



AB Special Education Spending & Population Trends 2004-2011

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PURPOSE AND BACKGROUND

The purpose of this paper is to provide useful cost and population statistics about special education in the Acton-Boxborough school district. We believe that tracking trends over time and comparing our district to other high performing school districts can provide valuable information to help inform future decision making related to special education planning and budgeting. For the purposes of this report we have selected Concord-Carlisle, Lexington and Westford – three nearby high-quality school districts – as a peer group for comparison.

Data in this paper has been taken from a report the state publishes each year, which provides direct special education expenditures by district. The report breaks out in-district instruction and out-of-district tuition expenditures. However, it has two principal drawbacks. First, it does not include transportation expenses associated with sending students out-of district. Second, the state publishes this report very late each year (e.g. FY 2011 information was published in June 2012), which limits its value as a management tool. Also, the reporting methodology the state uses changed in FY 2004¹ to accommodate the new Circuit Breaker program, which provides state funding assistance for out-of-district placements. Due to this reporting change we have chosen to focus on data available since FY 2004.

EXECUTIVE SUMMARY

Occasionally the public expresses concern about the growth of special education spending and the possibility that Federal and State mandates may crowd out spending for the overall student population. However from FY 2004 through FY 2009 the growth of the total Acton-Boxborough school budget outpaced the growth of special education spending by 10.4%. In the last two reported fiscal years, FY 2010 and FY 2011, Acton-Boxborough has actually reduced total special education spending from the FY 2009 level. Since FY 2004 special education spending in Acton-Boxborough has ranged between 17.7% and 20.7% of the Total School Operating Budget. In FY 2011 that ratio was at the low end of this range at 17.9%. For comparison the FY 2011 ratio of special education spending to Total School Operating Budget for peer districts reviewed was: Concord-Carlisle 23.7%, Lexington 20.6%, and Westford 14.1%.

Special education spending per student has not grown at all in Acton-Boxborough over the last five years due to decreasing numbers of out-of-district placements (and decreasing tuition) and a moderate 2.5% in-district growth rate. Among the peer districts reviewed, AB has been at the bottom in both dollars spent and growth rate of spending for in-district special education (on a per student basis). Lexington, Concord-Carlisle, and Westford are funding in-district services at a materially higher level per student than Acton-Boxborough and are willing to grow that spending at a rate above inflation. Our district's current spending trends raise concerns about whether Acton-Boxborough can continue to provide a quality education to special education students.

¹ Due to consistency issues we have used FY 2004 as the base year for calculating long term trends.

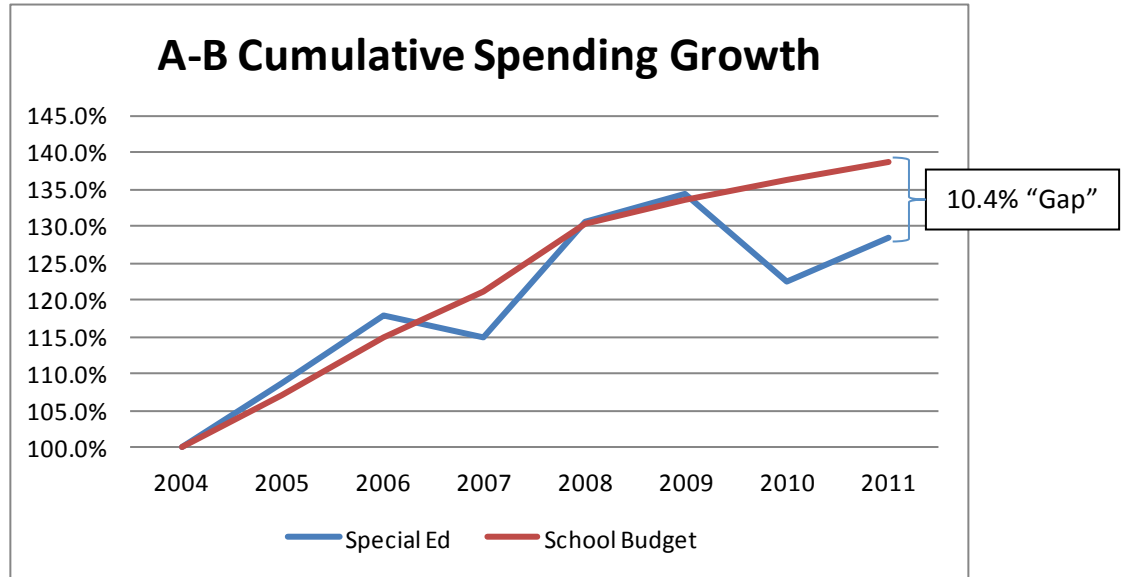
When reviewing student population trends we found a flat to decreasing total number of special education students in the district over the last seven years. There is no data to suggest an impending surge of special education students, which would necessitate a large spending increase related to special education. We looked at special education enrollment of three year olds and three to five year olds, as well as the number of third grade MCAS test takers in the special education subgroup to look for an increase in numbers at these early ages which might indicate greater numbers moving up through the system.

