Analysis of New Jersey's Census-Based Special Education Funding System

Prepared for the

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Contents

I. Introduction

This report summarizes the work done by Augenblick, Palaich and Associates (APA) for the New Jersey Department of Education (DOE) in undertaking a study analyzing New Jersey's census-based special education funding system.

As part of the School Funding Reform Act of 2008, New Jersey changed how special education was funded. Prior to 2008, special education students in New Jersey were funded based on their level of need. Each student was placed into one of four need tiers, with higher per pupil funding associated with the higher need tiers. A study done in 2003 by Center for Special Education Finance (CSEF) showed that New Jersey had higher per pupil spending for special education than the national average. [1] The study suggested switching to a census-based special education funding model might help New Jersey control its spending. In 2008, the state made the switch to a census-based model.

Under a census-based funding model all districts are funded for the same percentage of special education students. For the 2008-09 through 2010-11 school years the funding percentage was 14.69%. (This percentage does not include students receiving only speech services, who are funded separately.) Each district's special education funding, excluding extraordinary aid[2], is calculated by multiplying the district's resident student population by 14.69% to determine the number of special education students to fund. This funded count is then multiplied by the special education per pupil funding amount to determine the total special education funding allotted to the district. The new system then wealth equalizes two thirds of this amount, splitting it up into a state and local share, and then funds the remaining third entirely from the state. Wealth equalization is a process commonly used in school funding formulas that determines what percentage of funding the state pays based inversely on the relative wealth of each individual district (the wealthier the district, the lower percentage the state pays). It is important to note that districts also receive extraordinary aid for special education students who are extremely expensive to serve. This aid is beyond the basic special education funding.

When this funding structure change was put into law a review of its impact was mandated. In the spring of 2010 the DOE released a Request for Qualifications (RFQ) to undertake the study of the impacts of the change with the specific mandate to the commissioner for "an independent study of the special education census funding methodology to determine if adjustments in the special education funding formulas were needed in future years to address the variations in incidence of students with severe disabilities requiring high cost programs and to make recommendations for any such adjustments."[3] It is important to keep in mind that the study was not meant to look at the appropriateness of the total level of special education funding in the state. APA replied to the RFQ and was awarded the contract in September of 2010 to undertake the study.

[1] Page 2 of the "Special Education Funding" RFQ
[2] The state reimburses districts for a portion of the costs of a child with extraordinary needs. This is defined as a student whose education costs exceed $40,000.
[3] Page 3 of the "Special Education Funding" RFQ

APA's proposal created a multi-tiered approach to examining the questions raised in the RFQ. The main focus was to identify those disability categories that carried high costs to districts but that generally occurred at a low incidence level. Once those categories were determined, APA proposed to identify districts that had higher than normal rates of these disability categories and to assess what impact the new funding system was having on these districts. Once the impact of the new system was understood, in relationship to these high cost-low incidence categories, recommendations would be made.

APA proposed to undertake a number of tasks as part of the study, which included:

1. Creating a comprehensive district-level database of special education counts and financial data;
2. Reviewing the research literature about which disability categories are high cost and low incidence;
3. Reviewing a few other states' special education funding systems and how they account for high cost, low incidence categories;
4. Identifying the low incidence, high cost special education categories using information gleaned from the literature and state reviews and the analysis of the comprehensive database;
5. Conducting two sets of interviews with district representatives -- the first focused on broad questions about the new system and the second more targeted to the specific high cost, low incidence categories;
6. Making recommendations based upon the findings of the literature and state reviews, the data analysis and the interviews.

This report discusses each of these tasks in detail and concludes with recommendations.

II. Comprehensive Database

APA's proposal focused on having a data-driven approach for the study of New Jersey's change to a census-based special education funding system. In order to undertake this approach a district-level database needed to be created. The original response to the RFQ from APA indicated that the full work of the study could not be undertaken until the needed data had been collected by APA with the help of the DOE.

As soon as the project started, a data request was made to the DOE for the needed data. The request included data for each district on:

- Number of students in each disability category;
- Number of students in each disability by type of placement;
- Age range, grade level range or school level of students;
- Special education revenues by source (state, local, and federal);
- Special education expenditures;
- Demographic data including enrollment, number of students eligible for free and reduced price lunch, and number of English language learners;
- Grade span of the district;
- Information on the wealth of the district, such as property value per student; and
- Information on the location of the district (rural, urban or suburban).

The data was requested for the 2007-08 and 2008-09 school years, which were the last year of the old special education funding system and the first year of the new funding system.

APA personnel made a trip to NJ to meet with department staff to finalize the request and to understand the different data that were available.

It became clear early in the data collection process that not all needed data was readily available. What was easy to obtain included basic demographic data, such as resident and attending enrollments, the number of total resident special education students, and the number of free and reduced price lunch students, the number of English language learner students, expenditures, revenues, grade span, and some wealth data. Certain student-level disability information was not possible to obtain. Funding in New Jersey is based on the district of residence of the student. At the same time, the expenditures for a special education student are reported by the district of attendance. This created the need for two different student-level datasets, with one dataset needed to identify students by their district of residence and the other by their district of service.

The belief was that one current data collection, NJ SMART, would provide a student-level database that would include both resident and attendance data for each student. The databases themselves are not

housed within the DOE but rather are housed with a state contractor that manages the data collection and databases. The DOE requested data from the contractor for both years. There was a delay in the start of the work as the DOE and contractor worked to create a database with the specific data points APA needed.

Once the individual student data was received it became apparent that the student level information did not contain the type of resident district information APA had requested. The individual student data provided by DOE included the district of residency based on where the student resides. In some cases this is different from the district that receives state aid and holds financial responsibility for the student. For example, a regional high school district receives state aid as a separate district but the students are recorded as resident enrollment of the respective constituent K-8 districts of the regional district. This wrinkle created difficulties in linking the enrollment data to the financial data. Additionally, the student level data was available for the 2008-09 and 2009-10 school years, not the 2007-08 and 2008-09 school years as the special education data in 2007-08 was not collected in the same fashion.

Despite the limitations of the data described above, APA was able to create a district-level database.

III. Literature Review

Part of APA's study was to undertake a literature review looking at available information on low incidence, high cost categories of special education. Under the Individuals with Disabilities Education Act (IDEA), the United States Department of Education defines a 'child with a disability' as a child who has mental retardation, hearing impairment (including deafness), speech/language, visual impairment, a serious emotional disturbance, orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who as a result, needs special education and related services (Muller & Markowitz, 2004). The most recent data available (2007-08) indicates that among children age 3 to 21, approximately 6,606,000 receive special education services under IDEA (U.S. Department of Education, National Center for Education Statistics, 2009).

Incidence of Disabilities

Using federal data, it is possible to identify the disability categories which occur most frequently and least frequently in students. The most common student disabilities are learning disabilities, comprising 39% of all disabilities, speech/language disabilities, comprising 22% of all disabilities, and mental retardation and emotional disturbances, respectively comprising 7.6% and 6.7% of all disabilities (U.S. Department of Education, National Center for Education Statistics, 2009). The least common student disabilities were visual impairments, with 0.4% of all disabilities, traumatic brain injury, with 0.4%, and deaf-blindness, with a value under 0.0% (U.S. Department of Education, National Center for Education Statistics, 2009). The following table presents the percent of students with disabilities in each disability category in 2007-08.

Disability Category	Percent of Students with Disabilities
Autism	4.5%
Emotional Disturbance	6.7%
Hearing Impairment/Deafness	1.2%
Mental Retardation	7.6%
Multiple Disabilities	2.1%
Orthopedic Impairment	1.0%
Other Health Impairment	9.7%
Specific Learning Disability	39.0%
Speech/Language Impairment	22.0%
Traumatic Brain Injury	0.4%
Visual Impairment/Blindness	0.4%

Source: (U.S. Department of Education, National Center for Education Statistics, 2009)

Defining High Cost Disabilities

IDEA does not explicitly define 'severe', 'high need', or 'high cost' student disabilities. Many states, however, have developed their own definitions, which vary across states (Parrish, Harr, Anthony, Merickel, & Esra, 2003). In a review of rules and regulations in 12 states, one literature review found that nine of the states define a student with disabilities as high-cost once a district's per pupil expenditures for that student surpass a precise dollar amount (Griffith, 2008). This study defined high cost per pupil expenditures as ranging from $10,000 in New York to $50,000 in Vermont. The other three states studied define a student as high cost when the per pupil expenditure for that student surpasses a cost relative to their average general or special education costs (Griffith, 2008). For example, high cost may be defined as '3 times the cost of educating a general education student' (Griffith, 2008).

One of the best sources of expenditure data associated with student disabilities is available from the Special Education Expenditure Project (SEEP), a nationally-representative study conducted by the Center for Special Education Finance. According to one SEEP report, policy makers often use the criterion of "medical" or "non-medical" to distinguish between high cost and/or severe disabilities and those that are low cost and/or not severe (Parrish, Gerber, Kaleba, & Brock, 2000). Severity and cost can also vary as a dimension of a disability category. For example, students with limited hearing impairments typically have less costly, less severe disabilities than those who are completely deaf. Two students with the same disability may receive different levels of services and therefore require very different expenditure levels. Thus, it may not always be appropriate to classify a particular disability as more severe or high cost. Nonetheless, it is possible to identify expenditure patterns associated with different disability categories.

High Cost Disability Types

A 2004 SEEP report examined the characteristics of high cost special education students, defining these 'high cost' students as those in the top five percent of the expenditure distribution for special education students (Chambers, Kidron, & Spain, 2004). The researchers found that the high cost special education students cost 4.2 times more to educate at the elementary level and 3.5 times more at the secondary level (Chambers, Kidron, & Spain, 2004).

In a breakdown of the high cost special education students, the study found some striking patterns. Four disability categories accounted for 76.8 percent of all high cost special education students; nearly a third of students in this high cost category had multiple disabilities (32.3%), 16.2% had emotional disturbances, 17.2% had autism, and 11.1% had hearing impairments/deafness (Chambers, Kidron, & Spain, 2004). The following table shows the full breakdown of high cost special education students by disability category.

Disability Category	Percent of High Cost Special Education Students
Autism	17.2%
Emotional Disturbance	16.2%
Hearing Impairment/Deafness	11.1%
Mental Retardation	7.1%
Multiple Disabilities	32.3%
Orthopedic Impairment	3.0%
Other Health Impairment	2.0%
Specific Learning Disability	0.0%
Traumatic Brain Injury	2.0%
Visual Impairment/Blindness	8.1%

Source: (Chambers, Kidron, & Spain, 2004).

Using 1999-2000 data, SEEP researchers calculated the average per student expenditure associated with each disability category. Across all disability categories, they found an average expenditure level of $12,525, with a range of $1,606 per special education student (Chambers, Shkolnik, & Perez, 2003). The following table presents the results of their analysis.

Disability Category	Average Expenditure	Range in Costs
Autism	$18,790	$5,762
Emotional Disturbance	$14,147	$4,484
Hearing Impairment/Deafness	$15,992	$4,578
Mental Retardation	$15,040	$2,176
Multiple Disabilities	$20,095	$3,462
Orthopedic Impairment	$14,993	$3,190
Other Health Impairment	$13,229	$2,896
Specific Learning Disability	$10,558	$1,502
Speech/Language Impairment	$10,958	$5,140
Traumatic Brain Injury	$16,542	$6,040
Visual Impairment/Blindness	$18,811	$6,594

Source: (Chambers, Shkolnik, & Perez, 2003)

The SEEP analysis indicated that students with certain disabilities tend to be more costly than students with other disabilities. In particular, students with multiple disabilities, visual impairments/blindness, autism, or traumatic brain injuries on average are more costly to educate than students with other disabilities. However, there is substantial variation in the costs of students in some of the disability categories, such as the categories of autism, traumatic brain injury, speech/language impairments, and

visual impairments/blindness. This suggests that the severity of the disability within the disability category has a large impact on costs. Students with slight visual impairments may require only minimal accommodations, while a blind student may require much more comprehensive services.

