Funding Students, Not Units: Moving Alabama from a Regressive Public School Funding State to a Progressive Public School Funding State

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Abstract

Two independent studies conducted by Baker, Sciarra, and Farrie (2015) and Augenblick, Palaich and Associates (2015) reveal Alabama's public school funding mechanism to be regressive and inequitable. The recommendation from both of these studies is to develop a funding formula including per pupil-based allocation and supplemental categorical weights. This study has developed such a formula. This funding formula will guarantee greater transparency and efficiency of public funds and a better public school system for all students. In order to receive the categorical funding, a school system must document a need for each individual that requires that service or program. This required data collection will allow the school systems to monitor progress and trends as well as allow for oversight by stakeholders for the use of public funds. The funding formula will also provide school systems with the mechanism to collect funds to meet the needs of their specific students, and the autonomy to expend those funds on the programs that their students need (which realistically changes from year to year). Implementing this funding formula will be the first big step in moving Alabama from a regressive funding state to a progressive funding state.

Keywords: Alabama school funding, school funding formula, equitable funding, funding distribution

In the world of education finance, Alabama has been the target of jokes such as "At least we're not Alabama." The reason for the "joke" is that it has been common knowledge among the education finance experts that until recently Alabama (AL) has been ranked the worst state when it comes to funding public education. Now, the response to the "joke" from Alabamians has been "At least we're not Mississippi." While this "joke" is a light-hearted attempt at poking fun of AL, in reality it's a sad truth with real implications for the students of AL.

Using the data and recommendations reported from several recent studies conducted on the Alabama school finance system, this study proposes moving AL from their current regressive funding mechanism to a more equitable student weighted funding formula. After highlighting the results of the previous studies, a categorical funding formula including student base costs and supplemental weighted services is proposed. Using the proposed formula and data from AL's 2014-2015 school year, examples of what the formula would produce at the state level and the local school system level was explored. Finally, the action needed to implement the proposed funding formula was discussed.

The Regressive Education Funding State

The Baker, Sciarra, and Farrie Study

In the 2015 national report card "Is School Funding Fair?," Baker, Sciarra, and Farrie (Baker) examine school funding fairness nationwide using four principles: effort, funding level, coverage, and funding distribution. "Effort- measures the difference in state spending for education relative to state fiscal capacity. 'Effort' is defined as the ratio of state spending to state gross domestic product (GDP)" (p. 4). This report indicated AL's per capita GDP was $37,186 and the effort index was 0.033. This means that AL contributes roughly 3.3% effort toward education, which classifies them as medium on the effort index.

Baker defined the fairness of funding level as measuring "the overall level of state and local revenue provided to school districts, and compares each state's average per-pupil revenue with that of other states [in order to make comparisons between states, the researchers controlled for] differences in regional wages, poverty, economies of scale, and population density" (p. 4). In this ranking of per-pupil funding level, Alabama was ranked 38th among the other states with a funding level of $8,701 per student. This means after controlling for the differences in regional wages, poverty, economies of scale, and population density, AL funds 53% less per student than the highest funded state (NY at $18,507 per student) and 27% more per student than the lowest funded state (ID at $6,369 per student).

The next measure of fairness according to the Baker study is

> "Coverage- This measures the proportion of school-age children attending the state's public schools, as compared to those not attending the state's public schools (primarily parochial and private schools, but also home schooling). The share of the state's students in public schools, and the median household income of those students, is an important indicator of the distribution of funding relative to student poverty (especially where more affluent household simply opt out of public schooling), and the overall effort to provide fair school funding" (p. 4).

In AL, 88% of all school age children attend a public school. Yet the 12% of students who attend private schools have a household income of 171% compared to the household income of those that attend public schools. This has two implications according to the study. First, it

indicates there is a high concentration of student in poverty in the public schools. Second, because the 12% are contributing to public education through their taxes, yet not participating in the public school system, they are less likely to vote for increases in funding for public schools, which possibly creates even further disparity in public school funding.

The final measure of fairness in the Baker study and the focus of this paper is "Funding Distribution- This measures the distribution of funding across local districts within a state, relative to student poverty. The measure shows whether a state provides more or less funding to schools based on their poverty concentration" (p. 4). The report indicated that AL funds its students in high-poverty school districts at 90% of what it funds students in low-poverty districts. This is possible because some local school districts are capable of generating a greater local contribution than other districts with lower wealth and lower property values. Because AL's per pupil expenditure for students in poverty is less than the per pupil expenditure for students not in poverty, AL is a regressive funding state.

To summarize the findings in this study, AL may not be the target of the education finance experts "jokes" any longer. The results of this study certainly do not paint a pretty picture of AL but it also reveals AL may not be the worst anymore either. On the positive side (or at least, the not the worst side) AL falls into the medium category of the amount of effort they put forth toward education and is ranked 38th among the other states in per pupil funding levels. But on the not so good side, AL has a huge gap in the household incomes of those attending private schools and those attending public schools, and they are inequitably under funding the students in poverty.

Augenblick, Palaich and Associates Study

In 2015, the Alabama State Department of Education (ALSDE) hired Augenblick, Palaich and Associates (APA) to conduct a series of studies on the states' education funding system. The studies conducted included a review of the current state funding system, an equity study, a study using the successful school approach to adequacy, and a study using the professional judgment approach to adequacy.

The Current State Funding System. The APA's review of the current state funding system compared AL to 15 other Southern Region Education Board States (SREBS) which included AR, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV. AL, like most of the comparison states, uses a foundation program. A foundation program is the use of a formula to determine how much money a school district will need to operate, then it determines what percentage of that need will be funded by the state and what will be required of the local systems to contribute to the need. The foundation program is used as a means to allow the state to equalize the school systems revenue by allowing the wealthier local systems to pay for a larger portion of their need hence freeing up some state money to aid the poorer local systems in meeting their need. This is done by first determining the amount of money a local system can contribute based on their property value, and then the state will "make up" the difference to bring each system to their funding level of need. In order to participate in the foundation program in AL the school systems are required to contribute 10 mil or that equivalent, accordingly then the state is to contribute the remaining amount needed to operate the schools in that system (AL Code 16-13-231). Outside of the foundation program, AL does provide funding for other services not covered by the foundation program such as transportation, an at-risk student fund, capital outlay, etc. AL uses the foundation program to fund units (personnel) and school leaders

based on the number of students enrolled in the previous year. The number of units is determined by the grade level divisor the AL legislatures sets. The number of school leaders including principal, assistant principal, counselors, and career tech directors are determined by a number of students to school leader ratio, also determined by the AL legislators. The AL legislators also decide the salary (according to a salary matrix) and benefits they deem necessary and the other expenditures they feel the schools will need (such as maintenance, operations, classroom materials, textbooks, etc.). This method of using the foundation program differs from the comparison states because the other states fund students based on the previous year's enrollment and provides weights to a base student cost in a formula for determining a per pupil allocation.