However, when looking at the composition of the special education student group we discovered that the number of students with a primary diagnosis of Autism Spectrum Disorder (ASD) had increased rapidly in Acton as well as in other districts. To date it appears that decreases in other diagnoses have offset the increase in students with Autism in our school district. However, Acton-Boxborough can expect to see a growing number of students on the Autism Spectrum in the future based on the number of students in the elementary school “pipeline.” This student population trend makes the need to complete Connections IV at the high school an even more important priority.

In summary, the results of our special education spending and student population analysis raise the question: can Acton-Boxborough continue to deliver “an education that prepares all students to achieve their individual potential” when per pupil resources for special education students are not keeping up with the rate of inflation and are not only lower than but falling further behind other high quality school districts?

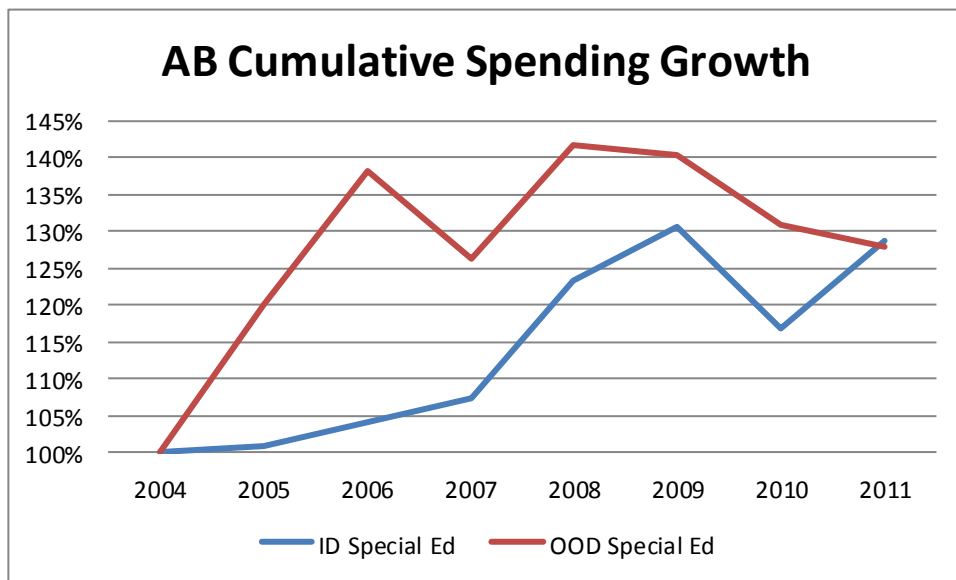
SPECIAL EDUCATION SPENDING VS. TOTAL SCHOOL EXPENSES

As noted above from FY 2004 through FY 2009 the growth of the total Acton-Boxborough school budget has outpaced the growth of special education spending by 10.4%. The AB district has actually *reduced* special education spending in the last two reported fiscal years, FY 2010 and FY 2011, in comparison with FY 2009. The following chart shows the cumulative spending growth of the total special education budget vs. total school budget from 2004 through 2011.



