Public Comment Graphical Comparisons

Property Values used to compute Ad Valorem Tax, and Francis Numbers, CAFR's, National Home Index.

The purpose of this graph is to examine the relationship between the following sets of values:

• The total property values of Haywood County used to compute Ad Valorem Taxes the last 3 years,

compared against:

- David Francis spread sheet values of ever increasing yearly property value,
- CAFR's (Certified Annual Financial Report), which use the Tax Departments yearly numbers,
- The latest Standard & Poors / Case-Shiller National Home Price Index

Julie Davis provided the total property numbers that have been used the past three (3) years to compute the amount of tax to be collected for revenue for the Budget [2009 - 2011].

Francis numbers begin in 2006 through 2011, and are ever increasing, as there is no provision to ever decrease the value of numbers in his spreadsheet, unless a house burns down.

The Total Property Values used in the CAFR are comprised of three (3) components:

- CAFR (Real property component only)
- CAFR (Personal Property component only)
- CAFR (Public Service component only)

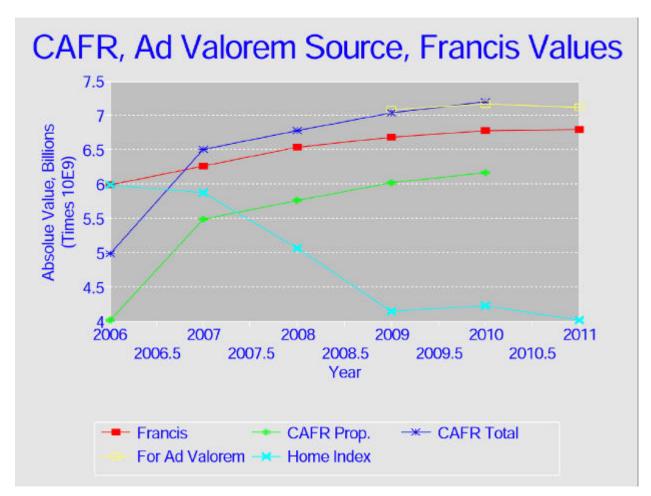
The values plotted in the graph are:

- [Red] Francis spread sheet numbers of ever increasing property values,
- [Green] CAFR (Real property component only),
- [Blue] CAFR (Total Property values),
- [Turquoise] S&P Case-Shiller Home Value Index, and
- [Yellow] Julie Davis values used for computing Ad Valorem tax [2009 2011]

All values are in absolute numbers.

The Home Value Index was normalized to use as a starting value Francis spread sheet number for 2006, and multiplied by the decreasing factor each year thereafter.

Source numbers for the values used in the graph appear at the end of this paper.



Observations.

- Julie Davis indicated that she receives total property tax information from the Tax Collection department. Discounting the first year of the plot [2006], which represents a discontinuity as there was a revaluation that year, both the CAFR property only values and CAFR total values track nearly identically with Francis spread sheet numbers. All are ever increasing.
- The Home Price Index indicates that the total property value should be around \$4 billion, rather than \$7 billion.
- The numbers Julie Davis uses for the computation of the Ad Valorem taxes each year (for the last three years) is nearly the CAFR total property value.
- There is a slight decline in this years number Julie used from the previous year.
- There is a disconnect between all county numbers and the rest of the real world.

Conclusion. I contend that **David Francis**' numbers are wrong.

June 21, 2011

Source Data

[First set of columns]

- Francis Spread Sheet (raw)
- CAFR (Real property component only)
- CAFR (Personal Property component only)
- CAFR (Public Service component only)
- CART Total (Real Property + Personal Property + Public Service)
 Values of total property Julie Davis used to compute yearly Ad Valorem Taxes for budget
- S&P Case-Shiller Home Index, normalized to Francis beginning value in 2006, multiplied by drop each year, i.e. what property values should be if normalized to the Home Index.

Francis to CAFR translation

Year	Francis (5/31/2011)	CAFR Real Prop.	CAFR Pers. Prop.	CAFR Pub. Service	CAFR I Total	For Ad Valorem Julie	Home Index	Source
2006	5,983,379,792	4,026,322,277	838,585,620	117,949,317	4,982,857,214		5,983,379,792	190.50
2007	6,257,155,922	5,479,463,273	889,422,387	130,444,521	6,499,330,181		5,881,929,310	187.27
2008	6,530,671,982	5,752,818,363	887,033,884	131,645,395	6,771,497,642		5,072,524,076	161.50
2009	6,684,214,356	6,023,547,541	876,803,849	139,166,644	7,039,518,034	7,086,104,458	4,142,823,069	131.90
2010	6,787,564,357	6,165,577,637	880,864,853	149,986,629	7,196,429,119	7,169,688,651	4,223,543,730	134.47
2011	6,791,618,290				•	7,113,059,455	4,022,527,296	128.07

Difference, Francis, Real Property from CAFR

5,983,379,792	4,026,322,277	1,957,057,515
6,257,155,922	5,479,463,273	777,692,649
6,530,671,982	5,752,818,363	777,853,619
6,684,214,356	6,023,547,541	660,666,815
6,787,564,357	6,165,577,637	621,986,720
	6,257,155,922 6,530,671,982 6,684,214,356	5,983,379,792 4,026,322,277 6,257,155,922 5,479,463,273 6,530,671,982 5,752,818,363 6,684,214,356 6,023,547,541 6,787,564,357 6,165,577,637