Conclusions

Combining the 2007-08 disability data and the 1999-2000 SEEP data, and classifying each set of data into low, moderate, and high levels enables us to create the following table:

Disability Category	Incidence of Disability (2007-08)	Percent of High Expenditure Special Education Students (1999-2000)	Average Costs (1999-2000)
Autism	Low	High	High
Emotional Disturbance	Moderate	High	Moderate
Hearing Impairment/Deafness	Low	Moderate	Moderate
Mental Retardation	Moderate	Moderate	Moderate
Multiple Disabilities	Low	High	High
Orthopedic Impairment	Low	Low	Moderate
Other Health Impairment	Moderate	Low	Moderate
Specific Learning Disability	High	Low	Low
Speech/Language Impairment	High	NA	Low
Traumatic Brain Injury	Low	Low	Moderate
Visual Impairment/Blindness	Low	Moderate	High

Although simplistic, this table allows us to identify the disability categories that are mostly likely to be low-incidence, high cost. Students with autism or multiple disabilities are most likely to fall into this category. Students with hearing impairments/deafness or visual impairments/blindness may also be relatively likely to fall in the low-incidence, high cost category. However, within these disability categories, there is substantial variation in average costs. In fact, some researchers have found that expenditures vary more within an expenditure category than across disability categories (Parrish, Gerber, Kaleba, & Brock, 2000). Consequently, it would be inaccurate to classify an entire disability category as high cost. Researchers and policy makers should exercise caution in how they use this data to inform policy decisions.

IV. Other States

States fund special education in a variety of ways. A CSEF report identifies the following types of funding systems:

- Pupil Weights – aid is allocated on a per pupil basis. The amount of aid distributed is based on a weight that represents the additional cost of a student. For example, if a student costs 50% more than an average student then the weight would be .5. States can use one weight for all special education students or they may use multiple weights to represent different levels of need for different types of special education students.
- Flat Grant – Under a flat grant approach a state takes the total available special education funds, divides them by the total number of special education students to determine the per special education funding amount. Districts are then funded by multiplying their total number of special education students by the per pupil amount.
- Census-based – The census-based approach assumes that all districts have the same percent of special education students. It also does not differentiate for specific differences in student needs/costs. Effectively, the census-based approach funds special education by allocating an additional dollar per pupil dollar amount to every student in the state. In practice, many states set a fixed percent of special education students that will be funded and then multiply that percent times a district enrollment figure to determine the special education count. This special education count is then multiplied by a per pupil funding amount to determine total special education funding.
- Resource-Based – The resource-based model funds specific resource levels versus funding a per pupil dollar figure. Resources are often based on staff/student ratios and can include funding for teachers, aides, and other resources. States can vary the ratios based on the level of need of the specific disability category or service level needed.
- Percentage Reimbursement – In states that use percentage reimbursement, districts are reimbursed by the state for a set percentage of their allowable actual special education expenditures.
- Variable Block Grant – The variable block grant approach refers to state funding systems that are at least in part based on ensuring similar funding to some base year amount.

Even when states use similar funding approaches, they can be applied differently. One state that uses pupil weights may use only one weight while another state might have multiple weights associated with different levels of need.

As part of the study APA looked at the funding systems in four states: Delaware, Florida, Ohio, and Pennsylvania.

Delaware

Delaware uses a resource-based approach to funding special education. Overall state education aid is primarily provided on the basis of allotting teachers and using a statewide teacher salary schedule to determine the total cost of teachers. Special education is differentiated from regular education on the basis of the ratios of teachers to students that are used to calculate the number of teachers that a district may employ. For regular education, the ratio is one teacher per 20 students. Three different ratios are used for special education: (1) one teacher to 8.4 students for "basic" special education; one teacher to 6 students for "intensive" special education; and one teacher to 2.6 students for "complex" special education.

If the ratio for regular education were thought of as 1.000, then the ratio for "basic" special education would be 2.381, the ratio for "intensive" special education would be 3.333, and the ratio for "complex" special education would be 7.6923. In effect these ratios create relative add-on weights for special education that are simply one unit less than the ratio; therefore the weight for "basic" special education is 1.3810, the weight for "intensive" special education is 2.3333, and the weight for "complex" special education is 6.6923. It should be noted that if the salaries for special education teachers were systematically higher than those for regular teachers, and the actual cost of special education was based on multiplying numbers of teachers times their salaries, then the weights would be higher (and if the salaries for special education teachers were systematically lower than those for regular teachers, the weights would be lower). See Delaware Revised Statutes Title 14, Chapter 1703.

Florida

Florida was the first state to use pupil weights as the basis of allocating state aid for special education; since then numerous weights were used to consider the differential costs associated with students with different disabilities. Recently, however, the approach was modified in such a way that most students in special education receive the same weighting as students in regular programs (with weights used to reflect cost differences between kindergarten, elementary school, middle school, and high school). A few students in special education receive much higher weights to reflect the higher cost of providing services to them; these two add-on weights are 3.523 (Level IV) and 4.935 (Level V).

In 2011, there were 2,375,362 unweighted students, 19,260 Level IV special education students and 4,897 Level V special education students; therefore, special education students eligible for added weighting represent about one percent of all students, which is far lower than the national average proportion of all students in special education programs (about 13 percent). Applying the special education weights produced 92,021 weighted special education students out of a grand total of 2,849,223 weighted students (including all weights).

Ohio

Ohio uses a weighted resource-based approach to determine the numbers of special education teachers needed by school districts, who then earn revenue based on salary levels that are applied to them. Six categories of weights are used: a.=2906; b=.7374; c=1.7716; d=2.3643; e=3.2022; and f=4.7205. The number of teachers is based on multiplying each weight by the number of students in that weighted group, adding up the sums across the six weights, multiplying the sum by .90 and dividing the product by 20. In addition, teacher aides are allotted on the basis of 25 percent of the number of teachers. For example, in a district that had 3,000 students in special education programs (categorized into the six groups as 1,200, 900, 500, 180, 150, and 70 students respectively), the total number of teachers allotted would be 141 and the total number of teacher aides would be 35. Obviously, the .90 factor simply reduces the value of the weights, reducing the numbers of teachers and aides below what they would have been if the factor had not been used.

Pennsylvania

Pennsylvania uses a census-based approach to allocate most of its funds for special education. Under the system, districts receive funding based on 16 percent of all students in the district. The 16 percent of students are multiplied by the special education weight. Based on actual revenue provided the weight is about 1.03 which is based on the fact that the state paid $1.026 billion for special education and $5.226 billion in basic support in 2010-11 and assuming that state support represents about 35 percent of all support for school districts and that local districts supplement special education to the same extent that they supplement basic support. Pennsylvania does provide additional extraordinary aid for very high cost students.

Of the four states described above, three of the states differentiate special education funding based on the need of the special education student. Two do this within resource based funding systems and one does this using a pupil weights system. Only Pennsylvania's census-based funding system does not have any sort of adjustment for different levels of need. The census-based approach does not lend itself to this type of differentiation.

V. Data Analysis

APA's data analysis work was divided into two phases. The initial data analysis was designed to identify disability categories that would be considered low incidence, or categories that have a small percentage of all special education students, and to identify which of these low incidence categories also had high per pupil costs. Finally, APA hoped to identify districts to interview for the second round of interviews by identifying districts with low incidence, high cost students.

The second phase of the analysis was designed to identify differences between districts with different characteristics. This included looking at total percentage differences and differences in types of students served and how students are served.

As was mentioned in the introduction APA requested data from the DOE that included:

- Number of students in each disability category;
- Number of students in each disability by type of placement;
- Age range, grade level range or school level of students;
- Special education revenues by source (state, local, and federal);
- Special education expenditures;
- Demographic data including enrollment, number of students eligible for free and reduced price lunch, and number of English language learners;
- Grade span of the district;
- Information on the wealth of the district, such as property value per student; and
- Information on the location of the district (rural, urban or suburban).

As was also mentioned in the introduction, there was some difficulty receiving some of the data. In the end, APA was able to create a district level database that included:

- Identifying information - county name, county number, district number, district name, DFG group and district type. (District type includes elementary districts, secondary districts, K-12 districts, etc.)
- Demographic data – resident enrollment, attending enrollment, number of at-risk students, and number of ELL students
- Special education student data – total resident special education count, total attending special education count, attending special education students by disability category, and attending special education students by placement.
- Expenditures – total general fund expenditures, total special education expenditures, special education expenditures by disability categories and per pupil special education expenditures by categories and total per pupil education spending.

It was hoped that the data would be collected for the 2007-08 and 2008-09 school years. These two school years represent the last year of the tier special education funding system and the first year of the

new census-based system. The individual student data was only available for the 2008-09 and 2009-10 school years. This data was the only student level special education database available for attending students. The attending student data was important in APA's efforts to understand spending and thus we shifted our database to the 2008-09 and 2009-10 school years.

Low Incidence Categories

From the literature review, APA gained an understanding of the disability categories that are generally considered low incidence. APA used the district level database to see if New Jersey's special education distributions were similar to the research. The New Jersey disability categories examined were:

- Auditorily Impaired
- Autistic
- Cognitively Impaired – Mild
- Cognitively Impaired – Moderate
- Cognitively Impaired – Severe
- Communication Impaired
- Emotionally Disturbed
- Multiply Disabled
- Deaf-Blindness
- Orthopedically Impaired
- Other Health Impaired
- Preschool Child with a Disability
- Specific Learning Disability
- Traumatic Brain Injury
- Visually Impaired

The special education category of Eligible for Speech-Language Services was not examined as part of this analysis although it was examined in later analyses.

The database included information for 594 school districts. The 594 school districts enrolled 1,367,769 resident students and 1,344,739 attending students. Resident special education students totaled 202,510 and attending special education students totaled 180,952. Table V-1 shows the percentage of NJ attending students in each of the fifteen disability categories in both 2008-09 and 2009-10.

TABLE V-1

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY DISABILITY IN 2008-09 AND 2009-10

	Disability				
	Auditorily Impaired	Autistic	Cog - Mild	Cog-Mod	Cog-Sev
2008-09	0.1%	0.7%	0.3%	0.1%	0.0%
2009-10	0.1%	0.8%	0.3%	0.1%	0.0%

	Disability				
	Communication Impaired	Emotionally Disturbed	Multiply Disabled	Deaf-Blind	Orthopedically Impaired
2008-09	1.2%	0.6%	1.4%	0.0%	0.3%
2009-10	1.4%	0.6%	1.4%	0.0%	0.0%

	Disability				
	Other Health	Preschool	Specific Learning	TBI	Visually Impaired
2008-09	2.0%	0.7%	5.7%	0.1%	0.0%
2009-10	2.3%	0.8%	5.9%	0.1%	0.0%

In 2008-09 the Cognitively Impaired – Severe, Deaf-Blind and Visually Impaired – all had 0.0% of attending students categorized in them. The category with the highest percentage was Specific Learning Disability, with 5.7% of attending students. The low and high categories stay the same in 2009-10 and the range is 0.0% for the low and 5.9% for the high. A disability category with 0.0% students does not have zero students in it across the state; rather, there are just so few students that the percentage is below 0.0%. Eleven of the fifteen categories had less than one percent of all NJ students in them. They are:

- Auditorily Impaired
- Autistic

- Cognitively Impaired – Mild
- Cognitively Impaired – Moderate
- Cognitively Impaired – Severe
- Emotionally Disturbed
- Deaf-Blindness
- Orthopedically Impaired
- Preschool Child with a Disability
- Traumatic Brain Injury
- Visually Impaired

The list above is very similar to the list of low incidence disability categories in the literature review section. New Jersey's disability categories do not directly correspond to the list in the literature review but they are close to being the same. The one category that is on the list above but not on the literature review list is Preschool Child with a Disability. Obviously this category only relates to preschool children and the students would generally be found in elementary and K-12 districts in New Jersey. Secondary and vocational districts in New Jersey would not be expected to have any preschool students. The list above was a good starting point for identifying low incidence disability categories. Still, just because a category is low incidence it does not mean that it is high cost. The next step of the analysis was to attempt to identify the high cost categories.

