Like all capitalist nations which have gone through a development process, the United States has relied partly on the rural-to-urban transfer of resources for the growth of an industrialized urban complex. The existence of a market-dominated rural sector and a noncompetitive (administered-price) urban sector has resulted in a major transfer of capital while the adoption of labor-saving technology within the farm sector has resulted in vast quantities of human migration. Because this rural-to-urban flow has also been affected by the educational system, this paper focuses on educational finances and migration of educated persons from rural areas in Kansas. Discussed are: geographic (rural-to-urban) transfers; an analysis of paying ability with respect to rural vs. urban counties and socioeconomic and occupational groups; and the effects of various statewide taxing schemes. Tabular data cover six groups of Kansas counties (most rural, moderately rural, slightly rural, slightly urban, moderately urban, and most urban) for: per capita revenues from county and outside sources; annual per pupil educational costs and losses due to out-migration; per capita indicators of property taxes and paying ability; effective rates of income, sales, and property taxes paid according to individuals' adjusted gross income; difference between the average cost per pupil and the per pupil revenue generated had the State imposed a statewide taxing scheme; and per pupil State aid under old and new formulae. (NQ)
EQUITY IN FINANCING PRIMARY AND SECONDARY EDUCATION --

A MIDWESTERN EXAMPLE*

Jan L. Flora
Department of Sociology
Kansas State University
Manhattan, Kansas 66506

[1974]

* Research supported by the Kansas Agricultural Experiment Station, Project 753. Opinions expressed are those of the author, not of the Experiment Station or of Kansas State University.

Appreciation is expressed to M. Mason Gaffney and Cornelia B. Flora for reading earlier versions of this paper.
INTRODUCTION

The underlying thesis of this paper is that the United States, as indeed all capitalist nations which have gone through the development process, has relied in part on the rural-to-urban transfer of resources to fuel the growth of an industrialized urban complex. The existence of a market-dominated rural sector, on the one hand, and what more and more has come to be a non-competitive or administered-price urban sector, on the other hand, has resulted in a major rural-to-urban transfer of capital. Furthermore, the wholesale adoption of labor-saving technology within the farm sector—a process which has gone much further than in the rest of the economy—has resulted in the transfer of vast quantities of human capital from rural to urban areas. Investment per agricultural worker (including self-employed farmers and family helpers, as well as hired workers) is \(4\frac{1}{2}\) times the national average.

The educational system has also made its contribution to this rural-to-urban flow. Thiesenhusen explains the consequences for rural America of these dynamics:

By relying too heavily on farm-financed social welfare, our affluent country has consistently overlooked its rural poor. While liberals may abhor this neglect, they must admit that the "agrarian dualism" which developed throughout this century had some important advantages: one subsector of farming [commercial sector] has provided immense production, while the other [small farm sector] afforded a stopgap matrix of jobs that retarded premature cityward migration. Through primarily locally financed schools, agricultural communities have helped to prepare farm people to be more productive in agriculture if they remained, and in urban employment if they migrated.

Whether or not the exploitation of rural areas and of the inhabitants who failed to migrate to the cities was inevitable or desirable in the context of national development, it is clear that in this so-called post-
industrial society, adequate resources are available in urban America to reverse the flow of resources and remove some of the inequities created by the development process.

This paper focuses on one aspect of current rural-urban intercourse—that of primary and secondary school financing—in a limited geographic area where historically rural political forces have dominated: the State of Kansas. As a result of an outdated taxation structure, low prices for agricultural products, and continued capital-intensive technification of agriculture, the rural-to-urban transfer of human and economic resources has continued. With respect to both geographic community (rural vs. urban) and socio-economic group, I will attempt to document the inequities in the system in terms of ability to pay.

What criteria can be used to determine fairness of the taxing system? Although perfect equity cannot be achieved, I believe it is fair to view a family's contribution to public educational costs as a retroactive payment for the parents' educations. It is the individual who benefits economically from his education, not his parents. (This is becoming more true with the increase in social security, retirement plans, and health insurance; children support their parents in old age much less than was true a few decades ago.) Hence, an individual who received a good education (either in number of years or in quality) should contribute more to public education than someone who received a mediocre education. The quality of one's education is to some degree reflected in his income level or total assets after he enters the labor force. Hence, income or wealth (the relationship between these two measures of ability to pay and their relative merits will be discussed later) will be viewed as the basis for discussing how equitable alternative taxation systems are.
Geographic (rural-to-urban) transfers will be discussed first, followed by an analysis of ability to pay with respect to rural vs. urban counties and socioeconomic and occupational groups. Then the effects of various state-wide taxing schemes will be assessed.

WHERE DO LOCAL TAX REVENUES COME FROM FOR URBAN AND RURAL COUNTIES?

In 1970, 46 percent of state and local governmental expenditures in Kansas went for education -- by far the largest single item in combined state and local budgets. Ninety-nine percent of local revenues in Kansas are derived from property taxes. (Only 2.3% of state revenues are from property taxes.) About 58% of local taxes are collected by school districts. Approximately 65% of primary and secondary costs are financed on the local level (30% from the state and 5% from the federal government). Since school costs make up such a large percentage of local governmental expenditures and since primary and secondary school taxes are raised principally at the local level, it is useful to look at the sources of local governmental revenues. Table 1 shows the distribution of per capita revenue for six groups of counties, according to how rural or urban they are. The more rural the county, the higher its per capita revenue and, therefore the higher its expenditures. This reflects the higher costs of government services in rural areas. The most rural counties raise nearly twice as much revenue (72% more) from local sources on a per capita basis as do the most urban counties. Although they receive slightly more revenue (24% more) from outside the county than do urban counties, the percentage of revenue raised within a county is higher for rural counties than for urban counties, ranging
from 76% for the most rural counties to 69% for the most urban. Rural counties tend to be relatively more self-sufficient.

DO RURAL OR URBAN COUNTIES HAVE HIGHER EDUCATIONAL COSTS AND WHERE DO EDUCATIONAL TAXES COME FROM?

The higher cost of services in rural areas is corroborated by figures on education costs. Per pupil costs in the most rural counties are 53% higher than in the most urban counties (see Table 2). Of course, part of the difference — but only a small part — is due to greater transportation costs in rural areas. (The difference in transportation costs between the two extreme groups is $54 per pupil\(^1\) while the difference in total costs is $305 per pupil.)