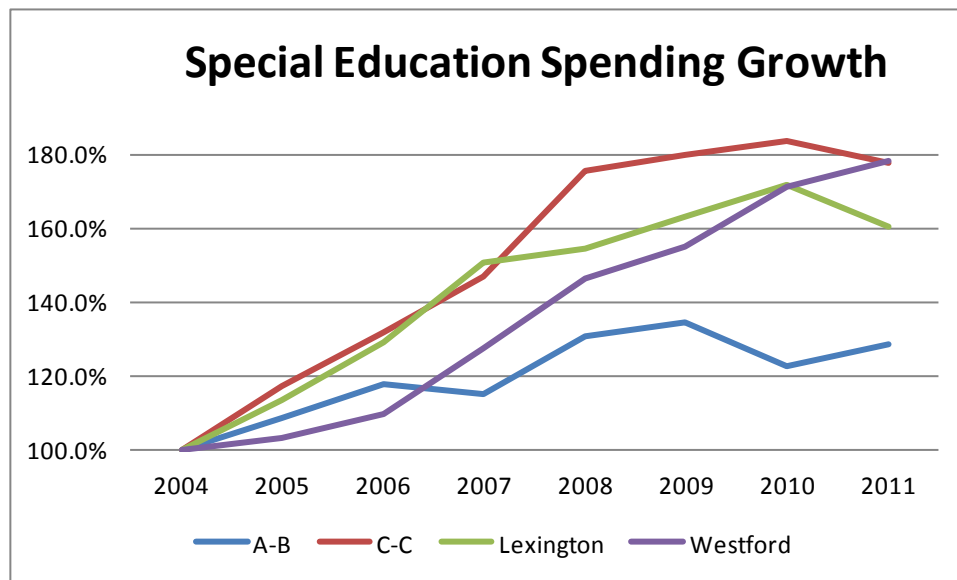
IN-DISTRICT VS. OUT-OF-DISTRICT SPECIAL EDUCATION SPENDING

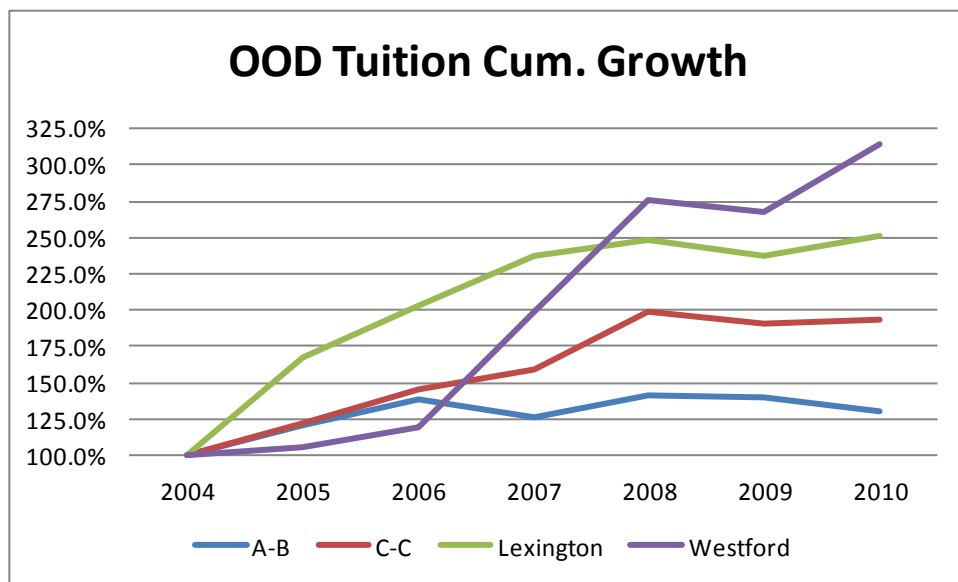
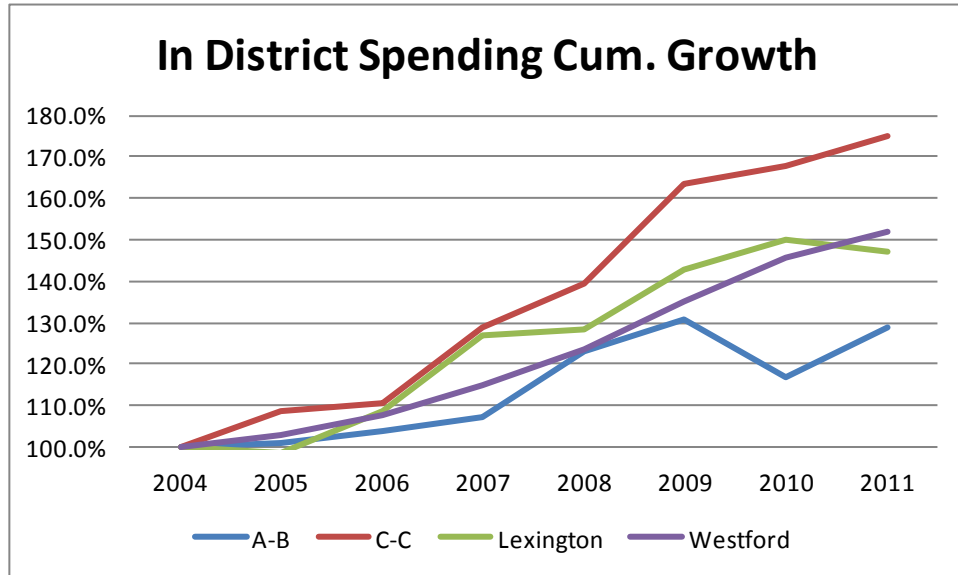
We thought it would be interesting to compare the spending trends of in-district vs. out-of-district special education expenses over the same time period. The chart below compares the spending growth of these two expense categories from FY 2004-FY 2011. This chart shows that out-of-district expenses declined each year after hitting a high point in FY 2008. The chart also shows that in-district expenses grew slowly from FY 2004 through FY 2007, then grew rapidly the following two years, declined sharply in FY 2010 and then rebounded to just below the FY 2009 spending level in FY 2011.



