While education is an important legal function of state government, a major portion of school facility funding is still at the local level, and the quality of school buildings varies across most states. This paper addresses how rural school facilities are financed. It provides an overview of school facilities funding in the United States as summarized by the literature, a mini study of school facilities funding in Arkansas, and comments from practitioners and researchers on the issues presented. It argues that the same equity issues raised on expenditure per pupils and equal educational opportunity should be raised in school facility funding too; and educational quality, including that of school facilities, should not rely on the wealth of the local community. Arkansas, one state that does depend on local wealth for the quality of school buildings, is examined in terms of its great diversity between quality and ability to support school facilities. The paper explains the multiple school funding problems faced by Arkansas' rural, small school districts, such as district size and the size of a supportive tax base and how these problems contribute to a wide range of allowable amounts of state aid available to rural versus urban school districts, thus creating vast quality differences in school facilities. (GR)
Financing Facilities in Rural School Districts

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In 1971, Barr and Jordan pointed out that even though the title for school buildings may legally reside with the state and education has historically and legally been considered a state function a major portion of the financial burden for providing housing for educational programs and students had been placed upon the shoulders of the local school district.¹ In *Brown v. Board of Education of Topeka*, Chief Justice Warren stated that "... education is perhaps the most important function of state and local governments, and ... must be made available to all on equal terms."² In 1998, we know that education is still one of the most important legal functions of state government and we know that a major portion of funding school facilities is still at the local level and that the quality of school buildings are not equal across most states.

The major question of this paper is: How are rural school facilities financed? The answer to that question depends on each state funding formula, how rural is defined, and in a majority of areas, the wealth of the local school district. The answer is not simple nor easy. In most states, school facility funding has been tied to the ability of the local school district to raise funds from local assessed property values, which introduces the problem of equity. School districts with a higher assessed value of property will have greater ability to raise funds with equal or less tax

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effort than school districts with lower assessed property values. Many poor school districts have little or no school facility funding when the avenue to raise funds is tied to their local wealth.

To study the problem of financing facilities in rural school districts across the United States the following information would be of great importance:

1. A uniform definition of rural.
2. A summary of the state laws for funding school facilities, state by state.
3. An analysis of the equity or fairness of school facility funding tied to local assessed property values.
4. A summary of the present condition and age of public school buildings, state by state and by geographic category (rural, urban, and etc.).
5. An identification of local sources of school facility funding that are not reported by the state (i.e., foundations, donations, fundraising, and grant writing).
6. An identification of the regional differences in the building cost per square foot.
7. An identification of the legal issues surrounding rural schools in public school funding equity litigation.

It is impossible for one person in one state to adequately describe the conditions of school facilities across the United States and the funding of those facilities. It is suggested that the most useful and accurate information on school facilities funding would be from state by state studies conducted by individuals that know their own state.

This paper will present an overview of school facilities funding in the United States as summarized from the literature, a mini study of school facilities funding in one state, and comments from practitioners and researchers on the issues presented in the paper.
Financing School Facilities

According to Johns, Morphet, and Alexander, prior to the twentieth century, financing of public school facilities was the total responsibility of local governments in the United States. They state that local school districts in most states have relatively few options available for obtaining the funds necessary to finance the construction of their school facilities.

Options for obtaining school facilities funding are: (1) "pay-as-you-go" or the ability to finance the construction of school facilities from current revenues; (2) reserve funds or the accumulation of tax funds in a separate account for future buildings; (3) general obligation bonds; (4) full state support; (5) state grants-in aid: equalization; (6) state grants-in-aid: percentage-matching; (7) state grants-in-aid: flat grant; (8) state loans; and (9) state school building authorities.

The National Educational Finance Project made a national survey of the problems of financing school facilities in 1971. Johns, Morphet, and Alexander noted that the problems identified in the 1971 study still existed in large part in 1980. The following is their summary of the findings of the National Educational Finance Project.

In any general discussion of aid for public school construction throughout the nation, two paramount problems emerge: (1) many state-aid plans are only token in nature, and several states do not provide local school districts with any financial

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assistance for school construction; and (2) the federal government has not provided financial support for any general programs for school construction.\(^5\)

The tradition of local responsibility for financing school sites, buildings, equipment, and other capital costs is still strongly entrenched in many states. In many parts of the nation, however, there are serious shortages and inadequacies, and many school systems cannot provide suitable facilities from local resources.\(^6\) The following 14 states: Arkansas, Idaho, Illinois, Iowa, Louisiana, Missouri, Montana, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Virginia, and Wyoming, provided no funding for school facilities in 1993-94. Therefore, the school districts in those states had to rely on their local property wealth for facilities funding.\(^7\) Michigan provided no funding in 1994-95 and Nebraska provided less than one million dollars in 1993-94.

Thirty-seven states provided some state funding for capital projects, including states that address capital outlay through their basic support program. During the 1993-94 school year, state funding programs for capital outlay ranged from full state funding in Hawaii; flat grants in Indiana and South Carolina; percentage equalizing in Massachusetts with state funds ranging from 50 to 90 percent of the projects; 60 percent of approved project costs paid by the state of Maryland with proportional local funding rated on the district’s wealth class; and funding provided through the School Building Authority in West Virginia. In summary, in 1993-94 some of the states

\(^5\)Ibid, 288.

