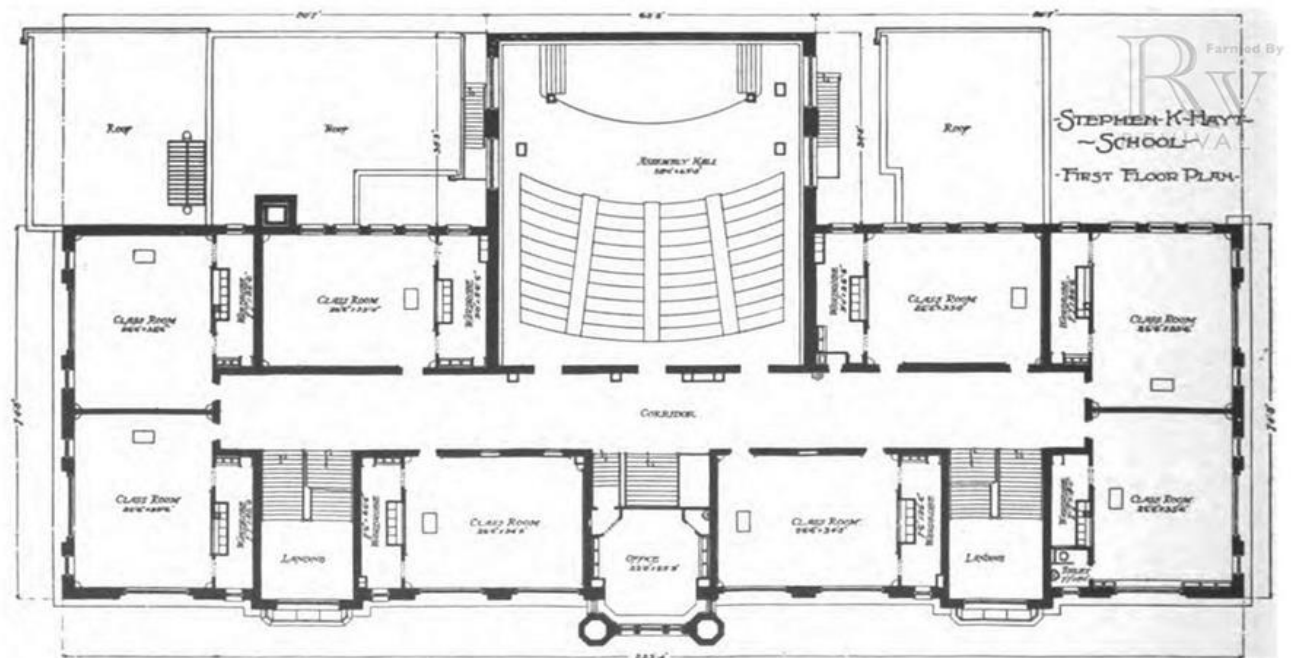December 2015

An Assessment of New Mexico's Public School Capital Outlay Funding Formula

Prepared for: NM Public School Capital Outlay Committee

Prepared by:
Gwendolyn Aldrich
Julian Baca
Jeffrey Mitchell

Bureau of Business & Economic Research
THE UNIVERSITY *of* NEW MEXICO

New Mexico's public school facilities state-local share formula

Brief history

Prior to the *Zuni* lawsuit, school facilities were financed through general obligation bonds repaid from local property tax proceeds and direct appropriations from State legislators. Thus, school district capital funding was limited by a district's taxable land value and bonding capacity, giving property-rich districts a notable advantage. The *Zuni* lawsuit was filed in 1998, and alleged that districts with lots of public lands and/or a small tax base were unable to raise sufficient funds to build even basic school facilities, while other districts were able to build beyond what was necessary – such as indoor swimming pools, performing arts centers, etc. The plaintiff alleged that New Mexico's system for funding public school capital projects was unfair and unconstitutional. In 1999 the court ruled in favor of the plaintiff and ordered the State to develop a more equitable system.

In response, the 1975 Public School Capital Outlay Act was amended in 2003 – New Mexico developed a standards-based process comprised of adequacy standards, a database of the overall condition and capacity (and associated weighted New Mexico Condition Index) of all NM public school buildings, and a state-local share funding formula. The state-local share funding formula, implemented in 2004, is used to determine what portion of approved projects for a given district will be paid for with local (district) funds and what portion will be paid for with state funds. The intent of the program is that the state will contribute funds only to the level of adequacy, and that the state share will on average be 50% but generally range between 10% and 90%. The one exception is for the Zuni district, for which the state share is 100%. State and local shares are calculated for each district based on per-student net taxable values and bonding capacities.

