Policy Brief
December 2011

Tulane University
COWEN INSTITUTE
FOR PUBLIC EDUCATION INITIATIVES

Louisiana's Minimum Foundation Program Formula: Analyzing the Results

Introduction

Across the country, school districts rely on a combination of local, state, and federal funds to operate schools – with local and state funds making up over 90 percent of all public school funding.[i] State and federal funds are distributed to districts on the basis of funding formulas. State funding formulas have a significant impact on the amount of funding that districts receive because they address the distribution of state funds and, in most cases, they consider local funds as well.

When designing a funding formula, policymakers strive to address numerous concerns including student needs, wealth inequalities between districts, and local tax effort (which is a measurement of the extent to which a government uses its taxing capacity to support schools). In general, state funding formulas result in school districts with higher income populations receiving higher amounts of funding on a per pupil basis than districts with lower income populations. In fact, according to Education Week's annual report *Quality Counts*, only six states have a funding system that results in poorer districts receiving higher amounts of funding.[ii] This pattern occurs despite the fact that most states include provisions in their formulas that increase funding for poorer districts.

In Louisiana, the state constitution requires the state Board of Elementary and Secondary Education (BESE) to "annually develop and adopt a formula which shall be used to determine the cost of a minimum foundation program of education in all public elementary and secondary schools…" This formula is commonly referred to as the MFP (or Minimum Foundation Program) formula. The MFP formula includes provisions to account for factors such as those mentioned above: student needs, wealth inequalities, and rewards for local tax effort.

However, as noted previously, the inclusion of factors such as these in a formula does not guarantee any particular outcome in terms of funding levels. Similarly, looking at the outcomes of a funding formula (i.e., the funding amounts calculated for districts) does not provide information about the structure of the formula itself. For example, the disparity in funding across Louisiana school districts is easily seen by looking at the range of per pupil funding for districts under the MFP. In the 2010-11 school year, the lowest level of per pupil funding was $6,729 and the highest level was $10,624. The district with the highest funding received 58 percent more combined state and local funding under the MFP than the district with the lowest funding. However, it is not clear whether the differences across districts in terms of funding levels occur *because of* or *in spite of* the MFP formula.

Thus, to truly understand the MFP formula, Louisiana's approach to education funding should be evaluated not only based on the philosophy and intent behind its design, but also on its real world results in terms of how many funds reach students.

This paper will examine the MFP formula from several perspectives. First, general information on funding formulas will be presented. Next, the basic components and structure of the MFP formula will be discussed. Then, the outcomes of the formula – that is, the funding levels determined by the formula – will be analyzed based on how well the goals of the formula are achieved. In this section, total funding will be examined as well as the funding generated by different parts of the formula. Lastly, two studies of state funding formulas are reviewed to see how the MFP compares to other states' formulas.

Education Funding Policies

Most funding for public education comes from local and state sources, but the distribution varies by state. Nationally, the state share of education funding was 48 percent in 2008. Local sources accounted for a roughly equal amount of funding – 44 percent. Federal sources made up only eight percent of funding.[iii]

Revenue from both local and state taxes provides for the costs of operating schools, including teacher salaries, facilities maintenance, instructional materials, and extracurricular programming. To help ensure that all children have the opportunity to receive a quality education, states have developed education funding policies about local and state funding.

Funding Formulas

Across the nation, states take a variety of approaches to school funding. There are five main approaches states take in education funding formulas:

- foundation;
- equalization;
- local-effort equalization;
- flat grant; and
- full state funding.

Most states implement two or more of these approaches in combination.

By far, the most popular approach to school funding is a foundation formula[iv]. In 38 states, districts are guaranteed a minimum *foundation* level amount per pupil or teacher unit. Each district is expected to contribute a specified proportion of this amount and the state provides additional funds to reach the guaranteed level. Most states with a foundation formula set a uniform per pupil foundation amount for all districts. Alternatively, seven states have a foundation amount per student that varies by district. Foundation formulas are generally used in combination with various methods of fairly equalizing funding levels across districts according to need and effort.

Equalization approaches to school funding are designed to ensure that pupils in all districts have the same opportunity to receive a quality education. General equalization measures

adjust state funding according to property wealth, taxation effort, and/or relative need. *Local-effort equalization* policies guarantee an equal yield for equal tax effort, regardless of a district's wealth. *Flat grants* and *full-state* formulas are the least common approach and primarily rely on state revenue.

Louisiana uses a minimum foundation formula along with equalization measures. The base funding for each district was set at $3,855 per pupil using the weighted count (in the 2010-11 school year). The proportion of the total funding that is provided by the state versus the local district is based on district wealth (defined by the tax base). As discussed below, Louisiana also provides additional funding based on district characteristics and student needs.

Weights and Categorical Funding

Many state formulas recognize that particular types of students may require additional resources by incorporating weights into their funding formulas. Across the country, states recognize a variety of different student weight categories including disability status, English-language learners (ELL), low income, grade level, and career and technical units. Some states use tiered weighting systems to account for varying severity of conditions. For example, the District of Columbia distinguishes between four levels of special education students with weights ranging from 1.5 to 3.37. Although weighted formulas are meant to provide districts with extra resources to meet the needs of specific students, most states, unlike Louisiana, do not place restrictions on how a district may spend additional funds received from weighted students[v]. This means that these funds can be used for purposes other than providing services to the students who generated the extra funding in those states.

Formulas can also be weighted to address certain district characteristics that influence overall cost. Common factors that justify district weights include district size, location, cost-of-living, teacher education or experience, and academic performance. As opposed to student weights that are applied to individual students, district weights are applied to all students enrolled in a district.

In addition to weights, categorical funds often supplement funding formulas to address particular types of needs. Programs or expenditures that commonly receive categorical funding include programs for special education students, gifted and talented students, bilingual/ELL students; transportation; capital and debt service; technology; teacher benefits; and compensatory education programs. Other states have implemented innovative categorical grants such as nutrition programs, alcohol/drug abuse programs, and security-related activities.[vi]

Louisiana weights four categories of students: special education, gifted and talented, "at-risk" (defined as students who qualify for free or reduced priced lunch), and career and technical units. Louisiana also adjusts its formula to account for a lack of economies of scale by providing additional funding to smaller districts.

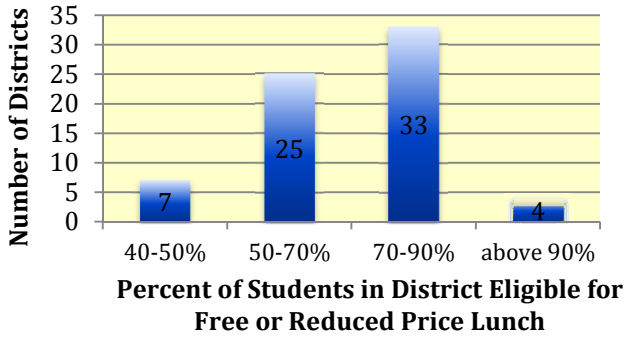
Louisiana's Approach to School Funding: The Minimum Foundation Program

The formula that the state of Louisiana uses to determine state and local funding for schools is called the Minimum Foundation Program (MFP) formula. In 1992, the state Board of Elementary and Secondary Education (BESE) undertook a complete overhaul of the formula used to fund districts, creating the MFP formula. This new formula aimed to increase equalization in funding across districts with varying degrees of wealth.[vii] In 2006, BESE convened a task force to review certain components of the formula, such as the weights applied to different categories of students as well as the base funding amount. Other than small changes to the weights, however, the formula has remained unchanged since it was put in place nearly 20 years ago.

