THE FOUNDATION PROGRAM IN MASSACHUSETTS

by Joseph W. Riordan

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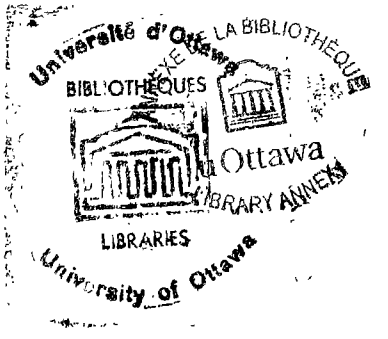

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INTRODUCTION

Numerous forms of financial assistance for schools have been developed in different parts of the United States. Some have been found lacking in one respect or another. However, all have attempted to even the burden of the support for education and the opportunity to develop. Background studies of different financial programs in various states have been considered and evaluated in the first Chapter.

In the Commonwealth of Massachusetts, as elsewhere, the question of financial assistance for education is under intense study. Since 1948 a modified form of the Foundation or Partnership Program has been used. Formulas, defined by statute, a principal and secondary formula, are used as a basis for allocating state financial assistance on a state-wide basis.

However, the present system of apportioning state aid using 1945 equalized valuations has become so hopelessly outdated that new sources of support revenue are being sought.

The influence of the educational laws involving the laws of 1642 and 1647 of the Commonwealth of Massachusetts cannot be ignored or their influence minimized

in attaining fiscal aid on a state-wide basis, nor can the present laws and statutes pertaining to education be overlooked.

That the problem of inequality both in opportunity and taxation is very real cannot be doubted as a survey of specific cases in Chapters Three, Four and Five will show. Statistically, the injustice of certain factors in allocating state funds becomes clear, and bears out the trend observed by inspection that definite inequalities exist in all the principal factors related to school finance in Massachusetts.

The main source of school taxation in many local communities has been raised to the breaking point, making imperative a wider variety of tax bases or at least a more even distribution of the tax burden over Commonwealth municipalities.

Throughout the discussion it might be well to emphasize that the phrase "foundation program" which will recur frequently is used interchangeably with "partnership program". "Experimental valuation", used particularly in Chapters Four, Five, and Appendix Five, refers to a scheme of proposed valuation based on a suggested re-apportionment factor. "State aid per pupil" refers to the amount made available by the Commonwealth of Massachusetts

on the basis of all seven to sixteen-year old children in attendance in the public schools.

The research reported on takes the following lines:

(a) An historical survey of the support given public schools in the United States;

(b) A survey of the present Foundation Program in use in Massachusetts, together with a study of pertinent state legislation;

(c) A study of the existence or non-existence of equality of opportunity in the present state aid program;

(d) A study of the tax burden along with some general observations on the tax allotment picture as it now exists in Massachusetts, and

(e) Some recommendations arising from the practical examples of comparing fully equalized proposed Foundation Programs. The comparisons have been worked out both in standard scores and in dollar values, as well as by means of the Fisher "z" score technique and the Pearson product moment correlation charts.

The figures quoted throughout this report on allotments of state funds, valuations of individual municipalities, amounts provided for local and total school support, state aid per pupil, are found in the Report of the Department of Education for the year ending June 30, 1952, generally referred to as Public Document No. 2, This volume contains tabulations of the school returns for the school year ending June 30, 1952, and the fiscal year preceding 1952.

There are five appendices, namely:

Appendix I consists of Chapter 70, which contains the principal state aid laws for use in the Commonwealth of Massachusetts.

Appendix 2 contains Chapter 559 (in use since 1945), an act establishing the basis of apportionment of school, state and county taxes. For comparison purposes, House 2172 figures are quoted from the December, 1952, biennial report of the Commissioner of Corporations and Taxation, which deals with a proposed plan of equalization and apportionment of state and county taxes for 1953 in Massachusetts.

Appendix 3 presents both a proposed program of state aid and a proposed program of equalized valuation with dollar and "z" score values for inter-class comparisons.

Appendix 4 introduces "key district" formula proposals as developed by Strayer and Haig and later modified by Dr. Mort. There is a $200 Foundation Proposal and a $150 Foundation Proposal. Both are in terms of dollar and "z" score values.

Appendix 5 is the most comprehensive of the appendices. The 349 municipalities of Massachusetts are analyzed in respect to dollar values, class ranks and state ranks. Two sets of "z" scores are provided, one for all four classes of municipalities; the other for state-wide comparisons of communities. Every useful financial factor relating to state school finance has been presented in this appendix.

CHAPTER I

A HISTORICAL SURVEY OF STATE SUPPORT OF PUBLIC EDUCATION

CHAPTER 1

A HISTORICAL SURVEY OF STATE SUPPORT OF PUBLIC EDUCATION

Before discussing the operation of present-day Foundation Programs, it is necessary to understand something of the nature of their growth. In this chapter, some of the practices which developed both directly and indirectly from the various forms of state aid will be discussed. It will be appreciated that before state aid could attain its present stage of development, much ground-work was needed to provide adequate norms with which current programs could be compared. The Strayer and Haig concept of equalization, the Reward-for-Effort Principle defined by Cubberly and the Adaptability or Efficiency Principle furthered by Mort and Cornell in 1937, all contributed substantially to the present form of state aid to education; so also did Pierce's studies on the relationship between community expenditures and the type and quality of education provided, Strayer's work on the appraisal of school systems and pilot communities, and Mort's work on cost-quality relationships.

The Constitution of the United States contains no specific reference to education to date, but the residual

right of each individual state to control its own system of education is implicit in the Tenth Amendment which provides that "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." Hence, there are in existence, at any given time, as many systems of public education as there are states in the Union.

Yet, in spite of the great variety of systems, certain practices have developed to meet similar needs. These practices expanded from state to state until they have obtained a definite influence on the educational policies of a large number of the states. In this manner, therefore, it becomes possible to identify certain periods in the history of American education where state aid was used to achieve specific objectives.

1. School Funds

School Funds were among the earliest means utilized to support public schools; for instance, the Connecticut School Fund, which dates back to 1750,[1] was firmly established in 1795 as the first permanent common school fund. At this time, Connecticut added to the school fund base, the proceeds

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[1] Ellwood P. Cubberly, Public Education in the United States. New York, Houghton-Mifflin, 1934, p.222.

received from the sale of its Western Reserve in Ohio,[2] which totalled $1,200,000. This fund originally furnished sufficient revenue to pay for complete support of all the schools in Connecticut; however, as the population of Connecticut grew, it became mandatory to return to compulsory taxation in 1854. The net result of this experience definitely pointed out the inadequacy of endowments as a means of public school support.

At one time or another, all the thirteen original states, with the exception of South Carolina, used the Permanent School Fund as a means of partial or full school support. By 1948, these Permanent School Funds still existed in forty-four of the forty-eight states.

It is of interest to observe with Mort[3] that the total amount produced by these funds in 1945-1946, along with School Land Leases, was $27,326,212. The amount of income from all such funds, including those controlled by states, counties, and municipalities, ranged from $3,565,826, in Minnesota, to $3,650 in North Carolina.

The distribution of these amounts to schools was accomplished on the basis of a pupil rate ranging from $22.35 in Wyoming, to $.03 in North Carolina; the average for forty-two states being in the vicinity of $1.17 per enrolled pupil.

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[2]Cubberly, Public Education in the United States, p.80

[3]Paul R. Mort and Walter C. Reusser, Public School Finance, New York, 1951, McGraw Hill, p.528.

It is evident that where a few states obtained substantial revenues from Public School Permanent Funds, many other states found themselves receiving only a small proportion of public school income from this source. Indeed, the percentage of total school income from Public School Permanent Funds has been falling off consistently in the last fifty years. The percentage in 1890 was 5.5; by 1920, the percentage had dropped to 2.7 per cent; by 1948 the percentage dropped to less than 1.0 per cent.

In the past, State Permanent School Funds have made a real contribution to school aid, because they were useful in stimulating and promoting local support for public school education.[4]

Now what were the accomplishments of the Massachusetts School Fund? Previous to 1834 when the Fund was set up, there was little or no trustworthy information available concerning the schools of the state. Participation in the income of the Fund made school returns mandatory. The question might be asked here why the Fund was limited to such rather small proportions of income per pupil instead of the large scale used in the neighboring state of Connecticut. The answer is found in the Report of 1859.

> A Fund which should be so large as to suffice for the support of the whole school establishment of the State, as in the case of Connecticut, would, in

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[4]Arvid J. Burke, Fiscal Policy for Public Education in the State of New York, Staff Study I, Education Conference Board, 1947, Albany, N.Y., p.92.

> the opinion of the Committee, be rather detrimental than advantageous; it would only serve to draw off from the mass of the community that animating interest, which will ever be found indispensable where a resolute feeling upon the subject is wished for or expected.[5]

Concerning the Massachusetts Fund the following is quoted from the Twenty-Second Annual Report of the Board of Education, where Secretary Boutwell's style is easily recognizable:

> The Fund was established by the Legislature of 1834 (Statutes 1934, Chapter 169) and it was provided by the Act that all moneys in the Treasury on the first of January 1835, derived from the sales of land in the State of Maine and from the claim of the State on government of the United States for military services, and not otherwise appropriated, together with fifty per centum of all moneys thereafter, to be received from the sale of lands in Maine, should be appropriated to constitute a permanent fund, for aid and encouragement of Common Schools. It was provided that the fund should never exceed one million dollars, and that the income only should be appropriated to the object in view.[6]

The method of distribution of the Fund was referred to a subsequent legislature. It was understood and provided that no town would receive a greater amount than was needed for the support of the Common Schools. Certainly, there are two aspects in the law that deserve consideration. First, the object of the Fund was the aid and encouragement of

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[5]Commonwealth of Massachusetts, Department of Education, Public Document No. 2, Annual Report of the Board of Education, 1859, Twenty-Second Annual Report of the Secretary, p.38.

[6] Ibid, p.38.

schools, and not their support; second, the limit of appropriation to the towns was the amount raised by each. An obvious inconsistency appears in this restriction, since a study of the report would show that the income from the entire fund at this time would have been equal to only 43 cents for each child in Massachusetts between the ages of five and fifteen years.

Public Document No. 2 closes with these words:

> The ancient policy of the Commonwealth will be continued; but whenever the people see the government, by solemn act, manifesting its confidence in the schools and in learning, they will be encouraged to guard and sustain the institutions of the fathers.[7]

It is clear that in 1642, the Massachusetts legislators had no intention of subsidizing fully, or even to any great extent, large centralized financial aid from the state treasury. Each town was to work out its educational aid problems to the best of its ability.

From Public Document No. 2 we also learn "That the cost of education was more than thirty dollars per pupil in the private schools and only eight dollars and forty-nine cents in the public schools."[8] By contrast with today's school expenditures it can be concluded that these items have been multiplied several times in the last two hundred years.

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[7]Commonwealth of Massachusetts, Department of Education, Public Document No.2. Annual Report of the Board of Education, 1859, Twenty-Second Annual Report of the Secretary, p.56.

[8]Ibid., p.49.

It is well at this point to recall that the definite concept of an elementary school in the early years of the United States was simply to teach certain basic skills, such as reading, writing and arithmetic; while academies, on the secondary level, were more diversified in subject-matter, as well as more costly. Secondary schools, in the long run, on account of their expanded curricula and extra-curricular activities, are still in need of higher expenditures, even in our day. However, it is well to recognize that the early methods of distribution of state funds were set up to stimulate the establishment of elementary schools.

Generally, as the elementary schools and the high schools, (a great many of these previously had academic status), became more numerous and more widely distributed, concern for the quality of schooling became an important problem. Moreover, it did not take some of the municipalities long to realize that they lacked the proper financial structure to support an adequate educational program. Consequently, administrators turned from the establishing of schools to a concern for the development of various types of educational activity. Minnesota, in 1895, allotted $200 for each graded elementary school. Likewise, Rhode Island, in 1894, provided for its school and teacher quotas. About this time, Vermont also allotted most of its state aid in proportion to the number of schools.

At the beginning of the 20th century, educators and public-spirited citizens, who were interested in special

areas of educational development such as providing school library books, establishing grade schools, rural schools, Americanization classes, and the like, emphasized the use of special aids for their development. At this time the idea that state grants, no matter how small, were an unfailing method of obtaining certain educational results gained wide acceptance. Indeed, in many parts of the United States, this same conclusion still prevails.[9]

2. STATE AID PROGRAMS

At the turn of this century, Cubberly made the first extensive survey of the matter.[10] He studied the fiscal policies of the various states, confining his interpretations to the problems of the period; he emphasized the principle of Rewarding-the-Effort of communities; he thoroughly investigated the wide use of special aids in the various states, along with the growing need for definite aid programs for the poorer school districts. He called this his Equalization Principle, helping the poorer districts rather than the wealthy ones.

The Equalization Laws passed in the latter part of the 19th and the early part of the 20th centuries, under the influence of Cubberly, when studied closely, seem to carry very little appreciation of what was essential in the way of

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[9]Arvid J. Burke, Financing Public Schools in the United States. New York, Harper, 1951, p.370.

[10]Ellwood P. Cubberly, School Funds and Their Apportionment. New York, Bureau of Pubs.,Teachers College, Columbia University, 1905, p.253.

state support, if equalization was to exist on the one hand, and other existing principles were not to be rejected on the other.

It is important to stress here that if the sole aim of these state aid laws had been equalization, there would have been unquestioned justification for ending all such aid to the wealthiest units instead of increasing it. For instance, New York State has not only consistently allotted state aid to the wealthier districts, but has also returned to all its state districts amounts in direct proportion to their tax-paying ability. This payment was justified, not on any political or educational grounds, but on the basis of good tax procedure.[11]

Now, this method of stimulation was repeated over and over in other states. Commissions or legislatures, when faced directly with the necessity of satisfying the immediate needs of poor districts, did not think it reasonable or just to take money away from the wealthy districts. This meant that funds allotted to the poorer districts served only to raise the property taxes in the more wealthy. The situation seemed ironical, improving conditions in one part of the state and actually making conditions worse in the other parts.

As an example, mention should be made of Connecticut, which was among the pioneers in applying the concept of

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[11]Burke, Financing Public Schools in the United States, p.346.

equalization in public school finance. In 1841, a minimum school term of four months became a requirement under the law. In order to enforce this statute, it became obvious that some aid must be guaranteed each district to ensure that a teacher might be employed. To do this, the Connecticut legislators provided that a direct grant of at least $50 would be paid to each district before any other distribution of the available funds for state aid would be made. In this manner, every small Connecticut hamlet had the means to employ a teacher in disregard of the number of pupils or the taxable wealth of the community. With few minor changes, this plan was in effect from 1841 to 1870.

It is highly significant that most of the early educational policies attempted to impose a minimum amount of expenditure for each district, each school, or each teacher. This was done on the assumption that certain basic needs existed, such as the authority to hire a teacher in a low-income community which could not afford this expense unaided, or the operation of a school with low enrollment, without imposing too great a financial burden on the taxpayers of the district.

A great many equalization methods failed because their objectives were dependent upon tax sharing, which many times failed to equalize the tax burden because wealthy districts received the most help; or else they called for changes in the procedures of giving grants-in-aid.

Failures in equalization occurred in such states as Delaware, Idaho, Nebraska, Nevada, New York, and Pennsylvania, mainly on these grounds alone. This proved the need to improve the older methods of equalization, or else to establish an entirely new concept of financing schools adequately as well as equitably.

In answer to the imperative need for a new basis for school finance, Mort, in 1923, with the help of Strayer and Haig, introduced the Foundation or Partnership Program. Of the many finance practices for school development during the past century, this was the most popular and the most successful. This concept provided a satisfactory answer to the problem of equalization, even though countless other issues were involved. Their original statement of the program's aims follows:

> To carry into effect the principle of "equalization of educational opportunity" and "equalization of school support" as commonly understood, it would be necessary (1) to establish schools or make other arrangements sufficient to furnish the children in every locality within the state with equal opportunity up to some prescribed minimum; (2) to raise the funds necessary for the purpose by local or state taxation adjusted in such manner as to bear upon the people of all localities at the same rate in relation to their tax-paying ability; and (3) to provide adequately either for the supervision and control of all the schools, or for their direct administration by a state department of education.[12]

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[12]George B. Strayer and Robert M. Haig, The Financing of Education in the State of New York, Report of the Educational Finance Inquiry Commission of New York, 1924, p.178.