High Cost Categories

APA worked with the DOE to identify the expenditures for special education from the DOE databases. In our initial meetings with the DOE, APA reviewed the expenditure categories that the DOE collected for special education. The expenditures for special education were complex but did include detailed level expenditure data for a number of disability categories. Expenditure data was not collected for every New Jersey disability category and the names of the categories were not always the same but expenditures for the following categories were listed:

- Auditorily Impaired
- Autistic
- Behavior Impaired
- Cognitively Impaired – Mild
- Cognitively Impaired – Moderate
- Cognitively Impaired – Severe
- Multiply Disabled
- Visually Impaired

APA also collected additional expenditure categories in an effort to identify the total special education expenditures for each district. The expenditures were for students attending the district and APA's plan was to examine the per pupil expenditures for the expenditure categories available. Per pupil

expenditures would be created using the total expenditures in each category and then dividing them by the number of attending students in each of the available categories.

Once APA received the expenditure data, it became apparent that this analysis might not be possible. It appeared that few districts identified expenditures by categories in a consistent manner. Table V-2 shows the number of districts that identified expenditures into a specific category and the range of per pupil amounts within each category. The table shows that no expenditure category has more than 46.5% of districts categorizing expenditures into it. Even in this category, Multiple Disabilities in 2009-10, the range of per pupil amounts categorized is from a low of $80 per pupil up to $192,951 per pupil. The Cognitively Impaired – Severe expenditures had no expenses identified for any districts in either 2008-09 or 2009-10. A number of the expenditure categories had less than 10% of the districts categorizing the costs into the disability specific expenditure categories.

TABLE V-2
PER PUPIL EXPENDITURE INFORMATION BY DISABILITY CATEGORY 2008-09 AND 2009-10

	Auditory per Pupil	Autism per Pupil	Behavior per Pupil	Cog - Mild per Pupil	Cog - Mod - Per Pupil	Cog - Severe per Pupil	Multiple per Pupil	Visual per Pupil
2008-09								
Districts	6	176	154	59	24	0	268	19
Minimum	$191	$2	$62	$142	$46	$0	$55	$52
Maximum	$5,820	$309,704	$477,156	$425,050	$107,892	$0	$171,697	$144,857
Average	$1,973	$18,008	$17,390	$32,511	$31,117		$12,669	$22,863
Percentage of Districts	1.0%	29.6%	25.9%	9.9%	4.0%	0.0%	45.1%	3.2%
2009-10								
Districts	31	182	148	52	26	0	276	15
Minimum	$39	$27	$77	$51	$454	$0	$80	$950
Maximum	$53,145	$110,503	$62,538	$408,963	$116,106	$0	$192,951	$155,458
Average	$20,269	$15,162	$13,493	$28,128	$28,202		$13,713	$26,642
Percentage of Districts	5.2%	30.6%	24.9%	8.8%	4.4%	0.0%	46.5%	2.5%

The lack of districts utilizing the categories and the wide variation in per pupil figures within the categories made APA uncomfortable with the specific disability category information. We decided not to use it further until we had a chance to talk to districts about the data.

Second Phase

Demographics

The initial analysis of low incidence high cost students was used to help with the second round of interviews described below. After the initial statewide analysis was undertaken, a more detailed analysis was done of the data to examine differences associated with district type and district DFG type (being used as a measure of district wealth.) APA received a "district type" indicator for each of the 594 districts used in this analysis. For this analysis APA examined all districts together and then looked at elementary districts, secondary districts, K-12 districts, other districts, and districts with only resident students separately. We combined K-6 and K-8 districts into one elementary group and combined the 7-12 and 9-12 districts into one secondary group. A number of districts only had resident students but no attending students (these are non-operating districts); these districts were grouped together. All the districts that did not fit into the other four categories were grouped into the "other" category.

The districts were also examined based on their DFG category. DFG categories were used to represent district wealth in this analysis. The DFG categories range from A to J with A being the least wealthy districts and J being the wealthiest districts. The eight categories were combined into four categories for the analysis. The four categories are DFGs A/B, C-D/D-E, F-G/G-H, and I/J. A few districts did not have a DFG and they were grouped into a fifth category for analysis. Tables V-3A through V-9B are shown at the end of this chapter.

Tables V-3A and V-3B show the layout of the 594 districts by district type and DFG type. Of the 594 districts, 284 districts are elementary districts, 47 are secondary districts, 220 are K-12 districts, 21 are other districts, and 22 are non-operating districts. The total resident enrollment of the 594 districts was 1,367,769 students in 2008-09 and 1,370,035 in 2009-10. In each year, the elementary districts had resident enrollment of about 250,000 students and the secondary districts had resident enrollment of about 95,000 students. The K-12 districts had nearly 1,000,000 resident students in both years. Other districts had around 25,000 resident students each year and the non-operating districts had around 2,000 students.

The total attending enrollment for 2008-09 was 1,344,739 students with the 2009-10 attending enrollment at 1,348,084. In each year, the elementary districts had attending enrollment of about 230,000 students and the secondary districts had attending enrollment of about 95,000 students. The K-12 districts had nearly 1,000,000 resident students in both years. Other districts had around 25,000 resident students each year and the non-operating districts had no attending students.

Tables V-3A and V-3B also show the number of districts per DFG group. Of the 594 districts, 105 districts were A/B districts, 151 districts were C-D/D-E districts, 164 districts were F-G/G-H districts, 128 were I/J districts, and 46 districts had no DFG designation. The A/B districts had the most resident and attending students in both years with around 370,000 students. The smallest DFG group was the I/J group with

around 290,000 resident and attending students in both years. Districts with no DFG designation had a little over 30,000 resident and attending students in both years.

In 2008-09, 91 percent of the A/B group's attending students went to K-12 districts; no other group had more than 73 percent of the students going to K-12 districts. Over 30 percent of I/J attending students went to elementary districts with only seven percent of A/B students attending an elementary district. The C-D/D-E and F-G/G-H districts had similar attendance patterns by district type with around 70 percent of students attending K-12 districts, around 20 percent attending elementary districts, and 10 percent attending secondary districts. The non DFG districts had almost no students attending elementary or secondary districts and only 16 percent attending K-12 districts. The rest seem to attend other types of districts including vocational districts. These figures are very similar in 2009-10.

Tables V-4A and V-4B examine the total number of resident and attending special education and speech students. The special education figures include students classified in the 15 disability categories described earlier in the report. In the second phase of the analysis we have included the speech only students in parts of the analysis. In 2008-09 and 2009-10, there were a little over 202,000 resident special education students. The attending special education count was around 180,000 students in 2008-09 and went up to a little over 185,000 students in 2009-10. Looking at both the resident and attendance figures shows that the attending count was around 90 percent of the resident count; this means a number of special education students were being served in districts outside of the 594 districts included in the analysis. Total speech only students show a similar trend in both years with the attending count 87.4 percent of the resident count in 2008-09 and 93.6 percent in 2009-10. These ratios were similar when looking at the data by district type except for the secondary district speech-only students and the special education students in other districts. Though the total number of students in either resident or attending counts was very low, it is still interesting that the attending count was only around 50 percent of the resident count in 2008-09, rising to around 68 percent in 2009-10. The other districts had over 5,310 resident special education students in 2008-09 but only had about 68 percent of this count in attending special education students. The figure was around 67 percent for 2009-10.

Tables V-5A and V-5B take the figures from Tables V-4A and V-4B and convert the student counts into percentages. The tables show the percentages for resident special education students, attending special education students, resident speech students and attending speech students. The statewide average resident special education percentage was 14.8 percent for both years, very close to the funded percentage in the census-based funding system. The K-12 districts had 14.7 percent of the resident students in special education in both 2008-09 and 2009-10. Elementary districts had percentages below the state average for both years. The secondary and other districts had resident percentages above the state average, while the other districts had rates well above the average. The resident-only districts had a very low count of special education students and the percentages vary greatly over the two years.

Looking at the statewide DFG breakdowns for both years shows that the percentage of resident special education students was highest in the poorest districts and decreased as the districts become wealthier. The non DFG districts actually had the highest resident special education percentages. This trend

continued in the elementary, secondary, and K-12 districts for both years. It is important to note that districts are fiscally responsible for resident special education students and must pay for the services these students receive.

The attending special education percentage statewide went down from the 14.8 percent resident percentage for both 2008-09 and 2009-10 to 13.5 percent attending special education students in 2008-09 and 13.7 percent in 2009-10. The pattern seen for resident special education percentages being highest in the A/B DFG districts and lowest in the I/J districts does not continue when looking at the attending special education percentages. In fact, no clear pattern can be seen as the figures go up and down across the DFG groups at the state level and when looking at the district types.

Tables V-6A and V-6B break out the attending special education students by disability category and by district type. A few categories showed differences by type of district. The first is autism, with a statewide average for 2008-09 of 0.7 percent and 0.8 percent for 2009-10. The K-12 districts in each year had the same percentage of autism students as the statewide average. Elementary districts had higher percentages and the secondary and other districts had lower percentages. A similar pattern was seen in the Communication Impaired category. The state average was 1.2 percent in 2008-09 and 1.4 percent in 2009-10. K-12 districts had the same percentage as the statewide average. Elementary districts were above the statewide average and secondary and other districts were below the average.

The pattern changes for the Emotionally Disturbed and Specific Learning Disability categories. For Emotionally Disturbed, the secondary districts had a percentage of 0.8 percent in 2008-09 while the state average was only 0.6 percent in that year. The figures were 0.9 percent and 0.6 percent respectively for 2009-10. The K-12 districts had the state average percentage and the elementary and other districts had lower percentages. Secondary and other districts had much higher percentages of Specific Learning Disabilities than the statewide average and the other district types. The statewide averages for the category were 5.7 percent in 2008-09 and 5.9 percent in 2009-10. The secondary and other districts had percentages over 8 percent in both years.

The Preschool Child with a Disability category is the other category with obvious differences based on the types of children eligible for the services and the types of children districts serve. The statewide average for the category was 0.7 percent in 2008-09 and 0.8 percent in 2009-10. Elementary districts had the highest percentages of these students and the K-12 districts had around the statewide average. By definition, the secondary districts had no students in the category; the other districts also showed 0.0 percent for the category.

Tables V-7A and V-7B show the same data broken out by DFG group versus district type. Most of the categories show little or no difference between the DFG groups. As was mentioned above, the statewide averages for Autism were 0.7 percent in 2008-09 and 0.8 percent in 2009-10. The percentages for the DFG groups show the lowest figures in the A/B DFG group and in the districts with no DFG designation. The percentages grow from the A/B group up through the I/J DFG group. This trend exists in both years.

The Cognitive Impairment – Mild category had a statewide average of 0.3 percent for both 2008-09 and 2009-10. The distribution across DFG groups in both years shows the highest percentages in the K-12 districts, 0.6 percent in 2008-09 and 0.5 percent in 2009-10. The non DFG districts had an average of 0.4 percent in each of the two years. The other DFG groups did not have a percentage over 0.2 percent in either year.

DFG groups A/B and C-D/D-E along with the non DFG districts had higher Multiply Disabled percentages in both years than the state average. The I/J DFG group had lower percentages in each year. Similarly, the I/J group had lower percentages of Specific Learning Disability percentages in both years. The non DFG group districts had much higher percentages of Specific Learning Disability students than any other grouping with around 8.0 percent. The statewide average was 5.7 percent in 2008-09 and 5.9 percent in 2009-10. In Other Health Impairments the percentages trend similarly to the autism figures. The A/B DFG districts and the non DFG districts had the lowest percentages. The percentages increase up from the A/B group and was highest in the I/J DFG districts. The increase was over one percentage point in both years.

Tables V-8A and V-8B look at the types of services students are receiving by the district type. The tables only focus on the six through 21 year-old categories. The Pre-School information is hard to compare since the secondary and other districts had no students and thus we have excluded it. The types of service include:

- Six through twenty-one year olds
    - At least eighty percent in the classroom
    - Forty to eighty percent in the classroom
    - Less than forty percent in the classroom
    - Public Separate
    - Private day program
    - Private residential program
    - Home
    - Correctional

The 6-21 categories are easier to compare. For both years the secondary districts had much higher percentages of students being served in the classroom over 80 percent of the time. The other districts had a much higher percentage of students being served between 40 percent and 80 percent of the time in the classroom than the district type groups in both 2008-09 and 2009-10. The other districts also had percentages in both years of students being served in public separate programs. The statewide average was 1.25 percent in 2008-09 and 0.9 percent in 2009-10. Other districts had 3.2 percent in public separate programs in 2008-09 and 2.8 percent in 2009-10.