COMPARISON OF AB SPECIAL EDUCATION SPENDING TO OTHER DISTRICTS

We next compared Acton-Boxborough's total in-district and out-of-district (OOD) spending growth with three nearby high quality school districts – Concord-Carlisle, Lexington and Westford. The three charts that follow indicate that special education spending growth in Acton-Boxborough has been lower than these peer districts from FY 2004 to FY 2011 and significantly less on a cumulative basis over the same time period. Over the last two years AB's in-district spending has actually gone down to pre 2009 levels. The district's cumulative growth from FY 2004 to FY 2011 has been by far the lowest in this peer group. Acton-Boxborough's out-of-district spending growth has essentially stayed flat since FY 2005 while peer districts' out-of-district costs rose steadily until FY 2008 before beginning to level off. Cumulatively over the last seven years peer districts' OOD spending has grown significantly more than Acton-Boxborough's.





SUMMARY OF SPECIAL EDUCATION SPENDING GROWTH

Overall, our analysis indicates that in Acton-Boxborough over the last seven years the cumulative growth of the overall school budget has exceeded that of the special education budget by 10.4%. In addition, AB’s special education spending growth has been slower than the district peer group we reviewed. Finally, in the last several years special education spending has actually decreased in Acton-Boxborough. When taking into account the rising cost of special education services, transportation and OOD placements, declining budgets almost certainly result in the reduction of services provided to students. If this short-term trend continues then special education spending (and the resources it purchases) will become a noticeably shrinking part of

the ABRHS school budget and comparisons with other districts will show larger gaps in cumulative growth rates of spending.

STUDENT POPULATION TRENDS

Since 2006 the total number of students in Acton-Boxborough has grown by a cumulative 5.1% while the population of special education students in district has grown by 4.2% as of FY 2011. It appears that AB has not experienced a disproportionate increase in the number of special education students attending school. Notwithstanding an increase in the size of the student population, AB’s out-of-district placements have decreased by 15 (24%) since FY 2006.

Fiscal Year	Special Education Subgroup			Typical Student Subgroup			ALL STUDENTS		
	Total Students	OOD Students	In District Students	Total Students	OOD Students	In District Students	Total Students	OOD Students	In District Students
2006	408	63	345	2,500.6	48.6	2,452.0	2,908.6	111.6	2,797.0
2007	397	59	338	2,570.6	37.2	2,533.4	2,967.6	96.2	2,871.4
2008	419	56	363	2,603.7	45.7	2,558.0	3,022.7	101.7	2,921.0
2009	437	51	386	2,601.7	37.4	2,564.3	3,038.7	88.4	2,950.3
2010	424	52	372	2,589.0	33.4	2,555.6	3,013.0	85.4	2,927.6
2011	425	48	377	2,599.3	36.1	2,563.2	3,024.3	84.1	2,940.2

