The Process, Cost Drivers and Cross-School Data Analysis of Special Education in the Acton Public and Acton-Boxborough Regional Schools

Report of the Special Education Financial Task Force II

Submitted to:

Acton Public School Committee
Acton-Boxborough Regional School Committee
Acton Finance Committee

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* A special note of thanks to Kathleen McArdle from Medfield who provided frank and targeted suggestions, and contributed both to the first report in 2003, as well as this one. Kathleen will be retiring at the end of this school year.
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Appendix A – “A Primer on Financial Aspects of Special Education” reprinted from City and Town with permission from the MA Dept of Revenue (Volume 21, No. 8 September 2008)

Appendix B – Federal and State Assumptions: “Givens” and “Changeables”, courtesy of Stoneman, Chandler and Miller, and Liza Huber

Appendix C – Graphs Updated with Information from 2007-2008 School Year (when available)
Preface

The impetus behind this report is two-fold: 1) to update the report titled: “A Look at the Costs and Drivers of Special Education” which was created by a sub-committee of the Acton Public and Acton-Boxborough Regional School Committees in October 2003, and 2) to examine the impact of changes, both in funding and practices in the field of special education, which can effect the ability of our local and regional districts to deliver high-quality services to the communities with improved efficiencies.

Special Education Financial Task Force II was formed in June 2007, comprised of two members from each of the Regional School Committee and Acton Finance Committee. Seven months into the project, the group was reduced to three: Kent Sharp from the Acton FinCom, and Xuan Kong and Michael Coppolino from the School Committee. Allen Nitschelm, who had been an active member from the Acton FinCom, stepped down in May 2008.

This task force found that the schools had indeed implemented some of the recommendations from the initial report – including working to serve the needs of more students through in-district programs and addressing needs at an early age. The goal of this report was, therefore, to identify additional areas where the schools might focus in order to continue on this path to improvement.

Executive Summary

This report is presented in three sections:

1) Process of Special Education, describes administrative aspects which include how referrals are made and how IEPs are created, both in flow chart and narrative formats.

2) Cost Drivers, examines resource requirements to fulfill special education obligations to students and their families. This section includes an organizational chart of Pupil Services, as well as District-specific data tables illustrating the cost structures of educating three cohorts of students. These analyses were designed to help the public understand the challenges and reasons behind cost drivers of special education. Information contained herein should also serve as a baseline for the Districts to improve their operating efficiencies.

3) Cross-School Analysis, updates much of the data in graphical format that was provided in the 2003 report, as well as findings from telephone and email interviews with school districts whose in-district and/or out of district (OOD) expenses per student are lower than ours.

Each section includes observations and recommendations, highlights of which are listed below, and are delineated in two groupings; highly recommended and suggested:
Highly Recommended:

1) We must stress the importance of regular, formal meetings between the Special Education Director and the Director of Finance, to provide independent reviews of SPED finances, particularly OOD costs. This is a practice a number of districts employ, as well as on-going discussions as to what criteria are used to place a student in a private day or residential placement. Also, regularly scheduled conversations should focus on what can be done to bring these students back to their home schools, saving the Districts substantial transportation costs as well as those for service delivery.

2) While regulations and laws mandate many procedural steps, it is important for the Districts to continue streamlining the efficiency and effectiveness of the IEP process, particularly through expanded use of technology and respectful, timely communications with parents.

3) The Districts, as well as all CASE member towns, should re-examine the cost accounting strategy and methods used for the overall CASE program, as well as for individual programs. In light of the State’s circuit breaker reimbursement program, actual costs should be assigned to each special education program, rather than using a gross average across all programs. Analyses demonstrate that differential cost structures would optimize the reimbursement opportunities for all member districts. In addition, actual cost accounting will identify inefficiencies within the Collaborative, and encourage member districts to provide needed resources (such as space for new programs, and associated maintenance and utilities) with fair value credited to those districts.

4) In addition, CASE member districts should hold the collaborative more accountable for the effectiveness of its transportation services by analyzing fully its current practices, and instituting measurable metrics to assess efficiencies on an on-going basis. This is a very important component, as CASE transportation provides services for all special education students in these and other districts, not only those who participate in programs offered by the CASE Collaborative.

5) Data should be collected and analyzed going forward, so that the effectiveness of regular education interventions based on the Child Study Team model, can be measured. There are disparities in the effectiveness of these teams amongst schools in our Districts that should be reviewed and remedied.
6) The District has recently become proactive communicating more regularly with parents, and needs to do so at the school level with regular education teachers. A strong collaborative effort amongst parents, as well as regular and special education teachers is crucial, so that a child’s needs are assessed and met by all caregivers. Increased professional development for staff and frequent communication with parents, both as a group and individually, are vital so that all involved are familiar with strategies to best identify and meet the needs of this student population. Earlier recognition and providing targeted services should address certain psychological and emotional needs, prior to escalation, mitigating the requirement for more intensive and costly out of district services.

7) A number of school districts stated their targeted use of consultants as a way to keep costs down over the long term, versus hiring permanent staff with associated benefit packages and annual increases. Using consultants also alleviates the necessity, and natural aversion, to cutting full-time staff when programs are no longer needed.

**Suggestions:**

8) The Districts should explore the possibility of establishing a legal resource pool with neighboring school districts, or within collaboratives to which they belong, as a cost effective means for accessing qualified legal representation while maintaining a more predictable legal cost from year to year.

9) The theory that more intense and frequent evaluations of a student at an early learning stage should reduce the costs associated with that student later appears to be valid, however the hypothesis must be supported by evidence through evaluations of our own school district data.
SECTION I: The Process of Special Education in the Acton Public and Acton-Boxborough Regional School Districts

Students may enter into special education programs primarily through two different paths:

1. Already having established special education needs at the onset of their student lives
2. By transitioning from regular education programs. Our most current estimate is that 20% of special education program students were transitioned from regular education programs for the 2006-2007 school year.

A student enrolled in special education programs would likely have gone through the following steps:

1. Referral of student to Child Study Team (CST) [In the Regional schools, the team is referred to as a Student Assistance Team (SAT)].
2. Evaluation of student by CST
3. Referral of student by the CST to (pupil service) Evaluation Team (ET)\(^1\)
4. Assessment of student through standardized tests and professional evaluation
5. Determination of eligibility by ET
6. Development of Individual Education Plan (IEP) by ET
7. Placement of student in special education programs according to IEP
8. Update IEP annually (a SPED progress report is issued at the same time intervals as regular report cards)
9. Full evaluation (testing) every three years (required by law)
10. Continuation of special education, or return to regular education, programs

Figure 1 presents the flowchart of the special education process in our Districts.

Referral of Student for Special Education Consideration

The following is a list of possible referral sources of a student to the CST:

- When a student fails to meet the minimum academic performance level, the student’s case is required to be reviewed by the CST.
- A regular education teacher may refer a student to the CST based on the teacher’s observations.
- A counselor (at the Jr. High and Sr. High) may refer a student to the CST and/or SAT.
- A parent may request a review by the CST.
- A Senior High School student may refer himself/herself to the SAT for review.

\(^1\) A student or student family could also initiate the referral process so that the student could be evaluated by pupil services to determine special education eligibility.
Evaluation by Child Study Team (CST)

The first formal step in determining whether a student should be transitioned from a regular education program to a special education program is through the CST. Each school in our districts has a CST. A CST, which is in every school in the District, consists of the building principal (or his/her designee), a counselor, a nurse, a special educator, a regular educator, and a psychologist. The psychologist is a district employee and may be shared by several schools. The CST meets once a week to discuss new cases, review and monitor on-going cases, and make necessary recommendations. At the junior high and high school, the CST meets twice a week.
Figure 1: Flowchart of Special Education Process at Acton Public and Acton-Boxborough Regional Schools

Dotted line represents a process available to the student or the student family when the student is initially found not eligible for special education services.
Once a referral is made, the CST will initiate the review process by examining the student’s case and conducting classroom observations. Based on the information collected, the CST may recommend one of the following:

a) Take no action.
b) Continuously monitor student progress.
c) Regular education intervention.
d) Referral to Pupil Service for full special education evaluation.