Context of Public Education in Louisiana

When examining the MFP formula and its results, it is important to understand the larger context of education in Louisiana. Louisiana has among the highest levels of student poverty in the country. Sixty-six percent (66 percent) of Louisiana students qualify for free or reduced priced lunch (based on low household income) compared with a national average of 41 percent.[viii]

Figure 1: Districts and Student Poverty Concentration



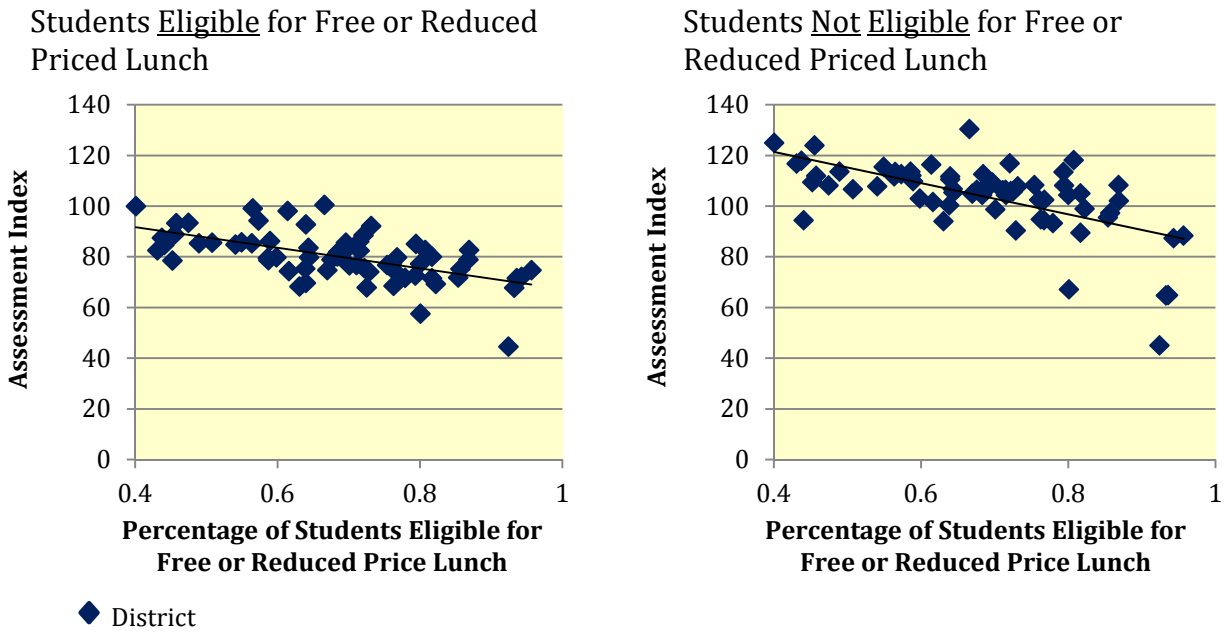
Not only do Louisiana's public schools have one of the highest poverty rates in the country, but the state also suffers from an extremely high concentration of poverty within its school districts. The majority of students are enrolled in districts in which between 50 percent and 90 percent of the student body is eligible for free or reduced priced lunch. Moreover, not a single district in the state has less than 40 percent of its students eligible for free and reduced lunch.[ix]

Students from low socioeconomic families tend to demonstrate significantly lower academic performance[x]. Thus, as expected, the Assessment Indices for districts (calculated based on a district's standardized test scores) decrease significantly as the percentage of free or reduced priced lunch (FRL) students increases. Evidence suggests additionally that the environment created by a school's poverty concentration may also have an impact on students in addition to the effects of their own background.[xi] As a result, all students--regardless of socioeconomic status—tend to demonstrate lower academic performance when in a high-poverty school or district.

As shown in Figure 2, the performance of FRL students decreases as the concentration of poverty in the district increases. (A trend line is included to help show the general pattern in the distribution of districts in the scatterplot.) As the chart on the right shows, students

who do *not* qualify for FRL exhibit the same decline in performance as the poverty concentration increases. Some other states, such as Illinois, use a district weight based on poverty concentration to provide additional funding for *all* students in impoverished districts.

Figure 2: Assessment Index (AI) for Students by Poverty Concentration



Source: Louisiana Department of Education Public School Enrollment (2009), District Subgroup Assessment Index (2009-2010)

In part, the higher concentration of low-income public school students in Louisiana schools is due to the fact that many students from higher income families attend private or parochial schools. Louisiana has the third lowest coverage rate (defined as the percentage of school-aged children who are enrolled in public schools) in the nation accompanied by one of the highest income gaps between private and public school families.[xii] Without significant changes to its education policy, these trends are likely to continue. Students from wealthy and middle-class backgrounds will continue to choose private education, leaving low-income students concentrated in poorly funded schools with few resources to provide a quality academic environment.

The Design of the MFP

In Louisiana, the MFP considers local and state revenue under a single formula to ensure that every student in Louisiana receives at least a minimum foundation of education. The MFP formula includes factors that provide additional funding for specific district needs, reward high tax effort, and cover the cost of certain teacher pay raises that were initiated by the legislature.

State funding in the MFP comes from an annual appropriation by the state legislature. Overall, the state contributes approximately 59 percent of total MFP funds[1]. The share provided by individual districts, however, varies based on the wealth of individual district tax bases, with wealthier districts receiving a lower percentage of state funding than poorer districts. In the 2010-11 school year, the local share of funding under the MFP formula ranged from 16-68 percent.

As discussed previously, Louisiana's MFP formula takes many elements into consideration when determining appropriate levels of and distribution of funding.

- *Student needs*: The MFP formula provides districts with additional funding to educate particular types of students. The state recognizes special education, gifted and talented, "at-risk" (or low-income students), and career and technical units as requiring extra funds.
- *District characteristics*: The MFP adjusts for particular district characteristics including membership size (or, weighted enrollment) and tax base. The state offers additional funding to address lack of economies of scale for districts with less than 7,500 students. Additionally, the formula expects wealthier districts to contribute more to their funding levels than poorer districts. The MFP formula defines a district's wealth as the sum of total assessed property value and sales tax base.
- *Other*: The MFP also incorporates hold harmless policies (to protect revenues for districts that received more funding under the prior formula) and state approved teacher pay raises for particular districts.

Three Tiers of Funding

The MFP formula determines funding for districts using three different "levels", each with its own formula. The funding amounts determined under each level are combined to calculate the total combined state and local funding for each district.