The average percentage of students served in private day programs was 4.0 percent for both years. Elementary districts had higher percentages served in these programs in both years; 5.5 percent and 6.2 percent respectively. The other districts had very low percentages of students served in private day

programs with only 0.4 percent served this way in both years. Secondary districts had 0.6 percent and 0.7 percent of students served at home in the two years. This was higher than the 0.3 percent average for providing services at home for the state.

Tables V-9A and V-9B show the type of service by DFG grouping. When looking at the service type data by DFG group there seemed to be two types of trends within the data. The percentages of students being served at least 80 percent in the classroom and in private day programs seemed to be lowest in the A/B DFG group and the non DFG group. When just looking at districts with DFG designations, the percentages were lowest in the A/B group and then increased until the figures were the highest in the I/J DFG group. The 80 percent category in 2008-09 grew from 39.6 percent of students served in the A/B group to 51.4 percent in the I/J DFG group, for 2009-10 the figures were 38.3 percent and 52.8 percent. The private day program figures grew from 3.1 percent in the A/B group to 5.4 percent in the I/J DFG group in 2008-09 and 2.4 percent to 5.5 percent in 2009-10.

The opposite trend is apparent for students served less than 40 percent in the classroom, in public separate programs, and at home. The I/J districts had the lowest percentages and the percentages rose up to the A/B DFG districts. In 2008-09 the figures for less than 40 percent in the classroom were at a low in the I/J districts at 7.1 percent and rose to 23.3 percent in the A/B districts. For 2009-10 the figures rose from 7.2 percent to 24.9 percent. The public separate programs percentages rose from 0.8 percent in the I/J districts to 1.9 percent in the A/B districts in 2008-09 and .7 to 1.3 in 2009-10. For services at home, the percentages were relatively flat in 2008-09 but from .2 percent to .5 percent between the I/J districts and the A/B districts. The non DFG districts had high percentages of students served less than 40 percent in the classroom and in public separate program but about average home service percentages. The non DFG districts also had a well above average percentage of students served between forty and 80 percent of the time in the classroom.

Expenditures

As part of the second phase of the analysis APA reexamined expenditure data. As we discussed earlier, APA was not comfortable using the disability level expenditure data; the expenditure disability categories do not account for all services provided to students within specific categories. For the second phase we examined total per pupil special education expenditures instead. We created a total special education per pupil amount based on attending special education students. APA used total special education expenditures, excluding tuition payments, to create a total special education spending amount. Expenditure categories for salaries were multiplied by a district specific benefit rate, received from the DOE, to account for benefit costs. The total special education spending amount was divided by special education attending students to create the per pupil special expenditure figure.

Once we had created the per pupil special education expenditure figures, we wanted to better understand how such spending was related to three particular characteristics of school districts: (1) their enrollment size; (2) their type, in terms of being an elementary, secondary, or K-12 district, and (3) their socio-economic situation, as reflected by their District Factor Group (DFG). To start, we examined

relationships between spending and each of the three characteristics separately, grouping districts into categories and examining average spending for each group. Ultimately, we undertook regression analysis in an attempt to understand how the three characteristics might be related to one another and spending.

We began the analysis by looking at the same 594 districts used in the demographic analysis above. Some districts had no expenditure information or had unusually low or high per pupil expenditures when compared to the other districts. We eliminated districts for which per student spending was more than 1.5 standard deviations above or below the statewide average. Between districts with missing data and those eliminated using this approach, we were left with 558 districts in 2008-09 and 539 districts in 2009-10 to include in the expenditure analysis. It is also the case that some districts are not classified as elementary, secondary, or K-12 and some districts are not assigned a DFG value; those districts were also eliminated from the analysis when we focused on a particular characteristic.

Tables V-10A through V-12B indicate the relationships between the three characteristics (enrollment size, district type, and DFG) and per student spending for special education as follows: Tables V-10A and V-10B show enrollment size; Tables V-11A and V-11B show district type; Tables V-12A and V-12B show DFG; all A tables are for 2008-09; and all B tables for 2009-10. Note that 594 districts are included when looking at enrollment size, 551 districts are included when looking at district type, and 548 districts are included when looking at DFG values.

We show one other variable in the tables – the average "need" of districts is based on assigning weights to students with different disabilities. We used three weights to reflect the relative cost of serving students with different disabilities (with the disabilities being placed into groups based on the literature review discussed in section two of this report): high cost disabilities (autistic, cognitive impairment – severe, deaf-blind, emotionally disturbed, multiply disabled and traumatic brain injury) were weighted at 4.0; moderate cost disabilities (auditorily impaired, cognitive impairment - moderate, other health impaired, orthopedically impaired, preschool child with a disability, and visually impaired) were weighted at 2.0; and low cost disabilities (communication impaired, cognitive impairment - mild, and specific learning disability) were weighted at .5. We assigned these weights because we could not develop any basis for assigning a relative cost by disability based on our review of spending data by disability (figures simply did not make sense, which may reflect any of a number of issues discussed previously) and yet we wanted to see whether there was a relationship between average spending for special education by district and the nature of the disabilities assigned to students being served by the districts.

Tables V-10A and V-10B show the relationship between district enrollment size and both districts average spending for special education and need in 2008-09 and 2009-10. A lot of districts in New Jersey are relatively small; more than 40 percent of all districts had fewer than 1,000 students and fewer than 15 percent of all districts had more than 5,000 students. Spending was highest in the smallest districts, which also had needs that were slightly above average (in 2009-10, on average the 117 districts with less than 500 students spent about nine percent more than the statewide average and had needs

that were about four percent higher than average. In that same year, average spending for special education was lowest in districts with between 1,000 and 2,000 students (spending was about five percent below average while needs were about three percent below average). In fact, spending generally decreased as enrollment size increased for districts with enrollments under 5,000 students; however, spending began to rise in districts over 5,000 students, with districts with more than 10,000 students spending above state average but having needs that were below the state average.

Tables V-11A and V-11B show the relationship between district type (elementary, secondary, or K-12 district) and both average per student spending for special education and need. Clearly, most districts are organized as either elementary or K-12 districts. Per student spending for special education was highest in the elementary districts, where need was also relatively high, and lowest in secondary districts, where need was relatively low. For K-12 districts, spending was slightly below the statewide average and need was around statewide average.

Tables V-12A and V-12B show the relationship between district DFG and both average per student spending for special education and need. While districts were split relatively evenly across the DFGs, the districts designated as A or B in terms of DFG were larger than average while districts in the other groups were of average size (that is, the groups contained larger and smaller districts which, on average, were just about the statewide average in terms of size). Interestingly, the average need of all DFG groups was similar. But spending was somewhat higher in the DFG groups with higher socio-economic status – despite having similar needs and being of similar size, wealthier districts spent a bit more for special education.

The data in these tables suggests that: (1) smaller districts spent more than larger districts on special education; (2) elementary districts spent more on special education than districts organized as secondary or K-12 districts did; and (3) wealthier districts spent more on special education than less wealthy school districts did. These patterns are general ones that appear to exist but that cannot be substantiated by statistical evidence. We used a statistical technique, multiple regression, to see whether enrollment size, district type, and DFG could predict differences in per student spending on special education when considered simultaneously and found that those factors could not explain such differences. Patterns apparent when districts are placed in groups simply do not exist when taking the information for each individual district into consideration.

The data analysis information is combined with the literature review information and the state program information from earlier in the report along with the interview information described next to create the final conclusions and recommendations.

TABLE V-3A

DISTRIBUTION OF DISTRICTS AND STUDENTS IN NEW JERSEY IN 2008-09 BY DISTRICT TYPE AND DISTRICT FACTOR GROUP

				District Factor Grouping				
			Statewide	A/B	C-D/D-E	F-G/G-H	I/J	None
1.0	Statewide							
	1.1	Number of Districts	594	105	151	164	128	46
	1.2	Number of Resident Students	1,367,769	373,589	302,507	365,081	293,282	33,311
	1.3	Number of Attending Students	1,344,739	366,496	297,088	361,047	288,879	31,231
2.0	Elementary Districts							
	2.1	Number of Districts	284	48	78	82	74	2
	2.2	Number of Resident Students	250,483	28,940	61,740	68,646	90,788	369
	2.3	Number of Attending Students	229,608	24,730	54,624	63,517	86,300	438
3.0	Secondary Districts							
	3.1	Number of Districts	47	5	14	17	11	-
	3.2	Number of Resident Students	95,399	7,805	24,661	40,474	22,460	-
	3.3	Number of Attending Students	95,828	7,604	24,772	40,463	22,990	-
4.0	K-12 Districts							
	4.1	Number of Districts	220	52	59	65	43	1
	4.2	Number of Resident Students	994,368	336,844	216,107	255,961	180,034	5,423
	4.3	Number of Attending Students	993,555	334,162	217,692	257,067	179,590	5,044
5.0	Other Districts (Vocational, etc.)							
	5.1	Number of Districts	22	-	-	-	-	-
	5.2	Number of Resident Students	25,439	-	-	-	-	-
	5.3	Number of Attending Students	25,749	-	-	-	-	-
6.0	Resident-Only Districts							
	6.1	Number of Districts	21	-	-	-	-	-
	6.2	Number of Resident Students	2,081	-	-	-	-	-
	6.3	Number of Attending Students	-	-	-	-	-	-

TABLE V-4A

DISTRIBUTION OF STUDENTS IN SPECIAL EDUCATION PROGRAMS IN NEW JERSEY IN 2008-09 BY DISTRICT TYPE AND DISTRICT FACTOR GROUP

				District Factor Grouping				
			Statewide	A/B	C-D/D-E	F-G/G-H	I/J	None
1.0	Statewide							
	1.1	Resident Students, Excluding Speech	202,510	59,087	46,403	51,428	38,776	6,817
	1.2	Attending Students, Exlcuding Speech	180,952	49,464	41,761	47,969	37,496	4,262
	1.3	Resident Students, Speech Only	24,145	5,231	5,265	7,863	5,626	160
	1.4	Attending Students, Speech Only	21,104	3,820	4,946	6,989	5,333	16
2.0	Elementary Districts							
	2.1	Resident Students, Excluding Speech	34,929	4,583	9,143	9,245	11,915	43
	2.2	Attending Students, Exlcuding Speech	31,078	3,519	7,380	8,616	11,519	44
	2.3	Resident Students, Speech Only	7,864	1,024	1,868	2,234	2,727	11
	2.4	Attending Students, Speech Only	6,777	810	1,477	1,966	2,514	10
3.0	Secondary Districts							
	3.1	Resident Students, Excluding Speech	15,322	1,637	4,295	6,032	3,359	-
	3.2	Attending Students, Exlcuding Speech	13,929	1,473	3,956	5,385	3,115	-
	3.3	Resident Students, Speech Only	147	14	38	78	17	-
	3.4	Attending Students, Speech Only	74	8	31	20	15	-
4.0	K-12 Districts							
	4.1	Resident Students, Excluding Speech	146,589	52,868	32,965	36,152	23,502	1,103
	4.2	Attending Students, Exlcuding Speech	132,320	44,472	30,425	33,968	22,862	593
	4.3	Resident Students, Speech Only	16,101	4,193	3,359	5,551	2,882	116
	4.4	Attending Students, Speech Only	14,247	3,002	3,438	5,003	2,804	-
5.0	Other Districts (Vocational, etc.)							
	5.1	Resident Students, Excluding Speech	5,310	-	-	-	-	-
	5.2	Attending Students, Exlcuding Speech	3,609	-	-	-	-	-
	5.3	Resident Students, Speech Only	11	-	-	-	-	-
	5.4	Attending Students, Speech Only	6	-	-	-	-	-
6.0	Resident-Only Districts							
	6.1	Resident Students, Excluding Speech	362	-	-	-	-	-
	6.2	Attending Students, Exlcuding Speech	16	-	-	-	-	-
	6.3	Resident Students, Speech Only	-	-	-	-	-	-
	6.4	Attending Students, Speech Only	22	-	-	-	-	-

TABLE V-4B

DISTRIBUTION OF STUDENTS IN SPECIAL EDUCATION PROGRAMS IN NEW JERSEY IN 2009-10 BY DISTRICT TYPE AND DISTRICT FACTOR GROUP