Regular education intervention may include one or more of the following:

i. Additional academic assistance, such as math tutoring.
ii. Research-based, alternative education methods.
iii. Behavior management plan conveyed to regular education teachers.

The intervention generally lasts for six to nine weeks during which time the CST will continuously monitor the student’s progress. If concerned parties are satisfied with the student’s performance, no special education evaluation is needed.

Table 1 summarizes the statistics for referrals to CST during the academic year 2006-2007. One-third of the referrals at APS (K-6) were eventually considered by Pupil Services for special education evaluations, while that figure was approximately 22% at the Junior and Senior High Schools.

<table>
<thead>
<tr>
<th></th>
<th>Cases Referred to Child Study Team (CST)</th>
<th>Cases Resolved within Regular Education</th>
<th>Cases Referred for Special Education Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acton Public Schools</td>
<td>213</td>
<td>142 (66.7%)</td>
<td>71 (33.3%)</td>
</tr>
<tr>
<td>RJ Grey JHS</td>
<td>65</td>
<td>51 (78.5%)</td>
<td>14 (21.5%)</td>
</tr>
<tr>
<td>ABRHS</td>
<td>156</td>
<td>123 (78.8%)</td>
<td>33 (21.2%)</td>
</tr>
</tbody>
</table>

Observations and Recommendations

Each year, approximately 10% of APS students are evaluated by a CST for various reasons, including academic performance, behavior, etc. Currently, there is no information available as to how many of them were repeat evaluations. We recommend that data be collected and analyzed going forward, so that the effectiveness of the CST model can be measured. For example, the data may reveal that 60% of the students evaluated by a CST at School A were evaluated previously, versus 20% at School B. Such an outcome may suggest that School B is doing a better job at identifying and meeting the needs of students, and that School A ought to adopt some of the best practices utilized by School B.
Regular education intervention could be an effective means to advance overall academic performance of the student population, to reduce the needs for placing students into special education program, and to improve the parent-school relationship. The districts and school committees should consider investment in regular education intervention programs as a cost-effective means of controlling future special education costs. The districts, especially at the elementary school level, should continue the effort of sharing best practices among schools.

Referral of Student by CST to Pupil Services

The CST may refer a student to Pupil Services for a full special education evaluation, including those who are not responding satisfactorily to regular education intervention programs. Once such a referral is received, the Pupil Service Evaluation Team (PSET) arranges a battery of tests and evaluations for each student, provided that his/her family, or the student (when of age), consents in writing. Depending on the student’s particular area(s) of suspected disability, the PSET is comprised of some or all of the following personnel:
a special educator, school psychologist, speech and language specialist, reading specialist, counselor\(^2\), home classroom teacher\(^3\), disability- specific experts, and the student’s parent(s)/guardian(s). Once the test and evaluation results are received, the PSET meets to evaluate the student’s case. Three common outcomes are:

1. The student is not eligible for special education. The PSET may recommend additional regular education interventions.

2. The student is eligible for special assistance under Section 504\(^4\). Section 504 covers individuals who meet the definition of qualified “handicapped” persons – for example, a child who has or has had a physical or mental impairment that substantially limits a major life activity, or is regarded as handicapped by others. The Section 504 regulation requires a school district to provide a “free appropriate public education” (FAPE) to each qualified person with a disability who is in the school district’s jurisdiction. The costs for providing any and all services to accommodate the disabilities are not reimbursable through federal or state grants, such as circuit breaker, and are usually considered a regular education expense.

3. The student is eligible for special education assistance. These students form our special education population. The law requires that an Individualized Education Program (IEP) be developed for each student. Other services may include speech and language therapy, occupational therapy, physical therapy, counseling services, academic support, psychological services, social services, assistive technology, and transportation.

\(^2\) For providing student education history
\(^3\) For providing student current functioning report
\(^4\) http://www.ed.gov/about/offices/list/ocr/docs/edlite-FAPE504.html
When the evaluation results are finalized, its outcome is communicated to the student’s parent/guardian. At times, the student’s family may elect to carry out an independent education evaluation, usually at their own expense. The evaluation results may or may not be shared with school districts by the student family, and those results may or may not be incorporated into the student’s IEP. However, outside evaluations should be given equal weight, and, as appropriate, those recommendations should be included in the IEP.

The financial drivers of this process are the cost of the initial comprehensive evaluation and the staff time to make the determination of eligibility of individual students, plus the time needed to create, edit, and revise an IEP. If a family with low income requests an independent education evaluation, the school district may be required by law to pay for its cost.

Table 2 provides a tabulation of the referrals to Pupil Services for special education evaluations for the academic year 2006-2007. At both APS and RJ Grey, 100% of the student families gave consent to the formal evaluation. At ABRHS, only 39.4% of the students or their families consented to the evaluation. The high rate of declination at high school may be attributable to the fact that out-of-class help (via special education) may be perceived as excluding the student from other academic options in the future. Among those evaluated, 80.3% of APS students, 57.1% of junior high students, and 84.6% of senior high students were found to be eligible for special education assistance. The students not eligible for special education may receive additional assistance such as regular education interventions.

Table 2: Outcome of Cases Referred to Pupil Services for Special Education Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Cases Referred for Special Education Evaluation by CST</th>
<th>Consent Given to Initiate Formal Evaluation</th>
<th>Cases Found Eligible for Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acton Public Schools</td>
<td>71</td>
<td>71 (100%)</td>
<td>57 (80.3%)</td>
</tr>
<tr>
<td>RJ Grey JHS</td>
<td>14</td>
<td>14 (100%)</td>
<td>8 (57.1%)</td>
</tr>
<tr>
<td>ABRHS</td>
<td>33</td>
<td>13 (39.4%)</td>
<td>11 (84.6%)</td>
</tr>
</tbody>
</table>
Observations and Recommendations

Like in health care systems, prevention is the most effective means to deliver quality services. The school district should continue its efforts to proactively provide regular education intervention as a part of its goal to provide educational excellence. As disagreements between the school district and student families are often for borderline cases, it is important that the school district provide adequate academic assistance to those students in need in order to alleviate anxiety for some families. The school district should also educate all student families that their child's progress is a partnership of school and home. Finally, the criteria for case referrals at the Junior High School by the CST to Pupil Services for special education evaluations should be re-examined. Only about half of the students currently referred by its CST are ultimately found eligible for special education services, whereas more than 80% of CST referrals at the elementary schools and the high school are found eligible. The reasons for this disparity should be identified and reviewed carefully.

Individual Education Plan (IEP) Development

When a student is determined to be eligible for special education, an Individual Education Plan (IEP) must be developed within 45 school days. The PSET that was responsible for determining eligibility is also responsible for development of the IEP. An IEP addresses the academic, social and life skill needs of the student and includes annual measurable goals are clearly specified. All IEPs must be updated annually.

Development of an IEP that is acceptable to both the school district and student’s family may require multiple meetings and iterations of the draft plans. This process should be made more efficient by leveraging office automation technologies, as the inability to receive draft plans by parents in a timely manner is the source of frustration for numerous parents of special education students. Specifically, we recommend staff use computers and district-owned software to create draft IEPs during IEP development meetings.