Next, this study compared AL with the other SREB states on spending per student, variation in spending across school systems, and statewide average staffing levels for different types of employees. What they found was nine of the 15 states personal income per capita were within $2500 of AL, which indicates those states have similar populations in relation to personal income thus making a comparison more equitable. For spending per student, AL was 6.8% lower than the average of all the other SREB states. The variation in spending from one school system to another is low in AL compared the other states variation between school districts meaning AL is spending roughly the same in each district. The relationship between per-student spending and district wealth is near average of the other states. For the staffing data, AL falls below the average of all other SREB states for the number of teachers, administrative staff, and guidance counselors employed. The teacher salaries in AL are 4.1% below the average of other SREB states, yet their benefit rate is very high compared to the others.

Another big difference between AL and the other states is how students' needs are determined and funded. In AL, each school system receives an added 2.5 weight for 5% of their total population, even though every system has more than 5% of the population identified as special needs (ALSDE, 2015). The added weight will be used to earn additional units for that system. The other states use a student weight, in addition to the base student cost, to provide additional funding for that student's special education services. Because AL does not use student weights for determining funding of services, this study imposed a student weight formula onto AL data in order to examine the ratio of weighted to unweighted students among the SREB students. The imposed formula added to the 1.0 base student Alabama location 1.10 for special education, .40 for at-risk students, and .75 for ELL students. With these imposed weights, AL is spending 37% more money on students who receive special education, at-risk, or ELL services than students who do not receive these services. This percentage is below the SREB state average (42%) and below the national average (45%). This study also found AL has a low proportion of students receiving special education services (11.1%) compared to other SREB states with similar levels of personal income per capita (20 percentage points), and is well below the national average (13.2%). So, in AL they are serving fewer students with special needs and funding the special programs at a lower rate than the average of SREB states and the national average.

The last piece of this study reveals that AL's spending on education including elementary, secondary and postsecondary is 20% higher than the SREB states and 40% higher than the national average. But this high percentage can be attributed to the proportion of education spending in postsecondary, which is higher than any of the other SREB states and 50% higher than the national average. In fact, 61.1% of the education spending in AL is for postsecondary education.

To summarize the APA's analysis of how AL is currently funding schools compared to how the 15 SREB states are, highlights AL is funding units not students. When converting the AL funding method to funding students, the researchers found AL is below the average of the other states in spending per pupil, number of school leaders, salaries, and number of students receiving special education, and spending on special education. The one area in which AL was above the average of the other states was the percentage of the state budget spent on education. Although, that finding must be approached with the understanding that the percentage reported included funding for both higher education and PK-12 education.

The Equity Study. In the Equity Analysis study, APA examined the fiscal equity of Alabama's school finance system from the 2006-07 school year to the 2012-13 school year. The researchers identify equity in terms of student fiscal equity (uniform per-pupil spending statewide), taxpayer equity (tax rates supporting education are similar across the state), and fiscal neutrality (there is no relationship between the wealth of the school system and the per-pupil spending) (APA, 2015). The results of the student fiscal equity in terms of vertical equity revealed that while an increase of $458 per pupil occurred over the seven-year period, after accounting for inflation, the per-pupil expenditure decreased by $513 per pupil. Furthermore, the student equity measure indicates the gap in per pupil spending between the highest and lowest spending districts grew over the seven-year study causing greater inequity (went from a $5,039 per pupil gap to $6,025 per pupil). Regarding the student horizontal equity, the level of need was calculated by the count of students identified as needing special education, at-risk, and English Language Learner or Limited English Proficiency. The need for these services remained relatively the same over the seven-year study period, but the level of spending per student decreased by 3.3%.

In terms of fiscal neutrality, the study measured by the relationship between the local property values and per pupil spending. The researchers stated "a generally accepted standard is that a system is reasonably fiscal neutral if this correlation is less than 0.50." (p. 31) The findings indicate AL, while still in the acceptable standard, is trending toward the unacceptable (0.38 in 2011-12 to 0.43 in 2012-13). Altogether, this equity study found that AL is not only inequitable in terms of the wealth of the school district and the per pupil spending, but they are coming closer and closer to becoming inequitable in fiscal neutrality as time goes on.

The Successful School Approach to Adequacy. The APA's next study used the successful school district approach to determine the base student cost needed to meet an adequate public education. This figure is calculated by examining the current district spending in successful districts. For this study, districts that met both criteria set by APA, would be examined as successful school districts. Those criteria included: 1) the districts that met the 2011-2012 proficiency level for at least five of the six grades 3rd through 8th, on both Math and Reading on the Alabama Reading and Mathematics Tests and 2) the districts whose proficiency percentage was at least 0.25 standard deviations above the state mean on all five 11th grade Alabama High School Graduation Exams. Thirteen of the 137 systems met both these criteria. The analysis revealed that the base cost of educating a student in a successful district in 2012-2013 was $7,170 (includes $5,386 for instruction, $977 for administration, and $807 for building maintenance and operations). This base funding level does not include the cost of special education, at-risk, or ELL services.

Professional Judgment Approach to Adequacy. APA then used the Professional Judgment Approach to Adequacy to determine the cost in the successful districts of providing resources such as school-level personnel, additional supports and services, technology, and district-level

resources. According to the researchers, the Professional Judgment Approach relies on the assumptions that experienced educators can specify the resources schools and school districts need in order to meet state standards, and that the cost of such resources can be determined based on a set of prices specific to those resources (APA, 2015).

Because each system in AL varies greatly in number of resources and the cost of those resources, APA created mock schools and districts using state average data. APA then constructed multiple judgment panels through a nomination by district staff process to determine the resources needed for the mock schools and districts. In total there were 80 panelists in 15 panels including school-level panels, special needs panels, district panels, additional topics area panels, and statewide panels. Each panel included a combination of classroom teachers, principals, personnel who work with students with special needs, superintendents, technology specialists and school business officials.

The results of the panelist's effort to identify the resources necessary for an adequate education found several key recommendations that were similar across the panels. The first necessity was small class sizes; in fact, they recommend the student-to-teacher ratios of 15:1 in K-1st grade, 18:1 in 2nd-3rd grade, and 25:1 in 4th-12th grade. As of the 1998 Pupil to Teacher Ratio reported on the ALSDE website, the state requirements include 18:1 in classrooms K-3 that include students with disabilities, 26:1 in 4th -6th grade classrooms that include students with disabilities, and 29:1 in 7th -12th grade classrooms that include students with disabilities (ALSDE, 2015). The next resource identified by the panelists was adequate funding for professional development, instructional coaches, and teacher planning time. Regarding student support, the panelists identified these resources as being necessary for an adequate education counselors, social workers, interventionist, before-and after-school programs, school-level summer school for struggling students, and alternative and CTE settings. The panelist also identified technology-rich learning environments, including 1:1 student devices in 3rd grade and up and the associated IT support as necessary. Finally, the panelists identified resources for sufficient staff to serve Special Education, ELL and gifted students, and Preschool for all four-year-olds as all being necessary for an adequate education in AL.

The results of the Successful School District Approach indicated a base student cost of $7,170 would be needed, but the Professional Judgment Approach yielded an $8,072 per student base cost as needed. The researchers combined the results of the two approaches for determining the weights needed to provide equitable funding. The suggested weights include English Language Learners earning 0.50, At-Risk students earning 0.30, Special Education earning 1.10, Gifted earning 0.20, Preschool earning 0.24, and Career Technical Education (CTE) earning 0.07. In Table 1, the APA applied these weights to the base costs generated by the two approaches for comparison. Without including a weight for the size of the school the Successful School District Approach finds the weighted student allocation needs to be $9,388 to adequately education a child in AL public schools. In the same circumstance the Professional Judgement Approach found the weighted student allocation needs to be $10,590 per student to adequately education the students of AL.

