A STUDY OF THE EXISTENCE AND EXTENT OF MUNICIPAL OVER-BURDEN IN MICHIGAN

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ABSTRACT

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Problem

The purposes of this study were: 1) to examine the extent of municipal over-burden in selected Michigan cities, and 2) to examine the effects of Section 17 of the Michigan State Aid Act on reducing that over-burden. Municipal over-burden, for the purposes of this study, was defined as the phenomenon that exists when non-school governmental functions in large cities consume an inordinate proportion of property tax revenues, thus leaving the schools with less support than from a total millage rate equal or larger than in other kinds of districts.

Studies of this phenomenon have been done previously in Pennsylvania by the Fels Institute of the University of Pennsylvania, in Minnesota by the Educational Research and Development Council, and in 107 of our largest cities by the School of Education at Stanford University in cooperation with the U. S. Department of Health, Education and Welfare. It was the intent of this study to apply similar

criteria to large cities in Michigan with the result that information obtained could then be compared with that resulting from the above studies.

Method

In examining the municipal over-burden problem in Michigan, the 25 largest school districts were selected, based on a basic 1967-68 student enrollments. In addition to qualifying by the size of its student enrollment, it was necessary that a selected district also exist as a metropolitan center on which tax data could be collected.

These 25 school districts were examined for existence of municipal over-burden by using both the formula set forth by the Michigan Department of Education for use with Section 17 of the State Aid Act, and the formula used for determining municipal over-burden in the Fels study. For those cities levying a city income tax, an additional calculation was made to determine the effect on the city's total tax burden. Neither of the formulas referred to above considers city income tax as a part of the total tax profile.

To determine the existence of municipal over-burden in the 25 school districts, tax data for 1967 and 1968 were collected.

The impact of Section 17 on these 25 districts was then analyzed in relation to various kinds of tax data. Conclusions were then drawn as to the adequacy of Section 17 in equalizing money available for school operations.

Summary

The competition for tax dollars by all arms of government is such that urban school systems are not able to provide equal educational opportunity for their students without the application of a logical and justifiable support formula. Many arms of municipal government compete directly with the educational program for financial support from the voters. Educational programs in urban areas require extra financial support which must come from outside the usual local tax resources.

The Michigan State Aid Act attempts to consider overburden through Section 17 of the Act. However, it is the conclusion of the author that Section 17 does not give fair consideration to rural districts of the state and is more cumbersome to administer than an alternate technique developed herein.

The dissertation concludes with some reflections concerning the equalized distribution of money, as through over-burden formulas, and the more pervasive problem of equalizing educational opportunities.

DEDICATION

This thesis is dedicated to all of those teachers I have had association with during the years, both as student and as colleague. From those who were competent and devoted, I have learned a great deal and it has been a pleasure to know them. From those other teachers who were neither competent nor devoted, I have also learned much. The constant source of annoyance and irritation which this latter group provided has helped create the dogmatic and idealistic person I am today.

ACKNOWLEDGMENTS

My problem, like so many before me, is to limit my acknowledgments to the space allowed. To mention all who have played a role in the completion of this level of my education would fill many pages. Therefore, without intention of slighting anyone, I will mention only those who were of special and recent assistance.

Deep appreciation goes without question to Dr. James E. Heald, committee chairman, advisor, and friend. Without his continual encouragement and prodding I would have joined the ranks of those who have terminated their work short of completion.

I am grateful for the encouragement and the flexibility given to me by my superintendent, Dr. Douglas M. Brown. Without this help, completion would never have been realized.

The balance of my committee, Drs. Blackman, Hecker, and McKee are due a vote of appreciation for their quiet encouragement and for the patience to stay with me until the end.

I wish to acknowledge the infinite patience of Mrs. Shirley Waldron of the Michigan State Department of Education. Without her help it would have been impossible for me to acquire much of my data.

And finally, a great deal of thanks and appreciation is due my secretary, Mrs. Sylvia Swanson, for her willingness to assist with this seemingly never-ending project.

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CHAPTER I

THE PROBLEM

Introduction

[illegible] cities have been deterred from solving [illegible] problems and reducing some of the shocking pathologies of the "inner city" by the strength of the states' rights at the national level, the historically rural control of state governments, and their economic dependence on state funds and [illegible]. These same factors have had a strong influence [illegible] in our large cities. Although society has become increasingly urbanized, the methods of teacher preparation, the administrative structure, and the basis for financing were historically designed to service the needs of an agrarian society, where there were relatively uncrowded and untroubled cities. Moreover, the middle class that has dominated the city schools has been concerned with preparing their own children for the struggle for [illegible] success, and has worried far too little about the education of other children.

The distress of the cities has been intensified by the exodus of the middle class to suburbia and the increase in disadvantaged populations in the central city. The white middle class has been able to escape the urban crush and

general congestion, while the others were trapped inside a wall of prejudice, denial, and lack of opportunity. In the new suburban areas, the middle class has set up school systems that rival and attract human resources from the city schools. Conant pointed out the ability of the suburbs to pay for good schools, giving rise to the disparity between education in the slums and the suburbs.[1]

The great urban centers are dramatic proof of the resultant effects of this phenomenon. Millions live in decaying buildings, with streets clogged with traffic and the air polluted by the soot and waste of industry. Crime rates are rising so rapidly that each year more and more miles of city streets become unsafe after dark. Further, the already inadequate public services are based upon a declining tax base.

Not unlike most large urban centers, Detroit has tended to develop in concentric circles. The older residents have moved farther away from the center of the city as their prosperity has increased. New, unskilled migrants have rushed in to fill the resulting void in the downtown and central areas. Because of this pattern of movement, people of similar incomes tend to be clustered together in the city, the lowest income groups in the center with income increasing as the distance from the central area increases.[2]

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[1]James B. Conant, Slums and Suburbs (New York: McGraw-Hill Book Company, 1961).

[2]Patricia Cayo Sexton, Education and Income (New York: Viking Press, 1961).

There are very few areas in Detroit where one can find expensive apartment buildings beside slum housing. Unlike a number of other large urban centers, upper income groups live almost exclusively in the outskirts of town or in the suburbs. Median family income is therefore significantly higher in the suburbs than within the city limits.

The ability of cities, such as Detroit, to support public education has been weakened by the increasing percentage of low-income population, by a decrease in total population, and by a decreasing state equalized valuation (SEV). These factors may be generalized into two basic conditions: 1) the proportion of local government revenues required by non-school functions such as police and fire protection, welfare costs, health and sanitation costs, etc., and 2) the special legislature-imposed restrictions placed upon property tax levies. These factors give rise to a significantly different tax demand being placed upon the residents of the large urban centers. This demand has become known as municipal over-burden.

Municipal over-burden, for the purposes of this study, is defined as the phenomenon that exists when non-school governmental functions in large cities consume an inordinate proportion of property tax revenues, thus leaving the schools with less support from an equal or larger total millage rate than that levied in other districts.

Studies of municipal over-burden have been made by the Fels Institute in Pennsylvania (1964), and the Educational

Research and Development Council in Minnesota (1966). In addition, the School of Education, Stanford University, with cooperation of the U. S. Department of Health, Education and Welfare, studied the phenomenon in 107 school districts in 10 states (1966).

These three studies which dealt specifically with municipal over-burden concluded that the impact of urbanization related to the higher cost of municipal services is clearly reflected in the tax pattern established. The highest municipal ratios are found in the largest cities which must provide the greatest amount of municipal services. A total tax bill including excessive taxes for municipally provided services must inevitably leave smaller proportions for educational services. Donald Leu et al. from Michigan State University conducted a study of social and economic characteristics in Michigan for the Metropolitan Educational Research Association (1963) which inferred an excessive tax burden for welfare services in the cities of Battle Creek, Detroit, Flint, Pontiac, and Saginaw.

History of Michigan Attempts to Compensate for Over-Burden

The municipal over-burden approach to state aid to education recognized the principle that taxable valuation is not equally available for school tax purposes in all school districts. Michigan is the only state which has a clear-cut municipal over-burden adjustment, although California made a major attempt to include such a provision in

its formula during a recent session of its legislature. Since state school aid in Michigan is limited to school operation purposes, school taxes for such non-operation purposes as debt service and building and site costs should also be regarded differently and treated the same as non-school taxes.

Dr. William Simmons, Deputy Superintendent of Detroit Public Schools and a lobbyist for consideration of municipal over-burden in the Michigan State Aid Act, had this to say about the over-burden rationale presented:

> Valuation per pupil is used with increasing emphasis to decide what amount per pupil the state allots to the various individual school districts.
>
> It is because of this use of valuation that a fair definition of "valuation" is needed. If "valuation" were not used to discriminate between school districts in this manner, there would be no need to insist on a fair definition of it. It is so used, however, and therefore it must be defined in as fair a manner as possible.
>
> One fact about valuation per pupil is that it is not equally available for school purposes in all school districts. Therefore, it is necessary that the definition of valuation for state school aid purposes must be redefined to recognize the impact of non-school taxes.[3]

Dr. Simmons feels that municipal over-burden could be applied to all federal programs requiring matching funds and could become a factor in all programs that require indices as part of a distribution formula.

In relation to federal programs, he states,

> The use of the municipal over-burden as a factor in distribution formulas for the Elementary-Secondary

[3]Letter from Dr. William Simmons, Deputy Superintendent, Detroit Public Schools, Detroit, Michigan, May 8, 1968.

> Education Act (E.S.E.A.) would be of direct benefit to the cities, since present programs are deliberately made broad enough to include distribution to the educationally and economically deprived pupil, without regard to local wealth. Properly applied, this factor would increase the pupil allowance in the cities, over and above the amount available to other school districts in the state.[4]

As a direct result of Dr. Simmons and others' work with the legislature in 1964, a municipal over-burden factor was added to the State Aid Act. Section 17, subsection (d) of the act now states,

> (d) If the resulting tax rate for the applicant school district is 125 percent or more of the resulting tax rate for the balance of the school districts of the state, the valuation of the applicant school district shall be reduced by the percent by which the resulting tax rates on property located within the applicant school district exceeds 125 percent of the resulting tax rates on property located in all other school districts of the state: Provided, any district currently qualified for state aid under section 8, subsection (a), shall not qualify for state aid under section 8, subsection (b) solely as a result of the effect of this Amendatory Act.[5]

Under this Amendatory Act, Michigan school districts that so qualified received $330,416 in 1964-65, $2,350,861 in 1965-66, $7,461,788 in 1966-67, and $11,191,113 in 1967-68.

Freely interpreted, this means that a school district must first apply for a reduction of its state equalized valuation under this subsection. The applicant district's total tax rate must be 125 percent or more of the average

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[4] Ibid.

[5] State of Michigan. School Aid Act of 1967-68, Act #312 of the Public Acts of 1957, as amended.

tax rate for the balance of the state's school districts, which qualifies the district for a reduction of its SEV by the percentage that its rate is in excess of the 125 percent.

For example, during the 1967-68 school year, Detroit's SEV was reduced by 35.89 percent, the amount its total tax rate exceeded 125 percent of the average tax rate for all other school districts in the state. This percentage reduced Detroit's SEV from $4,807,697,930 to $3,082,215,143, a difference of $1,725,482,787. The result was that the amount of state aid received by Detroit was increased by $9,110,549.00. The subsection then counters the possibility of qualifying the district for additional monies as a result of this reduction by negating their eligibility for special aid under Subsection (b) of Section 8. Section 8, Subsection (b) is a special allotment for poorer districts that have a SEV of less than $12,736/pupil and are exerting a minimum effort for full participation of 10 mills for operation. There is a possibility that the reduction under Section 17 would lower the district's SEV such that it could then qualify for additional aid under Subsection (b) of Section 8.

It is necessary to obtain certain information about a particular school district in order to determine the amount of state financial aid that will be provided. The information required includes the following:

A. The State Equalized Valuation of taxable property in the school district.

B. The number of pupils in public school membership on the fourth Friday after Labor Day. All students enrolled on or before this date are counted. This number is later increased by a count of the special education pupils, both mentally and physically handicapped. This special education count takes place on or before December 15th.

C. The various millages (allocated and voted for operation, debt retirement, and building and site) being levied in the school district.

In addition to the above information about the school district, it is necessary to have an understanding of the 1967-68 State Aid Act. This Act has several terms which must be understood in order to compute the state financial aid due any particular school district. Some of these terms are:

A. Gross Allowance: The financial amount per membership pupil which will be available for each pupil on a partnership basis between the state and the local school district. (See points "W" and "X" on Figure 1.1.)

B. Deductible Millage: The millage applied to the local school district's State Equalized Valuation which will produce the local school district's share of the partnership financial plan or gross allowance.

C. Participating Millage: The operation or general fund millage which must be levied for the local district to obtain either partial or full payment of the state share of the partnership plan.

The 1967-68 Act provides a gross allowance of $294.52 per pupil with a deductible millage of 5.28 mils (.00528) or $427.87 per pupil with a deductible millage of 15.75 mils (.01575). For partial participation in the

$294.52 per pupil section of the 1967-68 State Aid Act, the local district must levy at least 8.0 mils for operation, while full participation requires a levy of at least 10.0 mils for operation. For participation in the $427.87 per pupil section, the local district must levy at least 10.0 mils for operation (there is no partial participation allowed in this section).

Figure 1.1 illustrates the 1967-68 State Aid Act membership formula. This figure makes it possible to estimate the State Aid per pupil to be obtained under either Formula A or Formula B--provided the State Equalized Valuation per pupil of the district is known.

Points "W" ($427.87) and "X" ($294.52) are the "givens" of the 1967-68 Michigan school aid legislation. The slope of the formula "A" line is established by connecting point "Z" for a district using this formula to point "X." Point "Z" was derived for purposes of this figure by multiplying a state equalized valuation of $30,000 per pupil by the deductible millage of 5.28 mils (.00528), and subtracting that resultant from the gross allowance of $294.52. Point "Z" is thereby equal to an allowance for the $40,000 SEV district of $136.12 per pupil.

The state aid per pupil may be found for any district under formula "A" by plotting its SEV on Figure 1.1 and following that value up to the formula "A" line, e.g., a district with $16,000 SEV will receive $210.04 per pupil of state aid.