\(^6\)Ibid, 275.

provided equalized aid for school facilities, some provide flat grants, several provided funds in the basic funding formula, and some provided non-equalized aid. Presented in Table 1 is an overview of capital outlay and debt service programs provided by the states. Capital outlay is defined as expenditures which result in the acquisition of or addition to fixed assets such as land, buildings and equipment. Debt service programs include the revenue to pay the principal and interest on long term debt (greater than one year).

<table>
<thead>
<tr>
<th>No State Funding</th>
<th>State Funding Percentage Equalized</th>
<th>State Funding Special Formula or Flat Grant*</th>
<th>State Funding Basic Funding Formula</th>
<th>State Funding Percent of Debt Service</th>
<th>State Funding State Leases</th>
<th>State Funding School Building Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>Connecticut</td>
<td>Florida</td>
<td>Alabama</td>
<td>Alaska</td>
<td>California</td>
<td>West Virginia</td>
</tr>
<tr>
<td>Idaho</td>
<td>Delaware</td>
<td>Indiana*</td>
<td>Arizona</td>
<td>New Hampshire</td>
<td></td>
<td>Virginia</td>
</tr>
<tr>
<td>Illinois</td>
<td>Georgia</td>
<td>Maine</td>
<td>Colorado</td>
<td>Kansas</td>
<td></td>
<td>Full State Funding</td>
</tr>
<tr>
<td>Iowa</td>
<td>Maryland</td>
<td>Minnesota</td>
<td>Kansas</td>
<td>Kentucky</td>
<td></td>
<td>Hawaii</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Massachusetts</td>
<td>Mississippi</td>
<td>Kentucky</td>
<td>Tennessee</td>
<td></td>
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</tr>
<tr>
<td>Michigan</td>
<td>New York</td>
<td>Nebraska</td>
<td>Texas</td>
<td>Wisconsin</td>
<td></td>
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</tr>
<tr>
<td>Missouri</td>
<td>Pennsylvania</td>
<td>New Jersey</td>
<td>South Carolina*</td>
<td>Utah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>Rhode Island</td>
<td>New Mexico</td>
<td>Carolinam*</td>
<td>Vermont</td>
<td></td>
<td></td>
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<tr>
<td>Nevada</td>
<td>Washington</td>
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<td>N. Dakota</td>
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<td>Oklahoma</td>
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<td>Oregon</td>
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<td>S. Dakota</td>
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<td>Virginia</td>
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<td>Wyoming</td>
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<tr>
<td>Total: 15</td>
<td>Total: 9</td>
<td>Total: 11</td>
<td>Total: 8</td>
<td>Total: 4</td>
<td>Total: 1</td>
<td>Total: 1-1</td>
</tr>
</tbody>
</table>

The ability of a school district to fund school buildings at the local level is directly related to the local fiscal resources available to that district. In most states the only fiscal resource available to school districts is the property tax. Therefore, the most commonly used measure of district wealth is a district’s equalized assessed property valuation. Some school districts in some states have access to other revenue sources in addition to the property tax such as local income tax, local sales tax, vehicle excise tax, and user fees. Advocates of an income factor to determine local fiscal capacity maintain that a low correlation between property values and resident income supports the need to combine the two to arrive at a more comprehensive measure of fiscal capacity. Some school districts have high assessed valuation of property and therefore a high property tax capacity but low incomes and thus a low resident fiscal ability to pay taxes and vice versa. In these instances, limiting the measure of fiscal capacity to just property produces an inaccurate picture of the overall fiscal ability of the local residents to support education. Found in Table 2 are local wealth factors used in state measurements of local fiscal capacity reproduced from Public School Finance Programs.

The information in Table 2 magnifies the importance of the Property Tax as a mechanism for measuring local wealth and for generating local school district revenue. Eight of the 15 states

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8Ibid, 25.


10Ibid, 37.

11Gold, Public School Finance Programs, 1:27.
that did not provide state aid for school facility funding in 1993-94, measured fiscal capacity by the single measure of assessed property valuation. Those states were Arkansas, Idaho, Illinois, Iowa, Michigan, Montana, North Dakota, and Oklahoma.

<table>
<thead>
<tr>
<th>Assessed Property Valuation (only)</th>
<th>Assessed Property Valuation &amp; Other Revenue Sources (not including Personal Income)</th>
<th>Assessed Property Valuation &amp; Personal Income</th>
<th>Assessed Property Valuation &amp; Personal Income, plus other Revenue Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>Alaska</td>
<td>Connecticut</td>
<td>Alabama</td>
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<td>Arkansas</td>
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<td>Idaho</td>
<td>South Dakota</td>
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<tr>
<td>Wisconsin</td>
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</tbody>
</table>

Total = 24                                                                                       Total = 9                                                                                       Total = 9                                                                                       Total = 5


*Table reproduced from Table 8, Vol. 1, p. 27, Public School Finance Programs of the United States and Canada, 1993-94.

School Facilities Funding in Arkansas
In 1993-94, Arkansas was one of 15 states that did not provide state aid for school facility funding and was one of eight states that measured fiscal capacity by the single measure of assessed property valuation. In the 1997-98 school year, Arkansas provided $10,000,000 for general facilities funding for 312 school districts that house approximately 400,000 students. This equates to $25 per student for state aid for facilities funding.

The Condition and Cost of School Buildings in Arkansas

In 1995, Arkansas had 3,101 school buildings of which 2,662 were permanent buildings in use and about 300 were temporary buildings. Ten percent (301) of the buildings were built before 1946, or 10 percent are greater than 50 years old. In 364 of the buildings, the occupancy is greater than capacity and in 100 of the buildings the roof needs to be replaced.