(Table 2 about here)

Over 40% of the difference in school costs between the two extreme groups is due to instructional costs.\(^1\) The single factor that explains the greatest amount of variation in school costs is the pupil-teacher ratio.\(^2\) It explains more of the variation than do total enrollment, pupil density, and number of attendance centers per district. Rural schooling is more expensive because of greater overhead resulting from low enrollments.

WHICH COUNTIES LOSE AND WHICH GAIN FROM MIGRATION OF YOUTH AND HOW MUCH?

Table 2 indicates the annual educational losses to out-migration for each group of counties, based on the out-migration of post-high school youth in the decade of the sixties (those who were teenagers in 1960 and who were in their twenties in 1970). The four most rural groups show annual dollar losses approaching or exceeding $200 per pupil. This compares with a state-wide average of $370 spent per pupil by local governments in Kansas.
and a total per pupil cost of over $625 for the state as a whole. The moderately urban group shows a loss of nearly $120 per pupil. The most urban group of counties benefits somewhat from the out-migration from the other five groups. They show a gain of $37 per pupil. Of these 13 counties only five -- Geary, (Ft. Riley Army Base), Johnson, (suburban Kansas City), Leavenworth (suburban Kansas City), Sedgwick (Wichita), and Shawnee (Topeka) -- had a net in-migration of young persons. Five other counties, where state universities or colleges are located (three are in the most urban group; two in the moderately urban group), had net in-migration if college students were included. Correcting for their temporary populations gave each of those five a net out-migration of young people.

The five most rural groups show annual dollar losses of between 35 and 43 per cent as a percentage of locally collected school taxes. The thirteen counties in the most urban group (representing 60% of the state's primary and secondary students) showed a net gain of 11%. (As indicated in the notes to Table 2, both the gains and losses are estimated conservatively.)

That all but the most urban group show high net out-migration suggests that Kansas as a whole has a serious net loss of educated persons. Between 1960 and 1970, Kansas had a net out-migration of 6.2%. For the cohort 10 to 19 years old in 1960 and 20 to 29 in 1970 the out-migration rate was slightly higher, 6.9%. This represents an annual per pupil loss for the entire state of $45 (Table 2). It is estimated that over the past 20 years, out-migration has cost Kansas nearly $1.5 billion, or almost $75 million per year in cash outlays for education and in opportunity costs. Kansas, a relatively rural state, has been losing population to more metropolitan states.
The more rural areas spend more per pupil, pay higher per capita property taxes, and pay a higher percentage of the costs of local government than do the most urban areas. Then the rural and moderately urbanized areas lose over a third of their investments in primary and secondary education to out-migration, which occurs before the out-migrants have made any significant productive contribution to the county that educated them. Similar, although weaker, patterns of net migration occur among rural and urban states.

ARE RURAL OR URBAN COUNTIES MORE ABLE TO AFFORD EDUCATIONAL COSTS?

At first glance, it would appear that although rural counties pay more per pupil for education, they also show a greater ability to pay than do urban counties (see the first three columns of Table 3). Per capita assessed property, and per pupil valuation show a steep linear decrease from "most rural" to "most urban" counties. In order to make up (Table 3 about here)

for the deficiencies in property valuation, the more urban counties were obliged to institute higher mill levies than the more rural counties. The mill levy for the most urban group is nearly 2/3 greater than that for the most rural group of counties.

Columns 4-6 of Table 3 indicate a quite different situation. Per capita property taxes increase noticeably and in a linear fashion from the "most urban" group of counties to the "most rural" group. Total Personal Income, the most accurate measure of income available, 17 shows a curvilinear relationship to rurality. The most rural and the most urban counties have the highest mean per household incomes. The most rural counties are Western
Kansas counties characterized by extensive farming. They have been successful in exporting their poverty. They represent only a small fraction of the State's population, while the most urban group contains sixty per cent of the State's primary and secondary students. (The income index for the four largest counties, representing the three SMSA's in the State—Wichita, Kansas City, and Topeka—, is 129, noticeably higher than the most rural group and the remainder of the most urban group. These four counties contain over forty per cent of the state's students.)

Column six relates property taxes to total personal income. Were it not for the above-average income of the most rural group there would be a linear decline in percentage of income paid in property taxes as one goes from rural to urban. The four more rural groups have rates which are within less than one percentage point of each other. The moderately rural group (that paying the highest rate) pays a percentage which is over eighty per cent greater than the rate paid by the most urban group (that paying the lowest rate).

How does one reconcile the figures presented in the first three columns of Table 3 with those of the last three columns? This question leads to a discussion of wealth versus income as the proper basis for assessing ability to pay.

Gaffney argues convincingly that wealth is the only appropriate measure of ability to pay. Wealth is much more unequally distributed than is income. (While the top five percent of families received 14% of the income in the U.S. in 1970, the wealthiest five percent of adults held 53% of total wealth in the mid-sixties.) Ultimately, one's ability to spend or to pay taxes is determined by the wealth he holds, not his income. Thus, income should not be used as the yardstick by which to measure the equity of a particular tax.
However, no general wealth statistic is available for Kansas counties, except for the property valuation, the equity of which we are attempting to test. We can only assume that income, in the aggregate, is roughly correlated with wealth.

In a region consisting principally of farmers and proprietors, the property tax is a proportional or even progressive tax, but as the economy diversifies this ceases to be true. Orazem and Trostle explain:

...as the economic structure of society becomes less agricultural, the ability to pay will not be so well represented by property ownership as it was previously. As a locality becomes more urban there may be a breakdown in the relationships between property value, property income, and other measures of the ability to pay taxes.20

The property tax, if it is to be equitable between different occupational groups, must tax all kinds of wealth at the same rate. This has not occurred in the U.S.21 In Kansas 61% of all property taxes were levied on real estate in 1971, while only 2.1% of property taxes derived from "intangible" personal property (stocks, bonds, savings accounts).22 Thus, within rural areas, where most property is real estate, the property tax is more equitable than in urban areas. Orazem and Trostle found that for the 31 most rural Kansas counties (the two most rural of the six groups of counties) the counties with high per capita income also had high per capita property valuation and high per capita income from property. (R² = .76 and .71, respectively). In the case of the 33 most urban counties, the relationship between per capita income, on the one hand, and property valuation and property income on the other, was nearly zero (actually slightly negative).23 This suggests that in the more urbanized areas of Kansas there is little relationship between income and property tax payments. This is corroborated in column 3 of Table 4, which indicates that with respect to adjusted gross income, the property tax is sharply regressive for all Kansans. For farmers (column 7), the pattern is one of proportionality except at the extremes.
The data in Table 4 were obtained by Olson and Sweetland from a sample of 10,000 Kansas income tax returns for 1968. They point out that the use of income tax returns creates a number of biases. In general, tax rates in upper and lower income brackets are overestimated, while rates in the middle brackets are rather accurate. Allowing for these inaccuracies, it is still clear that the sales tax and the property tax are regressive while the state income tax is progressive for the population as a whole. The total effect of the three taxes is clearly regressive, resulting in large part from the magnitude and regressiveness of the property tax. Kolko indicates that state and local taxes are regressive for the nation as a whole.

