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ABSTRACT

This monograph examines four plans for state funding of educational facilities: total control; 50-50 flat grants; full state funding; and equalization. The trend in many states is to become increasingly more involved in helping local school districts with capital outlay for facility requirements. Recent litigation suggests that capital outlay is an emerging issue that will be addressed in the courts if it is not effectively addressed by state policy. Twenty-eight states currently provide some form of true assistance. The result is a greater degree of equity, enhanced educational opportunity, and reduced vulnerability to legal challenges. Policymakers need to understand their options, and they need methods to assess them in the context of political economy, legislative climate, demography, and patterns of school organization. The four plans examined in this document are evaluated for their effects on adequacy and equity in the context of two models--the average practice model and the estimated needs model, each applied to data from Kansas schools. The goal within the first model is to enable every district to fund facilities at an average level. The goal in the second model is full funding of needs estimated by districts. The discussion draws a number of implications about the adequacy and equity of school financing, urban-rural differences in financing, and systematic improvements. Recommendations to state policymakers address increased local control; funds for debt service and new projects; and funds to meet special needs, growth, and the exigencies of sparsity. (TES)

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IN CAPITAL OUTLAY FINANCING:
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EXECUTIVE SUMMARY

Although the immediacy and certainty of state involvement in capital outlay finance is not predictable, the trend in many states is to become increasingly more involved in helping local school districts with their facility needs. In Alaska, Hawaii, Maryland, and Pennsylvania the involvement of state governments is already substantial. Recent litigation suggests, moreover, that capital outlay is an emerging issue that will be addressed in the courts if it is not effectively addressed by state policy.

Twenty-eight states provide some form of true assistance (apart from state loans), and the result in those states is a greater degree of equity, enhanced educational opportunity, and reduced vulnerability to legal challenges. Twenty-two states, however, now provide no meaningful aid to support capital outlay in their local districts. Given recent legal trends, the position of these states is tenuous.

Existing data, however, suggest that the adequacy and equity of funding for school facilities should be improved in virtually all states. Policymakers in all states need to understand their options, and they need methods to assess those options in the context of the characteristics of the political economy, legislative climate, demography, and patterns of school organization in their states. State policymakers would be prudent to take steps toward equalizing funding for this critical area of education. Facilities appear destined to occupy an important part of the expanding definition of adequacy and equity.

The analysis in this monograph examines four alternative plans for funding facilities--total local control, 50/50 flat grants, full state funding, and equalization. Discussion includes definition of the notions

of adequacy and equity and shows how adequacy is a precondition of equity. The four alternative plans are evaluated for their effects on adequacy and equity in the context of two models--the average practice model and the estimated needs model. The goal in the average practice model is to enable every district to fund facilities at least at the average level; the goal in the estimated needs model is full funding of needs, as estimated by local districts.

The two models are applied in this monograph to a Kansas data set, and the application documents serious problems in Kansas. Analyses for other rural states may well confirm the existence of even more serious problems because the economic climate of other rural states, particularly in the Southeast, is worse than that of Kansas. The discussion draws implications for the various states in answer to the following questions:

- Why is there concern about the financing of facilities?
- How do adequacy and equity apply?
- What significant legal issues might affect facility finance in the future?
- How are states other than Kansas addressing problems?
- Are there substantive differences between rural and urban areas?
- What are the implications of the Kansas findings for other states?
- How does current practice compare to needs?
- What is the priority of adequacy and equity among the alternative plans?
- What are the estimated costs to the state of each alternative?
- How might current practice be improved?

Recommendations advise state policymakers to take the issues of adequacy and equity in relation to facilities finance quite seriously. Three specific recommendations concern: (1) local control, (2) funds for debt service and new projects, and (3) funds to meet special needs, growth, and the exigencies of sparsity. In general, local control over spending must be a feature of any workable plan. In fact, policies that provide new state aid for facilities can be so constructed as to develop meaningful state and local partnerships that restore a measure of local initiative now lacking in many rural school districts.

The issue of facilities funding has moral and educational dimensions that are underscored by the legal jeopardy in which many state plans now seem to stand. Policymakers need to acknowledge these dimensions, which temper the seemingly enormous task before them. Only then can policymakers seriously address the problems of adequacy and equity analyzed in the discussion that follows.

CAPITAL OUTLAY AND THE PUBLIC SCHOOL: ISSUES OF ADEQUACY AND EQUITY

Educational costs have risen dramatically over the last forty years. Estimates for future resource needs project a relentless upward spiral far into the twenty-first century, and concern about funding schools leads an array of issues threatening the long-term health of education. Solutions may be elusive and distant unless policymakers and school leaders act quickly to reverse the widespread pessimism and frustration that have accompanied seemingly insatiable demands for increased resources. The complexity of fiscal issues facing schools demands aggressive and effective solutions if education and national economic productivity are to continue to flourish.

Financing Rural and Urban Schools

Increased awareness of fiscal dilemmas among the nation's schools has heightened recognition of problems experienced by rural and urban school districts. Rural and urban problems are growing, and the emerging problems have encouraged educators and policymakers to engage in more detailed analyses of fiscal adequacy and equity within individual states. Adequacy and equity have become expansive concepts, and the increasing concern over differing fiscal needs among rural and urban schools has added uncertainty to an already tenuous balance. The issues are so complex that some researchers have suggested that alternative approaches to examining adequacy and equity are needed because these concerns may not be fully addressed by state-level and traditional macro-perspectives (Camp & Thompson, 1988).

The alternative appears to be increased examination of issues at smaller incremental levels. One such opportunity is presented by the growing distinction between rural and urban schools on dimensions of fiscal adequacy and equity.

Genuinely perplexing problems exist in financing rural and urban schools. Urban school needs are well documented,¹ and the plight of distressed cities is worsening. Urban centers frequently suffer from enormous tax base erosion, accompanied by soaring costs for education as disadvantaged populations increase. The ability of the nation's major cities to maintain educational services has been weakened in many instances, and the effect of fiscal exigency has been felt by cities of all sizes as school districts have increasingly been placed in competition for tax revenues with other governmental units. The result has been a demand that urban schools should become a major priority, and that demand has been accompanied by an increase in litigation addressing the urban plight, on the constitutional grounds of adequacy and equity.

Issues confronting rural school finance are equally complex. Rural school systems are increasingly showing signs of distress. A subset of rural districts are among the poorest school districts in the nation. Rural school districts cover vast areas of the nation, encompassing large amounts of uninhabited land, typically supported by agriculture or other

¹. For example, see a scathing report by the Community Service Society of New York, Promoting Poverty: The Shift of Resources Away from Low-Income New York City School Districts. Other widespread evidence of urban difficulties exist, such as San Francisco's attempt to pass a \$90 million bond issue, which would serve merely to restore broken glass, provide paint for walls, and other general upkeep items in the district. Similarly, the problems in the Kansas City school district over the costs of desegregation, diminishing tax base, and urban plight demonstrate problems faced by large city districts.

depressed industries (Bender et al., 1985; Deavers & Brown, 1985; Stephens, 1988). Rural systems are increasingly plagued by narrow and eroding tax bases, burdensome educational reform costs, and changing demographics which have resulted in decreased political influence and higher costs distributed among fewer constituents (Stephens, 1988). In a nation that has consolidated over 125,000 school systems to fewer than 16,000 in less than ninety years (Guthrie, 1979; Mid-Continent Regional Educational Laboratory, 1987), the problem of financing rural schools from a diminishing and economically depressed resource and population base seemingly denies immediate and effective solutions.

While growing needs of larger school systems have called attention to urban distress, the problems experienced by rural schools have also led to increased recognition of rural fiscal exigencies. Like urban schools, there has been an increase in litigation focusing on unequal opportunity among rural school systems.

States are facing new legal challenges resulting from how declining resources are distributed. School finance litigation has increased significantly in the last two years (Camp & Thompson, 1988), and the propensity toward litigation has been accelerated by fiscal distress. Rural and urban complaints are increasingly visible, charging that adequacy and equity are violated by state formulas that fail to address unique needs effectively. Increased advocacy and a frequent inclination to seek solutions through the courts suggest that lawmakers and school leaders are vital stakeholders in the eventual solution to current fiscal problems in education. As states face an uncertain future with few hopes for a major fiscal windfall, those problems will probably be addressed in the arenas of law and policy.

Facilities: An Urban and Rural Issue

The impact of limited resources pervades all aspects of schooling. One part of increased awareness of rural and urban fiscal problems has focused on the ability of school districts to provide educational facilities. Facilities represent a particularly difficult problem for districts because of their extraordinarily high cost in relation to other educational expenditures and because state assistance is often absent or limited.

There is widespread evidence of extensive facility needs in school districts. Other emerging evidence suggests that concepts of adequacy and equity may be argued to apply to facilities. There is a growing concern that equality of educational opportunity is affected by all parts of the educational enterprise, and that the states may have a responsibility to assist local communities in financing facilities. The extensively documented needs, increasing court interest, and an expanding body of research that examines equity in facility finance suggest that capital outlay should be of vital concern to the states (e.g., Walker, 1989).

Concern about adequacy and equity in financing facilities in the fifty states and the growing importance of rural and urban issues have prompted development of this monograph, which examines facility finance in the context of adequacy and equity. There is a genuine need for research that examines facility funding within the context of actual practice, estimated need, and potential state legal responsibility for viewing facilities as an issue of equal opportunity. Most research has explored these issues apart from their dynamic interdependency.

The research presented here, however, summatively develops an integrated view of facility issues as it establishes an historical overview of facility finance; traces the development of capital outlay as an issue of equitable concern, examines adequacy and equity in actual facility funding practices in one representative rural state, and explores the implications of facility finance in the nation's school systems. By linking the broader issues of adequacy and equity to facilities within the growing concept of rural and urban education, significant steps can be taken to assess the size of the problem and legal potential of the issue. This analysis will allow policymakers to gain a useful perspective of a difficult and costly legal question.

Examining adequacy and equity in financing capital outlay raises serious questions, which must be answered. Why is there concern about financing facilities? How do adequacy and equity apply? What are the significant legal issues that may affect facility finance in the future? How are the various states addressing problems associated with funding facilities? Are there substantive differences between rural and urban school districts?

In the analysis that follows, these questions lead to a more detailed examination of a representative state. What are the dimensions of the problem in a selected state? How adequate is current funding in that state? How does current practice compare to facility finance needs? If common models for funding facilities were implemented, which models would improve equity? What would be the estimated costs to the state of each alternative funding model? And finally, how might this analysis of adequacy and equity be applied to other states?

The questions reflect difficult issues, and the answers are not clearly evident. Like most issues in education, the question of how to provide school buildings for children is complex, and the high cost of physical structures has been a significant barrier to achieving adequate and equitable funding. But given the need to exhibit concern for all aspects of the educational enterprise--as well as the potential legal questions surrounding facility equity--answers to these questions appear to be vital to guiding effective and equitable policy development in the various states.

Trends in State Assistance

Sophisticated formulas have been developed for state-level assistance in funding operating budgets, special education programs, transportation, and other school services. In sharp contrast, however, funding methods for capital outlay, specifically facilities, have generally been neglected in many states. Construction funding has especially been a low priority. A major cause has been reluctance to depart from a long tradition dating from an era when a smaller percentage of children attended school and building costs and programs were simpler. In an earlier era, school buildings were locally protected possessions, often raised by hand with volunteer labor and donated materials and land. Obsolescence of facilities was nearly nonexistent, and, in a largely rural nation, the demands on local tax bases for funding other governmental services were minimal.

The turn of this century, however, marked the end of internal sufficiency and rural independence from the larger society. Bonding for facility construction became an imperative as school districts experienced rapid growth. Movement of the nation from an agricultural to an industrial

economic base with rapidly expanding cities and school populations forced the educational enterprise to meet significant needs for new facilities. Issues of tax base adequacy emerged, and assessed valuation of property and location of power plants, oil and gas facilities, railroads and other industries became critical to funding local educational programs (Salmon & Thomas, 1981).

But despite growing needs of school districts for larger revenues and expanded tax bases, many states continued to follow tradition as they financed school facilities. School districts were forced to levy taxes for school building needs against local property wealth, which was often too low to generate adequate revenue. Unlike emerging foundation and equalization formulas for general school aid, facility financing remained largely dependent on local property wealth. That dependency was frequently exacerbated by statutory debt limitations, mill rate caps, and the need to seek approval in local referenda. Whereas other areas of school funding changed dramatically, financing facility repair, maintenance, renovation, and construction remained a low priority. The cause of this neglect lay primarily in lingering tradition, increased resource demands for other educational services, and emerging competition for tax revenues to fund other community services.

Although spiraling instructional expenses and resistance to state involvement resulted in overall low priority for improving facility finance structures, a number of states experimented with financial support as a

consequence of special initiatives² and significant national events. School building needs increased after World War I, but they were not met because of severe economic depression. These needs dramatically increased after World War II, and states were encouraged, and sometimes forced, to examine local insufficiency to provide for educational facilities.

Devastating economic events in the first half of the century had nearly halted facility construction, and the result was a severe backlog of building needs that had to be addressed following World War II. Increasing costs of education, demands for new curricular programs, and postwar mobility had absorbed nearly all available revenue, leading to at least minimal state involvement because of the need for enhanced revenue sources. State governments were additionally encouraged to become involved in facility finance as an inducement to overcome widespread resistance to the consolidation of school districts in the 1960s. As a consequence of national stress and rapidly increasing needs, several states began to assist local districts with capital outlay expenses (Thompson, Camp, Horn, & Stewart, 1988).