The construction cost per square foot for a regular classroom plus site in 1995 was $38.42. For a specialty area including site, labs, media center, gym, and auditorium, the cost was $65.47 per square foot. The 1995 cost of the total school facility and site was $49.12 per square foot. Projects in progress during 1995 had increased to $65.21 per square foot for the total school facility and site.12

The Arkansas Department of Education reported that during a typical school year plans for approximately 100 school construction projects are submitted to the office of School Plant Services for approval. The Department pointed out that the plans are equally divided between construction of an entire building, additions to existing facilities, and renovation projects. The

major trend in both new construction and renovation projects is providing facilities for middle level instruction units. According to D. Cecil McDermott of the Instructional Microcomputer Projects for Arkansas Classrooms (MPAC), Arkansas ranks ninth in the nation in student per-computer ratio. Currently, the ratio in Arkansas is 8 to 1.\textsuperscript{13}

Differences Among School Buildings and Facility Funding in Three School Districts

The following is a short description of three public school buildings located in three different school districts within the same county. In addition to a description of the school buildings is an overview of the school districts' demographic and school facilities funding data.

School Building #1 is a new eight million dollar middle school that has 126,000 square feet of usable space for 1,050 sixth and seventh graders. The new building sits on 30 acres of donated land that has a value of over $500,000. The cost to build the middle school was about $63 per square foot, which included $300,000 for terrazzo floors. Many individuals have indicated that this is one of the most beautiful and efficient school facilities they had ever toured and that it is an example of what public schools of the new millennium could offer. The school is well equipped with 145 computers, 90 microscopes, a media center, band, chorus and art rooms, a gymnasium and a cafeteria with a stage. This school represents the state-of-the-art in school architect, equipment and school buildings.

This middle school is located in a school district that had a K-12 enrollment of 8,867 in 1993-94, 23 percent free and reduced lunch rate, and 50 students per square mile. The borrowing power of the school district to build new buildings was $10,098 per student or a total borrowing

\textsuperscript{13}Ibid
power of $89,540,000.\textsuperscript{14}

School Building #2 is located in a rural, isolated school district with a total K-12 enrollment of 259 students in 1993-94, 65 percent free and reduced lunch rate, and four students per square mile. The school district borrowing power for facilities was $5,051 per student or a total school facilities debt limit of $1,308,125.

Located on the school district grounds are a 7-12 grade range high school, an elementary school, and a building that houses the cafeteria and the gymnasium. The original high school building was built in 1907, burned and was rebuilt in 1915. The second building burned in 1930. The outside stone structure of the 1930 building survived the fire and the inside was rebuilt during the same year. Therefore, the present high school building is about 58 years old. The science class and lab are located in the "dungeon" as the students call the basement area of the high school, an area that floods often with heavy rains. The science lab has 22 microscopes and a fish tank. The halls above the basement area have nails for coats and the building has no air conditioning. Two years ago the high school set up a computer lab with used computers and black and white monitors, but a majority of the computers became unusable when the room became too hot and the computers overheated. Today, the computer lab sits idle except for limited training on keyboarding. Last summer the school acquired two new heating units that stand nakedly in the main hallway with ducts going into the classrooms. The one set of restrooms for the high school students are attached to the outside of the building making it necessary for the students to go out

\textsuperscript{14} School District borrowing power or debt limit for school facilities is computed as follows: 22 percent of Assessed Property Value. Property is assessed at 18 to 22 percent of market value. The school district can borrow up to 22 percent of the assessed property value of the school district area.
of the building to get to the restrooms. The building is in need of repairs from the floor to the ceiling. School #2 is located in a rural, isolated area of the same county that the $8 million dollar middle school is located.

School #3 is located in a rural school district that had a total K-12 enrollment of 1,078 in 1993-94, a school facilities borrowing power of $5,155 per student or a school district total debt limit of $5,557,357, a free and reduced lunch rate of 50 percent, and 7.4 students per square mile. The topic of discussion is the school district’s new Information and Communication Center located in the new addition to the high school / middle school building. The new addition is 36,000 square feet and was constructed for a cost of $3.5 million. Four computer labs were built, twelve classrooms, a 500 seat school-community auditorium with a grand piano, a conference room and a 12,000 square foot media center. The whole complex has been wired and setup for the latest technology. The building was designed so that the computer labs are open for adult classes and community participation.

All K-12 classrooms have access to a computer, phone, fax, TV, VCR, Dukane Multimedia Retrieval System, Distance Learning, CD-Rom tower and the Internet. Over 90 percent of the faculty and staff have active user accounts with Internet access. The high school and middle school students have accounts and they are preparing to allow over 1,300 students online. The Information and Communications Center offers over 16 different services, has three satellites, local television cable, live video capabilities, digital satellite systems, and remote controls in every classroom. They are very close to being able to provide distance education from their site.

The Center is used by students, staff, parents, and the community. In the past eight years,
the school district has grown from six computers and four phone lines to over 400 networked computers and its own phone system. Grant writing, pilots, and community involvement in passing a tax increase has provided funding for the new facility and equipment. Seventy percent of the community voted for a mileage increase to fund the building. The philosophy of the school district is “Education is the business of the whole community.”

