be decided within the next few months. Kristen Michael presented the budget to the Federation on January 19, 2012. The purpose of this report is to provide background data for the FCPS budget discussion. The budget data was obtained from <http://www.fcps.edu/fs/budget/budgetdocuments.shtml>. By Revision A, we incorporated what we learned from Kristen's presentation and the ensuing comments and questions.

Summary: In setting salaries and benefits, the principal components of the school budget, we must consider what is just. Many teachers are paid much more than the taxpayers who provide the funds to pay them.

From 2000 to 2011, the school budget has increased 4.77% per year, far more than the 0.89% per year increase in enrollment and the 2.39% increase in cost of living (CPI-U). Almost all of the increase was due to increases in salaries and benefits. The average teacher-salary increased 2.56%, which is faster than the 2.21% of the median taxpayer and faster than the 2.39% CPI-U increase. However, the teacher pay-scale increased only 2.06%. We can reasonably expect most teachers to get a step increase; therefore, the total annual increase in the salary of an individual teacher will be 4.32%, plus the increase in benefits that accompanies the salary increase. Over this same period, private-sector salaries increased approximately 3.23%. For FY 2013, the proposed budget calls for a 2% increase in the pay scale plus a step increase where justified.

Although the price of single-family homes increased a net of 7.6% per year from 2000 to 2011, taxes are paid from income, not house value. Because the median household income increased 2.21% while the school budget increased 4.77%, taxpayers in 2011 were more burdened in paying school-system expenses than they were in 2000. The added burden includes a 6.79% increase per year in the benefits the school-system employees received.

Questions from the school board, with answers from the school administration, are posted at <http://www.fcps.edu/fs/budget/questions.shtml>. As of the date of this report, the only question concerns projected County revenue.

Discussion: The total FCPS budget for the years 2000-2011 increased considerably faster than enrollment and inflation. The increase in the budget was by \$896.5M (million), or 4.77% per year, as compared to the CPI-U increase of 2.39% per year. The primary causes of the increase in school expenditures were salaries and benefits, being \$500M and \$300M, respectively (Exhibit 1). The salary scale for a teacher with a Masters Degree at Step 9 (MA+9) rose 2.06% per year¹ -- slightly less than the 2.21% increase in the County-wide median income; however, benefits increased greatly, 6.79% per year². The averages and medians would, in the absence of inflation, not change because individuals would move up in income, but highly paid, older people would retire and lower paid, young people would be hired. When the County increases the salaries, it actually increases only the pay scale so that, for example, someone with an MA+9 will get an increase even if they do not move up a step. If the pay

¹ <http://www.fcps.edu/fs/budget/wabe/>

² Those who have retired are not part of the school budget. The reason for the high rate of increase is probably due to the expansion of benefits over this time period.

scale had been kept even with inflation, the increase of MA+9 would have been 2.39%. The County-wide median income increase (2.21%) was also less than the CPI-U increase.

