



# Acton 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 Public School district. We believe that tracking trends over time and comparing our district to other high performing 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, 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 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 2004<sup>1</sup> 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 Public School budget outpaced the growth of special education spending by 3.1%. In the last two reported fiscal years, FY 2010 and FY 2011, Acton has actually reduced total special education spending. Since FY 2004 special education spending in Acton has ranged between 20.8% and 24.9% of the Total School Operating Budget. In FY 2011 that ratio was 22.3%. For comparison the FY 2011 ratio of special education spending to Total School Operating Budget for peer districts reviewed was: Concord 25.0%, Lexington 20.6%, and Westford 14.1%.

Over the last five to seven years special education spending in Acton has grown at roughly the same rate as overall district spending – district spending outpaced special education spending by a little over 3%. However, in the last two years special education spending has decreased markedly while total district spending has continued to rise steadily. If this trend continues the gap between the quality of education received by special education students and that received by general education students will continue to grow.

The number of special education students has decreased in absolute numbers and relative to total students over the last five to seven years as well. The decrease in special education students has muted the impact of the service decreases implicit in lower funding. Nonetheless, spending per in-district student declined in FY 2010 and remained below the FY 2009 level in FY 2011 as well.

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

Out-of-district tuition and transportation costs have raced upwards, more than doubling over the last five to seven years. Fortunately a decrease in the number of students requiring out-of-district placements has mitigated the impact of these cost increases. The development and enhancement of in-district programming to reduce future out-of-district placements will continue to be advantageous to the district financially.

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. It is clear that to date there has not been a large influx of special education students or unusually large spending increases 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, we didn't find any such increase. When looking at the composition of the special education student group, however, we discovered that the number of students with a primary diagnosis of Autism Spectrum Disorder (ASD) had increased rapidly in Acton over the last seven years as well as in other districts. To date it appears that decreases in other diagnoses have offset the increase in students with Autism in the Acton Public Schools.

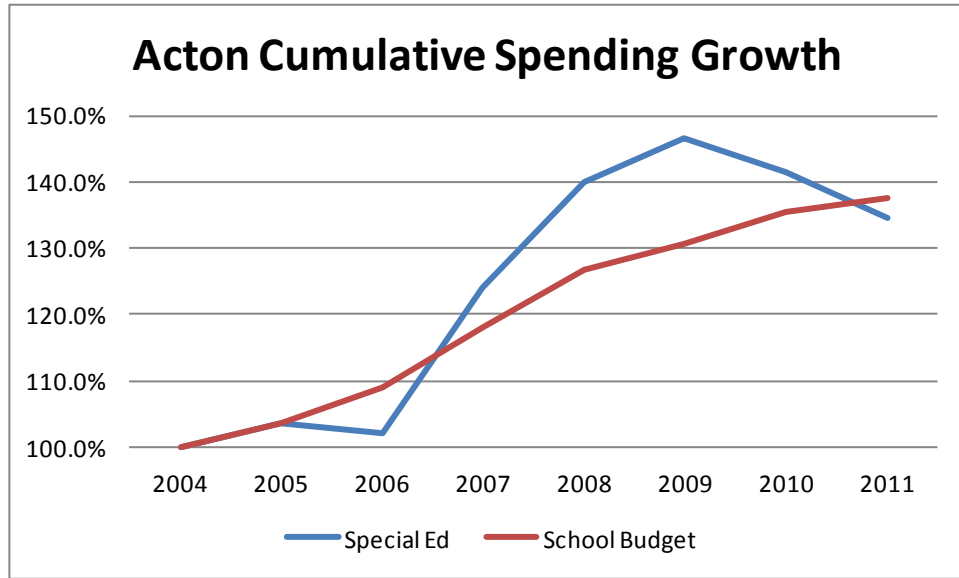
We also compared per student spending and spending trends with other districts. As expected we found that Acton spends less per pupil than Concord and Lexington but more than Westford. We were surprised to find that as a result of the special education spending cuts of FY 2010 and FY 2011 that Acton's relative position to these other high quality districts is declining.