Level 1: Under Level 1, each district is guaranteed $3,855 (in 2010-11) per weighted enrolled student. To determine how much of this amount will be funded by the local district and how much will be funded by the state, the state determines a standard tax rate and expects each district to contribute the amount of money calculated by applying the rate to the district's tax base. (This standard tax rate is the same for every district.) The state then provides each district with additional funds to meet its guaranteed amount of $3,855 per weighted enrolled student. Because wealthier districts generate high levels of local revenue under the expected tax rate, they receive a relatively smaller share of their Level 1 funds from the state.

Level 2: Level 2 is designed to provide incentives for local tax effort. If districts exceed their Level 1 expected contribution, the state rewards their effort by

[1] As discussed in the next section, the MFP formula has three different components. The proportion of state funding varies for each part of the formula. When all three levels of the MFP are considered, the state share combined state and local funding is 59 percent.

matching a portion of the extra revenue. Revenue eligible for Level 2 matching is capped at 34 percent of a district's total Level 1 costs.

Level 3: Level 3 includes a continuation of legislatively-mandated pay raises from previous years, hold harmless funding (for districts that received more funding under the prior formula), and funding for foreign language associates/teachers.

Figure 3: Districts with Highest and Lowest State and Local Funding under the MFP Formula

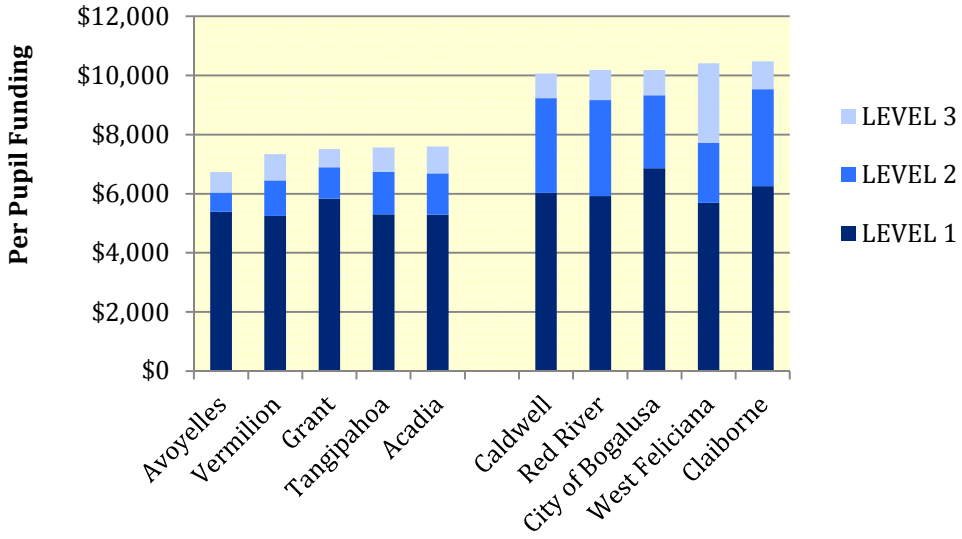


Figure 3 shows the five districts with the lowest combined state and local funding under the MFP and the five districts with the highest total funding under the formula in the 2010-11 school year. The amount of funding generated by each level of the formula is shown for each district. As the chart shows, the districts that receive the highest overall funding receive more funding from each level on average. The greatest disparity between the two groups occurs in the amount of funding generated under Level 2, which rewards local tax effort.

The table below provides information about funding for all districts. It shows the mean funding under the MFP program and the range from lowest to highest total funding per pupil.

Per-Pupil State and Local Funding under the MFP Formula	
Mean	$8,763
Range	$6,729 - $10,624
Standard Deviation	$ 743

Evaluating Outcomes of the MFP

The MFP formula is a complex one that includes a variety of factors and considerations. Because of the complexity of the formula, it is important to examine how the different components work together. The following section examines the outcomes of the MFP formula for the 2010-11 school year by looking at funding under the formula.

The specific outcomes that are examined are the levels of funding for different districts as compared to key characteristics of each district. Three of the main district characteristics incorporated into the MFP formula are the needs of students in each district, the wealth of the tax base of each district, and the tax revenue collected by each district. This section first looks at the relationship between each of these factors and the total level funding under the MFP for every district. Next, the individual levels of funding in the MFP formula (Levels 1, 2, and 3) are examined along the same lines.

In order to evaluate the MFP, this paper establishes two measures to characterize districts.

Needs Ratio: Students with special needs are counted as greater than one student when calculating total enrollment under the MFP. The value of each category's weight is based on expected additional costs of educating a particular type of student. Louisiana uses four categories of student weights: "at-risk" (defined as qualifying for free or reduced priced lunch), special education, gifted and talented, and career and technical units. "At-risk" are considered 1.22 students; special education students are calculated as 2.5 students; gifted and talented students are calculated as 1.6 students; and career and technical units are calculated as 1.06 students.

This paper uses a "needs ratio" to indicate the aggregate special needs characteristics of a district's student population. It is calculated as a ratio of weighted enrollment to actual (unweighted) enrollment. Higher values indicate student populations with greater needs.

District Wealth Indicator: The "wealth indicator" is calculated by summing a district's total assessed property value and sales tax revenue and dividing by its number of public school students.[2] This measure reflects a district's ability to raise revenue, *not* the income levels of its residents or socio-economic status of its students.

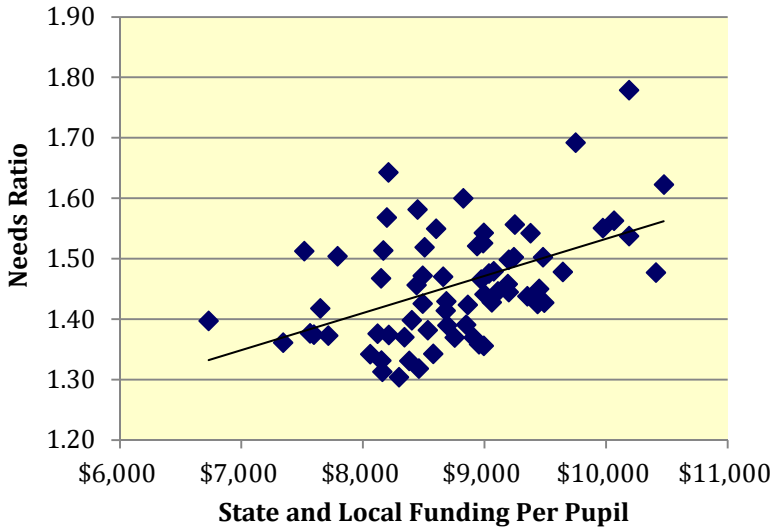
Total Funding

The MFP recognizes that there are higher costs to providing an education to certain students by weighting particular categories of students more in the formula. It is expected that this would result in higher funding for districts with more students with special needs

[2] For the purposes of creating the district wealth indicator, the actual property and sales tax bases presented in the MFP spreadsheet was used. For districts that experience a property or sales tax base increase of 10 or 15 percent (respectively), the MFP formula gradually incorporates the tax base increase. However, for the analyses in this paper, the actual tax base is a better measure of district wealth.

recognized by the formula. As Figure 4 demonstrates, total funding is correlated with the needs ratio. That is, generally speaking, the districts with the highest needs ratios also receive the highest total funding under the MFP.