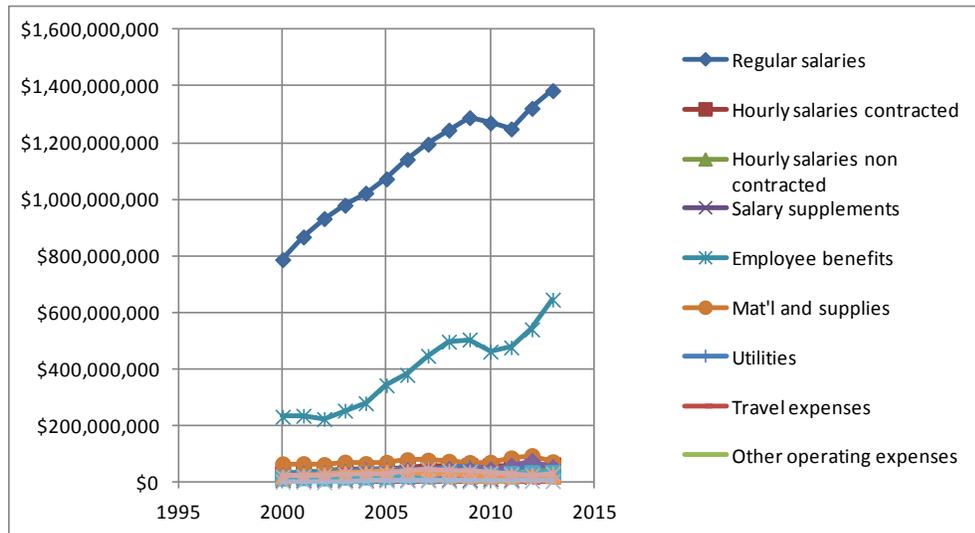


Exhibit 1: History of FCPS Expenditures from 2000 to 2013

The increase in wage costs, excluding benefits, was due primarily to increases in the number of employees and to increases in regular salaries (Exhibit 2)³. An individual teacher usually gets a step increase each year. A step increase increases the individual teacher's salary by approximately 3%, although less in the early years. Because no increases were given in FY2011, the 11-year average step increase was approximately 2.7%. If this 2.7% is added to the 2.06% salary-scale increase, the result is an average annual salary increase of 4.76% for a typical teacher. Other data, which includes teachers in the early years, show an increase in the salary of a typical teacher as 4.32% over this same period and of a private-sector professional, 3.23%⁴. These latter values are shown in Exhibit 2.

The County was able to absorb the 4% per year salary increases during the “housing bubble” for all employees, when County revenues increased sharply as housing prices rose 14% per year for six years. After the bubble collapsed in 2009, school expenditures did not increase; however, neither did they retreat back to pre-bubble conditions, as housing prices decreased 14% per year (for two years)⁵. The net effect is that the median single-family-home price has increased 7.6% per year since 2001, some of the increase being due to inflation. For renters, the increase in the housing price is reflected in the increase in rent. For home owners, the increase in the housing price is a benefit only upon sale of the house. Therefore, both renters and owners must pay from their income, which increased at a slower rate than did the school budget, so both experienced a decrease in the family funds available to pay for other needs.

Some deeper investigation would be worthwhile. The investigation should include an analysis of why the Regular salaries increased so much more than teacher salaries. Teachers do progress up the salary

³ “Regular salaries” are those of full-time employees. “A typical teacher” combines increases associated with a step “promotion” (usually another year of experience) and increases associated with the salary scale. “Average teacher-salary” is the total expenditures for teachers divided by the number of teachers. “Salary for MA+9” is the Master’s degree pay scale value for Step 9. WABE uses this salary as representative of the average teacher-salary.

⁴ http://data.bls.gov/pdq/SurveyOutputServlet?request_action=wh&graph_name=EC_ectbrief and http://www.bls.gov/oes/current/oes_47894.htm#25-0000

⁵ See our Report <http://www.fairfaxfederation.org/pdf/IncreaseAffordable.pdf>. The graph from this report is included herein as Exhibit 7.

ladder as they grow older and become more experienced, with salaries increasing approximately 3% per step for teachers⁶; however, the highest paid employees retire and new college graduates are hired at low salaries. If the cost of living did not increase, the average salaries and the pay scales salaries should also not increase⁷. That pay scales (e.g., MA+9) increased less than average teacher pay may be a result of hiring high-salary teachers instead of new college graduates.

Description	Average annual increase (2000-2011)	Proposed average annual increase (2011-2013)
Special Education Enrollment	8.83%	
Benefits	6.79%	16.36%
ESOL Enrollment	4.84%	
School Budget	4.77%	7.39%
A typical teacher	4.32%	
Regular salaries	4.29%	5.27%
A typical professional in private sector	3.23%	
Average salary, all FCPS employees	3.06%	
Free/Reduced-Price Meal Eligible	3.05%	
Average teacher-salary	2.56%	
CPI-U	2.39%	
County-wide median income[1]	2.21%	
Salary for MA at Step 9	2.06%	
School-system employees	1.40%	2.86%
Number of teachers	1.35%	
Enrollment	0.89%	1.89%