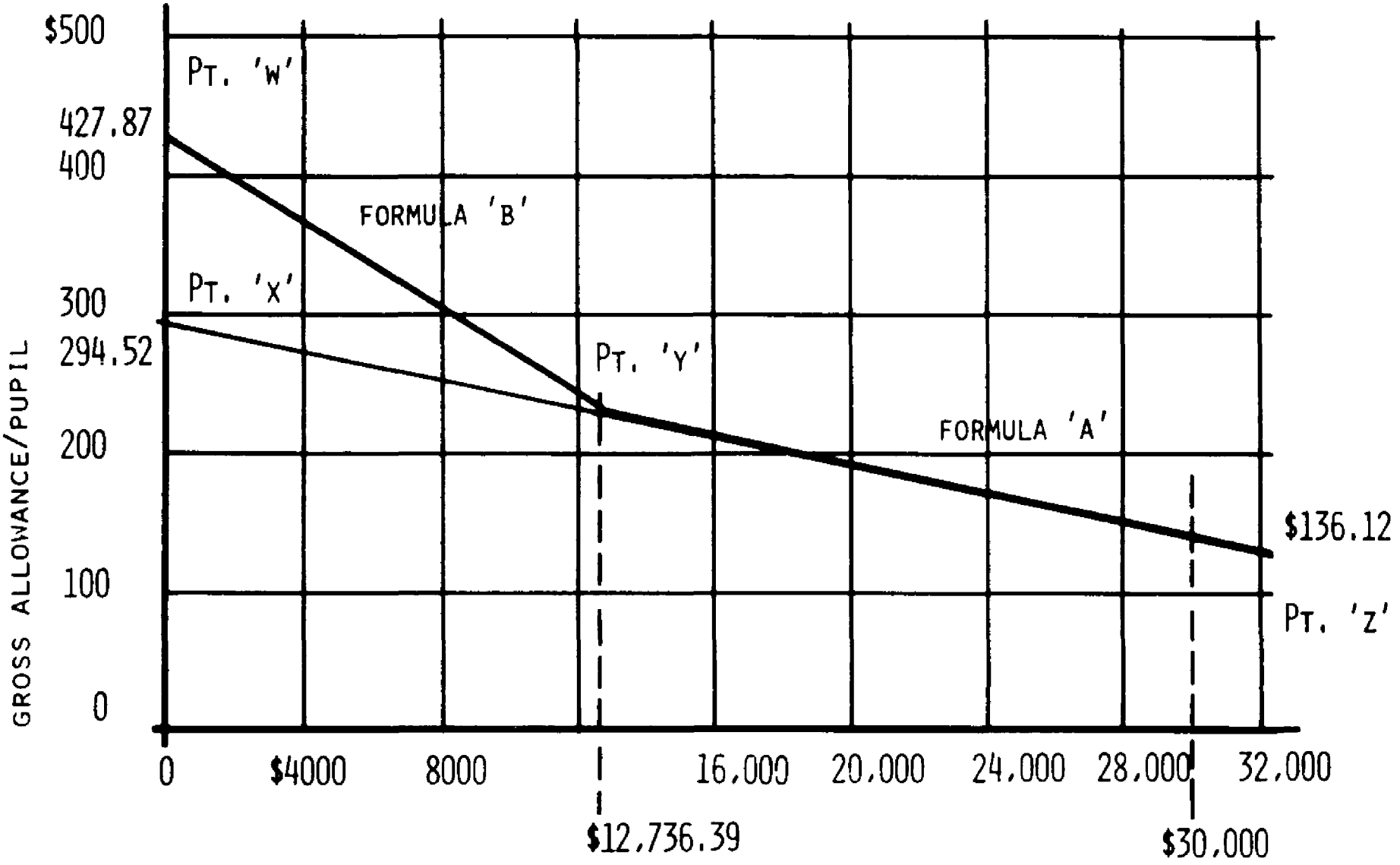

FIGURE 1.1--1967-68 MICHIGAN STATE AID ACT MEMBERSHIP FORMULA

Formula "B" is for the additional monies provided under subsection (b) of Section 8 of the State Aid Act. The slope for this line is derived in the same manner as the slope of the formula "A," with the exception being the value of the deductible millage used in the formula. Fifteen mils (.01575) is used in place of 5.28 mils. The junction of these two formula lines, Point "Y," is the point where the amounts received under formula "A" and formula "B" are equal. Point "Y" is determined in the following manner"

Formula "A"		Formula "B"
$294.52 - .00528 SEV	=	$427.87 - .01575
.01047 SEV	=	$133.35
SEV	=	$12,736.39

National Concern

There is a growing interest in the municipal overburden phenomenon reflected in the studies referred to early in this chapter, as well as in a paper written for the Committee on Educational Finance of the National Education Association by Dr. Erick L. Lindman of the University of California, which points out:

> Failure to include these factors (rising costs, resistance to tax increases, and higher numbers of students needing remedial instruction and special counseling) in state support formulas is probably attributable in part to the inherent difficulty in measuring the justifiable extra costs. Certainly state school support formulas are complex enough without adding more special cost factors. Moreover, it has always been assumed that cities can, with modest property tax rate increases, pay for these unusual costs from local property tax sources. The validity

of this assumption, in view of the increasing double burden upon the city property tax payer, should be re-examined.

In the past, city school systems were usually in better positions to supplement the state foundation program than were school systems in suburban and rural areas of the state. City school systems could, often with little extra effort, pay better salaries to teachers and meet their higher costs. Have changing conditions materially altered this situation? More specifically, has the changing nature of the city school problem and the growing double burden upon the city property taxpayer made it necessary to adjust an approach which was satisfactory in the past?[6]

Need

It is because of the current uneasiness in our larger cities such as civil disorder, financial difficulties of certain larger districts in the state, the growing concern for educational quality and the unequal costs of providing educational equality that this study of the existence and extent of municipal over-burden in Michigan is undertaken.

The ability of cities to support public education is weakened by two factors: first, the proportion of local government revenues required by non-school functions, and second, the special legislature-imposed restrictions placed upon urban property tax levies. These factors contribute to the phenomenon known as municipal over-burden.

There are three main stimulating forces behind this study: 1) interest in the financial formula for determining the amount of assistance each school district is to receive

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[6] Dr. Erick L. Lindman, "School Support and Municipal Government Costs," Long-Range Planning in School Finance. A report. (Washington, D. C.: National Education Association, 1963).

from the state, 2) the growing concern over the inadequacies of our urban educational programs, and 3) concern for the recent civil disorders in our large cities. Equalized educational opportunity for all students in public schools is a growing concern both for minority groups and political and educational leaders. It is necessary that all students be provided with higher levels of understanding and skill in order that they may make wise decisions now and in the future.

There are many difficulties connected with measuring the equalized opportunities for students throughout the state. To begin with, agreement upon a basic level of support has been very difficult in the past. In addition, concepts of an adequate educational program are constantly changing. Consequently, the probability of finding a concensus among the legal structure, the legislature, public opinion, and traditional values is low.

The problems connected with the present situation include both questions of quality and quantity. Typical questions are: What is an adequate program? Within what boundaries should public education operate? From what level of government is support to come? The cost of raising the educational expenditures of large cities to state averages is staggering all by itself. When consideration is given to not only raising these programs to state averages, but improving them as well, costs rise above the highest levels of support presently in existence. However, it is

anticipated that if the financial load can be distributed equitably, the total state economy can support an enriched quality education program.

In summary, the development of an equitable education support program is a necessary first step in solving our problems related to both quality and quantity in the public schools of Michigan. An equitable support program will provide a more intelligent, systematic basis for educational decisions. To develop new and more equitable support programs, a better understanding of the over-burden problem is necessary.

Purposes

The purposes of this study are: 1) to examine the extent of municipal over-burden in selected Michigan cities, and 2) to examine the effects of Section 17 of the Michigan State Aid Act on local school districts' income.

The Scope and Delimitations of the Study

This study is delimited in the following ways:

1. The analysis of this study concerns the determination of municipal over-burden, the determination of income derived from Section 17 of the Michigan State Aid Act, and the determination of additional support required to raise this support to an arbitrary but equal level.
2. The study is limited to data from the 25 largest public school districts, based upon student population for the 1967-68 school year, in the state of Michigan.

3. This study treats only the selected financial factors of educational support and thus does not intend to be comprehensive of all municipal needs.
4. The conclusions of the study regarding the relationships of educational support factors and educational cost and educational opportunity are to be interpreted in the sense that the relationships are associational and not causal.
5. Although the author is well aware of the socio-economic and political issues involved in "equalizing educational opportunities," this study was limited to an analysis of Michigan's attempt to more nearly equalize the resources available for education.

Summary

Large city school systems are still not able to cope with their inability to support financially their programs at an adequate level, thus enabling them to be competitive with the suburban districts of the state. Their inability to support their educational programs at a competitive level has been caused by the competition within the city for tax revenue such as the cost of welfare, the cost of police and fire protection, the cost of maintaining health and sanitation controls, etc. They are further hampered by the legal restrictions placed upon them by state governments which disallow demands and needs from receiving a level of support necessary to operate all programs at the level which the people desire.

Historically, there has been a need for an equitable foundation upon which intelligent educational decisions regarding programs, quality and quantity problems, and fiscal support may be made. Society has not come close to providing for equality of educational opportunity thus far, even though it is guaranteed under the Michigan State Constitution. Attempts have been made to provide financial equitability through such legislation as Subsection (d) of Section 17 of the Michigan State Aid Act.

This study will examine the extent of municipal over-burden in the selected Michigan cities, and determine the effects of the money provided under Section 17 of the Michigan State Aid Act in reducing the educational finance problems facing metropolitan areas.

CHAPTER II

REVIEW OF RESEARCH

Four specific studies dealing with the problem of municipal over-burden for public schools systems have been reviewed. There is a growing concern for this problem apparent in the frequency of its mention in the news media which has reported on various legislative actions, legal considerations, and court cases.

The earliest studies on the subject were done by H. Thomas James of Stanford University. The first of these was School Revenue Systems in Five States, completed in 1961. This study was not available for review; however, the author was able to obtain a copy of the second study conducted by James completed in 1963 entitled, Wealth, Expenditure, and Decision-Making for Education. This study is commonly referred to as the "Ten-State Study."

Wealth, Expenditure, and Decision-Making for Education

by H. Thomas James, J. Alan Thomas and Harold J. Dyck
School of Education, Stanford University, Stanford, California, 1963. Cooperative Research Project #1241.

This report is the second of a series of studies of the process by which resources in the United States are allocated to the support of education. It is divided into three

parts. In part one a rationale for the study of school finance is formulated and applications of it are examined to explain variations and expenditures associated both with state efforts to equalize educational benefits and tax loads and with levels of state support. The rationale postulates three clusters of determinants for educational expenditures which included factors of demand for educational services, factors of ability to realize the demand, and factors that add to the system of voting by which demands can be expressed and abilities utilized. The analysis indicates conditions under which efforts towards equalization can be achieved and the conditions under which increases in state revenue result in increased expenditures for education.

Part two reports some explorations of the interaction of wealth and expenditures for education, using three models developed from the general rationale. The first model examines the rationale of wealth to educational expenditure; the second examines the relationship of resource import to educational outcomes; and the third examines the relationship of educational outcomes to economic growth. The general conclusion of this section is that wealth invested in education has predictable effects on the development of human talent and that the development of talent, in turn, has predictable effects on economic growth and the generation of new wealth.

Part three represents an analysis of fiscal independence versus dependence in the relationship of local school

districts to other governmental agencies. The analysis is directed toward developing a typology of these relationships. The analysis suggests that the fiscally dependent school district can be expected to spend slightly less for education than the fiscally independent district under similar conditions of ability and demand for education, but that the relationships are too complex for useful generalizations that will hold for interstate study.

A General Rationale for the Study of School Finance

Studies over the past several years have sought to develop a general rationale for the study of school finance. The researchers feel that such a rationale, if satisfactorily formulated, should provide not only a basis for describing and explaining school finance phenomena, but also a basis for predicting the behavior of communities in financing public education. They suggest that the formulation of such a rationale must begin with the assumption that our resources will never be adequate to satisfy all the demands that are made upon them and that the demands for public school funds are always resolved in competitive situations.

Granting this, the researchers postulate that three conditions are essential to public school support in our kind of market-oriented society. The first condition is a shared set of expectations for educational services sufficiently pervasive to generate group efforts in support of their achievement. The second condition is availability of

wealth from which funds can be allocated. The third condition is a political system that allows expression of expectations and access to wealth. In this study, the researchers sought to extend the rationale. The next logical step appeared to be to treat expenditures and certain other factors and input in an attempt to relate them to output. Their efforts in this direction are reported in part two of this study, together with a preliminary effort toward demonstrating the upward spiral of the effects from educational expenditures to educational output, resulting in increases in wealth and increases in a demand for education, which, in turn, raise educational services to new levels.

Extension of a Test for Equality and Initiative

A test for equality and initiative was applied to 10 states selected on the following basis:

1. A broad distribution in levels of state support.
2. States with reasonably effective programs for equalizing assessments.
3. States near or above the median income per capita.
4. States varying little in rank on ability as compared with rank on expenditures.
5. States with local school district systems.
6. When application of the other five criteria still left a choice within half a standard deviation from the point selected, a state was selected with which the chief researcher had some experience or one that would require the least amount of travel.

The states selected by these criteria were New Hampshire, Nebraska, Massachusetts, Wisconsin, New Jersey, Oregon, California, New York, New Mexico, and Washington. The tests were based on the assumption that state finance systems were purposive, that governments devise school support systems in order to equalize the distribution of financial support for education and the resulting tax levies among school districts and to stimulate local initiative. The researchers proposed tests for equality in the distribution of local tax payments supporting education and in the distribution of educational services. The tests used were measures of dispersion applied in the first instance to school tax rates for current operation levied on an equalized evaluation of property and in the second instance to current expenditures not mandated by the state as a measure of initiative exercised locally.

Throughout this study, the researchers' interest was divided between variations within the state to which they directed their hypothesis and variations among states about which no explicit hypotheses were formulated. The researchers sought to prove that districts of similar socio-economic characteristics gathering revenues for school with the property tax under similar rules would arrive at similar levels of expenditure, but that state interference, either by making additional revenue available from other sources or by changing the rules, would have predictable consequences on district expenditures.

Following this line of reasoning, they analyzed the kinds of state action that might affect the level of expenditure. They included the following:

1. increased state support
2. conditional support
3. mandated programs
4. mandated levies
5. levy limitations

Other types of state interference with the postulated equilibrium between the demand for educational service and resistance to rising local taxes can be found, notably in state specifications of expenditures and in state salary schedules for teachers. However, the five mentioned above appear to be the most important ones in the states included in this study.