Summary of the Condition and Funding of School Buildings in Three School Districts

Presented were three school districts with three very different school facility conditions. All three school districts are located within the same county. One has a new $8 million dollar state-of-the art middle school; one has a new state-of-the art Information and Communication Center and a new 500 seat school-community auditorium, and the third school district has computers that smoked and burned due to the hot conditions of the high school building, student restrooms that are accessible to the high school students from the outside of the building, and a facility that is in great need of repair and maintenance.

The question is: How does such great diversity in the quality of school buildings happen in the same county? In the same state? How does one school district have so much and another have so little? There is no simple answer. Leadership, community involvement, and property values are some of the major reasons. School facilities funding in Arkansas is tied to property values. Each local school district provides for facility funding from their ability to borrow money which is tied to local property values. This year the state provided $10,000,000 for facilities funding, but remember that the one new middle school cost $8,000,000. If you divide $10 million across 312 school districts and over 400,000 students you can see a great problem, too little for
Another problem is school size. The two rural school districts had about the same borrowing power per student for school facilities, about $5,000 per student. But, the total amount of borrowing power is a different story. One of the rural school districts had $5.5 million borrowing power compared to the smaller rural school district of $1.3 million. Now, compare the borrowing power to fund school facilities of the two rural school districts with the non-rural district: $1.3 million for the rural, isolated school district, $5.5 million for the rural school district, and $89.5 million for the urban. Of course, the two rural school districts will not have the number of buildings that are required to house the students in the non-rural, larger school district and will not require the same amount of total revenue for facilities funding. But, size still presents a problem relative to the needs of a school district's school facility funding.

On the whole, the school facilities funding problem for rural schools in Arkansas and many states becomes a problem of school or school district size and property values. The following data will demonstrate this point.

School Facilities Funding and School District Size

In 1993-94, the relationship between school facilities funding and school district size was very strong ($r = .94$). This means that as the size of the school district increases the amount of funds available for school buildings increases. The measure of school facilities funding was based on 22 percent of a school district’s assessed property value, the amount that the school district could borrow with approval of the local community for local school facilities. It should be pointed out that if two school districts show equal borrowing power per student (i.e., $7,000 per student).
It is the total borrowing amount that becomes significant to the school district in their ability to build and repair buildings. There is little relationship between borrowing power for school facilities and expenditure per pupil \((r = .14)\), and total borrowing power and borrowing power per pupil in ADM \((r = .26)\). Size factors showed the strongest correlation with borrowing power: the number of certified staff \((r = .93)\), ADM \((r = .94)\), and students per square mile \((r = .74)\). A negative correlation was present with borrowing power for school facilities and the percentage of students receiving free and reduced lunch \((r = -.16)\).

Table 3 shows a dramatic difference in school facilities funding for the five highest ranked school districts on borrowing power for school facilities and the five lowest ranked school districts in Arkansas. Borrowing power per student does not appear to be the best measure of comparison for school facilities funding when one considers the cost of a school building or that school building repairs can amount to millions of dollars.

The lowest ranking school districts on school facilities funding shown in Table 3 are rural and poor as indicated by the low number of students per square mile and the high percentage of free and reduced lunch participation. As indicated earlier, the expenditure per pupil has very little relationship with school facilities funding. Facilities funding in Arkansas is measured and obtained from local property wealth. Also, the resident ability to pay is not a factor in evaluating a school district's capacity to fund school buildings.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Borrowing Power</th>
<th>Borrowing Power/ADM</th>
<th>ADM</th>
<th>% Free &amp; Reduced</th>
<th>ADM/Sq Mile</th>
<th>Expenditure/Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$530,939</td>
<td>$4,871</td>
<td>109</td>
<td>76%</td>
<td>1.1</td>
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</tr>
<tr>
<td>2</td>
<td>664,054</td>
<td>7,461</td>
<td>89</td>
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</tr>
<tr>
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<td>3,188</td>
<td>231</td>
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<tr>
<td>4</td>
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<td>5,057</td>
<td>149</td>
<td>73</td>
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</tr>
<tr>
<td>5</td>
<td>990,677</td>
<td>5,726</td>
<td>173</td>
<td>61</td>
<td>5.6</td>
<td>3,280</td>
</tr>
<tr>
<td>1</td>
<td>$94,160,000</td>
<td>$10,864</td>
<td>8,667</td>
<td>28%</td>
<td>33.6</td>
<td>$3,058</td>
</tr>
<tr>
<td>2</td>
<td>94,160,000</td>
<td>17,827</td>
<td>5,282</td>
<td>28</td>
<td>55.0</td>
<td>3,200</td>
</tr>
<tr>
<td>3</td>
<td>150,700,000</td>
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<tr>
<td>5</td>
<td>363,000,000</td>
<td>15,303</td>
<td>23,721</td>
<td>49</td>
<td>224.0</td>
<td>5,084</td>
</tr>
</tbody>
</table>

In examining the borrowing power for facilities funding per pupil in Table 3, you will find that one of the lowest and one of highest-ranking school districts have about the same borrowing power per student, $7,461 and $7,952. In comparing these two school districts, the lowest ranked district has 89 students with 78 percent free and reduced lunch rate and the highest ranked has 20,390 students with 39 percent free and reduced lunch rate. There are two points that I am wanting to make with these two school districts. Number one: how many school buildings can a school district build and how many repairs can be made with $664,000 compared to $162 million, and how hard will it be for the local school district with 78 percent free and reduced lunch rate to
support increased property taxes to pay a bond issue to cover the amount the school would borrow for school facilities compared to the area with a lower free and reduced lunch participation rate? When facilities funding is based on local property wealth and local ability to pay great inequities will occur. One way to reduce this inequity in school facilities funding is for the state to recognize local wealth and local ability to pay and to equalize funds accordingly. A second way is federal funding assistance. The next section discusses in more detail rural areas and facility funding.

