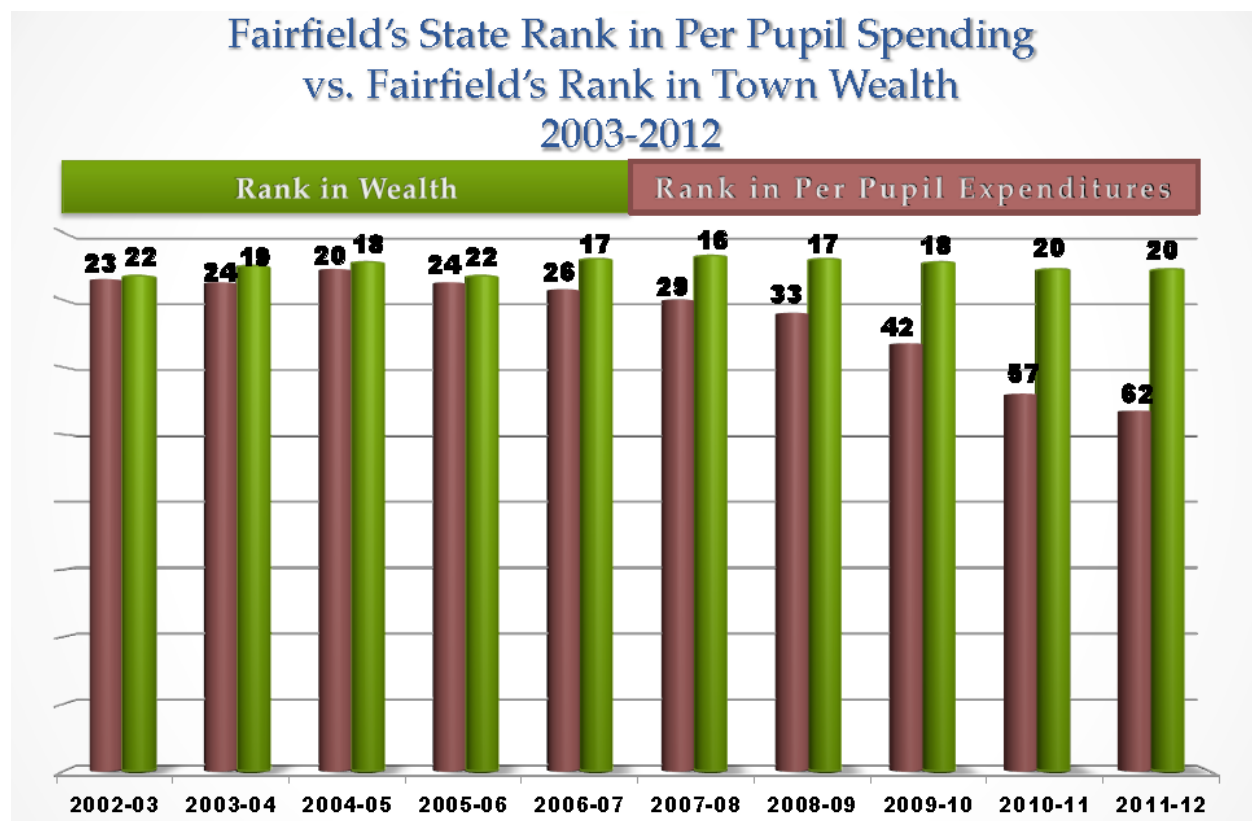


“You Can Fool Some of the People . . .”

Fairfield Taxpayer is responding here to a number of issues raised by Superintendent of Schools David Title and BOE Chairman Philip Dwyer in their recent presentation to the Board of Selectmen and the Board of Finance. The presentation was made in support of their request for a \$5.8 million (3.9%) increase in the FY15 BOE budget (to \$157 million from \$151.2 million).

1. “Improvement in rank” is not equivalent to “improvement in efficiency.”

The recent presentation¹ by Supt. of Schools David Title and BOE Chairman Philip Dwyer states as follows: *“In the past ten years, Fairfield Public Schools has [sic] become more efficient. We have moved from 23rd to 62nd in the state in Per Pupil Expenditures.”* The following graph was provided to illustrate and support this point.