Table 1

APA's comparision of the applied weights to the two approaches.

2012-13 Adequacy Estimates, Compared to Actual Spending

	Current Expenditures	Successful School District		Professional Judgment	
		Without Size Adjustment	With Size Adjustment	Without Size Adjustment	With Size Adjustment
Adequacy Estimate (totals in millions)					
Base	-	$5,274.3	$5,365.2	$5,937.8	$6,040.1
Special Education	-	$562.5	$562.5	$633.2	$633.2
ELL	-	$49.9	$49.9	$70.2	$70.2
At-Risk	-	$929.8	$929.8	$1,046.8	$1,046.8
CTE	-	$76.9	$76.9	$86.6	$86.6
Total	$5,681.2	$6,905.8	$6,984.3	$7,774.6	$7,790.3
-Per Student	*$7,723*	*$9,388*	*$9,495*	*$10,569*	*$10,590*
Difference between Adequacy Estimate and Comparable Spending (total in millions)					
Difference		-$1,224.6	-$1,303.1	-$2,093.4	-$2,109.1
-Per Student	-	*-$1,665*	*-$1,772*	*-$2,846*	*-$2,867*
-Percentage	-	*21.6%*	*22.9%*	*36.9%*	*37.1%*

Note: Table from Augenblick, Palaich, and Associates (2015), Equity and Adequacy in Alabama Schools and Districts: Prepared for Alabama State Department of Education, p. 71. Retrieved November 1, 2015 from http://www.alsde.edu/sec/comm/Related%20Documents/Alabama%20Final%20Report%209.8.15.pdf#search=Augenblick

To synthesize all of the aforementioned research, AL is not the worst state nationally when it comes to funding public schools, but they are below average on most indicators compared to other SREB states. Furthermore, while a comparison that shows they are not the worst, it does nothing to improve the education of AL students. The reality is AL is sliding down the hill of adequately and equitably funding public education. Action must be taken to halt the downward slide. Both the Baker and the APA studies suggest that AL move from a funding of units to a weighted formula for funding students as a necessary step for moving AL from a regressive education funding state to a progressive education funding state. The next section of this study proposes what the weighted formula would look like including categories of weights and actual weight amounts suggested from the previous studies.

A Weighted Per Pupil Funding Distribution Formula for Alabama

Obviously, in a weighted formula, there must be a base cost to apply the weights. The base cost for this formula would be the cost associated with educating an average student. The base cost would include the personnel, the instructional support (i.e. student materials, technology, library, textbooks, professional development, etc.), transportation, and operating costs needed per student. The base cost and categorical weights will be set annually by the legislators based on the results of required adequate funding studies (such as the Successful School District Approach and the Professional Judgment Approach) conducted every 3 years.

Categorical Weights

The categorical weights to be added to the base cost will require annual data from the school system to document the need for the weights. The first categories are to decrease the inequity related to student poverty and small school sizes, and these include a poverty supplement and a small school system supplement. These categories are based on student demographic data, specifically a measurement of identifying the number of students living in poverty and the total number of students within a school system. The remaining categories are based on services provided to a particular student beyond the basic student education that is required for an adequate education. These service categories include a special education matrix supplement, and English Language Learner supplement, a vocational education supplement, and a preschool supplement. A visual model of this categorical funding formula can be seen in Chart 1.

The APA study made a suggested weight for the poverty supplement, although they called it an at-risk weight. The APA suggests a 0.30 weight for a poverty supplement. This would mean a student identified as living in poverty would receive $1.30 for every $1.00 a student not living in poverty would receive for education. To identify which students are living in poverty, two methods should be used. First, the Federal School Lunch program is already collecting student data related to poverty levels as a qualification for participation in the Federal Free and Reduced Lunch Program (FRLP). It makes sense to use their identification data. Therefore, if the FRLP identified a student eligible to participate, that student would be identified as living in poverty and also qualify for the poverty supplement. Because the FRLP is voluntary and requires the students' guardian to apply annually for the program, a second method of identifying the students living in poverty is necessary. There is overwhelming evidence indicating as students' progress through the education system they are less likely to apply for the lunch program in middle and high school years. So to mediate the decline in participation of the federal lunch program, which falsely under identifies students living in poverty, a cohort trend analysis will be used, in conjunction with the FRLP, to identify those students who may stop applying to the FRLP. Because the FRLP qualifies students to receive either free lunches or reduced price lunches, this funding formula will also distribute the categorical weight on a two-tiered level. Students who are identified as qualifying for a free lunch in the FRLP will receive a 0.30 weight. Students who are identified as qualifying for a reduced price lunch in the FRLP will receive a 0.20 weight. A small school system size is another category that inherently attributes to inequality. Typically, these smaller systems are located in rural areas resulting in fewer children attending the public schools than the urban areas. Fewer students means less money, yet the overhead and operational costs of keeping a school open does not vary much with the number of students in the building. Therefore, these smaller systems are required to spend more on overhead and operations leaving less money for instructional programs and services, creating a disadvantage to those students. For this formula, students attending a school system with less than 1000 students will receive a .10 weight to offset the fixed costs of operating the schools.

The remaining four categories of support are services a student must be eligible to receive and the school system must provide annual documentation of qualified students. The English Language Learner supplement would include the APA's recommended .50 weight for students who qualify for ELL services. The Vocational Education Supplement will include a weight of .10 due to the AL college and career readiness campaign and the need to support the career ready pathways. The Preschool supplement will be offered for all 4-year olds in the state to attend a

half-day of schooling. Because 4-year olds do not receive a base student allocation, a school system that offers this service will receive the equivalent of a .24 weight per student to fund the program. To receive these service supplements a school system must provide documentation of program success and actual student participation numbers.

The final service category is the special education category. Because there is such an enormous spectrum of services needed by students with disabilities, a matrix of required services will determine the level of weight a particular student will receive. It makes more sense to fund a service rather than simply a disability label because the label does not reflect the level of need a student requires. Using a matrix to identify the level of additional support and services a student with a disability requires in order guaranteeing access to a Free Appropriate Public Education allows for a tiered service level that can be tied to a tiered funding system. In this matrix modeled after Florida's matrix (FLDOE, 2015), the school system must submit to the state annual documentation that indicates a level of need as indicated on the service page of the students' Individualized Education Plan ranging from Level 1: No Extra Services Are Needed to a Level 5: Continuous Intense One On One Support Is Needed in five different domains (Curriculum and Learning Environment, Social or Emotional Behavior, Independent Functioning, Health Care, and Communication). The score of the matrix will determine the level of tiered special education weight. In this tiered matrix, a level 1 would represent all students who have and Individualized Education Plan identifying them as qualifying to receive special education services but has no or little need for services or programs beyond what the basic student receives and would receive a .10 weight. Although, no additional services are required, there are costs associated with monitoring, evaluating, and consulting so a small weight is needed. A level 2 would receive a .20 weight because the level of service needed for these students increases to receiving assistance on a periodic basis. A level 3 would receive a .75 weight. There is a more significant increase in weight here because these students will require complex accommodations that require a joint effort and receive services on a regular schedule. A level 4 would receive a 1.00 weight to provide specialized approaches to the majority of learning activities, assistance or equipment or extensive modifications to the learning environment. The last level, level 5 will receive the APA recommended weight of 1.10 to provide intense one on one continuous intervention or assistance. Obviously, it is expected that the number of students will decrease as the level of service increases.