In summary, the results of our special education spending and student population analysis raise the question: can Acton continue to deliver "an education that prepares all students to achieve their individual potential" when per pupil resources for special education students are not only lower than but falling further behind other high quality school districts? On balance it is our view that special education spending is well controlled and there is no immediate concern about large numbers of qualifying students absorbing resources to the detriment of the overall student population. To the contrary, we believe the greater concern is that the tough fiscal management applied to special education particularly in the last two years is adversely impacting student learning as indicated by recent MCAS performance for this subgroup of students. We suspect that the weak subgroup growth in English Language Arts at Conant and Merriam and below average growth in both ELA and Math at McCarthy-Towne may be due in part to staffing reductions forced by budget constraints.

### **SPECIAL EDUCATION SPENDING VS. TOTAL SCHOOL EXPENSES**

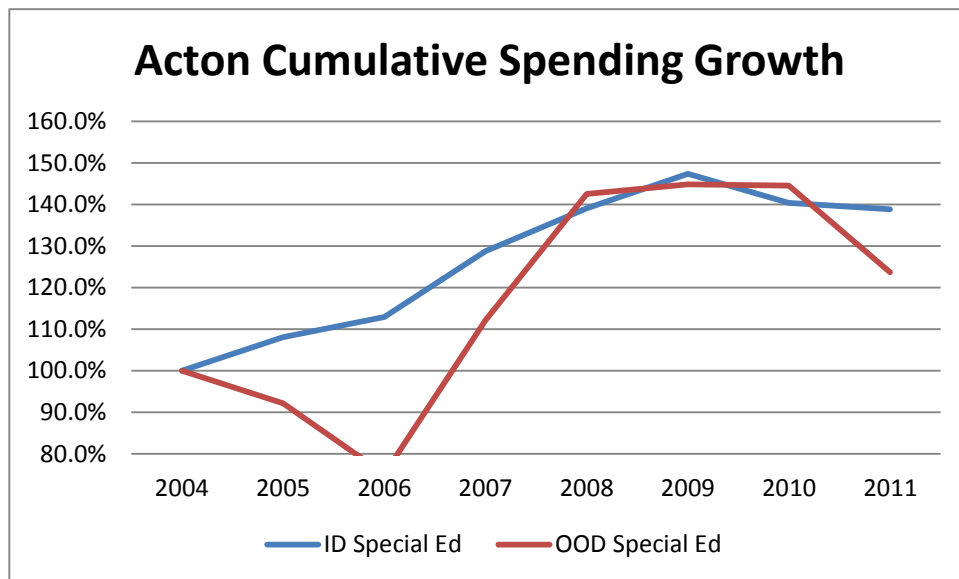
As noted above from FY 2004 through FY 2009 the growth of the total Acton Public School budget has outpaced the growth of special education spending by 3.1%. The Acton district has actually *reduced* special education spending in the last two reported fiscal years, FY 2010 and

FY 2011. The following chart shows the cumulative spending growth of the total special education budget vs. total school budget from 2004 through 2011.