It is noteworthy that the Strayer-Haig definition of equalization of educational opportunity and equalization of school support has stood the test of public acceptance in formulating educational programs in the various states for well over the past thirty years. Also, more often than not, those using the term equality of educational opportunity in discussing school finance include simultaneously the concept of equalization of the burden of support as an integral part of the definition.

On the other hand, this concept of Strayer and Haig has been so completely accepted that quite often those working on the format of state financed educational programs have focussed their attention solely on the basis of equalizing the burden of support, thus neglecting almost completely the complementary factor, the significance of equalization of educational opportunity in the Foundation Program. Under such circumstances, testing the adequacy of the Partnership or Foundation Program[13] was subordinated to the necessity of doing justice to the public.

Strayer and Haig had envisioned the final outcome of their Foundation Concept as evolving into total state support and state control of the public school system. Even today, modern versions of the Foundation or Partnership Program are divided into two main groups; namely, those states such as North Carolina and Delaware[14] which have attempted to support

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[13]Mort and Reusser, Public School Finance, p.406

[14]Edgar L. Morphet, Characteristics of State Support Programs, in Problems and Issues in Public School Finance, Bur. of Pubs.,Teachers College, Columbia University, New York,1952,p.172.

completely a rather comprehensive foundation program from state funds; and the second group which consists of approximately forty states, which participate in some form of foundation or equalization program.[15] The first group has for its basic concept, a completely supported state program using a flat-grant plan for disbursing funds, thus local community effort is neither demanded or required for receiving state allotments. Under the second group, about sixteen states now distribute over 50 per cent of all school funds. The range of present equalization programs runs from weak district grants, which are rather inadequate, to those programs which attempt to set up, through state and local funds, an efficient adequate foundation program for all local school units. Most state funds are now apportioned on the basis of an objective formula which is either written into the law or is prescribed by regulations of the state board of education in accordance with the requirements of the law.

Further, the usefulness of the Strayer-Haig definition as first introduced in New York state under the leadership of Dr. Mort in 1923 was to functionalize the concept of the Foundation Program in the Empire State. In so doing, Mort found it necessary to equate minimum opportunities with dollars. Communities not receiving any state funds would receive 36.4 cents per $100, as a maintaining level. However, in the program as finally adopted by the New York legislature,

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[15]Morphet, Characteristics of State Support Programs, p.165.

the cost of each elementary classroom was cut from $1900 to $1200, and the local rate was lowered from 36.4 cents to 15 cents. Thus, approximately the very same type of equalization as was originally recommended by the procedure of increasing flat grants to local communities prevailed. Thus too the net result of this shift to flat grants gave more fiscal aid to the local communities than the original $1200 program. In 1926 this law was amended, and still again in 1929.[16]

The 1926 changes in the New York statute, called the Cole-Rice Act, attempted a clarified concept of equalization and improved ways of applying its principles. However, the Cole-Rice Act[17] failed to attain the minimum level of equalizational support envisioned by Mort, consequently in 1927 the Friedsam Law was introduced. This law, which went beyond the extent of the Cole-Rice Act, was established mainly for the purpose of solving the school problems of the inflationary period following the first World War. Primarily, this law was a means of relief on property taxes, thus contributing somewhat to equalization, for it raised the level of the New York Foundation Program from about $44 to $56 per elementary pupil. In this manner, it increased the equalization grant to around $36,000,000.

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[16]Morphet, Characteristics of State Support Programs, p.172.

[17]Arvid J. Burke, Financing Public Schools in the United States, New York, Harper, 1951, pp 346-348.

In 1929, the Friedsam Act was further extended to include districts employing less than five teachers and even to one-teacher districts. Such single-teacher districts, however, had to make considerably higher local contributions to the cost of their schools. The Friedsam Act was, in effect, with certain changes like the above, from 1929 to 1945, when the Dewey Act emerged.

Other states also moved toward supporting equalization programs based upon the Foundation Program concept for Georgia in 1926. In 1927, Alabama and Oklahoma took preliminary steps toward the Partnership Program type of equalization program. In 1931 Missouri subscribed to the policy. Even during the depression years from 1933 to 1937 the Foundation Program set-up was followed either wholly or in part by such states as Idaho and Michigan, in 1933; Ohio, Vermont and Wyoming in 1935; and Rhode Island in 1936.[18]

Regardless of all the efforts expended in the several states, there is still a tremendous lag in obtaining a satisfactory proportion of local support particularly in respect to the tax burden of a community. This is pointed out by Burke:

> Up to the present time, probably no state having an equalization program combining state and local support and using property valuation as a measure of taxpaying ability has achieved equity in the local tax burden for supporting the state program. Yet

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[18] Burke, Financing Public Schools in the United States, p.349.

> it can be said that such programs have reduced inequities in local tax burdens existing under previous policies. Certainly the method has more equity in it than any other policy except a completely state supported policy.[19]

A primary difficulty in the development of equalization programs, combining state and local participation is the division of support between the two elements. However, if the state does not furnish an adequate measure of support to all units it can never fulfil its basic objective, a fairly reasonable degree of equality of opportunity for each citizen. Neither can many of the local districts provide the minimum educational essentials in education, without state aid.

It has been by no means easy for some states to support equalization programs involving state and local participation. There is an ever-present tendency to return aid to the more wealthy districts, as did the former policies of tax sharing, or per capita grants, and of older forms of state-supported equalization programs. States that have moved through this phase of the program in recent years are South Carolina, Ohio, New York, New Jersey, Michigan, New Mexico, Kansas, and Colorado.[20]

In 1949, about twenty-one states had equalization programs as their major policy. The remainder of the states, except Arizona, Connecticut, Delaware, North Carolina, and South Carolina, have supplementary programs.[21]

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[19]Burke, Financing Public Schools in the United States, p.351

[20]Ibid, p.357

[21]Ibid, p.357

Better equalization programs must be evolved. At the present time the majority of the states have not adequate school finance programs; many states also have given small consideration to the matter of tax leeway, which is the basic element for high adaptability. The whole matter presents a problem which is open for discussion and study.

Until the early 30's, few people understood the necessity to adapt schools to the changing needs of society. It was not until 1932 that the Adaptability or Efficiency Principle appeared in a survey in Ohio.[22] This principle, according to Mort, "has to do with the sloughing off of outmoded purposes by school systems and the taking on of new ones to meet new needs".[23] It served as a splendid guide for reconstructing the system of school finance in that state.

As the awareness of the implications of the Principle of Adaptability advanced, its tremendous influence on school finance, on school organization and operation began to be felt. Two other influential factors, pertinent to the period, may also have contributed to furthering its influence, namely the changing social and economic conditions

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[22]Ohio School Survey Commission, Equalizing Educational Opportunity in Ohio, Report of a Survey of State and Local Support of Public Schools, Columbus, Ohio, 1932.

[23]Paul R. Mort and Francis G. Cornell, Adaptability of Public School Systems, New York, Teachers College, Columbia University, 1948, p.ix.

of the period, and the changes that were occurring in theories of learning. Of this period, Burton says

> A new type of activity appeared about 1930. The organismic psychology changed our basic conceptions about the learner and his processes. Three principles of great import began to operate: continuity of growth, experience as the method of learning, and integration as a continuing aim.[24]

Although not so-defined until the mid-thirties, the Adaptability Principle might be considered the all-important base underlying the generous interest in special aids in school finance circles from 1850 to 1905. In simple language, this definition made the state responsible for inaugurating conditions and factors that would continually and consistently make schools aware of the necessity of improving themselves.

The Adaptability Principle and its advancement in the United States can be attributed to large extent to Mort and his group from Columbia University and to their surveys of New Jersey, Maine and Rhode Island.

Among the most important findings developed from Mort's research was that the Stimulation Principle not only reacts against the Equalization Principle, but that it also restricts tax leeway and budgetary freedom; both of which are most necessary to encourage adaptability and local initiative.[25]

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[24]A.S.Barr, William H. Burton, and L.J.Brueckner, Supervision. Democratic Leadership in the Improvement of Learning, New York, Appleton-Century, 1947, p.865.

[25]Burke, Financing Public Schools in the United States, p.84

Ever since the investigation by the Educational Finance Inquiry in 1924, neither the Payment-for-Effort Principle, the Reward-for-Effort, nor the Stimulation Principle, have been considered sound criteria of public school finance.[26]

3. MEASURING DEVICES

Since 1935, over three score studies have been made concerning the relationships of adaptability to other factors. In a considerable number of these researches the main emphasis has been an evaluation of the expenditure level.

As the adaptability studies progressed it soon became apparent to those interested in their advancement that some sort of a measuring or evaluating device for school units was greatly needed to furnish norms of adaptability. To supply this request, Mort and Cornell produced such an instrument in 1937.[27]

This instrument listed a total of 183 items, which attempted to represent certain improvements that had occurred in educational practices during the latter half of the 19th century, and the first two and one-half decades of the 20th century. These key items sought to discover what communities had accepted certain advanced practices and the approximate time of their adoption.

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[26]Paul R. Mort, State Support for Education, p.37

[27]Paul R. Mort and Francis G. Cornell, The Foundation Program and the Measurement of Educational Need, in Problems and Issues in Public School Finance. New York, Teachers College, Columbia University, 1952, p.202.

In supplying this criteria of adaptability, Mort and Cornell also made possible important investigations into the matter of evaluating the quality of education in the public schools of certain communities. Such a consideration had been only lightly touched on in earlier studies in the field of adaptation.

According to Mort, two theories account for the apparent spread of an educational change through school systems.[28] One, the Diffusion Theory, claims that an invention is formulated in one community and then spreads to near-by communities. The other, the theory of independent invention, holds that once the need of invention becomes evident many people in many places go to work on it simultaneously. Under this theory, with so many people working on the same problem of attempting to invent an adaptable device or method in so many places, it seems perfectly natural for the same method to appear in various parts of the country at approximately the same time.

About 1945, Dr. George D. Strayer used an improved instrument, The Guide for Self-Appraisal for School Systems, in a study of 140 schools in West Virginia. This study was chosen as a representative sample of the medium expenditure

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[28]Paul R. Mort, Educational Adaptability, Metropolitan School Study, New York, (no date), Columbia University, p.2.

schools at that time. Eighty-seven elementary schools and twenty-three high schools located in 21 counties participated in this study. Three expenditure categories were set up, based upon the current expense per weighted pupil in 1945-1946.[29]

The following will serve as a guide to a better understanding of the West Virginia Study and the three expenditure categories involved:

> The range of budgeted expenditures was from $57 to $106 per weighted pupil. The median of the low expenditure group was $83, that of the middle group $73, and that of the high group $93, all 1945-1946 budgetary figures. The scores on the "Guide" for the three groups of elementary schools, starting with the lowest expenditure group were 233, 275, and 567. The median scores for the high schools in the same order were 325, 450, and 850.[30]

Several aspects of the West Virginia Study brought out imperfections in the adaptative process.[31] The first imperfection concerned itself with the difficulty of bringing to light certain aspects of the Adaptability Principle that exist in large communities. Findings in this study also showed that certain educational adaptations did not appear in any of the three expenditure levels. This was particularly true in

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[29]George D. Strayer, A Report of a Survey of Public Education in the State of West Virginia, Charleston, W.Va., 1945, Legislative Interim Committee, p.512.

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[31] Paul R. Mort, Cost-Quality in Education in Problems and Issues in Public School Finance, New York, Columbia University, 1952, p.27-28.

the larger communities. The unbiased conclusion of some investigators was that not enough money had been provided to cause these adaptations to appear. It is important to emphasize that a large number of adaptations, though recorded, appeared on expenditure levels below which they were anticipated.

Pursuing further into the West Virginia survey, it is noticeable that many communities in various parts of the state, which had no sources of taxable wealth closely associated with favorable population characteristics, had a tax rate which frequently resulted in schools being supported on a lower level than was necessary. However, when the county set-up in West Virginia was established, the extended growth of such districts ended. This was brought about by the county children being subjected to a more or less uniform level of educational opportunity obtained through the hiring of better trained teachers and the use of special school services.

No doubt the West Virginia county school units did possess good work standards and had acquired certain fringe benefits in the adaptability process, but the importance of the development of pilot or lighthouse schools was not sufficiently taken into consideration. Due to the county set-up of school finances, certain communities were also prevented from spending at a rate greater than the Foundation

Program level, so while these county systems possessed equalization, they lacked adaptability to a high degree. The deduction from this section of the West Virginia study leads to the necessary conclusion that local initiative and local participation are both essential in the Adaptability Principle.

Perhaps the item that suffered most from the over-emphasis on equality was the lack of "wholesomeness" of education throughout the state. Mort amplifies quite clearly the meaning of "wholesomeness" in the following:[32] The integration of the Initiative, Equalization, and Adaptability Principles are quite essential for a healthy state and locally supported finance program, particularly a dynamic Foundation Program. He lists the following critical factors:

1. All districts in the state having at least $200 per weighted elementary pupil.
2. A goodly number of districts in the state spending well above the normal expenditures in the state and at least some spending above the $300 level.
3. All districts in the state taxing themselves at least $3 a thousand on full (current sales) value, and reaching upward toward $8 a thousand rather than down toward $3 a thousand.
4. The absence of artificial restrictions on taxation but at the same time the absence of conditions where other than very few districts greatly exceed a local tax of $8 a thousand on full value.
5. All districts in the state sufficiently large to assume local autonomy.
6. All large districts in the state with internal arrangements for insuring local autonomy within the communities making up the large district.

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[32]Paul R. Mort, Public School Finance, p.115.

7. Direct and simple control of the budget by the voters, together with freedom from review by non-educational authorities locally, or by state central agents, educationally, or other freedom from audits that overstep the bounds of strict accounting audits.
8. Central agencies supported to help as well as to exercise prudential responsibilities.

Other findings in this study also have important implications. The higher level expenditure in West Virginia schools consistently showed the effect of the increased expenditure, even considerably more than did the middle group. Also, the middle group showed the effect of additional spending more than did the lowest expenditure group. Further examination of this report points out that there was a slight gain in the percentage of spread of a practice, or invention, For example, as the expenditure per pupil increased from the low expenditure level to the middle expenditure level, this diffusion appeared. While the gain was not large, the average per cent of diffusion of the 146 practices at the lower level of expenditure was 26.4, and at the middle level of expenditure 32.9. The highest expenditure group showed an average diffusion of 51.4 per cent. However, this large gain may be accounted for by the fact that the highest expenditure group included a greater number of pupil costs.

The range of expenditures for the highest expenditure group was about $24 per pupil above the highest expenditure school in the middle group. By contrast, the middle group

per pupil cost did not exceed by more than $10, the highest expenditure school in the lowest expenditure group. Also, another important finding concerned certain educational practices which never showed themselves, at all, or else in a very small measure only,in the middle or lower expenditure levels, now showed themselves in the top level expenditure group.[33]

Therefore, from the West Virginia study we can assume that initiative produced by the local community is an important adjunct, if not the most important, in applying the Adaptability Principle. In the days of early state finance, the practice of local and state government participation in the financing of schools gained impetus. Many of the proposals of those early days agreed that a change of control to state auspices would considerably narrow the importance of local initiative. Earlier studies reaffirmed that the Adaptability Principle was greatly influence by local initiative. One of the assumptions from such a statement could well be that in future public education should promote, not hinder, local participation. Therefore, from the long range viewpoint the Foundation or Partnership Program should extend itself sufficiently to include the rapid adoption of excellent time-proven educational inventions under dynamic local sponsorship.

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[33]Paul R. Mort, Public School Finance, pp 176-177.

At the same time, there should be many wealthy districts willing to spend considerably above average to provide conditions favorable for experimentation in the adaptability of methods, devices and facilities in the educational program. Such districts are essential for the continued growth of educational adaptability in the various states. They are called "pilot" or "lighthouse" districts because they willingly provide a great deal more than a minimum or partnership program.