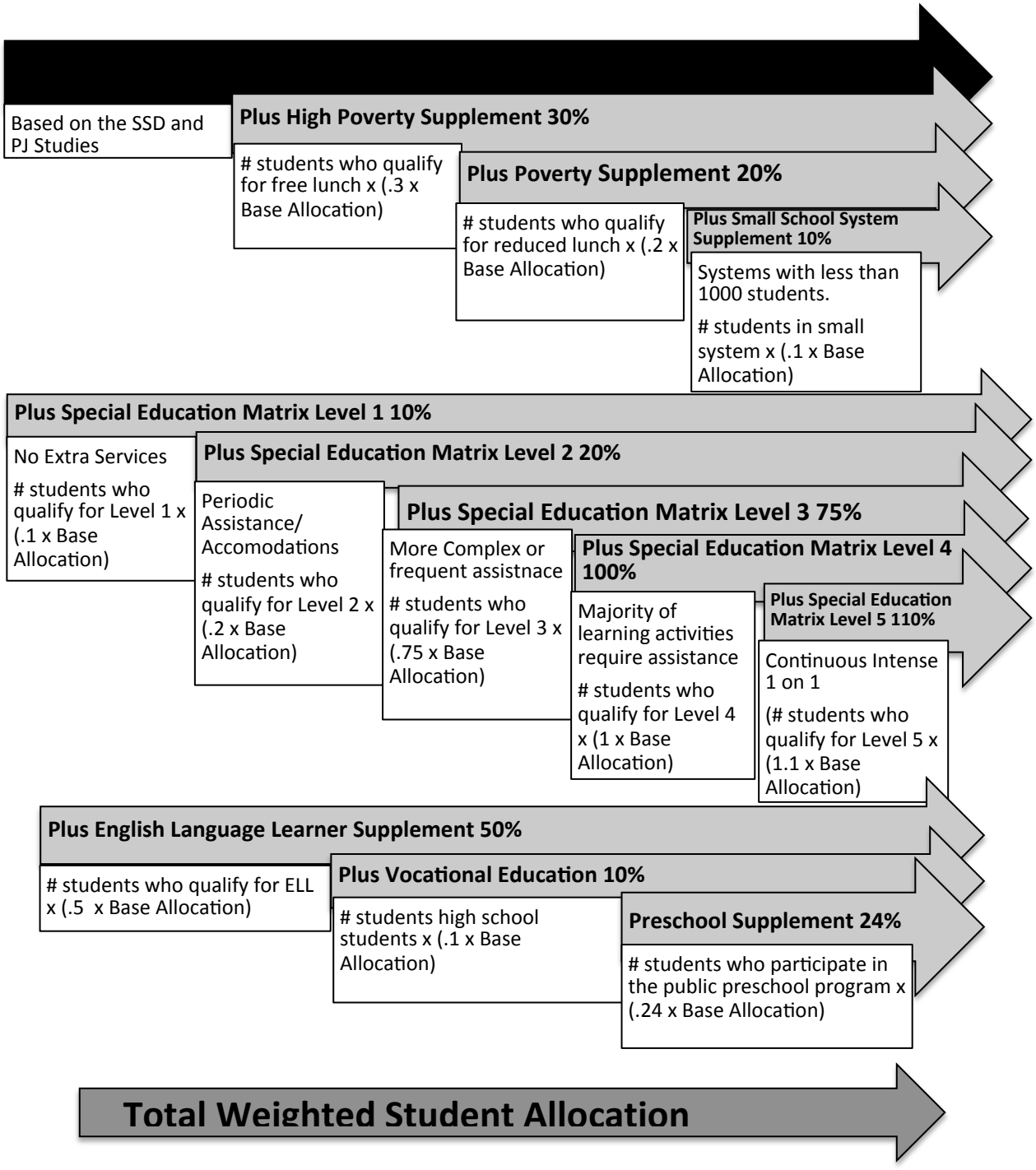
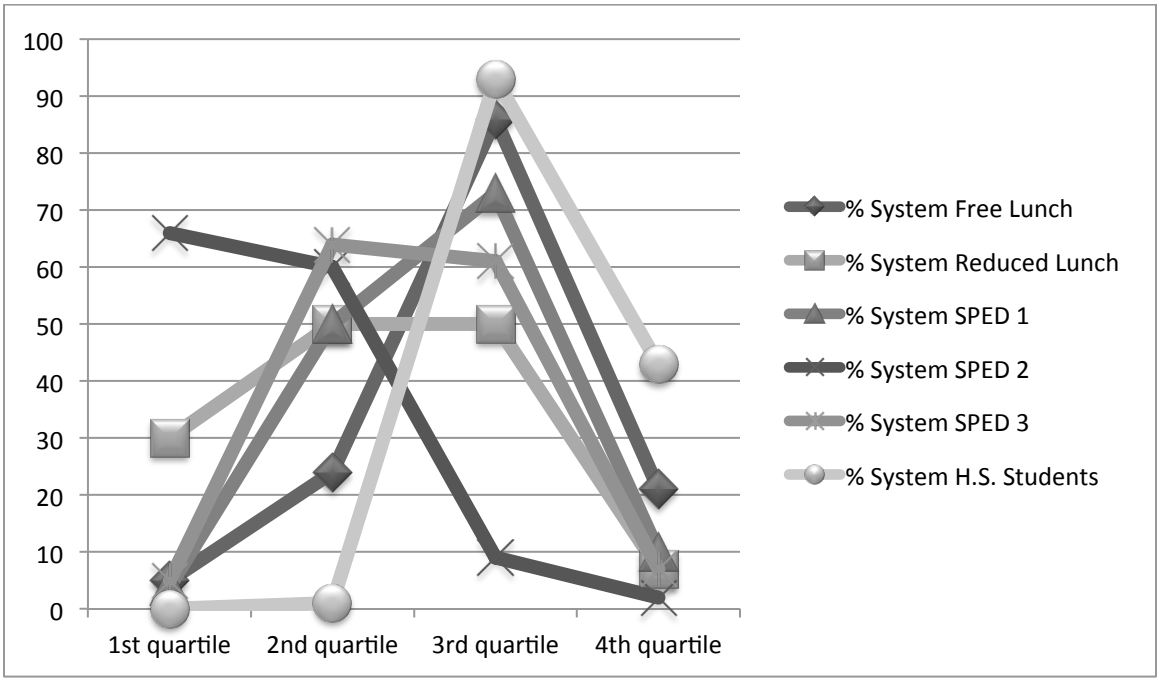


Figure 1. Visual Representation of the Funding Formula

What Should We Expect?