State involvement has differed dramatically in the fifty states, and the early attempts to establish state assistance have resulted in at least nominal recognition of facility costs. Table 1.1 indicates that at the present time a small majority of states have effectively recognized the problems school districts experience in funding facilities. Although the extent of state assistance varies considerably, 28 states currently provide

². For example, Alabama instituted funding for rural school buildings in 1901. Two years later, Delaware aided the building of facilities for Blacks, and in 1909, South Carolina instituted a similar program. Also in 1909, North Carolina and Virginia began offering state loans for assisting local districts with the cost of school facilities.

true grant-in-aid programs, but 22 states do not effectively assist local districts. Those states that aid facilities do so within a wide variety of participation schemes, resulting in substantial variations in levels of actual support.

Although most states have recognized facility funding problems by providing state loans or allowing access to creative financing techniques, only the 28 true-aid states have created state aid mechanisms which actually reduce reliance on local property wealth for facilities. When states providing loans or allowing bond authorities and bond banks are included, the number of states that assist facility funding increases to 45 of the 50 states (Thompson et al., 1988).

Features of assistance plans used by states are as varied and unique as the fifty states. But despite the differences associated with adaptations, the majority of states have generally utilized six basic plans to assist local districts with facility needs.

Full state funding. Full state funding implies major state assumption of the local building program. Under this concept, the state accepts major responsibility for education. In practice, states are more likely to employ a modified full state funding concept. Advantages to full state funding include the support of the wealth of the entire state by providing the broadest tax base and access to resources within a state. Full state funding adheres to principles of wealth neutrality which govern modern school finance. Disadvantages associated with full state funding have included higher than anticipated costs, concerns regarding local control of education, and fears about declining local initiative (Thompson, 1986).

TABLE 1.1
METHODS OF STATE PARTICIPATION
1988

True Grant-in-Aid	No Aid
Alaska	Alabama
Arizona	Arkansas
California	Colorado
Connecticut	Idaho
Delaware	Indiana
Florida	Iowa
Georgia	Kansas
Hawaii	Louisiana
Illinois	Michigan
Kentucky	Minnesota
Maine	Missouri
Maryland	Nebraska
Massachusetts	Nevada
Mississippi	Ohio
	Oklahoma
	Oregon
	South Dakota
	Tennessee
	Texas
	Virginia
	West Virginia
	Wisconsin

Source: Thompson et al. (1988).

Equalization grants. Equalization plans resemble equalization formulas found in general fund financing. These grants to local districts are often established on some method by which aid increases as ability to pay declines. If power equalization principles are observed, the unique feature is that a district may choose to increase its contribution and qualify for corresponding increases in state contributions. Equalization grants may be part of the general funding formula or operate independently, but the critical element is the cost-share based on ability to pay. The greatest advantage of equalization aid for facilities are found in its consistency with wealth neutrality, under the provisions of which districts are aided in inverse proportion to their ability to pay. Another important advantage is that equalization plans also tend to preserve a measure of local control.

If a genuine attempt to create a power-equalization formula is made, however, a major weakness is the fear that the state may not be able to fund adequately the identified needs. In fact, power-equalized schemes, as implemented, have often resulted in a less than optimum aid ratio. Moreover, districts in greatest need may not be able to afford the local contributions that are required if they are to receive the higher aid monies associated with open-end local choice.

Percentage-matching grants. Percentage matching plans are a more secure variant of power equalization grants. They are a method by which open-end or power equalized funding can be capped. Percentage-matching grants may provide funds to districts on the same cost-share basis, but with a fixed level of state participation. Depending on the structure of

the scheme, some flexibility may allow districts to qualify for incentive aid in return for increased local effort.

Percentage-matching plans are subject to most of the same criticisms as power equalization. They have the added disadvantage that, whereas power equalization formulas may cap themselves because of local decisions not to increase taxes to qualify for additional aid, overtly capping expenditure levels in percentage-matching plans acts to reduce local choice even further.

Flat grants. Flat grant provisions have been used by states to offer districts a set amount of money that is legislatively determined on some distribution basis. The result is that, although aid is not necessarily related to need, the district's cost is nonetheless reduced by the amount contributed by the state, and the district is free to relieve tax effort or to supplement its facility choices. The advantage is that districts receive at least some funds where none previously existed, and local wealth dependency is reduced. While primary dependence on flat grants in general aid schemes has declined, use of the flat grant for aiding facility needs has continued.

The major disadvantage is the missing relationship between ability to pay and aid received. Flat grants have also been criticized because districts not needing assistance are often eligible to receive grants. Under those conditions, relative equity achievement is unaided because wealth disparities are at least preserved and frequently increased.

State loans. Loan programs represent a frequent method by which states have provided funds to school districts, often with favorable interest rates and strong security ratings for investors. A major feature

of loans is repayment by the local district to the state, generally with interest costs. Advantages are similar to grants, since money becomes available to districts through state channels, and favorable treatment on loan terms and interest rates may reduce repayment costs. In some instances, loans may be forgiven if the district is unable to repay.

The primary disadvantage, however, lies in the detrimental relationship of wealth and ability to pay. Districts in the greatest need may be least able to afford the added expense of borrowed money.

State or local authorities. Building authorities are among the mechanisms existing in some states to allow for use of private capital to construct and lease or lease-purchase school buildings. Building authorities provide local construction funds without major concern for debt limitations. Percent of assessed values and availability of limited state revenues are not considerations, because they are often not subject to the normal requirements found in traditional bonding. Because they are intended to be profitable for investors, bonds floated by state or local authorities frequently attract large sums of readily available capital.

The major advantages of building authorities lie in the ability to tap resources unrestricted by a low tax base, and the process of building schools may be shortened significantly. Opponents, however, cite avoidance of voter referenda and the potentially higher net cost associated with for-profit enterprises as disadvantages. Opponents see grave consequences in these features of state and local bonding authorities, which they

believe to be inimical to democratic principles and local control.³

Conclusions

The preceding discussion in this section indicates that despite reluctance to assume a significant role in financing facilities, a majority of states currently provides some amount of true aid to funding facilities. The additional 17 states providing statutory recognition or loans bring the total number of states involved in facility finance to nearly 90 percent, with only two states failing to recognize facility finance.⁴

Despite this nearly unanimous recognition, however, limitations on available revenue frequently prevent effective assistance. The net result is that 22 states do not offer aid for facilities that significantly reduces local wealth dependency; moreover, the actual equalizing effect and genuinely effective impact in the 28 true grant-in-aid states is not widely known.

The data indicate that states have recognized the importance of funding facilities, but the lack of genuinely effective assistance in at least 22 states raises widespread questions of adequacy and equity in an

³. For example, a South Carolina court has allowed local school districts to build schools through a lease-purchase option. Prior to the ruling, South Carolina had been one of the few states that did not permit school districts to finance major renovation projects through lease-purchase. Those who opposed the ruling argued that it allowed districts to circumvent the state constitution, which requires districts to seek permission from voters to acquire debt beyond statutory limits. In the wake of the ruling, the South Carolina School Boards Association announced plans to sponsor a \$30-40 million lease-purchase plan to construct schools in several districts.

⁴. States failing to provide statutory authorization or not mentioning facility methods are Arkansas and Wisconsin.

era when legal challenges to general finance mechanisms are increasing. The relevant questions become particularly relevant because challenges have frequently cited concerns about facilities, and, within the context of rural and urban settings, attention to the importance of adequacy and equity in rural school facilities is currently increasing. Rural and urban school districts are facing major difficulties in funding facility needs, and states that do not provide effective assistance to capital outlay may face claims of unequal educational opportunity relating to facilities.

Because current methods for financing facilities appear to have been greatly influenced by lingering tradition, and where the level of support is critical to effectively addressing current needs, evaluation of the question of legal responsibility for state participation in school building costs, assessment of current practice, and comparison to actual needs should be regarded as a critical concern among educational leaders and policymakers.

LEGAL RESPONSIBILITY FOR STATE INVOLVEMENT: EMERGING TRENDS

The Concept of Finance Equity

Although achievement of equity has been a governing premise for court decisions in school finance reform over the last twenty years, equity is a concept that continues to elude absolute definition. As difficult as it has been to define adequacy, equity has been even more difficult to capture. As Rossmiller (1987) points out, equity has been variously argued with striking differences in outcomes, and Berne and Stiefel (1984) have similarly argued that equity is subject to a selected frame of reference. The result appears to be that the definition of equity is incomplete, and the cogent observation by Alexander (1982, p. 194) that "what is equitable depends to a great extent on the orientation of both the dispensers and receivers of equity" continues to confound immediate accord on the nature and extent of equity.

While unqualified definition remains arguable, certain conditions appear to be elemental to achievement of equity. Berne and Stiefel (1984) suggest that equity may be conceptualized on horizontal, vertical, and equal opportunity dimensions, and that these principles may be considered relative to pupils and taxpayers as the objects of equity. These broad categories are useful in framing an evaluation that seeks to capture the essence of court struggles as they may apply to facilities.

Because adequacy is a precursor of a genuine substantive effect of equity, the starting point in defining equity ultimately comes to be based in measuring horizontal wealth neutrality for both pupils and taxpayers, while checking for revenue sufficiency. In narrowing the focus of equity to facilities, it would then seem useful to define equity in terms of three

dimensions: Pupil access, wealth relatedness, and taxpayer effort or burden within the concept of adequate resources.

The first dimension thus seeks equity achievement through resource accessibility, arguing that students within a state should have equal access to resources appropriate to their needs. A primary effort to equalize expenditure levels for pupil equity, resource accessibility would seek to adjust unacceptable restrictions to educational opportunity that are related to variations in resource inputs by infusion of state aid into relatively poorer school districts.

The second dimension of wealth relatedness focuses on variations in resource accessibility that flow from local property wealth. Sometimes referred to as ex post fiscal neutrality, this dimension of equity would seek to ensure that variations in per pupil revenue are not unduly limited by residence; rather, variations would instead be related to local preference and determined under conditions of free choice. Thus, ex post fiscal neutrality is effectively a second pupil equity standard exhibiting an equal educational opportunity concern across a state. The objective of ex post fiscal neutrality has been a major impetus behind the last twenty years of fiscal equity litigation.

The third dimension of tax effort exhibits concern for taxpayers by seeking equal revenue yield under equal taxing conditions. Sometimes referred to as ex ante fiscal neutrality, this condition of equity would suggest that taxpayers in a school district should receive equal protection of the laws consistent with pupil equity standards, whereby educational opportunity across a state should not be unduly limited by residence or local wealth. When applied to taxpayers, equity would seek to provide all

pupils with resources roughly equivalent to their needs and under conditions that generate equal revenues by roughly equivalent taxing effort. This principle of taxpayer equity has been central to foundation and equalization formulas for general school aid by mechanically adjusting for unequal distribution of wealth-related educational opportunities.

These three principles are concerned with students and taxpayers, and they assume that the quality and accessibility of educational opportunity are significantly related to fiscal resources. They frame a working definition of equity reflected in school finance reform. The definition states that students should have access to resources to meet their individual needs regardless of residence, and that taxpayers have a right to expect the state to support education to such an extent that variations in local wealth will not have an adverse effect on local ability to provide an adequate educational system. While other confounding factors ultimately affect pupil access to educational services, these elements of equity provide a useful framework for considering the impact of equity and for evaluating the extension of the reform movement to facility finance. The working definition of equity captures the essence of court struggles because plaintiffs have contended that states have either ignored or failed to implement the spirit of reform.

Although these principles of equity seem unarguable, their implementation has, in fact, been difficult and incomplete. Part of the failure to achieve complete equity has come from resource inadequacy, and another part has come from a struggle over who has the ultimate responsibility to fund education. If defining equity has been difficult,

establishing willing responsibility for achieving equity has been more difficult still.

States have only recently accepted the burden, primarily as a result of important court cases in which battles over the fundamental value of education were fought. The outcome of those struggles determined that the federal government denied a guarantee of protection under the Fourteenth Amendment's equal protection clause (San Antonio Independent School District v Rodriguez, 1973). The Rodriguez decision in Texas caused reformers to turn to state courts under the logic that if federal protection was denied, then protection under individual state constitutions might prove to be a way to force states into substantially equalizing educational expenditures. In many instances, the strategy was effective, since the language of some state constitutions established education as a fundamental right or state equal protection laws and education articles were more strictly construed. With the Rodriguez decision, the widespread effect of the Serrano decision (Serrano v Priest, 1971) became even more pronounced.

Serrano had launched a major reform movement two years earlier, establishing the principle that equity requires education to be a function of the wealth of the state as a whole and that failure to correct extreme variations represented an abdication of the state's constitutional requirement to establish an adequate system of schools open to all residents. In Serrano, a primary responsibility of the state for funding education was clearly established. Equity principles in Serrano were closely aligned to the operational definition of equity based on resource accessibility and fiscal neutrality (both ex post and ex ante). Serrano

effectively secured state responsibility for education as states enacted reforms based on the perception that, if challenged, their finance systems would be judged inequitable. The onslaught of state court challenges to equity begun by Rodriguez and Serrano sparked a major reform movement which was to significantly alter educational funding in most states (Camp & Thompson, 1988).

The net effect of Rodriguez, Serrano, and other cases ruling affirmatively for equity was that states had to find means by which to adjust for wealth variations. Because redistributing property wealth was not physically possible, states were forced to devise equalization methods for tax revenue distribution to achieve resource accessibility, ex post fiscal neutrality, and ex ante fiscal neutrality.

Fiscal equity, hard fought and not completely won, came to be viewed as the cornerstone on which state funding mechanisms should be based. Regardless of the mechanism used by a state for aiding educational costs, the state's partnership with the local community in providing an adequate and equitable educational system was at least constructively established by law.