Fairfield Taxpayer questions this claim for two reasons.

First, in the past, when others have compared the educational outcomes in Fairfield’s schools to other districts based on rankings of standardized test scores, Dr. Title has been quick to point out that “rankings” can be very misleading when the data are clustered and a small change in scores can produce a significant change in rank. Indeed, in most statistical distributions, outcomes cluster around the median, and thus the closer one moves toward the median the more likely it is that a small difference in outcome will produce an exaggerated change in rank. In this case, we note that a 3% increase in Fairfield’s PPE (Per Pupil Expenditure) in 2012 would have increased its rank (which in this exercise is a worse outcome) from 62 to 51, and a 3% decrease would have lowered its rank from 62 to 82 (a

¹ [http://fairfieldschools.org/downloads/budget/2014-15 Budget PresentationMAR2014.pdf](http://fairfieldschools.org/downloads/budget/2014-15%20Budget%20PresentationMAR2014.pdf)

combined swing of 31 ranking positions). Accordingly, Fairfield Taxpayer supports Dr. Title's usual belief that we should not rely on rankings as a measure of performance.

Second, there are two ways that Fairfield's PPE rank can change: Fairfield can look better because it becomes more efficient, or it can look better because others become less efficient (just as a runner can look better either because s/he is running faster, or because others are running slower). To determine what has happened in this case, we identified the towns whose changes in rank allowed Fairfield to move down (remember, moving down is a good thing by this measure) from the 23rd highest PPE in the state to the 62nd highest.

As indicated in the table at the end of this report, there were 40 towns whose PPE ranks moved from below to above Fairfield, and one town (New London) whose rank did the opposite. **Thirty-one** (78%) of the 40 towns had enrollments of less than 2,000 students (22 actually had fewer than 1,000 students). Their average enrollment was only 809, making them conspicuously poor choices for benchmarking performance for Fairfield, which has over 10,000 students and is one of largest districts in the state.

Moreover, Dr. Title's and Chairman Dwyer's claim of improved relative efficiency is rendered even more suspect by the fact that fully 35 (88%) of these 40 towns experienced enrollment declines of between 1% and 38%, while Fairfield's enrollment rose 20%. Since there are significant scale economies in education, **it is much more probable that any change in Fairfield's relative productivity as measured by its PPE rank was primarily a consequence of declining productivity for the 35 towns with declining enrollment, and to the lesser 2%-7% gains in enrollment for four of the remaining five towns, versus the big 20% gain in Fairfield's enrollment.**

Third, it is notable that most of the improvement in Fairfield's PPE rank occurred in the last five years (from #26 in FY07 to #62 in FY12). As we all remember far too well, this was a period of considerable turmoil in the economy and one of special grants to states and towns as part of the funds distributed under the American Recovery and Reinvestment Act of 2009 (a.k.a., the Stimulus Package). Thus, it is possible that there were non-recurring forces at work that our analysis has not yet uncovered that temporarily raised PPEs for some school districts and thus distorted the outcomes.

2. Fairfield should NOT be spending \$32 million more on education.

Beyond asserting that Fairfield's productivity can and should be measured by changes in its PPE rank, Dr. Title and Chairman Dwyer made an even more provocative claim based on the data in the same graph. The new presentation states:

"Over the past ten years Fairfield's state ranking in wealth has remained between 16th and 22nd; per pupil expenditures have declined from 23rd to 62nd."

In his remarks, Dr. Title clearly implied that "rank in wealth" (not wealth itself) is a measure of "ability to pay," and referring to the early years in the above graph, he said that "our ability to pay was [then] equal to our PPE." He then said that "ability to pay is not the same as willingness to pay," implying that Fairfield could and should now be spending substantially more on education, and that Fairfield taxpayers have been too tightfisted in recent years. If we apply Dr. Title's "logic," how much more should we be spending? Dr. Title did not say, but **in order to achieve a PPE rank equivalent to our #20 Wealth rank in FY12, we would have had to spend 21% more (\$17,534 versus \$14,529 per pupil), which is of course untenable. Applying the 21% increase to the currently proposed \$156.2 million BOE budget for FY15 would mean an additional \$32 million in both spending and taxes on top of the \$8**

million that has already been proposed (not including TBD school security costs) for the Town and BOE combined.