Figure 4: State and Local Funding under the MFP Formula by District Needs Ratio



Another factor that the MFP considers is the wealth of each district. In Level 1 of the formula, a district's expected local contribution is based on the tax base of the district. Figure 5 shows the relationship between combined state and local funding under the MFP formula and the wealth indicator of each district in Louisiana. As the chart demonstrates, total funding is correlated with the wealth of a district's tax base.

In addition to the tax base of a district, the MFP formula also accounts for the tax revenues of each district. Tax revenue is determined by the both the tax base and the tax rate in any district. Actual revenue influences the total funding of a district under the MFP. Tax revenue that a district raises in excess of the minimum amount that it is expected to contribute to Level 1 is carried forward in the formula and is used to determine state funding in Level 2 of the formula.

Figure 5: State and Local Funding under the MFP by District Wealth Indicator

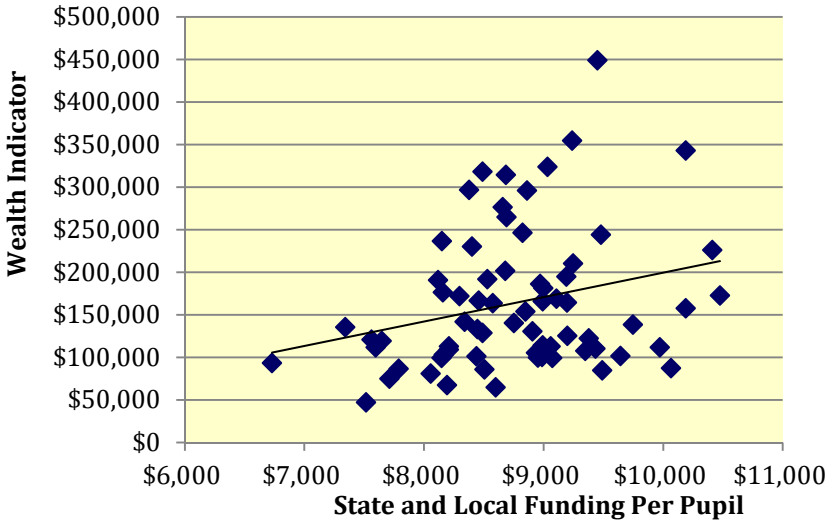
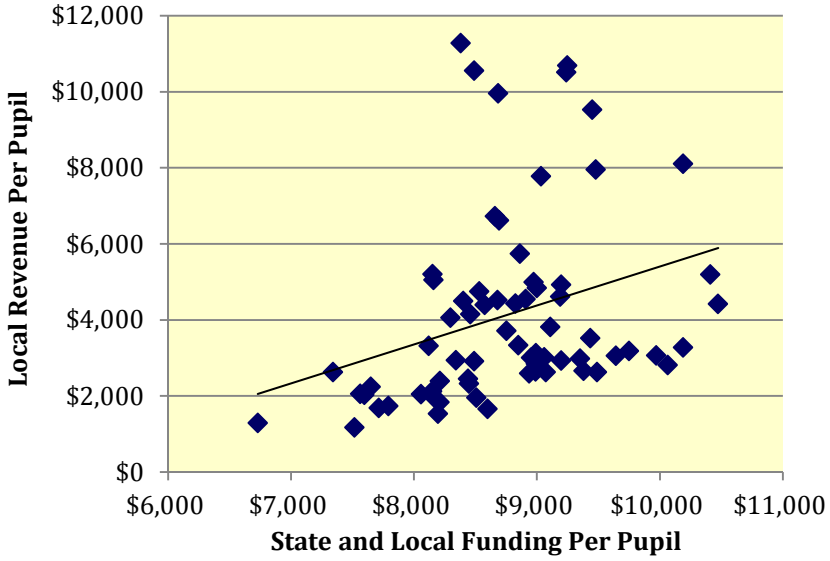


Figure 6 shows the relationship between combined state and local funding under the MFP formula and local tax revenue per pupil. As the chart shows, local effort is correlated with total funding under the MFP program. Generally speaking, those districts that raise more local money per pupil receive higher overall funding.

Figure 6: State and Local Funding under the MFP by Local Revenue Per Pupil

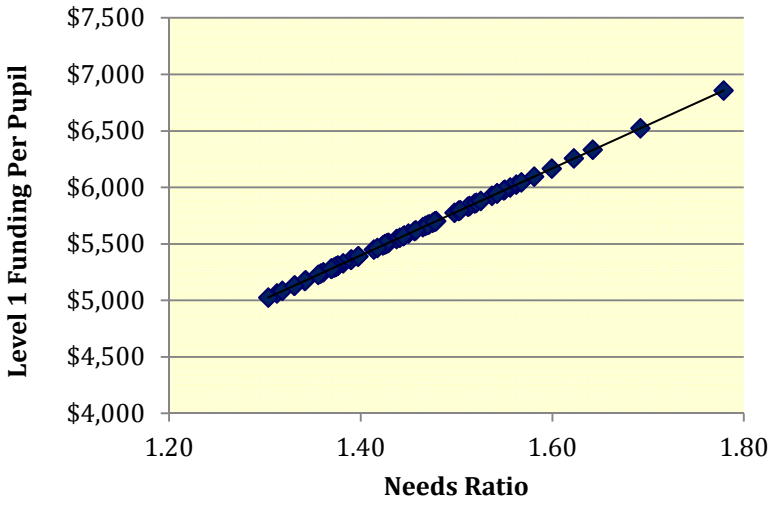


Level 1

Level 1 of the MFP formula establishes a base level of funding for every public school student in Louisiana using a weighted student count for each school district. After the total foundation level is determined, the next step in Level 1 of the formula is to calculate the portion of the total Level 1 funding that the state will contribute.

Level 1 guarantees districts a constant amount of funding per weighted student, regardless of local tax effort. Weighted enrollment is based solely on the district's number of enrolled students and their needs. For example, in the 2010-11 school year a district with 1,000 enrolled students and a weighted enrollment of 1,200 students, would have a minimum foundation amount of 1,200 * $3,855 = $4,626,000. As expected, therefore, Level 1 funding is directly correlated with the needs ratio. The relationship between Level 1 funding and the Needs Ratio is shown in Figure 7.

Figure 7: Level 1 Funding per Pupil by Needs Ratio

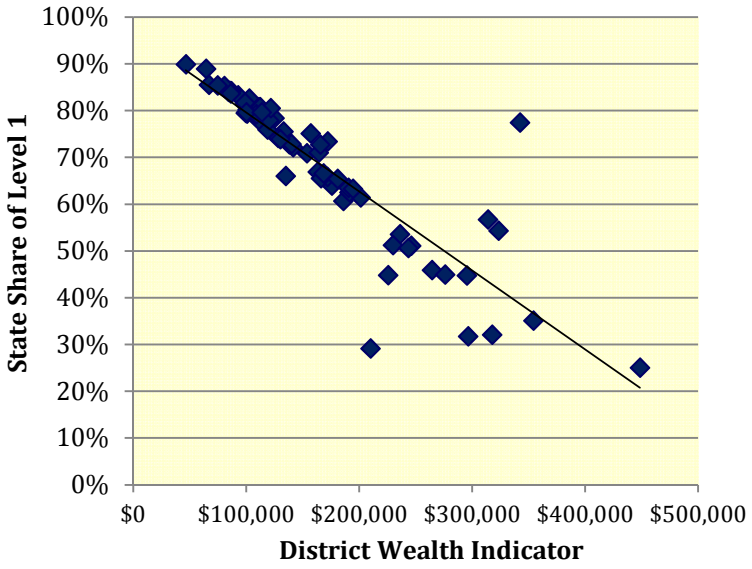


Once districts receive their Level 2 and 3 funds, funding per pupil is less strongly correlated with a district's

needs ratio. Comparing Figure 7, which shows Level 1 funding, with Figure 4, which shows total funding under the MFP, highlights that a district's total funding is determined by several factors in addition to its students' needs.