Performance

In general the state-local share funding formula has performed well. However, some districts have noted that state-provided funding is seemingly insufficient in some cases but excessive in others. More specifically, state-provided funding has enabled districts with average and above-average per-student property tax valuation (which tend to be located in more densely populated urban areas) to use local funding to build facilities that exceed adequacy standards. In contrast, districts with below-average per-student property tax valuation (commonly located in rural areas) often have insufficient local bonding or mill levy capacity to provide the required local share. Thus rural districts often struggle even to build to adequacy. For example, because only 20% of the property in McKinley County is taxable, that 20% of the McKinley County property must

provide the 18% local share if the school district is to obtain a grant from the Public School Capital Outlay Fund.

To obtain state funding for capital outlays (outside of direct legislative appropriations), school districts may submit requests to the Public School Capital Outlay Council (PSCOC) for assistance from the Public School Capital Outlay Fund. The current director of the Public School Facilities Authority, Mr. Robert Gorrell, notes that some school districts for whom the local share is large and the state share is small have opted to not apply for funding. This suggests that when the state share is low, the effort required to apply for state funding may in some cases exceed the benefits derived from having the state help fund capital outlay projects.

It is also worth noting that because the formula is a function of property valuations, school enrollment, and mill levies, fluctuations in any of these three measures will result in changes in a district's state and local shares. As an example, recent fluctuations in oil and gas extraction activities have sufficiently altered some districts' property values that the state/local shares have notably changed as well. The Carlsbad Municipal School District is a case in point – between 2011 and 2014 the district's local share increased from 75 to 88 percent as a result of increased oil and gas property values. Net taxable property values are included in the formula as a means of capturing ability to pay; including alternate or additional measures of ability to pay, such as median household income, per capita income, percent of district in poverty, unemployment rate, or the percent of students eligible for free or reduced-cost lunch, may improve the formula's performance.

In addition to having notably higher assessed taxable values and thus greater ability to pay, densely-populated urban areas benefit from both a scale advantage and a location advantage. That is, districts with small student populations (typically rural districts) cannot use facility space as efficiently as districts with large student populations, since cafeterias, libraries, multipurpose rooms, etc. are similarly sized regardless of the size of the student population. As a result, the total amount of facility space (gross square footage) required per student is higher in small rural districts than in large urban districts, thereby driving up per-student costs in rural areas. Per-student capital outlay costs are also higher in rural areas due to the fact that per-square-foot construction and maintenance costs are a function of location and tend to be higher in rural areas than in urban areas. Thus not only do urban schools generally require less square footage per student, but the cost-per-square-foot (for both construction and maintenance) is also lower in urban areas. These factors are not reflected in the current formula.

In summary, although the funding formula for New Mexico's public school capital outlay projects generally performs quite well, there are several complexities (most of which stem from differences between rural and urban areas) that the exiting formula does not adequately capture and account for, and which are therefore creating disparities in

school facilities. As New Mexico explores modifying its public school facilities cost-sharing formula, it may be helpful to consider the methods, formulas, and measures used by other states. The next section therefore summarizes how other states fund public school facilities.

Other states' methodologies

In June 2014 the Center for Cities and Schools at the University of California Berkeley published a report summarizing how each of the 50 states funds K-12 public school facilities.[1] Although most states provide at least some funding to school districts to aid in providing adequate public school facilities, in several states the funding of public school capital projects is entirely the responsibility of local school districts. Of the states that do provide capital project funding, some provide a set percentage of project costs for all approved projects, whereas others use a funding formula to determine the portion of districts' capital outlay projects to be paid for using state fund.

There are fifteen states in which public school capital outlay projects are solely a district responsibility (state governments provide no funding) – Indiana, Louisiana, Michigan, Mississippi, Missouri, Nebraska, Nevada, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Virginia, and Wisconsin.[2] In the remaining states at least some state-level support is provided for public school capital projects. Several states provide a set amount of funding for all approved projects, and although the percentage amount may vary by type of project (such as new construction versus renovation), the state/local shares do not vary with school district characteristics. There are nine states in which the state/local shares are fixed in this manner: Arizona, California, Delaware, Hawaii, Iowa, Tennessee, Vermont, West Virginia, and Wyoming.