If you are interested in Fairfield Taxpayer’s analysis of “education spending” relative to “ability to pay,” (using exactly the same State wealth data [a.k.a., “AENGLC”] for each town in Connecticut), please see our recent article entitled, “A Teachable Moment for Our BOE.” Our conclusion was as follows:

“Although it is true that Fairfield’s PPE is lower than eight of the nine Southern Fairfield County towns that Dr. Titles chooses for comparison, our spending is at the higher end of the range relative to our capacity to spend – and not by a small margin. Fairfield’s spending relative to our capacity is 70% higher than the average for the other eight towns.”

3. Educational outcomes are not a function of spending.

Another slide in the presentation compares Fairfield’s standardized test scores and PPE to those of five Fairfield County towns (Darien, New Canaan, Westport, Weston and Wilton), which are labeled as “DRG A.” Based on the data in this table, the presentation states that “Fairfield’s CMT index score is 3.5% lower than DRG A towns while our PPE is 15.2% lower than DRG A towns in Fairfield County.” Dr. Title’s remarks left no doubt that we were supposed to interpret this to mean that Fairfield is getting a bargain based on the relationship between CMT scores and PPE, and he even suggested that we should look at “CMT points per dollar of PPE.”

		2013 CMT Index	2011-2012 Per Pupil Expense
DRG B	Fairfield	90.6	\$ 14,529
DRG A	Darien	93.6	\$ 16,185
	New Canaan	95.3	\$ 17,115
	Westport	93.9	\$ 17,636
	Weston	93.2	\$ 18,141
	Wilton	93.5	\$ 16,550
	DRG A Average	93.9	\$ 17,125

District Reference Group A actually includes four other districts (Easton, Redding, Ridgefield and District 9 [Barlow High School serving Easton and Redding]). Including these additional towns alters the outcomes slightly (Fairfield’s CMT index score is 3.3% lower, and its PPE is 13.2% lower), and if we look instead at CAPT scores (the 10th grade standardized test), Fairfield is 6% below DRG A (at 87.9 versus 93.5).

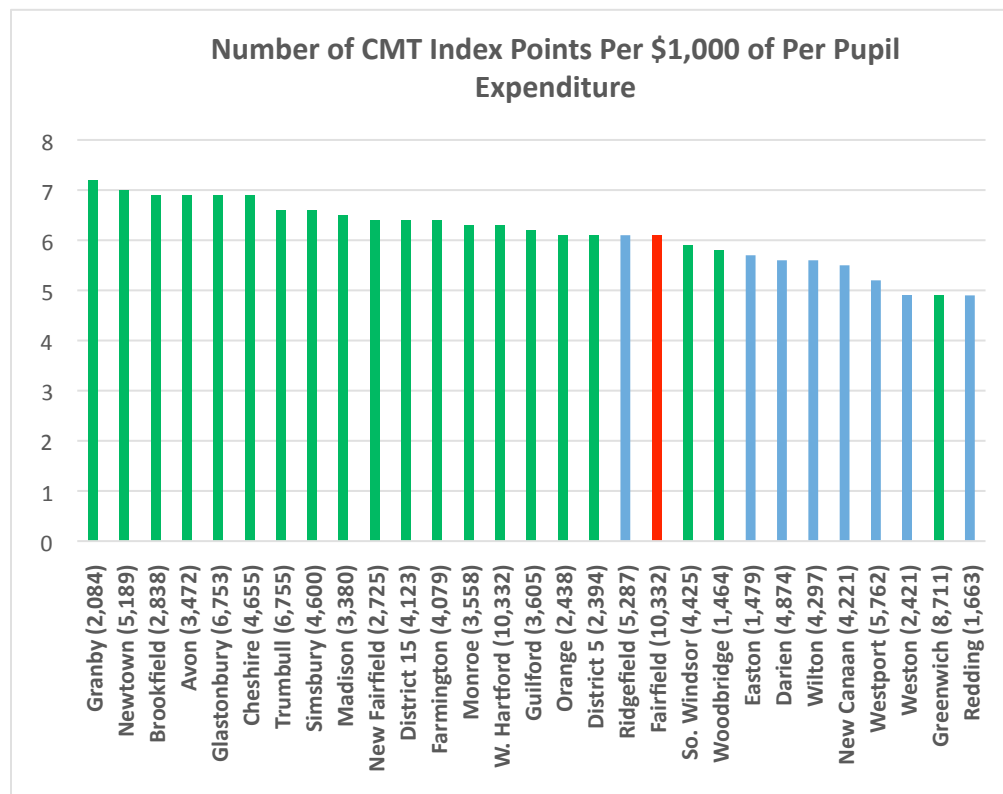
However, the really big question raised by this table and Dr. Title’s remarks is whether these percentage differences are actually meaningful. In other words, even ignoring the fact that Fairfield’s PPE should be lower because of the scale economies it enjoys with 2.7 times as many students (10,322 versus an average of 3,880) as the towns in DRG-A, **is there any reasonable basis upon which to presume that percentage differences in standardized test scores should have any meaningful relationship with percentage differences in PPE?**