The state provides a varying percentage of the minimum foundation amount to each district based on its ability to raise funds. As shown in Figure 8, the state share of Level 1 is highly correlated with district wealth. Poorer districts with fewer taxable resources receive higher levels of funding from the state. In contrast, wealthier districts are expected to fund a much larger share of their foundation costs.

Figure 8: State Share of Level 1 by District Wealth Indicator



Level 2

Level 2 is designed to reward local tax effort, regardless of district needs. The state provides additional funding to districts based on how much revenue each district raises locally. Specifically, the state portion of Level 2 funding is based on the "local revenue over Level 1," which is the amount of revenue that a local district raises that is above the amount the district is required to contribute to Level 1. For example, according to the 2010-11 MFP calculations, the St. Martin Parish School Board raised approximately $19 million in total revenues. The district was expected to contribute about $9 million to Level 1, so the district's local revenue over Level 1 was $10 million. The state matches only a portion of a district's local revenue over Level 1.[3] On average, in the 2010-11 school year the state provided each district with an extra $680 per pupil (i.e., the state share of Level 2). Some districts received no extra funding; the highest state share of Level 2 funding was $1,349 per pupil.

Two examples help illustrate how district wealth and local revenue over Level 1 can impact Level 2 funding:

[3] The MFP formula sets a cap on the amount of revenue that is eligible for match. The cap is equal to the lower of (1) a district's local revenue over Level 1 or (2) 34 percent of the total Level 1 cost for the district. Once the revenue that is eligible for match is determined, the next step in the formula is to determine the local share of Level 2. The local share of Level 2 is equal to [the local share of Level 1 as a percentage] X 1.72 X the revenue that is eligible for match. The state share of Level 2 is the difference between the cap and the local share. If the local share is more than the cap, then the state contributes no money to Level 2 for that district.

Districts with comparable taxing abilities: When variations in Level 2 funding exist between districts with comparable ability to raise revenue, this likely indicates a difference in tax effort in the two districts. For example, West Carroll and Caldwell districts have almost equal measures of wealth and poverty (as defined by the MFP formula). Both districts are expected to contribute roughly 16% to their Level 1 costs. Caldwell demonstrates much higher tax effort, however, by bringing in over twice as much revenue per pupil above its Level 1 share as West Carroll does. As a result, Caldwell receives over twice as much Level 2 funding per pupil from the state ($1,349) as West Carroll does ($563).

Districts with differing taxing abilities: For example, Pointe Coupee and Winn parish school boards both raise about $1,400 per pupil above their required Level 1 shares. Pointe Coupee's high wealth indicator, however, indicates that it was able to raise this amount by exerting less effort than Winn Parish. Districts with large tax bases are expected to raise more revenue than poorer districts with fewer taxable resources. Because of its low demonstrated effort, Pointe Coupee receives only $223 per pupil in Level 2 funding from the state while Winn receives $938 per pupil.

Although a district's taxing *effort* has an impact on Level 2 funding, the *wealth* of a district is also correlated with Level 2 funding. The three graphs below show the relationship between Level 2 funding and district wealth as measured by the district wealth indicator.

- Figure 9 shows the relationship between the local share of Level 2 funding and district wealth. The general pattern is that districts with higher wealth contribute more local money for Level 2. This is to be expected because a district's local share of Level 2 funding is based in part on that district's local share of Level 1 funding as a percentage. Because wealthier districts are expected to contribute a higher percentage to their Level 1 funding, it follows that their contributions to Level 2 funding would also be higher.
- Figure 10 shows the relationship between the state share of Level 2 funding and district wealth. In this case, the trend is reversed: districts with lower wealth indicators received more Level 2 funding from the state than districts with higher wealth indicators. Again, this is to be expected given that the state share of Level 2 is the difference between total eligible revenue (for Level 2) and the local share of Level 2 funding.
- Figure 11 shows the relationship between total Level 2 funding and district wealth. Here, the association is more complicated. The districts with the highest wealth indicators (approximately $200,000 per pupil and higher) tend to cluster in the middle of the distribution in terms of total Level 2 funding, close to $2,000 per student. These are the same districts that receive relatively little or no funding from the state for Level 2. Thus, their total Level 2 funding is neither at the high end nor at the low end of the distribution. On the other hand, districts with lower wealth indicators (approximately $200,000 per pupil and lower) have a wider distribution of total Level 2 funding, ranging from approximately $650 to $3,275 per pupil.

Among these districts, the trend is that higher district wealth tends to be associated with higher overall Level 2 funding.