There is significant variation in the funding formulas used by the remaining states (wherein state/local shares vary by district characteristics) to determine the state and local shares of capital outlay expenditures, although there is also notable consistency in the variables included in the formulas. In nearly all cases the state and local shares are determined at least in part as a function of the school districts' wealth and school enrollment.[3] Wealth is incorporated into state funding formulas through assorted measures of property wealth and/or income wealth, including taxable value per student, property tax yield per student, per capita property tax value, unemployment

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[1] Vincent, Jeffrey M. 2014. <u>State Funding for K-12 School Facilities: A Survey of the States</u>. <u>http://citiesandschools.berkeley.edu/reports/Vincent_2014_State_K12%20fac_funding_final.pdf</u>
[2] Vincent, Jeffrey M. 2014. <u>State Funding for K-12 School Facilities: A Survey of the States</u>. <u>http://citiesandschools.berkeley.edu/reports/Vincent_2014_State_K12%20fac_funding_final.pdf</u>
[3] Exceptions exist, however. For example, Florida does not consider school district wealth when determining state funding levels (<u>State Funding for K-12 School Facilities: A Survey of the States</u>, June 2014).

rate, per capita income, and student median family income. Numerous states also incorporate into their funding formulas various additional variables, such as bonding effort and success (Colorado), outstanding debt (Montana), or the number of towns that send their children to a school or district (New Hampshire). A summary of capital outlay funding formulas used by other states is provided in Table 1. For each state we list whether the state's share is a fixed or variable amount and, if variable, what variables are used to determine the state and local shares.

Table 1. Capital outlay funding in other states

State	State Funding (fixed/variable)	Determinants of state funding level	State funding level Min	Max
Alabama	variable	Enrollment Yield per mill		
Alaska	variable	Taxable property value Enrollment	65	98
Arizona	fixed	Guaranteed $ amount per student. If local tax base insufficient to fund, balance is provided by state.		
Arkansas	variable	Assessed property value Enrollment Enrollment growth		
California	fixed	New construction: 50% Modernization: 60%		
Colorado	variable	Assessed property value Median household income Enrollment Mill levy Percent of students eligible for free/reduced-cost lunch Bond election effort & success over last 10 yrs Remaining available bonding capacity Unreserved fund balance (charter schools only) Annual budget (charter schools only)		
Connecticut	variable	Income Assessed property value Population	20	80
Delaware	fixed	Low wealth areas: 80% High wealth areas: 40% Taxable property value Enrollment		
Florida	variable	Enrollment	11	35
Georgia	variable	Net equalized adjusted property tax digest Funds (potentially) generated by 1% sales tax Enrollment	80	92
Hawaii	fixed	All approved projects: 100%		
Idaho	variable	Enrollment Unemployment rate Taxable property value		

Table 1. Capital outlay funding in other states (continued)

State	State Funding (fixed/variable)	Determinants of state funding level	State funding level	
			Min	Max
Illinois	variable	Assessed property value Enrollment		
Indiana	none			
Iowa	fixed		25	25
Kansas	variable	Assessed property value Enrollment		
Kentucky	variable	Assessed property value Enrollment		
Louisiana	none			
Maine	variable	Taxable property value Enrollment Median household income		
Maryland	variable	Enrollment growth Local effort Percent qualifying for free or reduced-cost lunch Unemployment rate Per capita income District outstanding construction debt	50	98
Massachusetts	variable	Property value Income Proportion of low income students	31	80
Michigan	none			
Minnesota	variable	Net tax capacity Enrollment		
Mississippi	none			
Missouri	none			
Montana	variable	Property wealth Outstanding debt		
Nebraska	none			
Nevada	none			
New Hampshire	variable	Equalized valuation of the taxable property base Enrollment Median family income Number of towns with students enrolled	30	60

Table 1. Capital outlay funding in other states (continued)

State	State Funding (fixed/variable)	Determinants of state funding level	State funding level Min	Max
New Jersey	variable	Poor districts: 100% Equalized valuation of the taxable property base Aggregate income		
New York	variable	Property wealth Enrollment	10	98
North Carolina	variable	Enrollment Local tax rate		
North Dakota	none			
Ohio	variable	Assessed property value Enrollment Projected enrollment		
Oklahoma	none			
Oregon	none			
Pennsylvania	none			
Rhode Island	variable	Assessed property value Enrollment	30	98
South Carolina	none			
South Dakota	none			
Tennessee	fixed	Fixed dollar amount per student		
Texas	variable	Property value Enrollment Annual debt service		
Utah	variable	Property tax yield Enrollment Enrollment growth		
Vermont	fixed	Renewable energy projects: 75% Consolidation projects: 50% All other projects: 30%		
Virginia	none			
Washington	variable	Assessed property value Enrollment	20	100
West Virginia	fixed	New construction: 100% Renovation: 10-60% (depends on age of building)		
Wisconsin	none			
Wyoming	fixed	All approved projects: 100%		