4.

THE COST AND THE QUALITY OF EDUCATION

Furthermore, the idea that education could be associated with cost or expenditure was extremely new. While most people would concede that schools involve expenditure, they felt that cost and quality of education were only slightly related. Several studies involving the relationship of the quality of education to the expenditure level have been made. These studies point out that those localities which spent more received more in the way of longer terms, better-trained teachers, and many special services.

Still other cost and quality studies showed that communities that spent more, not only performed a more effective service in revising older phases of the school program, but also did much to extend the scope and usefulness of the school. The higher the level of expenditure, the better-integrated was the school. That such schools are

more "adaptable" in the sense of Mort's definition of the principle as "the sloughing off of outmoded purposes by school systems and the taking on of new ones to meet new needs" is self-evident. That the Adaptability Principle is the underlying base for all forms of specialized state aid (which includes Foundation Programs) has been shown earlier in this chapter, and the necessity of including the application of this Principle in any dynamic Foundation Program has also been seen in Dr. Mort's discussion of the meaning of "wholesomeness" in education.

The most forceful conclusions in regard to cost and quality of education appear in Mort's article Cost-Quality Relationships in Education, as follows:

> In all the data collected over thirty years of interest in this subject, there are none that speak more convincingly than these. They seem to indicate that after fifty years of readjustment to the revolutionary discoveries in psychology made at the turn of the century we see emerging an education of great potential and we see that the one important accompaniment of such strong education is expenditure.[34]

While higher expenditure schools appear to obtain stronger patterns of behaviour in the categories of character, personality and citizenship, to teach skills and knowledge more realistically, and to give a great deal of attention to the discovery and understanding of special aptitudes than do low-expenditure schools, by no means is cost the only factor of large importance affecting adaptability.

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[34]Paul R. Mort, Cost-Quality Relationship in Education, in Problems and Issues in Public School Finance, p.17

Dr. Pierce's study of the socio-economic characteristics of communities and the up-to-dateness of school programs bears out this finding. His study holds that prediction concerning the quality of a school can be learned better from certain simple facts about the community than from the expenditure level.[35]

The presence or absence of certain characteristics in the community environment of a school may definitely react to establishing educational improvement. It can be said, in general, that the cultural level of a community is a highly significant factor of diffusion.[36]

In line with this finding, again Mort and Cornell, in their investigation of school systems in Pennsylvania, considered community characteristics in relation to their geographical distribution along with their varying degrees of community interrelationship.

Their conclusion emphasized that both the location and characteristics of a community as a part of a metropolitan area affect its development. They state,

> Adaptability is conditioned not only by the characteristics of individual communities, but by

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[35]Truman M. Pierce, Controllable Community Characteristics Related to the Quality of Education, New York, Teachers College, Columbia University, 1947, p.6.

[36]Paul R. Mort and Francis G. Cornell, American Schools in Transition, New York, Teachers College, Columbia Univ., 1941, p 124.

> the characteristics of the "super-community" of which the school district is a part. That is to say, in addition to possessing the other necessary conditions, the most adaptable communities will be those that are so located geographically as to possess a high degree of interchange of economic and social life and inter-dependence with other communities.[37]

They emphasized that the manner of participating in community life was also a factor:

> The geographical setting of the community with respect to other communities is related significantly to adaptability not only because of the internal richness of social environment, in addition to financial and other factors, but also because of the nature of the part the community plays in the super-community, or the functions of social and economic life which various predominant elements of the community serve.[38]

These same authors also held that isolated communities tended to be less adaptable, partly because of their independence in social and economic life, and partly because they are less influenced by the distant densely-populated areas.[39]

Mort and Cornell, in their Pennsylvania study, also found that the order of importance of communities subscribing to the principle of Adaptability was as follows: first, the residential, second the composite, third the industrial, and lastly the predominantly rural units, which were the least adaptable of all.

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[37]Mort and Cornell, American Schools in Transition, p. 124

[38]Ibid., p 124.

[39]Ibid., p 113.

Later, Pierce found that community factors, which are closely related to the adaptability of schools are:

> Good will toward education; understanding of what schools can do; and characteristics which condition the expression of good will and understanding in the schools themselves.[40]

Pierce has clearly shown that the manner in which a school operates, its background as viewed by the community, with its differing qualities and characteristics, is of extreme value in recognizing the extent to which educational needs are being met. He found that the relationship of all measured community factors to adaptability was expressed by a correlation of .80.[41]

The following inferences can be drawn from his study: that any community is the arbitrator of the quality of education received by its children; that a low degree of community favor for education shows an unwillingness to extend financial support and a disregard for favorable changes in the school program; that public enthusiasm for improvements and extensions in education are decidedly limited by low educational and occupational levels in the community; and that other factors delimiting high educational functioning are such social factors as density or nationality of the population.

Factors relating to good will are also significantly related to adaptability. Again, Pierce's study showed good

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[40] Pierce, Controllable Community Characteristics Related to the Quality of Education, p 6.

[41] Ibid., p 6.

will had a correlation of .69 with adaptability, thus indicating that almost one-half of the variation in adaptability is allied to these measures.[42]

Effectiveness in providing adequate schools in the future will be hampered if communities do not understand what the functions of its schools are in respect to added burdens of responsibility; also they must be enlightened as to the best manner of making schools more efficient through the use of adaptations and inventions in educational practices.

One of the most important single measures of adaptability is community expectancy of what schools can do, as measured by public understanding of what schools should do.

Pierce found that this item had a correlation of .37 with adaptability.

> The real value of an individual factor must be interpreted in the light of its relation to other factors in the analysis. Understanding, as measured, was not significantly related to the best combination of all other community measures. The correlation is .25. This is highly important for it indicates that the factor of understanding contributes something to the explanation of variations in adaptability which is largely independent of the other measures we have used. When combined with other measures, the per cent of variance in adaptability related to all factors analyzed in this study was increased from 61 to 65.[43]

Thus, it is quite evident from the foregoing that

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[42]Pierce, Controllable Community Characteristics Related to the Quality of Education, p 9.

[43] Ibid., p 11.

the factor of understanding appears to be independent of almost all of the other previously mentioned factors.

Further study of the influence of community groups may be summarized from Cooking:

> There are strong indications that the quality and degree of these school-community relationships, the presence or absence in the community of groups or organizations connected with the schools, may aid or obstruct the diffusion of educational practices. The nature of their attitude and the amount of their participation, with respect to pushing the introduction and diffusion of educational practices, may well hinder the improvement of the whole school program.[44]

Ebey also showed that in a school community the presence of a number of able and financially established parents groups had a decided tendency to hurry the introduction of adaptations.[45]

Cooking introduced this topic quite objectively by saying:

> A low level of financial support, especially below a critical level has been shown to hinder the diffusion of educational practices. A series of studies made in recent years seek to show how educational practices purchased at different expenditure levels vary from one another. These studies have attempted to answer two questions. The first: are the better educational practices more widely diffused among the higher expenditure school systems? The second: what is the critical level of expenditure below which the diffusion of educational practices does not take place to any significant degree?[46]

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[44]Walter Cooking, The Regional Introduction of Educational Practices in Urban Systems of the United States, Institute of Administrative Research, Study No.6, Teachers College, Columbia University, p 60.

[45]George W. Ebey, Adaptability Among Elementary Schools in an American City, New York, Bureau of Publications, Teachers College, Columbia University, 1940, p 31.

[46]Cooking, Op.cit., p 65.

In the early thirties, the studies on returns for money spent showed that schools in New Jersey and Maine, which could afford it, were providing certain enlightening practices, such as the minimum use of non-promotion, greater use of tests, better health and clinical services; also they made wider use of a variety of equipment and materials.

Later, the State of Rhode Island Survey, conducted by Mort and Cornell, using their device A guide for Self-Appraisal, containing 183 kinds of practices, evaluated thirty-nine towns in the State for adaptability factors.[47] The 183 practices showed a consistent relationship with expenditure level. Practices were found more frequently in the middle expenditure group than in the low expenditure group, and more frequently in the high expenditure group than in the middle group.

Certainly, the assumption that expenditure plays a large part in the diffusion of adaptability on various expenditure levels appears well-founded.

Another conclusion from the Rhode Island survey indicated that no matter what favorable conditions existed in the lowest expenditure schools, they were not sufficient to off-set the deficiencies involved by the poor expenditure level. The Pennsylvania study brings to light the assumption that better educational practices are more widely spread among the highest expenditure school systems. Hence, the level of expenditure appears to have a definite relationship

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[47] Mort and Cornell, American Schools in Transition, p.64.

to high progress in the educational program. While there are other closely allied factors in this study, we find: " ..a high expenditure level is one of the important considerations of individual adaptation".[48]

Closely related to the expenditure of a school district is its wealth and tax leeway. It is understandable how a wealthy district can provide more money for school expenditures at a lower tax rate and thus not overburden the local property tax base. Mort and Cornell bring this out by the statement:

> Wealthy districts play an important part in the inventing of adaptations and in experimentation with them. When a particular movement in education is studied, it is generally found that a wealthy district or a large district, or a district with both of these characteristics, has been a pioneer.[49]

Communities with a heavy property tax seem unwilling to give consistent support to education on a high level. This is further proven by studies by Mort and Cornell,[50] and by Pierce.[51] All three studies indicate that low tax-leeway communities are decidedly less adaptable; conversely, high tax-leeway communities are consistently more adaptable than the greater majority of districts.

What Education Our Money Buys, produced by the New York State Education Department, emphasizes that educational

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* [49]Mort and Cornell, American Schools in Transition, p 139.

[50]Ibid.,

[51]Pierce, Controllable Community Characteristics Related to the Quality of Education.

* 48 Mort and Cornell, American Schools in Transition, p 64.

returns increase as the expenditure level increases. The program in school districts of New York State is described at three different expenditure levels. School systems that have expended the highest amount of money have introduced the larger number of approved educational practices. The programs of education in these school systems emphasized character, thinking, citizenship, home living, in useful life experience situations.[53]

> Data have been documented on many school systems in other states showing that somewhere near $100 per pupil represents one of the critical points in school support. Schools at this level are distinctly different institutions from those on a $75 level. They not only provide better education for children today, but seem to have a much larger capacity for taking on improvements as they are developed here and there by school systems, by some of them that are spending considerably more. They do not lag behind the best known practices so far. In addition, they do better the tasks attempted by schools on the lower level; in other words, they do more and they do it better.[54]

We may recall that in the West Virginia study, there was a definite tendency for the schools of higher expenditure to be better rated than either the middle or lowest expenditure schools.

Finally, Woollatt has shown rather conclusively that even at the highest expenditure levels, communities continue to expect as their expenditures increase that they will secure more favorable educational returns in the areas

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[53]New York State Education Department, What Education Our Money Buys. New York State Educational Conference Board, Albany, 1943.

[54]Strayer, Survey of Public Education in West Virginia, pp.512-513.

of knowledge, special aptitutes, behavior patterns, and basic skills.[55]

From this brief survey of state aid it is apparent that such aid cannot be considered apart from purpose. It is one of the ways by which certain ends may be achieved. Foremost among these remedies is the implied assurance of sufficient funds to lower the expenditure by poor districts to establish a defensible level of support. One of the most successful ways so far attempted to meet this situation is the Foundation, or Partnership, Program currently in wide use. A general discussion of the principles of such Programs follows in Chapter 2, together with a detailed discussion of the operation of such a plan or Program in the Commonwealth of Massachusetts.

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[55]Lorne Woollatt, The Cost-Quality Relationship on the Growing Edge, New York, Teachers' College, Columbia University, 1948. p 59.

CHAPTER II

THE FOUNDATION PROGRAM

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THE FOUNDATION PROGRAM

Chapter two will outline briefly the working principles of the general Foundation Program as found in a number of the forty-eight states. A brief history and explanation of the development of state aid in Massachusetts will follow. Also included will be a study of Chapter 70, which contains the laws and amendments pertaining to state assistance in the Commonwealth of Massachusetts. An attempt will be made in the latter part of the chapter to clarify the various devices, variations, and relationships pertaining to Section 4 of Chapter 70, the Foundation Program formula.

1. The General Foundation Program

Developments during recent years in the field of school finances have been highly encouraging. The majority of states have made some progress while a number of them have materially revised and improved their fiscal programs.[1]

Much has been written during the past decade concerning the desirability of each state advancing plans for the financing of its public schools to guarantee all children

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[1] Edgar L. Morphet and Erick L. Lindman, Public School Finance Systems of the Forty-Eight States, Washington, D.C., Federal Security Agency, Office of Education, Circular 274, p.64.

an adequate educational program, based on a prudent proportional tax effort. While a number of excellent discussions pertaining to the objectives and criteria for developing such programs are available, nevertheless, much further discussion, planning and study will be needed in a number of states before this problem is anywhere near a satisfactory solution.

The prime concern of most states is no longer the idea of establishing a completely equalized program in which all but the most wealthy districts participate. Instead, most states have advanced during recent years in the direction of establishing a Partnership Program with local communities. Such a program, pioneered by New York State in 1923, encourages the broadening of the tax base and the establishment of a reasonably adequate educational program for all children. Because such a procedure does away almost entirely with the state appropriation of special purpose funds, it permits the tax-paying burden to be impartially distributed among the participating partners, the school districts.

However, Morphet and Lindman contend that it is quite evident that no state has yet applied to its own financial school problems all the knowledge and research which is available.[2] The diversity of plans and schemes now in operation to provide some measure of financial relief and to broaden the base of the tax burden and equalize its

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[2]Morphet and Lindman, Public School Finance Programs, p. 3.

effectiveness, give weight to this claim. The most successful of such plans, if general acceptance is any criterion, is the type of state aid generally described as a Foundation Program.

What is a Foundation Program? Theoretically, a Foundation (or Partnership) Program establishes the level of educational services and facilities which the combined efforts of the state and local community guarantee for every child. Its total support should be founded upon a partnership basis of proportionate state and local participation and cooperation to include all essential facilities and services.

The cost is pro-rated for all taxpayers, who contributeto the support of the minimum or guaranteed level, which may be defined under four major headings; instructional services, operational services, transportation services, and school plant services. Moreover, all school districts desiring to do so should have the opportunity to plan educational services and facilities beyond those assured by the Minimum Program.

The major premises of the Minimum Program consist in giving every child, regardless of race, residence, physical handicaps, or the wealth of the school district or parents, adequate educational opportunities.[3]

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[3] Kentucky, State of, A Proposed Foundation Program for Education in Kentucky, State Advisory Committee on Educational Policy, Louisville, Ky., --------, p.22.

Confusion over the definition of the word "minimum" in the Minimum Program may be avoided if the following explanation from Planning Foundation Programs is accepted:

> Obviously, there is no minimum unless it is zero, and a zero level would not be acceptable to anyone as a basic level of educational support. Use of the word "minimum" apparently is intended to emphasize that the program is the lowest which is acceptable to the legislature. But, this is a part of the definition of the foundation program and consequently need not be included in the title. It appears preferable to define it for any state as the level of education which the legislature regards as basic and essential for every child that can participate. The expression "minimum foundation program" embodies an intent to make it extremely low and that is certainly not the purpose of legislatures.[4]

Brookline, Massachusetts, evidences advancement beyond what is called for in a Minimum Program:

> Brookline has had the reputation for many years of being a relatively wealthy community. Perhaps the most significant observation that can be made from a consideration of Brookline's ability to pay is, that it isn't a very real problem. The ability to pay is there. The major question is how much should the town spend on its school system in order to provide children with an education of high quality. Or, to put it more specifically, how much should it pay its teachers, administrators and supervisors in order to be sure that efficient instructional service will be provided. Whatever Brookline wishes to pay, within reason, it can afford.[5]

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[4] Morphet and Lindman, Public School Finance Programs, p.8

[5] Institute of Field Studies, Salaries of the Professional Staff, Brookline Public Schools, New York, Teachers' College, Columbia University, 1952, p.85.