Figure 9: Local Share of Level 2 by Wealth Indicator

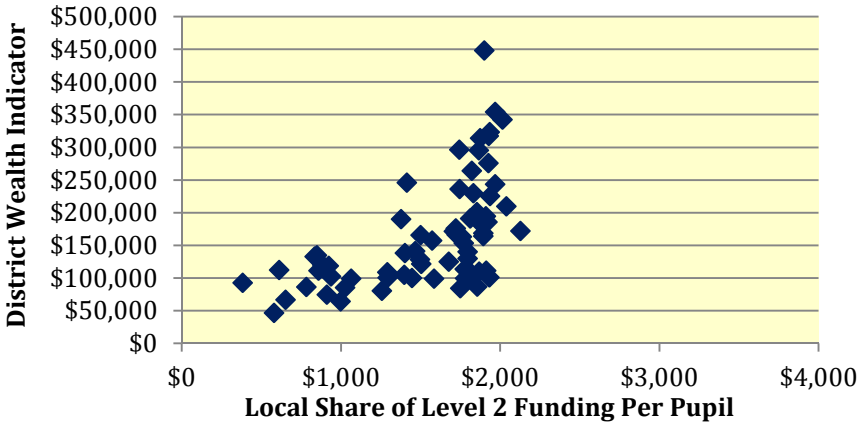


Figure 10: State Share of Level 2 Funding by Wealth

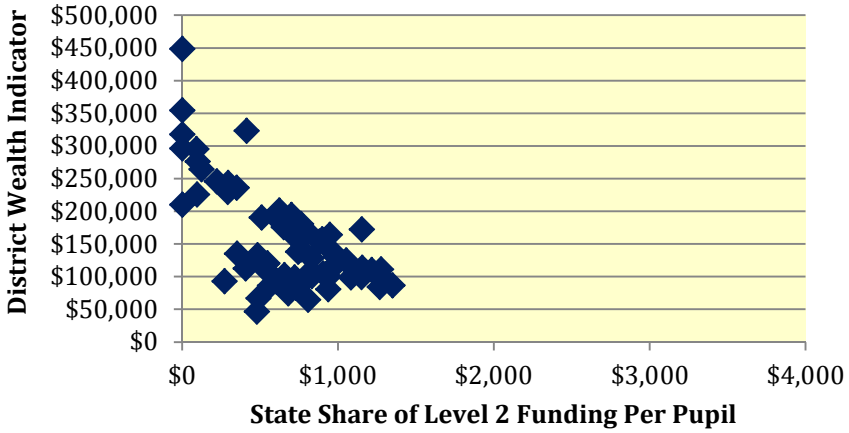
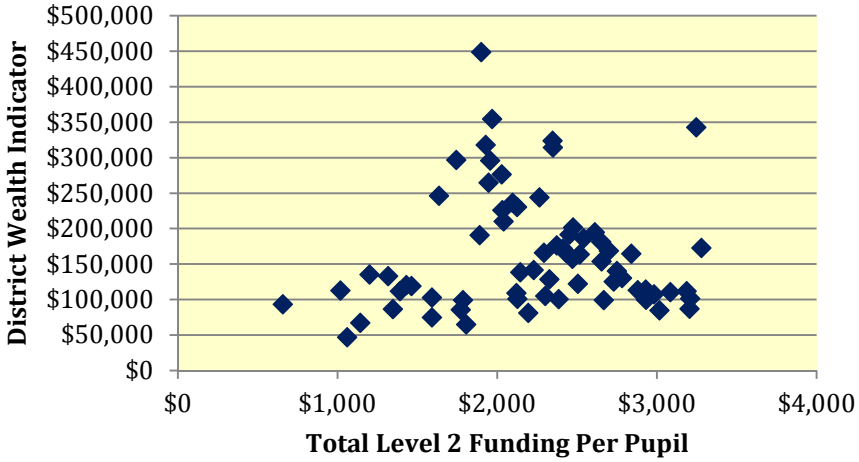


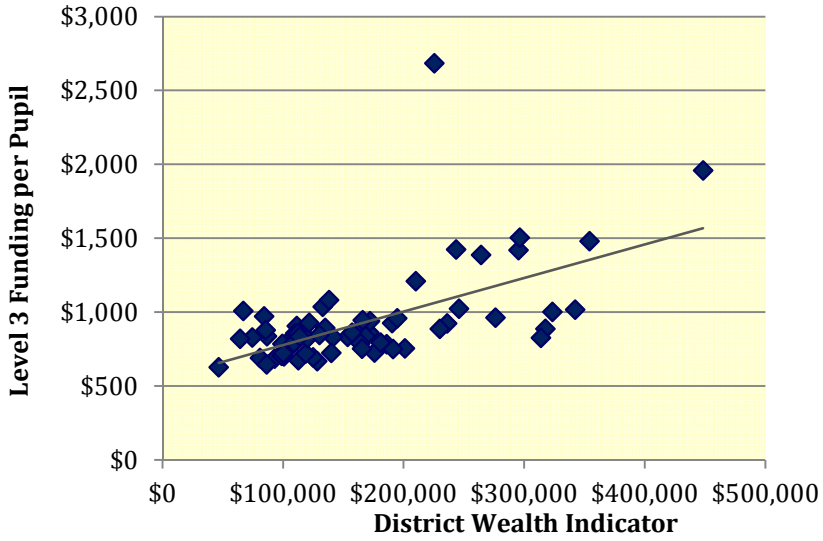
Figure 11: Total Level 2 Funding by Wealth Indicator



Level 3

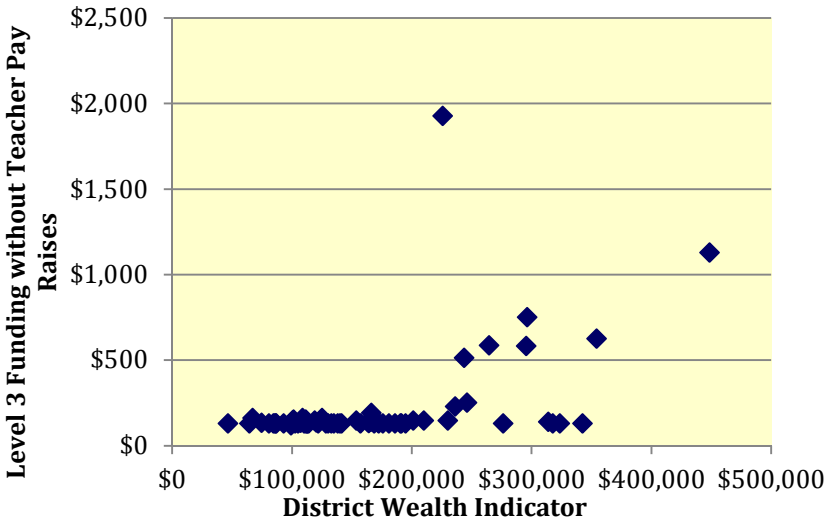
Level 3 provides additional funding for various purposes. Specifically, Level 3 provides funding for legislatively-mandated pay raises from previous years, "Hold Harmless" funding (for districts that received more funding under the prior formula), and funding for foreign language associates/teachers. Level 3 funding is not intended to relate to wealth. However, Figure 12 shows a positive correlation between Level 3 funding and the district wealth indicator.

Figure 12: Level 3 by District Wealth Indicator



In part, this relationship may be related to teacher pay raises. Indeed, when teacher pay raises are excluded, Level 3 is no longer associated with the district wealth indicator. Figure 13 shows that, once teacher pay raises are removed from Level 3 funding, there is almost no correlation with the wealth indicator. It is not clear why teacher pay raises result in an association between Level 3 funding and the wealth indicator. Perhaps the pay raises allow wealthier districts with funds that enable them to maintain historically low student-teacher ratios. The outliers in Figure 13 are districts that receive additional funding under a "Hold Harmless" provision, designed to prevent a sudden decrease in funding for districts that received higher funding under the prior formula. Funding under this provision is slowly being phased out and redistributed to all districts; it will take another six years for the phase-out to be complete.