INCREASE IN STUDENTS WITH AUTISM

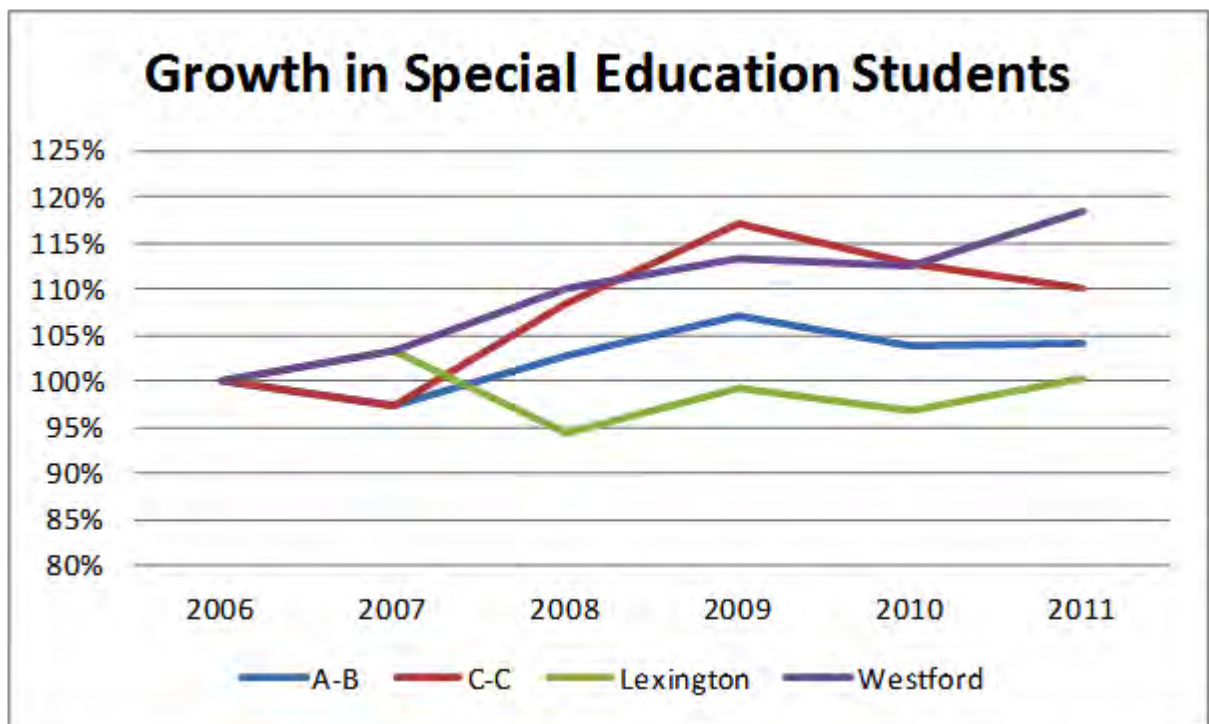
However, AB (and Concord-Carlisle) are experiencing rapid growth in the number of students with a primary diagnosis of Autism Spectrum Disorder (ASD). AB’s total population of students with Autism has increased by 25 students over the last six years – from 9 to 34 kids (FY 2006 to FY 2012). That works out to a compound annual growth rate of almost 25%. Since the total special education population grew by 17 over the same time period as the ASD segment grew by 25, there has been a reduction of the number of other disabilities represented in our student population. A comparison with the peer districts reviewed earlier and total numbers for the state indicate that AB and Concord-Carlisle’s growth rates are double what other districts have experienced during the same period of time.

	2006	2012	CAGR
A-B	9	34	24.80%
C-C	6	22	24.18%
Lexington	70	118	9.09%
Westford	35	64	10.58%
State	7,521	13,228	9.87%

AB’s growth in special education students with Autism appears to reflect growth from the elementary school grades. In FY 2006 there was an average of 3.1 ASD students per grade in the Acton elementary schools² and 1.5 at AB. In FY 2011 there were 5.9 ASD students per grade in the Acton elementary schools (another .9 at Boxborough) for a combined total of 6.8 per grade vs. 5.7 at AB. There are several indicators pointing to continued growth in the ASD population at AB. First, the 6.8 students per grade at the elementary schools will move up to the region plus or minus “move ins.” Second, the three year annualized growth rate of the ASD population in the Acton elementary schools is 6.4% with wide year-to- year swings (-2.1% to +20.0%). As the graph below shows, the trend experienced by the three other districts tracked in our peer group also show moderate growth in the number of students requiring special education services. We therefore would expect continued growth of the ASD population at the region over the intermediate term.

SPECIAL EDUCATION STUDENT GROWTH ACROSS PEER DISTRICTS

The following chart reflects the growth of all special education students over the last five years.



² Average per grade in elementary schools assumes there are eight grades (pre-K and K-6). There are six grades in the A-B district (7-12).

APS DATA INDICATING MODEST GROWTH IN SPECIAL EDUCATION SUBGROUP

In the APS report we tried to estimate the growth of the special education population by reviewing trend data of students aged 3 and aged 3-5 as well as looking at third grade MCAS students. Our theory is that a surge in special education students would become apparent first in the early grades. We found that since 2006 the number of three year olds in the subgroup has varied from 10 to 16 children and this number was 11 as of October 1, 2011. The total number of 3-5 year olds ranged from 50 to 59 children and was 50 as of October 1, 2011. We found the third grade special education population has declined in absolute numbers and as a percentage of all students over the last seven years (see table below). Based on this analysis we don't see a surge in the number of special education students attending Acton public schools. One explanation consistent with the data we have looked at is that the number of students with disabilities other than Autism has shrunk more rapidly than the number of students with Autism has grown, which would account for the decline in overall special education numbers. However, we believe the decline in special education students will reverse over the next several years as a result of the increasing prevalence of Autism among our youngest students.

Acton Third Grade Students Taking MCAS

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Special Education	60	57	53	58	51	42
All Students	379	376	380	351	368	349
% Special Ed	15.8%	15.2%	13.9%	16.5%	13.9%	12.0%

RATIO OF SPECIAL EDUCATION STUDENTS TO ALL STUDENTS ACROSS DISTRICTS
Acton-Boxborough's FY 2011 ratio of special education students to all students has not changed from the FY 2006 ratio and has remained lower than the Concord-Carlisle and Lexington ratios but above Westford's. In terms of the ratio of out-of-district special education students to all students Acton-Boxborough has shown some improvement over the period and is in the middle of the pack – higher than Lexington and Westford but lower than Concord-Carlisle.