Farmers pay higher property taxes than does the population as a whole. (Compare the absolute percentages in columns 3 and 7 of Table 4 for each income group.) Agricultural land in Kansas accounts for 21% of all tangible and intangible property taxes and 34% of all real estate taxes. Yet farmers (farm owners and managers) make up only 10% of the employed males in the state.

For farmers with income between $4,000 and $50,000 the proportion of gross adjusted income paid in property taxes is fairly constant (at least, there is no discernible trend among these income categories). The rate paid by farmers with income less than $4,000 is considerably higher, reflecting the precariousness of farming in any given year and the difficulty small farmers have in making a profit, as well as an underestimation of income in these brackets because transfer payments are not included in the gross adjusted income. The rate is much reduced for farmers with gross adjusted incomes exceeding $100,000. This may reflect in part the fact that many of them have substantial non-farm income.
Taxation of intangibles at a rate the same as or approaching the rate for real estate would largely eliminate two inequities: (1) the lack of correlation between income levels and property taxation within urban areas, and (2) the inequitable balance in property taxation between urban and rural areas.

A number of criticisms are leveled at the intangibles tax. Snyder does an excellent job of dealing with them. The most serious ones are: (1) ease of concealing ownership of intangible property and (2) double taxation—intangible property is merely a representation of the physical taxable property. With respect to the first, he points out that the federal income tax system has assessed stiff penalties on concealment of property. The IRS has information which is available to the states on investment income for all persons filing Federal income tax forms. If the problem of divestiture of investments prior to tax day is a problem, a tax on income from intangibles is an alternative. (Nine states, including Kansas, have such a tax, although the rates are quite low.)

With respect to double taxation, in a sense there is double taxation on real property: once in the form of property tax and again on the income derived from it in the form of income tax. To fail to tax intangibles as property is to leave this form of capital taxed one time less than is true for other forms of property.

Politically, it is easy to see why use of the intangibles tax as an instrument for restoring public confidence in the property tax has not reached the level of public awareness in most parts of the country. Investment wealth, particularly public stock ownership, is the most concentrated form of wealth in this country. More than 70% of publicly held corporate stock is held by the wealthiest one percent of the population. Real estate is much less con-
In 1967, while 30% of the real estate wealth was held by individuals with a gross estate size of over $60,000, 88% of corporate stock wealth was held by this group. Taxation of intangibles at a rate approaching the rate for real estate and personal property would make the property tax a progressive tax. It would also have the effect of partially closing the long term capital gains loophole by taxing all capital gains rather than only 50% of them as does the federal income tax. Snyder estimates that with only an 8 to 10% tax on income from intangibles (a rate considerably below the rate at which physical property is taxed), new taxes amounting to 25 or 30% of present property tax collections would be raised. Until intangible property is taxed at a rate approaching that for real property the property tax will remain an inequitable tax.

WHAT ARE THE EFFECTS OF ALTERNATIVE STATE-WIDE SCHOOL TAXATION SCHEMES?

Orazem and Janssen have calculated deficits and excesses (that would be generated per pupil with respect to current per pupil costs of education) for each school district in Kansas under different state-wide taxing systems. The results are summarized by six groups of counties in Table 5. A positive number indicates that, assuming that per pupil costs remain the same as in 1970, the county would generate more than the amount required to run its schools. The excess would go to pay for the deficit in counties with a negative number. That is, counties with a negative number would be taxed less than it currently costs to run their schools.

At first, one would think that a state-wide uniform property tax would be more related to ability to pay than the current patchwork system, but
because of the relatively small amount of per capita taxable property in urban areas compared to rural areas, urban areas would then pay even less than now, and the already over-burdened rural areas (the three rural categories) would pay nearly double what they now pay (compare with column 3 of Table 2). Even a "compromise" formula in which 50% of schools costs were from a uniform property tax and 50% from a proportional income tax would transfer money from counties in the three rural categories to the most urban counties.

Orazem and Janssen calculate that a 12.6% state income tax (with no graduations) would be necessary to fund schools exclusively by state income tax. Even a nongraduated or proportional income tax would begin to redress the imbalance between urban and rural areas with respect to ability to pay. Under it, the 13 most urban counties would pay $106 more per pupil than they did in 1970 -- not a serious burden because it is considerably less than that already paid by the more rural counties. Per family income in the most urban counties is over $2,000 more than for any of the other groups of counties (except for the most rural group). Hence, these counties would not be overburdened if a state-wide income tax were adopted to finance school costs. Just as important is that the burden of school taxes would be shifted toward those most able to pay within each county, especially the more urban counties.

Table 6 shows for the six groups of counties the county-based sales tax rates necessary to raise revenue equal to the total property tax and the school property tax collected in each county in 1971. This is the amount of new sales tax required to completely replace the property tax (column 1)
or to replace the portion of the property tax which goes to the schools (column 3). The absolute rates are not nearly as important as the relative rates for the various groups of counties. The three most rural groups would have rates which are about double the two most urban groups. Hence, if a state-wide uniform sales tax rate were employed to cover educational costs, it would shift resources from the urban areas to the rural areas, much in the same fashion as a state-wide income tax would. However, with respect to individuals or families, the sales tax is quite regressive (see Table 4), and is therefore not an equitable tax.  