The findings support the general notion that school finance systems are purposive, but that purposes pursued are often in conflict. They leave considerable doubt that high-support states are any more successful than low-support states in equalizing property tax burdens and perhaps in equalizing educational services. The explanations for this apparent failure to accomplish an often stated purpose of school finance systems must be sought in the complex behavior that results from conflicting purposes at both the state and local level. The major conflict at both levels is over increasing educational services versus reducing taxes. At the state level, further conflict surrounds the efforts to

equalize benefits and burdens among districts, to shift the incentive of school taxes among alternative tax bases and to stimulate and direct the flow of specified educational services. In the resulting conflict situations, educational purposes may suffer either from state level neglect or from state level interference, but on the evidence examined, the researchers conclude that they suffer more from neglect.

They further conclude that rising levels of state support will increase expenditures for education under specified conditions, while pressures inhibiting increases in local taxes will balance demands for increased expenditures at a given level. The introduction of state collective income sales taxes will allow expenditures to rise to a higher level because of the great elasticity of the yield of state taxes, and also because the total tax base is broadened. However, a point will be reached where further increases in state support will be used to substitute for local taxes if state mandates are not established. Furthermore, state governments tend to encourage this substitution by the limitations imposed on local governments to tax.

Patterns of educational support were examined among the 10 states to determine whether or not the state system had accomplished its stated purpose of equalizing educational opportunity. The pattern of the relationship between expenditures, measures of wealth and aspiration seems to vary significantly from state to state, not only at the level of expenditures but also in the strength of the effects of the

different explanatory variables. Educational expenditures are significantly related to wealth as measured by equalized valuation and median family income in California, Massachusetts, New Jersey, New York and Wisconsin. The effects of the measures of aspirations are weaker and less concise from state to state. Perhaps their major value is that they enable us to consider the relationship between "wealth" variables and expenditures with some other variable held constant.

The differences in the level of expenditures from state to state after the effects of the measures of wealth and aspirations have been removed were striking. There were four distinct plateaus with New Hampshire and Nebraska on the lowest; Massachusetts, California and New Mexico on the second; Washington, New Jersey, Oregon and Wisconsin on the third; and New York far above the rest.

The effects of a district's fiscal independence and the pattern of the relationship between expenditures and independent variables seem less significant than the similar effects in the state in which the district is located. In the two states in which enough observations were found to measure separate relationships for dependent and independent districts, the coefficients did not seem to differ greatly or in any consistent pattern. When independence was used as a separate variable, widely differing coefficients were obtained, with a general tendency for independent districts to spend slightly more than dependent districts, but

subsequent analysis suggested that this slight difference might be attributed in part at least to economics of scale. The researchers concluded from results of the above study that expenditure levels for education are indeed related to wealth as measured by equalized valuation and median family income.

The researchers next took a look at the budgetary cycle and fiscal formulation policies of the school systems in an attempt to establish whether the school district was dependent upon a municipal government organization or independent from it. Following this phase of the study, and its corresponding statistical analysis, the researchers found a tendency for independent districts to spend more on education than dependent districts; however, the issue was not clear cut since other factors may have influenced the results, particularly the fact that New York's six dependent districts are also located in the six largest cities in the state.

In review, the researchers specify that basic to a rationale for studying school finance are the assumptions that resources available for the support of public education are rarely sufficient to satisfy all the demands made upon them and that the determinants of public school support are almost always made in a competitive situation. The rationale they formulated postulates three major determinants of expenditure:

1. A set of shared expectations for educational services;
2. The availability of wealth from which funds for schools can be allocated, referred to as ability; and
3. A political system that allows the expression of demands, and access to the ability, referred to as governmental arrangements for decision making.

Determinants of Educational Expenditures in Large Cities of the United States

by H. Thomas James, James A. Kelly and Walter I. Garms
School of Education, Stanford University
Stanford, California, 1966
Cooperative Research Project #2389

The most extensive study in the area of municipal over-burden was one conducted by H. Thomas James for two specific purposes. The first purpose was to refine the inductively-derived rationale for the study of school finance, and the other was to apply the rationale to school systems in the great cities of the United States. The report contains four major parts.

1. The historical development of the great cities in this country, focusing on trends in population, taxable wealth, school enrollment, and expenditures per pupil.
2. The rationale for the study of school finance and indications of how the rationale was used

in the study. The rationale postulates three sets of determinants for educational expenditures--expectations for educational services, financial ability to realize these expenditures, and governmental arrangements through which expectations are expressed and abilities utilized.

3. An examination of the budget processes utilized in the 14 largest city school districts, including the events observed during the budget processes and the relationships between the participants.
4. The empirical analysis of the relationship between expenditures per pupil and measures of the three sets of determinants of educational expenditures in 107 of the largest school districts in the United States in 1960.

The socio-economic profile of the great cities in the United States developed in this report is traced through the growth pattern. The report mentions that large city public school systems did not exist until the mid-nineteenth century. Therefore, the school systems studied are relatively new when compared to many of the other social institutions of the same cities.

Most of the real growth in our large cities has occurred between 1890 and 1930. Since 1930 there has been comparatively little construction of either residential

housing or schools in our large cities. As a result, most of the buildings, whether residential or school, are old and out-moded. In addition, unless unusual maintenance efforts have been prevalent, these buildings are not only old but in generally poor condition.

The most depressed areas of our large cities tend to become the homes of the very poor. Since the houses are usually large and the rents often disproportionately high, families may double or triple up in order to pool enough money to pay the rent. As density increases, so do many socially related problems, causing a rise in welfare and related municipal costs. These rising municipal costs must be paid with the same tax money that the school system needs to face the task of trying to educate additional numbers of students in these dense areas. And, to further complicate the situation, the deteriorating condition of the property in these areas means that less and less money is available in property taxes, the method used to finance school and municipal costs in most cities.

A related phenomenon brought out in the study was the fact that total large city population declined between the census of 1950 and the census of 1960, while at the same time the school population went up. For the 10 selected large cities, the mean total population decreased 6 percent and the mean school-age population increased 20 percent.

James feels that local taxpaying ability comes through in this study as a major influence on educational policy.

Cities generally rely heavily on property taxes for revenue, and these taxes have not kept pace with the rising cost of education and governmental services. Between 1930 and 1960 educational expenditures per pupil in the United States went up 300 percent while the real property valuation in 11 of the 14 largest cities went down. At the same time, the ratio between assessed value and the number of pupils in eight of the 11 states in which these cities are located went up, however.

Despite these declines, these cities still have a higher assessed value per pupil than the other districts in their states. The ability of the large city systems to support their educational program is weakened by two additional factors: 1) the proportion of non-school fiscal requirements, and 2) special legislative-imposed restrictions placed upon urban tax levies. Data collected in this study point out that the non-school governments in large cities absorb a greater proportion of the property tax revenues than do the local non-school government services of smaller cities within the same states.

The large city school systems find that the demands for services have been increasing drastically at a time when resources are steadily dwindling, with no curtailment of the trend in sight. The city districts are forced to reduce their expenditures per pupil during a time when the remainder of the country is increasing theirs.

Federal funds and the foundation grants have relieved this problem somewhat since 1960; however, the hope that society, through the federal government, would continue to reverse the trend of inferior education in our cities now seems dimmer than at the point of initiation.

> . . . if there is one generalization with important policy implications to be drawn from this study, it is this: local taxpaying ability is the most important determinant of social policy for education in American cities. Until we find the means to reverse that equation, and let social policy determine the resources to be allocated to education, we face a rising sea of trouble in our cities. (page 17)

Determinants of Educational Expenditures in Large Cities of the United States

by H. Thomas James, James A. Kelly, and Walter A. Garms
School of Education, Stanford University, 1966.

This is the third study of a series devoted to bringing order to the theoretical field of school finance. In earlier studies expectations for educational services have received some attention from the researchers, but have not been utilized as a major determinant of expenditures. Perhaps this is due to the ambiguity of "expectations of education."

Expectations are an "input" in the determination of educational expenditures, reflected by the varying types of programs and problems in communities which have approximately the same financial ability to support schools. Various members of communities hold different expectations and these expectations are transformed into educational policy. Expectations are made up of values, attitudes, and opinions,

all of which are difficult to assess and measure. However, observable behavior which helps to understand the characteristics of expectations is speaking at board meetings, organizing pressure groups, voting, and making complaints to board members. These are overtly expressed expectations which can be conceptualized as demands.

All of the expectations relating to educational services, to staff benefits, and to taxes must somehow be balanced in the process by which communities allocate funds to education. To the extent that the school board participates in this allocation process, it must itself balance these sometimes competing expectations and demands. The report suggests that the balancing of these expectations is a fundamental function, perhaps the paramount function, of boards of education.

The second component of the school finance rationale is wealth and the concept of ability. The wealth of a community has generally been accorded a paramount role in studies of educational expenditures, for it clearly is a prime determinant of educational expenditures in local public schools. It is reasonable to believe that, at any given moment in time, educational expenditures will be closely related to taxpaying ability. However, economists have clearly demonstrated that over a period of years, educational expenditures represent an investment which eventually improves the productive capacity of the labor force. In our market-oriented economy, the productive capacity of labor is

supposedly related to earnings. Thus, educational expenditures at one point in time result in increased ability to support education at a latter point in time.

The final component postulated as essential for the support of public schools is the existence of a political system that allows for both the expression of educational expectations and the access to resources necessary for their realization. The most important factor in the political system is a governmental structure that allows preferences to be expressed among competing private and public demands for resources, among competing demands with the public sector, and among competing demands from different levels of education. In this study, attention was focused upon the structural arrangements surrounding decision-making. These arrangements were analyzed with respect to evidences of how they shape results as measured in educational expenditures when factors of ability and demand were held constant.

The results of this study indicate that more than two-thirds of the variation in educational expenditures among large school districts can be explained by measures of economic conditions reflecting ability to support education and measures of social conditions reflecting expectations for educational services. The financial resources of a community and the character of its population are major determinants of that community's educational policy.

Major Purposes and Research Hypotheses

The authors have used the general rationale developed in earlier studies to better understand how fiscal affairs are managed in our great city school systems. The particular problem was to explain the variation in expenditures for education in large cities. Specifically, they attempted to develop further the general rationale, primarily in the area of governmental arrangements and to a lesser extent with respect to demand for educational services, and to apply this rationale in a study of the great city school systems. Particular attention was devoted to governmental arrangements which influence school budget decisions in large cities. However, the task of explaining variations in per pupil expenditures has been viewed as instrumental with respect to the broader purpose of the study, which was to come to a more sophisticated understanding of how fiscal affairs in large city school systems are managed and from this understanding to develop some useful guidelines for fiscal policy.

The general hypothesis tested was:

If factors of demand for education and factors of financial ability to pay for education are held constant among school districts, then variation in the organizational structure for financing education will be associated with variation in educational expenditures.

General Procedure

The sample in James' third study comprised 107 of the 119 largest school districts in the United States in

1960. The necessary socio-economic data for the ability and demand clusters were collected from census sources; the expenditures data came from the U. S. Office of Education reports; the property tax data came from the local school districts, the state tax commissions, and the census of governments.

Of the 107 cities in the total sample, 14 are members of the Research Council of the Great Cities Program for School Improvement. These 14 cities served as laboratories in which the staff, through extensive observation and interviews, identified a number of variables which appeared to be important in determining the level of educational expenditures. These factors were included in a questionnaire which was submitted to the remaining 92 cities of the sample. In this manner, a type of inducive case study, issue-analysis approach was used to identify the governmental variables for this study.

Chapter 3 of the study contains a historical perspective of the budgetary process, the concept of the budget process, boundaries that affect budgetary decision-making, the participants in the process, the process itself, conceptual approaches to budgeting, and conclusions.

The following generalizations are presented to summarize their findings and their conclusions:

1. The budget process in large city school districts is far more complex than heretofore has been reported in traditional school finance literature.

Textbook treatments of the budget have been oriented primarily towards smaller administrative units, where political realities may be different than in a large city.

2. When school budget documents of today are compared with those of a half-century ago, it is evident that budgeting today is far more responsible and informative.
3. The financial resources of a community and the character of its population set "boundaries" beyond which it is unlikely that educational administrators and school boards can move regardless of governmental arrangements. Decision-making about school budgets must be viewed in the context of a number of "de-facto" limitations on the decision-makers' discretion. Three major reference groups put pressure on boards of education during the budget process: the clientele of the school and the school employees--both supporting higher expenditures, but for different purposes, and the economy or efficiency groups resisting increases in the level of expenditures. Boards must balance these conflicting pressures placed upon them. Hemmed in by a body of state regulations, state mandates, services and levy limitations, salary schedules and other staff benefits, the typical board of education may

become practically immobilized and attempt only relatively minor adjustments in the school budget during the brief time it is before them.

4. The basic structure of the budget decision in big city school systems has been to insure that existing programs will continue and to focus budget analysis upon those changes in or additions to the existing program. This incremental approach is being challenged by the idea of program budgeting which is being adopted throughout the Federal Government by order of the President. It is anticipated that the use of program budgeting will increase in big city school systems in the coming decade.

5. To simplify the decision-making required by annual budget processes, cities utilize formulas to determine how much will be required for particular budget categories and as a detailed plan for the distribution of funds. These formulas or norms are based upon the enrollment in a school and/or the number of teachers in a school and are used to determine budget allocations with respect to certified and non-certified personnel. The major decision-makers are aware at a very early stage in the process of the approximate amount of money that will be available for the following fiscal year. Thus, most budget processes are

conducted under an umbrella of "known revenue," and much of the detailed procedures involved in filling out forms, analyzing information, and holding public hearings are little more than ritual. Even decisions related to the distribution of available revenues within the system are largely determined through the wide-spread use of formulas. This process effectively neutralizes thousands of professional employees from participation in the budget process.

6. The influence of teachers' organizations on school expenditures is increasing, and dominates the budget process. Demands for teacher salaries and other staff benefits are usually presented to the superintendent of schools or his budget director at an early date in the budget process so that changes in teachers' salaries can be considered at the earliest stages of the budget process. By contrast, there is no similar channel open for formal communication during the preparation stage of the budget process for community organizations which may wish to urge that additional educational services be provided.
7. The popular dichotomy of fiscal independence versus dependence bears no relationship to the level of educational expenditures and is not adequate to describe the complex governmental arrangements

involved in large city school districts' budget processes. The structure of governmental arrangements should not be the issue; their form has little consequence for school expenditures. If the public is apathetic or the schools are not responsive to interested citizens, no form of democratic government is likely to serve the people well over an extended period of time.

8. As big city school budget processes have become more complex, the ability of the school bureaucracy to exercise substantial influence over budget decision has increased, since the school bureaucracy provides the expertise and time necessary to collect, organize, and analyze the vast amounts of information needed to prepare a budget.

Statistical Analysis

Chapter 4 of the report contains the statistical analysis. In this study they selected a sample of 107 school districts with over 25,000 students in 1960 out of a total of 119 possible school districts listed in a publication by the U. S. Office of Education. Twelve districts were eliminated because of the impossibility of obtaining information, or because the districts were atypical.