Rural Areas and Facility Funding

The 312 school districts in Arkansas were categorized by level of ruralness and by levels of borrowing power for school facility funding. An explanation of the levels of each category are as follows:

1. Ruralness - five levels of ruralness are measured by students per square mile with levels one and two representing the most rural school districts. Each school district was assigned a level.

   I = 0.5 - 5.0 students per square mile
   II = 5.1 - 10.0
   III = 10.1 - 20.0
   IV = 20.1 - 40.0
   V = 40.1 - 300.0

2. Borrowing Power for School Facilities by Quartiles - 78 school districts in each quartile. The 312 school districts were ranked from high to low on borrowing power for school facilities and divided into quartiles with each quartile containing 78 school districts. Quartile I contains the school districts with the least borrowing power for school facility funding.
Levels of Borrowing Power for School Facilities by Quartiles

I = Less than $2.6 million in borrowing power
II = Greater than $2.6 million but less than $4.8 million
III = Greater than $4.8 million but less than $10 million
IV = Greater than $10 million

Presented in Table 4 are the number of school districts and the number of students by each category of borrowing power and levels of ruralness. In relationship to ruralness, it is interesting to note that the most rural school districts, those with less than 10 students per square mile, are found in all four levels of borrowing power.

As noted in Table 4, 76 school districts have less than 10 students per square mile and less than $2.6 million in borrowing power for school facilities. An additional 63 school districts have less than 10 students per square mile and between $2.6 million and $4.8 million in borrowing power. In total, 75 percent or 234 of the 312 school districts in Arkansas have less than 10 students per square mile. The diversity in the borrowing power for school facilities for these 234 rural school districts ranges from $531,000 to over $10 million. The total student enrollment of 171,480 in the 234 rural school districts represents 38.6 percent of the total state public school population. The rural school districts, as measured by 10 students or less per square mile, represent 75 percent of the states' school districts and 39 percent of the student enrollment.

Ninety-five school districts are located in the four cells of Quartiles III and IV and in RI and RII. This indicates that 40 percent of the rural school districts have borrowing power for school facility funding from $4.8 million to $10 million or more. Among the 234 rural school districts in Arkansas there is great diversity in the amount of funds that are available for school facility funding. Again, each school district's capacity for funding facilities is dependent upon
property wealth, resident ability to pay, and school district size.

Table 4
Ruralness and Facility Funding
1993-94 Arkansas

<table>
<thead>
<tr>
<th>Quartile</th>
<th>RI 0.5-5.0 Students per Sq. Mi</th>
<th>RII 5.1 - 10.0 Students per Sq. Mi</th>
<th>RIII 10.1 - 20.0 Students per Sq. Mi</th>
<th>RIV 20.1 - 40.0 Students per Sq. Mi</th>
<th>RV 40.1 - 300 Students per Sq. Mi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>QI</td>
<td>60 sd</td>
<td>16 sd</td>
<td>2 sd</td>
<td>0</td>
<td>0</td>
<td>78 sd</td>
</tr>
<tr>
<td>&lt;$2.6 m</td>
<td>18,496 s</td>
<td>7,019 s</td>
<td>1,021 s</td>
<td></td>
<td></td>
<td>26,536 s</td>
</tr>
<tr>
<td>QII</td>
<td>41 sd</td>
<td>22 sd</td>
<td>13 sd</td>
<td>2 sd</td>
<td>0</td>
<td>78 sd</td>
</tr>
<tr>
<td>$2.6 &lt; $4.8 m</td>
<td>21,252 s</td>
<td>16,438 s</td>
<td>9,434 s</td>
<td>2,097 s</td>
<td></td>
<td>49,221 s</td>
</tr>
<tr>
<td>QIII</td>
<td>39 sd</td>
<td>29 sd</td>
<td>9 sd</td>
<td>1 sd</td>
<td>0</td>
<td>78 sd</td>
</tr>
<tr>
<td>$4.8 &lt; $10 m</td>
<td>31,584 s</td>
<td>30,399 s</td>
<td>12,486 s</td>
<td>1,264 s</td>
<td></td>
<td>75,733 s</td>
</tr>
<tr>
<td>QIV</td>
<td>12 sd</td>
<td>15 sd</td>
<td>18 sd</td>
<td>18 sd</td>
<td>15 sd</td>
<td>78 sd</td>
</tr>
<tr>
<td>$10 m</td>
<td>16,008 s</td>
<td>30,284 s</td>
<td>50,673 s</td>
<td>88,856 s</td>
<td>106,914 s</td>
<td>292,735 s</td>
</tr>
<tr>
<td>Total</td>
<td>152 sd</td>
<td>82 sd</td>
<td>42 sd</td>
<td>21 sd</td>
<td>15 sd</td>
<td>312 sd</td>
</tr>
<tr>
<td></td>
<td>87,340 s</td>
<td>84,140 s</td>
<td>73,614 s</td>
<td>92,217 s</td>
<td>106,914 s</td>
<td>444,225 s</td>
</tr>
</tbody>
</table>

sd = School District; s = students

The range in the number of students in each school district and the percentage of students receiving free and reduced lunch by Quartile on Borrowing Power for School Facilities Funding is great, as shown in Table 5. The importance of this table is in the knowledge of the great diversity among the school districts in their ability to fund facilities and their ability to pay as represented by the student rate of free and reduced lunch. Each quartile contains 78 school districts.
Table 5
Diversity in School Size, Ability to Pay, Ruralness and Funding Facilities by Quartiles