Extension of Equity Principles to Facilities

Although the effect of equity reform was widespread, there was a common belief that implications for state responsibility applied only to general fund expenditures. Yet, reliance on local wealth for funding facilities rends the integrity of reform because a continually expanding definition of equity has enveloped nearly all general fund expenditures, has engendered huge special education mandates, and has even extended to transportation on the premise that equal opportunity encompasses the able,

the disadvantaged, and the geographically isolated child. Those who promote such applications of the principle of equity assume that resources will be adequate, that their distribution will be widely accessible and appropriate to children's needs, and that their impact on learning will be significant.

Reliance on local property wealth to fund capital outlay and facilities, however, opens the question of vulnerability of many states' programs if challenged. In the words of Governor Calvin Rampton as he addressed the Utah Conference on School Finance in 1972:

If we think there are inequities in state systems for funding current expenditures of public schools, just wait till we examine the way we finance school buildings!

(Webb, 1972, p. 1)

Despite the recognition of jeopardy envisioned by Rampton and others, facility finance has not received the same attention as other equity concerns in the courts or legislatures. The reasons examined earlier (burgeoning direct instructional priorities, relative invisibility of the relationship between facilities and educational programs, lingering tradition that resists state encroachment on local choice, and widespread assumption that equalization principles did not apply to facilities) appear to have been major contributors to the incompleteness of the equity fabric. Yet, indicators suggest that facilities may have been a dormant element of equity and that the courts are taking greater interest in the problems faced by school districts in funding facilities.

Court Decisions Involving School Facilities

For fifteen years, courts have criticized the methods available to local districts for funding school building projects. Generally, an

addendum to larger equity decisions, direct reference to capital outlay has been made in many court cases. Accordingly, the extension of general equity principles to facility funding is a legitimate consideration.

Earlier court cases. Shofstall v Hollins (1973) in Arizona noted that funds for capital improvements were more closely tied to district wealth than funds for operating expenses and that the capacity of a school district to raise revenue by bond issue is a function of assessed valuation. The court noted in Robinson v Cahill (1972) that the state's obligation included capital expenditures, without which required educational opportunity could not be provided. In order to satisfy the court, provisions were made in Serrano II (1986) for deferred maintenance funds. The court noted in Board of Education of the City of Cincinnati v Walter (1979, p. 825) that a thorough and efficient system of schools is not met if "any schools are starved for funds, teachers, buildings, or equipment." The court also showed a concern for capital outlay funding in Diaz v Colorado State Board of Education (1977) stating that some districts were better able than others to provide adequate facilities, and in Lujan v Colorado State Board of Education (1982) the court concluded that the fiscal capacity of school districts to raise revenue for bond redemption and capital reserve was a function of property wealth.

Recent court cases. More recently, capital outlay financing was an issue in Christiensen v Graham (1988) in Florida and Helena Elementary School District v State of Montana (1988). Although the Florida court ruled in summary judgment that the state system for financing education did not violate equal opportunity, Florida has been among those states leading the nation in assisting facility finance. In sharp contrast, however, the

Montana court found that the state's system of funding public schools violated the state's constitution, and the court criticized facility dependence on local school district wealth. Similarly, capital outlay emerged in Edgewood Independent School District v Kirby (1987). In Edgewood, a district court judge declared the Texas system of school finance unconstitutional, and the ensuing court order required the legislature to find a mechanism which would guarantee adequate funding for educational expenditures, including facilities. The court enjoined state aid distributions under the present finance system, but stayed the order to allow the legislature appropriate time to remedy the conditions. Although an appeal court reversed Edgewood late in 1988, the argument over facilities contributed to the growth of concern about local wealth dependence for facility needs. The potential for ongoing struggle through continued appeals to the state's highest court highlights the pervasive nature of finance concerns and its applicability to facilities.

Pauley v Kelly. The best analysis of potential breadth of the concern for financing school buildings is seen in Pauley v Kelly (1979). Originally filed as a broad concern for inaccessibility to a quality education in West Virginia, Pauley became the first instance in which a court identified a concentrated concern for equal opportunity as defined in part by adequate school buildings. A lower court ruling for the defendants was reversed by the West Virginia State Supreme Court, which found education to be a constitutional right, that a constitutional right required high quality across the state, and that failure to meet the criteria could not be attributable to the state. The court in Pauley saw a primary flaw in the state's finance scheme because of the reliance on local

property wealth for providing quality education, extensively defined to include school facilities.

The implications in Pauley for funding capital outlay were significant. The court went to historic lengths to describe the scope of quality education and clearly indicated that facilities were integral to equal opportunity. The court-ordered master plan for improvement included broad facility mandates and specified in detail that each school would provide adequate space and quality for each area of the curriculum. The court ordered, for example, that every elementary school must have an art room for each 350-500 pupils, and that every secondary school of 500 students would need at least one art room. Even storage areas were detailed, and similar minute specifications were provided for each academic and activity function at the elementary, junior high, and high school levels.

Although political maneuvering and fiscal restraint have served to modify the scope of Pauley, the case remains as a standard against which the potential for capital outlay as an issue of equitable concern can be initially assessed. The exhaustive definition of a quality education found in Pauley--and the court's willingness to define for the state what was expected by equity and equal opportunity--signalled judicial awareness that facilities may play a meaningful role in setting the stage for educational success.

Urban cases. The issue of rural and urban plight has also emerged in court challenges to state finance mechanisms, and problems in funding facilities have emerged as substantial concerns. The Kansas City, Missouri schools are facing major problems associated with a court ruling which seeks to impose stringent improvements on the city's schools, including an

order to issue \$150 million in capital improvement bonds to correct facility conditions which the court described as "...literally rotted." (Jenkins v the State of Missouri, 1987). Growing sensitivity toward urban needs, including facilities, is also dramatically illustrated by Abbott v Burke (1988) in New Jersey. In a 607 page decision handed down in August 1988 (more than seven years after the original complaint was filed and more than sixteen years after the New Jersey state finance formula was ruled unconstitutional in the original case of Robinson v Cahill), an administrative law judge ruled that the state's system of school finance could be found by a court to violate the New Jersey state constitution. The court observed appalling educational needs in poor districts, vast program and expenditure disparities between poor urban and property-rich suburban school districts, and the role of socioeconomic status and geographic location in determining equal educational opportunity. The ruling was a sharp blow to funding schemes based primarily on local property taxes. Detailed in the decision were multiple instances of disadvantage to the state's large urban centers. In recommending changes for the state, the administrative law judge noted that changes would be required, including enhancing the powers of the state to move students between districts, reconfiguring district boundaries to eliminate overly large and small districts, and combining a high foundation aid plan with comparable categorical funding for transportation and aid to facilities.

Tennessee Small Counties System. Court challenges to methods for funding rural and small schools also exist and are exemplified in a current Tennessee case which cites facilities as an issue. Tennessee Small Counties System v McWherter (1988) was filed by 66 small school districts alleging

that the state has denied equal protection to smaller and poorer school districts by failing to provide adequate funding under the state constitution. The focus in the Tennessee case makes an allegation that is the opposite of that embodied in urban challenges, charging that the state finance mechanism strongly favors urban and suburban areas of the state and denies rural and small communities equal access to funding. The plaintiffs charge that operation of the state finance mechanism provides an inadequate state foundation plan, inappropriately supplemented through local sales and property tax revenue.

The plaintiffs in Tennessee offer evidence to support the contention of inadequate revenue capacity in rural and small districts. Plaintiffs charge that, although equalization is present in the Tennessee Foundation Program, it is not sufficient to offset differences in sales tax revenue resulting in differences in available resources that vary by as much as 1500 percent. Plaintiffs charge that the constitutional requirement guaranteeing education as a fundamental right cannot be met in the context of Tennessee's schools ranking last in educational expenditures nationally, where state foundation aid underfunds an 'adequate' expenditure level by 43 percent⁵, and in which school districts lose accreditation if they fail to meet minimum standards imposed by the state. The evidence cites small school districts, which because of insufficient local wealth capacity as defined by property wealth and sales tax revenue, must use worn and outdated texts, cannot meet state minimum pupil-teacher ratios, provide

⁵. The Tennessee School Finance Equity Study conducted in 1979 cited in Tennessee, 1988, Complaint for Declaratory Judgment and Injunctive Relief, p. 11) reported that a base of \$939 per pupil was needed to meet the average cost of a fourth grade program. In 1987, the Tennessee Foundation Program provided \$535 per pupil, unadjusted for inflation since 1979.

less comprehensive course offerings, must offer split-grade classes, and cannot purchase laboratory and computer equipment. The complaint filed in county court notes that

in today's society and economy, deprivation of necessary and appropriate courses, facilities, extracurricular activities and materials constitutes a violation by defendants of the rights of the plaintiff students and parents to a minimally adequate education.
(Tennessee, 1988, p. 15)

The Tennessee case seeks injunctive relief, specifying violation of the state and federal constitutions, demanding reformulation of the state finance structure, and seeking to enjoin defendants from acting pursuant to existing law until the case is decided.

Conclusions. The court struggles have been lengthy, and the arguments have centered upon adequacy and equity in distribution schemes. The cases in New Jersey, Missouri, Tennessee, and West Virginia are representative of litigation and the various states' experience in funding schools, rural and urban issues, and their relationship to school facilities. As awareness of rural and urban fiscal exigency grows, other states are considering legal action.

In Arizona, rural schools are considering a challenge to the state's finance formula. Other states are experiencing fiscal problems, as in Ohio where 38 districts were forced to seek state bail-out funds totalling nearly \$30 million including aid for facilities (Jennings, 1988a). A Texas panel has recommended \$100 million in emergency capital outlay funds (Mathis, 1988); California voters have been asked to approve more than \$800 million in facility aid (Colvin, 1988); and a South Carolina judge has allowed school districts to engage in lease-purchase deals to help relieve more than \$1 billion in facility needs (Jennings, 1988b).

These problems seem to be endemic to a nation characterized by large metropolitan populations and vast rural areas, where problems of tax base erosion, overburden, and other inordinate costs have become significant. Ultimately, challenges to finance schemes are engendered by distress, which is itself a product of inadequate resources. When inadequacy is linked to a distribution scheme believed to be inequitable, litigation is a natural consequence.

The courts are deeply involved in educational funding. Three emerging issues appear to be preeminent: (1) awareness of rural and urban issues is growing; (2) an increasingly sharp advocacy for rural and urban issues is coalescing, and (3) states will continue to be challenged over methods of funding schools. The tensions reflected in these issues result from the impact of difficult economic and governmental judgments about the distribution of inevitably finite resources. The unavoidable consequence points to continued litigation. At the same time, there is a longstanding legacy of court commentary about the funding of facilities. These conclusions suggest that support for facility funding in all fifty states poses significant questions that deserve serious research and evaluation.

RESEARCH ON THE FUNDING OF SCHOOL FACILITY NEEDS

State assistance to capital outlay funding has been a research interest for many years, and the absence of substantial aid to facility projects in many states has not been due to a lack of research evidence. The early research literature focused on identifying problems associated with capital outlay funding, and as early as 1922, the research literature was suggesting practical ways for states to assist local districts. Proposals for state assistance varied widely, but they consistently focused on the concept of ability to pay. Proposals were frequently advanced, but none was universally popular. Few were accepted enthusiastically by legislative or educational leaders.

Early efforts focusing on applied methodology subsequently led to more recent attempts to identify problems and to provide more sophisticated responses to national concerns. The growing awareness of problems faced by local school districts in providing facilities prompted the federal government to implement Public Law 874, which provided impact funds for the states whose local tax bases were affected by federal installations.

The National Education Finance Project (NEFP) undertook a major survey of legal bases, procedures, and practices for funding facilities in the fifty states and suggested new models for facility finance. Although the NEFP was the last major effort on a national scale, interest in facility funding has continued, and a growing series of research articles, dissertations, and legislative studies have confirmed and extended concerns about adequacy and equity.

Adequacy, Equity, and Needs

The majority of equity research in capital outlay has been conducted since the mid-1960s. Although the emphasis has been more on current problems than on classic equity measurement, findings have consistently indicated a substantive problem. Plainly, heavy reliance on property wealth has had a deleterious effect on the adequacy and condition of facilities. The research has overwhelmingly indicated that increased state involvement provides a neutralizing effect on local wealth dependency as the principal determinant of facility adequacy, and that the operation of local wealth has had a detrimental effect on the quality of programs offered to students. The troublesome relationship between wealth and facilities is consistently identified in wide disparities of ability to service capital outlay and debt retirement. These conditions have been heightened by inflation, population changes, educational program growth and improvements, and the normal deterioration of facilities. The evidence points sharply to advantages held by wealthier districts, which can tax less for services, produce more revenue per pupil, and provide a better opportunity for an adequately funded education. While effort has been made to improve equity in most funding areas, the evidence continues to demonstrate that the absence of state assistance in funding facilities violates fundamental equity principles (Thompson et al., 1988).

Local Capital Improvement Needs

The literature weaves together the areas of equity and specific facility needs. Problems confronting rural and urban schools have been prominently noted. Repeatedly, the literature emphasizes a backlog of needs among districts of all sizes, and their relative ability to pay for

unmet needs is documented. The American Association of School Administrators, in cooperation with the Council of Great City Schools and the National School Boards Association, reported estimates for maintenance backlog in excess of \$25 billion in the nation's schools, and reports from the individual states confirm and detail the staggering estimated needs (Council of Great City Schools, 1983)⁶.