Before we jump into the formula, we should get the context of how these weights are represented in each system. Just looking at the numbers without the context can mislead one into misinterpreting and advocating for inappropriate policy. Appendix A provides the percentage of students in each system that will receive a supplement. The percentages represented in the Appendix were coded to represent four quartiles with white being systems in the lowest quartile, light grey in the second quartile, dark grey in the third quartile, and black in the highest quartile. The quartiles were determined by using the highest percentage in each category and dividing that number by 4 to determine the quartile ranges. For example, for the category of Free Lunch, the system with the highest reported percentage of Free Lunch students was Greene County at 88%. So, one-fourth of 88 is 22, therefore the systems that had a percentage of students receiving free lunch in the range of 0% to 22% were coded white, systems with 23% to 44% were light grey, systems with 45% to 66% were coded dark grey, and systems with 67% to 88% were coded black. This is important to understand, because if funding is based on student need, knowing who has the highest need will give preview to who will receive more funding. A summary of the number of systems in each quartile by category is represented in Chart 2. Back to the Free Lunch example, looking at Figure 2 you will see that more than 80 of the school systems fall into quartile 3 meaning more than 80 of the 137 school systems have between 45% and 66% of their students in high poverty and participating in the FRLP thus will receive an additional 30% of the per pupil allocation.



	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Free Lunch Range	0-22	23-44	45-66	67-88
Reduced Lunch Range	0-3.6	3.7-7.2	7.3-10.8	10.9-14.3
SPED Level 1 Range	0-7.4	7.5-14.8	14.9-22.3	22.4-29.4
SPED Level 2 Range	0-.13	.14-.26	.27-39	.40-.53
SPED Level 3 Range	0-1.0	1.1-2.0	2.1-3.0	3.1-4.0
H.S. Students Range	0-10.5	10.6-21.0	21.1-31.5	31.6-42.0

Note: The data used to create this chart was gathered from the Alabama State Department of Education's FY 2015.

Figure 2. Number of school systems in each quartile of each category

Applying the Formula

A funding formula is just a mathematical equation with no value until real numbers are plugged into it and the results are used to positively impact a situation. To increase understanding of the proposed formula and to positively impact the regressive, nearing inequitable funding of AL schools, this section of the research will use data from the ALSDE to insert real numbers. Data reported to the ALSDE for the FY2015 was used for these examples. To begin with the goal in mind, the formula will be used with the suggested base student allocation of $7621 suggested in the APA study (difference between the Successful School District Approach and the Leadership Judgment Approach) and recommended student weights. This will yield a picture of what the funding system should look like in a fully funded budget required for an adequate education. Next, the actual funding from 2015 school year will be used to back into the formula to determine what the system would look like using the actual money allocated. This will give a "where we are now" and "where we should be" scenario. This scenario will be created first at the state level and then at the district level.

It is worth noting these scenarios are just estimates of what the systems would resemble when applying the funding formula. This is noted because some of the numbers are the best numbers attainable at the time of the study. In particular, for the number of students receiving the poverty supplement, only the FRLP data was used, not including the cohort trend analysis for determining unidentified students. For the special education supplement, students were assigned to a funding level based solely on their identified disability because the matrix has yet to be created and implemented. So, students identified as speech, developmentally delayed, gifted, orthopedically impaired, other health impairments, and specific learning disability were grouped into level 1; students identified as hearing or visually impaired were grouped into level 2; students identified as emotion disability, intellectual disability, mental disability, and traumatic brain injury were grouped into level 3; and no students were grouped into level 4 or 5. The ELL supplement was not calculable due to insufficient data on the number of students in each system for this category. Also, it is of utmost importance to understand this example is based on reported data and may not represent actual data, which is another implication of implementing this model: if a system does not report correctly, they will not receive the correct amount of funding.

At the State Level

Starting with the end in mind, using the 733,089 average daily membership reported in 2015 and the suggested base student allocation of $7621 the base student allocation needed would be $5.6 billion. Then using the number of students reported in each category multiplied by the recommended weights for each category an additional $1.2 billion would be needed resulting in a total weighed student allocation of $6.8 billion. As seen in Table 2, the actual amount spent in 2015 on the base student allocations including salaries, classroom supports, transportation, capital purchase and debt services was deducted from the total weighted student allocation leaving $2.3 billion to help cover the weights and the increase in the base allocation. The amount of local funds contributed does not change and the total amount the state would need to contribute would be $6.2 billion. In the adequate model, there is enough funds generated to cover the base student allocations and all the weighted allocations with $1.1 billion left for increasing salaries, updating buildings, improving technology, etc. that has been underfunded in AL for so long.

Table 2

Where we should be

STATE TOTALS	FY 2015	
Student ADM 733,089	Total	Per student
Base Student Allocation	**$5,586,871,269**	**$7621**
Weighted Categorical Supplements		
High Poverty Supplement	$794,427,519.90	347,473 students
Poverty Supplement	$56,902,958.60	37,333 students
Small System Supplement	$2,979,811.00	3,910 students
SPED Level 1-5 Supplement	$184,577,190.55	143,121 students
ELL Supplement		
Vocational Ed. Supplement	$168,475,922.80	221,068 students
PreK Supplement		
Total Weighted Student Allocation	$1,207,363,402.85	752,905
Total Weighted Student Allocation	**$6,794,234,671.85**	**$9,267.95**
Salaries	$2,277,011,466	$3,106.05
Fringe Benefits	$904,567,593	$1233.91

Other Current Expense	$752,446,808	$1026.41
Classroom Support		
Student Materials	$14,609,118	$19.93
Technology		
Library Enhancement		
Professional Development		
Common Purchase		
Textbooks	$25,920,013	$35.36
School Nurse Program	$29,985,470	$40.90
Salaries-1% per ACT 97-238	0	
Technology Coordinator	$3,664,778	$5.00
Transportation Operations	$278,860,179	$380.39
Fleet Renewal	$36,954,000	$50.41
Capital Purchase	$170,000,008	$231.90
Debt Service	$532,864	.73
***Total Current Allocations**	$4,494,552,297.00	
***Supplemental Funds Remaining*	$2,299,682,374.85	
Total State Funds	$6,198,819,984.85	
Local Funds		
Foundation Program	539,347,750	10 Mills
Capital Purchase	56,066,937	1.02282 mills
Total Local Funds	595,414,687	

Note: * Actual dollar amounts reported in the ALSDE 2015 budget.

** Represents the supplemental money generated by the weights above what is currently being allocated. This money will be used to cover the supplements earned by the systems.

Next looking at the "where we are now scenario" at the state level, the total money allocated for education was used to back into the formula to determine the base student allocation using the recommended categorical weights. As seen in Table 3, the actual base student allocation using reported funds from the 2015 budget would be $5100 per student. This base is what was left from the state total after deducting the $807 million needed to cover the weights needed and divided by the number of ADM. Adding the base student allocation total to the weighted categorical total gives the total weighted allocation of $4.5 billion. Again, deducting the actual spending on salaries, classroom supports, transportation, capital purchase, and debt services which is the base student costs, only $51 million would be left for covering the cost of the weights. Now the difference for what was generated for weights and what is left to spend on the weights is a $756 million difference. This is because the $756 million was needed to cover the base allocations. Clearly, the $51 million is not enough money to cover the cost of the weights. This example highlights the underfunding of the Alabama public schools, and illustrates the necessity in re-evaluating the funding system. But even with the limited funds, using the categorical funding distribution, the $51 million can be used to fund the weights just at a much lower percentage than what is needed. This still moves AL into more equitably distributing the limited funds they do have available. With this as a starting point and the "where we should be" scenario as a goal, AL can develop a plan.