The financial drivers to the District of the IEP development process are staff time in developing the initial IEP plan, communicating with the student family, and the eventual outcome of the plan. Effective communication utilizing modern technologies is a key to expedite communications and mitigate any misunderstandings between the school district and the student family during the development of IEPs. Sound electronic document management practices should be adopted whenever possible.

There are significant costs associated with IEP development since meetings include special education administrators, liaisons and teachers, all service providers, plus regular education teachers. If an IEP does not accurately and completely reflect what was discussed in the meeting, then a follow-up meeting must be called with all or some subset of the staff identified above. Administrative staff then revise and reissue the IEP as many times as it takes for the Team to come to agreement on the content. If either
mediation or hearing are necessary then all of the staff mentioned above usually attend the mediation meeting(s) as well, which can last for hours or reconvene over multiple days. In addition, legal costs are added to the picture at this juncture. Consequently, anything that can be done to reduce the number of revision cycles and meetings required, not to mention legal actions, will reduce district special education costs.

**Observations and Recommendation**

It is critical to balance the desire of the student family for the best education opportunity, with the requirement from the school district to provide an appropriate education for all students. To minimize the overall cost to the school district, particularly in dealing with its disagreements with student families, requires dedicated resources from both educational and legal professionals. It might be useful for the school district to explore the possibilities of establishing a legal resource pool with neighboring school districts, or within CASE or EDCO. Such a legal collaborative could be a more cost effective way for all school districts to access qualified legal representation while maintaining a more predictable legal cost throughout the years.

**Special Education Delivery Based on IEP**

Once the student family accepts an IEP, the special education services outlined in the plan are delivered through in-district, collaborative, or out-of-district programs. Pupil Services monitors the services delivered and progress made by students. A SPED progress report is issued at the same time intervals as regular report cards.

Pupil Services has been proactively identifying services required by district students that are currently only offered through out-of-district programs. Proposals to develop in-district programs to offer the equivalent services have been put forth for consideration, and some are being implemented, all with the intent to minimize the total cost to the district while maintaining the education standard which a student needs.

**Full Evaluation of Students in Special Education Programs**

The school district is required to perform a full evaluation of students receiving special education services every three years to determine continued eligibility. The IEP is subsequently updated based on the evaluation results.

At this juncture, based on the results of the three-year evaluation, either special education services are continued, or the child’s needs may be met in a regular education program, which makes him or her no longer eligible to receive special education services.
SECTION II: Cost Drivers of Special Education: Case Studies

Overall special education expenditures are driven by two main factors: 1) total number of students qualified for special education and 2) total cost per student. In this section, we primarily examine the cost drivers for special education students in the Acton Public and Acton-Boxborough Regional School districts.

Special Education Student Population

For the 2006-2007 school year, the special education population in our Districts has the following characteristics, as compared with statewide statistics:

- The special education student population was 15.6% (404 special education students out of 2583 total) at APS and 13.5% (397 out of 2935) at ABRHS. The statewide average was 16.7%.
- Male to female ratio of 2:1, similar to state average.
- Grade 7 has the highest percentage of SPED students in our district, which was similar to that statewide.
- 76% of APS students were classified as full inclusion, 18% as partial inclusion, and 5% as substantially separated. At the region, the rates were 71%, 10%, and 7%, respectively. The remaining 12% are categorized as public/private day, residential, etc. (see Figure 1). Statewide, the rates were 55%, 23%, and 16%.
- APS spent 8.8% of its total school operating budget on out-of-district tuition and special education transportation, while A-B spent 9.5% of its operating budget on those two categories in 2006-2007.

Services provided to special education students in our districts are coordinated and monitored by Pupil Services. An organization chart of the Pupil Service Department can be found in Figure 2. In addition to special education programs, Pupil Services also provides services in the areas of English Language Learners, psychological counseling, and health and nursing.
Figure 2: Special Education Student Placement Distribution at Acton Public and Acton-Boxborough Regional Schools

The number of students and its percentage of total special education students follow type of placement. Certain categories are defined as follows: Full Inclusion (Services outside classroom less than 21%), Partial Inclusion (Services outside classroom 21% to 60%), Substantially Separate (Substantially Separate Classroom - Services > 60%)
Figure 3: Pupil Services Organization Chart
(From Director of Personnel as of March 2008)
An IEP (Individualized Education Plan) specifies the services and programs to be delivered to each special education student. A student may be placed into an in-district or out-of-district program if that setting is the least restrictive setting within the regulations. Each student is unique in his/her needs, and the costs associated with service delivery can vary significantly among students. Nevertheless, it is worthwhile to examine the financial drivers of special education by grouping students into several categories. In this report, we classify special education students into three cohorts, based on how their education needs are met:

- **Cohort A** - Students whose educational needs can be met in a full inclusion environment within the school district. Other in-district students may not fit into this cohort, as their learning needs may require an educational setting other than full inclusion.

- **Cohort B** - Students whose educational needs are being met in collaborative programs, such as CASE (Concord Area SPED Collaborative), EDCO, etc.

- **Cohort C** - Students placed in private school programs or residential programs.

Regardless of which cohort a student is placed in, the student enters into the special education program through a well-defined process (please see Section I).

A student does not necessarily remain in special education throughout grades K-12. In the following examples, the costs associated with each grade are shown and tabulated. This provides a comprehensive documentation of the special education program cost, not necessarily reflecting the actual cost of each student. The Table shows the cost for students in each grade, however every individual student does not necessarily stay in SPED for every grade, K to 12, therefore, the total life-time cost to the District for a specific student may not be the sum of the costs from K to 12. Furthermore, each student is unique in his/her own disability and educational needs. The tables that follow are reasonable cost illustrations associated with a student in each cohort, as determined by Pupil Services staff. Numbers presented herein should not be used solely as the basis for any budgetary considerations.

**Cohort A**

Table 3 summarizes the total education costs for a student from Cohort A, in comparison with a regular education student’s cost to the District. Additional expenses include, testing and evaluation, additional teaching staff, and additional support services. According to Pupil Services, the school district emphasizes early intervention (frequent and intense evaluation, more direct teaching at an
early age) as an effective means to improve educational outcomes and to reduce overall special education expenditures. This approach leads to higher testing and evaluation, as well as direct teaching costs during the earlier years of a student’s academic life. The idea behind this educational model is simply to help children at the earliest stages of development, so that each can master the basic components of learning. Although assessment and diagnostics are stable through early childhood, direct teaching costs become lower as learning and mastery are acquired. The cost breakdown for testing and evaluation can be found in Table 4.

Table 3: Costs Associated with a Student in Cohort A

About 60% of school district special education students belong to this cohort. The needs of these students can be met through in-district programs.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reg. Ed Cost</th>
<th>Additional Special Education Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluation</td>
<td>Teaching</td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>K</td>
<td>$8,397</td>
<td>$4,800</td>
<td>$8,500</td>
</tr>
<tr>
<td>1</td>
<td>$8,397</td>
<td>$4,800</td>
<td>$4,700</td>
</tr>
<tr>
<td>2</td>
<td>$8,397</td>
<td>$3,400</td>
<td>$4,700</td>
</tr>
<tr>
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<td>$8,397</td>
<td>$3,400</td>
<td>$4,700</td>
</tr>
<tr>
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</tr>
<tr>
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<td>$8,397</td>
<td>$3,400</td>
<td>$4,700</td>
</tr>
<tr>
<td>7</td>
<td>$9,803</td>
<td>$2,900</td>
<td>$2,900</td>
</tr>
<tr>
<td>8</td>
<td>$9,803</td>
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</tr>
<tr>
<td>9</td>
<td>$9,803</td>
<td>$2,850</td>
<td>$2,300</td>
</tr>
<tr>
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<td>$9,803</td>
<td>$2,850</td>
<td>$2,300</td>
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<tr>
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<td>$9,803</td>
<td>$2,850</td>
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</tr>
<tr>
<td>12</td>
<td>$9,803</td>
<td>$2,850</td>
<td>$2,300</td>
</tr>
</tbody>
</table>

*Evaluation costs for a given student will only be incurred once every three years. See Table 4 for a breakdown of costs.