Now that it is clear what the effects of replacement of the local property tax by state-wide property, income or sales taxes are, it is easier to understand the effects the reform school finance law passed by the Kansas legislature in 1973, under pressure from a court decision (Johnson County District Court, Caldwell vs. State of Kansas, May 1972) to eliminate the dependence of per pupil school expenditures on the wealth of the district. (The constitutional imperative of adhering to this decision was removed by the U.S. Supreme Court decision in San Antonio Independent School District v. Rodriguez in March 1973.) The formula for distributing state aid to schools was changed and the proportion of school costs covered by the state were increased somewhat. The formula has some progressive elements such as the reduction of the state-wide sales tax from 8 mills to 2 mills and the granting of state aid partially on the basis of district enrollment (the smaller the district, the greater the per pupil state aid).  

State aid is also based on district wealth--the wealthier the district the less state aid it receives. District wealth is defined as the sum of taxable income and adjusted property valuation. Thus with respect to the wealth measure the more rural counties (those with the highest per pupil valuations) will tend to receive less state aid than those
with lower per pupil valuations, the more urban counties. Property valuations will have more influence in the formula than will taxable income since the variance of the former is considerably greater than the latter (see Table 3), and since total property valuation exceeds income in all counties. Per capita income in the most urban group of counties is almost the same as for the most rural counties, but the per pupil valuation for the most rural group of counties is nearly triple that for the most urban group. Table 7 compares the amount of state aid received by the six groups of counties in the 1970-71 school year and the estimated amount to be received under the first year of operation under the new formula. Obviously, the three more urban groups fare much better than the three most rural groups under the new formula, both in terms of total state aid and increase in state aid. The most rural group of counties is particularly hard hit. It has the highest per pupil school expenditures. This group ends up with less state aid than previously, declining from fifth to last place among the six groups. The new state aid derives more from income and sales taxes and less from a state-wide property tax than was true prior to 1973. However, given the way it is distributed among rural vs. urban counties, it is not likely that the new system is any more equitable than was the old.

Obviously, in the Kansas case and in others, the failure to provide equal protection of the laws through equal educational opportunity is due to a simple shortcoming: district wealth was partially or totally determined by property valuations. The Texas ruling, which was fortunately struck down by the Supreme Court (for the wrong reasons), made the assumption that property valuations were a proper indicator of a district's wealth. If intangible property were taxed
at a rate similar to personal property and real estate, then property valuations could be used as an indicator of the wealth in the district. Then a state-wide property tax could be used to raise state aid for the purpose of equalizing educational opportunities among the districts in a state.

Thus a state-wide property tax—or even a combined state-wide property and income tax—which replaced the system of local property taxes would shift the burden of primary and secondary school finance even more squarely on the rural areas. An income tax or sales tax would be more equitable geographically. However, the sales tax is extremely regressive. Thus, the only two acceptable alternatives to the existent property tax for financing primary and secondary education are the income tax and a property tax which taxes intangibles at a rate approaching that for "tangible" property. The intangibles tax would be more progressive than the income tax since it would tax wealth rather than income, and would presumably close the capital gains loophole.

CONCLUSION

This paper has attempted to show that rural-to-urban transfers of resources which are ubiquitous with industrial development also occur in the post-industrial society. Although it may be true that inequalities tend to diminish once a country reaches a certain level of development, the political imbalances created by these inequalities tend to perpetuate the disparities. This would seem to be particularly true with respect to rural-urban inequalities since the resource transfer from rural to urban areas includes human migration. Thus, numerically, rural people, and agriculturalists in particular, no longer have the strength of numbers.

In viewing one aspect of this resource transfer from rural-to-urban areas—that of educational finances and migration of educated persons from rural areas
in the state of Kansas—we found that, although the societal economic exigencies for this resource transfer had disappeared, the process continues. Even when forced by a court decision to revamp the educational financing structure, the Kansas legislature chose, if anything, to accelerate the rural-urban flows. This resulted from a compromise between a Democratic governor (who wanted to reward his supporters, chiefly urbanites) and a Republican-dominated legislature. The Republicans were unable to take a clear cut stand in favor of rural areas because even within the state GOP urban influences are quite important because of the dominant business orientation of the party (and indeed of both parties—especially on the national level where the limits within which discussion will take place are set), the possibilities of making the property tax a tax on all property didn't even reach the level of public consciousness.

Recent talk promoting rural development (it has not gotten much past the talking stage) indicates a growing awareness that much of this country's rural wealth has historically gone to subsidize urban growth. That policy may have been appropriate in the early stages of industrial development, but it makes little sense today. Rural areas are in serious trouble because of high rates of out-migration, low incomes, and high costs of public services. Urban areas are in trouble because concentrating people in urban areas has caused environmental and human crises. A factor contributing to this over-concentration has been rapid rural-to-urban migration, caused in part by low farm prices and the relatively high cost of urban-produced goods. Devising a school taxation system based on ability to pay represents an opportunity to break this vicious circle of dependence.
FOOTNOTES


4Costs of higher education are excluded since higher education is not principally resident education; most students must migrate to another county to receive higher education. Also, funding for higher education comes principally from the state and national levels. Thus it is difficult to assign costs and benefits according to locality.


7 Ibid., pp. 16-17; figures are for 1972.


9 The 105 Kansas counties were classified into six groups according to a composite index based on total population, percentage of population that was rural farm, and farm incomes as percentage of total income. See Ronald Gene Trostle, "An Analysis of Alternative Tax Sources to Finance Local Services in Kansas," unpublished Ph.D. dissertation (Manhattan: Kansas State University, 1971), pp. 76-77.


11 Loc. cit.


13 Four of the five have military installations. It was believed legitimate to include military personnel, because although many of the in-migrants will not remain long, they will be replaced by others. Also, each of these counties received relatively large amounts of federal aid to off-set the cost of educating military dependents. Leavenworth county also has a sub-
substantial prison population. Hence, its in-migration rate may, for our purposes, be slightly inflated.


17 It is superior to census measures of mean income because self-employed persons are more likely to underestimate income than are salaried persons. Rural areas have a higher percentage of self-employed persons than do urban areas. It is not clear that farmers responding to the census explicitly include farm subsidies in their income. Home consumed agricultural products are not included in the census figure. Both of these are explicitly included in Total Personal Income. Total Personal Income is based principally on data provided by the Office of Business Economics of the U.S. Department of Commerce, supplemented by various other sources of county-level data on each of the various components of income—wages and salaries, property income, proprietors' income, transfer payments, and contributions to social insurance. Thus there is no obvious bias of income estimates with respect
to rural vs. urban counties, except that the incomes in Wyandotte and Johnson Counties, two of the largest counties in the most urban group, were underestimated because of an underestimation of the earnings of those inhabitants who worked in Kansas City, Missouri (personal information from M. Jarvin Emerson, Chief Economist, Kansas Office of Economic Analysis).