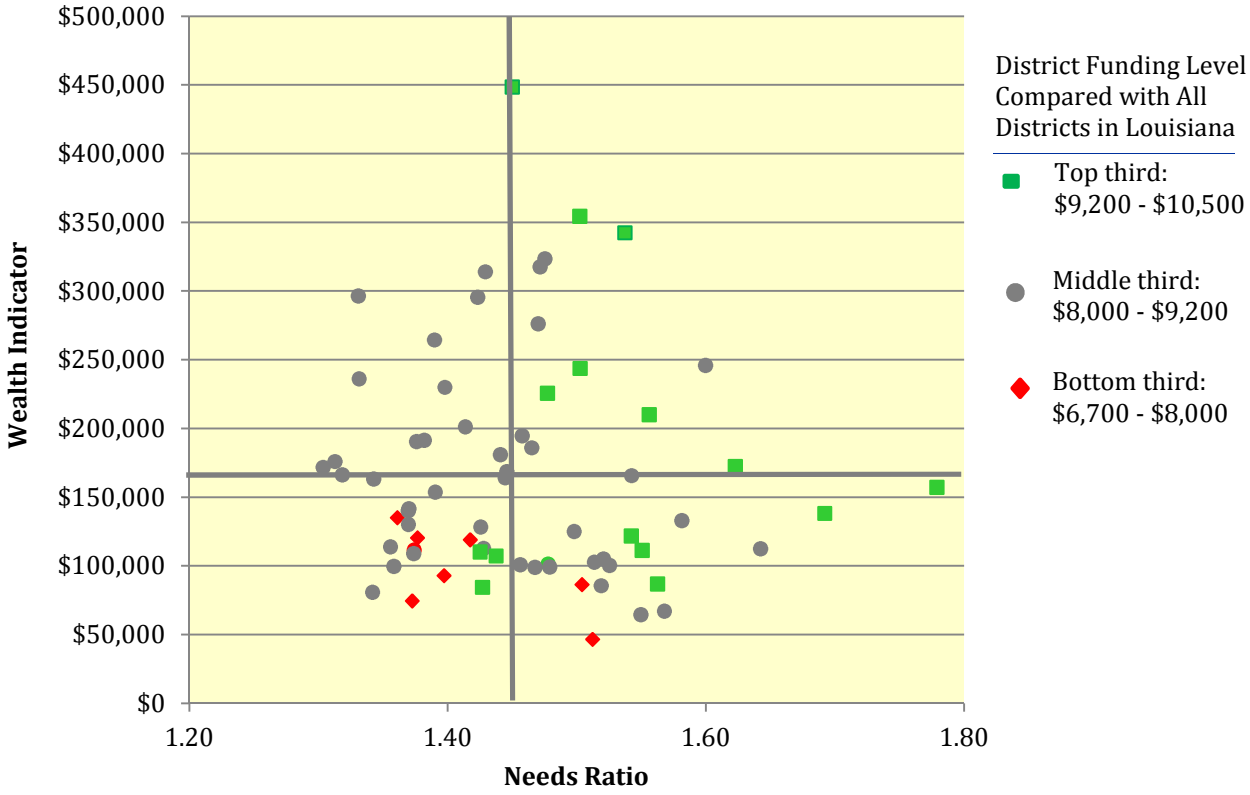
Figure 13: Level 3 Funding without Teacher Pay Raises by Wealth Indicator



Conclusion

The analysis above shows that combined state and local funding under the MFP formula is positively correlated with needs ratio, district wealth indicator, and local revenue per pupil – all of which are intended to have an effect on funding under the formula – when considered separately. However, the analysis does not reveal how these different attributes interact with one another. To better understand the outcomes of the MFP formula, it is important to understand how these characteristics work together.

Figure 14: State and Local Funding under MFP Formula by Need and Wealth



The chart above shows every school district in Louisiana by needs ratio and district wealth indicator. Each district is colored to show combined state and local funding under the MFP: those in the top third of all districts are shown in green; those in the middle third are shown in grey; and those in the bottom third are shown in red. The grey lines show the average needs ratio (1.46) and the average wealth indicator ($164,000) for all districts in the state.

The chart reveals some interesting patterns.

- No school district that is above average in terms of wealth indicator is in the bottom third in terms of funding. Similarly, every district that is in the bottom third of funding has a below-average wealth indicator.

- Most, but not all, of the districts that are in bottom third of funding have below average needs ratios. Similarly, most, but not all, of the districts in the top third of funding have above-average needs ratios.

However, as the chart shows, needs ratio and wealth indicator combined do not completely explain variations in funding. Schools in the middle third in terms of funding can be found in every quadrant. One important aspect of each district that is not captured in the chart above is the amount of local revenue per student, which is related to both district wealth and local tax effort. Variation in local revenue per pupil likely contributes to some of the differences in the chart above; however, it is beyond the scope of this paper to determine the nature and causes of these differences.

Comparing States' Formulas

The previous section examined the outputs of the MFP formula by looking at the associations between funding and selected characteristics of school districts and their student populations. This section will look at how the MFP formula distributes funds among districts as compared to formulas in other states. In recent years, several studies have looked at equity in funding formulas, defined as how much funding goes to poorer districts as compared to wealthier districts. This section will examine the findings of two recent studies that have conducted in-depth analyses of funding formulas and funding levels across every state in the country.

In fall 2010, the *National Report Card* was released by Bruce Baker of Rutgers University and two co-authors at the Education Law Center, David Sciarra and Danielle Farrie.[4] The *National Report Card* evaluates each state according to four "fairness measures:" funding level, funding distribution, effort, and coverage (defined as the percentage of school-aged children who are enrolled in public schools). The authors highlight poverty concentration as a significant issue affecting public education.

Additionally, each year, the Education Research Center collects and analyses data for Education Weekly's *Quality Counts*, an annual report on American education. The most recent version of this report was published in January 2011.[5] The report assesses each state's funding formula, mechanisms for targeting funds, revenue sources, financial equity and spending, and accountability.

While these two reports use a variety of different measures to evaluate state funding policies related to education, they both look at funding levels and funding distribution. States' funding policies are evaluated along two dimensions. First, to evaluate how much

[4] The analyses in the *National Report Card* take into account all sources of local and state revenue. The primary data source for financial data is the U.S. Census Bureau – Fiscal Survey of Local Governments, Public Elementary and Secondary Finances for 2007. An update to the report was prepared using 2008 data; however, the major findings from the report were not changed.

[5] The analyses in *Quality Counts* are based on data from the following sources: U.S. Department of Education's Common Core of Data (CCD) 2005-06, 2006-07, and 2007-08 (district-level data) and National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2007-08.

states spend on education, the reports look at the funding level for each state compared to states in the rest of the country in terms of overall spending level and demonstrated effort put forth to fund education. Second, both reports examine the "fairness" of each state's policies by comparing the funding levels across all districts in each state. While the reports use different measures of "fairness," all of the measures used look at how progressive or regressive state funding policies are. Progressive policies result in poorer districts receiving more funding than wealthier districts. Regressive policies results in the opposite distribution of funding.

Overall Spending Levels and State Effort

States demonstrate wide ranges of both spending and effort. According to *Quality Counts*, average spending per pupil ranges from $6,525 in Utah to $17,114 in Wyoming, with a national average of $11,223. (Per pupil expenditures (PPE) is adjusted to account for regional cost differences.) Louisiana ranks slightly above average with a PPE of $11,540. The funds are not evenly distributed among districts, however: Only 28 percent of the state's students are in districts with a PPE at or above the U.S. average. The *National Report Card* looks at state and local revenues (as opposed to spending) for all states, adjusted for differences between states. It finds that state and local revenue per pupil in Louisiana lags behind the national average: $8,806 compared to $10,469. The difference in findings between these two studies may be due in part to the fact that school districts in Louisiana receive a higher percentage of their funds from federal sources than the national average.[xiii] Federal funds would be captured by the analysis in *Quality Counts* but not in the *National Report Card*. Thus, Louisiana would do better as compared to other states in terms of overall funding levels when federal funds are included.