If educational outcomes are somehow related to spending per pupil, then Ridgefield is getting an even better bargain because, with a PPE equal to Fairfield’s (\$14,514 versus \$14,529), it has CMT and CAPT scores that are, respectively, 3.5% and 5.6% higher (93.8 versus 90.6, and 92.8 versus 87.9). And taxpayers in Trumbull are even happier with spending per pupil **10% below** Fairfield’s (\$13,019 versus \$14,529), and CMT and CAPT **scores that are both 1% above** our scores (91.4 versus 90.6, and 89.2 versus 87.9). Rather than belabor this point with still more examples, we offer the following quote from a report issued in 2004 by the State’s Office of Legislative Research entitled, “Education Spending and Mastery Test Results”:

*“Statistically, **there is no correlation** between per-pupil spending and student performance on the mastery exams. Utilizing data from the 1999-2000 school year and a simple regression analysis, **less than 5% of the variation in test scores across school districts is explained by per-pupil spending.** In fact, **rather than the causal direction being more spending resulting in better performance, this data shows the reverse.**”*

And a recent article on Fairfield Patch² entitled, “Does Spending More on Education Lead to Better Performance?,” states as follows: “A comparison of 2013 standardized test performance rankings and per pupil spending for the 2012-13 academic year shows **an interesting lack of correlation**, with the state’s lowest and highest spending districts both offering Excelling schools, the SDE’s highest classification. . . **The distribution of all six classifications is almost the same for schools spending less than the average of \$14,961 as it is for schools spending more, with the latter actually trending just slightly worse.**”

Finally, even though we believe it is not a valid exercise, we took Dr. Title’s suggestion and looked at the relationship between CMT scores and PPE, but instead of looking only at the five towns he selected from District Reference Group A, we looked at all the towns in both DRG-A (blue bars) and DRG-B (green bars).³ As you can see in the graph below, Fairfield’s performance is better than most DRG-A towns, but is the fourth lowest (out of 21) in its own group, DRG-B. Because of the importance of scale economies, we note that the ten districts with lower outcomes on this chart have on average 62% fewer students (enrollment in each district is provided below in parentheses).



² <http://fairfield.patch.com/groups/schools/p/does-higher-education-spending-lead-to-better-performance>

³ “District Reference Groups” is a classification system in which districts that have public school students with similar socioeconomic status and need are grouped together, the purpose of which is to make legitimate comparisons among districts.