<table>
<thead>
<tr>
<th>Borrowing Power Quartile</th>
<th>ADM Range</th>
<th>% Free &amp; Reduced Range</th>
<th>Students/Sq. Miles Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>89 - 851</td>
<td>20% - 94%</td>
<td>0.5 - 18</td>
</tr>
<tr>
<td>II</td>
<td>225 - 1,381</td>
<td>19% - 100%</td>
<td>1.2 - 30</td>
</tr>
<tr>
<td>III</td>
<td>163 - 2,021</td>
<td>14% - 94%</td>
<td>1.2 - 38</td>
</tr>
<tr>
<td>IV</td>
<td>641 - 23,721</td>
<td>16% - 87%</td>
<td>1.2 - 303</td>
</tr>
</tbody>
</table>

Note: Each Quartile contains 78 school districts.

Summary and Conclusion

Education is a state responsibility. The education process includes school buildings. Therefore, the same equity issues raised on expenditure per pupils and equal educational opportunity should be raised in school facility funding. One of the main equity issues, the quality of education should not be dependent on the wealth of the local community, should also apply to the quality of school buildings. In 1993-94, 15 states provided no state school facility funding and eight of those states measured local fiscal capacity by assessed property valuations. Arkansas was one of those eight states that depend on local wealth for the quality of school buildings and in Arkansas there is great diversity among the quality and the ability to support school facilities.

The rural school districts in Arkansas, as measured by 10 students per square mile of land area, represent 75 percent of the 312 school districts and 39 percent of the student enrollment. School facility funding is based on the borrowing capacity that is reflected in 22 percent of local assessed property values. Poor school districts have a double blow in school facility funding in low property wealth and low resident ability to pay taxes.
Rural, small school districts face three problems in school facility funding: (1) the problem of school district size; (2) the problem of local property wealth; (3) and the problem of local ability to support taxes. With the combination of school size and low property wealth, a small school district faces an insurmountable problem of facility funding when there is no state or federal aid. In Arkansas, the amount of money that can be borrowed for school facility funding ranges from $530,939 for a small, rural school district with 109 enrollment to $363,000,000 for a school district with 23,721 enrollment. In facility funding per student, the large school district has three times the amount of money per student for school buildings and repairs than the small, rural school district. School size and local wealth work against a small school district when the state does not equalize school facility funding. In the above example, the small, rural school district had 78 percent of their students participating in the free and reduced lunch program, an indication of low resident ability to support additional taxes for facility funding.

The diversity among all 312 school districts in Arkansas is great. Just among the 234 rural school districts, the borrowing power for school facility funding ranges from $531,000 to over $10 million; the percentage of students on free and reduced lunch ranges from 18 percent to 93 percent; and school size ranges from 89 to 3,709 enrollment in ADM. State and federal aid to school districts for school facility funding would have to evaluate each school district on size, local wealth, and resident ability to pay to establish an equitable solution to the problem of school facility funding.

The final section of this paper presents comments and observations by practitioners and researchers in the field of public school education on issues addressed in this paper.
In response to the paper, “Financing Facilities in Rural School Districts,” individuals representing 12 states discussed many of the issues presented in the paper. The topic that received the greatest amount of discussion was, “What is rural?” Other topics discussed were local control and state school facilities funding; forced consolidation; efficiency; local ability to pay; politics and power; funding school facilities from a natural resource tax; equity, fair funding, and rural school coalitions; state obligation to provide an education and to fund school facilities; tax abatement; state funding policy but the state does not pay; and “What can we do?”

Most of the respondents discussed the above issues relative to their state and their personal experiences. States identified by the respondents were California, Colorado, Indiana, Iowa, Missouri, Minnesota, Nevada, Ohio, Kansas, Tennessee, Texas, and West Virginia. The group discussion started with, “In your state, what is rural?” The following is a summary of the responses to this question and other topics.

**Discussion topic: In your state, what is rural?**

* About 2,500 students or less. Can a small city be rural? I had one person tell me absolutely not.

* I heard a good definition one time: it’s less than three McDonalds.

Kansas I’ve always used the guideline of around 1,000 as indicating rural. We have large, medium, small, and tiny schools. Rural to me means anything under 1,000.
Kansas We need to separate out rural from large and small somehow because in Kansas we have some districts that I consider large districts, Garden City for example in Western Kansas, but it's a very rural district if you use the term rural. We made a major change in our school finance formula effective with the '92-'93 school year: [identifying school districts that are] small by choice and small by necessity.

Texas I became superintendent of a school district in south Texas in 1979 that had 2,500 students. This year there are 16,000 students and it is still rural from the standpoint that it has 900-plus square miles and 200 buses to bring kids from all over the place. The central community is only 1,500. I understand rural in the sense of smallness, but I think there are qualifying factors. This is a major school district, size-wise, but it is a rural school district. It is difficult to get teachers to go out there because there is no housing for teachers; and entertainment and a major grocery store are 15-20 miles away. I think these are factors that need to be considered.