The literature indicates that modernization and replacement are growing needs, while other uncontrollable influences such as handicapped accessibility, Title IX, asbestos control, and expanding curricular needs, including technology, have outstripped local budgets (Thompson & Camp, 1988). The concept of deferred maintenance and construction has yielded a huge unmet need in the various states. A 1987 survey by the Oklahoma State Department of Education estimated that more than \$622 million in needs had gone unaddressed in that state, and if all districts were to extend themselves to the legal maximum for capital outlay purposes, needs would still exceed \$125 million (Oklahoma State Department of Education, 1987). In 1987 North Carolina similarly noted \$3.2 billion in unmet needs and enacted new legislation addressing part of the state's facility shortcomings by providing more than \$793 million in new state monies (North Carolina Department of Public Instruction, 1986). In 1988, California voters approved Proposition 79 authorizing \$800 million in bonds to address some of that state's needs for renovation and new construction (Colvin, 1988), and evidence submitted in Texas suggests that a total of \$5.4 billion will be needed to fund facility projects by 1996 (Haas & Sparkman,

⁶. Also see Mathis (1989), "Escalating' Bricks-and-Mortar' Cost: The Problem Nobody Wants," for a thorough description of current representative problems found in the fifty states.

1988). Similar results are reported throughout states that have undertaken studies, indicating that inattention to mechanisms for providing facilities in this century has resulted in accumulation of large needs that have been inadequately addressed.

Identified needs have been extensive, and some research has begun to examine levels of need and ability to pay in both rural and urban settings. Evidence on deferred maintenance, construction, and equity between districts is being linked with rural and urban issues in Kansas where a growing body of evidence indicates that districts are operating at varying levels of budget stress that have led to increasing facility problems. In 1985, a study of Kansas school districts found that fully 10 percent of all districts were unable to fund an average practice budget per pupil of \$54.75 for capital outlay purposes under uniform tax effort. Serious concerns were posed about resource accessibility, wealth neutrality, and taxpayer equity. Local ability to generate revenue differed by nearly 700 percent, leading to significant doubts about whether or not "average practice" genuinely indicated actual needs (Thompson, 1985).

Rural and urban issues in Kansas were also examined in separate studies in the same year. A survey of rural school districts that enrolled fewer than 1,000 students found the average age of buildings was sufficiently high to question continued service, that maintenance decisions were significantly related to debt levels, and that estimates for maintenance deferral approached \$60 million (Honeyman & Stewart, 1985). Similar evidence was found in the state's urban school districts, where researchers concluded that a positive relationship between local wealth and

condition of facilities had significantly contributed to needs for deferred maintenance exceeding \$321 million (Devin, 1985).

In 1988, Thompson and colleagues extended the investigation in a further survey of Kansas school districts (Thompson et al., 1988). These researchers found a strong relationship between condition of facilities and local tax bases, leading them to conclude that many rural and urban school systems within the state were exerting significant effort for facility projects--with inordinately differing results--and were losing the battle of unmet facility needs because of inadequate local wealth.

Because facility repair, maintenance, renovation, and construction remain outside many states' formulas for funding schools, serious questions arise. These questions inevitably relate to local inability to fund capital outlay needs fully. This question again raises concerns about whether or not states have an obligation to become involved in meeting educational facility needs.

In Kansas, such indicators suggest that dependence on local wealth to finance facilities violates accepted principles of equity. Such dependence establishes a relationship between local wealth and the condition and quality of facilities, and it also suggests that state funding policy may have an indirect negative effect on educational programs. From such evidence arises a need for additional research into the extent to which rural and urban areas of the state are substantively affected by the operation of state funding mechanisms for capital outlay.

The estimates of unmet needs in various states and the research in Kansas on equity indicate that the relationship between facilities and educational programs is important. The importance of this relationship

lies in the basic assumption that adequacy must underlie distributional equity if the effect is to be substantial. The courts have demonstrated their interest in educational finance mechanisms, particularly in regard to how state responsibilities are structured and how the state meets those responsibilities.

Given indications of court consternation, the growing awareness of rural and urban distinctions, and the concerted attention evident in research, queries about capital outlay financing are not likely to diminish in the near future. In the future, the courts may scrutinize the issues of adequacy and equity more closely. Their continued interest is likely to play a major role in the development of the context within which policymakers will be asked to make decisions.

ANALYSIS OF EQUITY ACHIEVEMENT UNDER COMMON FUNDING OPTIONS

Documented needs throughout the nation have led to doubts about the adequacy and equity of current mechanisms for funding the maintenance, replacement, and construction of facilities. Facility needs appear to be increasing rapidly among rural and urban districts.

Decisions about adequacy and equity obviously require thorough analysis. At the very least, serious questions will have to be addressed as new court challenges emerge, a probability that seems imminent. The increase in litigation alleging facility deprivation should encourage research that assesses relevant legal and policy issues. Such research must help answer troublesome questions and link current funding levels and mechanisms to established needs. Questions about sound educational policy and legal jeopardy are initially presumed to be greater in states that depend entirely on local revenues to fund facility projects. Kansas is one such state.

Kansas: One example

Kansas represents an ideal setting in which to explore these issues because it is among the 22 states that provide no meaningful assistance for capital outlay to local school districts. Research has also suggested that sizeable facility needs exist in Kansas, based on deferred maintenance and construction, and the relationship between equity and local wealth in that state has been explored.

Preliminary research into rural and urban facility practices in Kansas has similarly emphasized a need to link actual average practice with estimated need in a legal context (Thompson et al., 1988). Because Kansas

is a typically rural state characterized by many traditional capital outlay funding practices, policymakers and school leaders in all states may, by examining this case, gain a greater understanding of a complex set of issues facing education. Because the model analysis can be widely replicated and additional alternative questions easily integrated, this policy analysis should be ultimately helpful to the various states in evaluating their respective state policies.

Policymakers in all states should reflect on the substantive questions proposed in this monograph. Many questions that guided this critique were addressed earlier; they will be summarized again under the section about policy implications. Answers to other relevant questions sought in the Kansas investigation included the following:

- What are the common problems in funding facilities?
- Are there important adequacy and equity differences between rural and urban school districts?
- Are districts able to levy adequately for facility needs?
- What is the actual difference between average practice and need?
- What are the state's characteristics when evaluated for resource accessibility, ex post, and ex ante fiscal neutrality?
- Which alternative method for funding capital outlay would show the greatest amount of resource accessibility, wealth neutrality, and horizontal tax equity in relation to funding both current average practice and estimated need?
- What would be the fiscal burden on the state for each alternative funding model examined?

Answers to these questions are important in any state, and answers to the last question are particularly important.

By modeling equity achievement in Kansas school districts with four common methods for capital outlay funding, implications for many states

become apparent. The largely rural nature of Kansas, its dependence on local wealth for facility funding, and the current desire by some organizations to introduce state aid for facilities in Kansas provided an opportunity for a meaningful test of models that can be considered by any state.

The models included:

- (1) total local control (the current mechanism in Kansas and those states offering no support for facilities),
- (2) full state funding with recapture provision for excess wealth,
- (3) an equalized grant, and
- (4) a flat 50/50 cost-share grant under uniform levy without regard for local wealth.

Finally, because Kansas--like most states--would consider incorporating capital outlay into the existing general fund formula, evaluation of that option is considered under the section about policy implications.

Because the models are examined for adequacy and equity from the perspective of both average practice and estimated needs, policymakers in Kansas and other states can observe the nature and extent of the problem with startling clarity.

Defining Equity Achievement in Capital Outlay Funding

As Berne and Stiefel (1984) have indicated, measurement of equity requires value judgments about what will be measured. Pupil equity is frequently preferred. Concern for pupils sensibly seeks to achieve horizontal equality by assuring all districts of a roughly similar starting point. Vertical equity would be a second-order priority because adequacy and horizontal equality are a prior condition to the achievement of vertical equity.

Consequently, facility equity would seek alternatives to channel resources in inverse proportion to local wealth or in sufficient amounts to overcome inadequate local tax yield. The concepts of resource accessibility, ex post fiscal neutrality and ex ante fiscal neutrality provide equal opportunity standards against which alternative funding mechanisms can be judged. To satisfy those standards, methods for financing capital outlay must (1) provide adequate resources and (2) overcome local wealth dependency.

Adequacy and equity must be defined. Because states have generally defined adequacy to be the current level of funding, it follows reasonably that all districts should be able to fund an average practice model (APM). Unfortunately, estimates of needs in the various states clearly indicate that average practice has not averted severe problems in many districts. Consequently, states need an alternative measure of adequacy.

One such measure might be the ability to fund an estimated need model (ENM). Under those conditions, adequacy for pupils and taxpayers could be satisfied when all districts are capable of funding the model. By constructing two adequacy models, policymakers can compare the size of the gap between average practice and estimated needs.

Adequacy examines only the quantity of resources. Equity, however, must consider the way in which potential resources are distributed. Equity pertains to three conditions: (1) resource accessibility, (2) ex post fiscal neutrality, and (3) ex ante fiscal neutrality. Standards for these three conditions make it possible to judge whether or not disputed resources are impartially available. Clearly, availability affects both pupils and taxpayers.

For pupils, resource accessibility would require equal availability of resources to fit pupil needs throughout a state. For taxpayers, it would require collection of sufficient revenue under similar tax effort. Ultimately, resource accessibility would be achieved when average practice, or preferably estimated needs, were fully funded.

Similarly, ex post fiscal neutrality would require elimination of positive linkages between wealth and residence, so that expenditure differences could be attributed to unfettered local choice rather than to tax base inadequacy. A basic equity issue, the achievement of ex post fiscal neutrality would force states to neutralize the effect of local wealth. As Friedman (1977) noted, ex post fiscal neutrality is probably violated if high wealth districts can or do consistently spend more than low wealth districts. Thus, in testing for equity, ex post fiscal neutrality would be achieved when adequate aid to fund average practice or estimated need is received without regard to local wealth or when aid is inversely related to ability to pay.

In contrast, ex ante fiscal neutrality examines taxpayer equity. As Friedman (1977) also noted, ex ante fiscal neutrality is based on the notion of equal yield for equal effort. Ideally, it would also be based on a choice mechanism through which the community freely determines its level of expenditure, with the difference between ability and need being funded by the state. Ex ante fiscal neutrality would be achieved when districts levy uniformly and receive sufficient aid to fund average practice or estimated needs without regard to local ability, or, again, when aid is inversely related to ability to pay.

Any scheme should satisfy the conceptual requirements of both adequacy and equity if it is to meet desirable goals and to withstand court scrutiny. While the facility issue is sufficiently complicated on its face, it is further aggravated by questions about the sufficiency of average practice juxtaposed against the emerging evidence of unmet critical needs.

Average Practice and Need: Diverse Concepts

Equity principles provide standards against which to assess alternative plans for funding facilities. But minute attention to equity without concern for adequacy offends sensibility. Because adequacy has historically been defined as average practice and because average practice may not represent actual needs very well, the construction of measures to compare historical practice and estimates of need is imperative.

How each state would choose to operationalize and test adequacy and equity must necessarily be specific to its philosophies and other funding methodologies. But while actual formulas would vary individually by state, all instances require setting a target level of funding that represents presumed or actual adequacy for facility needs. A mean budget per pupil for both average practice and need can be used to derive both actual spending patterns and estimated needs.

For example, the examination in Kansas constructed an average practice model from data on actual levy experience from 1985-88 by dividing all districts' actual capital outlay tax revenues by the number of pupils in the state for the same three year period. The result was a budget per pupil (APM) which defined resource adequacy as expressed by current practice. The APM then served as the target that each alternative funding

model sought to fund. By establishing separate APMs for the entire state and for rural and urban subgroups, the various classes of school districts could be compared.

As stated earlier, when all districts could meet or exceed the APM, adequacy and equity (as defined above) by the standard of average practice would be achieved. To generate these revenue simulations, average practice levies for capital outlay and debt service were also calculated and applied against local assessed valuations. The ability of each district to fund the average practice target under uniform levy conditions could then be compared.

Consistent with earlier argument, a need model was also derived because of the obvious logical flaw inherent in construing average practice as representative of actual need. An average practice model is useful in comparing relative advantage among districts with respect to current practice, but it cannot be assumed to genuinely exhibit either adequacy or equity because it may severely underestimate need and reflect various funding and taxing restraints.

In other words, current or average practice may be an estimate of conservative practice under the best conditions, or of fiscal exigency under the worst conditions. Because full funding is seldom practiced, the latter alternative is probably more characteristic than the former. Consequently, estimated need models were constructed for the state and its rural and urban populations from the work by Honeyman and Stewart (1985) and Devin (1985). The model summed districts need estimates, dividing by fulltime enrollment (FTE) to establish a statewide estimate of need per

pupil. Like the average practice models established earlier, local ability to fund the need model could also be estimated.

Revenue was then simulated for each of the four alternative funding methods (i.e., total local control, full state funding, equalized grant, and cost-share flat grant) to see if adequacy were achieved. Alternatives were also statistically evaluated for equity achievement. Finally, the alternatives were analyzed according to their performance on equity principles.

Total Local Control: The Declaration of Dependence

The series of studies conducted in Kansas have revealed interrelated conditions consistent with reports from other states regarding growing facility needs and resource inadequacy. Like many states whose facilities are aging rapidly and whose revenue sources are limited, Kansas school districts are experiencing significant needs. The age and condition of Kansas facilities, sources of revenue, and other financial and tax levy information describe facility problems that are increasing with time (Devin, 1985). Almost 75 percent of all attendance centers are more than twenty years old, and nearly 20 percent exceed fifty years of age. Nearly one-fourth are in fair to poor condition.