One of the major problems faced by this study, and by many other studies of school districts that hope to use

census data, is that school districts frequently have boundaries which are not coterminous with the boundaries of any other political subdivision. The approach for this study was to determine for each of the 107 districts in the sample whether it was coterminous with some other political subdivision. Where the district boundary split a census tract, the tract was entirely included if 50 percent of the population of the tract was within the district or otherwise that district was entirely excluded. This method provided data on the population which was identical with that of the school districts to within ±2 percent. Of the 107 districts in their sample, 32 were clearly not coterminous with the boundaries of any other political subdivision; another 12 had very minor differences between their boundaries and those of some other political subdivision.

Data were gathered on the following factors for ability and expectation parameters:

median family income
percentage of housing occupied by owner
median years of schooling by the adult population
percentage of labor force unemployed
percentage of population non-white
percentage of elementary students in private schools
total population

For the non-coterminous districts, data on these variables were also gathered for the population center, city or county, that seemed most representative of the district. Neither the multiple correlation coefficient nor any of the individual regression coefficients which were examined were significantly different in either group.

Property values have always played a prominent part in theoretical and practical discussions of school district financing. A large majority of the school districts in the United States use taxes on the value of property as the principal source of revenue. After exhaustive comparisons of the methods used by the various districts, the researchers concluded that for the purposes of their study, the ratios published by the U. S. Census were more objective and more comparable among states. In this study, the principal method of evaluating the data was multiple regressions using approximately the same variables representing ability and demand factors. This gave a multiple correlation coefficient which would seem to indicate that the effect of ability and demand on expenditures is less in the smaller districts predominating in the Ten-State Study than in the large school districts of this study.

Major findings of the study were as follows:

1. A careful effort was made, by obtaining data at the census tract level, to get census data for an area coterminous with the area of the school district. Regressions using these refined data were compared with regressions using the data for the city or county most closely associated with the school district. The errors introduced by using the unrefined data were not significant.
2. The basic ability-demand rationale used in the Ten-State Study was confirmed in this study.

3. A surprising finding is the large positive regression coefficient for percentage unemployed, indicating that the higher the percentage of unemployed, the higher the expenditures per Average Daily Attendance (ADA). This effect appears to be confined to large districts in 1960, and may reflect the effect of governmental rigidities in the face of changing socio-economic conditions.
4. The governmental variables defined and measured in this study are unimportant. It is postulated that these may be important for each individual district, but that the effect of a particular variable may be positive in one district and negative in another, so that in the aggregate the effects tend to cancel out.
5. There is a distinct difference in the effects of many of the variables in districts in the South compared with their effects in non-Southern districts. In particular, many of the governmental variables have opposite effects.

Special Educational and Fiscal Requirements of Urban School Districts in Pennsylvania

by Fels Institute of Local and State Government University of Pennsylvania, Pennsylvania, 1964.

The final study for review was completed in 1964 for the state of Pennsylvania by the Fels Institute of Local and

State Government. It was an inquiry into the impact of social and economic conditions on urban education and on state fiscal policy. It focused on the special educational tasks of urban school districts as well as the distinctive fiscal factors operating in those urban centers. The research efforts sought to measure differences in educational requirements of public school pupils in urban school districts compared with non-urban districts resulting from the socio-economic characteristics of the homes and neighborhoods from which the children came. It also sought to measure the differences in school financing of urban districts compared with non-urban districts resulting from higher tax burdens for non-school municipal services. The research findings in this report clearly show that substantial numbers of urban public school pupils present significantly different educational needs related to their socio-economic background and such needs require new, expanded or intensified educational programs and services which are costly. The findings also show that the school financing capacity of urban centers is significantly reduced by the disproportionately high tax levels required to support necessary services.

The researchers feel that these findings have direct relevance to educational fiscal policy at the state level as well as in the local districts. They feel that the nature and magnitude of the urban problems are such as to command immediate attention. Positive action is called for to equalize educational opportunities throughout the state and to

produce a more equitable financing pattern for public education in the state of Pennsylvania.

The next part of this study deals with differentials in educational program requirements. Using the achievement test data for the school year 1962/63, the study found a substantial difference in the educational requirements of urban, suburban, and rural school populations. Urban districts, as defined in this study, contained 25 percent of the state's public school pupils, yet these same districts contained 66 percent of the state's pupils in school districts or attendance areas with average achievement scores one-half grade or more below equated norms. Pupils in suburban districts represented 49 percent of the state's pupils and only 8 percent of pupils in low achieving districts or attendance areas. Pupils in rural districts represented 26 percent of the state's pupils and a proportional 26 percent of the pupils in low achieving districts.

This represented a problem of major proportions which demanded serious concern at all levels of government. The data indicated that in the 21 urban school districts there were an estimated 156,000 pupils who were achieving one-half grade or more below their grade level norms. Approximately 96,000 of these low-achieving pupils were in Philadelphia; this is 40 percent of the district's average daily membership. Approximately 21,000 low-achieving pupils were in Pittsburgh--32 percent of its membership; 39,000 pupils were

in the other 19 urban districts--22 percent of their total membership.

The multiple correlation analysis used in this study demonstrated that differences in educational requirements as measured by achievement test performance were significantly correlated with the social, economic, educational, and demographic characteristics of the homes and communities in which the children reside. Correlations between achievement test scores and socio-economic characteristics are most significant in urban school districts and least significant in non-urban districts. In Philadelphia, for example, 77 percent of the variation in achievement test scores was explained statistically by variations in socio-economic characteristics. In Pittsburgh, the figure was 71 percent and in the other 19 largest urban districts the figure was 59 percent.

The analysis thus measured the extent to which low socio-economic status in the homes and neighborhoods of urban pupils was a significant factor in producing low achievement in the public schools. Based on the data examined, it is evident that grossly disproportionate numbers of urban pupils come to the public school system with substantially different educational program needs.

The multiple correlation analysis also demonstrated that median family income was the characteristic most closely related to achievement test scores in urban school districts and in some classes of non-urban districts. Regression lines used in this study to describe statistically the family

income-achievement score relationships showed that below a median family income of $4,800.00 to $5,700.00 the predicted average achievement scores for urban school populations were always lower than comparable scores for any other classes of suburban or rural school districts representing the entire state.

The new educational strategies and expansions of normal educational programs required to meet the special educational needs which exist in urban school districts were explored and evaluated for the study by Dr. H. Thomas James of Stanford University. A wide variety of programs involving home, school and community were strategically developed and applied programs were recommended. Programs proposed covered all grade levels but the primary focus was on pre-school and elementary grade levels. Perhaps the single most promising strategy recommended is the extension of school services downward to include intensive pre-school training programs for three- and four-year old children in identified sections of urban school districts. Kindergarten should be made compulsory in these sections.

Amounts paid to local school districts under the Pennsylvania state subsidy system are based in part on the assumption that educational requirements of public school pupils throughout the Commonwealth are equivalent in terms of cost. A uniformly applied equalization level of maximum subsidy in the basic account formula of the subsidy system reflects that assumption.

The researchers feel that the findings of this study illustrate that this assumption is erroneous. Vast numbers of urban pupils require special educational programs which are significantly different and more costly that the normal program. Their special requirements are caused by the social and economic disadvantages which characterize large segments of urban populations. It is entirely appropriate, indeed imperative, that these differences be taken into account in state educational policy and educational fiscal policy.

The second part of this study deals with the differentials in school financing capacity. The ability of local school districts to finance education depends not only on the available tax-producing wealth of the district, but also on the demand upon the local tax base by school, municipal and county governments. The comparative fiscal analysis based on 1962-63 revenues clearly indicated that the total tax burden per $100 of market value of taxable real estate is significantly greater in urban districts than in the various classes of suburban or rural districts representing the entire state. The tax burden for urban school districts was on the average 30 percent higher than in suburban and rural districts. In Philadelphia the total tax burden was on the average 72 percent higher than in non-urban districts; in Pittsburgh it was 52 percent higher.

Analysis showed that the differences in school tax revenues related to taxable wealth among urban and the various classes of non-urban school districts were relatively

small. The average school tax load for the various classes of suburban and rural school districts ranged from $1.61 to $1.84 per $100 market-value of taxable real estate compared to $1.52 for urban districts. Philadelphia's school tax revenue measured in the same terms was $1.31 and Pittsburgh's was $1.18. In Philadelphia and Pittsburgh, however, only 30 percent of total local tax revenues were used for school purposes. In urban districts as a whole, the average of the total revenue used for school purposes was 50 percent. By contrast, schools in the various classes of suburban and rural districts received, on the average, 59 percent-73 percent of all local taxes collected. It should be emphasized that school cost figures used in this analysis did not reflect the cost of additional special education programs required in the urban districts.

The high cost of municipal services which produce much higher total tax burdens in the urban districts significantly reduces the ability of urban districts to provide comparable fiscal support for educational purposes. Municipal revenues amounted to $1.65 per $100 of market value in urban districts compared to averages of $.68 to $1.10 in suburban and rural districts. The Philadelphia and Pittsburgh municipal tax burdens of $3.07 and $2.71, respectively, were far higher than the averages for other urban and non-urban districts.

The researchers state that the present state subsidy system does not recognize the impact of municipal tax burdens.

The formula implicitly assumes that the local tax base measured by the market value of taxable real estate adequately and proportionately measures the ability of the district to finance its educational program. The highly differential impact of municipal services costs in urban school districts demonstrates that such districts do not have equal access to the local tax base and that the assumption reflected in the present formula is invalid as a second base for state educational fiscal policy.

The third part of this study identified those implications for adjustments in the state educational subsidy system. The sheer magnitude of the problems revealed in this study and the gross cleavages and disparities measured in the educational and fiscal requirements of urban school districts will present a problem of major governmental importance which affects the Commonwealth and the nation as a whole. This problem is concentrated in the urban school districts but is caused by broad shifts and dislocations in the socio-economic structures of urbanized society.

There is a need for administrative and fiscal commitment on the part of the Commonwealth and the urban school districts to provide progressive sustained efforts to offset the blighting effect of social and economic deprivation on educational development. The state bears heavy responsibility for providing the necessary additional funds required and for assisting the urban districts in developing the new and expanded educational programs and services that are required.

Adjustments should be made in the present educational subsidy system or any new subsidy system developed under policy guidelines which provide additional funds for special educational programs required. Initially the amount of state funds required should be equivalent to total cost of the additional educational program services required to meet defined needs. Additional funds should be available to those districts in which the special programs exist in amounts reflecting the additional costs of the approved programs.

Adjustments should be made in the present or any devised system to reflect the differential impact of the municipal tax burden on local fiscal capacity to finance education. To recapitulate, the basic finding of this study is that urban school districts in Pennsylvania are seriously disadvantaged financially under the present state educational subsidy system in two major respects: 1) Disproportionately large numbers of urban public school pupils have special educational needs produced by the negative progressive effects of social and economic deprivation. These special needs require new and expanded educational services to enable the pupils so disadvantaged to achieve adequate educational development. The additional cost required to develop and maintain these special programs in urban school districts is not recognized in the present state educational subsidy system. 2) The municipal tax burden in proportion to local tax wealth is much higher in urban school districts than in non-urban school districts. These high municipal service

costs effectively reduce the capacity of urban districts to finance local educational costs. This reduced educational fiscal capacity of urban school districts is not recognized in the present educational subsidy system.

Municipal Overburden

by Van D. Mueller, Ex. Secretary
Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc.
University of Minnesota, Minneapolis, 1966.

Following the model suggested by the Fels Institute Study in Pennsylvania, Van D. Mueller conducted a brief study in Minnesota. The data collected were to dramatize the existence and extent of municipal over-burden in Minnesota in 1966.

Tables were presented illustrating taxable valuation, tax levy, levy exclusive of schools, state levy, county levy, municipal levy, school levy, the total tax per $1000 of valuation, levy exclusive of schools per $1000, levy for schools per $1000, and finally, the total tax levy exclusive of school levy as a percent of total tax levy. The data, according to Mueller, presented evidence as to the unequal proportions of the local tax base which are available for financing schools.

The procedure outlined in Chapter III will follow the example set forth in these studies. The present Michigan State Aid Act purports to provide funds to local school districts in amounts which insure equal educational opportunity at reasonably uniform rates of local taxation.

However, if over-burden such as that reported in Pennsylvania, Minnesota, and selected large cities of the United States does, in fact, exist in Michigan, the Act falls far short of meeting its stated goal.

CHAPTER III

PROCEDURE

Sample

In examining the municipal over-burden problem in Michigan, the 25 largest school districts, by 1967-68 student enrollments, were selected. Two of the larger districts in the state were omitted because they did not have corresponding municipalities. They were the Taylor Township and the Waterford Township school districts. In addition to qualifying by the size of its student enrollment, it was mandatory that a selected district also exist as a metropolitan center on which tax data could be collected.

These 25 school districts were examined for the existence of municipal over-burden using both the formula set forth by the Michigan Department of Education for use with Section 17 of the State Aid Act and the formula used for determining municipal over-burden in Pennsylvania by the Fels Institute,[1] in 107 of the largest cities in the United States

[1]Fels Institute of Local and State Government, Special Educational and Fiscal Requirements of Urban School Districts in Pennsylvania (Philadelphia: University of Pennsylvania, 1964).

by H. Thomas James,[2] and in Minnesota by Van D. Mueller.[3] In addition, for those cities levying a city income tax, an additional calculation was made to determine the existence and extent of municipal over-burden when a city income tax was considered as a part of the overall tax profile. Neither the Michigan formula or the formula used in the other studies considers city income taxes as a part of the total tax profile.

Design

To determine the existence of municipal over-burden in the selected city school districts, the following information was used:

1967 State Equalized Valuation (SEV)

1967 Total State Tax Rate and Revenue

1967 Total State Tax Rate and Revenue less School Operating Revenue

1967 State School Operating Revenue

1967 Local Tax Breakdown
- Schools
- Cities
- Counties
- Townships
- Villages

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[2]H. Thomas James, James A. Kelly, and Walter I. Garms, Determinants of Educational Expenditures in Large Cities of the United States (California: School of Education, Stanford University, 1966).

[3]Van D. Mueller, Municipal Over-burden. A Revised Report to the School Districts of the Education Research and Development Council of the Twin Cities Metropolitan Area, Inc. (Minneapolis: University of Minnesota, June, 1966).