For a description of the methodology employed in calculating Total Personal Income, see Darwin Daicoff, Kansas County Income, 1950-1964, (Topeka: State of Kansas Office of Economic Analysis, 1966), Chapter 4.


19 Charles H. Anderson, Toward a New Sociology, revised Edition (Homewood, Ill.: The Dorsey Press, 1974), pp. 80 and 90. See Gaffney, op. cit., p. 414 for a summary of results from several other studies on wealth concentration. The results are similar to Anderson's figures.


21 Twenty-one states have no tax on intangibles. Twenty states have a "low profile" ad valorem tax which either excludes corporate stocks or allows deductions for property taxes levied on the corporations themselves. Nine states impose a tax on earnings from intangibles, ranging from six per cent downward, with certain important investment earnings excluded in most cases. See Lester B. Snyder, "Taxing the Unlanded Gentry: a New Trend in Taxation of Intangible Property," Connecticut Law Review, Vol 4 (Fall 1971), pp. 315-318.
Publicly held corporate stocks alone account for at least twenty-five percent of the nation's wealth (Snyder, op. cit., p. 310). Kansas taxes the earnings from intangible income at the rate of three percent.

In urban areas, a larger proportion of taxed property is corporately—rather than individually—owned. This fact may contribute to the low correlation between property income and valuations with personal income. However, it is not the principal factor since in the 31 rural counties income from taxed property makes up 27.9% of total income, while in the urban counties, property income is only 16.1% of total income (Orazem and Trostle, op. cit., p. 636).

"If total or personal income were used to calculate effective tax rates . . . the ostensible tax impact would be substantially reduced in the upper and lower income brackets. In the upper brackets, roughly half of capital gains is excluded from adjusted gross income; at lower income levels, transfer payments are excluded." Cited from Edwin Olson and Douglas P. Sweetland, "Kansas Individual Income Tax," in Kansas State University and the University of Kansas, State and Local Finances. Research Paper No. 6 (Manhattan: Kansas Agricultural Experiment Station, 1972), p. 141.

One should exercise caution in assessing the degree of progressiveness of the state income tax. Gross adjusted income from the Federal income tax forms is not an independent yardstick. Its use in this case is analogous to the use of property valuations as a yardstick for determining the progressiveness of the property tax. However, one can be rather certain of its progressiveness in the lower and middle income
brackets. (Note that for the population as a whole, the rate for those with incomes over $100,000 is lower than for those between $30,000 and $100,000. If untaxed capital gains were included in gross adjusted income the regressiveness within these upper income brackets would be even greater.


27 Flinchbaugh, op. cit., p. 18; figures are for 1971.


29 In the case of farmers, the portion of capital gains on which no tax was paid was added to adjusted gross income in figuring the property tax rate. Thus, farmers' property tax rates in the higher income brackets are not overestimated as is the case for all occupations, for which the capital gains information was not available.

30 Snyder, op. cit., pp. 323-324.

31 Ibid., p. 336.

32 Ibid., pp. 325-333, contains a thorough discussion of the "double taxation" question.

33 Ibid., pp. 310-311.
34 Orazem and Janssen, op. cit., p. 3.

35 The most rural counties pay over $300 more per pupil than do the 13 most urban counties (from column 3 of Table 2).

36 Kolko indicates that the higher one's income the greater his propensity to save. In 1950, a fairly typical year, the highest income decile received 29% of all personal income in the U.S., but it had 73% of all personal savings. The 20 or 30% of the population with lowest incomes generally show negative savings -- they spend more than they earn (Kolko, op. cit., 14 and 48).

37 The previous formula was based partially on the number of teachers in the district. Since the student-teacher ratio was lower in rural areas than in urban areas the most urban group of counties received less state aid than did any of the other groups (see column 1 of Table 7).


40 The governor supported distribution of state aid based on the property valuation per pupil. Those schools with high valuations would receive less state aid than before; those with low valuations would receive less. He
proposed an eight-mill state-wide property tax to pay for the new state aid. This would have replaced a ten-mill county levy. (Topeka Daily Capital, January 14, 1973, pp. 6 and 8).
<table>
<thead>
<tr>
<th></th>
<th>PER CAPITA REVENUE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL ($)$</td>
<td>FROM OWN SOURCES ($)</td>
<td>FROM OUTSIDE ($)</td>
<td>% FROM OWN SOURCES</td>
</tr>
<tr>
<td>Most rural (14)</td>
<td>433.05</td>
<td>327.36</td>
<td>105.7</td>
<td>75.6</td>
</tr>
<tr>
<td>Moderately rural (17)</td>
<td>398.89</td>
<td>289.79</td>
<td>109.1</td>
<td>72.7</td>
</tr>
<tr>
<td>Slightly rural (20)</td>
<td>353.45</td>
<td>256.40</td>
<td>97.1</td>
<td>72.5</td>
</tr>
<tr>
<td>Slightly urban (21)</td>
<td>327.55</td>
<td>226.19</td>
<td>101.4</td>
<td>69.1</td>
</tr>
<tr>
<td>Moderately urban (20)</td>
<td>303.39</td>
<td>211.06</td>
<td>92.3</td>
<td>69.6</td>
</tr>
<tr>
<td>Most urban (13)</td>
<td>275.38</td>
<td>189.83</td>
<td>85.6</td>
<td>68.9</td>
</tr>
</tbody>
</table>