Not surprisingly, the tax base of Kansas school districts reflects its specialized rural economy. Nearly 60 percent rely primarily on agriculture, and an additional 11 percent depend on energy production for the bulk of tax sources (cf. Bender et al., 1985)⁷. While the

⁷. In examining the state, it is important to recognize the primarily rural profile. Twenty-seven percent of districts--the urban districts--contain 75 percent of pupil enrollments. The urban community tax bases are broader, with a diversity of economic activities, as compared to the specialized economic activity of the rural districts. Additionally, urban

state's overall tax base may be stronger and more diverse than the reported percentages indicate--because of the economic significance of urban economic activity--many Kansas school districts have recently experienced rapid property valuation losses because of depressed agricultural and energy related industries. Although the changes have resulted in major shifts in school aid under the state's general fund equalization formula, none of these shifts, however, has provided aid for facilities.

In Kansas, communities depend completely on local property wealth to meet capital outlay needs. That dependency has resulted in approximately 80 percent of all districts levying significantly for capital outlay, and more than half have bonded indebtedness that must be serviced by the local tax base. Despite \$385 million bonded indebtedness, which equals nearly 35 percent of the state's total property wealth, significant capital projects continue to be actively planned, with nearly 20 percent of reporting school districts anticipating bond elections. A significant number of those districts are among the 10 percent that have experienced recent bond election failures, and some of those districts have experienced multiple failures.

With local property wealth dependency comes wide variations in local effort for facility funding. Three years of comparative levy data in Table 4.1 indicate that the state's school districts are making a concerted effort to maintain and improve facilities. Average levies for the most

real estate comprised the tax base in 8.2 percent of these districts, and another 11 percent of these districts indicated that there was no single outstanding feature which characterized their tax bases.

recent three years indicate overall effort of more than seven mills for capital outlay and debt service. The state's urban districts are exerting roughly one-third greater effort for facilities than are rural schools, yet urban districts receive less revenue per pupil for this effort.

Revenue-generating ability defined by average practice (APM) indicates that the mean levy produces \$83.50 per pupil in rural schools, \$53.30 in urban schools, and \$61.51 statewide. While the tax yield in Kansas may be greater or lesser than yields in other states, the conclusion is clear that average practice is significantly different from estimated needs per pupil of \$1,064.30 for urban districts, \$611.30 for rural schools, and \$953.08 for the state.

There is little doubt that the evidence demonstrates that current practice underfunds actual needs in rural districts by 732 percent, nearly 2,000 percent in urban districts, and more than 1,500 percent statewide. If district perceptions of their needs are accurate, local wealth dependency holds little hope of providing adequate levels of support for facilities.

If adequacy was highly suspect, equity fared no better in this analysis. Statistical evaluation for resource accessibility, wealth neutrality, and equal tax effort revealed similarly great inequity. The state's profile (see Table 4.2) overwhelmingly indicated that total local responsibility for funding capital outlay must be judged both inadequate and inequitable under either average practice or estimated need. Extreme variation existed in resource accessibility.

TABLE 4.1

SUMMARY OF MEAN TAX EFFORT, AVERAGE PRACTICE, AND NEED

	Rural	Urban	State
1985-86			
Mills for Capital Outlay	3.9	6.3	4.5
Mills for Debt Service	2.2	3.3	2.9
1986-87			
Mills for Capital Outlay	2.95	2.68	2.87
Mills for Debt Service	4.31	5.24	4.56
1987-88			
Mills for Capital Outlay	2.8	3.3	2.9
Mills for Debt Service	3.4	6.0	4.1

THREE YEAR MEAN MILL RATE

	Capital Outlay	Debt Service	Combined Mean
Rural	3.22	3.5	6.72
Urban	4.09	4.85	8.94
State	3.42	3.85	7.27

AVERAGE PRACTICE MODEL
REVENUE PER PUPILESTIMATED NEED MODEL
REVENUE PER PUPIL

Rural	\$63.50	\$611.30
Urban	\$53.30	\$1,064.30
State	\$61.51	\$953.08

Kansas school districts, like those in many other states, must fund capital outlay expenditures from unadjusted raw wealth. Available wealth under uniform levy varied by \$4,633.89 per pupil (93:1), and the restricted range (middle 90 percent of districts) varied by \$761.49 per pupil (10:1). Local tax base dependency left 29 districts (9.6%) unable to fund a mere \$61.51 average practice model. Only 20 districts (less than 7 percent) were able fully to fund estimated needs. The evidence of this analysis supports earlier correlations in the state which indicated strong linkages between wealth and planned improvements ($r = .63$), condition of facilities and age ($r = .59$), wealth and level of bonded indebtedness ($r = .30$), and planned improvements with district debt ($r = .26$) (Thompson et al., 1988).

These conditions are troublesome. They trap districts in a cycle of insufficiency. If, because of existing differences in local wealth,

TABLE 4.2

ADEQUACY AND EQUITY OF FOUR METHODS OF FUNDING FACILITIES

STATE SUMMARY

Measure	Local Control		Full State Funding		Percentage Equalized		50/50 Grant	
	APM	ENM	APM	ENM	APM	ENM	APM	ENM
U.R.	\$4,633.89	\$4,633.89	\$0	\$0	\$0	\$0	\$4,633.89	\$4,633.89
R.R.	\$761.49	\$761.49	\$0	\$0	\$0	\$0	\$761.49	\$761.49
F.R.P.	8.55	8.55	0.0	0.0	0.0	0.0	4.28	4.28
R.M.D.	.75	1.80	0.0	0.0	0.0	0.0	.38	.54
C.V.	.49	.83	0.0	0.0	0.0	0.0	.24	.42
Gini	.43	.94	0.0	0.0	0.0	0.0	.22	.47
McLoone	.06	.003	1.00	1.00	1.00	1.00	.82	.0017
N below mean	29	283	0	0	0	0	15	142

N=303

APM=Average Practice Model

ENM=Estimated Need Model

U.R.=unrestricted range

R.R.=restricted range

F.R.R.=federal range ratio

R.M.D.=relative mean deviation

C.V.=coefficient of variation

Gini=Gini coefficient

McLoone=McLoone Index

districts can fund neither need nor average practice, the implication for policy is clear: Policymakers should replace funding schemes that fail to correct for both inadequate and inequitable revenues.

Further analysis of the Kansas data examined rural and urban subgroups, revealing similar inequities. Tables 4.3 and 4.4 summarize urban and rural adequacy and equity. The pattern of insufficiency to fund either average practice or estimated need was upheld throughout both subgroups. Whereas urban wealth disparity (\$1,550) yielded a ratio of nearly 25:1, the rural district ratio of 93:1 (\$4,633.89) was even more extreme. Although all urban districts were at least minimally able to fund the average practice model, 29 rural districts were not. Inequity soared under the need model as 80 urban districts (99%) were unable to meet the ENM per pupil of \$1,064.30, and 203 (90%) rural districts were similarly unable to meet their estimated need of \$611.30 per pupil.

The evidence overwhelmingly indicates that both rural and urban areas of the state are seldom able to fund estimated needs, and funding the average practice model is impossible under uniform tax levies in nearly 10 percent of all districts.

Policymakers should probably view the attempt to fund average practice with some suspicion, because the limitations of this model are so obvious. Adequacy of average practice is inherently suspect because average practice almost certainly underestimates need in many states. The restrictions under which average practice takes place are great. These include--in the states like Kansas--voter approval for both capital outlay levy and bond referenda,

TABLE 4.3
ADEQUACY AND EQUITY OF FOUR METHODS OF FUNDING FACILITIES
URBAN SUMMARY

Measure	Local Control		Full State Funding		Percentage Equalized		50/50 Grant	
	APM	ENM	APM	ENM	APM	ENM	APM	ENM
U.R.	\$1,550.00	\$1,550.00	\$0	\$0	\$0	\$0	\$1,550.00	\$1,550.00
R.R.	\$89.95	\$89.95	\$0	\$0	\$0	\$0	\$89.95	\$89.95
F.R.R.	.85	.85	0.0	0.0	0.0	0.0	.42	.42
R.M.D.	.75	1.80	0.0	0.0	0.0	0.0	.38	.54
C.V.	.28	.85	0.0	0.0	0.0	0.0	.14	.43
McLoone	.04	.33	1.00	1.00	1.00	1.00	.50	.03
N below mean	0	80	0	0	0	0	0	40

FTE >1,000
N=81

APM=Average Practice Model
ENM=Estimated Need Model
U.R.=unrestricted range
R.R.=restricted range
F.R.R.=federal range ratio
R.M.D.=relative mean deviation
C.V.=coefficient of variation
McLoone=McLoone Index

TABLE 4.4
ADEQUACY AND EQUITY OF FOUR METHODS OF FUNDING FACILITIES
RURAL SUMMARY

Measure	Local Control		Full State Funding		Percentage Equalized		50/50 Grant	
	APM	ENM	APM	ENM	APM	ENM	APM	ENM
U.R.	\$4,633.89	\$4,633.89	\$0	\$0	\$0	\$0	\$4,633.89	\$4,633.89
R.R.	\$854.75	\$854.75	\$0	\$0	\$0	\$0	\$854.75	\$854.75
F.R.R.	9.2	9.2	0.0	0.0	0.0	0.0	4.60	4.60
R.M.D.	.75	1.04	0.0	0.0	0.0	0.0	.38	.52
C.V.	.65	.91	0.0	0.0	0.0	0.0	.32	.46
McLoone	.26	.007	1.00	1.00	1.00	1.00	.52	.004
N below mean	29	203	0	0	0	0	40	102

FTE <1,000
N=222

APM=Average Practice Model
ENM=Estimated Need Model
U.R.=unrestricted range
R.R.=restricted range
F.R.R.=federal range ratio
R.M.D.=relative mean deviation
C.V.=coefficient of variation
McLoone=McLoone Index

TABLE 4.5
 REQUIRED LOCAL MILL RATE
 LOCAL CONTROL MODEL

	<u>APM Mills</u>	<u>Percent Difference High to Low</u>	<u>ENM Mills</u>	<u>Percent Difference High to Low</u>	<u>Percent Difference APM to ENM</u>
State High	.00896	8960.00%	.11827	12449.47%	1319.98%
State Low	.0001		.00095		950.00%
Rural High	.00896	8960.00%	.08907	9375.79%	994.08%
Rural Low	.0001		.00095		950.00%
Urban High	.00684	2442.86%	.11827	172.65%	1729.09%
Urban Low	.00028		.00479		1710.71%

APM Mills: Mill rate required to fund average practice model.

ENM Mills: Mill rate required to fund the estimated need model.

as well as restrictive debt limitations. In contrast, the estimated needs model includes the notion of resource accessibility and the data generated by that model reflect the difference between local ability and local capacity to meet estimated actual needs.

In many states, these accusations typically allege that one segment of the population possesses inordinate amounts of wealth that significantly disadvantage other populations. In Kansas urban districts frequently allege that rural districts are wealthier than urban districts.⁸ The substantial record of reform litigation demonstrates that the allegations are legitimate concerns and that there is at least initial acceptance of the concept of comparative disadvantage. In the comparison of adequacy and equity, however, it becomes particularly apparent that state policy--particularly in states that require communities to depend on their own property wealth for facility needs--can now be seen to discriminate initially against all communities not independently capable of funding their facility needs.

The allegation in Kansas that rural districts have higher overall wealth was not uniformly upheld by this analysis. While the greatest pockets of wealth were found in rural districts, the poorest schools were also located in rural areas. This finding illustrates the fact that the first imperative should be to establish the extent of needs and only then to identify a mechanism sensitive to differing populations' needs.

In Kansas, such a formula would have to consider that while nearly all districts in the state could not fund estimated needs, no urban districts lay below average practice, whereas nearly 10 percent of rural districts were

⁸. In other states, particularly in the Southeast, the opposite allegation is made (cf. Pauley v Kelly, 1979).

disadvantaged. Hence the commonalities of rural and urban problems are probably initially more striking than their differences.

In states that depend on local property wealth to fund facilities, all districts operate under the same limitations that exacerbate the effects of local wealth: Wealth relates to ability to pay, and the effect of wealth on facilities results in great disparity. The effects of this linkage play out somewhat differently in rural and urban settings, but equity is uniformly violated under total local control because nearly all districts in the state are unable to fund estimated needs in a cycle they are powerless to break.

Flat 50/50 State Grant: Unequal Relief

A flat 50/50 cost-share grant by the state to local school districts was also examined in the Kansas analysis. Obviously a middle ground among diverse alternatives, a cost-share grant represented a limited and controlled introduction of state assistance into funding school facilities. Like all funding options, a flat grant represents value choices. A flat grant accepts state responsibility, but, among state-funding alternative, takes a comparatively uncomplicated approach to determining the level of state support.

Under the conditions of the research reported here, the flat grant provided introduction of state aid on neutral grounds, without the perceived disadvantage of recapture found in some funding proposals. It would appease demands for state assistance to all districts, but restrict state costs to a predictable and manageable amount. The choice to cap state participation at 50 percent was arbitrarily neutral, but it established an equal partnership that would leave the state and local

districts free to influence remaining conditions. These conditions include local initiative to reduce costs by the amount of state participation or to enhance the building program through the use of state aid as a supplemental grant. By exercising care to balance the effects of such decisions, local districts and states could hypothetically make significant advancements by introducing aid at such a significant level.

This analysis also assessed the effects of the flat grant model in funding average practice and estimated needs. Although limited state participation is insensitive to the balance of classic equity achievement, the flat grant roughly halved inadequacy present under the total local control model. Introducing state aid significantly improved adequacy by the proportional amount, but failed to improve equity because it preserved initial funding discrepancies.

Improvement in local adequacy can be clearly seen in Table 4.2, which shows that 15 (5%) of the state's districts would still be unable to fund current average practice, and 142 (46.7%) districts could not approximate the need model. Flat grants thus provide desirable progress toward achieving adequacy, while having neutral or detrimental effects on equity because of enrichment aid to wealthy districts.