At the present time in several states current expenditures for the support of education per pupil in average daily attendance range from slightly under $100 to over $300 per year. Among localities in certain areas an even wider range of expenditure occurs. However, certain states spending slightly over $100 in average daily attendance hardly ever attain the goals of securing adequate educational opportunities, such as good teachers, modern school buildings, books, and supplies. Such states are not providing an adequate or adaptable school program because the small amount spent for these services and facilities is almost totally insufficient to procure the desired levels of attainment.[6]

Furthermore, Mort and Reusser claim that there is ample evidence to assume that a reasonably wholesome Foundation Program should cost in the vicinity of $200 per pupil per year, or slightly in excess of $5000 per classroom unit. This includes the average cost of a Partnership Program which would give the largest number of school districts in a state a satisfactory equalizing and an adaptable level of school support.[7]

The Foundation Program is more than a device for apportioning state aid for schools. It affects the educational level available to school children in local communities,

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[6]Clayton D. Hutchins and Albert R. Munse, "Planning Foundation Programs", in School Life, Vol.35, No.3, issue of December, 1952, p.47.

[7]Mort and Reusser, Public School Finance, New York, McGraw-Hill, 1951, p.105.

which possess such a small degree of tax-paying ability that they contribute very little from local resources, no matter how extensive a tax effort they make. Norton and Reutter substantiate this as follows:

> The average income per capita of the six highest states in 1929 was $925 and of the six lowest states $296, a ratio of 3.3 to 1. In 1949 the six highest states averaged $1673 per capita income and the six lowest states averaged $782, a ratio of 2.1 to 1. Of the six highest states in 1929, five are still among the six highest in 1949. Also, five of the six lowest states in 1929 are still among the six lowest in 1949.[8]

In other words, of the low-income areas, only one was able to lift itself out of the bottom brackets over a 20-year period, despite the fact that the per capita income rose by 269% in that time. The provision of adequate educational facilities to match those being made available in more wealthy communities obviously became more and more the financial responsibility of the state, in the provision of additional funds from state sources, to make up the differential.

What might be termed the "spread-of-use" factor is commonly accepted as evidence of worth and desirability. This measuring device is no less valid in assessing the value of such a form of state assistance to schools as the Foundation Program under study.

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[8]John K. Norton and E. Edmund Reutter, Jr., "Federal Participation in the Financing of Education" quoted in Problems and Issues in Public School Finance, edited by R.S.Johns and E.L.Morphet, New York, National Conference of Professors of Educational Administration, Teachers College, Columbia University, 1952, p.255.

This author made a rapid survey of the forty-eight states to learn first-hand exactly how many states had a Foundation Program and a Foundation Formula for distributing state aid.

Each state superintendent or commissioner of education was sent the following short four-item questionnaire along with a self-addressed stamped envelope:

	Please check YES	NO
1. Does your state have a Foundation Program for education?	☐	☐
2. Is a Foundation Formula for education used in your state?	☐	☐
3. Are informative materials pertaining to state aid in your state procurable?	☐	☐
4. Would 1950-1951, 1951-1952 reports on expenditures by state and school districts be procurable?	☐	☐

The results of the questionnaire follow:

1. One state, Oklahoma, did not answer.
2. Thirty-two states had a Foundation Program.
3. Two states had a Foundation Program but no Formula.
4. Thirty had both a Foundation Program and a Foundation Formula.
5. Fifteen had no Foundation Formula or Foundation Program.
6. Practically all states sent reports and materials as asked in questions three and four.

The questionnaire produced considerable first-hand information on the extent of use of both the Foundation Program and the formula for its distribution in the forty-eight states. A splendid amount of school finance literature was also made available through the medium of this survey.

The very brevity of the questionnaire precludes the accuracy of the figures obtained by Dr. Morphet in his investigations, as referred to earlier, but the answers obtained do provide a rough working basis for consideration of the present-day extent of the use of the Foundation Formula.

There are a few states, including Massachusetts, where the Formula for determining the cost of the Partnership Program and the amount of local effort is written in the law; the assumption being that the legislature must find the necessary funds to finance the program. Also, the lawmakers are more apt to stabilize educational funds if they have to enact workable laws for the carrying out of equitable and adequate financial programs.

Another type of state aid is set aside by the constitution of some states. It might be described as a guaranteed minimum-grant plan. The pattern used by California follows:

> California, through its constitution, guarantees $120 per pupil in average daily attendance in the state; with a minimum of $90 per pupil or $2400 for each district regardless of local effort; New

> York guarantees $220 per elementary pupil and $280 per high school pupil through a combination of state and local funds.[9]

Burke brings out an interesting viewpoint in contrasting Massachusetts' position to California's in respect to state aid: "Massachusetts has exercised a high degree of control with a small amount of state support. California has allowed a high degree of local freedom with a large amount of state support."[10]

The primary concern of state participation everywhere is to provide all children with a minimum program of education along with provisions for securing a very reasonable and flexible revenue system for school support. Constant effort on the part of all participating members is necessary to better the standards of both state and local support. The following quotation highlights the necessity of higher and better standards in state support than are now being met.

> The best systems of state support assure all the children with only a little above mediocrity in the way of a minimum school program and the poorest systems of state support provide all the children with considerably less than mediocrity in their guaranteed minimum programs.[11]

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[9] Edgar L. Morphet, "Characteristics of State Support Programs" quoted in Problems and Issues in Public School Finance, p.181. (The quotation has been extended to include the amounts provided by the State of New York, for purposes of comparison.)

[10] Arvid J. Burke, Financing Public Schools in the United States, p.288.

[11] R.L.Johns, "Local Ability and Effort to Support Schools" in Problems and Issues in Public School Finance, p.220.

2. The Development of State Aid in Massachusetts

It is one thing to say that a state shall finance a Foundation Program below which no community will be allowed to go; it is quite another proposition to find a method of accomplishing this, that will give due consideration to the maintenance of the necessary balance of control between the communities and the state. "Control" in the broad sense used in this discussion will mean any relationship that exists or may exist between the central government and any municipality. With such a basic consideration in mind, the study of the Foundation Program in Massachusetts is presented.

It is only since 1919 that Massachusetts has participated widely in the financing of elementary and secondary schools by means of state aid or state assistance. Up to 1915, the Commonwealth of Massachusetts had allotted less than two per cent of its funds to furnish state assistance to a limited number of towns. Due largely to the influence of the Chamberlain Commission, and their splendid work and report, the Massachusetts Legislature, known also as the General Court, enacted Chapter 363 of the Acts of 1919. This law made provision for payments to every municipality which met certain teacher, salary, and other qualification standards, from the proceeds of the newly-enacted Personal Income Tax Law passed in 1916. Chapter 363 authorized the payment of a fixed amount or primary reimbursement, to

every city or town for each teacher employed.[12] Some municipalities with a low valuation per pupil received additional grants or supplementary reimbursements.

Up to 1921, the Commonwealth provided only slightly more than 11 per cent for state assistance in education. At the same time a great many other states were supplying a greater percentage of educational state aid. State expenditures in aid of public, elementary, and secondary schools in Massachusetts approximated in 1920, $4 million; in 1930, $6 million; in 1940, $6 million.

It will be noted that, from 1920 to 1940, no substantial change or variation occurred in the amount of state aid in the Commonwealth of Massachusetts.

In 1945, the Commonwealth's share of school support amounted to slightly under nine per cent. This condition ranked Massachusetts 44th in the 48 states and brought about the filing of Petition 911,[13A] which called on the Legislature to appoint a Recess Commission to study the subject of state aid for schools. This petition resulted in Chapter 88 of the Resolves of 1945[13B] being enacted for

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[12] State Fiscal Aids to Cities and Towns for Public Elementary and Secondary Schools in Massachusetts, Boston, Mass., Massachusetts Federation of Taxpayers' Association, 11 Beacon Street, March, 1945, p.8.

[13A] Commonwealth of Massachusetts, Petition 911, Boston, Mass., 1945.

[13B] Commonwealth of Massachusetts, Chapter 88, Resolves of 1945, Boston, Mass., 1945.

the purpose of setting up such a State Aid Commission. Chapter 82 of the Resolves of 1946[13C] continued the Recess Commission Study that began in 1945.

The Comprehensive Report of the Recess Commission, known as House 1899, was made public in 1947. In part it reported:

> Probably no state can show greater diversity among the cities and towns with respect to their financial ability to maintain schools. In 1945, the state's share in support of public schools amounted to under nine per cent of the total cost. Viewed from any angle, this is meager fiscal evidence of state educational responsibility. Twenty-eight of the forty-eight states furnished from state sources anywhere from 30% to 92% of the total school revenues, while across the country as a whole 30% of the school revenue came from the state government.[14]

Even as late as March 1951, another Recess Committee, headed by Ralph C. Maher, of Orange, Massachusetts, in a document entitled House 2324 refers to state aid conditions from 1916 to 1948 as follows:

> The Commonwealth of Massachusetts was slow to assume its responsibility with financial support of local schools. Up to 1915, the State supplied less than 2 per cent of the total public school revenues. Even after the enactment of the income tax law, and the devotion of part of this tax to school support, the Commonwealth furnished in 1921, only slightly over 11 per cent of the cost of schools. By 1947 the state's share in the support of schools amounted to under nine per cent. As a result of the increased aid under Chapter 643, of the Acts of 1948, the amount of state aid to local communities for support of public schools approximates 14 per cent.

[13C]Commonwealth of Massachusetts, Chapter 82, Resolves of 1946, Boston, Mass., 1946.

[14]Commonwealth of Massachusetts, Report of Proceedings, House 1899, Boston, Mass., 1947, p.9

[15]Commonwealth of Massachusetts, Report of Proceedings, House 2324, Boston, Mass., 1951, p.51.

> Viewed from this angle, this is meager fiscal evidence of state educational responsibility. In comparison with other American states the Commonwealth's share of public school support looks small indeed.[15]

During the years 1947-1949, Governor Robert F. Bradford concerned himself greatly with state aid. Excerpts from his addresses will serve to give valuable information and continuity to this discussion. Portions of Governor Bradford's Address to the Senate and House of Representatives, May 5, 1947, under the caption Senate No.569, are quoted:

> In no department of local government is the need for increased state assistance more apparent than in the support of education. With greatly increased costs in every phase of the school budget, it has become impossible for all but the wealthiest municipalities to meet the educational needs of their communities.
>
> The problem is of vital concern to the Commonwealth as a whole. A few states, recognizing this state-wide responsibility, actually administer local schools from the state level. I do not favor any such state control in Massachusetts. But I do recognize the necessity of equalizing our available revenues for this purpose to assure adequate schooling to every child in the Commonwealth. This must be the primary purpose in any program of state assistance for education.[16]

Continuing further in his analysis of the existing formulas for education assistance in 1947, Governor Bradford said:

> Let me examine with you our existing formulas. They fail almost completely to answer the specific requirements for state assistance to schools. Almost no recognition has ever been given to the need for equalization. No assistance whatever is provided for

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[16]Commonwealth of Massachusetts, Report of Proceedings, Senate No. 569, p.7.

> elementary transportation or school construction, however great the need. Encouragement has been given to the perpetuation of small rural schools, rather than to consolidating them into larger and more educationally effective units, and the total amount of state assistance to education has been entirely inadequate.[17]

Perhaps the most important epoch in the history of Massachusetts state aid occurred when His Excellency, Governor Bradford, ended all previous types of educational state financial aid as of December 31, 1947, and recommended a new equalizing formula distributing $14 million of state money to the various communities of the Commonwealth. In addition, $1 million was distributed by means of a new transportation formula. Provisions for reimbursement of a portion of the costs of constructing consolidated schools were also included. The following is the recommendation of the governor:

> I, therefore, recommend: 1. That the present state aids for high school tuition, high school transportation, high school grants, and primary and secondary reimbursements so called, be discontinued effective December 31, 1947.
>
> 2. That instead, new formulas be adopted for state aid to public schools as follows: an equalizing formula based upon the number of public school pupils and the valuations of respective cities and towns to provide $14 million annually; an additional $14 million to be distributed on the basis of a classroom unit formula, approximately $1 million to be distributed in accordance with the transportation formula, providing state reimbursement of all transportation costs in excess of an established level, contingent, however, on state approval of such expenditures; and a construction formula providing for the reimbursement of a portion of the costs of

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[17]Commonwealth of Massachusetts, Report of Proceedings, Senate 569, p.8.

> of constructing consolidated schools in amounts subject to annual appropriation by the General Court but not to exceed $40,000 in any one consolidated school or one half the actual construction cost, whichever is smaller.
>
> I recommend that these formulas become effective January 1, 1948.[18]

All of the above recommendations were voted favorably by the legislature, with the exception of the additional $14 million which was to be distributed on a classroom unit basis. The real measures that will be discussed at length later are the equalizing formula and the appropriations for consolidated schools.

Lastly, Governor Bradford, in his usual direct style, lists his recommendations for a school fund thus:

> I, therefore, recommend the establishment of a School Aid Fund, effective July 1, 1947, to receive all assigned revenues and from which will be paid all state grants for public schools under the formulas proposed for aid to vocational training, for aid to superintendency unions and aid for specialized classes. I recommend that all income from the Massachusetts School Fund be transferred annually and credited to the School Aid Fund.[19]

3. Laws and Amendments Pertaining to State Assistance in the Commonwealth of Massachusetts.

Thus, it is seen how state aid for Massachusetts schools was considerably revised in 1948. However, it was not until November, 1949, that the new plan went into operation under the official title of Chapter 70, General

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[18] Commonwealth of Massachusetts, Report of Proceedings, Senate 569, Boston, Mass., p.10

[19] Ibid., p.10

Laws, as amended by Chapter 643, Laws of 1948. The full text of Chapter 70 is to be found in Appendix I. A brief resume of it follows:-

To be eligible to receive school aid from this newly created fund, a town must have expended for school support, exclusive of the cost of noon lunches and cafeterias during the preceding year, at least $110, in net average membership in the public day schools. By net average membership is meant the average membership for a school year as shown by the school registers, increased by the number of tuition students of another town, whose tuition has been paid for at least half a school year, decreased by the number of non-residents (pupils attending school for not less than one half of a school year). However, at his discretion, the Commissioner of Education may recommend an expenditure of less than $110 per pupil.

The Commissioner of Education must receive before July 31 of the current year, from the Superintendents of Schools, a sworn statement covering the necessary school information in order to determine the amount of money payable by the state to the town under this Chapter.

School Committees by law must include in their estimates for school support, the amount of money the town is to receive under Chapter 70, which shall not be less than the town received in 1948, from the state treasury. However, if the town has a population less than 5000, it may, with

state permission, use the second part of the formula.

If the town has a valuation of less than two million dollars, or belongs to a regional high school program, or has a teacher for retarded children, it is entitled to receive extra compensation besides the Foundation Formula allotments.

Towns signing a construction agreement to build a regional school are eligible to receive an additional 15 per cent state reimbursement from the present school fund.

At the present time, the Foundation Program in Massachusetts is for the most part a local and state partnership, with only a small amount of Federal help. The Commonwealth of Massachusetts, although legally responsible, assumes but a small share of the entire cost, while the local community is the major contributor through the medium of the property tax. According to the principal formula, the Foundation Amount is equal to one half the difference between $130 multiplied by the number of children aged 7 to 16, and the product of each $1000 of equalized assessed valuation, multiplied by six. In other words, the principal formula is as follows:

a) The educational need factor:
Number of children 7-16 years at $130

b) The ability to pay factor:
Town equalized valuation divided by 1000 and multiplied by 6.

a-b) The Foundation Amount:
The ability to pay factor subtracted from the educational need factor, and the result multiplied by 50%.

The principal aim of the Foundation Program distribution formula in the Bay State is to promote the equalization of educational opportunity and at the same time equalize the burden of the cost of schools to the respective towns.

The Foundation Program formula is very simple, being based upon two essential factors. The first is the measure of financial need, allowing $130 for each person between the ages of 7 and 16 residing in a municipality. This basic amount of $130 is to be increased or decreased by $1. per pupil for each one hundred million or major fraction of increase or decrease in the total equalized valuation of the Commonwealth as a whole. The second factor determining the amount of state assistance is 50 per cent of the amount by which the Foundation Formula exceeds the product of each $1,000 of equalized valuation of the town multiplied by 6. The last equalized valuation for all municipalities was established by the General Court in 1945.