1967 Local District SEV

1968 Local District SEV

1967 Total Local Millage Rate and Revenue

1967 Local School District Operating Rate and Revenue

1967 Total Local District Revenue Excluding School Operation

1967 Local District Enrollment Comparison (Public--Non-Public)

1967 City Income Tax Revenue

1960 Median Family Income

The Fels, James and Mueller studies used a simple determinant for municipal over-burden--whenever the non-school operation revenues exceed 50 percent of the total tax profile, municipal over-burden was assumed to exist. The Michigan State Department of Education uses a percentage comparison recognizing municipal over-burden whenever the local non-school district's percentage of operation revenues exceeds 125 percent of the balance of all other districts in the state rate for non-school operation purposes. Such items as debt service and building and site costs are treated as if they were non-school (municipal) costs within the Michigan formula.

The 25 selected cities' tax profiles were compared using both of these formulas. For those cities collecting an income tax, the equivalent millage rate and revenue for this tax was determined and added to the total tax profile established for those cities by property taxes. The same municipal over-burden comparisons were then refigured with

these new data. The inclusion of equivalent rates and revenues derived from city income taxes was done to form a more complete individual tax profile.

The statistical techniques used in the study are non-parametric. This type of treatment was chosen in lieu of parametric methods because the following assumptions can not be met:[4]

1. No guarantee exists that the population is normally distributed according to the variables under investigation.
2. The condition of homogeneity of sample variances has not been met.
3. The variables are measured on an ordinal scale.

The Kendall Coefficient of Concordance[5] was used to measure the relationship among the five major variables included in the study. The Spearmen Rank Method of Correlation[6] was used to measure the degree of association between paired variables. The .05 level of significance was selected as the critical region of rejection for both statistical treatments.

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[4]David E. Murphy, "An Investigation of the Relationship Between Attitudinal Factors Which Influence Faculty Morale, and Faculty Perceptions of Involvement in Policy Formulation at Public Community Colleges in Michigan" (Unpublished doctoral dissertation, Michigan State University, 1968).

[5]Sidney Siegel, Non-parametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, Inc., 1956), pp. 229-239.

[6]Ibid., pp. 202-213.

A rank order correlation was made on the following individual school district characteristics:

Percent of Local Support

SEV/Pupil

Revenue/Pupil

1960 Median Family Income

Expenditures/Pupil

All of these characteristics are determinants of the effort and/or ability a district may put forth in supporting its schools.

Following the determination of municipal over-burden and the rank order correlations of the various financial and pupil characteristics of each of the selected districts, a hypothetical level of support was determined. The level chosen was above that of the highest level in any selected district. Each district was then measured against this hypothetical level to determine the effort which would be required by each to achieve this theoretical level of support. A comparison of total tax requirements to reach the same level of educational support then served to highlight the comparative differences in non-educational over-burden. It is the intent of this comparison to further exemplify the particular municipal and school needs of these districts and the variation in the required effort to meet them.

The new Michigan State Income Tax levied for the first time during the last quarter of 1967 is yet another tax which adds to the individual tax payer's burden.

However, due to the complexities of the establishment of a tax of the proportion of this state income tax, statistical data are not yet available, thus making the additional consideration of this particular tax impossible. Thus, while city income levies could be considered, the state income levy could not.

This study, while based upon the findings of these earlier studies, did not attempt to replicate the socio-economic characteristics portion of the prior studies. The findings of these prior studies are accepted and their acceptance serves as a basis for this entire financial study. Consideration of these socio-economic characteristics is relevant to the philosophy upon which the present state aid system is formed, namely, to provide state fiscal support in a manner which insures equal educational opportunities for all of the children of the state at reasonably equitable levels of local effort. It is not the purpose of this study to examine minutely all of the facets of the present state aid act, nor is it the purpose to suggest a totally new or basically different system. This study is designed to examine the present aid act in terms of its adequacy in meeting special fiscal problems of our urban school systems.

The use of the Fels model for the analysis of overburden is appropriate and timely, since it will add to the bank of data collected relative to the larger school districts in the United States as well as provide data on Michigan schools for the first time. This study compares the

school operation as a percentage of the total municipal tax rate as did the earlier studies by Fels, by James, and by Mueller. In addition to measuring municipal over-burden in Michigan, a comparison between the current Michigan State Aid Act formula and that of Fels was made to determine the similarities of these two methods.

This study concentrates on the larger urban school districts in Michigan. No attempt was made to compare the urban problems with those of the suburban districts since the earlier studies identified this particular problem--municipal over-burden--as one peculiar to urban districts. Federal studies such as Racial Isolation in Public Schools,[7] and Equality of Educational Opportunity[8] point out the inadequacies of urban schools, plus the social pressures being brought to bear by various civil rights organizations which necessitate changes in the existing structure. The drastic educational change which is demanded will require more educational funds than ever provided previously--funds that will have to come from state and/or federal sources and be distributed on a basis related to need.

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[7]U. S. Commission on Civil Rights, Racial Isolation in Public Schools, Vol. I (Washington, D. C.: Government Printing Office, 1967).

[8]James Coleman, et al., Equality of Educational Opportunity, Office of Education Survey (Washington, D. C.: Government Printing Office, 1966).

Summary

The 25 largest municipal school districts in Michigan were examined for the existence of municipal over-burden in a manner set forth by tax studies in Pennsylvania by the Fels Institute (University of Pennsylvania), in Minnesota by Van Mueller, and in 107 of the nation's largest cities by H. Thomas James, as well as the manner currently in use by the Michigan Department of Education. Tax data were collected on each of the selected districts as well as the state as a whole in an effort to determine if Michigan's urban school districts do, in fact, have a particular financial problem.

In addition to tax data, other economic factors were also compared to enable a more accurate picture of our urban problem to be drawn, i.e., comparisons between revenue/pupil, percent of local support, SEV (indicator of wealth), and median family income.

The comparison of methods for determining municipal over-burden measured how well Section 17 of the Michigan State Aid Act fits the accepted definition of researchers in the field of educational finance. Discrepancies in definitions will lead to confusion and delay when these same urban problems are examined on a national scale by the federal legislature, not to mention the communication problems that will arise among the professionals and lay citizens bent on solving educational finance problems through the country and the state.

Hopefully, this study will provide the basis for change in terminology and/or definitions with the Michigan State Aid Act which will align it more closely with national terminology and definitions of terms.

CHAPTER IV

ANALYSIS OF THE DATA

Financial data were obtained from the Michigan State Departments of Education and Treasury. Each category of data was reduced to the amount per pupil to simplify and clarify the discussion.

One of the most important factors in the present Michigan School Aid Formula is the state equalized valuation (SEV). The SEV per pupil for each of the sample districts was plotted on Figure 4.1 for comparative purposes. The average SEV per pupil for the 1967-68 school year is represented by the line which transverses the graph and represents $14,459.00 of SEV per pupil.

This figure illustrates the tendency of the individual district's SEV to fall close to the state average. This was to be expected since these 25 sample districts represent 38.73 percent of the enrollment in the entire state. It also illustrates quite clearly those districts which are in extreme positions, such as Dearborn and Grosse Pointe at the high end, and Garden City, Roseville, Wayne Community and Lincoln Park at the low extreme. It is interesting to note that 22.07 percent of this sample group's school

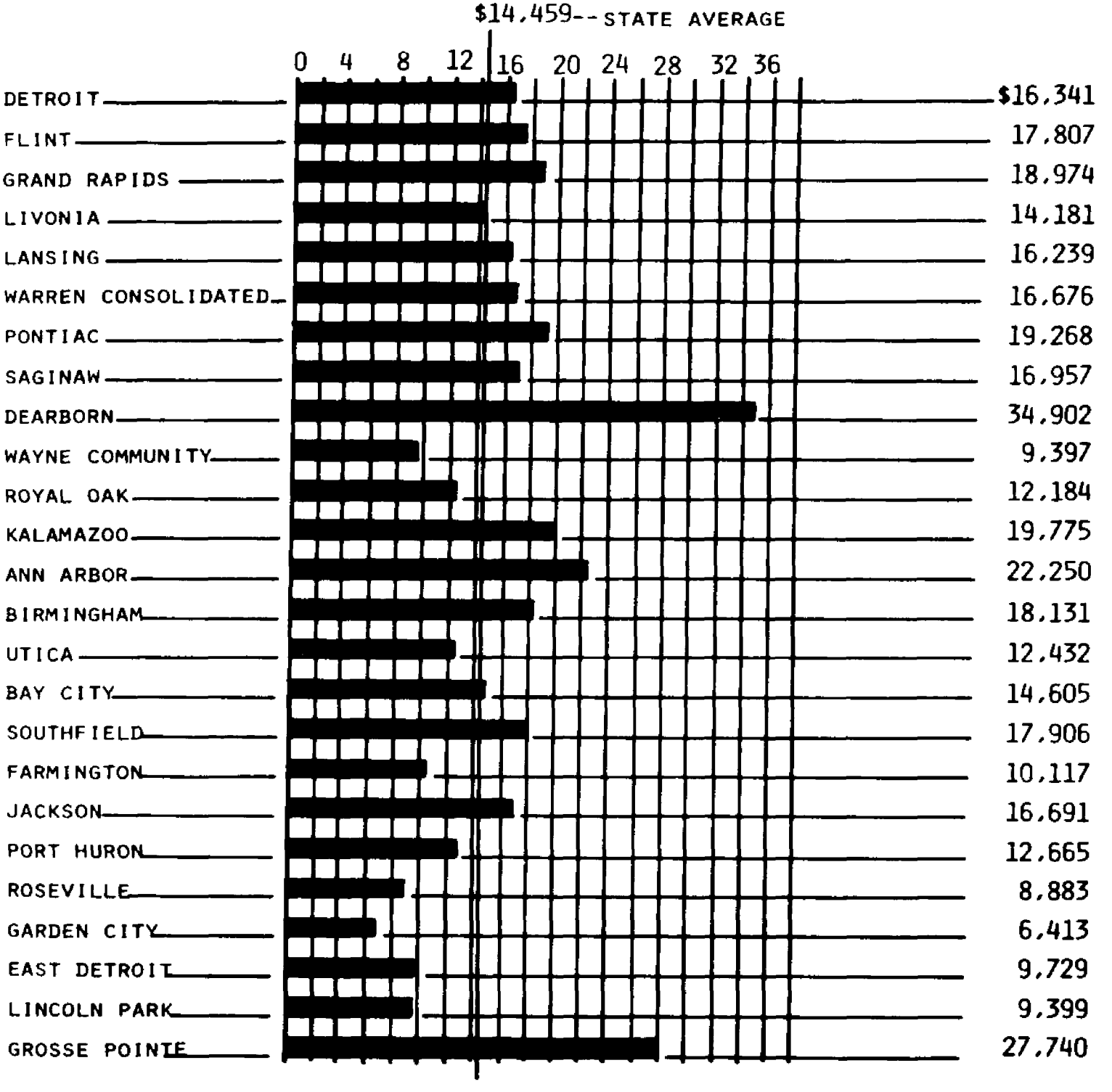

FIGURE 4.1--STATE EQUALIZED VALUATION (SEV)/PUPIL X $1,000

population attends districts in which the SEV is below the state average.

Following the examination of SEV for the various districts, expenditure per pupil was examined. These data are presented in Figure 4.2. If, in fact, the SEV is an indicator of district wealth, then there should be a relationship between this wealth and the expenditure per pupil.

The transverse line on Figure 4.2 represents the average expenditure in Michigan for the school year 1967-68, an amount of $597.82. Again there is a high relationship between the amount spent in the various districts and the average figure. Also, note again the extreme high position of Dearborn and Grosse Pointe when compared with the others. It is indeed revealing when we examine this figure for those districts lower than the state average to find that only four districts, or 16 percent of the sample, fall below the average expenditure per pupil in the state and that the most extreme of these four, Garden City, is only $16.33 below that average.

Another of the factors of interest in this study was the median family income in these districts. This item was used to verify its relationship to indicated wealth via SEV. Medians were most difficult to obtain, since no state figures exist for the chosen year. The 1960 census figures were incomplete because of the variation between school district boundaries and census tracts. However, local political offices were able to supply figures and these are

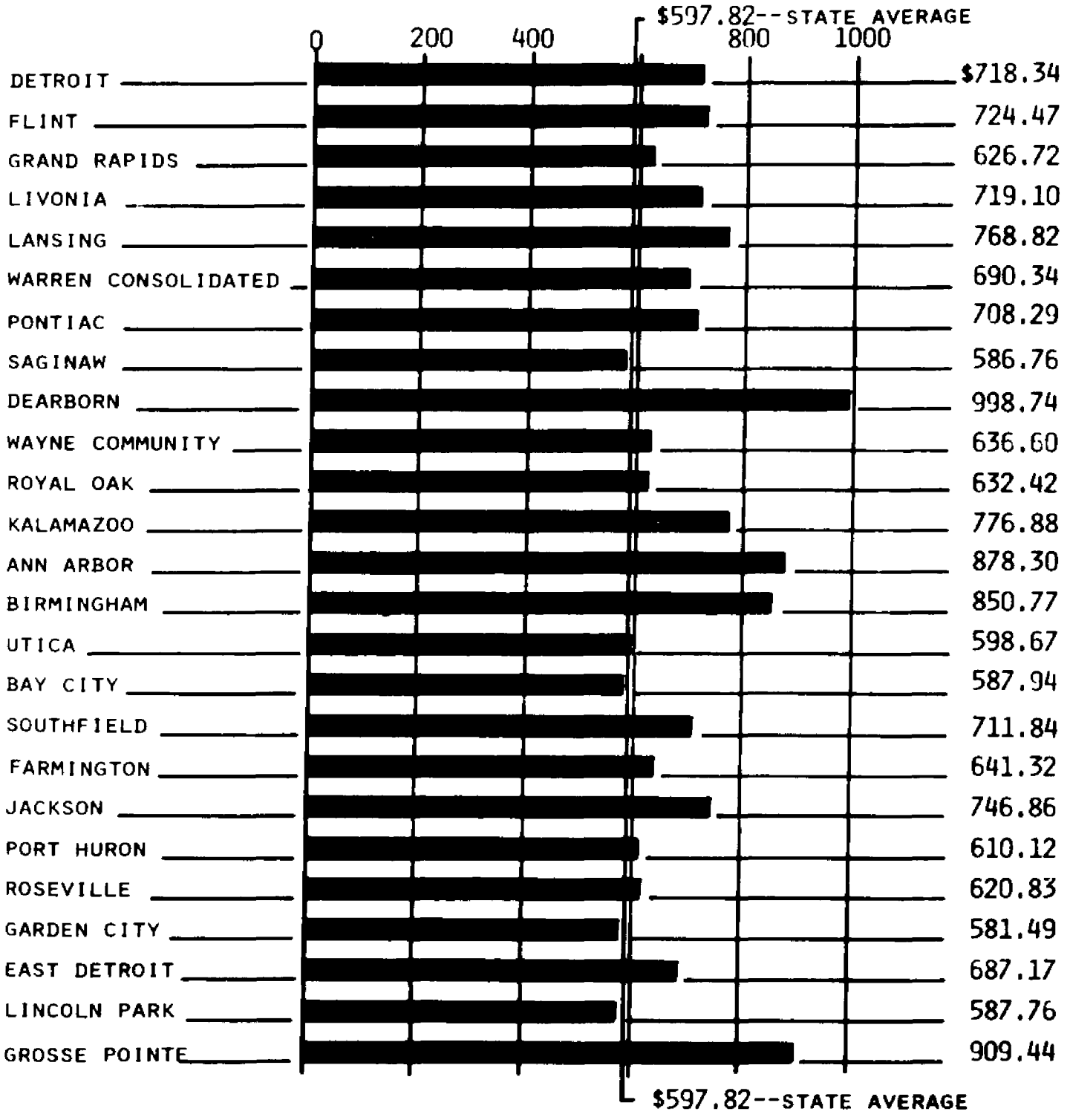

FIGURE 4.2--1967-68 EXPENDITURE/PUPIL

reported in Figure 4.3. The transverse line represents the median Michigan family income of $6,256.00.