The same distinctions between urban and rural districts found under local control were preserved by the flat grant. Unlike total local control, under the provisions of which rural districts were less favorably positioned, however, urban districts were slightly more disadvantaged by flat grants. Although urban districts would, under the 50/50 flat-grant plan, receive the bulk of resources because they have 75% of student enrollment, urban districts were previously generating less revenue per

pupil--a condition unimproved by the flat grant. Urban needs were initially in greater need, due to lower per pupil revenue and greater overall per capita needs.

Equity disparities, however, were greater among rural districts, consistent with evidence from the total local control data. Those data suggested that rural districts suffer from the best and worst effects of fiscal capacity.

State costs, a nonexistent issue under total local control, were less for the flat grant than for the remaining options discussed next, because of the 50 percent cap. Nonetheless, state costs were significant, resulting in roughly a \$24.5 million expense for which the state currently enjoys no responsibility.

The disequalizing effect of flat grants has, of course, been known for many years. Nonetheless, several states continue to use flat grants to school districts for various educational purposes (Honeyman, Stewart, & Wood, 1989). Other alternatives are better suited to achieving equity and should receive higher recommendations for adoption and implementation.

Nonetheless, the utility and frequency of flat grants among the states point to a commonly ignored benefit: The net result of introducing state aid to facility funding through the flat grant would be that districts are able to add state resources to facility projects. Flat grants without doubt improve adequacy. There is also no question that flat grants fail to improve equity. Despite significantly reducing inadequacy on a dollar basis, flat grants preserve, and even amplify, the troublesome inequities inherent in wealth variations.

While acceptance of flat grants as a desirable option should usually be avoided in policy recommendations, flat grants may represent a limited option for states that do not currently provide assistance for facilities. At best, flat grants are only a first step toward the ultimate goal of achieving equity. In practice, they may serve their best purpose in successfully initiating politically difficult solutions.

The lesson to be learned is obviously political, but it also relates sensibly to educational benefit. The state's role in funding education can have a tremendous impact, but its participation can have either equalizing or disequalizing effects on the balance of both adequacy and equity, depending on the kind of funding plan. Policymakers should also be aware that, unless extraordinarily high funding levels can be generated, the decision to implement a flat grant can be expected to achieve only limited improvements in adequacy; moreover, their negligible or even detrimental effect on equity must be recognized. These concerns are important, given the current propensity toward litigation. When they consider introducing aid to facilities, policymakers should give careful consideration to the effects of funding schemes on both adequacy and equity. Flat grants improve adequacy to a limited degree, but they do nothing to improve equity, and they frequently exacerbate it.

Full State Funding: A Perilous Path

Suspiciously regarded and generally rejected, full state funding represents a completely opposite attitude toward state involvement in facility finance. Tried in only a few states, full state funding presupposes several conditions, all of which relate to values, politics, and government.

Full state funding, however, also presupposes a very high level of support, which logically requires increased or enhanced revenues. Normally only two options exist: increasing taxes generally or recapturing excess wealth. While neither option is popular, recapture was tested in the Kansas study for contrast with the other models for funding capital outlay. Excess wealth recapture is more frequently associated with full state funding.

As in the other models, the test of this alternative in Kansas assessed the funding of average practice and estimated need. A marked contrast to the local control and flat grant options is presented in Tables 4.2 through 4.4. The net effect of tax collection and administration by the state under uniform levy conditions utterly negates tax base disparity.

Making the major assumption that property is uniformly assessed, statistical equity is a natural consequence as the state lays, collects, and administers facility funding under uniform tax conditions. Depending on the level at which the state funds the model, adequacy is automatically satisfied. Regardless of the level of funding, statistical equity is also achieved by a model that taxes impartially, accesses statewide wealth, and distributes it without particular regard to residence. Consequently, the issues quickly depart from achievement of adequacy and equity--given the pro forma nature of wealth neutrality under full state funding--and the practical issue devolves to the political acceptability, costs, and the structural conditions of implementing full state funding. Major issues and reservations include the wisdom of recapture, local control and initiative, and the establishment of local enrichment capabilities.

Another major concern entails costs to the state and to local districts. Statewide tax collections must initially be generated in the local community, and the effects of recapture built into the model in Table 4.6 illustrate that if the state were to require districts to levy at current statewide APM averages, a revenue windfall in excess of \$57 million would occur. This would indicate that wealth pockets in the state are capable of supplementing average practice for all districts, while simultaneously generating millions in excess recapturable wealth. The reaction to such a proposal among those politically influential communities, however, would predict a difficult implementation process for the state.

In contrast, if the need model were funded, a shortfall of nearly \$300 million would occur, with most districts receiving aid in excess of contributions. Given the conservative nature of the state and the widespread unpopularity of full state funding in most areas of the nation, it is unlikely that either large windfalls or huge shortfalls would be accepted without considerable struggle.

The issue remains, however, that adequacy and equity are satisfied by full state funding, if such a plan is fully funded. Such conclusions point to the viability of full state funding in meeting the presumed goals of wealth neutrality and educational improvement. If strict adherence to principles of full state funding are unacceptable, the alternative remains

TABLE 4.6

STATE COSTS TO FUND THE FOUR ALTERNATIVES

	Total Local Control		Full State Funding	
	APM	ENM	APM	ENM
Required Revenue	24,588,939	381,000,000	24,588,939	381,000,000
Available Revenue	81,824,591	81,824,591	81,824,591	81,824,591
Net Revenue Change	57,235,652	(299,175,409)	57,235,652	(299,175,409)
State Cost	0	0	(57,235,632)	299,175,409
Percent Aid	0	0	100% (30%)	100%
N aid districts	0	0	303	303
	Equalization		50/50 Grant	
	APM	ENM	APM	ENM
Required Revenue	24,588,939	381,000,000	24,588,939	381,000,000
Available Revenue	81,824,591	81,824,591	94,119,060	94,119,060**
Net Revenue Change	57,235,652	(299,175,409)	81,824,591	(274,586,470)
State Cost	8,182*	299,175,409	24,588,939	24,588,939
Net Revenue Change	.00001	79%	50%	50%
N aid districts	1	274	5	142

* One district receives at an .003%.

** Local wealth yields \$81,824,591. State contributes half of required aid at \$12,294,469. $\$81,824,591 + 12,294,469 = \$94,119,060$.

to structurally modify its elements to compromise a high level of state aid, mixed with local effort to both ease the state's burden and to retain local incentive.

The cost in Kansas and other states would thus depend on the way in which full state funding would be defined. The assumption that full state funding is the most expensive alternative may be mistaken. The evidence in Kansas suggests that costs for full state funding can in fact be considered to be in line with costs for other alternatives, such as equalization discussed next. The cost would, however, be greater or less than equalization costs depending on the way in which the state and local partnership is defined.

Attempts to initiate full state funding in many states would be treacherous, as funding average practice would yield no tangible reward to wealthier communities, and funding the need model would likely result in more limited fiscal returns to wealthier districts, in comparison to their initial investment. Because average practice is arguably low, and because surplus wealth exists in only a few districts, a major struggle would probably ensue. The struggle would entail difficult economic and political decisions about how full state funding should be defined for the state. In all likelihood, most policymakers would be inclined to seek less provocative solutions or to substantially modify the structure of full state funding to accommodate external pressures from various constituencies. Full state funding, while meeting all conditions of adequacy and equity, represents one qualifying alternative to reducing current problems. Its political acceptability, however, may be quite another matter--to be decided ultimately within the context of cultural values, legislative interest and will, and the view of the electorate.

Equalized Grants: Choice and Promise

Equalization grants provide sharp contrast to total local control, flat grants, and full state funding by providing aid in inverse relationship to ability to pay. In contrast to the other alternatives, ability to pay is the critical issue that triggers assistance so that districts receive increasing aid as local ability declines.

Any range of operating conditions or limits can be designed under this model, including percentage-equalized plans--in which the state caps its participation limit--or district power equalization plans--in which the state agrees to open-end matching of local choices. Because many states limit how equalization can "raid" the state treasury in their general fund formulas, the current model limited its features to testing adequacy and equity by assessing the effects of the model on average practice and estimated need with no local district incentive options. Additionally, the model included a stop-loss provision to prevent recapture of excess wealth.

The legal context surrounding education makes the effects of equalization aid relatively incontestable, since the flow of aid to local districts varies tightly with their ability to pay. When applied to facility aid in the model, the net effect of state revenue collection under uniform levy was to levy overcome local resource inadequacy. The equalized grant achieved substantial adequacy and equity.

Like full state funding, equity was automatically satisfied because of the formula's sensitivity to local capacity. Because equity is inherent in equalization, adequacy thus becomes the critical issue. The major adequacy issue pertains to the cost to the state, particularly since no recapture

provision was included in the model applied to the Kansas data. As seen in Table 4.6, if the state chose to fund average practice, only one district in Kansas would be inadequate, resulting in a negligible cost to the state of roughly \$8,000.

Substantively, however, the adequacy of average practice remains doubtful, and analysis under the need model immediately qualified 274 districts (90%) for average aid of 79 percent of their estimated need. State costs for funding estimated district needs become highly significant at nearly \$300 million, reinforcing the concept that average practice has not defined true need; rather, average practice has reflected powerlessness to address actual local needs.

Like full state funding, there is little argument that equalized grants clearly meet the criteria for achieving resource accessibility, wealth neutrality, and uniform tax effort. Similarly, the issues quickly turn again to political acceptability, costs, and the structural conditions of implementing equalization. Unlike full state funding, however, at least two of the issues would be more graciously received.

Many states already utilize equalization schemes in general education aid. In Kansas, for example, general fund equalization aid has been in place since 1973, and the formula is widely embraced despite occasional criticisms. This context makes political acceptability a realistic goal. Similarly, the structural conditions in many states would be favorable. Many states already incorporate the equalization concept into their base aid plans. For these reasons, equalization would be a highly acceptable vehicle for introducing facility aid to local school districts.

The issue of cost, however, would make the success of equalization dependent on the way in which the state defines formula operation, and ultimately on the extent to which the state is willing to assume local costs. Because adequacy is presumed to be a necessary prerequisite to meaningful equity, the critical nature of how fully the state defines and funds equalization through average practice or need models becomes immediately apparent (cf. Honeyman, Thompson, & Wood, 1989)

Clearly far more politically feasible than full state funding, equalization defines a local/state educational partnership that is consistent with many states' general aid formulas. Equalization immediately addresses equity and offers a useful means by which the state may improve equity conditions for funding facilities.

Summary

The funding alternatives analyzed here represent only four possible choices. The range of possible methods for state participation is nearly limitless, since the basic plans could be modified endlessly. Other options could also be selected for study--including state loans, building authorities, and other private or state investment schemes. The methods chosen for evaluation, however, represent genuine state involvement consistent with the classification in Table 1.1, whereby only those methods resulting in meaningful benefit to local districts were described as true grant-in-aid plans.

While the range of choices is rich, the issue must ultimately return first to the adequacy of any distribution scheme, and secondly to its method for distributing aid. The evidence clearly indicates that the present method for funding facilities in Kansas and other states that do

not assist local districts routinely violates equity. Such an arrangement stands in jeopardy on the principles established by Serrano, if such principles are extended to the financing of capital outlay. The evidence also indicates that there are differences between rural and urban districts--differences that lie in both the magnitude and types of problems each context experiences.

In the final analysis, the simple fact remains that no matter how complex state, rural, or urban issues may become, the problems and solutions lie in the availability of adequate and equitable resources to effectively address student needs. For Kansas, the results are alarming because average practice almost certainly fails the adequacy and equity test. Moreover, estimated needs remain unmet under conditions of adequacy and equity in all funding schemes.

The importance of resources in determining the outcomes of education is overwhelmingly evident because wealthier school districts tend to have better schools and better school buildings (MacPhail-Wilcox & King, 1986). Comments by the courts and the increasing number of legal challenges that cite concerns about facilities seem to indicate that both rural and urban school systems suffer under the limitations that dependence on local wealth imposes on their attempts to provide and maintain adequate and equitable facilities.

This analysis confirms the perception that policymakers and school leaders should be concerned for the future of how school facility needs will be resolved; there is already cause for concern about the legal implications. There is no doubt that it is an educational issue that must be addressed.

POLICY IMPLICATIONS FOR EQUITY UNDER STATE PARTICIPATION

Methods of financing public schools have changed dramatically since the turn of the century. Many present characteristics are recent developments, however. Responsibility for education now extends beyond the local community, and the effect of school finance decisions are felt at all levels of the political economy, and with lasting impact. Education is one of the largest expenditures of state government, and decisions made in local board rooms, state legislatures, and other levels of government will have a profound influence on the future. Policies leading to further change or decisions to maintain the status quo should be made with utmost deliberation and on the basis of solid evidence.

To formulate effective policy, synthesis must draw the elements together, provide discussion of substantive effects of research, and consider implications that may affect future policy directions. The evidence on the financing of facilities holds powerful conclusions and implications. Answers to the questions which began this policy analysis can provide the needed to identify future needs and to make recommendations that policymakers and school leaders in all states can use to assist with informed decisions.

Why is There Concern About the Financing of Facilities?

The concern exists because there is widespread national evidence of an overwhelming inability of local districts to fund capital outlay at levels needed to keep buildings adequate, safe, and accessible to all students. Moreover, practical concern reflects awareness that such issues may become

positively linked to court requirements that reflect general concern for equal educational opportunity.