			District Factor Grouping				
		Statewide	A/B	C-D/D-E	F-G/G-H	I/J	None
1.0	Statewide						
1.1	Resident Students, Excluding Speech	202,518	58,367	46,191	52,383	39,115	6,463
1.2	Attending Students, Exlcuding Speech	185,318	49,392	43,026	49,966	38,432	4,502
1.3	Resident Students, Speech Only	24,254	4,783	5,605	7,784	5,919	163
1.4	Attending Students, Speech Only	22,710	4,360	5,322	7,236	5,766	26
2.0	Elementary Districts						
2.1	Resident Students, Excluding Speech	35,243	4,619	9,198	9,461	11,925	41
2.2	Attending Students, Exlcuding Speech	32,123	3,612	7,722	8,992	11,753	44
2.3	Resident Students, Speech Only	7,775	924	1,862	2,121	2,851	17
2.4	Attending Students, Speech Only	6,937	797	1,586	1,889	2,647	18
3.0	Secondary Districts						
3.1	Resident Students, Excluding Speech						
3.2	Attending Students, Exlcuding Speech	15,301	1,610	4,203	6,055	3,435	-
3.3	Resident Students, Speech Only	14,509	1,461	3,966	5,614	3,468	-
3.4	Attending Students, Speech Only	118	11	30	65	12	
		80	10	29	32	9	-
4.0	K-12 Districts						
4.1	Resident Students, Excluding Speech						
4.2	Attending Students, Exlcuding Speech	146,495	52,139	32,791	36,868	23,756	943
4.3	Resident Students, Speech Only	135,132	44319	31338	35360	23211	904
4.4	Attending Students, Speech Only	16,316	3,848	3,713	5,598	3,056	101
		15,685	3,553	3,707	5,315	3,110	-
5.0	Other Districts (Vocational, etc.)						
5.1	Resident Students, Excluding Speech						
5.2	Attending Students, Exlcuding Speech	5,328	-	-	-	-	-
5.3	Resident Students, Speech Only	3,548	-	-	-	-	-
5.4	Attending Students, Speech Only	13	-	-	-	-	-
		8	-	-	-	-	-
6.0	Resident-Only Districts						
6.1	Resident Students, Excluding Speech	151	-	-	-	-	-
6.2	Attending Students, Exlcuding Speech	32	-	-	-	-	-

TABLE V-5A

PROPORTION OF STUDENTS IN SPECIAL EDUCATION PROGRAMS IN NEW JERSEY IN 2008-09 BY DISTRICT TYPE AND DISTRICT FACTOR

			District Factor Grouping				
		Statewide	A/B	C-D/D-E	F-G/G-H	/IJ	None
1.0	Statewide						
1.1	Resident Students, Excluding Speech	14.8%	15.8%	15.3%	14.1%	13.2%	20.5%
1.2	Attending Students, Exlcuding Speech	13.5%	13.5%	14.1%	13.3%	13.0%	13.6%
1.3	Resident Students, Speech Only	1.8%	1.4%	1.7%	2.2%	1.9%	0.5%
1.4	Attending Students, Speech Only	1.6%	1.0%	1.7%	1.9%	1.8%	0.1%
2.0	Elementary Districts						
2.1	Resident Students, Excluding Speech	13.9%	15.8%	14.8%	13.5%	13.1%	11.7%
2.2	Attending Students, Exlcuding Speech	13.5%	14.2%	13.5%	13.6%	13.3%	10.0%
2.3	Resident Students, Speech Only	3.1%	3.5%	3.0%	3.3%	3.0%	3.0%
2.4	Attending Students, Speech Only	3.0%	3.3%	2.7%	3.1%	2.9%	2.3%
3.0	Secondary Districts						
3.1	Resident Students, Excluding Speech	16.1%	21.0%	17.4%	14.9%	15.0%	-
3.2	Attending Students, Exlcuding Speech	14.5%	19.4%	16.0%	13.3%	13.5%	-
3.3	Resident Students, Speech Only	0.2%	0.2%	0.2%	0.2%	0.1%	-
3.4	Attending Students, Speech Only	0.1%	0.1%	0.1%	0.0%	0.1%	-
4.0	K-12 Districts						
4.1	Resident Students, Excluding Speech	14.7%	15.7%	15.3%	14.1%	13.1%	20.3%
4.2	Attending Students, Exlcuding Speech	13.3%	13.3%	14.0%	13.2%	12.7%	11.8%
4.3	Resident Students, Speech Only	1.6%	1.2%	1.6%	2.2%	1.6%	2.1%
4.4	Attending Students, Speech Only	1.4%	0.9%	1.6%	1.9%	1.6%	0.0%
5.0	Other Districts (Vocational, etc.)						
5.1	Resident Students, Excluding Speech	20.9%	-	-	-	-	-
5.2	Attending Students, Exlcuding Speech	14.0%	-	-	-	-	-
5.3	Resident Students, Speech Only	0.0%	-	-	-	-	-
5.4	Attending Students, Speech Only	0.0%	-	-	-	-	-
6.0	Resident-Only Districts						
6.1	Resident Students, Excluding Speech	17.4%	-	-	-	-	-
6.2	Resident Students, Speech Only	0.0%	-	-	-	-	-

TABLE V-5B

PROPORTION OF STUDENTS IN SPECIAL EDUCATION PROGRAMS IN NEW JERSEY IN 2009-10 BY DISTRICT TYPE AND DISTRICT FACTOR GROUP

			District Factor Grouping				
		Statewide	A/B	C-D/D-E	F-G/G-H	I/J	None
1.0	Statewide						
1.1	Resident Students, Excluding Speech	14.8%	15.5%	15.3%	14.4%	13.4%	19.0%
1.2	Attending Students, Exlcuding Speech	13.7%	13.4%	14.5%	13.9%	13.3%	14.0%
1.3	Resident Students, Speech Only	1.8%	1.3%	1.9%	2.1%	2.0%	0.5%
1.4	Attending Students, Speech Only	1.7%	1.2%	1.8%	2.0%	2.0%	0.1%
2.0	Elementary Districts						
2.1	Resident Students, Excluding Speech	14.1%	15.8%	14.9%	13.9%	13.3%	10.6%
2.2	Attending Students, Exlcuding Speech	14.1%	14.6%	14.1%	14.3%	13.8%	10.0%
2.3	Resident Students, Speech Only	3.1%	3.2%	3.0%	3.1%	3.2%	4.4%
2.4	Attending Students, Speech Only	3.0%	3.2%	2.9%	3.0%	3.1%	4.1%
3.0	Secondary Districts						
3.1	Resident Students, Excluding Speech	16.1%	21.0%	17.2%	15.0%	15.2%	-
3.2	Attending Students, Exlcuding Speech	15.1%	19.3%	16.1%	13.9%	15.0%	-
3.3	Resident Students, Speech Only	0.1%	0.1%	0.1%	0.2%	0.1%	-
3.4	Attending Students, Speech Only	0.1%	0.1%	0.1%	0.1%	0.0%	-
4.0	K-12 Districts						
4.1	Resident Students, Excluding Speech	14.7%	15.4%	15.1%	14.4%	13.2%	17.9%
4.2	Attending Students, Exlcuding Speech	13.5%	13.2%	14.4%	13.7%	12.9%	18.2%
4.3	Resident Students, Speech Only	1.6%	1.1%	1.7%	2.2%	1.7%	1.9%
4.4	Attending Students, Speech Only	1.6%	1.1%	1.7%	2.1%	1.7%	0.0%
5.0	Other Districts (Vocational, etc.)						
5.1	Resident Students, Excluding Speech	20.3%	-	-	-	-	-
5.2	Attending Students, Exlcuding Speech	13.3%	-	-	-	-	-
5.3	Resident Students, Speech Only	0.0%	-	-	-	-	-
5.4	Attending Students, Speech Only	0.0%	-	-	-	-	-
6.0	Resident-Only Districts						
6.1	Resident Students, Excluding Speech	7.3%	-	-	-	-	-
6.2	Resident Students, Speech Only	1.5%	-	-	-	-	-

TABLE V-6A

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY DISABILITY IN NEW JERSEY IN 2008-09 BY DISTRICT TYPE

		Disability							
		Auditorily Impaired	Autistic	Cog - Mild	Cog- Mod	Cog-Sev	Communication Impaired	Emotionally Disturbed	Multiply Disabled
1.0	Statewide	0.1%	0.7%	0.3%	0.1%	0.0%	1.2%	0.6%	1.4%
2.0	Elementary Districts	0.1%	0.9%	0.2%	0.0%	0.0%	1.6%	0.4%	1.4%
3.0	Secondary Districts	0.1%	0.4%	0.2%	0.0%	0.0%	0.6%	0.8%	1.6%
4.0	K-12 Districts	0.1%	0.7%	0.3%	0.1%	0.1%	1.2%	0.6%	1.4%
5.0	Other Districts (Vocational, etc.)	0.1%	0.1%	0.5%	0.1%	0.0%	0.6%	0.5%	1.5%

		Disability						
		Deaf-Blind	Orthopedically Impaired	Other Health	Preschool	Specific Learning	TBI	Visually Impaired
1.0	Statewide	0.0%	0.3%	2.0%	0.7%	5.7%	0.1%	0.0%
2.0	Elementary Districts	0.0%	0.1%	2.3%	1.2%	5.2%	0.1%	0.0%
3.0	Secondary Districts	0.0%	0.0%	2.3%	0.0%	8.3%	0.1%	0.0%
4.0	K-12 Districts	0.0%	0.4%	1.9%	0.7%	5.5%	0.2%	0.0%
5.0	Other Districts (Vocational, etc.)	0.0%	0.0%	1.6%	0.0%	8.9%	0.1%	0.0%

TABLE V-6B

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY DISABILITY IN NEW JERSEY IN 2009-10 BY DISTRICT TYPE

	Disability							
	Auditorily Impaired	Autistic	Cog - Mild	Cog- Mod	Cog-Sev	Communication Impaired	Emotionally Disturbed	Multiply Disabled
1.0 Statewide	0.1%	0.8%	0.3%	0.1%	0.0%	1.4%	0.6%	1.4%
2.0 Elementary Districts	0.1%	1.0%	0.2%	0.1%	0.0%	1.7%	0.5%	1.4%
3.0 Secondary Districts	0.1%	0.4%	0.2%	0.0%	0.0%	0.8%	0.9%	1.6%
4.0 K-12 Districts	0.1%	0.8%	0.3%	0.1%	0.0%	1.4%	0.6%	1.3%
5.0 Other Districts (Vocational, etc.)	0.1%	0.2%	0.4%	0.1%	0.0%	0.7%	0.4%	1.3%

	Disability						
	Deaf-Blind	Orthopedically Impaired	Other Health	Preschool	Specific Learning	TBI	Visually Impaired
1.0 Statewide	0.0%	0.0%	2.3%	0.8%	5.9%	0.1%	0.0%
2.0 Elementary Districts	0.0%	0.1%	2.5%	1.3%	5.2%	0.0%	0.0%
3.0 Secondary Districts	0.0%	0.0%	2.6%	0.0%	8.4%	0.1%	0.0%
4.0 K-12 Districts	0.0%	0.0%	2.2%	0.8%	5.8%	0.1%	0.0%
5.0 Other Districts (Vocational, etc.)	0.0%	0.0%	1.6%	0.0%	8.5%	0.0%	0.0%

TABLE V-7A

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY DISABILITY IN NEW JERSEY IN 2008-09 BY DISTRICT FACTOR GROUP

		Disability							
		Auditorily Impaired	Autistic	Cog - Mild	Cog- Mod	Cog-Sev	Communication Impaired	Emotionally Disturbed	Multiply Disabled
1.0	Statewide	0.1%	0.7%	0.3%	0.1%	0.0%	1.2%	0.6%	1.4%
2.0	District Factor Groups A-B	0.1%	0.4%	0.6%	0.2%	0.1%	1.1%	0.7%	1.7%
3.0	District Factor Groups C-D and D-E	0.1%	0.7%	0.2%	0.1%	0.0%	1.4%	0.6%	1.7%
4.0	District Factor Groups F-G and G-H	0.1%	0.8%	0.2%	0.0%	0.0%	1.3%	0.6%	1.3%
5.0	District Factor Groups I-J	0.1%	0.9%	0.1%	0.1%	0.0%	1.3%	0.4%	1.1%
6.0	District Factor Groups None	0.1%	0.2%	0.4%	0.1%	0.0%	0.7%	0.5%	1.7%