A secondary formula is used for towns under 5000 population with the permission of the Commissioner of Education. Briefly, the formula is twenty-three times $125, multiplied by the number of full-time principals, supervisors, teachers, and guidance directors. The figure 23 was arbitrarily chosen and as far as can be ascertained has no significant base that could fluctuate with the rise or fall in income or other pertinent factors. In addition to this,

towns having less than 5000 population receive a bonus grant of 25% of the net state aid to which they are entitled under this formula.

There are five main types of situations which arise in allocating state aid to the various municipalities:

1. Principal formula -- towns over 5000 population.
2. Secondary formula -- towns under 5000 population. (a comparison of the two formulae)
3. Towns receiving less state aid now than they did in 1948.
4. Towns receiving extra compensations:
   (a) consolidated school aid
   (b) for teachers of retarded children.
5. Towns having less than $2,000,000 valuation.

In Appendix II will be found, in alphabetical order, the town names, the 1945 equalized valuation and the number of minors, 7 to 16 years of age, residing in these towns. Thus, by applying the principal formula, which is used by all municipalities with over 5000 population, an interested person can work out the approximate state aid for most communities in the Commonwealth of Massachusetts.

Figure 1 illustrates the application of the basic or principal formula in the allocation of the amount of state aid to the city of Worcester, Massachusetts.

Figure 2 shows the application of the secondary formula, using Brewster, Mass., a town with a population of only 987, as an example.

Certain towns, although having a population over 5000 have been exempted from maintaining high schools; Longmeadow, exemplified in Figure 3 is included in this category.

All extra reimbursements such as Regional High School participation 15%; valuation under $2 million, 25%; teacher of retarded children up to $500 a classroom; are simply added on to the principal formula or secondary formula amount.

WORCESTER, Mass.
Population: 203,486.

a)	The educational-need factor:	
	Number of children 7-16 (23,797) at $130 each	$3,093,610.00
	MINUS	MINUS
b)	The ability-to-pay factor: Equalized valuation $\frac{321,362,930}{1000}$ X 6	1,928,177.58
		1,165,432.42
a–b)	New Amount of State Aid; ½ of above	582,716.21
	PLUS	
	Grant for teachers of retarded children	7,800.00
	TOTAL STATE AID	590,516.21

Fig. 1 - Example of Basic or Principal Formula 1951-1952.

BREWSTER, Mass.
Population: 987

a) The educational-need factor:		
$2875 X 85 (number of full-time teachers, etc.)		$24,437.50
MINUS		MINUS
b) The ability-to-pay factor: Equalized valuation = $\frac{\$2,357,135}{1000} \times 6$		14,142,81
		10,294.69
a—b) Net Amount of State Aid: ½ of above		5,147.34

Fig. 2 - Example of Secondary Formula, 1951-1952.

BREWSTER, Mass.
Population: 987

Funds available using principal formula:

a) Educational-need factor:

$130 x 129 (number of children 7-16)	$16,770.00
MINUS	MINUS
B) Ability-to-pay factor: $\frac{\$2,357,135}{1000}$ X 6	14,142.81
	2,627.19
a—b) Net Amount of State Aid: ½ of above	1,313.61

Fig. 2A - Comparative Figures for Towns of Less than 5000 Population Using Principal and Secondary Formulas.

N.B. Under the principal formula, Brewster would only receive $1,313.61 in state aid. Under the secondary formula it would receive $5,147.34 (See Figure 2), an amount almost four times as great as that available under the basic formula.

LONGMEADOW, Mass.
Population: 6508

a) Educational-need factor

$130 x 1007 (no.of children 7-16 yrs)	$130,910.00
MINUS	MINUS
b) Ability-to-pay factor:	
Equalized valuation $\frac{\$19,996,004}{1000}$ X 6	119,976.02
	10,993.98
a-b) Net Amount of state aid due under revised plan: ½ of the above	5,466.99

Fig. 3 - Town receiving less state aid in 1951-1952 than in 1948, would receive the amount allocated to it in 1948.

N.B. - In 1948, Longmeadow received $7800. It is entitled to receive the larger amount under Chapter 70, Section 6.

In 1953, the newly proposed equalized valuations for Massachusetts made their appearance.[20] If we look at Chapter 70, Section 4, it is clear that the $130 is increased or decreased $1. per pupil for each one hundred million dollars in the total equalized assessment. As this new set of valuations has gone up approximately $93 hundred million, the new formula, if approved, would resemble the following very closely: $130 + 93 = $223.

The principal formula would then work out on the basis of

a) the educational-need factor:
$223 x no. of children 7-16 years of age

MINUS

b) the ability-to-pay factor:

$$\frac{\text{Equalized valuation of town}}{1000} \times 6$$

a-b) Net amount of state aid: ½ the result of the above.

A study of this new formula shows that large cities like Boston, Springfield, and Cambridge, stand to lose considerably, while a great many other communities would gain. In 1948, Boston received $717,000. Under the Principal Formula evolved in 1948, Boston's net state aid amounted to $2,056,500 in 1951-52. Under the proposed revision of the formula, the allocation of state aid to Boston would be:

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[20] Commonwealth of Massachusetts, Report of Proceedings, House 2172, Boston, Mass. pp 3-11.

a) Educational-need factor:
$223 x 94,139 (no. of children 7-16) $20,992,997.

MINUS MINUS

b) Ability-to-pay factor:
Equalized valuation $\frac{4,139,027,562}{1000} \times 6$ 24,834,000.

4,158,997

a-b) Net amount of state aid: ½ of the above 2,079,498.50

Under this proposed formula, Boston would receive nothing in the way of state aid, and would have to revert to the $717,000 allocated to it in 1948.

It would, therefore, seem most unlikely that such a formula would meet with sufficient support from the larger and more influential communities to ensure its passage at forthcoming sessions of the legislature. In spite of its uncertainty of passage, the new formula has been presented here to show specifically the full meaning of Chapter 70, Section 4, in its entirety.

The Report of the Massachusetts Department of Education in reference to state aid is shown as Appendix III. There are 349 towns participating. Mount Washington has no schools, and Gosnold has been deliberately omitted because of its disproportionate allotment resulting from a unique combination of high equalized valuation and low school population. The amounts of state aid to individual towns, per pupil, will be given in the following chapter.

Thus, we have viewed the general picture of the essential characteristics of the Foundation Program, a short history of state aid, and the beginnings of the Founda-

tion Program in Massachusetts. This was followed by a resume of Chapter 70, the State Aid chapter of the General Laws of the Commonwealth of Massachusetts, along with some specific examples of how the 1948 Foundation Formula works under different situations and how the 1953 Foundation Formula would appear in comparison to it.

This chapter has served as a point of reference for the understanding of Foundation Programs in general and the Foundation Program of Massachusetts in particular.

CHAPTER III

EQUALITY OF EDUCATIONAL OPPORTUNITY IN MASSACHUSETTS

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In this chapter, it is proposed to discuss the various factors that may be used to measure the existence of equality of opportunity to secure an adequate education in the Commonwealth of Massachusetts. Some specific inequalities, using 1951-1952 figures, and some statistical proof will be offered in support of the contention that at the present time equality of opportunity on a state-wide basis does not exist in Massachusetts.

Background of the Problem.— "Equality of opportunity has become a catch phrase in the daily lives of most Americans. However, while this ideal is held up for imitation on the one hand, there is, on the other, a country-wide negation of one of its most intrinsic elements, namely the provision of an adequate educational opportunity for all.

In 1940, there were well over 4 million children in certain sections of the forty-eight states attending schools supported by funds which allocated less than $500 per classroom unit. At the same period, at the other

extreme, in various parts of the United States, approximately another million children were attending schools costing well over $4,000 annually for each classroom unit.[1]

Excellent instruction and highly satisfactory results, education-wise, should be found in schools where the classroom cost per pupil is $4,000 or more a year! Little or nothing that pertains to good schooling can usually be found in the lower cost $500 classrooms!

The year 1940 was chosen for this comment because the American dollar was then worth approximately its full one hundred cents. Since that time school costs in most sections of the forty-eight states have not kept pace with the cost of living. This is essentially true of Massachusetts.

Four factors determine whether a child is being given superior or inferior school facilities: the economic condition of the family, the financial standing of the community, the child's race, and the section of the community in which he lives.

Edwards claims that inequalities of educational opportunity generally arise for the following reasons:

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[1]American Council on Education, Federal-State Relations in Education, Washington, D.C., Educational Policies Commission, March 1945, p.16.

> The inequalities of educational opportunity which characterize the American educational system today result primarily from the unequal distribution of the educational load, from regional and community differences in economic well-being or from the long-established tradition that the schools should be supported in the main from local and state revenues.[2]

Burke cites a number of factors that contribute greatly to the lowering of educational opportunities in education.

> Among the factors generally misunderstood by both educators and taxpayers are the effects of changed or different standards upon public school expenditures; the effects of certain social trends, such as the changed status of women; the relationship between expenditures and objectives or services; the influence of price variations among states and communities; the economic costs of public schooling, and the economic contributions of public schooling.[3]

The ideal criterion for evaluating the equality of educational opportunity appeared as far back as in 1914 in a report of the United States Commissioner of Education:

> In this country we shall never be satisfied until we have assured to every child that kind and degree of education necessary for the fullest and most perfect development of its humanity; for the complete life of manhood or womanhood, for the intelligent performance of the duties of citizenship and for making an honest living by intelligent and skilled labor of some kind ... The world is also becoming conscious of the fact that neither society nor state can ever attain to its best, until every individual unit of it has attained unto its best. The first duty of a democratic state certainly is to provide equal and full opportunity of education for all its children.[4]

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[2] N. Edwards, Equal Educational Opportunity for Youth. A Report to the American Youth Commission, Washington, D.C. American Council on Education, 1939, p.181.

[3] Arvid J. Burke, Financing Public Schools in the United States. New York, Harper, 1951, p.10.

[4] U.S.Department of Education, Report of the United States Commissioner of Education, 1914, Vol.1, Washington, D.C., Govt. Printing Office, 1915, p.xiii.

The general statutes of the Commonwealth of Massachusetts reflect the implementation of this principle.

Distribution of State Support in Massachusetts.— The purpose of Chapter 70, the State Aid Law in the General Laws of Massachusetts, is to promote the equalization of educational opportunity in the public schools of the Commonwealth and the equalization of the burden of the cost of schools to the respective towns. Section 1 of this chapter defines the principle of "partial equalization" for the state.

The background for this law goes back further than the Strayer and Haig definition of 1923. Indeed, if we return to the Massachusetts Law of 1642, it might be shown as the first real starting-point for public schools in the United States, while the law of 1647, which made it mandatory for towns to provide suitable opportunities for education under threat of penalty, might be called the root-stock of the principle of equality of educational opportunity.

Martin, one of the foremost authorities on early public schools in Massachusetts, has this to say on the laws of 1642 and 1647:

> The universal education of youth is essential to the well being of the state ...
>
> The obligation to furnish this education rests primarily upon the parent. The state has the right to enforce this obligation. The state may fix a standard which shall determine the kind of education and the minimum amount. Public money raised by a general tax may be used to provide such education as the state requires. Education higher than the rudiments may

> be supplied by the state. Opportunity must be provided at public expense for youths who wish to be fitted for the University.[5]

The State of Massachusetts was being realistic rather than paternalistic in taking this view of the necessity for education of its children. An educated citizenry was essential to the future economic and civic well-being of the Commonwealth. Due to the normal intra-state migration of families, it is essential that all children in all towns and cities receive an adequate and comparable education. Berard found that more than half of the adult citizens in any town or city received at least a part of their education elsewhere.[6] If any one municipality wished to assure itself of a competent educated group of citizens, it had to assure itself that other towns and cities also provided good schools. In the wider view, the interest of the state in providing adequate opportunities for education becomes obvious.

The Constitution of the Commonwealth of Massachusetts reads in part as follows:

> Wisdom and knowledge, as well as virtue, diffused generally among the body of a people, be necessary for the preservation of their rights and liberties; and those depending on the spreading (of) the opportunities and advantages of education in the various parts of the country, and among the

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[5]G. Martin, The Evolution of the Massachusetts Public School System, New York, Appleton, 1908, p.15.

[6]Commonwealth of Massachusetts, Report of the Chamberlain Commission on Education, Boston, Mass., 1919, p.18.

> different orders of people, it shall be the duty of the legislatures and magistrates, in all future periods of this Commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the University at Cambridge, public schools and grammar schools in towns, to encourage private societies and public institutions, rewards and manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings, sincerity, good humor, and all social affections and generous sentiments among the people.[7]

Despite this specific instruction laid down in its basic document of law, the Chamberlain Report on Education in 1919 called attention to the following:

> Among all the states, Massachusetts has thus far been the least ready to recognize, in terms of state organization and state support, the responsibility of the state for equalizing educational opportunity.[8]

The Minimum Level of State Support.— One of the most direct questions pertaining to equality of education was proposed by Burke when he asked "What is the minimum level below which the people of the whole state cannot afford to let any of their districts go"? Answering his own query, he provides us with a pithy and very pertinent commentary.

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[7]Commonwealth of Massachusetts, Constitution of the Commonwealth. Chapter V, Section II, Boston, Mass. quoted in The Chamberlain Report, p.29.

[8]Commonwealth of Massachusetts, Report of the Chamberlain Commission on Education, Boston, Mass., 1919, p.18.

> Education for civic competence, the protection and preservation of the group; the advancement of the individual, the improvement of group life and adaptation to changed conditions have been the motivating forces for the expansion of public schools. States probably have aimed to provide educational facilities for all future citizens equal to the best that have been developed. Yet, practical considerations such as public opinion, existing school personnel and facilities, past educational provisions, tradition and financial resources often have resulted in educational provisions far below what might be regarded as adequate.[9]

At the present time, programs of school finance that might have been highly adequate a few years ago cannot be accepted as such today due to changing conditions in American education. As a result, many methods of allocating state aid to local communities, although originally intended to be equitable to all participating units, are now exerting a retarding influence on the development of larger units. However, Chisholm and Cushman seem to have a way of solving this difficulty.

> The state may assume its basic or inherent responsibility for providing adequate educational opportunity for all children and youth throughout the state by revising its state school finance program so as to remove all financial rewards for maintaining ineffectively organized local school districts or school centers. Furthermore, an appropriate degree of financial encouragement should be given to those school districts which are organized so they can use the available money effectively in carrying on acceptable programs of education.[10]

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[9]Arvid J. Burke, Financing Public Schools in the United States, New York, Harper, 1951, p.81-82.

[10]Leslie Chisholm and M.L.Cushman, The Relationship of Programs of School Finance to the Reorganization of Local School Administrative Units and Local School Centers, in Problems and Issues in Public School Finance, New York, Bureau of Publications, Teachers' College, Columbia University, 1952, p.94.

Factors Affecting Co-Terminus School Districts.— Massachusetts has many small school districts. This is one result of the parallel between the geographical limits of both school and political districts. The cost of operating these small school districts.is distinctly disproportionate. The National Commission on School District Reorganization made a major study on the relationship between school district organization and reorganization and school finance. In discussing the size of schools and per pupil cost, the Commission said:

> Size of school and the cost of education are directly related. In general, the smaller the school the higher the cost per pupil, and the smaller the administrative unit, the smaller the schools maintained. Thus, the reorganization of administrative units is closely related to the per pupil cost of education.[11]

In a discussion of the advantages, in fact the needs for communities to be dissatisfied with a minimum standard of educational support, Mort and Reusser have provided us with an excellent working clarification of the term "equalization".

> Because of the almost exclusive emphasis on equalization during the past quarter of a century, there are a goodly number of people today who look upon the existence of well supported districts as undesirable. Such a position is untenable ... Equalization does not mean uniformity; if it did, we could use the simpler word. Equalization means assuring a satisfactory foundation level.[12]

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[11] National Commission on School District Reorganization, Your School District, Washington, D.C., National Education Association, 1948, p.89.