SOURCE: Adopted from B. L. Flinchbaugh, "State and Local Finance in Kansas and Neighboring States," in Kansas State University and the University of Kansas, State and Local Finances in Kansas, Research Paper #6 (Manhattan, Kansas: Agricultural Experiment Station, January 1972), figure 1.1, p. 21.
<table>
<thead>
<tr>
<th></th>
<th>(1) Per Pupil Educational Costs</th>
<th>(2) Per Pupil State and Federal Aid</th>
<th>(3) Per Pupil Educational Costs Borne by County</th>
<th>(4) % of Educational Costs Borne by County</th>
<th>(5) Per Pupil Educational Losses Due to Out-Migration</th>
<th>(6) Minimum % of Educational Costs Borne by County Which Are Lost to Out-Migration</th>
<th>(7) Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Rural (14)</td>
<td>$878.32</td>
<td>$242.93</td>
<td>$635.39</td>
<td>72.3%</td>
<td>$-219.50</td>
<td>-35</td>
<td>13,628</td>
</tr>
<tr>
<td>Moderately Rural (17)</td>
<td>858.00</td>
<td>255.05</td>
<td>602.95</td>
<td>70.3</td>
<td>-235.02</td>
<td>-39</td>
<td>21,698</td>
</tr>
<tr>
<td>Slightly Rural (20)</td>
<td>807.85</td>
<td>266.40</td>
<td>541.45</td>
<td>67.0</td>
<td>-232.61</td>
<td>-43</td>
<td>29,814</td>
</tr>
<tr>
<td>Slightly Urban (21)</td>
<td>747.50</td>
<td>272.24</td>
<td>475.26</td>
<td>63.6</td>
<td>-192.25</td>
<td>-41</td>
<td>48,598</td>
</tr>
<tr>
<td>Moderately Urban (20)</td>
<td>597.82</td>
<td>277.99</td>
<td>319.83</td>
<td>53.5</td>
<td>-119.24</td>
<td>-37.3</td>
<td>98,538</td>
</tr>
<tr>
<td>Most Urban (13)</td>
<td>573.22</td>
<td>246.48</td>
<td>326.74</td>
<td>57.0</td>
<td>+ 36.71</td>
<td>+11.2</td>
<td>322,695</td>
</tr>
</tbody>
</table>

Average for Entire State 625.98  255.99  369.99  59.2  -45.37  | 534,971 |

NOTE: for sources and explanation of calculations, see next page.
TABLE 2

Sources: Columns (1) and (7), Frank Orazem and Donald C. Hines. "Public School Costs by Counties, 1970-71," (Manhattan: Cooperative Extension Service, Kansas State University, 1972), pp. 6-14.


Column (5): Calculated in the following manner for each county:
per pupil educational costs x median years of school completed for persons over 25 years of age x proportion of educational costs borne by the county x proportion of population between ages 10 and 19 in 1960 that migrated from the county by 1970 ÷ 10. (Each county was weighted according to total enrollment in the county in computing the figure for the six groups of counties.)

"Per pupil educational costs" was taken from Orazem and Hines, 1972, cited above. The average annual per pupil cost for the entire state was used ($625.98 -- see Table 2). This underestimates the losses for the four most rural groups of counties, since their educational costs are higher than the state average, and would slightly overestimate the losses of the moderately urban and the gains of the most urban counties. Therefore $597.82 was used for the moderately urban group and $573.22 was used for the most urban group. These are the average per pupil costs for these two groups of counties (Orazem and Hines, op. cit. 5).

"Median school years completed" was obtained from U.S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics -- Final Report PC(1)-C18 Kansas. (Washington, D.C.: U.S. Government Printing Office, 1972), Table 120, pp. 368-376. The simple average of the figure given for males and for females was taken. When it exceeded 12.0, 12.0 was used because higher education is not financed on a local basis. Although this average slightly overestimates the average amount of primary and secondary education obtained by persons over 25, it does not significantly overestimate the number of years of primary and secondary school completed by the younger generation which migrates since (1) educational levels are increasing over time and (2) it is probable that migrants are somewhat more educated than are non-migrants of the same age.
NOTES FOR TABLE 2 (continued)

This figure was multiplied by the proportion of the county's primary and secondary educational revenues generated by local taxes.

Out-migration rates were taken from unpublished computations by Cornelia Flora of the Kansas Agricultural Experiment Station Population Research Laboratory. She used the life table cohort survival method of computation. The life table utilized was that for Kansas for the years 1959, 1960 and 1961. The out-migration of the cohort 10-14 years old in 1960 and 20-24 in 1970 probably overestimates out-migration rate as some out-migrants might return later after completing military service or college. The out-migration of the cohort that was 15-19 years old in 1960 and 25-29 in 1970 underestimates out-migration rate as persons not yet 19 but having left high school by 1960 may have migrated from the county before the 1960 census. We believe that using the two cohorts together gives a close approximation of permanent out-migration of young people. However, this figure will, on the average, result in underestimating educational losses because the entire state showed negative net migration rates for all age groups between 1960 and 1970 with the sole exception being females who were 60 and more in 1960, and 70 and more in 1970. That is, all productive age groups showed a net out-migration from Kansas as a whole (C. Flora, "The Impact of Migration on Kansas." Bulletin 570, (Manhattan: Kansas Agricultural Experiment Station, 1973), Table 1.

Because out-migration was expected to be underestimated by this method for counties containing colleges of universities, out-migration rates for the two cohorts were inspected. Out-migration rates of the older cohort was significantly greater in seven counties with institutions of higher education. Five contained state-supported, four-year colleges or universities: Crawford, Douglas, Ellis, Lyon, and Riley counties. Therefore, the out-migration rate for the older cohort (those between 15 and 19 years old in 1960 and between 25 and 29 in 1970) was used exclusively for those five counties, as few students were expected to be 25 to 29 years old. In all five cases, college enrollment exceeded 50% of the number of people counted by the 1970 census between ages 15 and 24 (data was only available by five-year intervals). The other two counties, Marion and Atchison, showed 9% and 43%, respectively, of persons in the 15-24 cohort as being in college in 1970. In Marion county, other factors apparently were operating so the average of the two cohorts was used. The older cohort was used for Atchison county.