California We don't have rural districts. We just have small districts. Anybody under 2,500 ADA qualifies as a small district. But, I think the fallacy is in the terminology. If we are talking about districts that is one thing. If we are talking about individual school sites, that’s another. And I haven’t heard anybody clarify that. I may be a small district with 2,500 ADA in the district, but I may have 1,500 different school sites. There is a big
difference between school sites and district numbers. We need to clarify
the definition.

* There can be lots of operational definitions of rural, but some
definitions that aren’t so operationalizable makes sense in terms of
questions about what is lost. One of the definitions is a cultural
definition of rural that has to do with the idea of a sense of place.
When we define rural by numbers, and then we say we’re going to
move all these people who are numbers into this larger school
because it’s efficient, we may overlook the sense in which a “sense
of place” characterizes many rural areas.

* I was listening earlier to those of you who are from the western
part of the country, and being on the eastern side, for me rural
doesn’t necessarily require large geographic areas. It can be rather
small amounts of areas between large metropolitan areas. But, out
west, geography, and how many square miles we’re talking about is
extremely significant. I had a student who taught in Alaska and he
talks about isolation, he talks about being snowed-in for six months.
Those [where you are located] play an issue in what might be
constituted as a possible way of examining rural.

**Discussion topic: State funding, local control, and efficiency**

West Virginia One of the issues that we have in West Virginia with the state funding with
the School Building authority is that in order to qualify for funding, you must meet a certain economies of scale and other factors. Certainly, the state is not going to commit millions of dollars to a school that simply is inefficient. It will not contribute to that. A good way of looking at that--6 ½ years ago, I believe my numbers are close, we had probably around 1,240 schools and I think this year we have 843. But, we have reached a point in many of these schools, with a declining population, where we lost 23 percent of our student population in the state. There are only so many dollars in the pie to slice. And, so what we do is look at these factors, and we’re going to take another look, now that we are going to strike down district. We have 55 counties and each county’s a district. We're looking now, we’re going to strike down county barriers, and the folks who will look at regional schools, inter-district schools, that will be weighted in their favor to fund those schools to eliminate bus rides.

I want to respond. It was mentioned that West Virginia is considering getting rid of the boundaries, the county being a school district, and the response of, I would say, 85 percent of the school folks in the state are, “That is not going to happen.” So, it is a big issue in that state, and I think for the big reason that as we accept state dollars for school facilities, we’re also told a number of things that would happen and wouldn’t happen. Last spring, I finished developing an education plan for a middle school, a K-8 school
we’re building, and involved 26 members of the community in
developing the education plan for the programs that would be there.

We had a wonderful school plan design. And then the funding
came and we had to cut and slash everything in order to meet the
funding. And it cost us $91.25 to build a school in my county (per
spare foot), so it’s a big difference there. And we were told, “This
is how much money you have, you must build a school for that.”

So my community is not as happy now with what we’re getting
with what we thought we were going to get.

Missouri  I think she [Dr. Hughes] began with more than just state responsibility.
She talked about equal opportunity, too. And here in Missouri, I would
like to see them take money from Branson and Kansas City and St. Louis
and redistribute it across the state to make sure every child is in a school
building that is somewhat minimum, equal quality. We have beautiful new
buildings in the Kansas City school district paid for by the people of the
state of Missouri while I can go 50 miles north of here [Kansas City] and
show you some that are cracking and the walls are falling down. It is a real
problem for us. But the equality I think overrides everything else, whether
it is a state responsibility or state money. It comes from the local people.

That’s swell. We’ll fight the battle of control if you will give us the money
to do what we need to do at the local level.

Minnesota  In Minnesota a few years ago we had what was called the secondary
facilities grant, which meant that the state would pay for a third to a half of the cost for a new high school if these districts would consolidate and put three or four high schools into one. Only one facility was built under that, despite the fact in Minnesota we have over 300 school districts and many of those are in very isolated areas, rural areas. My district was part of a group of five districts that looked at doing this, and the issue of local control again killed the idea, mostly because, first of all, there usually is not a geographically center town where this could be located. That's important. How long is the bus ride going to be is the next consideration for parents. But, the loss of local identity was even more important. To give that up, to put a school out in the middle of nowhere in a corn field, and I know in eastern Iowa they have done that, still did not appeal to those people because they like that sense of town and local identity, and local control of the school. So, even with that state carrot out there, they were not willing to bite. It [local identity] was just too important.

* One thing that disturbs me a lot is that we put no value on the student’s time. I once figured the number of days that the students in North Dakota spent on school buses and it is alarming. And that never gets into the efficiency-kinds of studies. The other thing that concerns me a lot is when state building policy begins to drive programmatic decisions.

Texas In 1995, the legislature set aside $170 million dollars for the state
of Texas for facilities. We ate it up. In 1997, the legislature set aside $200 million dollars. This is leverage monies. They said, “If you guys are willing to pass a bond issue, your community is willing to pay part of the expense, we will set aside $200 million dollars every year for 20 years to help you pay your bond debt.” Now, we’re doing business and we had over 200 bond issues passed this last fall just from September to December 15, leveraging $1.2 billion dollars worth of debt. Construction is going to happen in the state of Texas in the next two or three years, and the state of Texas is putting in $200 million, and basically the school districts are putting in maybe $100 million for locals. Are the districts having to give up some local control? Yes. For example, the law in 1997 is House Bill 46. It’s called the instructional school facilities allotment. Instructional. No gymnasiums, if you do build a gymnasium for PE purposes you can’t have seating of more than 150. No stadiums, no administration buildings, no bus facilities, no maintenance facilities. What the state is saying to school boards, “We’re deciding for you, at least until the level of whatever you’re going to build is for instructional purposes.