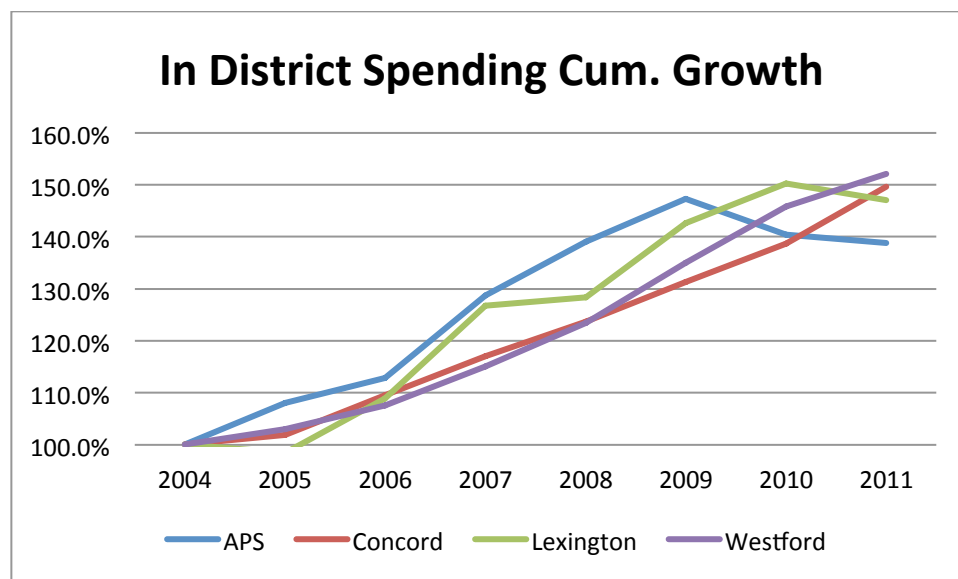
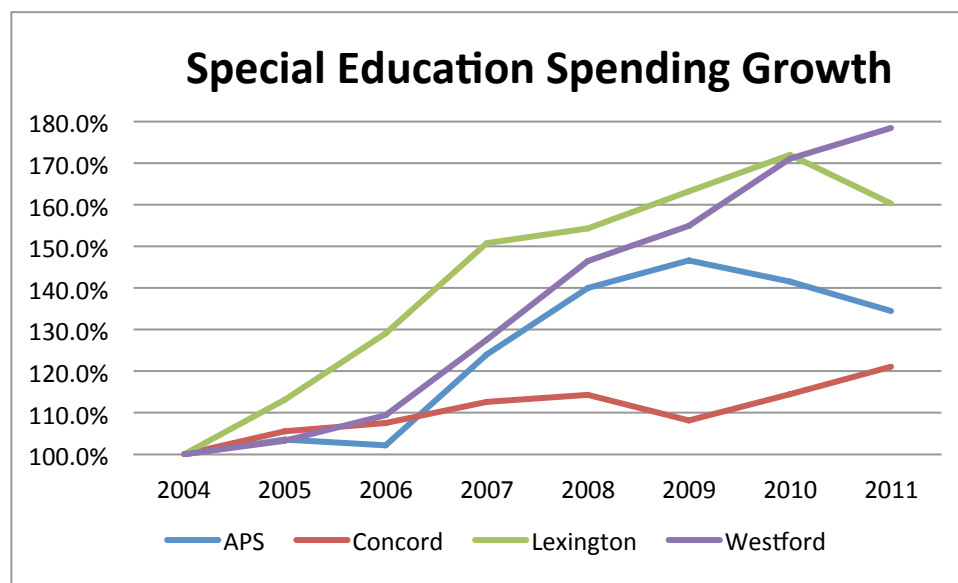
**IN-DISTRICT VS. OUT-OF-DISTRICT SPECIAL EDUCATION SPENDING**