Note that in the extreme positions are Grosse Pointe and Birmingham on the high end and Port Huron on the low end. With the exception of Grosse Pointe, these cities have not been in extreme positions in either SEV or expenditures. Four of the districts fall below the state median, while 21 are above it.

The fourth category of financial data collected on each school district was local revenue per pupil. These data are presented in Figure 4.4. The transverse line represents the average state level of local revenue per pupil, an amount equal to $306.94.

Note that the graph illustrates that 19 of the 25 districts collect more than the state average per pupil. Dearborn and Grosse Pointe are in the extreme high positions with Garden City, Lincoln Park, East Detroit and Roseville in the extreme low positions.

The final figure collected was the percentage relationship between total local tax rates and those levied for purposes of school operation as presented in Figure 4.5. This is the factor that is reported in the Fels study to be the indicator of municipal over-burden. It is this factor which best illustrates the competitive positions in which the large city schools find themselves--competing with their own municipal governments. As was pointed out in the Fels study:

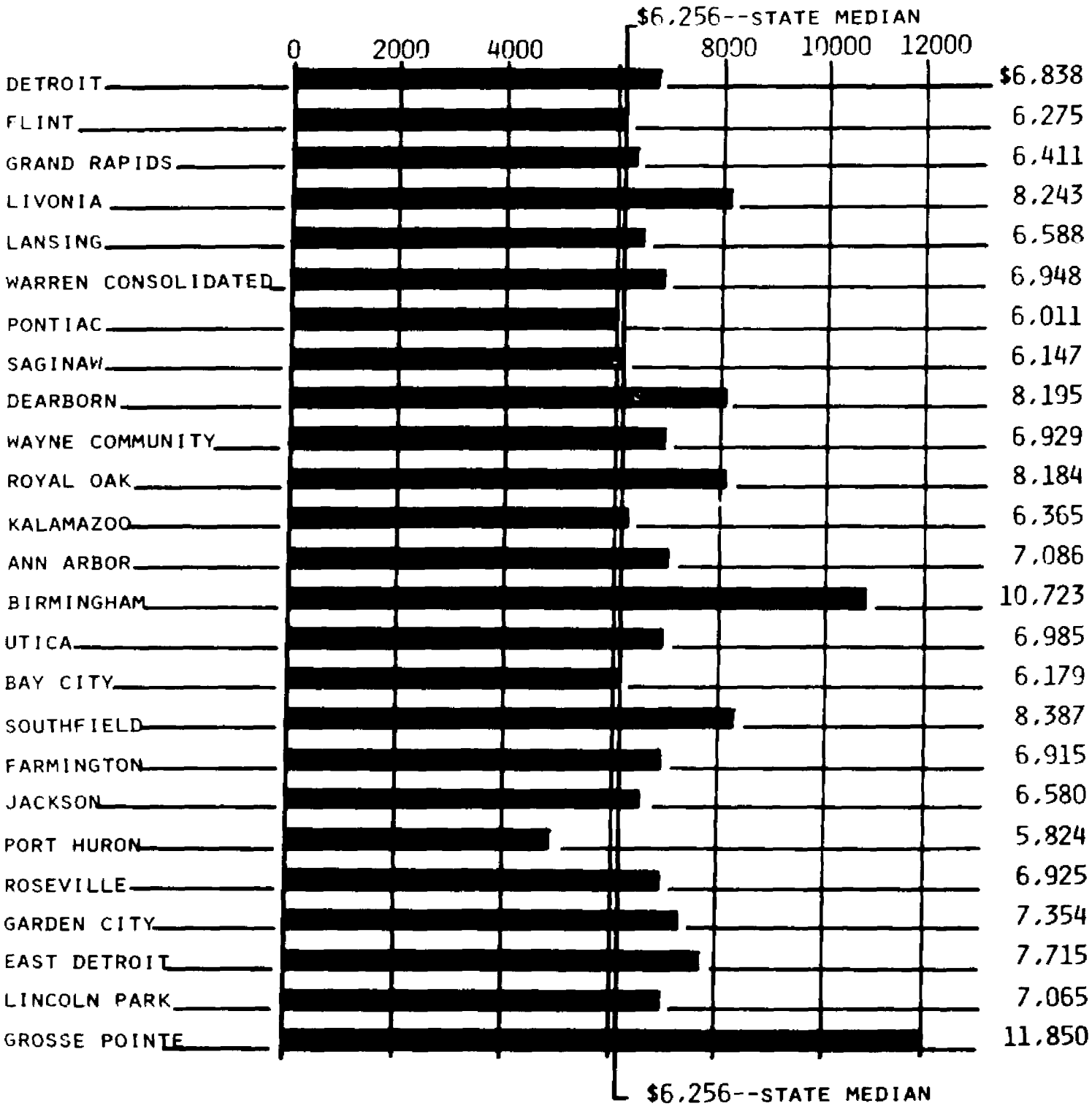

FIGURE 4.3--1960 MEDIAN FAMILY INCOME

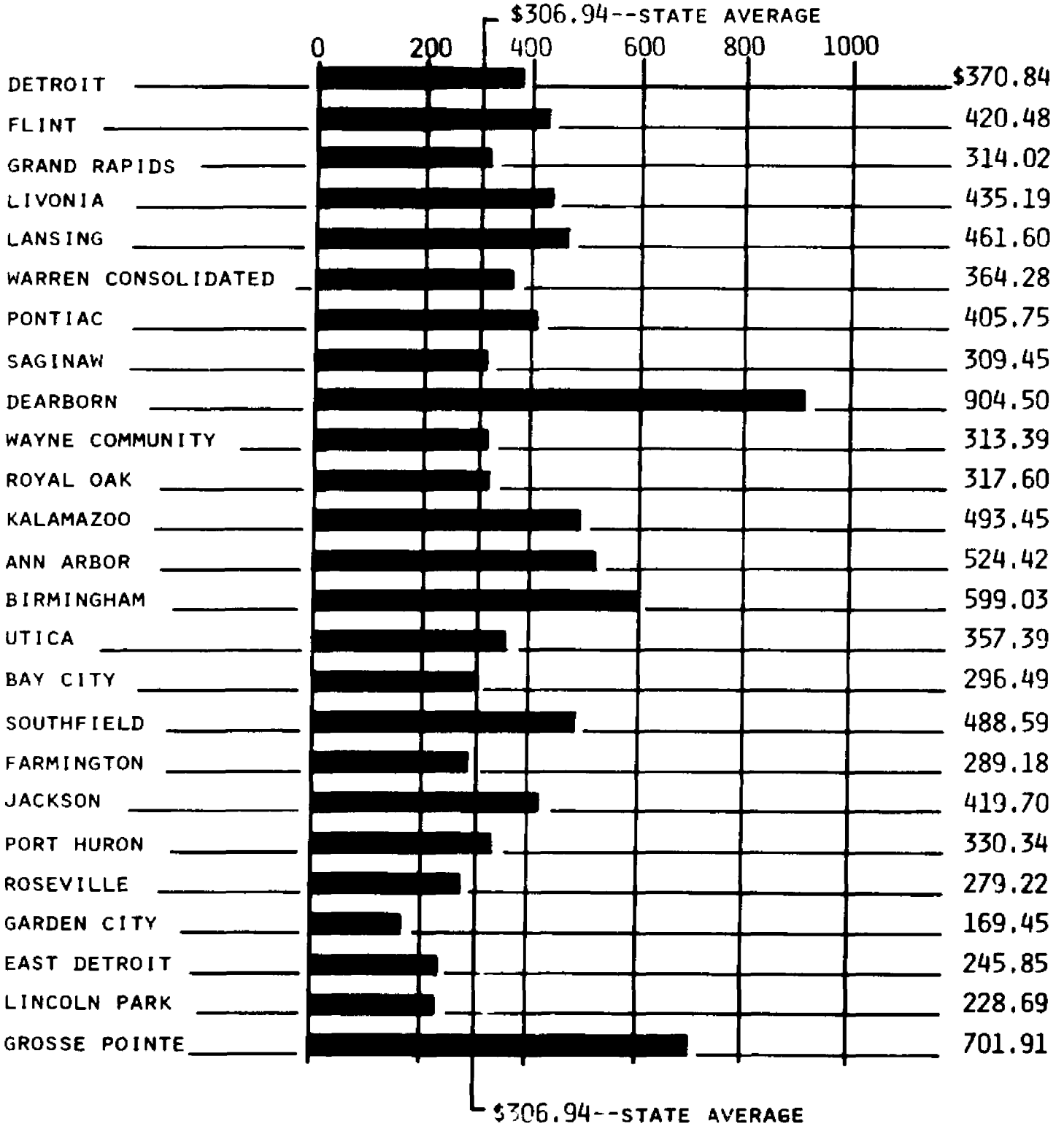

FIGURE 4.4--1967-68 LOCAL REVENUE/PUPIL

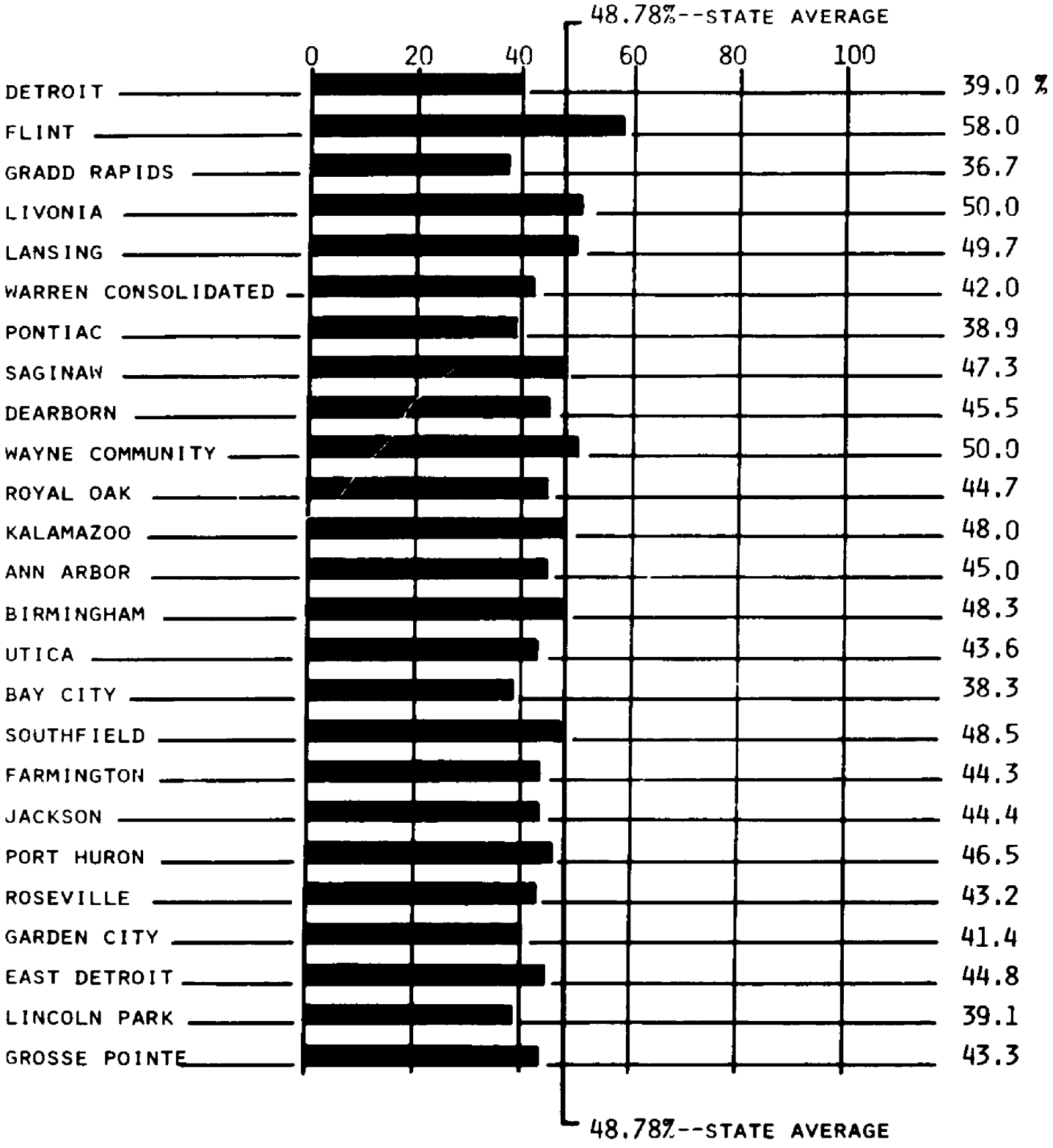

FIGURE 4.5--1967-68 PERCENTAGE OF LOCAL REVENUE FOR SCHOOL OPERATION

> The analysis clearly indicates that it is the cost of municipal services which produces the significantly heavier total tax burden in urban school districts . . . The individual tax burdens in nearly all of the 21 urban municipalities were heavier than the average tax burdens of the non-urban groups. . . The impact of urbanization related to the higher cost of municipal services is clearly reflected in the pattern established by the ratios. (local operating and total local) By far the highest municipal tax ratios are found in the largest urban cities.[1]

The same appears to be true in Michigan, according to the data collected. Of the selected districts, 21 had a percentage of local tax support for school operation lower than the average for the state. The only districts which did not have an over-burden were Flint, Livonia, Lansing, and Wayne Community. The average percent of local taxes for school operation for all districts in the state was 48.77 percent. This means that over 50 percent of local taxes went for the support of municipal government functions other than school operation. Yet, school levies are the main target for voter opposition to rising government costs and are a target which is highly vulnerable to voter rejection at the polls.