[1] In 2009, the average income was 1.284 times the median income in Fairfax County; in 2010, 1.269. If this ratio holds constant, then comparing increases in median and average incomes is valid. For the average, see <http://quickfacts.census.gov/qfd/states/51/51059.html>

Exhibit 2: Comparison among Growth Rates

Although enrollment increased only 0.89%, the 1.35% increase in number of teachers might be attributed to the increase in the number of disadvantaged students. Students with English as a second language (ESOL) increased 4.84% per year; students qualifying for reduced-price meals, 3.05%; and students in special education, 8.83% (Exhibit 3). The large increase in special-education students may be due to changes in the criteria the school system uses for classifying students. The American Psychiatric Association (APA) recently changed its criteria such that far fewer are expected to be classified as autistic, although the feedback from schools and parents is making the APA reconsider the criteria⁸. Teachers, students, parents and school administrators benefit from having more students classified as disadvantaged. Notice also that the increased enrollment of disadvantaged students has had almost no

⁶ Unlike private-industry practice, increases associated with a step increase are small for new graduates, starting at less than 1% from Step 0 to Step 1 and gradually increasing to approximately 3% at the sixth step.

⁷ Remuneration can increase in a non-inflationary environment if productivity increases.

⁸ <http://www.medscape.com/viewarticle/757515>

effect on SAT scores (Exhibit 3). The jump in SAT scores from 2005 to 2006 is due to the addition of a new section to the SAT's so that the maximum score is increased by 600.

Other Individual Budget Items

There are several other individual budget items that increased at rates that far exceeded inflation. The VRS payments increased much faster than the ERFC payments, even before the payment deferral (Exhibit 4). VRS pension contributions will be further increased to cover the two years of deferred payment.

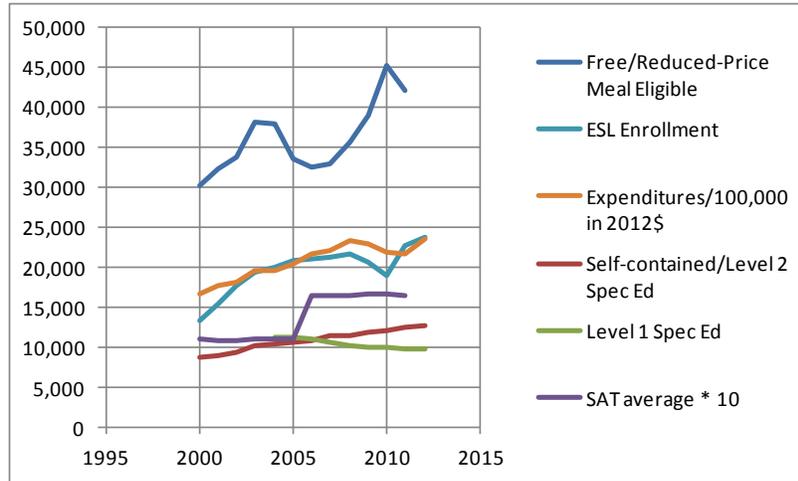


Exhibit 3: Enrollment of Disadvantaged Students

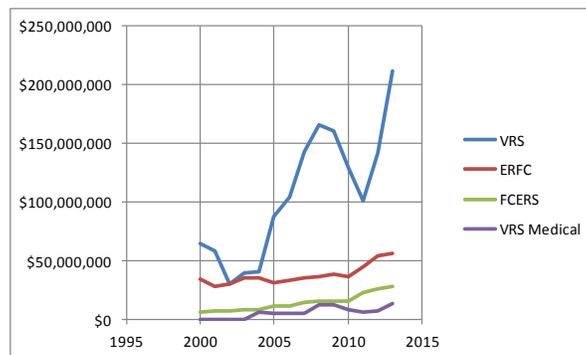


Exhibit 4: Pension Contributions

Another curious increase is that for “Other Professional Services” (under Contracted Services). The expenditure increased from \$12M in 2010 to \$18M in 2011 then to \$29M in 2012. The 2013 expenditure expected to be back to \$17M – still much more than in 2010. The \$29M is the Estimated Expenditure for 2012. The Estimated Expenditures is typically 5% higher than Actual (Exhibit 5). To avoid the errors in the Estimated Expenditure, Exhibit 2 compares the Proposed Budget to the Actual Expenditure in FY2011, rather than FY2012, using the average increase over the two-year period. All other comparisons have been between Actual Expenditures. The inflation-adjusted cost per student has been increasing at a rate of 1.7% per year since 2000 (Exhibit 6).