Evaluation and assessment costs for students in Grades 3-6 student are lower, as they are typically administered less frequently, and are less intensive. Nevertheless, all evaluations and assessments required by special education regulations are met. Pupil Services staff completes many evaluations, while outside consultants may be hired for others, depending on the expertise required for each individual child. Once the evaluations are finished and an IEP is developed and fine-tuned, students generally need less intensive and less frequent evaluations in the upper grades. The need for direct teaching and assistance can also be reduced as the student shifts to a more independent model of working with peers and greater self-advocacy. Thus, we see lower total special education costs in the upper grades.
Table 4: Typical Test and Evaluation Cost Breakdown for Students Referred to Pupil Services for Special Education Evaluation

<table>
<thead>
<tr>
<th></th>
<th>K-2</th>
<th>3-6</th>
<th>7-8</th>
<th>9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Assessment</td>
<td>$500</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Psychological and Cognitive Behavioral</td>
<td>$1200</td>
<td>$1200</td>
<td>$1200</td>
<td>$1200</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>$500</td>
<td>$300</td>
<td>$300</td>
<td>N/A</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>$400</td>
<td>$400</td>
<td>$200</td>
<td>$150</td>
</tr>
<tr>
<td>Speech and Language Applied Behavior Analysis Learning</td>
<td>$1000</td>
<td>N/A*</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Vocational, Career, and Transition</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>$1000</td>
</tr>
<tr>
<td>Totals:</td>
<td>$4,800</td>
<td>$3,400</td>
<td>$2,900</td>
<td>$2,850</td>
</tr>
</tbody>
</table>

*Applied behavior analysis test may be performed for some children in grades 3-6 as those on the autism spectrum may not be diagnosed until 3rd grade.

Additional special education costs continue to decrease as a student advances from junior to senior high school. It is the District’s goal to educate students either in regular or in special education settings, so that each student becomes an independent learner and a self-sufficient, productive member of society.

**Observations and Recommendations**

While the hypothesis that more intense and frequent evaluations of a student at an early learning stage should reduce the costs associated with that student later appears to be valid, the hypothesis must be supported by evidence through evaluations of our own school district data or a comparison with other school districts. Only through objective analysis of the data can we be certain that the additional investment in evaluation and teaching has the anticipated positive impact.

In a comprehensive report commissioned by the Australian Government, the efficacy of early childhood interventions was examined. The study was primarily based on reviews of programs previously conducted. Early childhood interventions were defined as public programs that attempt to improve child health and development during the period from conception to six years of age.

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Systematic reviews showed that a significant proportion of well-designed early childhood interventions yielded positive and substantial short-term outcomes, with cognitive effects typically diminishing over time but positive effects on crime rates and employment being evident. It was emphasized that without appropriate interventions at other crucial developmental stages, children will not be safeguarded from problems in the years to come. The cost benefit analyses were largely inconclusive as confounding factors were hard to control. In the context of special education, it was argued that if early childhood interventions can avoid the need for special education services at school, and help children get along better with peers, then they are deemed successful, despite their lack of long-term improvements in cognitive skills. One of the findings of the Chicago Child-Parent Center program was that the intervention group was less likely to have received special education by age 18 (14.4% vs. 24.6%).

Cohort B

Table 5 summarizes special education costs for a student whose educational needs cannot be met in district, but instead can be met through one of the special education collaboratives to which the District belongs. Most students in this cohort are placed into the CASE (Concord Area Special Education) Collaborative. Currently CASE charges each of its member districts approximately $35,000 per student annually (for FY09 it will be $42,550) regardless of the actual cost of the program in which each student enrolls. Depending on the type of special education services provided, other collaboratives charge from $27,000 to as much as $68,000 per student. Administrative support expenses per student are high compared to those for in-district students. According to Pupil Services, even though the Districts do not directly provide services for students in this cohort, its staff provide oversight, monitoring, and liaison work with parents as, and we place a high priority on school-parent relationships. Whether such expenses can be reduced while maintaining program effectiveness remains to be seen.

Transportation services are provided by CASE for students attending its own collaborative programs, as well as for students who attend other out-of-district schools. Transportation costs are considerably higher for students in secondary schools primarily, per Pupil Services, attributable to multiple trips needed for each student. These trips are generally within Acton and Boxborough, and pertain to transitions and employability training programs that are necessary to promote self-advocacy and independence.

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Table 5: Costs Associated with a Student in Cohort B

About 5% of school district special education students belong to this cohort. Their needs can be met through one of the collaboratives, such as CASE.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Evaluation*</th>
<th>Tuition</th>
<th>Support</th>
<th>Transp.</th>
<th>CB Reimb#</th>
<th>Total</th>
<th>Cost Above Reg. Ed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>$ 4,800</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 50,025</td>
<td>$ 41,628</td>
</tr>
<tr>
<td>1</td>
<td>$ 4,800</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 50,025</td>
<td>$ 41,628</td>
</tr>
<tr>
<td>2</td>
<td>$ 4,800</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 50,025</td>
<td>$ 41,628</td>
</tr>
<tr>
<td>3</td>
<td>$ 3,400</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 48,625</td>
<td>$ 40,228</td>
</tr>
<tr>
<td>4</td>
<td>$ 3,400</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 48,625</td>
<td>$ 40,228</td>
</tr>
<tr>
<td>5</td>
<td>$ 3,400</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 48,625</td>
<td>$ 40,228</td>
</tr>
<tr>
<td>6</td>
<td>$ 3,400</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$ 8,000</td>
<td>(975)</td>
<td>$ 48,625</td>
<td>$ 40,228</td>
</tr>
<tr>
<td>7</td>
<td>$ 2,900</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,825</td>
<td>$ 43,022</td>
</tr>
<tr>
<td>8</td>
<td>$ 2,900</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,825</td>
<td>$ 43,022</td>
</tr>
<tr>
<td>9</td>
<td>$ 2,850</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,775</td>
<td>$ 42,972</td>
</tr>
<tr>
<td>10</td>
<td>$ 2,850</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,775</td>
<td>$ 42,972</td>
</tr>
<tr>
<td>11</td>
<td>$ 2,850</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,775</td>
<td>$ 42,972</td>
</tr>
<tr>
<td>12</td>
<td>$ 2,850</td>
<td>$ 35,000</td>
<td>$ 3,200</td>
<td>$12,700</td>
<td>(975)</td>
<td>$ 52,775</td>
<td>$ 42,972</td>
</tr>
</tbody>
</table>

*Evaluation costs are incurred only once every three years. See Table 4 for a breakdown of the cost.

#CB Reimb: Circuit breaker reimbursement from state. Approximately equal to 75% of tuition cost beyond $33,700. See Table 3 for regular education costs.
Several school districts reported that, in addition to OOD expenses, in-district special education program costs could also be offset, in part, through the State’s so-called “Circuit Breaker” legislation. This special education reimbursement program was enacted in 2000 and first implemented in fiscal year 2004. School districts are reimbursed by the State for expenses related to excessive costs for special needs students that are based on the prior fiscal year’s eligible expenses, which sometimes causes a cash shortfall in a given year. Currently, the reimbursement rate is 75% of eligible expenses above the threshold amount of $33,700. Tuition charged by collaboratives and out of district schools are examples of expenses eligible for reimbursement, while transportation of students to and from schools is not part of the Circuit Breaker plan.