Table 3

Where we Are

STATE TOTALS	FY 2015	
Student ADM 733,089	Total	Per student
Base Student Allocation	**$3,738,753,900.00**	**$5100**
Weighted Categorical Supplements		
High Poverty Supplement	$531,633,690.00	347,473 students
Poverty Supplement	$38,079,660.00	37,333 students
Small System Supplement	$1,387,200.00	3,910 students
SPED Level 1-5 Supplement	$123,519,705.00	143,121 students
ELL Supplement		
Vocational Ed. Supplement	$112,744,680.00	221,068 students
PreK Supplement		
Total Weighted Student Allocation	$807,364,935.00	752,905
Total Weighted Student Allocation	$4,546,118,835.00	**$6,201.32**
Salaries	$2,277,011,466	$3,106.05
Fringe Benefits	$904,567,593	$1233.91
Other Current Expense	$752,446,808	$1026.41
Classroom Support		
Student Materials	$14,609,118	$19.93
Technology		
Library Enhancement		
Professional Development		
Common Purchase		
Textbooks	$25,920,013	$35.36
School Nurse Program	$29,985,470	$40.90
Salaries-1% per ACT 97-238	0	
Technology Coordinator	$3,664,778	$5.00
Transportation Operations	$278,860,179	$380.39
Fleet Renewal	$36,954,000	$50.41
Capital Purchase	$170,000,008	$231.90
Debt Service	$532,864	.73
***Total Current Allocations**	$4,494,552,297.00	
***Supplemental Funds Remaining*	$51,566,538.00	
Total State Funds	$3,950,704,148	
Local Funds		
Foundation Program	539,347,750	10 Mills
Capital Purchase	56,066,937	1.02282 mills
Total Local Funds	595,414,687	

Note: * Actual dollar amounts reported in the ALSDE 2015 budget.

** Represents the supplemental money generated by the weights above what is currently being allocated. This money will be used to cover the supplements earned by the systems.

At the System Level

When looking at the system level, first each systems' categorical data was run through the funding formula using the suggested base student allocation of $7621 and the suggested categorical weights on the data the systems reported to the ALSDE. Then for comparison purposes the new weighted total that a system needed was divided by the number of ADM the system reported to get an average weighted per pupil allocation. To be able to compare per pupil

allocation of “the where we should be” to “the where we actual are,” the actual per pupil allocation was calculated using reports from the ALSDE on the revenue each system received and their ADM in 2015. Figure 3 shows what the actual state per pupil allocation is for each system then shows how much would be added to each system to get to the adequate funding levels recommended in the previous studies.

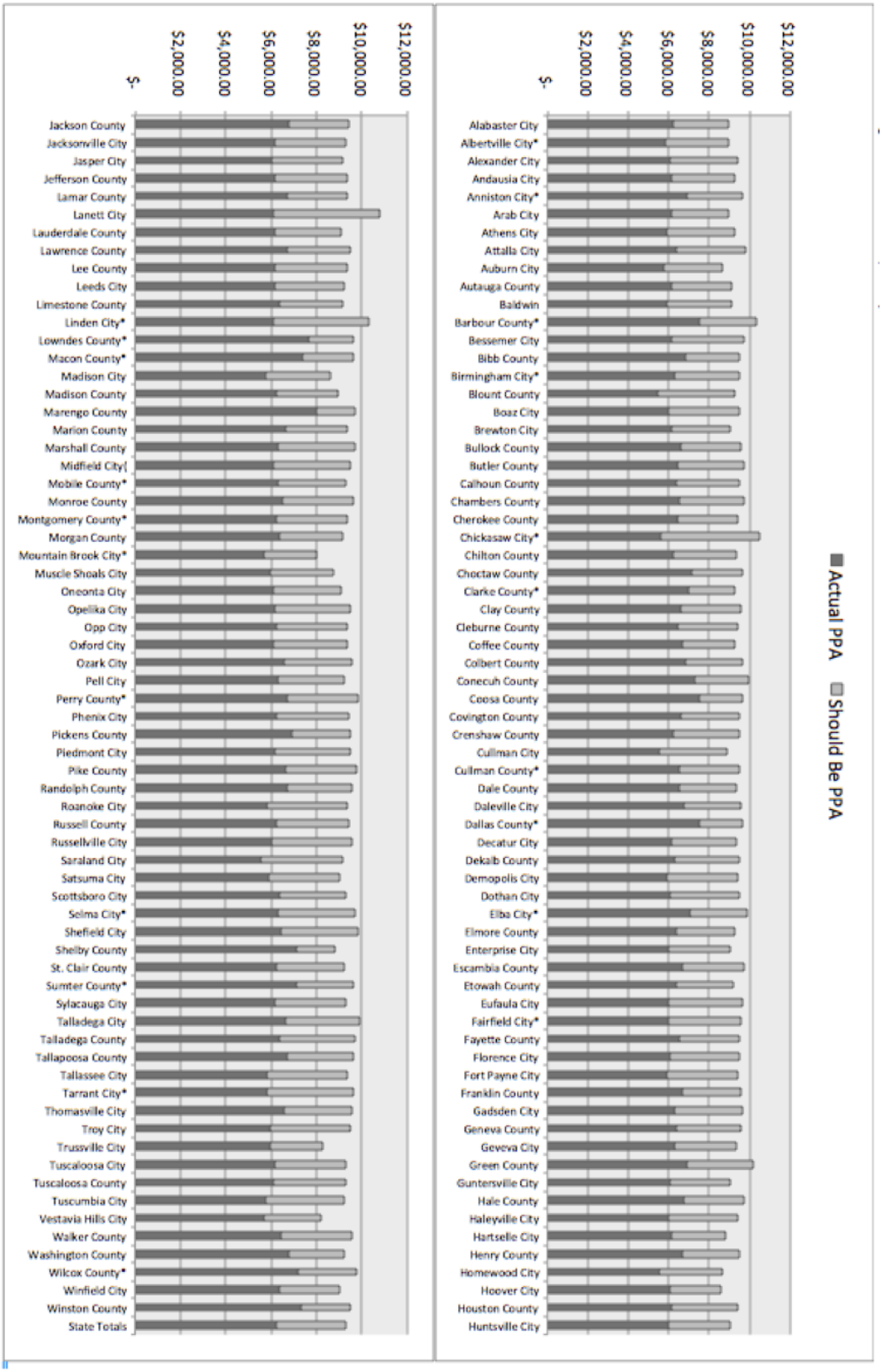


Figure 3. Actual Per Pupil Allocation (PPA) From 2015 with Should Be PPA Ad

Next, the intention was to use the actual system revenues to back into the formula to compare what funding the systems actually received and the funding they would receive with the formula. But in the preliminary runs with the existing data, questionable data was found. Examples of these questionable data can be found in the Appendix when noticing several of the county schools appear to be under reporting the number of students receiving reduced lunch and special education in particular. Typically, the county systems are the more rural and high poverty systems, so when the data reported indicated 0% of a system qualifying for reduced lunch suspicions were raised. Due to the accuracy of the reporting being questionable, the researcher thought it best to not continue comparing the systems until another level of this study can be completed to verify the systems reported data. One hypothesis for the under reporting is due to funds not being tied to the numbers, so in an overworked, underfunded system, this error may have gone unchecked. Another hypothesis is in the county schools often with the lack of additional units funded by the local taxes, often many of the system level personnel have to cover the responsibilities of several jobs leaving room for error. Therefore, as a follow up to this study, the researcher will take a more qualitative approach to learning about the possible under reporting in these categories and then a quantitative approach to securing more accurate counts before making any further comparisons.