Comparisons such as contained herein are not without difficulties (see Appendix A).

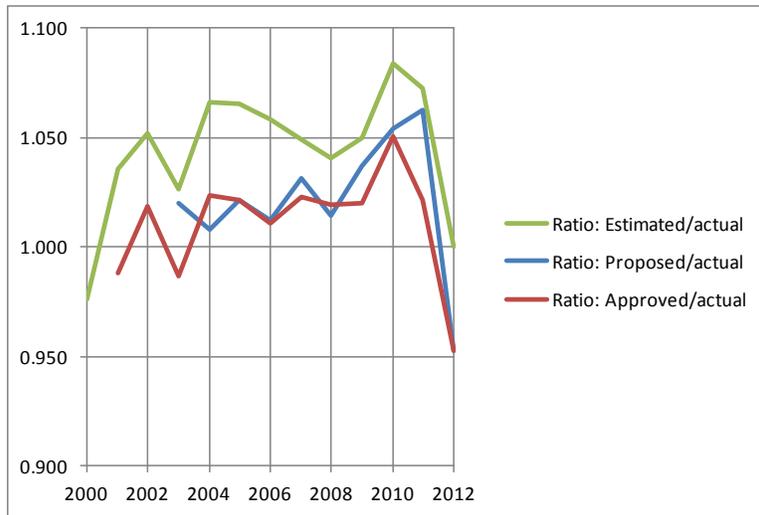


Exhibit 5: Actual Expenditures Compared to Proposed, Estimated, and Approved Total Expenditures
 Supplementary funds in 2012 caused the Actual Expenditures to rise above the anticipated.

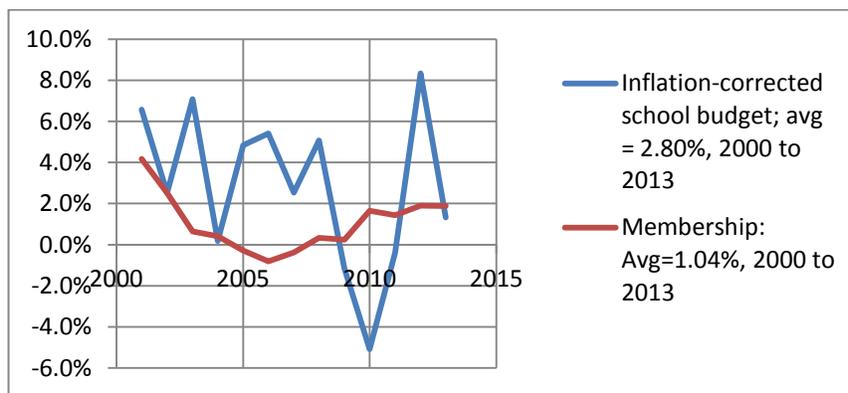


Exhibit 6: Year-to-year changes in total school budget and in membership (enrollment)