Cost Structure of Collaboratives

The pricing structures of most collaboratives, and in particular CASE, were determined prior to the establishment of the “circuit breaker” legislation. The Acton and A-B school districts, along with other CASE member towns, should re-examine the cost accounting strategy and methods used for the overall program, as well as for individual programs. Special education programs in a collaborative are generally housed in a member town’s school facility. The cost of the building space (as a percentage of debt service, for example), utilities, cleaning services, and routine maintenance cost should all be accounted for as part of the program cost. If a member district receives proper cost reimbursement from the collaborative for its contribution of available space, more member districts will make a greater effort to identify available space for future special education program development.

Several special education programs are offered at each collaborative. For example, CASE programs are for students 3-22 years old who are developmentally delayed, hearing, speech and language impaired, and emotionally challenged. Current practice is to pool all expenses and calculate an overall average program cost per student, which is charged to each member town. Given that the average cost typically has been about the same as the circuit breaker threshold (approx. $35K), it will benefit all member districts that, instead, actual costs are charged for each student and each program. Table 6 provides an illustration of the advantage of distinct program pricing for APS, as an example, under the following scenarios:

- Four students are enrolled in a program that costs $20,000 each.
- Four students are enrolled in a program that costs $35,000 each.
- Four students are enrolled in a program that costs $50,000 each.

We note that the average cost for these twelve students would remain the same as before ($35,000). As illustrated, the cost savings for the district would be approximately $3,425 for each student every year, which equates to over $40,000 annually for twelve. So, if the collaborative charged actual program cost
for each of the 12 students at differentiated rates, instead of using an overall average program cost, this will translate to a total cost reduction of $287,700 over the seven years of the twelve APS students’ academic lives. Similar cost savings can be achieved for Grade 7-12 students, using the recommended actual program cost model. The availability of circuit breaker reimbursement is the key driver for these cost savings which can be realized by all CASE member districts, and likely other collaboratives.
Table 6: A Comparison of Total Net Tuition Cost to the District for 12 CASE Students Under the Current Average Price Model and Proposed Actual Price Model

<table>
<thead>
<tr>
<th>Student Count</th>
<th>Tuition Cost Per Student</th>
<th>Total Net Tuition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CASE Tuition</td>
<td>CB Reimb#</td>
</tr>
<tr>
<td>Under Average Price Model ($35,000 per student per year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>$35,000</td>
<td>$(975.00)</td>
</tr>
<tr>
<td>Under Actual Price Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$20,000</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>$35,000</td>
<td>$(975.00)</td>
</tr>
<tr>
<td>4</td>
<td>$50,000</td>
<td>$(12,225.00)</td>
</tr>
<tr>
<td>12</td>
<td>$367,200</td>
<td></td>
</tr>
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</table>

Net Savings Per Year Per Student $3,425

#CB Reimb: Circuit breaker reimbursement from State. Approximately equal to 75% of tuition cost beyond $33,700.

Cohort C

Table 7 summarizes the special education costs for students in Cohort C - private, out of district placements, which generally carry the highest per student cost among all special education services. A student is placed in a private out-of-district program (such as all day or residential program) if the student’s needs cannot be met through in-district or collaborative programs. The students in this cohort usually receive on average one additional intensive evaluation before, during, or when transitioning back from out of district. The purpose of this evaluation is to identify the measurable gains of the student, to determine future needs, and to plan specifically what is needed for content mastery. As the child moves to higher grades, the number of evaluations decreases as record reviews or clinical assessments can be used.

A typical OOD tuition is about $60,000, ranging from a low of $26,000 to a high of $120,000 for day programs, and as high as $276,000 for residential programs. Because of circuit breaker reimbursement, the net increase to the District for these OOD costs was not as high as the net increase in tuitions. Support and administrative costs remain the same as those for students in collaboratives. Transportation is generally provided by CASE. Factors affecting these costs are distance to the school site from the student’s home and the number of children sharing the ride.
Table 7: Costs Associated with a Student in Cohort C

About 7% of school district special education students belong to this cohort. Their needs can only be met through out-of-district, private day or residential programs.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Evaluation*</th>
<th>Tuition</th>
<th>Support</th>
<th>Transp. &amp; CB Reimb</th>
<th>Total</th>
<th>Cost Above Reg. Edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>$5,800</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$63,065</td>
</tr>
<tr>
<td>1</td>
<td>$5,800</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$63,065</td>
</tr>
<tr>
<td>2</td>
<td>$4,400</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$61,665</td>
</tr>
<tr>
<td>3</td>
<td>$4,400</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$61,665</td>
</tr>
<tr>
<td>4</td>
<td>$4,400</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$61,665</td>
</tr>
<tr>
<td>5</td>
<td>$4,400</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$61,665</td>
</tr>
<tr>
<td>6</td>
<td>$4,400</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$13,790</td>
<td>$(19,725)</td>
<td>$61,665</td>
</tr>
<tr>
<td>7</td>
<td>$3,900</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,251</td>
</tr>
<tr>
<td>8</td>
<td>$3,900</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,251</td>
</tr>
<tr>
<td>9</td>
<td>$3,850</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,201</td>
</tr>
<tr>
<td>10</td>
<td>$3,850</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,201</td>
</tr>
<tr>
<td>11</td>
<td>$3,850</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,201</td>
</tr>
<tr>
<td>12</td>
<td>$3,850</td>
<td>$60,000</td>
<td>$3,200</td>
<td>$9,876</td>
<td>$(19,725)</td>
<td>$57,201</td>
</tr>
</tbody>
</table>

*Evaluation costs are incurred only once every three years. See Table 4 for a breakdown of the cost.

#CB Reimb: Circuit breaker reimbursement from state. Approximately at 75% of tuition cost beyond $33,700.
The transportation cost is lower for upper grade students because multiple students ride the same vehicle.
CASE Transportation

For fiscal year 2006-2007, the total transportation costs for special education students were $306,000 and $599,000 for APS and ABRSD, respectively. On a per student basis, the transportation costs were $747 for APS and $1,508 for ABRSD. These amounts each exceeded by a factor of 6 to 9 times the costs for regular education transportation ($112 per student at APS and $171 per student at ABRHS). Most of the special education transportation services were provided through CASE. Some school districts, such as Westford, find running their own special education transportation system to be more controllable and cost-effective than using that provided by collaboratives.

A brief discussion with CASE Executive Director Teresa Watts suggested that no objective criteria were in place to measure the efficiency of CASE transportation, in terms of its route planning and scheduling. While there is every reason to believe that the administrative staff at CASE has strived to provide the most efficient services for its member districts, lack of measurable metrics prevent any meaningful assessment of this important service. It is recommended that the member school districts, through their representatives to CASE, advocate for accountability of the transportation services provided by the collaborative. Initial assessment of the transportation route planning and scheduling efficiency can be achieved using a straightforward metric, such as the actual mileage traveled calculated as a percentage of individual student travel needs (usage percentage). This would measure how closely the actual transportation service is to a dedicated transportation service. If the percentage approaches 100%, it implies that the efficiency is low.