Conclusion

It is very clear from previous research and the results of this study that AL public schools are underfunded and funded inequitably. The recommendations from the Baker study and the APA study indicate a weighted categorical funding distribution be created to curve the regressive distribution that is currently used in AL. By combining the research and methods used in other states, the funding formula created in this study would clearly move AL from inequitably funding units into far more equitably funding of students. It makes sense to pay for the services that a student requires to make an adequate education possible for all the students in AL.

In order for this change from funding units to funding students to take place in AL several things need to take place. First, an investigation into the underestimated reports produced by the ALSDE on the number of students being served in various categories must be addressed. The follow up study to this one will investigate this potential problem and gather the most accurate data in order to run this distribution formula as a ghost behind the actual budget for a few years in order to gather reliable data for comparisons. Also, the paperwork and training must be completed for the systems to easily report accurate data pertaining to the Special Education matrix of services. Finally, in order to change the funding of units to the funding of students, a legislative change would be required.

For the sake of the future of AL, something must be done to move AL from a regressive funding state to a progressive funding state. Clearly, there are numerous obstacles to making this a reality, but none the less, it is beyond time for the effort to be made. Even while AL works towards fully funding the education system, the distribution of the funds available must be done with the student and their needs in mind first. FUNDING STUDENTS, NOT UNITS.

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Appendix

Percentage of Students in Each System that Would Receive the Supplement

	% of students receiving free lunch	% of students receiving reduced lunch	% of students in SPED level 1	% of students in SPED level 2	% of students in SPED level 3	% of high school students
Autauga County	41%	7.7%	18%	0.17%	1.7%	30.9%
Baldwin County	38%	5.2%	26.5%	0.14%	1.9%	30.2%
Barbour County*	68%	0.0%	12.3%	0.23%	2.2%	28.3%
Bibb County	54%	9.1%	16.6%	0.27%	2.5%	30.9%
Blount County	46%	8.2%	15.5%	0.17%	2.3%	31.2%
Bullock County	65%	0.0%	13.2%	0.13%	2.0%	30.6%
Butler County	68%	5.5%	13.4%	0.10%	1.7%	30.8%
Calhoun County	52%	9.1%	18.4%	0.23%	2.3%	31.9%
Chambers County	63%	8.2%	24.0%	0.22%	2.2%	29.9%
Cherokee County	52%	11.0%	15.7%	0.28%	1.4%	31.0%
Chilton County	50%	7.2%	14.5%	0.15%	1.7%	29.2%
Choctaw County	65%	3.9%	16.8%	0.00%	2.0%	32.0%
Clarke County*	51%	0.0%	15.4%	0.17%	1.7%	35.2%
Clay County	55%	10.5%	19.4%	0.15%	3.0%	33.1%
Cleburne County	49%	12.6%	18.4%	0.08%	2.3%	31.1%
Coffee County	46%	9.8%	19.3%	0.15%	0.8%	33.9%
Colbert County	59%	8.1%	22.9%	0.04%	1.8%	32.0%
Conecuh County	84%	4.1%	12.7%	0.07%	0.8%	27.9%
Coosa County	63%	6.6%	11.2%	0.19%	2.3%	32.1%
Covington County	54%	10.1%	15.3%	0.29%	2.0%	29.3%
Crenshaw County	56%	8.6%	16.9%	0.14%	1.5%	30.7%
Cullman County*	59%	0.0%	17.1%	0.35%	2.3%	30.1%
Dale County	53%	6.7%	12.4%	0.13%	2.0%	29.1%
Dallas County*	65%	0.0%	18.8%	0.21%	2.7%	35.2%
Dekalb County	60%	6.4%	14.6%	0.34%	1.4%	29.6%
Elmore County	45%	7.5%	19.5%	0.24%	2.0%	29.0%
Escambia County	68%	6.0%	16.5%	0.07%	2.2%	27.5%
Etowah County	43%	10.8%	14.4%	0.20%	1.4%	30.7%
Fayette County	51%	9.3%	13.3%	0.13%	4.0%	31.4%
Franklin County	57%	13.1%	19.9%	0.25%	1.6%	28.7%
Geneva County	60%	6.7%	18.0%	0.11%	1.5%	30.3%
Green County	88%	4.2%	4.9%	0.41%	3.8%	32.4%
Hale County	68%	7.7%	8.4%	0.15%	2.0%	33.3%
Henry County	57%	5.2%	18.7%	0.08%	1.2%	31.6%
Houston County	51%	7.7%	17.3%	0.21%	1.7%	31.3%

Jackson County	56%	8.9%	12.7%	0.16%	1.2%	31.5%
Jefferson County	48%	7.6%	20.6%	0.17%	2.3%	32.1%
Lamar County	48%	11.3%	20.1%	0.17%	1.5%	29.2%
Lauderdale County	39%	6.2%	19.2%	0.18%	1.3%	31.3%
Lawrence County	54%	10.2%	16.0%	0.06%	2.0%	29.0%
Lee County	48%	7.9%	16.0%	0.17%	1.8%	32.4%
Limestone County	42%	6.7%	14.7%	0.10%	2.0%	31.1%
Lowndes County*	69%	0.0%	13.1%	0.00%	1.6%	32.2%
Macon County*	68%	0.0%	10.8%	0.14%	1.2%	35.2%
Madison County	29%	7.6%	23.2%	0.18%	2.0%	32.3%
Marengo County	68%	5.8%	10.3%	0.00%	1.3%	33.0%
Marion County	49%	7.7%	15.6%	0.09%	2.7%	30.5%
Marshall County	65%	7.7%	15.5%	0.14%	1.9%	31.2%
Mobile County*	49%	0.0%	20.7%	0.29%	2.1%	30.1%
Monroe County	63%	5.4%	11.4%	0.08%	2.6%	32.6%
Montgomery County*	54%	0.0%	14.9%	0.09%	2.8%	27.4%
Morgan County	40%	7.6%	23.9%	0.05%	1.6%	31.5%
Perry County*	73%	0.0%	11.8%	0.19%	3.5%	29.4%
Pickens County	59%	5.3%	12.9%	0.23%	2.4%	31.3%
Pike County	69%	6.7%	18.4%	0.00%	1.3%	30.6%
Randolph County	59%	6.3%	18.2%	0.05%	1.5%	32.5%
Russell County	50%	9.0%	14.2%	0.14%	2.8%	30.3%
St. Clair County	44%	7.9%	19.1%	0.25%	2.2%	28.5%
Shelby County	25%	5.4%	22.8%	0.19%	2.6%	29.3%
Sumter County*	66%	0.0%	10.8%	0.06%	1.9%	35.3%
Talladega County	62%	10.2%	16.5%	0.10%	2.3%	30.7%
Tallapoosa County	60%	8.7%	19.2%	0.21%	2.0%	33.0%
Tuscaloosa County	46%	7.1%	20.4%	0.18%	1.9%	29.0%
Walker County	58%	7.3%	12.8%	0.21%	2.4%	31.0%
Washington County	46%	7.7%	14.5%	0.07%	1.6%	32.3%
Wilcox County*	73%	0.0%	10.0%	0.12%	3.0%	31.3%
Winston County	46%	14.3%	25.6%	0.53%	1.9%	33.3%
Albertville City*	44%	0.0%	10.8%	0.12%	1.3%	24.2%
Alexander City	52%	5.3%	20.9%	0.19%	2.5%	31.6%
Alabaster City	32%	4.9%	21.0%	0.15%	2.8%	29.9%
Andalusia City	48%	4.1%	18.9%	0.12%	2.1%	30.1%
Anniston City*	72%	0.0%	9.6%	0.05%	2.5%	25.1%
Arab City	31%	8.1%	18.9%	0.24%	1.9%	32.8%
Athens City	49%	5.2%	18.7%	0.21%	1.7%	28.5%
Attalla City	64%	10.3%	15.4%	0.06%	2.1%	42.0%
Auburn City	26%	3.0%	8.0%	0.22%	1.8%	28.8%