4. Still no acknowledgement that Fairfield’s scale should give it a cost advantage.

The presentation continues a long tradition of comparing spending in Fairfield to other school districts without consideration of the scale economies that apply to education, even though, as noted above, Fairfield is one of the largest districts in the state, and its enrollment has increased significantly at a time when most other districts have been shrinking. For example, another slide from the presentation presents a list of towns where PPEs are higher than they are in Fairfield (the numbers in parentheses are the PPE rank for each town compared to Fairfield’s rank of 62).

**Sample CT School Districts
with Higher Per Pupil Expenditures
than Fairfield**

\$	New Haven.....(21)	\$
	Windham.....(32)	
	Woodbridge.....(34)	
	Windsor.....(39)	
\$	Windsor Locks.....(43)	\$
	Milford.....(46)	
	Hamden.....(48)	
	Branford.....(60)	

First, we could list the 107 towns with lower PPEs, but that would prove nothing more than does this random list of 8 towns with higher PPEs.

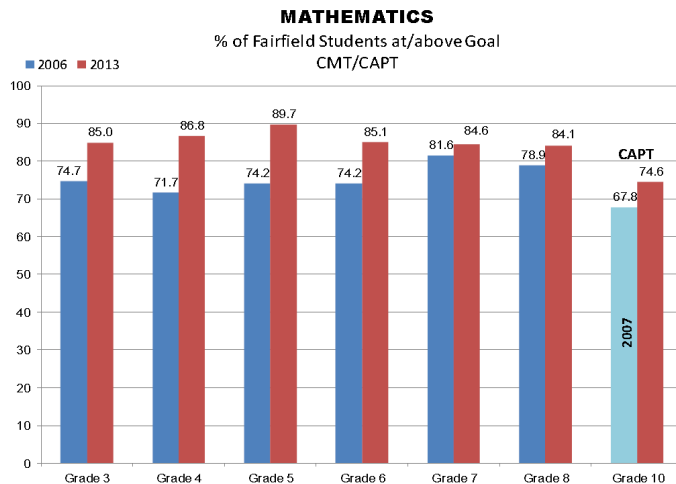
Second, we could note that on average these towns have 44% lower enrollment (62% lower excluding New Haven), which means that Fairfield should have a lower PPE because of its scale economies.

Third, we could also point out that the average decline in enrollments for these eight towns ('03-'12, the same time frame used in the first graph) was 10%, while Fairfield’s enrollment increased over 20%.

Finally, we could observe that despite their scale diseconomies, despite the difficulty of managing costs with declining enrollment, and despite the special challenges faced by New Haven (reflected in its high PPE of \$17,486), it is remarkable that the average PPE for these towns is only 7% higher than Fairfield’s (\$15,608 versus \$14,529).

5. Still no benchmarking of performance against other towns.

In a series of graphs like this one, the presentation once again depicts the performance of Fairfield’s schools based solely on changes over time in its own standardized test scores and in the number of its AP courses and students without consideration of how these results compare to comparable districts. In response to a question at the meeting, Dr. Title, the CEO of our \$150+ million school system, said that he has not compared Fairfield’s results to those of similar districts.



6. Still no breakdown of the budget by program.

One of Fairfield Taxpayer’s key objectives is to require both school and town administrators to provide budget breakdowns by service and by student or user, so that the people of Fairfield and their elected representatives can make well informed decisions about which services they both want and can afford.

In response to yet another annual request for such a breakdown from Board of Finance Chairman Tom Flynn, Dr. Title replied that the administration can provide estimates of the cost of a small number of programs, but is not able to provide a breakdown for all programs. Any CPAs reading this will have noted that providing only selective cost breakdowns avoids the inconvenient constraint that applies to a complete breakdown, which is that the sum of the program totals must equal the total budget.

Just to give everyone an example of what they should look like, we have copied below two program cost breakdowns from Greenwich and Newtown.