Special Education Student Ratios			
Ratio:	Special Ed to All Students		
F/Y:	<u>2011</u>	<u>2006</u>	<u>Change</u>
A-B	14.1%	14.0%	0.0%
C-C	16.6%	14.8%	1.8%
Lexington	17.4%	17.2%	0.3%
Westford	10.6%	9.2%	1.4%
Ratio:	OOD to All Students		
F/Y:	<u>2011</u>	<u>2006</u>	<u>Change</u>
A-B	1.6%	2.2%	-0.6%
C-C	3.0%	3.5%	-0.5%
Lexington	1.3%	1.3%	0.0%
Westford	0.7%	0.4%	0.3%

Note: Due to rounding process, columns don't always add across.

Technical Note About Calculation of Students

There are two counts of students each fiscal year. On October 1 there is a “snapshot” of students that collects subgroup data such as the number of special education students. After the close of each fiscal year there is an average student population calculation of in-district and out-of-district students that is used to calculate cost per student amounts. We have assumed that there is no material difference between the October 1 and average counts. We believe this is a reasonable assumption given our observation of little student turnover during a school year. However we cannot prove this assumption with the data available to the public.

We use the October data to establish the count of special education students and the breakout between in-district and out-of-district placements. This is possible by subtracting the individual school data from the district data, which includes the school and out-of-district counts. The average student population data is used for the “All Student” numbers, which also includes a breakout of in-district and out-of-district placements. In this case the out-of-district numbers include more than the special education students. The number includes students attending other vocational schools, charter schools, and other districts’ schools via school choice.

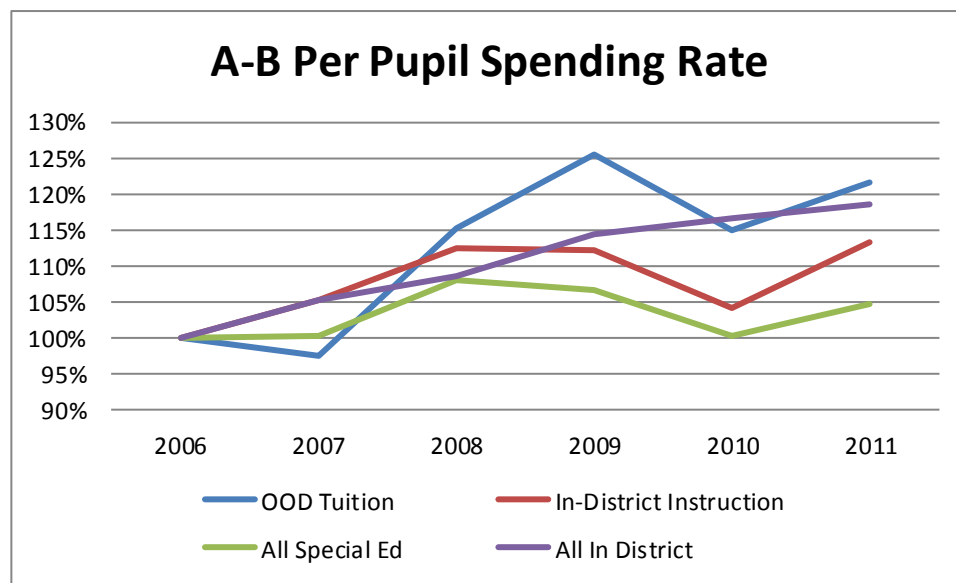
PER STUDENT SPENDING

The tables and charts that follow combine the total spending and student count information discussed earlier to derive per student spending numbers. This is often a more useful way to compare numbers.

Here are some highlights:

- Tuition per special education student increased by 21% in the last five years. That's a compound annual growth rate of about 4%. This contrasts sharply with the doubling of tuition per student experienced by APS. It is possible that the district's practice of advancing tuition payments related to the next fiscal year is influencing the trend results.
- Transportation per out-of-district student has increased at about 2% per year over the four years of available data. In FY 2011 transportation spending was \$531,691 or \$11,077 per student. This also contrasts widely with the APS experience where average transportation costs more than doubled from \$7,128 per student in FY 2006 to \$15,801 in FY 2011.
- The total budgetary impact of out-of-district placements was mitigated by a 15-student (24%) decrease in the number of OOD placements between FY 2006 and FY 2011.
- Compound annual growth in spending for all in-district students has outpaced growth in spending for in-district special education spending at 3.4% vs. 2.5% respectively.
- Special education spending per student peaked in FY 2008, declined in FY 2009 and FY 2010, and made a partial rebound in FY 2011. Spending per in district special education student in FY 2011 was still 5.5% below the FY 2008 peak.
- Over five years special education spending per pupil has declined slightly while total in-district school spending has grown at 3.4% per year.
- As tracked by the state, in FY 2006 AB's special education spending as a percentage of the total operating budget was 20.7%, more than the state average of 19.1%. In FY 2011 AB's percentage declined 2.8% to 17.9% in comparison with the state average which increased .7% to 19.8%. In monetary terms, if AB's 2011 special education spending percentage of total budget was the same as its FY 2006 percentage, almost another \$1 million of resources would have been available to these students.