Bessemer City	71%	1.1%	12.6%	0.08%	2.4%	25.8%
Birmingham City*	64%	0.0%	13.5%	0.18%	2.1%	26.8%
Boaz City	58%	7.7%	15.4%	0.05%	1.5%	28.5%
Brewton City	46%	3.6%	5.5%	0.00%	0.9%	30.8%
Chickasaw City*	71%	0.0%	20.5%	0.11%	3.1%	20.7%
Cullman City	30%	6.9%	15.4%	0.32%	2.1%	29.4%
Daleville City	61%	7.9%	16.0%	0.09%	1.2%	34.0%
Decatur City	52%	3.4%	15.9%	0.27%	2.5%	29.0%
Demopolis City	55%	8.9%	9.0%	0.14%	1.3%	30.3%
Dothan City	59%	6.3%	10.5%	0.26%	2.1%	26.6%
Elba City*	47%	0.0%	14.8%	0.15%	1.4%	34.2%
Enterprise City	37%	5.8%	16.9%	0.01%	1.2%	32.3%
Eufaula City	67%	4.8%	19.0%	0.18%	1.6%	27.6%
Fairfield City*	63%	0.0%	12.7%	0.11%	2.9%	30.3%
Florence City	56%	5.1%	16.1%	0.11%	2.4%	31.0%
Fort Payne City	59%	4.5%	9.4%	0.10%	1.4%	28.3%
Gadsden City	65%	6.2%	12.0%	0.06%	1.6%	29.8%
Geneva City	52%	5.8%	17.8%	0.16%	1.7%	26.9%
Guntersville City	42%	5.0%	12.7%	0.10%	1.5%	29.8%
Haleyville City	50%	9.8%	22.0%	0.00%	1.8%	30.4%
Hartselle City	25%	4.7%	29.4%	0.07%	1.2%	31.9%
Homewood City	22%	3.9%	21.5%	0.15%	2.1%	28.0%
Hoover City	20%	4.8%	7.3%	0.13%	1.7%	32.2%
Huntsville City	37%	1.0%	18.9%	0.20%	2.9%	29.7%
Jacksonville City	46%	8.3%	15.0%	0.13%	2.5%	30.6%
Jasper City	43%	5.3%	14.6%	0.33%	2.0%	30.9%
Lanett City	85%	4.8%	18.6%	0.00%	1.3%	26.6%
Leeds City	45%	7.7%	20.5%	0.16%	1.9%	25.8%
Linden City*	63%	0.0%	7.7%	0.00%	2.9%	32.4%
Madison City	18%	3.9%	16.5%	0.22%	1.8%	34.5%
Midfield City(	61%	0.0%	13.9%	0.09%	1.9%	31.0%
Mountain Brook City*	0%	0.0%	6.9%	0.07%	1.7%	32.0%
Muscle Shoals City	25%	7.1%	17.3%	0.14%	1.3%	31.4%
Pelham City	33%	5.3%	17.2%	0.06%	2.0%	29.8%
Oneonta City	38%	7.6%	17.0%	0.20%	1.9%	28.4%
Opelika City	61%	5.8%	7.9%	0.12%	1.9%	29.6%
Opp City	52%	6.8%	18.6%	0.08%	1.6%	28.4%
Oxford City	51%	7.0%	14.7%	0.05%	1.7%	29.7%
Ozark City	58%	4.9%	18.9%	0.36%	2.4%	31.5%
Pell City	47%	6.7%	14.3%	0.05%	2.3%	29.2%
Phenix City	59%	6.2%	11.6%	0.04%	2.0%	25.6%

Piedmont City	58%	4.8%	18.2%	0.08%	1.9%	29.7%
Saraland City	40%	8.5%	16.5%	0.11%	1.3%	34.5%
Roanoke City	53%	7.5%	21.3%	0.14%	0.5%	30.5%
Russellville City	63%	8.7%	15.3%	0.08%	0.8%	27.2%
Scottsboro City	43%	8.1%	21.9%	0.04%	2.6%	30.2%
Selma City*	73%	0.0%	10.0%	0.20%	2.4%	25.4%
Sheffield City	71%	6.3%	16.7%	0.09%	2.1%	29.3%
Sylacauga City	48%	7.4%	20.2%	0.22%	1.5%	30.8%
Talladega City	76%	8.2%	14.0%	0.05%	1.9%	27.3%
Tallassee City	47%	5.6%	26.6%	0.05%	2.1%	29.2%
Satsuma City	33%	10.1%	17.8%	0.08%	1.5%	34.2%
Tarrant City*	65%	0.0%	12.7%	0.17%	3.4%	28.3%
Thomasville City	56%	10.0%	18.0%	0.22%	2.0%	35.1%
Troy City	59%	3.7%	18.5%	0.10%	2.3%	29.6%
Tuscaloosa City	48%	1.7%	23.9%	0.17%	2.9%	29.0%
Tuscumbia City	44%	7.8%	17.9%	0.00%	1.5%	31.1%
Vestavia Hills City	7%	1.9%	14.4%	0.09%	1.3%	28.1%
Winfield City	36%	8.1%	5.6%	0.08%	2.8%	31.5%
Trussville City	8%	2.8%	13.7%	0.26%	1.4%	31.8%
State Totals	47%	5.0%	17.0%	0.17%	2.1%	30.9%

Note: Appendix was coded to represent four quartiles with white being systems in the lowest quartile, light grey in the second quartile, dark grey in the third quartile, and black in the highest quartile.