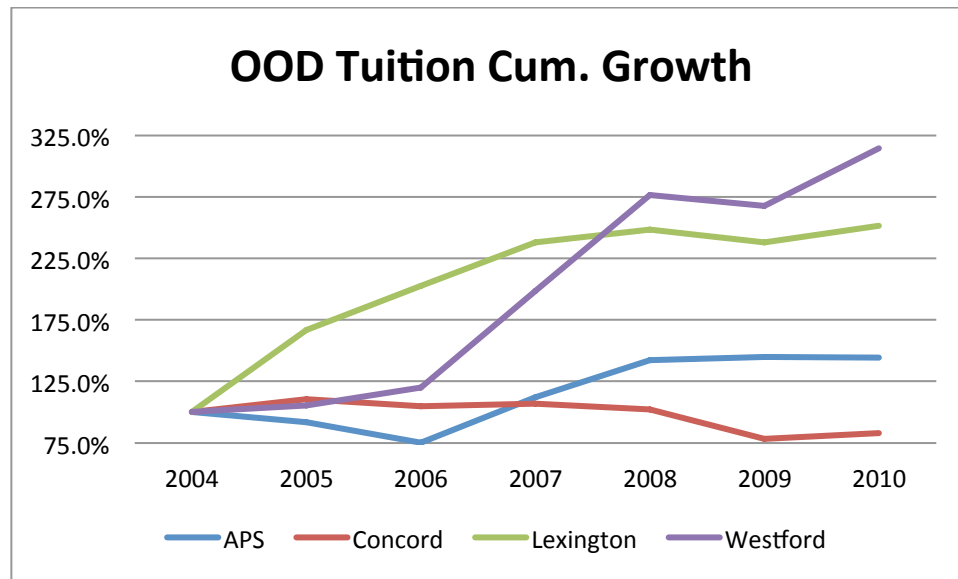
We thought it would be interesting to compare the spending trends of in-district vs. out-of-district special education expenses over the same time period. The chart below compares the spending growth of these two expense categories from FY 2004-FY 2011. This chart shows that both in-district and out-of-district expenses decreased in FY 2010 and FY 2011 versus the prior year but the largest decline was in the out-of district expenses. [Bill, the OD line should be labeled OOD.]



## COMPARISON OF ACTON SPECIAL EDUCATION SPENDING TO OTHER DISTRICTS

We next compared Acton’s total in-district and out-of-district spending growth with three nearby high quality school districts – Concord, Lexington and Westford. The three charts that follow indicate that special education spending growth in Acton has been on the low end versus peer districts. Growth of in-district spending was the highest among districts but was reined in over the last two years so that cumulative growth is the lowest in the peer group.





**SUMMARY OF SPECIAL EDUCATION SPENDING GROWTH**

Overall, our analysis indicates that in Acton over the last seven years the cumulative growth of the overall school budget has exceeded that of the special education budget by 3.1%. In addition, Acton’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 decreased in Acton. 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 APS 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 has been very stable while the population of special education students has shrunk by about 8% (32 students) as of FY 2012. It appears that Acton has not experienced a disproportionate increase in the number of special education students attending school although that has been a concern of some in the community. The table below reflects student population trends between FY 2006 and FY 2012.

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	419	23	396	2,180.6	5.7	2,174.9	2,599.6	28.7	2,570.9
2007	404	19	385	2,108.5	8.6	2,099.9	2,512.5	27.6	2,484.9
2008	414	26	388	2,209.8	5.9	2,203.9	2,623.8	31.9	2,591.9
2009	402	24	378	2,194.3	5.6	2,188.7	2,596.3	29.6	2,566.7
2010	392	24	368	2,258.6	8.1	2,250.5	2,650.6	32.1	2,618.5
2011	378	18	360	2,217.1	4.8	2,212.3	2,595.1	22.8	2,572.3
2012	387	14	373						

### INCREASE IN STUDENTS WITH AUTISM

However, Acton is experiencing growth in the number of children with a primary diagnosis of Autism Spectrum Disorder (ASD). Acton’s total population of students with Autism has increased by 22 students over the last six years – from 25 to 47 kids (FY 2006 to FY 2012). That works out to a compound annual growth rate of about 11%. A comparison with the peer districts reviewed earlier and total numbers for the state indicate that Acton’s growth rate is slightly higher than what other districts have experienced over the same time period. In comparison, the growth of Concord’s Autism Spectrum subgroup has only been about half of what the other districts in this peer group have experienced.