The differences in per pupil expenditures and revenues across the country are likely influenced, at least in part, by state wealth. Therefore, it is helpful to evaluate states according to measures of effort, rather than absolute spending levels. *Quality Counts* measures state effort by calculating the percent of taxable resources in each state that is spent (by the state and local districts) on education, which ranges from 2.5 percent to 5.5 percent with an average of 3.8 percent. By this measure, Louisiana ranks among the worst in the nation, at 2.9 percent. The only states that devote a lower percentage of their resources toward education than Louisiana are also significantly wealthier, indicating that even with low "effort" toward education, absolute spending levels in these states are higher.

The *National Report Card* uses a slightly different measurement to determine state effort by comparing states' PPE to their per capita real Gross Domestic Process. According to this measure, Louisiana is tied with Tennessee for exerting the third lowest level of effort in the country.

Equity within the State – "Fairness"

A fair funding formula provides all students in the state with equal educational opportunity, regardless of their district. In the two national reports referenced above, fairness measures evaluate states by how well they equalize disparities created by a district's socioeconomic status or tax-base wealth.

Quality Counts uses two measures to evaluate equity, defined as spending a uniform amount per pupil in all districts throughout the state. The McLoone Index is calculated as the amount of additional funds needed to raise the PPE for all students to the same level as the state's median pupil. By this measure, Louisiana ranks relatively high in terms of equity. The second measure, the "restricted range," measures the difference between the highest and lowest funded districts. Louisiana's restricted range is below the national average, also indicating above average levels of equity.

The *National Report Card* takes a different approach to measuring fairness. To help control for the effects of factors other than poverty on funding levels, the *National Report Card* models funding levels for districts with varying levels of poverty for every district in each state. Based on the results, states' funding formulas are classified as progressive or regressive. Louisiana is classified as regressive, meaning funding levels decline as poverty levels increase; however, the authors indicate that the findings were not statistically significant for Louisiana.

Conclusions from *Quality Counts* and *National Report Card* Reports

While the two reports use different methodologies to evaluate states' performance, they both indicate that Louisiana exerts very low effort in financing public education. *Quality Counts'* finding that Louisiana exhibits average measures of equity likely reflects the fact that the majority of districts have relatively low levels of funding.

Conclusion

In this paper we examine several questions related to the MFP: what does the formula aim to accomplish in terms of funding distribution? How well does it accomplish its goals? How do its outcomes stack up against those of other states' formulas?

Our analysis reveals that many of the MFP formula outcomes are in line with the objectives built into the formula. Specifically, this paper looked at total funding and funding under each of the three levels in the MFP as they relate to need and wealth.

- Total funding is positively associated with higher needs ratios, higher wealth indicators, and higher amounts of local funding per pupil.
- Level 1 funding shows perfect positive correlation with needs ratios, which is expected based on the calculations for Level 1 funding. Because district need is taken into account only in Level 1 of the formula, no association between need and funding in the other levels was analyzed.
- The association between district wealth and funding under Level 2 and Level 3 is complicated. For Level 2, higher district wealth is correlated with higher funding for districts with average or below-average wealth indicators. For Level 3, higher district wealth is correlated with higher funding. Because wealth is not considered in determining the overall funding amount under Level 1, no association between need and funding in that level was analyzed.

Several other factors should be considered when interpreting the findings in this paper. First, as shown above, total funding under the MFP is positively associated with needs of a district's students. To understand this finding, however, it must be noted that the needs ratio of a district is driven largely by the special education population in the district. At-risk students influence the needs ratio to a much smaller degree. Special education students are weighted 2.5 times as much as regular instruction students. At-risk students, defined as students who qualify for free and reduced lunch, are weighted only 1.22 as much as students who are not economically disadvantaged. Therefore, the correlation between total funding level and needs does not necessarily indicate that districts with high proportions of economically disadvantaged students receive higher funding under the MFP.

Second, when funding from all levels in the MFP is combined, the formula is regressive; that is, wealthier districts receive higher funding. And, as discussed immediately above, the weight given to economically disadvantaged students has a relatively small influence on a district's needs ratio. To the extent that funding inequities exist among districts, it raises the question whether students in districts with lower wealth have access to the same resources as students in districts with higher wealth.

Lastly, combined state and local funding levels for education in Louisiana, along with the state's taxing effort toward education, are low. Although the *Quality Counts* report found that average per pupil expenditures statewide (adjusted for regional cost differences) were approximately equivalent to the national average, these figures include federal revenue. Louisiana receives higher than average amounts of federal funds per pupil.

As with many studies, this paper also raises new questions. Two issues for possible future research have been revealed. First, it appears that variations in local revenue per pupil play a role in explaining the differences in funding. This outcome is to be expected based on the construction of the formula. This finding raises questions about tax effort: How much emphasis should a formula place on local tax effort? How do other district characteristics, such as median household income and the percentage of school-aged children in private schools, impact local effort? Second, the formula, in keeping with the language in the Louisiana Constitution, seeks to provide a "minimum" foundation of education. Over the past 20 years, the emphasis in many other states' formula has been on measuring and ensuring that school funding is *adequate*.[xiv] The analysis in this paper shows variation between districts rather than evaluating the amount of funding districts receive. Costing-out the price of providing an adequate education is very complex; however, an understanding of that information is critical to truly evaluate the funding districts receive based on the MFP formula.

Endnotes

[i] Hightower, A.M., Mitani, H., & Swanson, C.B, *State Policies That Pay: A survey of school finance policies and outcomes*, Education Research Center, 2010.
[ii] *Quality Counts 2011: Uncertain Forecast, Education Adjusts to a New Economic Reality, Education Week,* January 13, 2011.
[iii] New America Foundation, *Background & Analysis: School Finance*, http://febp.newamerica.net/background-analysis/school-finance.
[iv] Hightower, Mitani, and Swanson, *State Policies That Pay*.
[v] Hightower, Mitani, and Swanson, *State Policies That Pay*.
[vi] Hightower, Mitani, and Swanson, *State Policies That Pay*.
[vii] Ducote, Jackie, The education article of the Louisiana Constitution, Louisiana Law Review, 62 La. L. Rev. 117.
[viii] Baker, B.D., Farrie, D. & Sciarra, D.G., *Is School Funding Fair? A National Report Card*, Education Law Center, 2010.
[ix] Louisiana Department of Education, Public School Student Enrollment Data, October 1, 2010.
[x] Sirin, S. R., Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research, Review of Educational Research, 2005, 75(3), 417-453.
[xi] U.S. Department of Education, National Center for Education Statistics. Poverty and Student Mathematics Achievement, The Condition of Education 2006 (NCES 2006-071), Washington, DC: U.S. Government Printing Office, 2006.
[xii] Baker, Farrie, Sciarra, *Is School Funding Fair?*.
[xiii] National Center for Education Statistics, 2009 Digest of Education Statistics, Revenues for public elementary and secondary schools, by state or jurisdiction: 2006-2007, http://nces.ed.gov/programs/digest/d09/tables/dt09_173.asp.
[xiv] Lefkowits, Laura, School Finance: From Equity to Adequacy, McRel Policy Brief, March 2004, http://www.mcrel.org/pdf/policybriefs/5042pi_pbschoolfinancebrief.pdf.