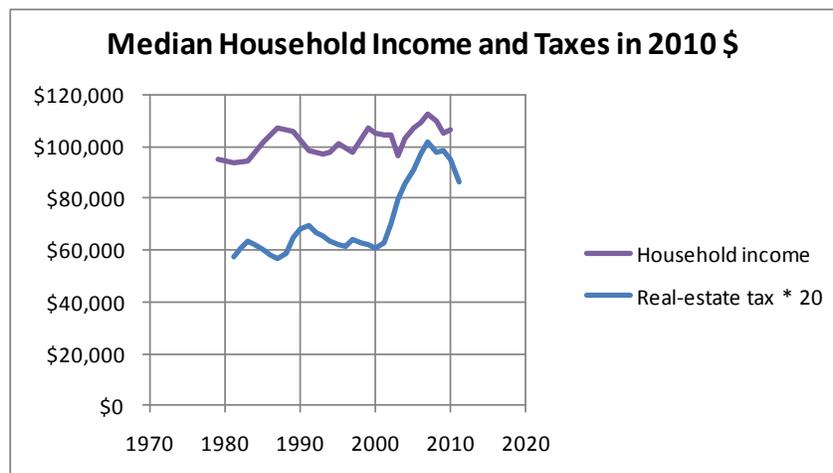


Exhibit 7: Graph from report referenced in Footnote 3

Appendix A: Difficulties in Comparing Growth Rates

The span of years over which average is taken has a significant impact on the average increases. Consider teacher wages. If we could ascertain when teacher wages were acceptable relative to other wages, such as private-sector wages, we could use that date as the basis for all averages. For example, if wages were considered acceptable in 2000, then we should always average from 2000 to the current date. The effect of averaging period can be seen in the following graphs. For example, averaging since 2009 (i.e., using a two-year average) encompasses two years in which the teacher salary scale at MA+9 decreased, whereas averaging since 2000 to obtain an 11-year average shows an increase of more than 2%.

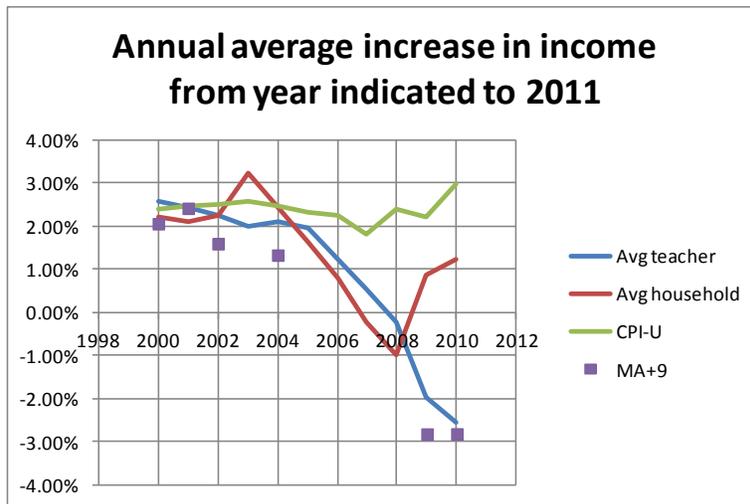


Exhibit A-1: Averaging from the Year Indicated to 2011

As an alternative, we might have averaged over a fixed number of years. The following graph shows the running average over a six-year period.

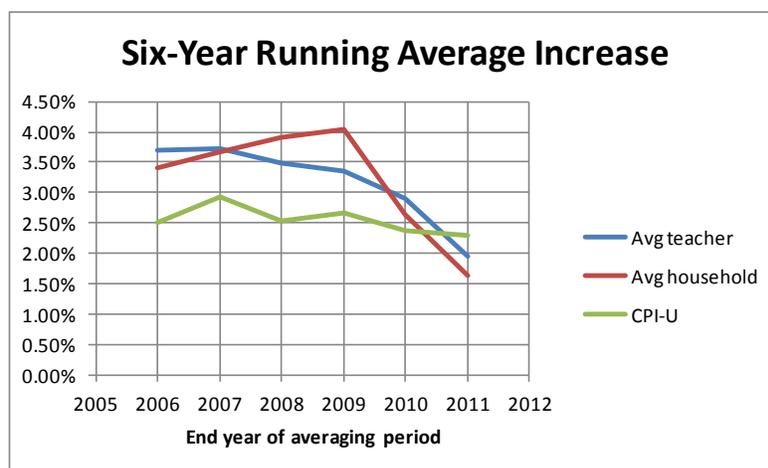


Exhibit A-2: Averaging over Six Years

In the body of this report, we have chosen to average from the first year on which the data is available on the Internet (2000). Our two key references were Washington Area Boards of Education (<http://www.fcps.edu/fs/budget/wabe/2000.pdf>) and Fairfax County Public Schools (<http://www.fcps.edu/fs/budget/docs/ApprovedBudget10.pdf>) with similar url's for other years.