[12] Paul R. Mort and W. Reusser, Public School Finance, New York, McGraw-Hill, 1951, p.81

Factors affecting Equalization of Educational Opportunities. — By equalizing educational opportunities in Massachusetts, is meant on the one hand, a plan for financing the public schools in such a manner as to guarantee all children in the state an equal opportunity for participating in an adequate program of education, and on the other hand, that local communities do more than perform only the minimum requirements of such a program --- as stated in the laws -- but strive to raise the existing facilities still higher.

There is great necessity to raise the level of public understanding of educational needs. School services and facilities must receive financial support that will adequately care for all without creating inequalities in local tax burdens.

One basic assumption in this study is that there is a relationship between the quality of education and the costs of education; in other words, education has a price tag. Strayer's work in West Virginia referred to in Chapter I shows clearly that there is a very high correlation between expenditure and the quality of education. Further surveys in Pennsylvania[13] and Rhode Island[14] add support to this assumption.

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[13] P.R.Mort and F.G.Cornell, American Schools in Transition, New York, Teachers' College, Columbia University, pp 139-145.

[14] P.R.Mort, Schools for Our Children, Parts I and II, Providence R.I., Commission on the Legal Structure of Rhode Island Public Education, 1941, pp 17-146.

In order to provide all children with an equal opportunity to acquire a good education, excellent instruction and adequate school facilities are a necessity. Facilities such as up-to-date equipment set in magnificent physical "plants", as some of our modern school buildings might be called, are a sheer waste of funds, if a well-qualified instructional staff is not secured and retained. If sufficient state aid is not made available to bolster revenues of lower-income districts, the salaries of the teachers in these districts are soon outstripped by adjoining and wealthier communities. The natural human tendency to gravitate to a locale where better wages and better facilities are provided is found in the teaching profession as well as in other fields. As a result, poorer schools in poorer districts are generally left with a poorer calibre of instruction. The resulting less efficient schools available to children in these districts form one nucleus in a sharply contrasted "split" system of education, having on the one hand good schools, staffed with highly qualified and well-paid teachers in wealthy districts, and on the other, less efficient schools staffed with their inferior (in the sense of less well-paid) counterparts for children in the poorer districts. It is not the intention of the writer to reflect on the ability of the teachers who have chosen to remain with the more inadequately financed schools through a personal dedication to their profession, but in the main, the better teachers have gravitated, in Massachusetts as well as in other areas, to those schools providing better salaries and better equipment. Such

an artificially created division in the available quality of instruction, and consequently of education itself, is scarcely compatible with the principle of providing equal opportunity for all children of the state.

In a report of a survey made on the professional salaries of teachers in the Brookline public schools, we find the following:

> Throughout the nation, the compensation of teachers in comparison with that of other professions is so slight that not sufficient teachers can be found to conduct the schools ... The influence of every community that takes an advanced step in increasing the dignity and security of the teaching profession is far beyond the bounds of the town or state.[15]

Effective state aid should promote state-wide interest in the development of education at all local school-unit levels, and develop a sense of responsibility with the local district for the education of all children. Morphet and Lindman put it this way:

> Provisions relating to the use of state funds for the support of public schools have a powerful effect on the character of the state school system. When state school support is meager and schools are financed almost wholly from local property taxation, extreme differences in the quality of the school program are found in different communities throughout the state. This is especially true where school districts are small. School districts which contain concentrations of industrial wealth are generally able to finance a more adequate school program than sparsely populated districts or districts containing only moderately priced homes.

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[15] Willard S. Elsbree, Salaries of the Professional Staff, Brookline Public Schools, Survey Report, Institute of Field Studies, New York, Teachers' College, Columbia University, p.29.

> Much of the impetus for state support of local school systems comes from the common desire to provide a basic school program for every child in the state regardless of the poverty of the community in which he lives.[16]

An increase of interest here would have the advantage of moving education forward on all fronts. Adjustments needed to meet increased enrollment or any other changes should be provided in the long-range plans for financing Foundation Programs. Nothing retards educational progress more quickly than attempting to stretch a fixed appropriation and maintain an adequate and satisfactory foundation program.

The level of expenditure of a Foundation Program plays a large part in establishing its adequacy. This would necessarily involve a careful scrutiny of unit costs. It is essential to remember that such costs are capable of moving in either of two directions. As new concepts and desires of the people within a state develop, costs are going to rise and more funds will be required to meet these costs.

Dr. Cornell summed it up thus:

> Perhaps the most critical over-all deficiency in the structure of public education in the United States is to be found in the great disparity in the extend to which communities have been able and willing to provide educational opportunities for school children.[17]

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[16] E. L. Morphet and E. Lindman, Public School Finance Programs of the Forty-Eight States, Circular 274, Federal Security Agency, Office of Education, Washington, 1950, p.44.

[17] F.G.Cornell, A Measure of Taxpaying Ability of Local School Administrative Units, in Contributions to Education, New York, Teachers' College, Columbia University, p.698.

Local support and participation are needed to contribute local revenues to the support of the partnership program. Tax leeway is vital to local units if any of the "extras" are to be added to supplement the foundation program. Local effort should be in direct proportion to its tax paying capacity.

> If the ratio between assessed and actual valuation of property varies among the districts of the state, either the assessment should be equalized, or some more objective and equitable measure of tax paying capacity should be used.[18]

Earlier in the same report we find that the attainment of the objective of adequate educational opportunity depends upon:

1. The establishment of local and state school organizations and structures which are adequate to provide educational programs for American children, youths, and adults.
2. Conformance to principles governing the operation of schools which have evolved from the experience of developing American school systems, and which have come to be accepted as valid guides to their further development.
3. The provision of enough funds from public sources to make possible the effective operation of an appropriate program of education.[19]

In Massachusetts there are 39 cities and 312 towns, divided into four classes under the statutes of the Commonwealth of Massachusetts. Class I consists of 39 cities, Class II of towns of more than 5000 population maintaining

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[18]National Education Association, Guides to the Development of State School Finance Programs, Committee on Tax Education and School Finance, Washington, 1949, p.6.

[19]Ibid., p.9.

high schools; Class II of towns of less than 5000 population maintaining high schools; and Class IV of towns of less than 5000 population not maintaining high schools. This system of division, with its rigidly defined areas, may have to be altered in the very near future as some towns have grown very rapidly both in size and in population.

Two municipalities, Mount Washington and Gosnold, have not been included in this study. Mount Washington, having no schools, is not considered a school district for purposes of allocating state aid, and Gosnold has been omitted because of its disproportionate assessment picture, as will be explained in the following chapter on taxation equality.

The Criteria of "Wholesomeness".— An examination of the total expenditure per pupil in average daily attendance reveals a range from $631.85 to $139.31. It has been contended by Dr. Mort that conditions are not likely to be "wholesome" in any school district that does not have available for annual expenditure as much as $230 in addition to whatever amount may be required for capital outlay, debt service, and transportation. If the district is purely an elementary school district, the figure should be $200; if purely a high school district, it should be $260.[20]

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[20]Paul R. Mort and Walter C. Reusser, Public School Finance, p.73

> It is exceedingly serious for a state to have districts supported below the $200 level, but it is also exceedingly serious for a state to have no schools leading out beyond that level. By the same token, in the process of improving a situation where school districts in parts of the state fall far below the satisfactory minimum level, the promotion of the idea of using the zeal of people in individual communities to lead out ahead is to be looked upon with favor and not as an unequalizing factor.[21]

The "unwholesome" conditions existing in these communities are not due to inadequacy or failure of local effort. The tax rate for the year 1952 for Newburyport was $63.40; for Marlborough $51, and for Brockton, $57.80. The average tax rate for 1951-52 was approximately $48 on a state-wide basis.

Most of these communities would not be able, without seriously restricting other services or levying confiscatory taxes on real estate, to increase the amount of local support for their educational program.

Injustice of Certain Practices.— The justice of the system of distributing state aid is open to serious question when a town such as Dennis, with an equalized valuation of more than $27,000 received $69 in state aid per pupil; while the town of Milbury, with a valuation slightly in excess of $5000 received but $45. Dennis is able to spend $317 per pupil, while Milbury can spend only $155 per pupil.

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[21] Mort and Reusser, Public School Finance, p.81.

The cases of Yarmouth and Grafton present another example of the obvious inequity in the distribution of state aid:

	Yarmouth	Grafton	Proportion
Equalized Valuation	$ 18,708.00	$ 5,078.00	3.684
Total School Support	272.15	186.22	1.461
State Aid	60.10	51.60	1.164

These are not exceptions. There are several communities with valuations greater than $15,000 receiving more in state aid than is being received by communities which have an equalized valuation of less than $5,000 per pupil.

Towns in Class IV without high school facilities send their students to Class III high schools on a tuition-payment basis. One result of this condition has been well summarized by Henzlik and Chisholm in a Nebraska study, where similar conditions prevail.

> The parents of more than one-third of the high school pupils as well as almost one-fourth of the elementary school districts of the state (Nebraska) have actually lost their legal right to participate in the control of the education of their sons and daughters.[22]

The Role of the Federal Government in the Fiscal Program.— It has been claimed that adequate provision of an equal opportunity for all children and youth to receive a good education would mean some participation of the federal government in the education field. However, it has already been made clear that the people of the United

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[22] F.E.Henzlik, and L.S.Chisholm, Nebraska Looks at Her Districts, Lincoln, Neb., University of Nebraska Press, 1948, p.12.

States do not want education federally controlled. Piecemeal financial hand-outs will continue in the United States as a whole until existing educational shortages are eliminated. Long-range planning, rather than hasty, ill-prepared and ill-advised measures, is to be preferred in the study of federal participation in education. Some new strategy is needed to change the direction of the trend away from control by a federal system. It should be feasible to devise some means of retaining the basic control of education within the state and local unit levels, while the federal government would help in the development of these services, but refrain from dominating them.

In a pamphlet published in March of 1945, the National Education Association made the following statement:

> While the nation as a whole must participate in the development of education, it is well to remember that the federal level of government should operate only within clearly defined limits.[23]

If the rate of local taxation is adequate, it is a good measure of local vigor. If inadequate, it can lead to many inequalities.

The Role of Property and Equalized Valuations in the Massachusetts Local/State Program.— One of the most serious of these inequalities is caused by the failure

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[23]National Education Association, Federal-State Relations in Education, Educational Policies Commission, Washington, D.C., March 1945, p.45.

of property valuations, on which the state aid is presently based, to keep pace with actual property values at the present time. In Massachusetts, the 1945 equalized valuations are inadequate both for school purposes and for apportioned-tax purposes. In practice, the 1945 equalized valuations have become so inadequate for school purposes that the 1951 municipal property valuations submitted by local communities are being used to figure out equalized valuations per pupil.

A glance at Appendix II concerning the 1945 Equalized Valuation figures and those proposed by House 559 for 1953 Equalized Valuation will indicate how Massachusetts property valuations have failed to keep pace with true property values. For instance, under the 1945 figures, Cambridge showed an equalized valuation of $138,515,872, but the proposed 1953 figure would be $421,806,838. Nor is this increase of valuation confined to the larger, wealthier municipalities. South Hadley showed an equalized valuation in 1945 of $10,540,021, but the proposed base for 1953, as shown in Appendix II, is $31,268,756.

In another appendix one can read that if the top ten per cent of communities in Massachusetts were to be compared with the lowest ten per cent in respect to equalized valuation and state aid received, the following results would be obtained: Seventeen communities in the

top ten per cent in equalized valuation received more state aid than did seventeen communities in the lowest ten per cent.

Statistical Analysis of the 1951-1952 Figures.— To determine in a precise way whether equality of educational opportunity exists or not, some method had to be found that would bring together the allocation of local and state funds for the support of education in the four classes of municipalities in the Commonwealth of Massachusetts. Two techniques were tried out.

Comparison Among Classes.— The first technique used was simply the difference between the means checked by the "t" ratio for each of the four factors involved in this portion of the investigation, namely, Equalized Valuation, Total School Support, Local School Support and State Aid. These factors were chosen for analysis because they dominate the state and local educational picture in the Commonwealth of Massachusetts.

A simple inspection of the comprehensive tables in Appendix V leads to the conclusion that there is little or no equalization in any or all of the four factors. To substantiate this claim more validly, we can consider the significance of the difference between the means of each of the four classes of municipalities for the four factors as a definite criteria for evaluating

equalization. I n finding the "t", or critical ratio, the following formula was used:-

$$\text{"t"} = \frac{d}{\sigma_d} = \frac{M_i - M_j}{\sqrt{\sigma^2_{M_i} + \sigma^2_{M_j}}}$$

in which M_i and M_j = means of any two distributions

$\sigma^2_{M_i}$ and $\sigma^2_{M_j}$ = the standard error of the means of two distributions

The assumption: if a "t" ratio is less than 2.58, which is at the one per cent level of confidence, equalization in some form occurs. If the "t" ratio is over 2.58, it is clear that there is no equalization of any kind between the two compared factors.

Table I. Statistics Used in Computing the "t" Ratio for Each of the Four Classes of Municipalities in Massachusetts in Respect to Equalized Valuation.

Classes	N	M	O	O_m
I	39	$ 12,200.	$2210.	$353.88
II	96	9,480.	3766.	386.38
III	94	8,993.	5466.	564.72
IV	120	9,633.	5989.	549.01

Table II. Equalized Valuation Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio.

Classes	II	III	IV
I	6.51	4.812	3.927
II		.710	.2278
III			.939

An analysis of Table II shows that when Class I was compared with Class II, (t = 6.51); with Class III, (t = 4.812); and Class IV (t = 3.927); there was no equalization. However, when Class II was compared respectively with Class III, (t = .710); Class IV, (t = .2278); and when Class III was compared with Class IV, (t = .939); equalization occurred.

The lack of equalization traced between Class I and Classes II, III, and IV brings out the fact that municipalities vary in their ability to provide needed educational services. Cities of the type of Class I generally have large concentrations of high-value property extending over large areas; this brings them a higher equalized valuation per capita or per pupil than in the three remaining classes of municipalities.

A very definite pattern emerges when Class I is compared to Class II, III, IV, because cities in the long run receive more revenue from all types of income-producing property than towns do.

When Class II was compared with Class III and IV, and when Class III was compared with Class IV, a second very definite pattern also became visible. In these specific classes the average equalized valuation varied only slightly from the mean, indicating a healthy trend toward the principle of equalization.

In comparing the two trends, a great deal of help in the form of state aid appears necessary to enable the less wealthy communities to enjoy a level of education comparable with the wealthier; the three Classes II, III, and IV, appear to assess property in a fairly uniform way, but on a slightly lower level than cities.

Table II also shows that property assessments in cities appear to be nearer to their true value than in the other classes, indicating that the possible lack of uniformity in assessment procedures between the cities and the towns needs attention.

The value of property in cities bears a close relationship to income, while in the rural areas, the value of property does not bear this same close relationship.

The existence of well-supported districts is not considered desirable in all quarters, due to the fact that certain districts will receive little or no state aid, and will have to bear themselves the full burden of the cost of education by means of property taxes. In order to bring Class II, III, and IV up to a standard resembling Class I, some means of support, other than real estate taxation, will have to be found.

To measure equalization in respect to Local School Support, "t" ratios in Tables III and IV for the four classes of municipalities in Massachusetts were derived. Evaluation of the data in these tables follows:

Table III. Statistics Used in Computing the "t" Ratio for Each of the Four Classes of Municipalities in Massachusetts in Respect to Local School Support.

Classes	N	M	σ	σ_M
I	39	$183.21	$34,24	$5.48
II	96	155.45	43.40	4.45
III	94	139.30	43.09	4.47
IV	120	133.56	44.20	4.05

Table IV. Local School Support Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio.

Classes	II	III	IV
I	3.94	6.22	7.29
II		2.56	3.64
III			.94

When Class II was compared with Class III a "t" of 2.56 occurred which was nearly the 2.58 limit set to indicate no equality. When Class II was compared with Class IV a "t" score of 3.64 occurred indicating no equality. The pattern when Class I is compared to Class II, III, and IV, in Tables III and IV, resembles very closely the pattern exhibited in Tables I and II. Wealthier cities can consistently allocate more revenue to Local Support of Education without reducing support to other needed categories. Because of their greater sources of revenue, cities are in a better position to contribute substantially to schools without interfering with other city expenditures. With the possible exception of certain municipalities in Class II, towns do not enjoy this position. Local School Support alone cannot provide equality of educational opportunity because the ability to finance schools varies widely from one municipality to another. State aid is an essential supplement to municipalities lacking this financial ability. There is a definite need of new tax bases to carry on the support of education. Even the greatest effort of the poorest towns to allocate a larger proportion of the tax rate to schools is not sufficient to support educational facilities adequately. Hence, the continuing need for state aid along more equitable lines for all deserving communities.