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Availability of relevant data

The existing formula requires information pertaining to school district boundaries, enrollment, mill levies, and net taxable values for residential, nonresidential, oil & gas, and copper:

1. School district definitions (i.e., what components of various counties are associated with what school district). Although changes to school district boundaries are uncommon, they do occur from time-to-time and must be accounted for when calculating the funding formula. This information is available from the Public Education Department (PED).
2. School enrollment (80 day and 120 day) information is also available from PED.
3. Mill levy data is maintained by PED.
4. Residential, nonresidential, and copper net taxable value data is maintained by the Taxation and Revenue Department (TRD) Property Division.
5. Oil & gas net taxable value data is maintained by the TRD Oil & Gas Division.

Several options exist if modifications to the existing formula are considered with the aim of improving how ability to pay is captured and/or incorporating differences in per-student costs. A district's ability to pay for capital outlay projects may be more fully captured by incorporating student eligibility for free or reduced-cost lunch (available from PED) and/or various measures of income and poverty (readily available from the Census). Economies of scale (the fact that districts with small student populations cannot use space as efficiently as districts with large student populations) could be incorporated through the inclusion of such measures as a district's average school enrollment or population density. Average enrollment data is readily available from the PED, while population density at the school district level can be easily constructed using information obtained from the Census.

Population density data could also serve as a coarse proxy for differences in the costs of constructing and maintaining school facilities in rural versus urban areas. Other measures that could be used instead or in addition to population density for the purpose of capturing challenges faced by rural districts include (a) the average distance between the school district office and district schools, (b) the average distance between district schools, and (c) the average distance between the school district office and the nearest major metropolitan area. The PSFA maintains all the information necessary to construct each of these three measures.

Another scale issue affects the ability of districts to maintain existing facilities – a district's ability to maintain their facilities is diminished when facilities are built above adequacy, as larger and more extravagant facilities cost more to maintain that facilities that are built to adequacy and with no embellishments. This complexity could be

accounted for in the funding formula by including a variable to capture discrepancies between adequacy standards and existing facilities. The Public School Facilities Authority (PSFA) maintains the necessary data to capture such discrepancies, which in addition to capturing potential maintenance issues also serve as a means of capturing relative need (i.e., the percent by which a district's existing facilities either exceed or fall short of adequacy standards).

Validation of current formula

The following data was obtained by BBER for purposes of calculating the public school capital outlay shares formula and validating the state and district share values provided by PED in recent years:

1. School district definitions were obtained from PED for years 2006-2014.
2. School district enrollment numbers (80 day and 120 day) were obtained from PED for years 2006-2014 (i.e. academic years 2006-2007 through 2014-2015).
3. Nonresidential and residential net taxable value data was obtained from TRD for years 2006-2014.
4. Oil and gas net taxable value data was obtained from TRD for years 2006-2014.
5. Copper net taxable value data was obtained from TRD for years 2006-2014.
6. Mill levy data was obtained from PED for years 2006-2014.

BBER has consolidated, formatted, and placed into a single Excel workbook the net taxable value, school enrollment, and mill levy data obtained from TRD and PED (see PSCOC State Funding Formula Database 2006-2014.xlsx). Each variable is housed in a separate tab within the file. Using the formula as specified in statue, a second Excel workbook calculates the single-year public school capital outlay share for each year in tabs labeled 2006-2014 (see PSCOC State Funding Formula Calculations 2006-2014.xlsx). Note that according to statute, the state share value submitted to PSCOC in spring 2015 would be the average of these single-year shares computed using 2012-2014 data. The final tab of the calculation workbook contains a summary of all single-year share values.

The tab of the calculation workbook titled Check BBER PED 2012-2014 provides a comparison of BBER's estimated 2015 state share with the corresponding value provided to PSCOC by PED. The difference between the state share calculated by PED and that calculated by BBER was exactly zero for 23 school districts, while differences of approximately zero (i.e., differences that rounded to zero) were found for an additional 32 districts. The state share calculated by PED was *higher* than that calculated by BBER for 11 districts (differences ranged between 1 and 7 percent), while the state share calculated by PED was *lower* than that calculated by BBER for 23 districts (differences ranged between 1 and 4 percent).

BBER found some discrepancies throughout the data, although no systematic differences. Files obtained from PED suggest that PED *may* be using oil and gas property

value data from the incorrect year when calculating the funding formula.[4] However, due to the manner in which three years' state percent values are averaged to determine the state share in a given year, this error would be unlikely to notably impact share values.