Urban and rural school buildings are deteriorating rapidly, and maintenance needs are increasing concomitantly. The average age of rural school buildings in the nation exceeds forty years, average deferred maintenance exceeds \$300,000 per building, and over half of all districts report inadequate buildings. The large needs found in individual states are nearly \$18 billion for rural schools alone, and urban schools also have huge needs. Facilities, however, are receiving an increasingly smaller share of limited resources as capital outlay spending in proportion to total school expenditures has declined nationally by nearly 50 percent from 1970 to 1983 (Salmon & Wilkerson, 1984).

The reason for concern exists in all fifty states, and policymakers need to examine levels of state support for adequacy and equity. Concern should be greatest among 22 no-aid states because there is a troublesome relationship between local property wealth and ability to construct and maintain school buildings. School districts that report high levels of need are almost invariably dependent on bonding, and this relationship creates a cycle of insufficiency that cannot be broken within the district. That dependency will continue to be noted as advocacy increases.

Rural and urban areas alike suffer from narrow or eroding tax bases, exorbitant costs for high need populations, educational reform costs, changing demographics, and shifting patterns of political influence (Stephens, 1988). In an era when an increasingly expanded definition of equity has enveloped nearly all general fund expenditures, engendered huge special education mandates, and extended aid to transportation, it may be

only a matter of time before the comparatively quiet criticism of courts becomes a direct mandate to include facilities in the definition of equal educational opportunity. Finally, beyond potential fears for increased state liability should rest the ultimate reason: Adequacy and equity in facility finance have a relationship to equal opportunity. Facility finance is an educational concern for all fifty states.

How Do Adequacy and Equity Apply?

These companion issues have long been the conceptual and operational underpinnings of desirable educational practice. Their operation is sequential and interdependent: Adequacy is a natural first priority, followed by concern for impartial distribution. Their definition frames school finance reform on the basis that students should have access to resources to meet their individual needs wherever they live.

Furthermore, taxpayers have a right to expect the state to support education to ensure that local wealth does not adversely affect educational quality. By definition, therefore, adequacy in all states is inherently suspect until funding provisions are examined to determine if sufficient levels of resources are actually going to school districts. In the 22 no-aid states however, adequacy is unavoidably conditioned by residence. In the unlikely event that all districts in a no-aid state possessed sufficient wealth to meet a carefully constructed estimate of need, then the requirement of adequacy could be satisfied. Such a claim, however is unlikely: The 22 no-aid states are in a doubtful relationship to adequacy.

Equity should follow adequacy, since by definition it implies equal access to adequate resources. Because wealth varies, adjustment is required to impede the natural tendency to unequal distribution. In

general school finance reform, that adjustment has been included in state formulas that distribute aid to school districts, either through variations on high level foundation plans or through equalization formulas sensitive to varying conditions of wealth. In the 22 states that provide no aid for facilities, however, the possibility that such adjustments will occur is precluded. The reality in no-aid states is that equity certainly does not occur for either students or taxpayers.

What Significant Legal Issues Might Affect Facility Finance in the Future?

The question underlies this policy analysis, and the clear indication is that multiple legal issues relating to facilities may emerge. Although judicial notice of facility wealth dependency has yet to become a fully developed issue, the potential is enhanced by a long history of court criticism, emerging rural and urban advocacy, and the growing needs of school districts to repair and replace facilities.

Court criticisms have increased in sharpness and frequency, and the growing significance attached to facilities in Pauley, Abbott, Jenkins, Edgewood, and others signal the latent power of capital outlay as a justiciable concern. Rural and urban advocacy represents the growing needs of different constituencies, and their needs are borne out by research indicating a need for billions of dollars to address deficient or inadequate facilities.

If adequacy is a legitimate legal issue and if it is highly suspect in no-aid states, then, if adequacy is a prerequisite of equity, it follows that equity is almost certainly violated in the 22 states that provide no meaningful assistance to capital outlay. For the remaining 28 states,

examination of levels of assistance and careful consideration of distribution schemes is also highly prudent.

How Are States Other Than Kansas Addressing Problems?

The answer is simply that most states have statutorily recognized that facilities require resources and that some have genuinely attempted to assist local communities with their needs. A significant number have, however, declined opportunities to assist local districts with their facility needs.

The legal mechanisms addressing facility needs range from great potential for achieving equity to little meaningful effect. Mechanisms granting true aid by reducing local costs (e.g., flat grants) or resulting in increased local choice about facility options (e.g., equalization plans) provide the greatest progress toward equity, but their actual impact is conditioned by the level of support they provide. Mechanisms such as state loans generally do not effectively address either true adequacy or equity concerns, except as favorable security ratings or lower interest costs may provide some small benefit.

Finally, while mechanisms for introducing private capital into facility projects may ease restrictive debt limits, they may actually have a greater negative effect on adequacy and equity because of the substantial costs associated with private funding. For states that provide genuine assistance to facilities, adequacy and equity are achieved proportionally to the extent they satisfy genuine need. For no-aid states, there is little or no evidence of progress toward either adequacy or equity.

Are There Substantive Differences Between Rural and Urban Areas?

There appear to be differences in both magnitude and direction of the problems encountered by rural and urban school districts. It is probable that the rural and urban experience in Kansas is substantially specific to the state because of its rural and agricultural complexion, in which classic urban stress is relatively nonexistent.

Its rural problems, however, may be typical of needs found in other rural states (particularly in the Midwest). The problems of rural states point to an origin in declining wealth, narrow tax bases and specialized economies, backlog of maintenance, and suspect relationships between tax base, facilities, educational programs, and equal opportunity. In Kansas taxable wealth ratios exceed 93:1; data from other rural states indicate that this situation is not uncommon (Honeyman et al., 1989). Since many states rely on local property wealth to fund facilities, the problems in Kansas are sufficient to suggest the breadth of rural problems in many other states.

Urban districts also face declining wealth and maintenance backlog, but the source of need differs. In urban areas, facilities problems are exacerbated by escalating costs related to the problems created by large populations and growing populations with special needs. General aid finance mechanisms frequently put urban districts at a disadvantage by failing to recognize their disproportionate program costs. The shortfall diverts limited resources from facility needs.

Although these differences are significant, they are dwarfed by the common problems that rural and urban districts share. The lack of adequate resources to effectively address student needs is the unifying theme. For

the no-aid states, the additional common thread is dependence on the local tax base for facilities. In these states, adequacy and equity will not be satisfactorily achieved without effective policy implementation or court intervention. One overall conclusion is inescapable: Until the states ensure adequate funding for facilities, the squabbles over equity are merely the meticulous division of pitiful spoils.

What Are the Implications of the Kansas Findings for Other States?

Compared to other states, the needs in Kansas are both typical and moderate. The age and condition of buildings throughout Kansas indicate a growing problem for districts to confront as they face the future. Although many older buildings are well preserved, age and condition must be vital concerns for communities and the state. Costs for replacement and modernization are growing, and the potential that improved facilities may have on teaching and learning must be a concern.

The dimension of the existing problem is also evident in the facts that (1) nearly 20 percent of buildings exceed fifty years of age and (2) the physical condition is described as fair or poor in nearly 22 percent of the state's schools. With 80 percent of districts levying for capital outlay and over half levying for debt retirement, there are significant unmet needs for repair, maintenance, and replacement of facilities.

Unfortunately, unfavorable economic conditions tend to aggravate the situation by providing an incentive to defer needed maintenance and improvement. Kansas's \$381 million in deferred maintenance represents a sum that will increase in the future if needs remain unmet. The likelihood that solutions will emerge without significant state level policy changes is remote.

The evidence also clearly indicates that Kansas school districts have varying levels of ability to pay for facilities, and the disparities remain even when the extremes are removed from the analysis. The variations are amplified if one considers the gap between average practice and estimated need, and evidence of great inequity exacerbates the evidence of widespread inadequacy. In Kansas, districts will not be able to meet their growing needs without state intervention. The state must examine its role in and possible responsibility for helping to meet capital improvement needs in school districts.

Despite its currently depressed condition, the economy in Kansas is enviable compared to many states. If Kansas is experiencing genuine needs, it is therefore reasonable to predict the existence of substantial needs in other states. Reports indicate that facility problems in Kansas are moderate by comparison to other states, and the stable economic and demographic conditions in the state suggest that its conservative nature has probably contributed favorably to its overall solid profile. Other states are experiencing greater problems which, when combined with recognition of inadequate or nonexistent state support mechanisms, point out the need to address those problems before they worsen.⁹

⁹. Mathis (1989) cited the grim statistics. Reports from various states have detailed annual construction outlays exceeding \$7 billion nationally, increasing by \$516 million in 1987 over the previous year. American School & University called it a "boom market" not seen since the 1970s and projected that facility costs would exceed \$21.9 billion for fiscal years 1988-90. Despite this vigorous activity, problems persist widely. Mathis (1989) reported Wisconsin's failure to pass a single bond referendum in the last five years. The state projects that buildings would have to last 400 years. Wisconsin is among the 22 states that provide no aid for facilities. The bottom line of problems in various states was summed up in a comment by the Wisconsin state school superintendent, who noted that "prisons are in better shape than elementary and secondary schools.... We put our children in decrepit, dank, stark buildings." He concluded, "Our highways, zoos, and prisons are in the greatest of shape" (Mathis, 1989, p. 1).

If Kansas's needs are as compelling as the evidence indicates, then the results of adequacy and equity modeling there suggests that other states have even more urgent facility needs. Kansas's serious needs probably understate facility needs in rural states in which economic circumstances are worse.

How Does Current Practice Compare to Facility Needs?

The evidence suggests that practice has fallen far short of need in many states. The enormous funds required throughout the nation to meet facility needs point to problems that have been allowed to accumulate over many years. Limited resources have forced districts to channel funds toward instructional priorities, resulting in neglect of facility needs. Average practice has been affected by limited resources, voters' resistance to bond issues, and the operation of law in many states in which low debt ceilings, dependence on local wealth, and mill rate caps have reduced districts' abilities to spend for facility improvements.

Facilities have suffered from implementation of an average practice model that is conditioned more by practical economics rather than by good educational practice. The cumulative effect of longstanding tradition, underfunding, and a lack of concerted improvement in equity has resulted in the current facilities problems evident in many states.

Facility needs have far outstripped many districts' local ability to pay. The results are typified in every state by estimates of the overextension that would result if local districts were to meet their needs fully. For example, meeting genuine needs in Kansas would require a statewide tax levy of nearly 34 mills, an increase of nearly 500 percent above the current average practice model. If local districts were to meet those needs individually, the mill rates would range from less than one

mill to more than 118 mills--representing a dreadful problem of inadequacy and inequity. Bad as this situation is, comparison to reports from other states and to the complaints before courts across the nation indicates that the magnitude of the problem in Kansas is only moderate.

What Is the Priority of Adequacy and Equity Among the Alternative Plans?

The selected model has less to do with adequacy than it does with equity because adequacy is relatively independent of the chosen vehicle--adequacy depends solely on sufficient revenue. The selection and features of any model are what ultimately determine the realization of equity. Actual improvement in equity operates in tandem with the first condition of adequate levels of resources. Models that achieve equity do so in varying degrees, depending on how well structural integrity is preserved in the interplay of state policy formulation, the legislative political process, and the restraints of a continuously changing political economy.

The basic models tested here indicate that full state funding and equalized grants achieve the highest level of equity. The final determination of equity achievement lies in how the models are structured in relation to local tax effort and the state's participation ratio.

- If full state funding is approached from basic purity or uses a high level foundation approach, adequacy and equity will likely be satisfied so long as the support level approximates need.
- If equalization is allowed to operate without restrictive caps and is based on actual need, equity will be achieved in a partnership sensitive to local ability to pay.

In contrast, although a flat grant does operate to reduce local inadequacy to fund a target, a flat grant will not reduce inequity because it preserves or amplifies distributional differences. As a consequence, the effect of a flat grant is greater on adequacy than upon equity.

What Are the Estimated Costs to the State of Each Alternative?

State costs are a function of need determinations and must be found for each individual state. Costs are a function of the level of state participation and the type of plan chosen. It may be expected that if need is the equity target to be funded, the full state and percentage equalized options will result in greater costs to the state and that districts will experience greater or lesser benefit in direct proportion to local ability to pay.

For example, if the need model for Kansas were to be funded under either full state or equalization models, state costs would be roughly equivalent at approximately \$300 million, but the political conditions would be vastly different. In this instance equity presents equivalent costs, and the issue devolves to the technical one of structuring an acceptable political and policy climate. The first condition in such a solution is the decision whether or not to fund needs fully, and the second condition entails policy decisions about how to distribute the revenue equitably.

How Might Current Practice Be Improved?

It is almost inescapable that the 22 no-aid states' characteristics are neither adequate nor equitable when evaluated for resource accessibility, student neutrality, and taxpayer wealth neutrality. In the remaining states, exploration and evaluation that would certify questions about the issues of the extent of adequacy and equity in state participation must take place. Actual policy structure depends on the political climate and constituent preferences in each state. Selection of funding methods will

continue to be a legislative prerogative shaped and guided by court principles that are emerging over time.

The principle that states should help local districts meet their facility needs should be universally acknowledged. But the way in which state assistance should occur must remain a value choice that cannot be externally imposed. In Kansas and many other states, it is very unlikely that any mechanism that removes local preference from decision structures could or should emerge. In conservative states the two simplest and most consistent options would include incorporating aid for facilities directly into the equalization or foundation formula as an addition to the general fund or to apply a separate wealth-sensitive formula to existing capital outlay and debt service accounts.