#### Growth in Autism Spectrum Diagnoses

	<u>2006</u>	<u>2012</u>	<u>CAGR</u>
Acton	25	47	11.09%
Concord	17	24	5.92%
Lexington	70	118	9.09%
Westford	35	64	10.58%
State	7,521	13,228	9.87%

### APS DATA INDICATING MODEST GROWTH IN SPECIAL EDUCATION SUBGROUP

We also 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 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 decreased more rapidly than the number of students with Autism has grown, which would account for the decline in overall special education numbers. Also, the source of the growth in students with Autism may be late diagnosis or "move-ins" to the district which would explain why the growth is not evident in the pre-school to early school year numbers available.

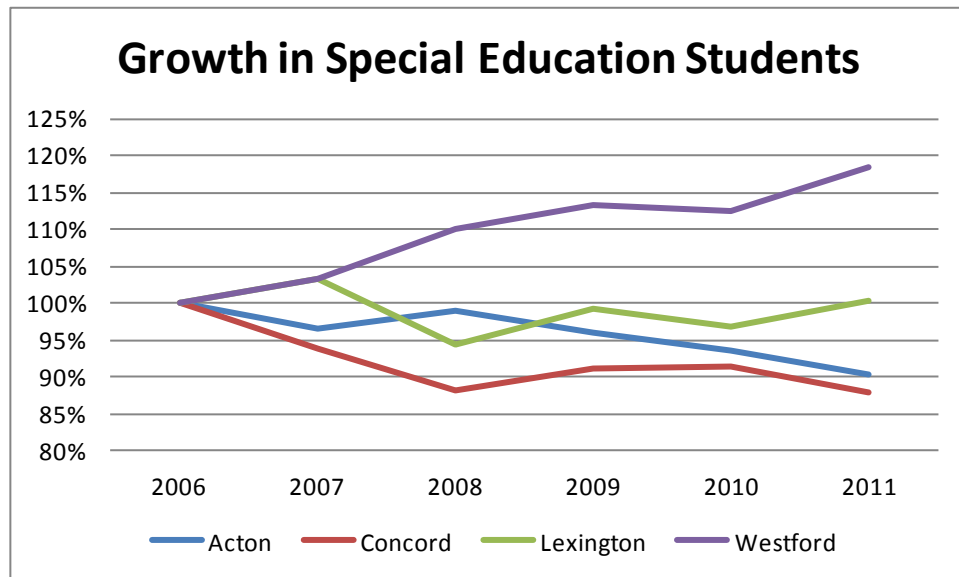
**Acton Third Grade Students Taking MCAS**

	<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%

As shown in the following chart the trend in Acton has also occurred in Concord. Lexington's trend has been flat while Westford has experienced a growth in its special education population. Again, the trends experienced by the three other districts tracked in our peer group do not indicate unusual growth in the number of students requiring special education services.

**SPECIAL EDUCATION STUDENT GROWTH ACROSS PEER DISTRICTS**

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





### 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**

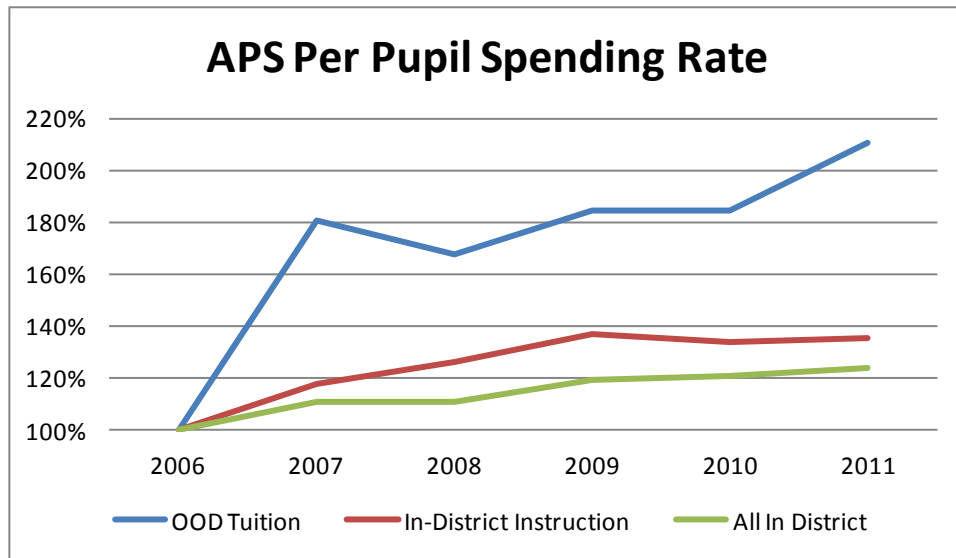
The tables and charts that follow combine the total spending and student count information discussed earlier to derive per student spending numbers. This is often a more useful way to compare numbers.