California In California, we have a lease purchase program so that you can get some state support if you are going to get into a new building program. There is also a modernization program, which is a matching program that we have.
And the state also has a deferred maintenance program. They figured out it's cheaper to try to maintain and upgrade older buildings than it is to construct new ones. The state is required under the deferred maintenance program to pay half of our deferred maintenance cost, and we match that as a local district. The problem with it is, the state doesn't pay. Over the past 10 years, they have paid less than 20 percent of their half of the match that is obligated to school districts. Look what that does to your general fund. The concern I have about states getting into either the construction or the bonds is who's to say that they are going to pay, and then what do you do, as a district, when you're finished? Be really careful if you pursue the fact of "it's a state obligation." Will they uphold their end of the deal? Track history, at least in California, has been no. It is hard enough to manage the politics that we deal with locally. With term limits in California, do you know what legislators are interested in? Getting re-elected. And if you don't have the popular issue, if you're talking about spending money, and if you're not in an area that has the population as far as votes, you're not going to get a lot of support. So, be real careful in pursuing state funding [for school facilities].

In the middle 1980s, 13 small counties filed a lawsuit, it was settled and we won. Out of the suit came what is presently known as the Basic Education Program in Tennessee, which is a formula depending upon your need. It has helped some of the rural counties quite a bit. Now we're threatening to
go back. When the statement is made, "we don't have clout," yes we do, if
you can get the right people organizing it and know what you are doing,
they will listen to you. But, it is a battle that you have to fight.

Ohio

I would like to give you advise on that. We had that happen in
Ohio, that's the lawsuit that won, and it was a coalition of rural and
small and poor inner-city districts. They did a wonderful job
getting it through and having the right lawyers to do it and they
argued the right arguments and everything. But, unfortunately they
didn't have a plan once they won. They weren't ready to win. So,

Colorado

Twenty years ago, the educators, school boards, small schools, rural
schools started going after the Colorado State Legislature on the basis of
equality. And to the point in 1983 they created enough pressure that the
legislature took responsibility for all public education in the state and
agreed to fund everything over and above the amount they set that would
be local participation. After they hadn't paid that for three years, in 1986,
everybody started putting the pressure on again and the Legislature
immediately relented when they were threatened with a lawsuit, and said,
"Oh, hey, we need to revise the law." They revised the law. 1986 and they
haven't paid that one. We're involved with another lawsuit at the present
time. Five rural school districts have gone together and going back
through the whole process. I think the problem is, you're dealing with
professional politicians. Now what can we do? The teachers are a strong political force in every state. If the teachers will get behind a movement and put the political pressure on to the point that a few legislators find they have been defeated because they have voted against public education by not funding it, you’re going to see a whole different attitude in the legislature. The legislature will go where the political push is. But the political push has never really been organized. I don’t think the teachers have been asked as a union to get behind the push. It hasn’t been in Colorado. So, we’re all fighting the same battle it seems no matter what the state is, there’s some variation, with one exception, the state of Wyoming. The state of Wyoming does not have any tax funds on their facilities. Yet, they are 100 percent funded by a state law that generates a tax levy against every piece of natural resource that comes out of the ground: coal, gas, oil, uranium. Every small town in Wyoming has a beautiful new school, built in the last 10 to 15 years. Too bad we all didn’t get behind the natural resource thing when the opportunity was there.

In Kansas, we can’t interact together in school finance as groups. The United School Administrators in Kansas has tried for the last two years to put together a coalition to decide what is fair funding, yet we have splinter groups called Schools for Fair Funding, we have another one called Fair Funding for Schools and we have another one for Funding School Fairly and another one. Fair Funding Options. The tiny school and the large
schools seem to have so little in common. Until we can find a way to all agree on what’s fair funding, we’re going to just have problems forever.

Discussion topic: Ability to pay

Tennessee

There is a condition that has developed in the middle area of Tennessee and possible other areas, that I think effects the ability of local districts to pay and provide the type of educational systems that they would like as well as some other services. In the Cookville area, we have become a centralized trade/business area. A number of the smaller counties around our area have lost their industries; unemployment rates are relatively high (30-40 percent unemployment in some of the areas). The business, the little industries have moved away and have left people jobless and consequently this had a domino effect, other type services and businesses got pulled back. Consequently, the major restaurants and Wal-Marts have become more centralized in trade areas [such as Cookville]. The smaller, surrounding districts not only do not have the jobs, they are not collecting the sales tax, the primary means of funding the schools and other services in our state. They go to the trade areas to buy their groceries and shop. They couldn’t build a school building. In Cookville, we are in the second year occupancy of a $40 million dollar high school.

Missouri

I wonder if other states have the problem that we do with tax abatement. We talk about local control but the general assembly has given taxing
entities the right to set aside taxes levied by other groups. Why are we concerned in rural education? We have industries that are moving into the state and the county commissions or the small cities are abating the taxes on these things. They bring the people, they bring the kids, but they don't bring the money to build the buildings. And it is a real problem.

**Discussion topic: What can we do?**

We have listened and heard everybody say, "we can't do this and we can't do that," but a question I have is, what can we do? Are we going to be back here a year from now, five years from now, talk about the same thing, the same topic, in the same position? Instead of being $112 billion or $200 billion, it will be $400 or $500 billion. Will everybody say, "that's too big, we can't do it," and then we'll be back five years after that and it'll be even greater.
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