Greenwich Public Schools 2014 - 2015 Budget

Summary by Program

<i>Program</i>	<i>2012-2013 Actual</i>	<i>2013-2014 Budget</i>	<i>2014-2015 Budget</i>	<i>Dollar Change</i>	<i>% Change</i>
10 Art	2,242,523	2,398,854	2,268,953	-129,901	-5.4%
12 Business Education	249,150	260,608	267,436	6,828	2.6%
14 E.S.L.	2,054,482	2,102,983	2,135,796	32,813	1.6%
16 World Language	4,776,919	4,972,291	5,092,280	119,989	2.4%
18 Health	577,226	630,475	546,740	-83,735	-13.3%
20 Family And Consumer Science	596,999	710,226	656,361	-53,865	-7.6%
22 Technology Education	676,185	699,382	723,225	23,843	3.4%
24 Language Arts	5,932,530	5,819,085	5,893,846	74,761	1.3%
26 Reading	2,723,162	2,811,441	2,979,915	168,474	6.0%
28 Mathematics	4,082,273	4,593,947	4,742,001	148,054	3.2%
30 Music	3,710,068	3,738,628	3,739,504	876	0.0%
32 Physical Education	3,528,819	3,576,331	3,651,586	75,255	2.1%
34 Science	5,052,900	4,951,513	5,015,817	64,304	1.3%
36 Social Studies	4,665,788	4,879,770	4,660,225	-219,545	-4.5%
38 Advanced Learning Program	2,115,201	2,103,885	2,150,103	46,218	2.2%
40 School Libraries	4,983,883	4,915,802	4,992,094	76,292	1.6%
45 Theatre Arts	266,149	282,288	268,358	-13,930	-4.9%
46 Student Activities	470,302	488,285	514,678	26,393	5.4%
47 Intramural Sports	136,937	149,958	156,463	6,505	4.3%
48 Athletics	1,793,867	1,983,045	2,013,993	30,948	1.6%
49 Nursing	1,591,260	1,602,787	1,618,153	15,366	1.0%
50 Guidance	2,980,373	3,047,708	3,166,263	118,555	3.9%
53 Special Ed	18,188,907	19,488,209	19,727,595	259,386	1.3%
55 Extended School Year	980,573	1,038,842	1,116,042	77,200	7.4%
56 Alternative High School	1,533,140	1,560,711	1,590,589	29,888	1.9%
60 Psychological	2,185,391	2,281,305	2,072,180	-209,125	-9.2%
62 School Social Work	803,549	881,216	929,237	48,021	5.4%
64 Speech & Hearing	1,871,184	2,019,535	2,000,575	-18,960	-0.9%
66 Pre Schools	2,206,226	2,445,174	2,342,016	-103,158	-4.2%
67 K-5 Classroom Teachers	18,631,408	19,354,463	19,318,061	-36,402	-0.2%
68 Teaching & Learning	10,213,200	10,331,082	10,675,418	344,336	3.3%
70 Curric. Instr. Prof Learning	1,279,100	1,685,991	1,988,647	302,656	18.0%
72 Board	184,626	159,676	105,776	-53,900	-33.8%
74 Central Office	418,842	635,172	1,050,483	415,311	65.4%
76 Communications	135,849	171,194	180,448	9,254	5.4%
80 Safety & Security	505,726	531,176	562,793	31,617	6.0%
82 IT/MIS	1,878,044	2,027,378	2,024,538	-2,840	-0.1%
86 Accounting & Budgeting	742,960	733,299	735,055	1,756	0.2%
88 Supply Acq & Managemnt	414,178	475,233	437,432	-37,801	-8.0%
89 Maintenance Of Plants	5,813,840	6,172,809	6,006,018	-166,791	-2.7%
90 Transportation	2,366,007	2,674,296	2,632,718	-41,578	-1.6%
91 Printing & Graphic Art	106,681	135,389	139,815	4,426	3.3%
92 Facilities	6,005,806	6,128,895	6,506,874	377,979	6.2%
93 Personnel Services	4,340,426	2,970,444	4,131,452	1,161,008	39.1%
94 Summer School	282,418	163,602	223,543	59,941	36.6%
95 Continuing Education	176,358	209,261	188,548	-20,713	-9.9%
96 Continuing Ed-general	226,849	0	0	0	-
98 Facilities/Rentals	195,691	0	0	0	-
Grand Total	136,893,977	140,973,644	143,939,653	2,966,009	2.1%