Here are some highlights:

- Tuition per special education student has more than doubled in the last five years. That’s a compound annual growth rate of about 16%.
- Transportation per out-of-district student has more than doubled in the four years that statistics are available – from \$7,128 per student in FY 2006 to \$15,801 in FY 2011.
- The total budgetary impact of the exploding cost of out-of-district placements is mitigated by a five-student (22%) decrease in the number of OOD placements between FY 2006 through FY 2011.
- Compound annual growth in spending per in-district special education student has outpaced growth in spending for the regular classroom at 6.7% vs. 4.1% respectively. Of the 6.7% increase, 4.2% is attributable to spending increases with the remainder due to a smaller number of students to divide by.

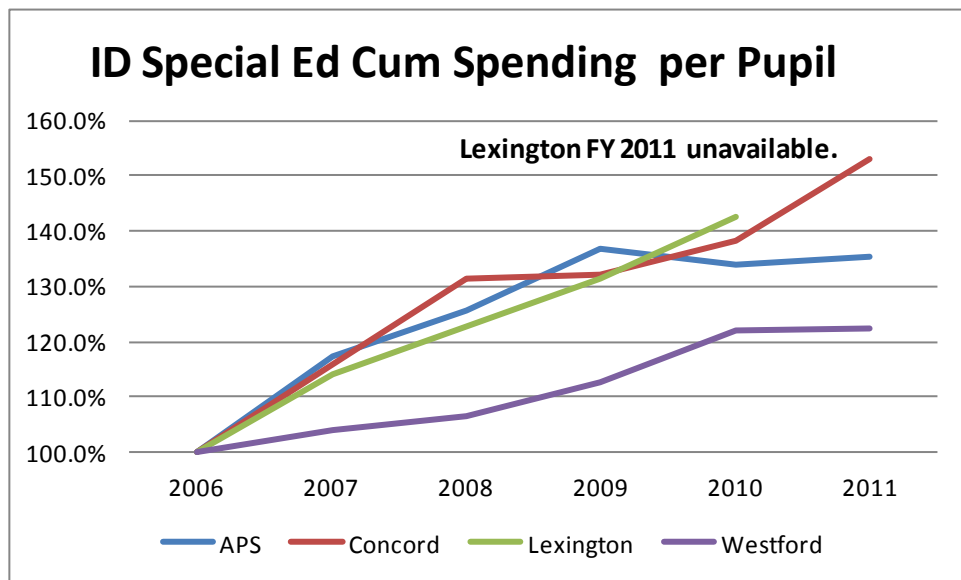
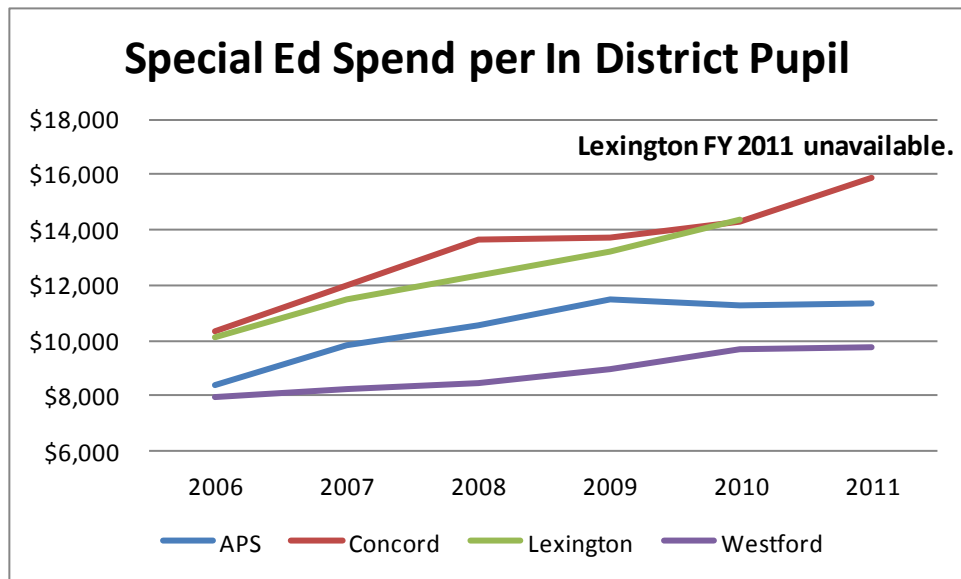
- Most recently, spending per in-district special education student peaked in FY 2009 at \$11,494 per student and was lower in FY 2010 and FY 2011 as budget cuts exceeded the reduction in the number of students.