To illustrate, we use the following example, illustrated in Figure 4 below. The travel needs of four individual students to get them to school, in the least efficient scenario, are 2*4 (for student A) + 2*3 (student B) + 2*5 (student C) + 2*2 (student D) = 28 miles. If a bus is routed in such a way that it goes from School to House A to House B, and back to School as one route, and from School to House C to House D to School as another route, then the total mileage driven for these two routes is 26 miles: (4+6+3) + (2+6+5). Therefore, the usage percentage for this bus route plan is 26/28 = 93%. On the other hand, if the bus travels from School to House B to House C to School and from School to House A to House B and then to School, the total mileage would be (3+2+5) + (4+5+2) = 21 miles. The corresponding usage percentage of the most efficient of these three routing scenarios would be 21/28 = 75%. Once the usage percentage is benchmarked, yearly bus route improvements can be measured with a goal of lowering the usage percentage.
Figure 4: An Illustration Assessing Transportation Route Efficiency
Numbers between houses are distances in miles.
SECTION III: SPED Cross-School Data Analysis

In reviewing the previous SPED Financial Task Force Report8 dated October 2003, we discussed the various charts comparing data across numerous school systems. We think the purpose of revisiting this data is two-fold: 1) to understand how the Acton Public (APS) and Acton-Boxborough Regional Schools (A-B) are doing relative to other schools in terms of Special Education expenditures, and 2) to determine if there were differences in the data that would point to areas that could be explored for possible improvements going forward.

Some of the data reviewed included the percentages of school populations in SPED placements, and the split between In District and Out of District (OOD) placements. Separately, we gathered and compared data on SPED costs/student. We decided to not calculate SPED costs as a percentage of overall school budgets, since that number is affected not only by the percentage of the student population in SPED and the SPED $/student, but also by the dollars spent per student for each school system. Thus, we felt that comparison did not provide additional value.

In order to assist the reader in comparing similar school populations, and due to the split between the Acton Public (K-6) and the Acton-Boxborough Regional Schools (7-12), we have organized the graphs so that the schools on the left of the graph are K-6, the middle group K-12, and the schools on the right are 7-12. We also combined figures to create three “additional schools”: 1) AB K-12, 2) Concord-Carlisle K-12, and 3) Lincoln-Sudbury K-12, in order to provide fair comparisons with other K-12 school districts.

Also, similar to the initial report, we generated graphs for all of the schools in the CASE collaborative, EDCO schools, and two other groups, which we refer to as Groups I and II. Group I schools were identified as “comparable communities” based on “1999 Income per Capita, 2000 U.S. Census, 2000 Equalized Property Valuation per Capita, FY02 Operating Budget and FY02 Foundation Enrollment.”9 Group II schools “refers to some towns who spend less of their budgets on special education costs than the State average, and less than Acton and Acton-Boxborough.”10

8 “A Look at the Costs and Drivers of Special Education”, October 2003
9 ibid, page 14
10 ibid, page 31
The schools in Group I are:

Acton Lincoln-Sudbury
Acton-Boxborough Marblehead
Canton Middleborough
Concord Sandwich
Concord-Carlisle Wilmington
Hingham Winchester
Lincoln

The Schools in Group II are:

Acton Needham
Acton Boxborough Scituate
Dover Westford
Masconomet Weston
Medfield

School Population Analysis

The data used for this analysis is reported by all Massachusetts school districts to the Massachusetts Department of Elementary and Secondary Education (DOE), and then made available on the State’s website: [http://www.doe.mass.edu](http://www.doe.mass.edu).

While it is likely that there may be some differences in reporting among districts, we assume that the data is generally comparable and accurate. The data reported to the State by each school district lists the number of students in the following categories (definitions provided by the DOE):

1. Total Student Population
2. Total SPED Student Population
3. Full Inclusion (Services outside classroom less than 21%)
4. Partial Inclusion (Services outside classroom 21% to 60%)
5. Substantially Separate (Substantially Separate Classroom - Services > 60%)
6. Public Day
7. Private Day
8. Private Residential
9. Homebound/Hospital
10. Public Residential
Overall SPED Rates

The first set of data we examined was the percentage of the total school population in SPED placements. While APS and A-B have slightly lower percentages of students in SPED programs than the State average, there are a number of school systems with lower rates. The table below shows the percentages of the student population in SPED programs for APS, A-B, “AB K-12” and the State Average:

Table 8: SPED Placements as a Percent of Student Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acton</td>
<td>14.11%</td>
<td>15.38%</td>
<td>16.31%</td>
<td>15.64%</td>
</tr>
<tr>
<td>Acton-Boxborough</td>
<td>14.66%</td>
<td>14.53%</td>
<td>14.27%</td>
<td>13.53%</td>
</tr>
<tr>
<td>AB K-12</td>
<td>14.16%</td>
<td>14.61%</td>
<td>14.85%</td>
<td>14.67%</td>
</tr>
<tr>
<td>State Average</td>
<td>15.57%</td>
<td>15.90%</td>
<td>16.35%</td>
<td>16.68%</td>
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The following graphs show the overall SPED rate for the four groups of schools previously described – CASE, EDCO, GROUP I and GROUP II.
Figure 5

Overall SPED Rate - CASE Schools

Y-axis: 0% - 25%
Bars indicate different years' data for each school.
Figure 8

Overall SPED Rate - Group II Schools
In-District and Out-of-District Ratios

The previous SPED report highlighted that in-district programs are a more economically effective way to serve the needs of many students. After checking with the DOE on their definitions, we used the data reported to the state as “Full Inclusion”, “Partial Inclusion”, “Substantially Separate” and “Homebound/Hospital” to represent in-district programs. The Out of District (OOD) values include data reported in the categories of “Public Day”, “Private Day”, “Private Residential” and “Public Residential”.11

These graphs show that Acton is providing services to SPED students through in-district programs at a similar or higher ratio to that of other similar schools, as well as state averages. For the four years shown, the APS average of SPED students in in-district programs is 98.6%, higher than any other school we reviewed, while the State average is 93.6%. For regional schools, Acton-Boxborough has a four-year average of 90% in-district, compared to 82% and 88.8% for Concord-Carlisle and Lincoln-Sudbury, respectively.

The differences between schools, and variations between different years for a school, stand out more when we look at the OOD ratios, so we have chosen to include only the Out of District graphs.

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11 It appears that in the State reports we reviewed, figures for CASE students were included in the “Substantially Separate” category, and thus were treated by the Commonwealth as in-district expenditures. In some internal/public records and presentations to the APS and A-B School Committees, CASE students are represented as part of the Out of District population. Thus, there may be discrepancies when comparing numbers in this report with Acton's and A-B's "public" materials. We have made the assumption that the Commonwealth collects information from different school districts in a consistent fashion, and thus have chosen to use their definitions when comparing school districts.
Figure 9

Out of District Ratios - CASE Schools
Figure 10

Out of District Ratios - EDCO Schools

[Bar chart showing out of district ratios for various districts over different years.]
Figure 11

Out of District Ratios - Group I Schools

2003-2004
2004-2005
2005-2006
2006-2007
Figure 12

Out of District Ratios - Group II Schools

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<td>Dover</td>
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<td>Medfield</td>
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<td>Needham</td>
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<td>Weston</td>
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<td>Acton-Boxborough</td>
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<td>Masconomet</td>
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<tr>
<td>State Average</td>
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Comparative Costs of Special Education

In addition to gathering data on the number of students by placement, we then examined the SPED expenditures. The following two figures show the breakout of the various components of the APS and ABRSD SPED expenditures.