BOARD OF EDUCATION'S REQUESTED BUDGET FOR 2014-2015

NEWTOWN HIGH SCHOOL

GRADE 9 - 12

SUMMARY BY PROGRAM

EXPENDITURE BUDGET SUMMARY

Object	2011 - 12 Expended	2012 - 13 Expended	2013 - 14 Budgeted	2013 - 14 Current	2014 - 15 Requested	\$ Change	% Change
HIGH SCHOOL							
ART	264,767	271,086	276,936	276,936	193,817	(83,119)	-30.01%
BUSINESS EDUCATION	175,120	179,200	190,992	183,914	198,656	14,742	8.02%
WORK EDUCATION	75,775	80,252	80,598	81,760	79,462	(2,298)	-2.81%
ENGLISH	1,215,352	1,205,818	1,235,196	1,246,687	1,290,334	43,647	3.50%
WORLD LANGUAGE	897,059	910,614	930,231	892,338	927,401	35,063	3.93%
HEALTH EDUCATION	163,218	168,863	173,722	173,722	180,265	6,543	3.77%
INTERSCHOLASTIC SPORTS & ACTIVITIES	684,747	659,080	680,157	680,892	681,035	143	0.02%
FAMILY & CONSUMER SCIENCE	182,709	190,297	193,191	193,191	200,818	7,627	3.95%
MATHEMATICS	1,107,626	1,112,079	1,160,910	1,134,775	1,141,949	7,174	0.63%
MUSIC	320,814	324,701	334,922	335,054	339,952	4,898	1.46%
PHYSICAL EDUCATION	500,508	526,374	538,348	506,306	525,729	19,423	3.84%
READING	73,777	74,330	78,545	80,790	78,527	(2,263)	-2.80%
SCIENCE	1,726,083	1,762,822	1,806,100	1,801,438	1,849,481	48,043	2.67%
HISTORY/SOCIAL SCIENCE	1,283,468	1,295,223	1,325,584	1,332,635	1,354,831	22,196	1.67%
TECHNOLOGY EDUCATION	472,569	484,049	481,855	509,391	529,308	19,917	3.91%
LIBRARY/MEDIA	247,274	263,306	280,308	280,308	285,726	5,418	1.93%
CLASSROOM	282,034	331,905	297,483	312,483	286,913	(25,570)	-8.18%
FLEX/TAP PROGRAM	279,992	280,427	291,961	286,961	299,612	12,651	4.41%
OUT OF DISTRICT TUITION	71,310	90,330	123,439	123,439	128,677	5,238	4.24%
BUILDING ADMINISTRATION	848,720	861,926	887,943	975,585	901,286	(74,299)	-7.62%
TOTAL HIGH SCHOOL	10,872,923	11,072,684	11,368,421	11,408,605	11,473,779	65,174	0.57%

Conclusion – Caveat Emptor

Fairfield Taxpayer understands that Dr. Title and Chairman Dwyer feel compelled to advocate for as large a BOE budget as they reasonably can, even as they claim to be giving due consideration to the financial capabilities of the town, and to the need to spend our money “as cost effectively as possible.” Our elected representatives on the Board of Selectmen, the Board of Finance and the Representative Town Meeting should however be careful to note that, unfortunately, Dr. Title and Chairman Dwyer have not presented a reasonable argument in support of their advocacy for the proposed \$5.8 million increase in BOE spending.