Summary of Findings

The work documented herein includes an assessment of the performance of New Mexico's public school capital outlay funding formula in allocating state funds to public school facilities projects, validation of the data and methods used by PED to calculate state shares, an assessment of the availability of relevant data for potential modifications to New Mexico's funding formula, and a summary of methods/formulas used by other states.

BBER collected from primary data sources the necessary school enrollment, net taxable value, and mill levy data to calculate the funding formula. Although some discrepancies were found between the data we collected from primary sources and that used by PED in calculating the formula, none were systematic discrepancies. A comparison of the 2015 state shares (an average of state percentages using 2012-2014 data) calculated by BBER with those calculated by PED found some differences, although none were larger than 7 percent.

The funding formula is intended to optimize the use of state funds to provide equal and adequate school facilities for all districts in the state. The formula has in general worked well, although there are still concerns that the formula has in some cases enabled districts to build above adequacy standards while other districts struggle to meet adequacy standards. We have identified two aspects of the formula that may explain why this is the case:

1. Per-student property tax valuation is perhaps not the best measure of a district's 'ability-to-pay' in New Mexico. Property valuations are subject to significant variability in districts where commodities such as oil & gas extraction comprise a significant share of property valuation; thus a determination of funding shares at a time of high commodity prices would excessively burden these districts if and when prices drop (and vice versa).

   This issue may be addressed by incorporating in the formula alternative measures of ability-to-pay, such as household or per capita income, poverty or unemployment rates, students eligibility for free or reduced-cost lunch, and/or alternative measures to correct for commodity and/or agricultural land valuation.

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[4] For example, the data file obtained from PED that contains mill levy and net taxable value data suggests that 2014 mill levy data and residential, nonresidential, and copper net taxable value data were used in conjunction with 2013 (rather than 2014) oil & gas net taxable value data.

2. The formula does not account for differences in the per-student facility construction and maintenance costs, for two reasons. A) Scale factors: lower enrollment schools (typically in rural areas) have higher average per-student space needs because common areas (e.g. hallways, cafeterias, libraries, multipurpose rooms) have minimum size requirements. Thus, all factors being equal (e.g. per-student property valuation), districts with lower-enrollment schools incur higher per-student facility costs. B) Locational factors: construction and maintenance costs vary by region, with costs typically higher in rural areas than urban areas. Thus, not only do rural schools typically require more square footage per student, but the cost-per-square-foot for both construction and maintenance is higher in these rural districts.

   These issues may be addressed by incorporating in the formula measures of space utilization and direct costs of facility construction and maintenance.

Proposed scope of future work

The project goal is to modify the existing funding formula to address a broader spectrum of complexities and differences in the cost and ability of school districts to maintain & improve existing facilities and construction new facilities. Although the existing formula addresses some of these complexities and differences, various important aspects are not addressed by the current formula. Examples of school district characteristics that vary across space and time, that are not adequately captured in the existing funding formula, and which can influence either the costs associated with facility maintenance and construction and/or a district's ability to pay for facilities' maintenance and construction include: population density, income, poverty, discrepancies between adequacy and existing facilities, school density, and distance to major metropolitan area. In doing so, the modified funding formulas will seek to address at least some of the concerns that have been raised with respect to the existing funding formula.

BBER will develop and analyze five alternative formulas that capture various aspects of these complexities. The analysis will include sensitivity analyses of the existing and alternate formulas to the variables included therein. Alternate formulas may omit existing variables and include new variables with varying weights and sensitivities. Electronic spreadsheets of the various formulas will be developed and provided to the Task Force. A meeting will be held at which BBER will present the five models to the Task Force, and provide direction as to how various components of the models can be manipulated to ascertain the sensitivity of the model to different variables and weights. In this manner members of the Task Force may use the spreadsheets to adjust the weights applied to variables included in each alternative formula, and thereby assess variables' impacts on state and local shares across New Mexico's school districts. Subsequent to being presented with the five alternative formulas, the Task Force will

decide upon two alternate formulas to be presented to New Mexico's school districts and included in BBER's final report.

The final report will include:
- an executive summary of the study and scenarios,
- a brief history and background of the public school capital outlay process and origins of the existing formula and its development,
- technical description and laypersons summary of the current formula and the variables included in the existing formula,
- technical descriptions and laypersons summaries of the two scenarios approved by the Task Force for submission to NM school districts, and
- an analysis of (including sensitivity analysis of the variables) the existing formula and two scenarios.

Work is to be completed within a 9-month period that will commence upon signing of a contract.