		Disability						
		Deaf-Blind	Orthopedically Impaired	Other Health	Preschool	Specific Learning	TBI	Visually Impaired
1.0	Statewide	0.0%	0.3%	2.0%	0.7%	5.7%	0.1%	0.0%
2.0	District Factor Groups A and B	0.0%	0.8%	1.4%	0.5%	5.4%	0.3%	0.0%
3.0	District Factor Groups C-D and D-E	0.0%	0.1%	2.1%	0.8%	6.2%	0.1%	0.0%
4.0	District Factor Groups F-G and G-H	0.1%	0.1%	2.2%	0.9%	5.9%	0.1%	0.0%
5.0	District Factor Groups I and J	0.0%	0.1%	2.6%	0.8%	5.3%	0.1%	0.0%
6.0	District Factor Groups None	0.0%	0.0%	1.6%	0.2%	8.1%	0.1%	0.0%

TABLE V-7B

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY DISABILITY IN NEW JERSEY IN 2009-10 BY DISTRICT FACTOR GROUP

		Disability							
		Auditorily Impaired	Autistic	Cog - Mild	Cog- Mod	Cog-Sev	Communication Impaired	Emotionally Disturbed	Multiply Disabled
1.0	Statewide	0.1%	0.8%	0.3%	0.1%	0.0%	1.4%	0.6%	1.4%
2.0	District Factor Groups A-B	0.1%	0.5%	0.5%	0.1%	0.0%	1.3%	0.8%	1.5%
3.0	District Factor Groups C-D and D-E	0.1%	0.8%	0.2%	0.1%	0.0%	1.5%	0.6%	1.6%
4.0	District Factor Groups F-G and G-H	0.1%	0.9%	0.2%	0.0%	0.0%	1.4%	0.6%	1.3%
5.0	District Factor Groups I-J	0.1%	1.0%	0.1%	0.1%	0.0%	1.4%	0.5%	1.0%
6.0	District Factor Groups None	0.1%	0.4%	0.4%	0.1%	0.0%	0.9%	0.4%	1.6%

		Disability						
		Deaf-Blind	Orthopedically Impaired	Other Health	Preschool	Specific Learning	TBI	Visually Impaired
1.0	Statewide	0.0%	0.0%	2.3%	0.8%	5.9%	0.1%	0.0%
2.0	District Factor Groups A and B	0.0%	0.0%	1.8%	0.7%	6.0%	0.1%	0.0%
3.0	District Factor Groups C-D and D-E	0.0%	0.0%	2.3%	0.9%	6.2%	0.1%	0.0%
4.0	District Factor Groups F-G and G-H	0.0%	0.0%	2.4%	0.9%	6.0%	0.1%	0.0%
5.0	District Factor Groups I and J	0.0%	0.0%	2.9%	0.8%	5.3%	0.1%	0.0%
6.0	District Factor Groups None	0.0%	0.0%	1.7%	0.4%	7.9%	0.0%	0.0%

TABLE V-8A

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY TYPE OF SERVICE DELIVERY IN NEW JERSEY IN 2008-09 BY DISTRICT TYPE

		Type of Service Delivery								
		Over 80% in Classroom	40% to 80% in Classroom	Less than 40% in Classroom	Public Separate	Private Day	Private Residential	Public Residential	Home	Correctional Facility
1.0	Statewide	44.4%	27.6%	15.0%	1.3%	4.0%	0.1%	0.0%	0.3%	0.0%
2.0	Elementary Districts	45.2%	27.7%	9.6%	0.7%	5.5%	0.2%	0.0%	0.1%	0.1%
3.0	Secondary Districts	55.5%	27.4%	12.8%	1.2%	2.0%	0.1%	0.0%	0.6%	0.0%
4.0	K-12 Districts	43.2%	27.3%	16.5%	1.4%	3.9%	0.1%	0.0%	0.3%	0.0%
5.0	Other Districts (Vocational, etc.)	39.1%	38.8%	18.4%	3.2%	0.4%	0.0%	0.0%	0.1%	0.0%

TABLE V-8B

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY TYPE OF SERVICE DELIVERY IN NEW JERSEY IN 2009-10 BY DISTRICT TYPE

		Type of Service Delivery								
		Over 80% in Classroom	40% to 80% in Classroom	Less than 40% in Classroom	Public Separate	Private Day	Private Residential	Public Residential	Home	Correctional Facility
1.0	Statewide	45.2%	26.9%	14.9%	0.9%	4.0%	0.1%	0.0%	0.3%	0.0%
2.0	Elementary Districts	45.4%	26.8%	9.4%	0.6%	6.2%	0.2%	0.0%	0.1%	0.0%
3.0	Secondary Districts	57.9%	27.7%	10.3%	0.8%	2.0%	0.1%	0.1%	0.6%	0.0%
4.0	K-12 Districts	44.0%	26.6%	16.8%	0.9%	3.7%	0.1%	0.0%	0.3%	0.0%
5.0	Other Districts (Vocational, etc.)	43.2%	38.4%	15.2%	2.8%	0.4%	0.0%	0.0%	0.1%	0.0%

TABLE V-9A

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY TYPE OF SERVICE DELIVERY IN NEW JERSEY IN 2008-09 BY DISTRICT FACTOR GROUP

		Type of Service Delivery								
		Over 80% in Classroom	40% to 80% in Classroom	Less than 40% in Classroom	Public Separate	Private Day	Private Residential	Public Residential	Home	Correctional Facility
1.0	Statewide	44.4%	27.6%	15.0%	1.3%	4.0%	0.1%	0.0%	0.3%	0.0%
2.0	District Factor Groups A-B	39.6%	25.6%	23.3%	1.9%	3.1%	0.1%	0.0%	0.5%	0.0%
3.0	District Factor Groups C-D and D-E	41.7%	28.9%	16.6%	1.4%	3.2%	0.1%	0.0%	0.3%	0.0%
4.0	District Factor Groups F-G and G-H	46.3%	28.6%	11.2%	0.7%	4.7%	0.1%	0.0%	0.3%	0.1%
5.0	District Factor Groups I-J	51.4%	26.7%	7.1%	0.8%	5.4%	0.2%	0.0%	0.2%	0.0%
6.0	District Factor Groups None	38.4%	35.6%	20.0%	2.7%	1.2%	0.0%	0.0%	0.2%	0.0%

TABLE V-9B

PROPORTIONAL DISTRIBUTION OF ATTENDING STUDENTS BY TYPE OF SERVICE DELIVERY IN NEW JERSEY IN 2009-10 BY DISTRICT FACTOR GROUP

		Type of Service Delivery								
		Over 80% in Classroom	40% to 80% in Classroom	Less than 40% in Classroom	Public Separate	Private Day	Private Residential	Public Residential	Home	Correctional Facility
1.0	Statewide	45.2%	26.9%	14.9%	0.9%	4.0%	0.1%	0.0%	0.3%	0.0%
2.0	District Factor Groups A-B	38.3%	25.5%	24.9%	1.3%	2.4%	0.0%	0.0%	0.3%	0.0%
3.0	District Factor Groups C-D and D-E	43.5%	28.0%	15.8%	0.9%	3.2%	0.1%	0.0%	0.3%	0.0%
4.0	District Factor Groups F-G and G-H	47.7%	27.8%	10.6%	0.5%	5.1%	0.1%	0.0%	0.2%	0.0%
5.0	District Factor Groups I-J	52.8%	25.5%	7.2%	0.7%	5.5%	0.2%	0.0%	0.2%	0.0%
6.0	District Factor Groups None	40.1%	33.2%	17.2%	2.2%	3.2%	0.0%	0.0%	0.1%	0.0%

TABLE V-10A
Average Size, Need and Per Student Spending of New Jersey School Districts in *2008-9* For School Districts Grouped by *Enrollment Size*

Enrollment Size Group	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
Less than 500	133	271	1.61	$16,317
500 - 999	110	753	1.61	$14,508
1,000 - 1,999	115	1,471	1.57	$13,352
2,000 - 4,999	132	3,127	1.59	$13,503
5,000 - 9,999	52	6,998	1.54	$13,879
More than 10,000	16	16,681	1.62	$14,340
Total/Simple Average	558	2,386	1.59	$14,400

TABLE V-10B
Average Size, Need, and Per Student Spending of New Jersey School Districts in *2009-10* For School Districts Grouped by *Enrollment Size*

Enrollment Size Group	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
Less than 500	117	279	1.66	$15,205
500 - 999	106	741	1.63	$14,391
1,000 - 1,999	114	1,442	1.56	$13,230
2,000 - 4,999	135	3,140	1.57	$13,241
5,000 - 9,999	50	7,011	1.53	$13,725
More than 10,000	17	16,376	1.55	$14,608
Total/Simple Average	539	2,465	1.60	$13,979

TABLE V-11A
Average Size, Need, and Per Student Spending of New Jersey School Districts in *2008-9* For School Districts Grouped by *Type of District*

District Type Group	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
Elementary	275	826	1.62	$15,109
Secondary	47	2,039	1.44	$11,964
K-12	217	4,541	1.61	$13,687
Total/Simple Average	539	2,428	1.60	$14,262

TABLE V-11B
Average Size, Need, and Per Student Spending of New Jersey School Districts in *2009-10* For School Districts Grouped by *Type of District*

District Type Group	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
Elementary	262	851	1.66	$14,915
Secondary	46	2,057	1.44	$11,617
K-12	216	4,588	1.58	$13,735
Total/Simple Average	524	2,498	1.61	$14,139

TABLE V-12A

Average Size, Need, and Per Student Spending of New Jersey School Districts in *2008-9* For School Districts Grouped by *District Factor Group (DFG)*

District Factor Group (DFG)	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
A, B	101	3,615	1.59	$13,751
C-D, D-E	147	2,014	1.60	$13,889
F-G, G-H	162	2,186	1.61	$14,373
I, J	126	2,283	1.60	$14,878
Total/Simple Average	536	2,431	1.60	$14,242

TABLE V-12B

Average Size, Need, and Per Student Spending of New Jersey School Districts in *2009-10* For School Districts Grouped by District Factor Group (DFG)

District Factor Group (DFG)	Size, Need, and Spending			
	Number of Districts	Average Enrollment Size	Average Need	Average Spending
A, B	100	3,685	1.62	$13,884
C-D, D-E	142	2,050	1.61	$13,544
F-G, G-H	156	2,289	1.60	$14,314
I, J	123	2,329	1.61	$14,767
Total/Simple Average	521	2,501	1.61	$14,128

VI. Interviews

An important part of the study was interviewing district personnel regarding the change in funding structure. Two rounds of interviews were undertaken for the study. The first round of interviews involved district special education personnel and focused on understanding the impacts of the funding change on district practices and finances. The second round of interviews involved both district special education personnel and district finance personnel; their focus included the areas discussed in the first round of interviews as well as an understanding of the actual data APA had for each district.

Prior to presenting the results of the interviews, it is important to note the climate that they were conducted in. The interviewees were identified both by the DOE and through APA data analysis. Regardless of how participant districts were identified, it proved to be difficult to get districts to participate in the interviews. Underlying this problem seemed to be the perceived relationship between the districts and the state. Though many districts simply did not return calls and emails requesting interviews, those that did often mentioned that the consistent budget cuts have created some animosity about participating in state run studies. They also mentioned that they found it difficult to find the time to participate in outside studies. At least one district mentioned participation in a court case against the state as reason not to participate. Ultimately, we were able to get a third of all districts we contacted to participate.

The following figure illustrates the number of districts that we contacted and the number that ultimately participated:

	# of Districts Contacted	# of Districts that Participated
First Round	20	7
Second Round	16	6
Total	**36**	**13**

First Round of Interviews

For the first round of interviews APA asked the DOE for a list of districts to interview; a list of twenty districts with district personnel to contact was provided of which seven districts participated. An interview protocol was created, which is shown in Appendix A. The interviews focused on few key areas including:

- Changes from the old system to the new system
- High Cost, Low Incidence students
- Best practices

District special education representatives were first asked about their understanding of the change from the old tier funding system to the new census funding system. It quickly became apparent that most of the interviewees had some understanding that funding had changed, but very few had full understanding of the specifics of the change and only one representative could articulate the change without prompting. Primarily, interviewees spoke about receiving reduced funding and pressure within their district to reduce costs. However, it unclear whether the changes in funding experienced was related to the change in the funding system or general state budget reductions.