The range of choices among the various states would necessarily be wide, but the selection of a funding plan should ultimately be influenced and guided by genuine concern, first, for adequate funding, and second, for equitable distribution of those funds. The two must go hand-in-hand. While the range is bounded only by the possible combinations of funding plans and the uniquenesses of the individual states, the basic concerns of resource accessibility, wealth neutrality, and equal tax yield will eventually have to be addressed in the context of one reality: Facilities are a complex and important educational issue, with emerging legal ramifications.

RECOMMENDATIONS

The role of the state in local education policy seems certain to increase in the future. Despite the historical reluctance of federal and state government to assume voluntarily the responsibility for financing education, the involvement of state and national government in local affairs has increased slowly and steadily during this century. The literature on bureaucracy generally supports the tendency of government authority to grow rather than to diminish.

Whether or not the encroachment on local option will continue its gradual growth or be imposed suddenly in court is open to speculation. The forum to allege inequity nonetheless exists, and available evidence will support the allegations in many instances. Hence, recommendations that prudently advise states to assess their liabilities should, if heeded, prove quite useful.

In light of the discussion in this monograph, all states should examine how educational facilities are provided. The issue is even broader than it is sketched here, and the problem will remain a persistent issue until it is effectively addressed. It is particularly important that all states accept a substantial responsibility for granting meaningful aid to local school districts to assist in capital outlay funding, including facility construction and maintenance. Meaningful aid mechanisms should be consistent with the principles of resource accessibility, wealth neutrality, and equal tax yield so prevalent in general educational finance formulas. The principles of equalization provide a secure basis for court approval and, more importantly, for optimizing educational opportunity.

Several critical features should become an integral part of any plan to assist facility finance. These features would include most districts and would effectively address justifiable fears about loss of local control. These features would require states to provide a high level of state participation, consider current local effort for facility financing, provide for continued local incentive and local control, assist with current debt service, and consider variables such as special needs, enrollment growth, sparsity, and emergencies.

Local Control

The issue of maintaining local control should receive emphasis. While increased state influence is likely to be associated with increased state funding the benefits should be constructed so as to outweigh the detriments. A strong local and state partnership is an essential component of any plan to grant state aid for facilities. The fear of loss of local control is nebulous, and, at present, strong local control is more a matter of perception than reality in most rural areas (Dunne, 1983). Most local school districts are already obligated to the state through bonding limitations, approval by state architects, and other guidelines that govern instructional programs. In sum, the loss of local control has already largely occurred, and the introduction of state assistance for facilities--in the context of a meaningful state and local partnership--could restore some balance in favor of local districts (cf. Tompkins, 1977). The other recommendations that follow call for concerted attention by policy makers to preserve the concept and the integrity of local control.

Funds for Debt Service and New Projects

Funds should be ensured for existing debt service as well as for new projects. The benefits are numerous, including rewards for districts that have already taken ambitious steps toward improving educational facilities financed entirely by local effort. By providing aid to existing projects, states would exhibit concern for districts that have previously extended themselves during a time when local effort controlled the quality of facilities. By providing aid for financing new facilities, the state addresses emerging concerns about state responsibility for assisting local districts to provide the best educational program available within the limitations of the wealth of the entire state.

Special Needs, Growth, Sparsity, and Emergencies

An additional critical feature would require states to recognize special needs, growth, sparsity, and emergencies. In developing a state plan for assistance to local districts, funds should be provided for districts that face unusual difficulties. Those concerns should be addressed first. Such action is consistent with principles of logic and sound fiscal management by addressing critical needs before undertaking a regular program of assistance. It would logically follow that states should standardize a process to include a statewide project list which prioritizes needs and identifies cost projections, thereby maximizing the utility of project identification and fiscal constraints. These may be termed five-year or perhaps even ten-year capital improvement program plans.

A process to identify critical needs, to establish methods for regularly aiding facility projects, and to ensure effective identification of needs using realistic cost estimates is critically needed. This process

would allow for joining state revenue projections with anticipated facility needs well in advance of actual project scheduling and fiscal encumbrances. A project approval list would provide states with an orderly plan by which local and state partnerships would be scheduled.

Finally, states should consider establishing more than one type of operational fund for assistance to local school districts. Fund types should be available which tie directly to the immediate needs of school districts that are experiencing difficulties. Such difficulties may be related to inability to pass a bond issue, to substandard facilities, or to facilities that fail to meet criteria for accessibility or other such features. Included should be funds in excess of insurance payments to correct losses by fire or natural disaster. In addition, these may include districts that have expressed facility needs but are unable to provide local funds for a legislatively mandated minimum per pupil facilities budget. A critical needs fund to finance capital improvement projects that provides significant aid to deserving school districts would meet this criteria.

A corollary fund should also be established so that the state can systematically address long-range plans and capital improvement needs in school districts. Where a large number of districts are unable to fund an established average expenditure model and where large numbers of districts express unmet needs, the need to provide substantial state funding is present. An important part of this recommendation, of course, is that the critical needs fund and the long-range fund appropriate substantial dollars to assist local districts.

Conclusions

Many additional recommendations could be conceived, but the preceding recommendations represent a realistic beginning to guide effective initial involvement. As states develop their plans, recommendations would be modified and outcomes altered in light of new information and fiscal restraints.

Nonetheless, it is now imperative for states to consider the research data and the arguments that show how allegations of inequity are related to the failure of many states to provide meaningful aid for capital outlay to local school districts. To the extent that the arguments are convincing-- and to the extent that the equity principles governing general aid formulas apply--state policymakers would be wise to consider assisting local school districts with facility initiatives.

The authors of this monograph recognize the enormity of the task implied in these recommendations. This recognition, however, is tempered by the reality of substantial educational need as well as the implications of recent court action. Research has identified needs that have already been deferred, and new data increase the total dollar amount, daily.

State policymakers would be well advised to recognize the issue of facilities for its moral dimensions as well as its inherent legal pitfalls. From that assessment should evolve decisions and processes that can guide the states as they develop and administer plans to aid facility finance in local school districts.

REFERENCES

"ERIC Document Reproduction Service Numbers" indicate that the cited works have been abstracted in the ERIC abstract journal, Resources in Education (RIE). In most cases the works will be available in paper or microfiche copy from EDRS. Credit-card orders may be placed toll-free: 800/227-3742. EDRS also offers a low-cost FAX service.

"ERIC/CRESS Accession Numbers" reference works that will soon be abstracted in the RIE. At that time, the Clearinghouse Accession Numbers will be cross-referenced with the EDRS number in the monthly issues of the RIE, and the documents, in most cases, will be available from EDRS.

Abbott v Burke, OAL Docket No. EDU 5581-85, Agency Docket Number 307-8/85 (unpublished) (1988).

Bender, L., Green, B., Hady, T., Kuehn, J., Nelson, M., Perkinson, L., Ross, P. (1985). The diverse social and economic structure of nonmetropolitan America (Rural Development Research Report Number 49, United States Department of Agriculture, Economic Research Service). Washington, D.C. United States Government Printing Office. (ERIC Document Reproduction Service No. ED 262 939)

Berne, R., & Stiefel, L. (1984). The measurement of equity in school finance: Conceptual, methodological, and empirical dimensions. Baltimore: Johns Hopkins University Press

Board of Education of the City of Cincinnati v Walter. 390 N.E.2d 813, (Ohio 1979).

Camp, W., & Thompson, D. (1983). The impact on public education of school finance reform and finance reform initiatives. Journal of Education Finance, 14(1), 221-238.

Christiensen et al. v Bob Graham et al. Case No.86-1390, of the opinion in the 2nd Circuit Court of the 2nd Judicial Circuit in and for Leon County, Florida. Motion for partial summary judgment, 1988.

Colvin, R. (1988, November 16). California voters back 'guarantee' for school funding in constitution. Education Week, p. 11.

Community Service Society of New York. (1987). Promoting poverty: The shift of resources away from low-income New York city school districts. New York: Community Service Society of New York, Department of Research, Policy, and Program Development.

- Council of Great City Schools. (1983). The maintenance gap: Deferred repair and renovator in the nation's elementary and secondary schools. New York: Washngto. D.C.: The Council of Great City Schools.
- Deavers, K., & Brown, D. (1985). Natural resource dependence, rural development, and rural poverty (Rural Development Research Report No. 48). Washington, DC: Economic Research Service, U.S. Department of Agriculture. (ERIC Document Reproduction Service No. ED 258 775)
- Devin, M. (1985). Deferred repair and maintenance in selected Kansas schools. Unpublished doctoral dissertation, Kansas State University, Manhattan, KS.
- Diaz et al. v Colorado State Board of Education. Superior Court of Colorado City and County of Denver, No. C-73688 (1977).
- Dunne, F. (1983). Good government v self-government: Educational control in rural America. Phi Delta Kappan, 65(4), 252-256.
- Edgewood Independent School District v Kirby. No. 362,516 (District Court of Travis County, 250th Judicial District of Texas, June 1, 1987).
- Friedman, L. (1977). The ambiguity of Serrano: Two concepts of wealth neutrality. Hastings Constitutional Law Quarterly, 4(3), 487-503.
- Guthrie, J. (1979). Organizational scale and school success. Educational Evaluation and Policy Analysis, 1(1), 17-27.
- Haas, D., & Sparkman, W. (1988). Financing school facilities in Texas. Journal of Education Finance, 13(4), 413.
- Helena Elementary School District No. 1 and High School District No. 1 of Lewis and Clark County; Billings Elementary School District No. 2 and High School District No. 2 of Yellowstone County et al. and Montana Education Association et al. v State of Montana; and the Montana Board of Public Education; and the Montana Superintendent of Public Instruction. Cause No. ADV-85-370. January 13, 1988.
- Honeyman, D., Thompson, D., & Wood R. (1989). Financing rural and small schools: Issues of adequacy and equity. Charleston, WV: ERIC Clearinghouse on Rural and Small Schools.
- Honeyman, D., & Stewart, G. (1985b). Capital fund mechanisms and the condition of facilities in rural and small schools. Research in Rural Education, 3(2), 79-83.
- Jenkins v State of Missouri. W.D. Mo. 639 FSupp 19, aff as mod 807 F2d 657, cert den 108 Sct 70, 98 LEd 2d 34 and Kansas City, Missouri School Dist v Missouri, 108 Sct 70, 98 LEd 2d 34, September 15, 1987.
- Jennings, L. (1988a, November 9). Judge allows South Carolina districts to participate in lease-purchase deals. Education Week, p. 12.

- Jennings, L. (1988b, October 19). Thirty-eight Ohio districts seek help from state 'bail-out' funds. Education Week, p. 12.
- Lujan v Colorado State Board of Education. 649 P.2d 1005 (1982).
- MacPhail-Wilcox, B., & King, R. (1986). Production functions revisited in the context of educational reform. Journal of Education Finance, 12(2), 191-222.
- Mathis, N. (1988, November 30). Texas panel ducks aid issue, but suggests new reforms. Education Week, p. 3.
- Mathis, N. (1989, March 1). Escalating 'bricks-and-mortar' cost: The problem nobody wants. Education Week, p. 1.
- Mid-Continent Regional Educational Laboratory. (1987, Spring). Policy Notes. 2(3).
- North Carolina State Department of Public Instruction. (1986). A survey of public school facility needs to meet the requirements of the basic education program. Raleigh, NC: North Carolina Department of Public Instruction.
- Oklahoma State Department of Education. (1987). State capital improvement master plan for public common schools. Oklahoma City: Oklahoma Department of Education.
- Pauley v Kelly, 255 S.E.2d 859, (W. Va. 1979); later changed to Pauley v Bailey, 324 S.E.2d 128, (1982); Pauley v Gainer, 353 S.E.2d 318.
- Robinson v. Cah 11, 289 A.2d 569 (N. J. Super. 1972).
- Rossmiller, R. (1987). Achieving equity and effectiveness in schooling. Journal of Education Finance, 12(4), 561-577.
- Salmon, R., & Thomas, S. (1981). Financing public school facilities in the 80s. Journal of Education finance, 7(1), 88-109.
- Salmon, R., & Wilkerson, W. (1984). Financing public school facilities. In L. Webb & V. Mueller (Eds.), Managing limited resources: New demands on public school management (Fifth Annual Yearbook of the American Education Finance Association, p. 113ff). New York: Ballinger.
- San Antonio Independent School District v Rodriguez, 411 U.S. 1, 93 S.Ct. 1278 (1973).
- Serrano II, 18 Cal.3d 728, 135 Cal. Rptr. 345 557 P.2d929 (1976).

Serrano v Priest, 487 P.2d 1241 (1971).

Shofstall v Hollins, 515 P.2d 590, (1973).

Stephens, E. (1988). The changing context of education in the rural setting. Charleston, WV: Appalachia Educational Laboratory. (ERIC/CRESS Accession No. RC 017 110)

Tennessee Small Counties System v Governor McWherter et al. Filed in the Chancery Court for Davidson County, Tennessee. Received July 8, 1988, Attorney General's Office.

Thompson, D., Camp, W., Horn, J., & Stewart, J. (1988). State involvement in capital outlay financing: Policy implications for the future. Manhattan, KS: Kansas State University. (ERIC/CRESS Accession No. RC 016 916)

Thompson, J. (1986). Funding and spending in paradise: Notes on the Hawaii model of school finance. Journal of Education Finance 11(3), 282-294.

Tompkins, R. (1977). Coping with sparsity: A review of rural school finance. In J. Sher (Ed.), Education in rural America: A reassessment of the conventional wisdom (pp. 125-155). Boulder, CO: Westview Press.

Walker, L. (1989). Wolves at the schoolhouse door. Washington, DC: Educational Writer's Association.

Webb, L. (1972, January). Equity in state provisions for financing capital outlay. (Paper presented to the Arizona State Legislature, Phoenix, Arizona).