**Figure 13**

**SPED Expenditures by Category, Acton Public Schools FY08**

- **Teaching** $3,308,502
- **Textbooks (instructional equipment)** $55,708
- **Tuition Private Schools** $1,018,411
- **Tuition Collaboratives** $619,173
- **Federal grant expenditures** $545,841
- **Legal** $14,951
- **Supervisory** $143,311
- **Transportation** $284,716
- **Guidance** $7,523
- **Psychological** $4,088
- **Total Tuition Payments:** $1,637,584
- **Total SPED Expenditures:** $6,002,224 (with Transportation)
We also reviewed data from the State web site to analyze costs that each school district reports for SPED programs. The data available includes expenditures reported in these categories:

- In-District – Teaching
- In-District – Other Instructional
- OOD – Mass Public Schools and Collaboratives
- OOD – Mass Private and Out of State Schools

We used this data, in conjunction with the student counts previously discussed, to calculate cost per SPED student for in-district and OOD placements. We did not calculate “State Average” numbers, because there were some differences between the number of schools on the two lists, and it appeared that the total dollars on one list didn’t represent the SPED costs for the total number of students on the other list.

12 It should be noted that even though the first category of expenditures is labeled “Mass Public Schools and Collaboratives”, from what we have been able to determine as described earlier, Acton’s CASE expenditures are not included in this figure. In that sense, these expenditures are consistent with the student counts given above, where CASE students are included in the in-district figures.
Average SPED Cost per Student

The following charts show the total amount of SPED dollars divided by the total number of SPED students, producing an overall average of SPED dollars spent per SPED student. APS compares favorably with other K-6 systems, though Lincoln is slightly lower. Amongst regional schools, A-B compares favorably with Concord-Carlisle and Nashoba, but is higher than Lincoln-Sudbury and Masconomet. “AB K-12” is higher than many other K-12 schools, which may partially be due to the fact that Boxborough’s cost per student is higher than other K-6 schools, so when combining Acton, Boxborough and A-B, this would increase slightly the overall number.
Figure 15

Average SPED $/Student - CASE Schools
Figure 16

Average SPED $/Student - EDCO Schools
Figure 17

Average SPED $/Student - Group I Schools

- Acton-Concord
- Lincoln
- AB K-12
- CC K-12
- LS K-12
- Canton
- Hingham
- Marblehead
- Middleborough
- Sandwich
- Wilmington
- Winchester
- Acton-Boxborough
- Concord-Carlisle
- Lincoln-Sudbury

- 2003-2004
- 2004-2005
- 2005-2006
- 2006-2007
Figure 18

Average SPED $/Student - Group II Schools

[Bar chart showing average SPED spending per student for various schools over different years.]

44
In-District SPED Cost per Student

The four-year average of in-district costs per student for APS were lower than most all other K-6 schools, while the in-district costs per student for the Regional schools were also lower than other similar school populations. “AB K-12” appears to be in the middle of the K-12 schools, though there are definitely some that are lower.
Figure 19

In-District SPED $/Student - CASE Schools

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<td>AB K-12</td>
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<td>Maynard</td>
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<td>Acton-Boxborough</td>
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<td>Concord-Carisle</td>
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<td>Lincoln-Sudbury</td>
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<td>Nashoba</td>
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</table>
Figure 20

In-District SPED $/Student - EDCO Schools

[Bar chart showing in-district special education costs per student for various schools over different years (2003-2004 to 2006-2007).]
Figure 22

In-District SPED $/Student - Group II Schools

[Bar chart showing data for different schools and years]
On average, the data above shows that for K-12 comparisons, the following districts consistently spend less per student for in-district placements than “AB K-12”.

Among EDCO districts: Arlington, Bedford and Belmont; in Group I: Canton, Middleborough and Sandwich; and in Group II: Medfield.

Out-of-District SPED Cost per Student

The majority of OOD Acton placements are Private Day School programs. Other towns have some distributed placements across other categories, including Private Residential, which should typically be more expensive. Two figures are included to show this – one showing the Acton OOD placements over four years, and the other showing the OOD placements for the CASE schools for 2006-2007. (We chose to not show all four years for all four groups of schools – but just the two samples to demonstrate the point.)
Figure 23

Acton Schools OOD Placements 2003 - 2007

- Public Residential
- Private Residential
- Public Day
- Private Day
We also reviewed the placements by disability, provided by Liza Huber, as shown in this table for 2006-2007.

**Table 9: OOD Placements by Disability 2006-2007**

<table>
<thead>
<tr>
<th>Disability</th>
<th>ABRSD</th>
<th>APS</th>
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<tbody>
<tr>
<td>Multi-handicapped</td>
<td>12 (15.8%)</td>
<td>4 (14.8%)</td>
</tr>
<tr>
<td>Autism Spectrum Disorders</td>
<td>13 (17.1%)</td>
<td>9 (33.3%)</td>
</tr>
<tr>
<td>Serious Emotional Impairment</td>
<td>35 (46.0%)</td>
<td>3 (11.1%)</td>
</tr>
<tr>
<td>Severe Intellectual Impairments</td>
<td>10 (13.2%)</td>
<td>7 (25.9%)</td>
</tr>
<tr>
<td>Unusual Circumstances</td>
<td>6 (7.9%)</td>
<td>4 (14.8%)</td>
</tr>
<tr>
<td>Total OOD Student Placements</td>
<td>76</td>
<td>27</td>
</tr>
</tbody>
</table>

While we did not have access to this type of data from other school districts, the increase in serious emotional impairments as a percentage of OOD students was a notable difference between APS and ABRSD, and suggests an opportunity to explore options to address the need of this segment of special education students at the ABRSD where there is a substantially higher number.

In looking at the data for OOD Special Education costs\(^\text{13}\), we understand that there can be significant differences within a district from year to year, and also between school systems, due to the wide variation in costs for different OOD placements. That said, in reviewing these graphs, in general, both APS and A-B OOD costs per student are higher than comparable schools. One possible explanation is that Acton and A-B have placed more students in in-district programs, so that their OOD placements are those which require more intensive, and hence, more expensive services. This explanation is supported by the relatively high percentage of SPED placements that are in-district, as described on page 333 of this report.\(^\text{14}\)

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\(^\text{13}\) According to the Commonwealth’s information, these figures do not net-out any circuit breaker reimbursements, and thus represent the full cost for the OOD students.

\(^\text{14}\) There is also information that, while CASE students do not seem to be included in the State’s OOD student counts, in some years the CASE costs may have been included in OOD expenses, so the APS and A-B cost per OOD student may appear to be higher than they really were. We could not reconcile data for all schools, so we chose to use the State data as the most consistent. Recommendations are based upon conversations with other schools, and not solely on the data.
Figure 25

OOD SPED $/Student - CASE Schools

Figure 26

OOD SPED $/Student - EDCO Schools

- Acton-Boxborough
- Canton
- Concord
- Lincoln
- Sudbury
- AB K-12
- CC K-12
- LS K-12
- Arlington
- Bedford
- Belmont
- Brookline
- Lexington
- Newton
- Waltham
- Watertown
- Weston
- Winchester
- Acton-Boxborough
- Concord-Carlisle
- Lincoln-Sudbury

- 2003-2004
- 2004-2005
- 2005-2006
- 2006-2007
Figure 27

OOD SPED $/Student - Group I Schools

- Acton
- Concord
- Lincoln
- AB K-12
- CC K-12
- LS K-12
- Canton
- Hingham
- Marblehead
- Middleborough
- Sandwich
- Wilmington
- Winchester
- Acton-Boxborough
- Concord-Carlisle
- Lincoln-Sudbury

- 2003-2004
- 2004-2005
- 2005-2006
- 2006-2007
Summary of School Interviews

Given the data above, it is clear that certain communities consistently spend considerably less per OOD placement than APS and A-B. In particular, among CASE schools: Harvard and Maynard in EDCO: Belmont and Lincoln-Sudbury, in Group I: Hingham, Marblehead, Middleboro, Sandwich and in Group II: Medfield, Needham, Westford and the Masconomet School District. In addition, some districts consistently had lower in-district costs per special education student compared with APS, A-B, and “A-B, K-12”, including Arlington, Bedford, and Canton, so given the potential financial impact we felt it was important to contact as many of these districts to determine if APS and A-B special education expenses could be lowered.