The interviewees generally did not agree with the underlying assumption of the census-based approach that all districts have the same percentage of special education students. The majority of representatives also disagreed with the underlying premise that the distribution of need is the same across districts. Many interviewees described specific special circumstances in their district or in districts where they used to work that resulted in the district either having a higher percentage of special education students or having a higher number of high need students. One example is a district located adjacent to a military base. The interviewees mentioned that the military sends families with high needs children to that base and thus the district gets a large number of high needs students. Interviewees felt that districts often developed reputations for either generally serving special education students well or serving a specific category of special education students well. When this happens, families hear about it and will specifically pick the district to move into in order to access the special education services. This can create a higher concentration of high needs students in some districts. Interviewees also mentioned that in some circumstances districts with higher levels of poverty can end up having higher percentages of students being served in special education.

No district had changed how it provided special education services due to the change in the funding system. All interviewees mentioned that the new funding system had not changed how many students were identified, the process for identifying students, the types of services students received, or where the students are served. It was repeatedly pointed out that the identification of students and the identification of the appropriate services for students is a complex process that operates independent of financial resource needs. Further, representatives noted that the level of service required for students was mandated by law and student IEPs so it was not something they could change once students were identified. There is a process in place in all districts and the teams making the special education decisions are not connected to the funding systems put in place by the state.

All representatives that had been in their district more than a year discussed the recent pressure in their districts to bring out-of-district placement students back to be served in district. Most felt that bringing the students back in had saved the districts money and allowed them to have a better understanding of how well they were serving these students. A number of districts had started new programs in district to serve students who would have formerly been sent out of the district. Overall, representatives noted that this was a positive development in their districts.

As mentioned previously, the majority of special education staff members interviewed in the first set of interviews were able to describe changes in funding but at the same time were unable to describe the

structural change in the funding system. In fact, APA believes that much of the information about the fiscal impacts that we received in the first round of interviews was actually related to the recent budget cuts not the structural change in the funding system. The difficulty in separating the two became very apparent during the second round of interviews when finance personnel were included in the discussions. Still, round one interviewees were concerned that districts with high percentages of special education students or high levels of high need students would be underfunded by the new system.

APA also asked the district personnel to identify the disability categories that are often high cost for districts. Many of the interviewees mentioned that it is hard to identify specific categories since not all students in a specific category are served the same way. Students can range in need within a category. With this caveat in mind, the categories of autism, emotional disturbance and multiple disabilities came up in some combination in every interview as generally high cost categories. Of particular note, every representative discussed autism as a growing category and one of the disability groups that districts are currently building more in house programs to serve.

The districts talked about moving as many students back into the home districts as one of the practices being used along with additional mainstreaming of students. Representatives spoke about serving students in the least restrictive and most inclusive environment possible as what was best practice for students and their highest priority. As was mentioned above, bringing students back into the district can sometimes save money and allows the districts better control over the services for the students. Some referred to getting more "bang for their buck" when doing so. There are still students that need to be sent out of district but limiting these placements has become a priority for many, if not most, districts due to the high cost of tuition.

Second Round of Interviews

For the second round of interviews, APA planned to visit districts across New Jersey to interview both special education personnel and finance personnel in person. An interview protocol was created, which is shown in Appendix B. The interviews were designed to focus on some of the same areas as the first round of interviewees along with a focus on the data APA had been analyzing which included:

- Changes from the old system to the new system
- High Cost, Low Incidence students
- Data on student counts
- Data on student spending

APA used the statewide district level database to identify school districts to interview. We selected eleven districts from different parts of the state, districts with different DFG categories (as an indicator of differences in wealth), districts with different grade configurations, and districts with different percentages of special education students. Once we had identified the districts, the DOE wrote letters to each district encouraging them to participate. The turnaround time for setting up the in person interviews was tight and APA struggled to get district participation. The reasons for the lack of

participation varied. Some districts were willing to participate but could not do it during the times APA would be in their area. Other districts did not feel comfortable participating. They either had conflicts, such as participation in a lawsuit against the state, or simply did not feel it would be a good use of district personnel's time. Other districts simply never responded to repeated phone calls and emails requesting an interview.

Faced with a very limited number of confirmed participants, APA canceled the onsite visits and turned to the DOE to create a new list of districts that would be willing to participate in a webinar-based interview. The three districts that had either scheduled an onsite visit or had shown willingness to participate previously were included.

The second round of interviews produced similar information from the first round of interviews on a number of key topics including:

- The belief that the new funding system's underlying philosophy does not work for every district. The funding system assumes the same percentage and general levels of student need for every district, but every representative we spoke with explained that there was significant variation in the proportion of special education students served in districts as well as variation in the categories of students served. Many districts serve either higher than average total percentages of special education students or serve pockets of very high need students.

- All interviewees reiterated that there is a general disconnect between those individuals making special education identification and service decisions and the state funding system. Those individuals responsible for making these decisions about students do not even necessarily know or understand the funding system. This would make it difficult to believe changes in the funding system would change the behavior of those staff. One person referred to the "myth" of Child Study teams being influenced by the funding. The person reiterated that the teams do not necessarily understand the system or know about the changes.

- The number of students identified, the types of students identified or the services provided to students has not changed based on the new funding system. It was repeated in each of the interviews that the identification of students and the determination of the types of services the students need are not tied to the state funding system. These decisions are made and then funding has to be found to pay for those decisions.

- Interviewees continued to mention the push to bring students back from out of district placement. They mentioned that it not only often leads to a cost savings for the districts but frequently is better for the student. Districts have created programs in house to serve students who used to be sent to out of district placements.

- Several interviews also sited autism, multiple disabilities and behavior disorders as categories of high cost, low incidence.

Fiscal Impact

One of the interesting points that came up due to the inclusion of finance personnel in the second round of interviews was how hard it has been for districts to gauge the impact of the funding change. This is primarily because the new funding system was only in place for one fiscal year, 2008-09. Even in that year, some districts did not receive the full benefit of the change since there were growth caps. Since the 2008-09 year the new system has not been used. Only two representatives could explain how and when the new funding formula had been used, but neither could fully articulate the impact it had on their districts due to the limited period of time it was in place.

The formula was suspended as a result of a fiscal emergency in the state. In fact, over the past two years districts have faced large cuts in funding from the state. The interviewees said that these cuts make it nearly impossible to speak to the specific impacts for their districts of the new funding method. The interviewees were able to discuss the impact of the large cuts in funding generally. They talked about having to increase the district share of special education funding in order to keep providing the programs and services that are identified within the special education identification process. Since the services are required to be provided any cuts in state funding have to be made up locally. This means dollars often come out of programs for "regular" education students to fund the special education costs in times of budget crunches.

Impact Variance by Type of District

Another new point that came up in the second round of interviews was the impact of district type on the percent of students a district might have. New Jersey has many different district types including elementary, secondary, K-12, vocational and special services districts. The interviewees mentioned that secondary and vocational districts often make very few special education identifications. Since these districts are serving students in upper grades, from 7th grade and up, students have generally already been identified as special education before they arrive in the district. This means that the district's special education percentage is basically fixed and has little to do with the practices of the district.

Though the district can make some decisions about the programs and services of their students they simply have little impact on the total percentage of students and even the disability categorization of students they serve. The interviewees felt that this situation went against the underlying principal that the new census-based funding system removed incentives for either over identification or misidentification of special education students. If those incentives did exist under the old system, and there was not agreement on this point, the secondary and vocational districts never had the incentive in the first place.

Examination of Data

As part of the second round of interviews APA wanted to gain a better understanding of the data it had received from the DOE. We reviewed with each district the student-level data and the expenditure level data we had for the district.

The student level data included:

- Total resident count,
- Total attending count,
- Resident at-risk count,
- Resident ELL count,
- Total resident special education count,
- Total attending special education count,
- Attending special education counts by disability, and
- Attending special education counts by type of service.

The data was for both 2008-09 and 2009-10. APA reviewed the student data with district personnel during each interview in order to understand if the data received in the various files was familiar to them. The district personnel were most familiar and comfortable with the information coming from the ASSA files from the state regardless of the year of data. They were less comfortable with the data collected through the individual student data system. This was especially true for the 2008-09 information, the districts felt that the collection system was new during this time period and there were questions about some of the data. Interviewees felt the issues could have occurred both on the DOE/vendor and district side during the ramp up of the system. The districts were more confident in the 2009-10 data from the individual student database.

The spending data that was reviewed with interviewees included:

- Total special education spending,
- Total general fund spending, and
- Per pupil special education spending by disability spending category.

Again the data was for both the 2008-09 and 2009-10 school years. In reviewing the data it became apparent that the data was not collected for the same reasons that APA had hoped to use the data. While the data collection system includes an area to classify expenses by disability category many districts do not use the categories. The interviewees made it clear that expenditures are not generally thought about by category. Instead, the districts classify special education expenditures by type of service; therefore students identified with two different types of disabilities might be served similarly. An example is students being served in resource rooms.

Conclusions

From the interviews several key points were mentioned by the majority of representatives we spoke with:

- Every interviewee did not agree with the underlying assumption of the census-based approach that all districts should/do have the same percentage of special education students and that the levels of need are similar across districts.

- Further, no representatives believed the change in the special education funding has had an impact on how districts identify special education students or on the types of services the districts provide to the special education students. Interviewees did not believe that the staff members responsible for making student identifications and programming decisions had changed their behavior due to the funding change or that they even knew about changes to funding. They believe there are strict rules and regulations regarding special education identification and services, and districts adhere to them.

- Interviewees believed that when state funding decreases districts must use local funds to continue to pay for the services that special education students require. These services cannot simply be reduced due to a decrease in funding.

- Interviewees suggested that the limited time that the new funding system was implemented makes it very difficult to fully understand its impact on districts and if it is working well for districts. Only two representatives were able to discuss the specifics of the funding change at length. Generally, districts are more concerned and familiar with the recent budget cuts and have not really thought about the impact of the new system.

VI. Conclusion

This chapter will: (1) review the scope and goal of the work; (2) discuss the complicating factors that arose during the study; (3) Identify some key findings from the analyses; and (4) layout the next steps New Jersey needs to undertake.

Scope and Goal

As was mentioned in the introduction of the report, the scope of the work was based on a legislative mandate to the Commissioner of Education to undertake "an independent study of the special education census funding methodology to determine if adjustments in the special education funding formulas are needed in future years to address the variations in incidence of students with severe disabilities requiring high cost programs and to make recommendations for any such adjustments."[4] APA's goal was to determine if the new system created issues for districts serving high numbers of low incidence, high cost students and, if so, create recommendations to address these issues.

Complicating Issues

APA's study included three types of research: (1) we reviewed relevant literature and other states' procedures; (2) we undertook a variety of data analyses; and (3) we conducted selected interviews with district personnel. While undertaking the data analyses and the interviews, a number of problems arose. These issues created complications for the study that ranged from small nuisances to large hurdles that made it difficult to answer the underlying question of the study.

APA's data collection focused on two types of information: demographic data and expenditure data. We worked closely with the DOE to identify the data sources and to quickly collect the data. As data was gathered, it became apparent that much of the data had not been collected in a manner that allowed us to complete the study in the manner we intended. Data can be collected for many different reasons and before data collection systems are set up, the uses for the data are often defined; we discovered that while lots of information was being collected, it was not relevant to the questions we were trying to answer.

This was true of the data set that APA was using to analyze student level special education data. We had planned to use the data to examine the distribution of special education students by disability category and service type for both resident and attending students. The individual student data APA received from the DOE did not include the residency information APA had hoped to use. This difference in coding of residency did not allow us to compare the differences in types of disability categories and types of service between resident and attending students. Therefore, our analyses could only focus on information associated with attending students.

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The expenditure data APA received were incomplete and unreliable. In reviewing the data points collected in the expenditure data collection with the DOE, we were excited to learn that expenditures for a number of specific disability categories were being collected. Once we received the data, however, it became clear that the districts were not reporting these disability category expenditures lines consistently. As Table V-2 in the data analysis section shows, many districts reported no expenditures at all into the categories and when expenditures were reported the per pupil amounts were inconsistent and difficult to interpret.