When Class III was compared with Class IV, equalization occurred due to the almost equal average revenues allotted to Local Education per pupil by Class III and Class IV.

Tables V and VI which follow, measure equalization in respect to Total School Support through "t" ratios for the four classes of municipalities in Massachusetts.

Evaluation of the data in these tables follows:

Table V. Statistics Used in Computing the "t" Ratio for Each of the Four Classes of Municipalities in Massachusetts in Respect to Total School Support.

Classes	N	M	σ	σ_m
I	39	$233.37	$30.60	4.90
II	96	214.63	39.70	4.07
III	94	228.51	63.83	6.62
IV	120	246.22	71.25	7.39

Table VI. Total School Support Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio.

Classes	II	III	IV
I	2.94	.551	1.468
II		1.79	3.75
III			1.91

The make-up of Total School Support consists principally in Local School Support with the addition of State Aid.

When Class I was compared to Class II, a "t" of 2.94 occurred indicating an absence of equalization. As seen in the four preceding tables, cities have the most wealth as expressed by real estate, and hence have more revenue, for School Support. With the addition of state aid, the Total School Support average per pupil in Class I could not be other than one of the highest in the four classes concerned.

When Class I was compared with Class III, equalization took place. (t = .551). This was due to the approximate equality of the average amounts of Total School Support per pupil in Class I and in Class III..

When Class I was compared with Class IV a "t" of 1.468 was obtained. This indicated that while equalization occurred, Class IV expended a slightly larger amount per pupil in Total School Support than Class I. However, this extra amount was not quite sufficient to bring about inequality. It was caused by higher transportation allotments and the use of the second part of the Foundation Formula, which in addition to its larger grant allows a bonus of 25 per cent over the usual allotment of State Aid for towns under 5,000 population.

When Class II was compared with Class III a "t" of 1.79 occurred, indicating a disparity, but showing

that Class III, which supports high schools and has towns of less than 5,000 population expends about $14.00 per pupil more. This is not, however, sufficient for a "t" of 2.58 which would indicate no equality.

When Class II was compared with Class IV a "t" of 3.75 occurred indicating no equalization. Class IV allocated the highest amount per pupil in respect to school support due to extra transportation allotments and to the use of the second part of the Foundation Formula, thus securing for itself a greater amount of state aid than would come to it through use of the principal Foundation Formula.

When Class III was compared to Class IV a "t" of 1.91 occurred indicating no equalization but showing again the higher expenditure of Total School Support of Class IV. The leeway of $17.71 in Class IV was not sufficient to show inequality. There is a certain amount of leeway given in all these critical ratio formulae before an amount is reached which definitely indicates no equality.

Tables VII and VIII which are presented next measure equalization in respect to State Aid by means of "t" ratios for the four classes of municipalities in Massachusetts. Evaluation of data in these tables follows:

Table VII. Statistics Used in Computing the "t" Ratio for Each of the Four Classes of Municipalities in Massachusetts in Respect to State Aid.

Classes	N	M	σ	σ_m
I	39	$34.52	$11.05	$1.79
II	96	37.23	14.30	1.47
III	94	61.37	30.60	3.17
IV	120	84.37	54.00	4.95

Table VIII. State Aid Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio.

Classes	II	III	IV
I	1.17	7.73	9.47
II		6.19	9.12
III			3.91

When Class I was compared to Class II equalization occurred, because the difference in the average State Aid between these two classes was insignificant.

However, when Class I was compared to Class III, a "t" of 7.73 occurred indicating no equality. This was caused by a difference of $26.83 between the average of Class I and Class III, which represented a large difference in revenue per pupil in State Aid, thus causing inequality to appear.

When Class I was compared to Class IV a large "t" (9.47) resulted. This indicates no equalization. The large difference in the amount of State Aid between Class I and Class IV was brought about by the use of the secondary part of the Foundation Formula, plus the addition of the 25 per cent bonus in state aid for towns under 5,000 population.

When Class II was compared with Class III a "t" of 6.19 occurred, indicating no equalization. Class III towns also took advantage of the secondary part of the Foundation Formula to build up a higher State Aid per pupil allotment in addition to the extra 25 per cent bonus for towns under 5,000 population.

When Class II was compared with Class IV, a "t" of 9.12 occurred. With its smaller number of pupils, its higher state aid per pupil, and without high schools of its own, paying only tuition rates for its Class IV high

school students, Class IV had a higher rate of State Aid per pupil income than the remaining three classes.

When Class III was compared with Class IV a "t" of 3.91 resulted. This showed no equalization. Class IV does not support a high school program and sends most of its pupils to Class III high schools. Class IV provides schools only for its elementary pupils, yet it receives the largest amount of state aid per pupil, $84.17, which is approximately one-third of the entire Total School Support in the three remaining Classes.

The five groups that showed no equalization showed a great need for a more equitable measure of apportioning State Aid to each of the four Classes. The need for a Foundation or Partnership Program built on a more equitable base is also obvious. Such a program will be considered in Chapter V.

Comparison Within Series.— Effective as the "t", or critical ratio, is in proving that there is no consistently recurring equality, it suffers from the deficiency of being difficult to use for other than intra-group comparison. In order that the situation within each of the four classes, as well as the 349 cities and towns as a single series, might be presented in one statistic, a Pearson product moment coefficient chart was worked out.

One way of comparing State Aid and Local School Support and State Aid and Total School Support is to use the units of allotments per pupil and to align them in an attempt to find a possible linear relationship.

The basic formula used was

$$r_{xy} = \frac{Z\,xy}{N\sigma_x\sigma_y}$$

where r_{xy} = correlation between one factor and a second factor;

x = deviation of any unit of allotment from the mean of that unit of allotment;

y = deviation of a corresponding unit of allotment from the mean of this corresponding unit of allotment;

Z_{xy} = sum of all the products of deviations of one unit of allotment times its corresponding unit of allotment;

σ_x and σ_y = standard deviations of the distributions of two sets of allotment units.

In order to show whether coefficients of correlation are significant or not, it is necessary to test r by means of the following formula:-

$$r_{ij} + r_{jo} = \frac{r_j - r_{jo}}{\sigma_{rj}2 + \sigma_{rj}2} = \frac{D}{\sigma D} = D$$

D_{rj} from 0 $\quad \sigma_{rj}2 + \sigma_{rj}2$ = standard error of coefficient of correlation.

r_{ij} = coefficient of correlation

r_{jo} = .00 correlation

A critical ratio of 2.58 shows that r is significant; a critical ratio of less than 2.58 indicates that r is insignificant.

Table IX.- Local Taxation per Pupil (L) Related to State Aid (A) per Pupil in the Four Classes of Municipalities in Massachusetts in Terms of r

Class	N	r_{LA}	$\sigma_{r_{LA}}$	$\frac{D}{\sigma_D}$
I	39	.41	± .133	.42
II	96	.05	± .084	.10
III	94	- .15	± .108	.30
IV	120	- .36	± .079	.80
All	349	.17	± .051	.35

A positive correlation of 1.00 between Local Taxation per pupil and State Aid per pupil would indicate perfect equality. Any trend in a positive direction is a movement toward this ideal. Class I, Class II, and Class IV all have trends indicating a positive trend toward equalization.

A negative -1.00 correlation between Local Taxation per Pupil and State Aid per Pupil indicates no equality. Class III indicates a small trend toward inequality.

In the four classes of municipalities in the Commonwealth of Massachusetts, it cannot be concluded that the correlations between Local Taxation per pupil and State Aid per pupil are significant because the obtained r's are not significant from the r's of .00. This same conclusion holds when Local Taxation per pupil in the 349 municipalities of Massachusetts was correlated with State Aid per pupil through Fisher's Z function.

Again, when Total School Support was correlated with State Aid by means of the Pearson product-moment coefficient of correlation chart for each of the four Classes of municipalities in Massachusetts, the following correlations resulted:

Table X.- Total School Support (S) per Pupil Related to State Aid per Pupil (A) in the Four Classes of Municipalities in Massachusetts in terms of r.

Classes	N	r_{SA}	σr_{SA}	$\frac{D}{\sigma D}$
I	39	.11	± .158	.22
II	96	- .10	± .108	.20
III	94	.16	± .104	.32
IV	120	.32	± .089	.66
All	349	.13	± .052	.26

The total correlation between the factors of Total School Support and State Aid for the total 349 municipalities in the Commonwealth of Massachusetts was found by averaging the four class coefficients of correlation, after they had been converted into Fisher's "z" function. This combined $r = .13$ also substantiates that there is only a very small trend in a positive direction towards equality.

Inspection had revealed little if any equalization in the classes of municipalities, and now computation of measures of difference and correlations have confirmed this situation with greater precision.

From a statistical viewpoint, equalization as an extant state is the exception rather than the rule, as shown in the ten tables to this chapter. Our conclusions in respect to equality of education in Chapter III are borne out. The idea is not new.

In the 1940 White House Conference on Children in a Democracy, the following statement appears in its general report:

> The facts do not support the assumption of equal educational opportunities for all children. Whole regions and states and large areas within the states are inadequately supplied with school facilities in quality, quantity, and accessibility. Regional and state differences in economic capacity, due largely to the concentration of resources and industry in a few areas make it literally impossible for a large proportion of the nation's children to obtain a reasonably good education under existing methods of state support.[23]

[23] White House Conference on Children in a Democracy. General Report by the Conference, January 9, 1940, Washington, D.C., Superintendent of Documents, p.86.

If this statement was true in 1940, it is no less true today. The stated examples of inequities existing under current methods of apportioning state-collected funds for schools and the statistical support given in the preceding pages raise doubts as to the method of their distribution, as well as to the inadequacy of the amount of money being made available for the purpose of equalizing the educational opportunities furnished the children of the Commonwealth.

In the following chapter the present system of distributing funds for education, through separate and combined taxation of local and state governments, will be studied in detail. A thorough search of the four classes of municipalities will be attempted to reveal the principal inequalities in taxation on the local and state level.

CHAPTER IV

EQUALITY OF TAXATION IN MASSACHUSETTS

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For at least the last four decades, leaders in school administration have emphasized the need of tax reform in the United States as a necessary supplement to educational reform.

Early History of School Support.- Over one hundred years ago when plans for school support were first established, wealth was distributed far more evenly than it is today. Agriculture was the principal industry at the time; the potential wealth of the country had not been discovered and developed; means of transportation were few and expensive. Small common industries were carried on in villages or on farms. The great industries had not been developed or even anticipated. Proprietorship of land, buildings, crops and household goods represented the only common measure of personal wealth, and from that, the measure of community wealth. Homes, farms, mortgages, and the like, became a natural basis for taxation. In order to secure revenue for all kinds of government activity, the property tax became the principal source of revenue.

With the changes in wealth, industry, living and government that have come about over the last century, population and wealth are no longer even approximately equal in distribution. New forms of intangible property have been acquired by the citizens. As this type of wealth is difficult to trace and consequently to tax, certain inequalities in taxation were bound to occur. New political, economic, and social needs have arisen. Among many other alterations, these drastic changes forced the individual states to enter the educational picture.

Forms of Tax Support.- In every state, the ability of the local community to support the educational program today varies much more widely than it did in other years. The causes of this variation are many, and are evident both in educational opportunities offered and in the tax burdens of local school districts. The situation is well summarized by the National Education Association. They report that

> ... the assurance of an adequate minimum of educational opportunity for all children within a state is impossible without state participation in financing the educational program.
>
> ... local school units vary widely in their ability to support education, and ... the taxing power of the state must be utilized to raise the level of financial support to a guaranteed reasonable minimum.[1]

[1] National Education Association, Guides to the Development of State School Finance Programs, Committee on Tax Education and School Finance, 1949, Washington, D.C., p.5

The simpler education problems and costs of yesterday have broadened and the per capita cost everywhere has been increased sharply. One result has been that the property tax in many communities is now greater than can be borne. Other sources of revenue are entering the financial picture to take the place of the property tax -- income taxes, sales taxes, and the like.

Legislative Powers.- Today, many legislative bodies in the various states are no longer satisfied to allot certain appropriations for schools. They use various methods for distributing school funds, in the hope that a well-rounded educational program for all children in the participating school systems on the basis of equitable local tax effort will result. It is to be emphasized that revenues apportioned or granted on guesswork or on the demands of those interested only in certain phases of the program give no assurance of adequacy or equity.

It is well to recall at this point that the principal reasons for state support of education are the equalization of educational opportunity and the equitable distribution of the tax burden as it applies to the school system.

Behind this is the principle of guaranteeing to all schools the financial resources necessary to develop

a sound basic program of school services. In this manner, the essential purpose of state control and supervision has been to raise the level of educational service to a desirable minimum, thus bringing about the objective of equalizing educational opportunity.

Controls of Equalization.- Many of the controls inherent in the extension of state financial support have been designed to protect the interests of the taxpayer or to correct insufficient, if not inefficient, local administration.

Strayer and Haig emphasized that if the two principles they were upholding of "equalization of educational opportunity" and the "equalization of school support" were to be effective, it would be necessary, in order to provide adequately for the control and administration of all schools, for a state department of education to take charge. But, because they felt that it would be wise for the individual municipalities to retain control over their own schools as far as possible, they suggested that the essentials of state direction of the program consist in a uniform levy to provide a minimum amount of educational support and whatever degree of state control over actual expenditure as would be needed to make sure that this expenditure would provide services, to certain standards, at a reasonable cost.

One of the most important phases in the administration of school finance is the control over the amount and

direction of school revenue. The amount available for disbursement governs both the extent and the quality of educational services and facilities on the one hand, and fiscal expenditure on the other. This total available revenue controls, directly or otherwise, the assessment of property, and from that, the collection of taxes. It places certain limitations on the taxing power of local school boards and provides an administrative scrutiny, usually with a view to fixing tax revenues and appropriations by state and local governments. State and Federal grants or apportionments are directly connected with the amount of revenue available within the state.

Factors Affecting State and Local Taxation.- In any extensive study of taxation, the relationship between local government and the state cannot be overlooked. Nearly one-half of the taxes collected by the state of Massachusetts, except employment security taxes, are shared with the towns and cities. Also, about one-fourth of all public funds spent by towns and cities are supplied by the federal or state governments. From this, it is obvious that the problems of state as against local taxation cannot be studied wholly apart from one another. There is a strong interrelationship between the amount of taxes which the state shares with each municipality, the amount of taxes levied locally, and the local tax rate.

Distributions of state taxes, especially income and corporation taxes, are of paramount importance to towns and cities, because of their influence upon local revenues and tax rates. Taxes to be collected locally are affected to a very marked degree by the level of economic activity in the State of Massachusetts, in that a high return to the state from corporation and income taxes means a larger "pool" of revenue to be shared on an equalized basis with the municipalities. This shared revenue increases or decreases the local municipal tax rate.

In presperous times, tax collections are usually high, and towns and cities fare very well in the amounts received by them from the state. In depression years, however, towns and cities must make up any deficit in state income and corporation tax collections. This deficit can only be met in one way -- by a sharply increased levy on the principal tax source, property, at a time when that particular municipal tax level is least able to meet it. In passing, it is interesting to note that while the state still has the authority to enforce a state tax on towns and cities in order to balance its budget, such an enforcement has not been used since 1947. In other words, municipalities, including those in the Commonwealth of Massachusetts, have to readjust the levies on their tax bases, which consist

almost entirely of real and personal property, because of the effects of factors over which they have absolutely no control, namely the amount of state tax revenues and the size of the state budget. Nor are these factors constant. Legislative reports themselves provide the proof:

> On a state-wide basis, the income and corporation tax distributions were equal to 12 per cent of the taxes levied on property by the cities and towns in 1940 and 21 per cent of the 1951 total. This percentage relationship is by no means stable. This means that the state distributed to the cities and towns in 1951, $1 for every $5 of tax levied against real and personal property.[2]

Inequalities in Tax Revenues.- Certain municipalities, having only a small population, received considerably more than the 20 per cent of their property levy in distributions, while at the same time, other localities received less than that percentage.