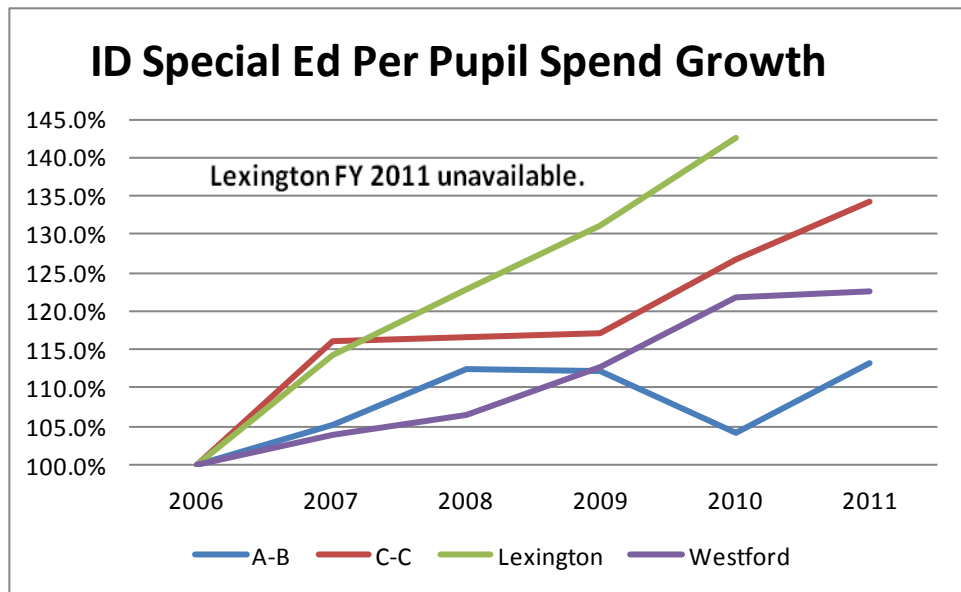
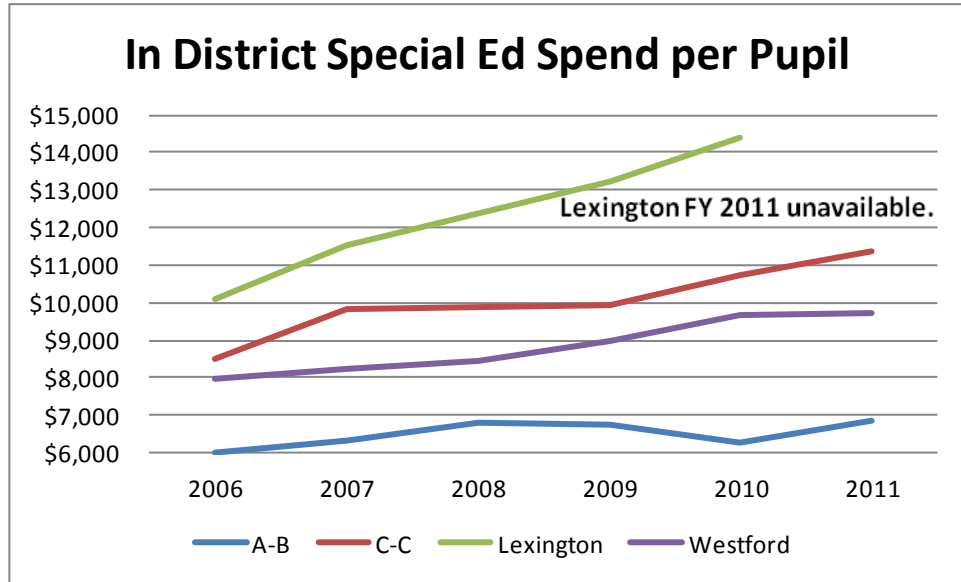
Per Pupil Spending						
Special Education						
	Out of District			All Special Education Students excl. Trans.	In District Spending to All In District	All Spending All Students
Fiscal Year	Out of District Tuition	Out of District Tuition + Transport.	In District Special Education	All Special Education Students excl. Trans.	In District Spending to All In District	All Spending All Students
2006	\$ 58,921		\$ 6,026	\$ 14,193	\$ 10,178	\$ 11,176
2007	\$ 57,460		\$ 6,343	\$ 13,939	\$ 10,698	\$ 11,582
2008	\$ 67,922	\$ 78,376	\$ 6,781	\$ 14,952	\$ 11,044	\$ 12,228
2009	\$ 73,925	\$ 85,188	\$ 6,761	\$ 14,599	\$ 11,626	\$ 12,822
2010	\$ 67,641	\$ 78,057	\$ 6,279	\$ 13,805	\$ 11,877	\$ 13,110
2011	\$ 71,558	\$ 82,635	\$ 6,826	\$ 14,137	\$ 12,049	\$ 13,182