During our interviews with districts, it became clear that district finance personnel did not think about special education spending in relationship to the disabilities of students and, therefore, they did not report such expenditures. Instead, the district finance personnel took the lead from the special education staff members who focus on the types of services and programs students need, and categorize expenditures based on the type of program or services students receive, not by disability category. The expenditure data supported these statements; while the disability categories were used infrequently, the resource room expenditure category was used consistently and had reasonable dollar amounts associated with it.

Beyond challenges in data analysis, there were some additional complications that arose with the interviews. The first complication was simply getting a large and diverse set of districts to participate. Districts were reluctant to participate in either set of interviews. Second, the limited time frame available to conduct the second set of interviews made it difficult to obtain a large number of participants.

During the interviews, the largest obstacle to the study became apparent. Interviewees consistently mentioned that though the special education funding system had changed, it was only fully implemented for one year, after which large cuts had been made in funding. The lack of sustained implementation, along with significant funding cuts, made it very hard for the districts to talk about the impacts of the new system. Because of the way the new system was implemented, it also becomes difficult over time to attribute any changes in how special education services are provided to the change in the funding system. The districts have effectively said the new system has not really been incorporated into any type of planning since it has not been fully implemented.

Findings

Even with the complicating factors mentioned earlier in the chapter, including the lack of sustained implementation of the formula that masks the effects of it to both service providers and researchers, APA is able to identify two key findings based on the literature review, the state program review, the data analysis, and the interviews.

Our first finding is that there are clear differences in the percentages and types of students served in different districts across the state. The census-based approach funds all districts similarly regardless of district size, district type, or DFG grouping. The demographic and expenditure data analyses show

differences in the types of special education students being served and the amounts being spent when district size, district type and DFG groupings are examined. Interviewees also pointed out that significant differences in numbers of special education students served and their needs exist among the state's school districts.

The demographic data analysis, seen in Tables V-5A through V-9B, shows numerous inconsistencies between types of districts and DFG groupings. Some district types serve higher percentages of students and some district types serve more students in certain disability categories. Tables V-10A through V-12B shows the differences in per pupil special education expenditures. District size, district type, and district DFG group are related to the amount spent per pupil. For example, elementary districts spent more than either K-12 or secondary districts in both years.

The second finding is that certain special education categories have higher costs than other categories and that the distribution of students by special education category is not consistent across all districts in the state. Interviewees told us that certain special education students are very costly to serve. The demographic data analysis showed that there is real variation by district type and DFG group in the percentage of disabilities in districts and in the percent of students being served by type of service provided, which vary in cost. New Jersey's previous special education funding approach tried to take the differences in cost of serving students into account when determining special education funding levels. The new system does not do this.

The literature review suggested that that there are certain special education disabilities that have higher per student costs. Interviewees also identified certain high cost disability categories. The interviewees found it more important to talk about the fact that certain students in certain types of programs were higher cost and that not all students in specific categories had similar costs. Our state program review also shows that three of the four states examined make some adjustment for higher cost students. New Jersey only makes an adjustment once the costs reach the extraordinary aid thresholds.

APA drew two tentative conclusions from the existing data: (1) New Jersey might need to consider funding special education based on the actual enrollment of special education students in districts and (2) the state might need to consider some differentiation of funding for higher cost students before the extraordinary aid threshold is reached. Since the existing data is insufficient to suggest moving forward on these tentative conclusions we suggest New Jersey take the steps listed below. These steps will allow the state low to gain an understanding of the specific changes that need to be made to the system.

Next Steps

In order to move forward with any changes to the system New Jersey must fully understand the impacts of the new funding system. To do this the state must: (1) fully implement the new special education funding system; (2) collect data in a manner that allows for analysis of both where special education students are being funding/served and the costs of serving different types of special education students;

and (3) undertake an analysis of special education enrollment patterns and costs associated with students across district sizes and types.

The state's implementation of the new special education funding system was derailed after only one year. Even within the first year of "full" implementation, districts whose potential increase in funding exceeded a certain amount had their increases capped. This means that the new system has never been fully implemented for all districts. The lack of implementation has hindered all stakeholders understanding of the system. Some districts that have always relied heavily on the local dollars have continued to do so, while those districts without the large local resources struggle to back-fill the loss of state dollars. This difference in available dollars while the system is not being implemented makes other information, specifically what is being spent on students, suspect. Districts with resources might be spending what is truly needed to serve students while expenditure data for those without these resources might not reflect all the resources the district would like to spend to serve the students if dollars were available. A fully implemented system will allow for better comparisons of expenditure data in the future.

As we said earlier in the report, data collection systems are often designed in consideration of the type of analysis one wants to do after collecting the data. APA was able to acquire a lot of data around special education, both student information and expenditure information. Unfortunately, the data was not readily available in a way that lent itself to APA's analysis. Future data collections need to allow for this data to be readily available for this type of analysis of the special education funding system. This would be accomplished by ensuring that information is available for each special education student by the district they would be funded in if special education funding were student-based. It appears the census-based funding system shifted the need for this type of data collection. While funding decisions are not made on this information, it would be helpful to understand the movements of students across the districts. This would be especially true for the low incidence, high cost students this study focused on. It is important to understand if certain districts have a high concentration of resident students in certain disability categories. The districts have the financial burden for these students and must ensure they are served appropriately which can have a high cost. The DOE has said it expects in the future that the individual student level data will be available and formatted in a way that aligns with the analysis APA was unable to undertake.

Expenditure data needs to be collected in a way that is both useful to the state in analyzing costs and of interest to school districts. The inconsistent use of the disability category expenditure information was related to the fact districts do not serve all students in a specific category in the same way. Instead of thinking about costs by disability, the state may want to work with districts in creating an expenditure tracking system that is more related to levels or types of service. This could mean not only looking at expenditures by disability categories but also gaining more detail about the services provided, particularly when services are provided in a resource room. It was clear that many of the expenditures for higher cost students were occurring in resource room type settings and that these expenditures were being categorized into this cost category.

Once the funding system has been implemented and the state data systems are collecting the pertinent information, the state needs to undertake analyses to determine if the census-based funding system causes funding inequities for districts, especially those with high percentages of low incidence, high cost students. The findings discussed earlier in the chapter highlight the differences found in the distribution of special education students across districts both by total percentage of special education students and by the percent of typically high cost students. The underlying question that was not fully answered is whether these differences mean the funding system, either the way students are funded and/or the total amount of funding, need(s) to be changed.

The basis of the study was to ascertain if districts with high concentrations of low incidence, high cost students are treated fairly by the census based system. APA was able to determine that these low incidence, high cost students were not evenly distributed across serving districts. What has not been fully studied, and needs to be addressed, is if this lack of even distribution is true for the resident districts also, those responsible for the funding of the students. If the distributions are inconsistent, either inconsistent across all types of districts or inconsistent between the types of districts, i.e. K-12 districts versus elementary districts versus secondary districts then funding inequities might exist.

Once it is determined if inconsistencies exist, the impact on district expenditures needs to be analyzed to determine if the distribution differences cause fiscal issues also. The added costs for specific categories or types of services associated with the high cost, low incidence students needs to be examined. If the costs are truly higher for certain low incidence special education the impact to districts needs to be understood. If on average, districts with higher rates of these high cost, low incidence students also somehow have lower incidences of other special education students, then perhaps the total cost of special education for the districts is not out of line with the use of the census based funding formula. On the other hand, if these districts retain the general level of special education students outside of the high cost, low incidence students than most likely the census based system is underfunding these districts. The inverse is also true; districts with lower than average percentages of the high cost, low incidence students may be benefitting from the census based system. Once again this should be examined looking at all districts and then also by types of districts. The state needs to understand if the census system places higher burdens on districts with these higher concentrations of high cost, low incidence students.

If it is found that the census system creates these higher burdens then adjustments need to be made to the special education funding system to addresses the inequities created by the census based funding. This might include differentiating the current census based system by type of district or eliminating the current system and funding districts based on actual special education students with regard to the higher costs associated with certain students.

APPENDIX A- LITERATURE REVIEW WORK CITED

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APPENDIX B- First Round Interview Questions

I. Changes from old system to new system
   a. What do you feel are the key changes from the old SpEd funding system to the new census-based system?
      i. Is the assumption of the new funding system – that the proportions of students with different disabilities are similar across all districts – correct? If not, why would the proportion vary across districts?
   b. Do you feel the new system has changed the way districts identify SpEd students?
   c. What do you think the strengths and weaknesses of the new system are?
   d. Do you think the incentives provided by the new approach are correct?
      i. To identify students.
      ii. To classify students by disability?
      iii. To provide appropriate services?
      iv. To serve students in the district?
      v. To provide services efficiently?
   e. How would you change the system so it provided appropriate incentives?
   f. How did the change from the old special education funding system to the new system affect you?
      i. Did it change the number of students receiving special education services? More? Less?
      ii. Did it change the process you use to classify students by disability?
      iii. Did it change the services you provide? What services increased? What services decreased?
      iv. Did it change the proportion of services provided in regular classrooms, in other ways in the district, or out of the district?
      v. Did it lower state support?
      vi. Did it require you to provide more local support?

II. High Cost, Low Incidence Students
   a. What disability categories do you consider high cost and/or low incidence categories?
      i. Have these categories changed over time?
      ii. Do you feel these types of students are generally spread evenly across districts?
      iii. Do you feel that most districts would consider these students high cost or is their variation in service models that may lead to variation in costs?
      iv. Do you feel that districts with different grade spans have different distribution of students?
         1. If so, does this change cost structures for these districts?

III. Best Practice
    a. For the high cost and/or low incidence students, are there best practices to serve these students?
    b. Do you think some districts better serve these students than others?
        i. If so, do you feel this can lead families to locate in these districts?
    c. Do you feel districts can create high cost programs that are not necessary for the appropriate service of students?

APPENDIX C- Protocol for Second Round of Interviews (NJ Visits or Calls)

1. Intro
    a. Who we are
    b. What we are doing for the NJDOE
    c. How your district was selected
    d. What we will cover in the conversation
        i. Try to explain that we are trying to understand the new funding mechanism for SpEd and understand there are cuts going on but want to focus on mechanism
    e. Responses are anonymous

2. Changes from old system to new system
    a. What do you feel are the key changes from the old SpEd funding system to the new census-based system?
        i. Is the assumption of the new funding system – that the proportions of students with different disabilities are similar across all districts – correct? If not, why would the proportion vary across districts?
    b. Do you feel the new system has changed the way districts identify SpEd students?
    c. What do you think the strengths and weaknesses of the new system are?
    d. Do you have any thoughts on what the appropriate incentives are for SpEd funding system?
    e. How did the change from the old special education funding system to the new system affect you?
        i. Did it change the number of students receiving special education services? More? Less?
        ii. Did it change the process you use to classify students by disability?
        iii. Did it change the services you provide? What services increased? What services decreased?
        iv. Did it change the proportion of services provided in regular classrooms, in other ways in the district, or out of the district?
        v. Did it lower state support?
        vi. Did it require you to provide more local support?

3. Counts of students being served
    a. Want to review data we were provided about counts of students participating in special education programs.
    b. Show resident and served counts by disability group and verify and changes over time (note anything of interest).
        i. Discuss private placements
        ii. Note any changes in schools with different grade spans.

c. Discuss number of students in programs assumed to be high cost.
    i. Does type of district have impact (e.g. K-12, Elementary, Secondary)?
    ii. District is running a special program (e.g., autism)?
    iii. Near a hospital with a particular specialty
    iv. Just happened?

4. Spending on students being served
    a. Want to better understand how much is being spent to serve students in special education programs and revenues used to support spending.
    b. Show spending information.
        i. What makes certain disabilities high or low?
        ii. Any unusual changes over time?
        iii. Based on your experience, are these figures comparable to other places?
    c. Show revenue information (state, federal, and assumed local, where local = total minus state and federal).
        i. Has local changed? If so, why?
        ii. How does special ed compare to other areas?

5. Views about special education funding
    a. Sufficient revenue to do job properly?
    b. Too much reliance on local revenue?
    c. Too much being spent on private placements?
    d. Census-based system working?