The out-migration rate between 1960 and 1970 was divided by 10 to obtain the annual out-migration rate of young people educated in a county, but who migrated before the county received any or much productive activity from them. The result appears in Column 5.
### TABLE 3. PER CAPITA INDICATORS OF PROPERTY TAXES AND ABILITY TO PAY
FOR SIX GROUPS OF COUNTIES, KANSAS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Rural</td>
<td>$4,780</td>
<td>$24,829</td>
<td>59.5</td>
<td>$347</td>
<td>123</td>
<td>8.67</td>
<td></td>
</tr>
<tr>
<td>Moderately Rural</td>
<td>$4,679</td>
<td>$26,381</td>
<td>62.5</td>
<td>$322</td>
<td>100</td>
<td>9.14</td>
<td></td>
</tr>
<tr>
<td>Slightly Rural</td>
<td>$4,348</td>
<td>$22,966</td>
<td>62.6</td>
<td>$291</td>
<td>89</td>
<td>8.76</td>
<td></td>
</tr>
<tr>
<td>Slightly Urban</td>
<td>$3,258</td>
<td>$16,533</td>
<td>70.7</td>
<td>$230</td>
<td>86</td>
<td>8.46</td>
<td></td>
</tr>
<tr>
<td>Moderately Urban</td>
<td>$2,433</td>
<td>$12,639</td>
<td>79.6</td>
<td>$210</td>
<td>94</td>
<td>6.67</td>
<td></td>
</tr>
<tr>
<td>Most Urban</td>
<td>$1,516</td>
<td>$8,933</td>
<td>97.5</td>
<td>$206</td>
<td>119</td>
<td>4.99</td>
<td></td>
</tr>
</tbody>
</table>

*For each group of counties, total personal income was divided by the total number of occupied housing units. In four of the five counties with significant numbers of military personnel, the average between "total number of occupied housing units" and "total number of families and unrelated individuals" was used as the denominator. These counties are Leavenworth, Riley, Sedgwick, and Shawnee. "Total number of families and unrelated individuals" was used as the denominator for Geary County. Occupied housing units was chosen since it does not include group living quarters, thus eliminating the effect of many students who, if included, would tend to artificially depress the per household income in counties with colleges or universities. (Students are usually not in the full-time workforce; those students living off campus contribute to the occupied housing units.) Four of the five counties with military personnel also had significant numbers of students; hence the average between the larger figure (families and unrelated individuals) and the smaller figure (occupied housing units). Geary County has a large military population, but no institution of higher education. (Military personnel, being full-time members of the labor force, should be counted in determining household income.)
Once personal income per household was determined for the six groups of counties, the resultant figures were divided by the state-wide average ($10,594) and multiplied by 100. Thus, for example, the moderately rural counties with an average per household income of $10,568 had an index of approximately 100.

SOURCES:


Column 3: Ibid., pp. 22-23.

Column 4: Orazem, Frank and Donald C. Hines. "Property Tax," in Kansas State University and the University of Kansas. State and Local Finances in Kansas. Research Paper No. 6, (Manhattan, Kansas: Kansas Agricultural Experiment Station, January 1972), Table 5.11, pp. 117 ff.


Column 6: Orazem and Hines, op. cit., Table 5.10, pp. 112 ff. (numerator) and Docking, op. cit. (denominator).
TABLE 4. EFFECTIVE RATES OF INCOME, SALES, AND PROPERTY TAXES PAID ACCORDING TO INDIVIDUALS' ADJUSTED GROSS INCOME, KANSAS, 1968

<table>
<thead>
<tr>
<th>Adjusted gross income, $</th>
<th>State income tax, %</th>
<th>State sales tax, %</th>
<th>Property tax, %</th>
<th>Total, %</th>
<th>State income tax, %</th>
<th>State sales tax, %</th>
<th>Property tax**, %</th>
<th>Total***, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 2,000</td>
<td>0.24</td>
<td>4.02</td>
<td>21.20</td>
<td>25.46</td>
<td>0.14</td>
<td>*</td>
<td>39.06</td>
<td>41.07</td>
</tr>
<tr>
<td>2,000 to 3,999</td>
<td>0.50</td>
<td>1.99</td>
<td>10.19</td>
<td>12.68</td>
<td>0.36</td>
<td>1.93</td>
<td>23.50</td>
<td>25.79</td>
</tr>
<tr>
<td>4,000 to 5,999</td>
<td>0.85</td>
<td>1.70</td>
<td>5.99</td>
<td>8.54</td>
<td>0.69</td>
<td>1.63</td>
<td>7.44</td>
<td>9.76</td>
</tr>
<tr>
<td>6,000 to 7,999</td>
<td>0.97</td>
<td>1.58</td>
<td>4.50</td>
<td>7.05</td>
<td>0.82</td>
<td>1.48</td>
<td>*</td>
<td>11.29</td>
</tr>
<tr>
<td>8,000 to 9,999</td>
<td>1.02</td>
<td>1.49</td>
<td>4.10</td>
<td>6.61</td>
<td>1.12</td>
<td>*</td>
<td>10.54</td>
<td>13.06</td>
</tr>
<tr>
<td>10,000 to 12,499</td>
<td>1.22</td>
<td>1.42</td>
<td>3.58</td>
<td>6.22</td>
<td>1.29</td>
<td>1.33</td>
<td>10.70</td>
<td>13.32</td>
</tr>
<tr>
<td>12,500 to 14,999</td>
<td>1.42</td>
<td>1.29</td>
<td>3.56</td>
<td>6.27</td>
<td>1.33</td>
<td>1.17</td>
<td>8.97</td>
<td>11.47</td>
</tr>
<tr>
<td>15,000 to 19,999</td>
<td>1.64</td>
<td>1.16</td>
<td>3.30</td>
<td>6.30</td>
<td>1.69</td>
<td>1.09</td>
<td>10.34</td>
<td>13.12</td>
</tr>
<tr>
<td>20,000 to 29,999</td>
<td>1.98</td>
<td>1.03</td>
<td>2.98</td>
<td>6.04</td>
<td>1.97</td>
<td>0.93</td>
<td>9.43</td>
<td>12.33</td>
</tr>
<tr>
<td>30,000 to 49,999</td>
<td>2.43</td>
<td>0.90</td>
<td>2.59</td>
<td>5.92</td>
<td>*</td>
<td>*</td>
<td>8.81</td>
<td>11.54</td>
</tr>
<tr>
<td>50,000 to 99,999</td>
<td>2.43</td>
<td>0.63</td>
<td>1.98</td>
<td>5.04</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>100,000 and more</td>
<td>2.33</td>
<td>0.24</td>
<td>1.12</td>
<td>3.69</td>
<td>2.07</td>
<td>0.34</td>
<td>1.86</td>
<td>4.27</td>
</tr>
</tbody>
</table>

* Variance is too large or the sample size is too small to place confidence in the reliability of the figure.

** These property tax rates are lower than rates based simply on the adjusted gross income because they take into account the half of capital gains on which no tax is paid.