To summarize:

1. In general, **changes in rankings do not provide a sound basis upon which to assess performance**, and in particular, a lower PPE rank does not necessarily mean that Fairfield has become more efficient.
2. The **decline in Fairfield’s PPE rank** over the last ten years appears more likely to be **the result of other towns becoming less efficient than of Fairfield becoming more efficient**.
3. It makes no sense **to suggest that Fairfield’s PPE rank should be the same as its wealth rank**, on which basis **Fairfield would have to spend \$32 million more on education**.
4. There is no reasonable basis upon which to suggest that standardized test scores are determined by PPE; indeed the evidence suggests just the opposite – that **educational outcomes are NOT a function of spending**.
5. **Economies of scale should always be considered** in any analysis of differences in costs.
6. Educational performance should be **benchmarked against results and trends for similar towns**.
7. Fairfield residents need a **breakdown of the BOE budget by program** in order to make **well informed decisions** about how much we should spend on education, and the BOE, Dr. Title and his administration need the same breakdown to be able to make well informed decisions about how the BOE budget should be allocated and how best to manage this \$150+ million enterprise.

TOWNS THAT MOVED ABOVE FAIRFIELD IN STATE RANKING OF PPE

	TOWN	2012			2003			%
		RANK	PPE	PUPILS	RANK	PPE	PUPILS	Change Pupils
1	Hampton	7	21,338	195	25	11,172	314	-38
2	Kent	10	18,792	339	41	10,634	401	-15
3	No. Canaan	11	18,746	427	36	10,765	514	-17
4	Chaplin	12	18,509	302	31	10,997	385	-22
5	Bloomfield	22	17,343	2,374	33	10,842	2,784	-15
6	Preston	24	16,627	610	32	10,929	749	-19
7	Wilton	25	16,550	4,310	34	10,839	4,094	5
8	Darien	27	16,185	4,835	26	11,063	4,123	17
9	Winchester	28	16,038	1,339	44	10,523	1,612	-17
10	Goshen	29	15,934	409	27	11,060	423	-3
11	Morris	30	15,934	356	27	11,060	392	-9
12	Warren	31	15,934	177	27	11,060	186	-5
13	East Granby	33	15,775	890	57	9,941	896	-1
14	Woodbridge	34	15,743	1,487	49	10,301	1,760	-16
15	Easton	35	15,738	1,509	40	10,661	1,460	3
16	Colebrook	36	15,696	222	51	10,195	260	-15
17	Chester	38	15,496	530	35	10,804	545	-3
18	Windsor	39	15,473	4,074	61	9,910	4,698	-13
19	Eastford	40	15,464	234	21	11,237	260	-10
20	Westbrook	41	15,417	942	117	8,836	1,084	-13
21	Mansfield	42	15,314	1,979	43	10,573	2,077	-5
22	Wind. Locks	43	15,270	1,861	64	9,815	2,051	-9
23	Bethlehem	44	15,216	453	89	9,242	625	-28
24	Woodbury	45	15,216	1,331	89	9,242	1,529	-28
25	Milford	46	15,213	6,908	53	10,116	7,440	-7
26	Willington	47	15,207	791	50	10,231	894	-12
27	Hamden	48	15,200	6,771	46	10,417	7,097	-5
28	Durham	49	15,126	1,340	58	9,937	1,403	-4
29	Middlefield	50	15,126	688	58	9,937	758	-9
30	Deep River	51	14,952	649	30	11,055	674	-4
31	E. Windsor	52	14,920	1,369	145	8,472	1,628	-16
32	Ashford	53	14,826	703	102	9,061	822	-14
33	Bozrah	54	14,800	350	73	9,628	391	-10
34	So. Windsor	55	14,731	4,506	137	8,638	5,151	-13
35	Waterbury	56	14,718	17,533	39	10,690	17,214	2
36	Canterbury	57	14,711	721	48	10,325	837	-14
37	Columbia	58	14,634	738	148	8,407	923	-20
38	Litchfield	59	14,607	1,154	130	8,694	1,426	-19
39	Branford	60	14,557	3,394	88	9,273	3,803	-11
40	Essex	61	14,540	970	42	10,627	904	7
41	Fairfield	62	14,529	10,314	23	11,220	8,570	20
	NewLondon	98	13,757	3,509	18	11,897	3,590	-2

Sources:

<http://actiongroupmarlborough.com/docs/CT-net-current-costs-per-pupil.pdf><http://www.sde.ct.gov/sde/lib/sde/PDF/dgm/report1/cpse2003/nceadm.pdf>