Thirteen of these fifteen districts were interviewed by telephone and email to try to determine reasons for this phenomenon. Some of the consistencies we discovered when communicating with these districts’ special education directors were:

1) A clear emphasis on regular and independent reviews of SPED finances, particularly OOD costs. These meetings range from informal daily meetings to formal meetings quarterly with the district’s financial officer or business manager to analyze spreadsheets while searching for possible cost-savings.

2) Strategic use of outside consultants to provide specific services, such as tutoring and occupational therapy. This expertise can then readily be released when such services are no longer required or demand for such was reduced, as opposed to eliminating permanent staff on the payroll, which is always difficult. One Special Ed director we spoke with stated (paraphrased): “Contractual services are worth looking into. We have 527 kids in Special Ed; a few hundred are serviced by spending $400K with outside contractors. This equates to roughly 5 FTEs with benefits! It has been our District’s model for many years (before I arrived) and it seems to help us keep our costs down.”

3) A number of districts mentioned their proximity and easy access to low cost resources e.g., Learning Prep charges approx. $28k per student per year; READS Collaborative, approx. $24K. Either the school liaison, or principals in elementary schools, frequently chair IEP meetings, which limits or eliminates central office overhead and provides more personalized services by professionals who are very familiar and interact daily with the child.

4) A number of districts suggested we look closely at why kids are in residential and day placements, and review bi-weekly as to determine if there’s a chance for them to transition back. Though comparative data by disability was not acquired from many districts, we did note that “A-B, K-
12" had approximately 2% of its total student population in OOD placements (103:5544) for 2006-2007, compared with Medfield with half that rate (31:3076), which is roughly 1%. To assist with the transition back from hospitalization or other residential placements, some districts provide in-house therapeutic supports, including social workers, psychologists and guidance counselors who work closely with these kids so they don’t have to return to OOD. Another interesting approach is to offer a course in the Psychology curriculum that helps kids identify their own triggers that cause them to need hospitalization. This way, kids can learn to manage their emotions in the regular school setting.

5) Another “best practice” many districts employ is an open and collaborative relationship with their SPED PACs. One long-standing SPED Director stated: "I'd never miss a meeting with the SPED PAC; it’s important that the SPED PAC be committed to programming, not complaining." Others have “an excellent relationship; I attend the first and then a few other meetings during the year, or when anything is new”.

6) Finally: “We don’t look at existing programs; we look at kids’ needs first. Internal programs are designed, as needed. We are watching costs constantly; we are now analyzing every kid and their IEPs...our culture is not to over refer kids to SPED (only 9.9%). Principals understand it’s there for kids that need it and they (principals) sit in on teacher support teams, as well as evaluations. I bring to their attention any blip in numbers, and report by grade, from pre-K, K-1, 2-3, etc.”
Concluding Remarks

The key recommendations and suggestions throughout the report are consolidated in the executive summary – so there’s no reason to repeat them here. What is worth noting is that while the charter of this Task Force was to concentrate on the financial aspects of special education, those aspects cannot be viewed in a vacuum.

In many situations, there can certainly be tension between a desire to reduce costs and the needs to properly fulfill the responsibility that the schools have to educate all students. In this case, we feel that there are some suggestions where more efficient use of resources is actually in concert with providing a higher level of assistance to students and their families. For example, intervention at an early age, as was suggested in the initial report, is often more economical in the long run and does a better job of addressing student needs. Providing more services in-district can also provide a win-win for all involved.

Similarly, recommendations to review financial aspects of SPED on a regular basis may identify ways to more effectively use limited resources. Use of technology in the IEP process can reduce staff time requirements as well as streamline the process for students and parents, mitigating parents’ frustration and perception of the schools being unresponsive. Earlier recognition of psychological and emotional needs may allow for effective assistance being offered sooner, while sometimes avoiding out of district costs.

We encourage all parties involved – school officials, teaching staff, parents and the collaboratives to be open, honest and respectful in their communications about these, and any other ideas as they work together to meet the needs of all students, and the community as a whole.
Appendix A

“A Primer on Financial Aspects of Special Education” reprinted from City and Town with permission from the MA Dept of Revenue (Volume 21, No. 8 September 2008)
Appendix B

Federal and State Assumptions

“Givens”

• **NCLB** (No Child Left Behind) ensures that all children have a fair, equal, and significant opportunity to obtain a high-quality education.

• **Section 504** is a Civil Rights Law. It protects individuals with disabilities from discrimination for reasons related to their disability. Children who receive special education services are automatically covered under 504 (but not the reverse).

• **ADA (American with Disabilities Act)** and **Section 504**: No qualified person with a disability, shall, by reason of such disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

• **IDEA (2004)** added new language about meeting the “developmental goals” and “challenging expectations that have been established for non-disabled children” so children will “be prepared to lead productive and independent adult lives”.

• Eligibility for special education requires written documentation of a disability AND evidence for lack of effective educational progress as well as the need for specially designed instruction to make progress.

• **IDEA (2004)** - A child may only be removed from the regular educational setting if the nature or severity of the disability is such that the child cannot be educated in regular classes, even with the use of supplementary aids and services. Schools are required to educate children with disabilities with children who are not disabled, “to the maximum extent appropriate”.

• Procedural Safeguards (due process) is guaranteed under the IDEA to ensure that the rights of children with disabilities and parents are protected.

• **IDEA** guarantees **FAPE** (free and appropriate public education), an individualized program that is reasonably calculated to provide an educational benefit to a child and an opportunity for the parent/guardian to participate in the process.

• **NASDSE (National Association of State Directors of Special Education)** - IDEA establishes a clear preference that students with disabilities will be educated with their peers who do not have disabilities, and, a clear expectation that students with disabilities have meaningful access to the general education curriculum.

• Congress intended to make IDEA as consistent as possible with No Child Left Behind (NCLB), with the focus on outcomes, results, research, data, and Annual Yearly Progress (AYP). Many NCLB requirements have been incorporated into the IDEA and students with disabilities are an important subgroup of NCLB.

Information derived from the following sources:
Current Drivers in Special Education

“Changeables”

1. Inclusive Practices
Probable Course of Action:
Continue to support, train and mentor regular education staff with current inclusionary practices, and remedial and differentiated instruction.

2. Referral System
Probable Course of Action:
Examine and monitor the frequency (how many) of referrals from classrooms, grades, houses, etc., the rate (how often), and duration of services (how long), based upon newly designed roles in consultation to the regular education teacher.

3. In-District Delivery of Programs
Probable Course of Action:
Based upon study, alignment, and possible restructuring, create additional, cost effective, in-district programs.

4. In-District Delivery of Services (1:1 programming, etc.)
Probable Course of Action:
Systematically study continuum of current services within the public school setting (internal) and identify creative alternatives.
Compare and contrast best practices from other school districts.

5. Out-of-District Placements
Probable Course of Action:
Analyze programs in out-of-district placements and chart similar needs; discuss the transition of selected students to cost effective in-district programs.
Evaluate children with input from parents and teachers for appropriate transition, i.e., curriculum materials and readiness.
Actively support the probability of new legislation regarding an increase in circuit breaker formula for extraordinary needs, including transportation.

6. Legal Fees
Probable Course of Action:
Continue to enhance school-home feedback sessions and educational opportunities within the school-home partnership which would dissipate the need for third party intervention.
Appendix C

Graphs Updated with Information from 2007-2008 School Year (when available)