Three municipalities in the sample group collected a city income tax during the 1967-68 school year. This additional tax should be included in the overall tax burden of the district as stated earlier. Including the income

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[1]Fels Institute of Local and State Government, Special Educational and Fiscal Requirements of Urban School Districts in Pennsylvania (Philadelphia: University of Pennsylvania, 1964).

taxes with the total taxes changes the percent of over-burden for the three districts as indicated in Table 4.1.

TABLE 4.1.--Percent of Local Taxes for School Operation.

District	Excluding Income Tax	Including Income Tax
Detroit	39.00 percent	38.84 percent
Flint	57.71 percent	56.26 percent
Saginaw	47.28 percent	46.19 percent

Following the determination of municipal over-burden, a hypothetical level of support was chosen. The figure used was $1,100/pupil which exceeded the highest level of any of the districts selected--the support level in Dearborn was $1,058.86. (See Table 4.2) By raising all districts to the same arbitrarily chosen figure, the effects of the Michigan over-burden formula, Section 17, could be highlighted. The effort necessary to bring each district's revenues to this hypothetical level was then calculated. The resulting millage increase, the total effort necessary, and the off-setting effect of Section 17 are reported in Table 4.2. Assistance to the local district through Section 17 does not depend upon any factor of local effort. Regardless of the local school operation millage level, Section 17 remains constant. Section 17 aid is determined by the percentage comparison of the local non-school operation millage and the average non-school operation millage of the balance

TABLE 4.2.--Local Effort Necessary to Raise Support to $1100 per Pupil.

SCHOOL DISTRICT	PRESENT REVENUE ALL SOURCES	CURRENT LOCAL OPERATION MILLAGE	ADDITIONAL MILLAGE NEEDED	TOTAL MILLAGE NECESSARY EXCLUDING SECTION 17	EQUIVALENT MILLAGE OF SECTION 17 AID
Detroit	$702.45	22.7[a]	24.4	47.1	1.9
Flint	715.30	21.9	22.1	44.0	none
G. Rapids	591.00	13.1	11.8	24.9	none
Livonia	698.39	26.9[a]	27.8	54.7	.3
Lansing	748.38	26.2[a]	21.5	47.7	.2
Warren Cons.	604.12	18.6	29.7	48.3	none
Pontiac	664.85	18.4	22.8	41.2	none
Saginaw	797.92	15.8	17.9	33.7	none
Dearborn	1,058.86	22.9	1.2	24.1	none
Wayne Comm.	630.03	31.6[a]	49.8	80.4	1.0
Royal Oak	588.16	22.9	42.1	65.0	none
Kalamazoo	768.19	23.0	17.2	40.2	none
Ann Arbor	752.01	21.0	15.4	36.4	none
Birmingham	832.17	30.0	14.8	44.8	none
Utica	625.72	25.6	36.1	61.7	none
Bay City	576.03	18.0	35.8	53.8	none
Southfield	725.51	24.6	21.1	45.7	none
Farmington	596.76	23.4	49.7	73.1	none
Jackson	727.51	23.4	23.4	46.8	none
Pt. Huron	649.00	23.8	35.6	59.4	none
Roseville	627.63	25.6[a]	53.1	78.7	4.4
Garden City	540.48	20.5[a]	87.8	108.3	1.6
East Detroit	543.68	23.1[a]	56.9	80.0	.1
Lincoln Park	607.69	20.2[a]	51.0	71.2	7.4
Grosse Pointe	877.72	22.9	8.1	31.0	none

[a]Equivalent local millage to equal present level of support including aid from Section 17.

of the state. There is no provision under Section 17 of the Michigan State Aid Act to even partially reimburse a local district for extra financial effort on its part. Once determined on the basis of local non-school operation millage, the aid available remains constant; aid can vary only as the non-school operation millage varies.

Statistical Analysis

Results of the Kendall Analysis of Concordance, Table 4.3, reveal a correlation value (W) of .55. The corresponding value of chi square, 66.0 with 24 degrees of freedom, exceeds the .001 level of significance which indicates that the obtained coefficient is significantly different from zero.

TABLE 4.3.--Kendall Correlation Analysis of Association Among Five Factors Related to Municipal Over-Burden.

W	x^2	d.f.	Level of Significance
.55	66.0	24	.001

These findings provide evidence that a significant relationship does exist among the variables included in the study, i.e., SEV/Pupil, Revenue/Pupil, Percent of Local Support, Expenditures/Pupil and Family Income. Further analysis to determine those factors which account for this relationship is indicated.

Results of the Spearman Rank Analysis, Table 4.4, reveal correlation values ranging from .01 to .85. Obtained values for the variable sets of SEV/Pupil - Revenue/Pupil, SEV/Pupil - Expenditures/Pupil, and Revenue/Pupil - Expenditures/Pupil were found to be statistically significant at the .01 level of confidence. Obtained values for the variable sets of Revenue/Pupil - Percent of Local Support and Percent of Local Support - Expenditures/Pupil were found to exceed the .05 level of significance. Obtained values for all other variable sets failed to equal or exceed the .05 level of significance.

TABLE 4.4.--Results of the Matrix Correlation Analysis for Ten Variable Sets Pertaining to Municipal Over-Burden.

	SEV/ PUPIL	REVENUE /PUPIL	PERCENT OF LOCAL SUPPORT	EXPENDITURES/ PUPIL	1960 FAMILY INCOME
SEV/Pupil	---	.82[a]	.10	.71[a]	.01
Revenue/Pupil		---	.44[b]	.85[a]	.27
Percent of Local Support			---	.41[b]	.17
Expenditures/ Pupil				---	.33
Family Income					---

Degrees of freedom = 23

[a]Significant at .01 level.

[b]Significant at .05 level.

The findings reported in Table 4.4 indicate that the following variables related to school finance in Michigan tend to vary together:

1. SEV/Pupil and Revenue/Pupil
2. SEV/Pupil and Expenditures/Pupil
3. Revenue/Pupil and Expenditures/Pupil
4. Percent of Local Support and Expenditures/Pupil
5. Revenue/Pupil and Percent of Local Support

Slight relationships do exist for the remaining variable sets. However, these relationships are not significant. Thus, it is concluded that the significant degree of association discovered among the five variables (Table 4.1) is accounted for by 1) the tendency for school districts with various SEV/Pupil levels to be characterized by corresponding levels of Revenue/Pupil and Expenditures/Pupil, and 2) the tendency for schools with varying percentages of local support to be characterized by corresponding levels of School Expenditures/Pupil and Revenue/Pupil.

All things considered, municipal over-burden, as defined in preceding sections, does exist in a number of the selected Michigan school districts. The basic element of over-burden, percent of local support, is significantly correlated with revenue per pupil and expenditure per pupil--two commonly used terms in Michigan school aid determination and related financial discussion. Conclusions and recommendations are reviewed in the next chapter.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The competition in our society today for tax dollars by all arms of government is so keen that urban school systems will not be able to provide equal educational opportunity for their many students without the application of a logical and thoroughly justifiable support formula. Urban school systems operate in a peculiar kind of environment, an environment which contains many socio-economic ills. Treatment of these ills demands certain forms of municipal government, some forms supportive and others restrictive. These forms, or functions, of municipal governments are in direct competition with the educational program for financial support from the voters.

The Michigan State Aid Act does attempt to consider over-burden, although it is not referred to specifically by that name, through Section 17 of the Act. However, it is the conclusion of this author that Section 17 does not give fair consideration to all districts of the state and is more cumbersome to administer than the technique presented herein.

For illustration, during the school year 1967-68, 29 school districts qualified under Section 17 for additional

aid. It was necessary that a school district make application for this additional aid which opened the possibility that through oversight on the part of a district's administrators the children of that district would not receive this aid even though they were entitled to it. Of the 29 districts which did receive additional financial aid, only nine were included in the sample used in this study as being large city school systems. Perhaps districts other than large urban ones have financial difficulties, and perhaps economic need is not the exclusive property of large city schools, but surely districts which rank among the state's wealthier districts can hardly be considered worthy of special legislative financial aid. However, certain of these districts did receive financial aid under Section 17 for the school year reported.

While 21 of the 25 districts in this sample would have qualified for financial aid under the technique accredited by extensive studies throughout the country, only nine received aid from the Michigan legislature under Section 17. The 20 other districts which did receive aid under this Act received $3,057,744.64. This means that 21 percent of the money allocated under Section 17 was used by school districts which could not qualify as large urban school systems.

Summary of Findings

1. Municipal over-burden does exist to a considerable extent in the state of Michigan.

2. To a degree this problem has been recognized and attempts have been made to rectify it through Section 17 of the State Aid Act.
3. Section 17 has not been structured tightly enough nor has the problem been identified clearly enough to eliminate the undeserving and to provide for all that are in genuine need.
4. Slightly less than 40 percent of the students attending public schools in Michigan during the school year of 1967-68 were enrolled in the 25 largest districts in the state.
5. Just over 22 percent of the sample group's student population attend schools with an SEV which is less than the state average.
6. Only four of the selected districts spent less per pupil during 1967-68 than the average expenditure per pupil in the state.
7. Only four of the selected districts had a median family income less than the state average.
8. Nineteen of the selected districts collect more dollars per pupil than the state average.
9. Twenty-one of the selected districts had a municipal over-burden as defined by the Fels formula of percent of local taxes for school operation.
10. In the state of Michigan during 1967-68, 51.22 percent of the local taxes were collected for municipal services other than school operation.

11. A significant relationship does exist between the variables studied--SEV/Pupil; Revenue/Pupil; Percent of Local Support; Expenditures/Pupil; and Median Family Income.
12. No significant relationship was found between SEV/Pupil and Percent of Local Support; SEV/Pupil and Median Family Income; Revenue/Pupil and Median Family Income; Percent of Local Support and Median Family Income; and finally, Expenditures/Pupil and Median Family Income. SEV, the present indicator of district wealth, was not significantly related to the Percent of Local Tax Support or Median Family Income.
13. Median Family Income was not significantly related to any of the factors utilized in financial comparisons of districts, i.e., SEV, Revenue/Pupil, Percent of Local Support, and Expenditures/Pupil.
14. The local millage rates that would be necessary to raise all of the selected districts to the hypothetical level of $1100 per pupil would be unrealistic to expect of any district. They only serve to illustrate the inequity of financial support under the present State Aid Act.

Recommendations

1. The State Aid Act should be modified to accomplish the following:

a. Clearly identify the problem for what it is. Certain districts find themselves in a less favorable position in regard to financial support than do other districts in the state due to municipal over-burden, and competition with other municipal services within their own districts.

b. Clearly state the intent of special consideration.

The State of Michigan shall provide additional state financial assistance for those districts in the state who have a demonstrated municipal over-burden. Municipal over-burden is herein defined as non-school operation levies within the district exceeding the average non-school operation levy within the state.

c. Utilize a formula which contains the municipal over-burden identification technique as described herein.

d. Develop within the State Aid formula the relationship between municipal over-burden and the amount of financial assistance to be given.

Without complete disregard for the thought and study that the present State Aid formula contains, a municipal over-burden factor may be applied following aid determination.

This aid determination would be as in the present manner with the exception of Section 17, which is herein replaced by the municipal over-burden factor which is illustrated in Figure 5.1. For example, after State Aid was determined for the Detroit School District, the Percent of Local Support would be compared to the Average Percent of Local Support in the State. Following this determination, the amount of State Aid normally received is multiplied by the percentage factor and additional aid is distributed accordingly. For the year of this study, Detroit would have received $15,884,288.00 in special state aid. This would compare with the $9,110,549.00 they did receive, or an additional $22.89 per pupil in state aid. The computations for the sample districts are shown in Table 5.1. If the proposed formula were to have been used during the 1967-68 school year, state monies would have been distributed as indicated in Column 2, rather than as actually distributed as indicated in Column 3 of Table 5.2.

From Table 5.2 it is plain to see that more aid would have been distributed to the various districts from state sources under

FIGURE 5.1.--Over-Burden Formula.

$$100 - \left(\frac{\text{School District Operational Millage}}{\text{Total Local Millage}} \div \frac{\text{Average State School Operational Millage}}{\text{Average Total State Millage}} \right)$$

= Percentage of Over-Burden

TABLE 5.1.--Over-Burden Computations.

DISTRICT	SCHOOL OPERATION MILLAGE	TOTAL MILLAGE	PERCENT FOR SCHOOL OPERATION	PERCENT OF OVER-BURDEN[a]	BASIC AID/ PUPIL	OVER-BURDEN AID/PUPIL
Detroit	20.76	53.23	39.00	20.05	$267.73	$53.68
Flint	21.85	37.86	57.71	none	$257.20	none
Grand Rapids	13.10	36.70	35.69	26.83	$274.38	$73.62
Livonia	26.90	53.60	50.19	none	$251.97	none
Lansing	26.20	52.84	49.58	none	$268.89	none
Warren Cons.	18.61	44.37	41.94	14.02	$234.62	$32.89
Pontiac	18.35	46.94	39.09	19.86	$242.96	$48.25
Saginaw	15.80	33.42	47.28	3.08	$253.22	$ 7.80
Dearborn	22.90	50.31	45.52	6.68	$151.18	$10.10
Wayne Comm.	30.60	61.32	49.90	none	$307.20	none
Royal Oak	22.85	51.20	44.63	8.51	$268.12	$22.82
Kalamazoo	23.00	48.01	47.91	1.78	$262.81	$ 4.68
Ann Arbor	21.00	46.67	45.00	7.75	$207.00	$16.04
Birmingham	30.00	62.10	48.31	.96	$230.55	$ 2.21
Utica	25.61	58.83	43.53	10.76	$260.93	$28.08
Bay City	18.00	47.05	38.26	21.57	$278.12	$59.99
Southfield	24.60	50.81	48.42	.74	$233.95	$ 1.73
Farmington	23.40	52.97	44.18	9.43	$306.48	$28.90
Jackson	23.42	52.70	44.44	8.90	$307.81	$27.40
Port Huron	23.75	51.00	46.57	4.53	$312.80	$14.17
Roseville	25.61	59.41	43.11	11.62	$309.30	$35.94
Garden City	20.50	49.59	41.34	15.25	$356.52	$54.37
E. Detroit	23.13	51.65	44.78	8.20	$297.14	$24.37
Lincoln Park	20.17	51.51	39.16	19.72	$304.73	$60.09
Grosse Pointe	22.90	52.31	43.78	10.25	$173.00	$17.73
Average:	21.03	43.11	48.78			

[a]See Figure 5.1 on preceding page.