While AB has managed to limit growth of spending for in-district special education students, our peer group districts have continued to expand spending for this group of students. The following charts track actual dollars per student and the cumulative growth of per student spending.

It is probably no surprise that the charts indicate that both Concord and Lexington spend significantly more per in-district special education student than Acton. However, some may be surprised that Westford also substantially outspends Acton-Boxborough on a per student basis. On the other hand, Westford classifies materially fewer students as a percentage of its total student population as requiring special education. Acton-Boxborough is not only spending less

per student than the peer group, it is also growing in-district special education spending at a slower pace than its peers. Since the budget cuts of FY 2010 AB is no longer “keeping up” and the relative gap in resources available per student appears to be growing.



Following is the most current Direct Special Education Expenditures as a Percentage of School Budget Report downloaded from the DESE website.

Acton-Boxborough Direct Special Education Expenditures from DESE

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600

Massachusetts Department of Elementary and Secondary Education Direct Special Education Expenditures as a Percentage of School Budget, FY02 to FY11

600 - ACTON BOXBOROUGH

600 ACTON BOXBOROUGH

Fiscal Year	A -- In-District Instruction--		C - Out-of-District Tuition -		E Combined Special Ed Expenditures (A+B+C+D)	F Total School Operating Budget	G Special Education Percentage of Budget (E as % of F)	H state average percentage
	Teaching	Other Instructional	Mass. Public Schools and Collaboratives	Mass Private and Out-of-State Schools				
2002	1,170,412	687,333	412,894	1,380,288	3,650,927	20,155,871	18.1	17.4
2003	1,455,812	448,080	389,446	1,876,813	4,170,151	21,989,536	19.0	17.7
2004	1,536,834	462,113	531,270	2,156,120	4,686,337	24,301,851	19.3	18.6
2005	1,509,672	507,971	736,324	2,489,717	5,243,684	26,014,654	20.2	18.9
2006	1,533,327	545,486	1,239,903	2,472,108	5,790,824	27,928,220	20.7	19.1
2007	1,507,487	636,278	709,983	2,680,138	5,533,886	29,439,625	18.8	19.4
2008	1,766,668	694,684	769,081	3,034,558	6,264,991	31,665,397	19.8	19.8
2009	1,903,769	705,910	1,191,032	2,579,155	6,379,866	32,418,472	19.7	20.1
2010	1,658,820	677,143	1,239,139	2,278,210	5,853,312	33,126,293	17.7	19.9
2011	1,837,650	745,910	1,430,245	2,006,946	6,020,751	33,721,296	17.9	19.8

Notes and Definitions

Decreases since 2009.

Source: End of Year Pupil and Financial Data

Special Education Expenditures

"Direct" special education expenditures include only those that can be related specifically to special education pupils.

"Other instructional" includes supervisory, textbooks and instructional equipment, guidance, and psychological services.

"Mass. Public Schools and Collaboratives" includes other public school districts, collaboratives, and charter schools.

Thru FY03, "Mass. Private and Out-of-State Schools" includes only the local share of residential programs (50 percent of the cost was paid directly to those schools by the Commonwealth). Beginning in FY04, the 50 percent reimbursement was replaced by the circuit-breaker program, which reimburses the districts directly. The tuition shown in this column now represents 100 percent of the district cost.

Spending from state "circuit breaker" funds is included. Otherwise, spending from grants, revolving funds, or other non-appropriated revenue sources (totalling less than 4 percent of total special ed spending statewide) is excluded.

Total School Expenditures

Through FY03, "Total School Operating Budget" equals Chapter 70 actual "Net School Spending". Beginning in FY04, circuit-breaker revenues are added to the net school spending amount because the circuit-breaker program is included in the special education columns, but not in net school spending.

Operating budget includes municipal indirect spending for schools but excludes capital expenditures and transportation.

Other than circuitbreaker spending, operating budget does not include expenditures from grants, revolving funds, or other non-appropriated revenue sources.