*** In computing the total, the figure used in place of the asterisk was the average of the two adjacent figures. For the state sales tax figure for the "less than $2,000" group, 1.93% was used.
NOTES FOR TABLE 4

NOTE: In 1971, personal income, general property, and sales and excise taxes represented 76.5% of all state and local taxes. An additional 11.8% derives from motor fuels and vehicle registration and 3.6% from cigarette and liquor taxes. Both of these taxes are likely to be regressive. The remaining taxes include 2.9% for corporate income taxes and 5.2% miscellaneous (Flinchbaugh, op. cit.:17 and B.L. Flinchbaugh, "State and Local Finances in Kansas and Neighboring States," in Kansas State University and the University of Kansas State and Local Finances in Kansas. Research Paper No. 6, (Manhattan: Kansas State University Agricultural Experiment Station, 1972), p. 15.

Adjusted gross income is income after business expenses are deducted, but before deducting personal exemptions.

TABLE 5. **DIFFERENCE BETWEEN THE AVERAGE COST PER PUPIL AND THE PER PUPIL REVENUE GENERATED HAD THE STATE IMPOSED A UNIFORM-RATE INCOME TAX, PROPERTY TAX, OR BOTH, TO FINANCE PUBLIC PRIMARY AND SECONDARY SCHOOLS, SIX GROUPS OF COUNTIES, KANSAS, 1970**

<table>
<thead>
<tr>
<th>COUNTIES</th>
<th>TOTAL ENROLLMENT</th>
<th>100% PROPERTY TAX $</th>
<th>100% INCOME TAX $</th>
<th>50% INCOME &amp; 50% PROPERTY TAX $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most rural (14)</td>
<td>13,628</td>
<td>516.33</td>
<td>-318.50</td>
<td>98.92</td>
</tr>
<tr>
<td>Moderately rural (17)</td>
<td>21,698</td>
<td>414.81</td>
<td>-287.52</td>
<td>63.65</td>
</tr>
<tr>
<td>Slightly rural (20)</td>
<td>29,81-</td>
<td>509.96</td>
<td>-255.48</td>
<td>127.24</td>
</tr>
<tr>
<td>Slightly urban (21)</td>
<td>48,598</td>
<td>188.43</td>
<td>-176.75</td>
<td>5.84</td>
</tr>
<tr>
<td>Moderately urban (20)</td>
<td>98,538</td>
<td>57.07</td>
<td>-37.62</td>
<td>9.73</td>
</tr>
<tr>
<td>Most urban (13)</td>
<td>322,695</td>
<td>-141.03</td>
<td>+105.72</td>
<td>-17.66</td>
</tr>
</tbody>
</table>

*for current operations; does not include transportation and capital improvements

**NOTE:** Raising the approximately $327 million spent by the 311 Kansas school districts for operating purposes would have required a state average mill levy of 56.8 (100% property tax) or a 12.6% non-graduated income tax against Kansas taxable income (100% income tax) or a 28.4 property mill levy and 6.37% income tax (50% income and 50% property tax) (Orazem and Janssen, op. cit., p. 3).

TABLE 6. SALES TAX RATES WHICH WOULD BE PAID BY SIX GROUPS OF COUNTIES IF THE PROPERTY TAX WERE REPLACED BY A COUNTY-WIDE SALES TAX, 1970-71

<table>
<thead>
<tr>
<th>Counties</th>
<th>County Sales Tax Rate Necessary for 100% Replacement of Current Revenue from Property Tax 1971 (%)</th>
<th>% of General Property Tax Going to School Districts 1970</th>
<th>County Sales Tax Rate Necessary for 100% Replacement of Property Tax Which Goes to School Districts (Col. 1 x Col. 2) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Rural</td>
<td>24.6</td>
<td>57.1</td>
<td>14.1</td>
</tr>
<tr>
<td>Moderately Rural</td>
<td>24.8</td>
<td>56.5</td>
<td>14.0</td>
</tr>
<tr>
<td>Slightly Rural</td>
<td>22.1</td>
<td>55.4</td>
<td>12.2</td>
</tr>
<tr>
<td>Slightly Urban</td>
<td>17.2</td>
<td>55.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Moderately Urban</td>
<td>12.7</td>
<td>58.3</td>
<td>7.4</td>
</tr>
<tr>
<td>Most Urban</td>
<td>10.7</td>
<td>57.2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

NOTE: In calculating the tax rates for each of the six groups of counties, each county was weighted according to its 1971 property tax collections, obtained from Table 25 (pp. 22-23) of Flinchbaugh, 1972a (cited below).

SOURCES:

Column 2: Frank Orazem and Donald C. Hines, "Property Tax," in Kansas State University and the University of Kansas. State and Local Finances in Kansas, Research Paper No. 6, (Manhattan, Kansas: Kansas Agricultural Experiment Station, January 1972), Table 5.10, pp. 112ff.
### TABLE 7. PER PUPIL STATE AID UNDER OLD AND NEW FORMULAE, FOR SIX GROUPS OF KANSAS COUNTIES 1970-71 and 1973-74

<table>
<thead>
<tr>
<th></th>
<th>(1) State Aid 1970-71</th>
<th>(2) Proposed State Aid 1973-74</th>
<th>(3) Change in State Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most rural</td>
<td>239.26</td>
<td>223.88</td>
<td>-15.38</td>
</tr>
<tr>
<td>Moderately rural</td>
<td>245.68</td>
<td>289.33</td>
<td>+43.65</td>
</tr>
<tr>
<td>Slightly rural</td>
<td>257.61</td>
<td>243.95</td>
<td>-13.66</td>
</tr>
<tr>
<td>Slightly urban</td>
<td>259.86</td>
<td>375.98</td>
<td>+116.12</td>
</tr>
<tr>
<td>Moderately urban</td>
<td>249.06</td>
<td>357.69</td>
<td>+108.63</td>
</tr>
<tr>
<td>Most urban</td>
<td>222.02</td>
<td>335.14</td>
<td>+113.12</td>
</tr>
</tbody>
</table>

**NOTE:** In calculating the per pupil aid for each of the six groups of counties, each county was weighted according to the total number of public primary and secondary school pupils in the county.

**SOURCES:**


Column 2: Donald Craig Hines, "Public Primary and Secondary Education Costs in Kansas with Implications for Revenue Generation and Allocation," unpublished Ph.D. dissertation (Manhattan, Kansas: Kansas State University, 1973), Appendix Table C.2.