Per Pupil Spending						
Special Education						
	Out of District			All Special Education Students excl. Trans.	In District Typical	All
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	All Spending All
2006	\$ 37,855		\$ 8,404	\$ 10,020	\$ 8,756	\$ 8,997
2007	\$ 68,394		\$ 9,857	\$ 12,610	\$ 9,673	\$10,086
2008	\$ 63,506	\$ 70,634	\$ 10,565	\$ 13,890	\$ 9,695	\$10,283
2009	\$ 69,910	\$ 77,838	\$ 11,494	\$ 14,982	\$ 10,403	\$11,011
2010	\$ 69,768	\$ 80,298	\$ 11,246	\$ 14,829	\$ 10,570	\$11,246
2011	\$ 79,608	\$ 95,409	\$ 11,370	\$ 14,620	\$ 10,860	\$11,480



While Acton 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. It is also well recognized that these wealthier districts spend more per student overall as well. The second chart suggests that through FY 2009 Acton kept up with its wealthier neighbors in terms of cumulative growth from the FY 2006 base. However since the budget cuts of FY 2010 and FY 2011 Acton 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 Direct Special Education Expenditures from DESE

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

2

**2 ACTON**

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	2,603,952	395,018	566,773	203,348	3,769,091	16,492,173	22.9	17.4
2003	2,735,059	292,089	664,085	597,903	4,289,136	17,365,185	24.7	17.7
2004	2,649,463	298,915	557,773	600,947	4,107,098	18,530,738	22.2	18.6
2005	2,843,849	342,380	623,062	444,165	4,253,456	19,183,156	22.2	18.9
2006	3,016,779	311,044	488,450	382,213	4,198,486	20,209,435	20.8	19.1
2007	3,448,652	346,246	641,526	657,953	5,094,377	21,897,041	23.3	19.4
2008	3,735,877	363,390	619,173	1,031,973	5,750,413	23,465,229	24.5	19.8
2009	3,973,519	371,276	616,076	1,061,753	6,022,624	24,191,296	24.9	20.1
2010	3,753,266	385,413	729,573	944,859	5,813,111	25,105,450	23.2	19.9
2011	3,693,133	400,115	690,675	905,397	5,689,320	25,514,117	22.3	19.8

Notes and Definitions

Source: End of Year Pupil and Financial Report, Schedule 4 - Special Education Expenditures

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 columns 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.

**Two years of actual spending decreases.**