TABLE 5.2.--Comparative Distribution

DISTRICT	PERCENT OF STATE OVER-BURDEN	COLUMN 2 PROPOSED SYSTEM	COLUMN 3 PRESENT SYSTEM	INCREASED STATE AID
Detroit	20.05	$321.41	$298.52	yes
Flint	none	$257.20	$257.20	no
G. Rapids	26.83	$348.00	$274.38	yes
Livonia	none	$251.97	$256.56	no
Lansing	none	$268.89	$271.69	no
Warren Cons.	14.02	$267.51	$234.62	yes
Pontiac	19.86	$291.21	$242.96	yes
Saginaw	3.08	$261.02	$253.22	yes
Dearborn	6.68	$161.28	$151.18	yes
Wayne Comm.	none	$307.20	$316.57	no
Royal Oak	8.51	$290.94	$268.12	yes
Kalamazoo	1.78	$267.49	$262.81	yes
Ann Arbor	7.75	$223.04	$207.00	yes
Birmingham	.96	$232.76	$230.55	yes
Utica	10.76	$289.01	$260.93	yes
Bay City	21.57	$338.11	$278.12	yes
Southfield	.74	$235.68	$233.95	yes
Farmington	9.43	$335.38	$306.48	yes
Jackson	8.90	$335.21	$307.81	yes
Port Huron	4.53	$326.97	$312.80	yes
Roseville	11.62	$345.24	$348.41	no
Garden City	15.25	$410.89	$366.83	yes
E. Detroit	8.20	$311.51	$297.83	yes
Lincoln Park	19.72	$364.82	$376.43	no
Grosse Pointe	10.25	$190.73	$173.00	yes

State Over-Burden Average: 48.78

the over-burden proposal. For the 1967-68 school year, the 19 districts which qualified for over-burden aid would have received $16,357,703.00 more than they actually did receive. Over-burden aid for the 19 districts which qualify from the sample group would have amounted to $27,773,323.00 as compared to Section 17 aid of $11,191,113.00 to the same group of districts. The amount of aid an individual district would have received using the over-burden formula is illustrated in Table 5.3.

A number of changes occur in special aid when switching from Section 17 to the over-burden formula. Mainly, these changes are in the form of increased state aid. However, three districts--Livonia, Lansing, and Wayne Community--which presently receive Section 17 aid would not receive aid when the over-burden formula is used. In addition, Roseville and Lincoln Park would receive less aid using the over-burden formula. It is of interest to note that Flint does not qualify for additional aid under either Section 17 or the over-burden formula.

When city income taxes were considered as a part of the total municipal tax profile

TABLE 5.3.--Over-Burden Aid Per District.

DISTRICT	MONEY FROM SECTION 17	MONEY FROM OVER-BURDEN FORMULA	DIFFERENCE TO DISTRICT
Detroit	$ 9,110,549	$15,884,288	+$ 6,773,739
Flint	---	---	none
G. Rapids	---	$ 3,523,969	+$ 3,523,969
Livonia	$ 155,771	none	-$ 155,771
Lansing	$ 90,135	none	-$ 90,135
Warren Cons.	---	$ 814,981	+$ 814,981
Pontiac	---	$ 1,160,654	+$ 1,160,654
Saginaw	---	$ 182,777	+$ 182,777
Dearborn	---	$ 225,240	+$ 225,240
Wayne Comm.	$ 189,288	none	-$ 189,288
Royal Oak	---	$ 460,987	+$ 460,987
Kalamazoo	---	$ 90,717	+$ 90,717
Ann Arbor	---	$ 291,351	+$ 291,351
Birmingham	---	$ 39,168	+$ 39,168
Utica	---	$ 468,824	+$ 468,824
Bay City	---	$ 949,942	+$ 949,942
Southfield	---	$ 26,770	+$ 26,770
Farmington	---	$ 441,159	+$ 441,159
Jackson	---	$ 408,534	+$ 408,534
Port Huron	---	$ 206,825	+$ 206,825
Roseville	$ 554,821	$ 509,881	-$ 44,940
Garden City	$ 143,731	$ 757,972	+$ 614,241
E. Detroit	$ 9,102	$ 319,905	+$ 310,803
Lincoln Park	$ 937,716	$ 785,857	-$ 151,859
Grosse Pointe	---	$ 223,522	+$ 223,522
Totals	$11,191,113	$27,773,323	+$16,582,210

as recommended herein, additional over-burden aid would result as reported in Table 5.4. Detroit would have received an additional $4.39 per pupil when the income tax was figured into the total tax profile. Flint, once again, did not qualify for any additional aid. Saginaw, however, received $5.65 more per pupil. Income tax is a factor of total taxes paid in a district, the impact of which is herein illustrated as it relates to the over-burden formula.

TABLE 5.4.--City Income Tax Impact on Over-Burden Aid

CITY	OVER-BURDEN AID	ALL AID /PUPIL	INCREASE OVER SECTION 17
Detroit without income tax:	$15,884,288	$321.41	$6,773,739
Detroit with income tax:	$17,183,319	$325.80	$8,072,771
Flint without income tax:	none	$257.20	none
Flint with income tax:	none	$257.20	none
Saginaw without income tax:	$ 182,777	$261.02	$ 182,777
Saginaw with income tax:	$ 315,174	$266.67	$ 315,174

The proposed over-burden formula effect on equalization of educational opportunity as depicted by the financial support is illustrated in Table 5.5 and Figure 5.2. Table 5.6 reports the local effort needed to reach the hypothetical support level of $1100 per pupil, the off-setting effect of Section 17 aid, and the off-setting effect of the over-burden formula. Previously the off-setting effect of Section 17 to reach this hypothetical level was reported and discussed in Chapter 4. (See Table 4.2) Municipal over-burden as a required factor in the determination of state aid shall be included in the calculations for aid for all districts; hence initiative shall no longer rest with the individual districts.

2. Further extensive in-depth research is necessary to separate those factors which account for the vast differences in aid which still exist for districts such as Saginaw, Dearborn, Birmingham, Garden City, East Detroit, Lincoln Park and Grosse Pointe. Research should be directed toward ascertaining those factors which account for an individual district's level of revenue. Of those districts listed above, Dearborn, Birmingham, and Grosse Pointe probably do not need additional aid, while there are others in this

TABLE 5.5.--Impact of Over-Burden.

DISTRICT	1967/68 TOTAL REVENUE/PUPIL	OVER-BURDEN AID	TOTAL
Detroit	702.06[a]	53.68	724.95
Flint	689.94	---	689.94
G. Rapids	591.17	73.62	665.56
Livonia	698.39[a]	---	693.80
Lansing	748.38[a]	---	745.58
Warren Cons.	604.12	32.89	637.01
Pontiac	664.85	48.25	713.10
Saginaw	570.76	7.80	578.56
Dearborn	1,058.86	10.10	1,068.96
Wayne Comm.	630.03[a]	---	620.66
Royal Oak	588.16	22.82	610.98
Kalamazoo	768.19	4.68	772.87
Ann Arbor	734.01	16.04	750.05
Birmingham	832.17	2.21	834.38
Utica	625.72	28.08	653.80
Bay City	576.03	59.99	636.02
Southfield	725.51	1.73	727.24
Farmington	596.23	28.90	625.13
Jackson	728.27	27.40	755.67
Port Huron	649.00	14.17	663.17
Roseville	627.63[a]	35.94	624.46
Garden City	540.48[a]	54.37	605.16
E. Detroit	543.68[a]	24.37	567.36
Lincoln Park	607.69[a]	60.09	596.08
Grosse Pointe	877.72	17.73	895.45

[a]Includes Section 17 aid which would be discontinued.

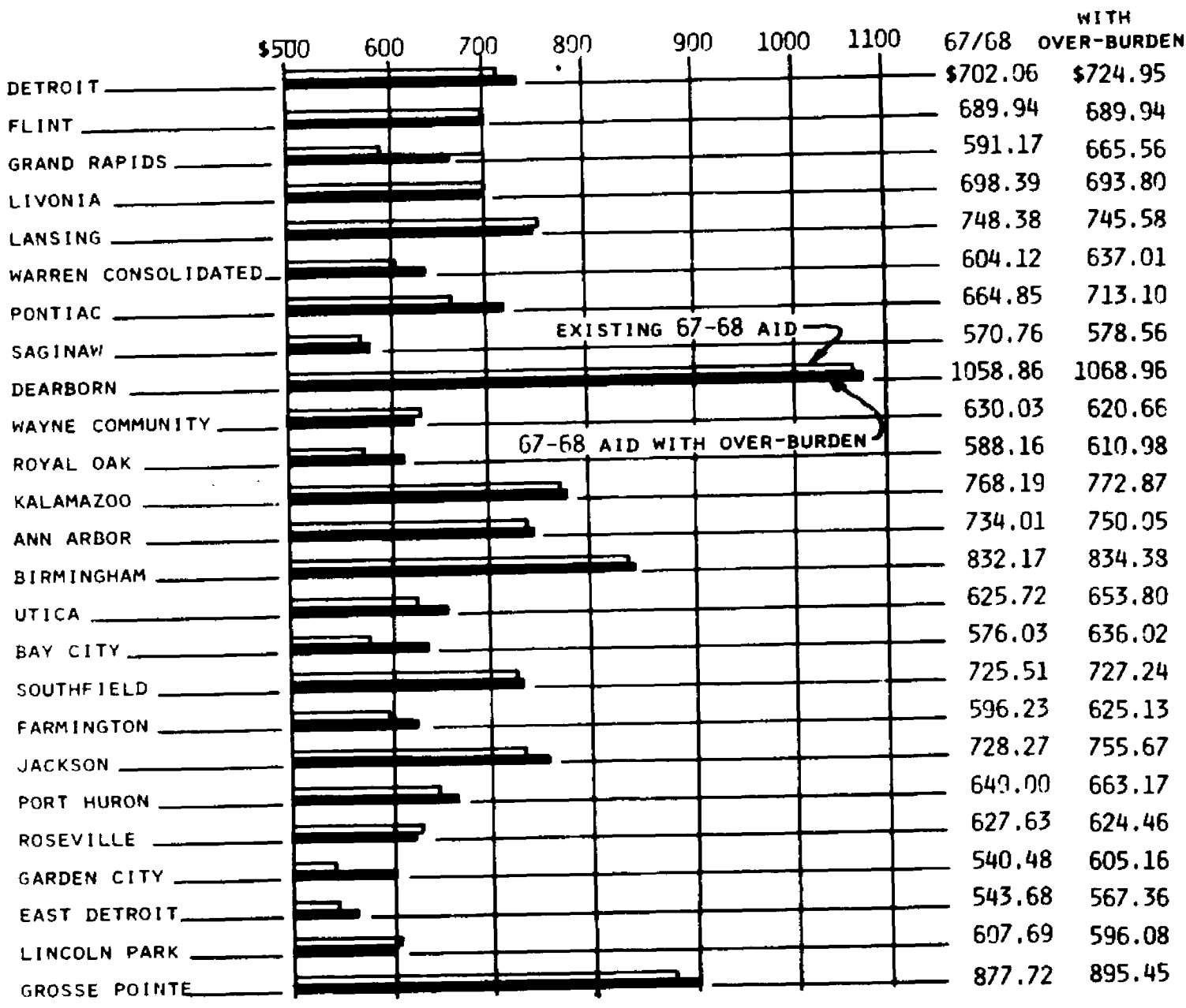

FIGURE 5.2--REVENUE/PUPIL INCLUDING OVER-BURDEN

TABLE 5.6.--Comparisons of Total Local Millage for a Support Level of $1100 Per Pupil

DISTRICT	EXCLUDING SECTION 17	INCLUDING SECTION 17	WITH OVER-BURDEN
Detroit	47.1	45.2	42.0
Flint	44.0	no change	no change
G. Rapids	24.9	no change	22.9
Livonia	54.7	54.4	54.7
Lansing	47.7	47.5	47.7
Warren Cons.	48.3	no change	46.3
Pontiac	41.2	no change	38.5
Saginaw	33.7	no change	no change
Dearborn	24.1	no change	25.1
Wayne Comm.	80.4	79.4	80.4
Royal Oak	65.0	no change	63.0
Kalamazoo	50.2	no change	no change
Ann Arbor	36.4	no change	35.9
Birmingham	44.8	no change	no change
Utica	61.7	no change	61.5
Bay City	53.8	no change	49.8
Southfield	45.7	no change	no change
Farmington	73.1	no change	70.3
Jackson	46.8	no change	44.1
Port Huron	59.4	no change	58.3
Roseville	78.7	74.3	74.8
Garden City	108.3	106.7	99.3
E. Detroit	80.0	79.0	77.8
Lincoln Park	71.2	63.8	66.2
Grosse Pointe	31.0	no change	30.3

listing which probably need still further aid. Consideration of over-burden in the state aid formula will aid in equalizing revenues. However, neither Section 17 nor the over-burden formula can completely equalize the problem. Perhaps nothing short of a 100 percent state support plan will be successful in accomplishing this goal.

EPILOGUE

Author's Reflections

The educational programs in urban schools must be specialized so that children in these areas can enter school with a background of knowledge and experience similar to that of children in suburban areas, as well as remedial assistance to maintain the same level throughout their years in school. To do this requires extra programs, extra teachers, extra classes, all of which require extra financial support which must come from outside the usual local tax resources. This extra support can come from the state legislature through the use of municipal over-burden factors in its State Aid Act.

Equalized educational opportunity for all children of the state must mean exactly that -- an "equal opportunity." Surely no child deserves to have his educational opportunities shortchanged solely for the reason that the particular area in which he lives has an over-abundance of socio-economic problems. Perhaps, just because of those socio-economic problems, the child should receive an educational program which is more costly than the program of a child in an affluent area where children receive a wider variety of experiences and opportunities.

This study was limited to the attempts in Michigan to equalize the distribution of money in the school districts throughout the state. The study did not touch upon those factors other than financial which contribute to unequal educational needs and opportunities. Money alone does not guarantee equal opportunity. Equal educational opportunity may well necessitate unequal distribution of money. Special programs, special equipment, and special staffing patterns may very well be needed, all of which are more costly than the more traditional programs, methods, and staffing patterns now practiced in many of our schools. As pointed out in the Fels study, the very cities which already had an excessive tax burden also had the greatest need for special programs, etc. Consideration of overburden may well provide a first step toward equalization of opportunities through a different pattern of financial aid. However, more research is needed to identify clearly those other contributing factors which will need to be supported, perhaps at the state level, through which true equality of educational opportunity will finally be achieved.

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