Lynn received $16.06 per capita tax distribution, which amounted to 20 per cent, or $11.36 of the $56.80 tax rate. To raise the same amount of money as is now obtained from the tax levy and state distribution would demand a $68.16 tax rate. The Lynn property tax base in 1951 was $1,396 for each individual included in its nearly 100,000 population.

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[2]Commonwealth of Massachusetts, House 2323, Boston, Mass., 1952, p.17.

Examination of House 2323[3] reveals that two towns, New Ashford and Russell, received more from state tax distributions than was obtained from local taxes.

Figures for per capita distribution show wide deviation. Millville, with a population of 1689, exhibited per capita distributions amounting to $13.16, while Monroe with a population of 118 received $110.39, approximately eight times Millville's distribution. This is a clear case of inequality affecting the tax rate established within a community, as a refund from the state for the support of schools is deductible from the local property tax rate to set the tax levy for any individual year.

State Tax Apportionments.- As has been shown, state distributions to local communities serve to reduce the amount to be raised locally from the property tax. This brings to light another serious inequality. The Commissioner of Corporations and Taxation sets the amount and proportion of local tax reductions or increases them. Therefore,

> ... because these tax distributions are so very important to cities and towns, however, it is imperative that the estimates be as close to the actual distributions as possible. Variations mean that either the local governments will not have the revenue to meet their budgeted obligations, or they will have to set the property tax above that which is actually required, and a surplus results. Both alternatives are distressing to cities and towns.[4]

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[3] Commonwealth of Massachusetts, House 2323, p.21-22.

[4] Ibid., p.23.

The basis for the apportionment of state tax distribution to every town and city was passed by the state legislature in 1945; it will continue until another basis for apportionment is proposed and passed by the General Court. An analysis of this method of tax distribution follows:

> Apportionment of distributions to cities and towns on the basis used for apportioning the state tax produces a wide variation from place to place in distribution per capita and ratio of distributed amounts to local tax levies. The very nature of the state tax apportionment is to levy a tax which varies with valuation per capita; that is (it is) less per capita in places with low valuations and more in places with high valuations. Hence it follows that when the same basis is used for the distribution of funds the pattern is the same. Places that can support high direct taxation receive larger distributions than places which cannot. In general, places with low tax rates and high tax levies per capita get large distributions per capita, and conversely. Likewise, in places with low tax rates the distribution is greater in proportion to the tax levy than in places with high tax rates.[5]

Certain Local and State Financial Relationships.- A fair indication of the value a municipality places on the education of its children is the ratio between the school tax and the total town tax. At the present time, municipalities are bound by statute to indicate the exact amount of the school tax on property bills. If this mandate is not carried out, the state or statistical branch of the state Department of Education, allows approximately

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[5]Commonwealth of Massachusetts, Report of Proceedings, House No. 1800. Boston, Mass., 1945, p.320.

thirty percent of the total property tax as equivalent to its contribution to school support. Local conditions and miscellaneous expenses undoubtedly enter into how much revenue is needed to support both schools and town government.

Another factor in the understanding of local financial relationships is the amount of per capita distributions of state-collected taxes. The per capita amount of revenue distributed by the Commonwealth has a direct effect on the amount of the local tax levy.

If we divide the cities and towns of Massachusetts into four groups based on the amount of per capita assessment, the picture becomes clearer. The first group is made up of 88 cities and towns with an assessed valuation per capita ranging from $460 to $1030; the second includes 88 cities and towns having an assessed valuation from $1040 to $1320; the third, 87 cities and towns between $1320 and $1890; the fourth, of 88 cities and towns, has a per capita assessed valuation of over $1910. Geographically, this relatively high assessed valuation per capita is concentrated in three general areas -- Boston and some of its suburban communities, including Brookline, Newton, Milton, Wellesley, Lincoln, Lexington, and Winchester; the coastal area from Hull to Provincetown; and nine towns in the Berkshire region near the Connecticut border.

Proportionately low assessed valuation per capita is concentrated in the central section of the state or widely scattered throughout its borders.

Total property valuations alone do not reveal the financial ability of a community to support its own institutions. Wealth of any kind must be considered in relation to the number of pupils or the number of residents before it has any significance.

Theoretically, high wealth per pupil does not imply low tax rates, since many factors relating to school and municipal budgetary demands may exact a relatively high tax rate to provide the necessary funds. However, while tax rates cannot always be accepted at face value, even within a state, because of varying assessment practices, they appear to be the best indexes available as to how much financial effort is required to meet local government costs.

The ideal way of assessing property might be to place on each assessor's list the amount that a certain type or kind of property would bring on a specific date through a sale by a willing seller or a willing buyer.

Assessment Practices in Massachusetts.- It has been well established that property valuations for tax purposes in Massachusetts are not the same from one municipality to another. Local/state relations were vitally

affected through the 1945 equalized valuations. Inequalities in assessment and variation in assessment practices are not of too much importance as far as local/state relations are concerned; but the lack of uniformity in assessment practices brings about huge inequalities through its effect on the state tax and in the distribution of state-collected taxes. At the same time, it must be appreciated that annual re-assessment would be costly, and in a great many cases would serve no good purpose. It is realized that some clear-cut instances of over-assessment or under-assessment have been changed by the General Court or by the Commissioner of Corporations and Taxation with the object of reducing this inequality. Such changes have not brought about the desired equalization, partly because they represent isolated instances only, and partly because the motivation behind them was, too often, political expediency alone.

It is regrettable that poor assessment practices in Massachusetts are allowed to form the primary source for the tax rolls for the annual sharing of $35 to $40 million of state-collected taxes with the municipalities.

This is brought out clearly by the following quotation from House 2323:[6]

> Apparently, the incongruity of approximately $18 million of school aid being distributed to cities and towns which have small assessed valuation in relation to the number of children

[6]Commonwealth of Massachusetts, Report of Proceedings, House 2323, p.39

> of school age and at the same time, distributing another $30 million to $40 million on the basis of the state tax, has not been emphasized sufficiently. The school formula attempts to equalize the local tax burden, while the state tax basis distributions provide the greatest amounts to the municipalities having the largest assessed valuations. It appears that for each dollar of state-shared taxes, which are directed toward equalization of local taxes, at least two dollars are distributed, so that the municipalities having the largest amounts of assessed valuation receive the most aid ...

The higher distributions in per capita amounts from 1950 on, was due chiefly to the new school Foundation Program, and to the school transportation aid. Cities and towns which have the largest populations receive average or below average revenues as far as the tax distribution per capita is concerned. It is interesting to observe that it is almost impossible for any of Group I, which includes a great many large-population districts, to benefit from the tax transportation factor. It is also apparent that cities and towns having large assessed valuation per capita also receive large amounts of state aid in the years that the total distribution is extensive and in lean financial years they receive reduced amounts.

Statistical Evaluation of Certain Factors.- There is a rather wide variation in local tax levies based on a per capita cost and in assessed valuation. The assessed valuation per capita is often used to indicate the tax-raising ability of a municipality.

In Class I, Class II, Class III and Class IV, correlations were made between assessed valuation and state aid, with the results shown in Table XI.

Class II and Class III showed a negative trend -- in the right direction. The more wealth a town has, the lower should be the amount of state aid apportioned to it. Class I and Class IV have positive correlations, indicating the least degree of equalization and that the state gives more state aid to certain cities in Class I and in particular to numerous towns in Class IV than is necessary to maintain equalization.

However, in the four classes of municipalities in the Commonwealth of Massachusetts, we cannot conclude that the correlations between assessed valuation per capita and state aid are significant because the obtained r's are not significant from the r's of zero. This same conclusion holds when the assessed valuation per capita for the 349 municipalities of Massachusetts was correlated with State Aid through the use of Fisher's Z technique.

From these observations, it would appear that the trend in State Aid in Massachusetts at the present time is away from the impartiality that should exist in a truly equalized program.

Table XI.- Assessed Valuation per Capita (C) Related to State Aid per Pupil (A) in the Four Classes of Municipalities in Massachusetts, in terms of r.

Class	M	N_{CA}	σ_{rCA}	$\frac{D}{\sigma - D}$
I	39	.25 ±	.15	.52
II	96	- .38 ±	.085	.80
III	94	- .38 ±	.088	.80
IV	120	.73 ±	.042	1.85
ALL	349	.20 ±	.032	.40

If we correlate Equalized Taxation per Pupil with State Aid per pupil, the results shown in Table XII are obtained.

Interpreted, these figures mean that if state aid is to have a fully equalizing effect, there should be a high negative correlation between ability to maintain a school program and the amount of state aid received. In other words, the poorest community, the lowest-ranking in tax-paying ability, should be the highest in the amount of state aid received. The use of correlation is well adapted to this situation, as it does not take into consideration the absolute (equalized valuation) amounts of the programs maintained as a whole in the Commonwealth of Massachusetts, but only indicates the trend of relationship between State Aid and local financial ability as expressed by Equalized Valuations per pupil.

Again, in the four classes of municipalities in the Commonwealth of Massachusetts we cannot conclude that the correlations between Equalized Taxation per pupil and State Aid per pupil are significant because the obtained r's are not significant from the r's of zero. This same conclusion holds when the Equalized Valuations per pupil of all the municipalities of Massachusetts are correlated with State Aid per pupil through Fisher's Z technique.

Table XII.- Equalized Taxation per Pupil (E) Related to State Aid per Pupil (A) in the Four Classes of Municipalities in Massachusetts, in terms of r.

Class	n	r_{EA}	$\sigma_{r_{EA}}$	$\frac{D}{\sigma D}$
I	39	- .05 ±	.159	.10
II	96	- .41 ±	.083	.88
III	94	- .38 ±	.088	.80
IV	120	.22 ±	.087	.44
ALL	349	- .16 ±	.052	.32

A study of Table XII reveals a correct correlational negative trend. As apportioned or equalized valuation is a better criterion than assessed valuation per capita, which was mainly used for comparison purposes, we find that the highest negative correlation in which we are interested is - .41 for Class II towns. Class II towns also had a correlation of - .38 when assessed valuation per pupil was used as a measure of ability. From these two figures it would appear that state aid had the greatest equalizing effect among Class II towns as a group. However, this is quite far from the desirable level which has been attained by adequate methods of equalized distribution, where there are found much higher correlations. In a fully adequate equalized program of state aid, the negative correlation is constant regardless of the level of state aid (the amount of the total foundation program). Any state really supporting a Foundation Program will show a consistently negative relationship between local financial ability and support and aid from the state.

Class IV towns show a correlation of + .22, indicative of a tendency for the state to give more to those towns with less need of financial aid when considered within the group. This trend may well be considered contrary to equalization. Another cause of this positive

correlation in Class IV is the high apportioned valuation per pupil and high state aid. To express equalization, towns of high valuation per pupil should receive a minimum amount or no state aid in order to fulfill the requirements of the equalization principle. It will be noted that a correlation of + .73 for Class IV towns appears when state aid is correlated with per capita income. Class IV towns as a whole have high equalized valuations and low populations which give strength to the authenticity of this high trend.

It is to be emphasized that all coefficients of correlation reflect only the situation within a particular class, without reference to the situation within the entire group.

A further manipulation of this same obtained data would present the coefficients of correlation for the Commonwealth as a whole, using the average correlation of the four classes. Using equalized valuation per pupil as a criterion of ability, a coefficient of $r = +.16$ is obtained. This is so slight a correlation as to be almost negligible. The coefficient of correlation obtained when per capita valuation is the criterion of ability is $r = +.20$. Here again the forecasting ability is negligible.

The purpose of the following part of this chapter is to attempt to measure the amount of financial equalization

under the present system of state assistance. Two measures of local financial ability to support education have been used. The first of these is the per capita equalization. This is obtained by dividing the total equalized valuation of a municipality by the total population. The second, and more valid, is equalized valuation per pupil, which is found by dividing the total equalized valuation of a community by the net average school membership (i.e. the number of pupils attending public schools).

Taxable Property as Wealth.- The financing of education is largely dependent on wealth as represented by taxable property. Since many municipalities in Massachusetts do not possess this type of wealth, it appears that they will not be able to raise sufficient revenue to maintain their respective school systems. In order to secure this additional, and necessary, financial help, the use of some other means than direct taxation, or some new source of revenue must be considered. Except for a few municipalities, the property tax does not provide, without an over-burdened capital levy, enough fiscal support to provide for the educational needs of the community. It is to be emphasized here that the cities and towns of Massachusetts cannot levy any

taxes except property, excise, and poll taxes, thus making almost mandatory the use of state collections and state aid for education.

The tables appearing on the following pages show rather forcefully the need for additional state aid for schools.

Cities and School Taxation.- For example, in Table XIII, on examination of the units in the city classification, it will be noted that the city of Cambridge, possessing large wealth as measured by equalized valuation per pupil of $24,111, and with an assessed valuation per capita of $1770 needs only $11.71 in school tax in order to spend $281 per pupil for total school support. Cambridge provides $247 local taxation per pupil while receiving $22.86 in state aid. This enables it to pay an average salary of $4302 to its teachers.

The city of Lynn, possessing medium wealth as measured by an equalized valuation per pupil of $12,874, and with an assessed valuation per capita of $1440, needs $16.60 for its school tax in order to spend $268 per pupil for total school support. Lynn provides $268 in local taxation per pupil for school support, while receiving $26.71 in state aid. This enables Lynn to pay an average salary of $3961 to its teachers.

Table XIII.- Principal School Taxation Expenditures of a Group of Selected Class I Municipalities

Municipality	Equalized Valuation per pupil 1951-52	1951 Tax Rate Support for Schools	Local Taxation per pupil	State Aid per pupil 1951-52	Total school support	Assessed Valuation per capita	Average Teachers' Salary	Tax Rate per $1000
Cambridge	$21,111	$11.71	$247	$22.86	$281	$1770	$4302	$42.90
Newton	17,764	14.44	256	12.25	287	2650	4300	38.40
Lynn	12,874	16.60	213	26.71	268	1440	3961	56.80
N. Adams	10,996	16.21	178	41.06	236	1430	3621	45.00
Somerville	10,659	15.31	163	40.73	214	1250	4053	53.60
Medford	10,589	19.01	201	32.07	244	1430	3982	49.40
Taunton	8,293	17.06	141	41.86	193	980	3185	49.20
Newburyport	7,743	14.10	109	40.68	188	990	2865	62.00

Taunton, with less than average wealth, as measured by the equalized valuation per pupil of $8293 and $930 in assessed valuation per capita, needs $17.05 school tax to spend $193 for total school support per pupil. Taunton allocates $141 for local taxation per pupil, while receiving $41.86 in state aid per pupil. This enables Taunton to pay its teachers an average salary of $3185.

School Taxation in Large Towns.- Considering large towns, Brookline, possessing large wealth, as measured by equalized valuation per pupil of $24,844, and with assessed valuation per capita of $2770 needs only $12.68 school tax in order to spend $356 for total school support per pupil, while receiving $9.28 in state aid per pupil. Brookline provides $315 in local taxation per pupil. It pays an average salary of $4721 to its teachers. Brookline might be said to have large tax leeway. Much more could be appropriated for diverse purposes without any financial risk to the community.

Natick possesses fair wealth as measured by the equalized valuation of $7626 per pupil, and with an assessed valuation per capita of $1460 it needs $18.15 school tax to spend $176 for total school support per pupil while receiving $25.90 state aid per pupil. Natick provided $138 in local taxation per pupil. It pays an average salary of $3419 to its teachers.

Table XIV.- Principal School Taxation Expenditures of a Group of Selected Class II Municipalities.

Municipality	Equalized Valuation per pupil 1951-52	1951 Tax Rate Support for Schools	Local Taxation per pupil	State Aid per pupil 1951-52	Total School Support	Assessed Valuation per capita	Average Teacher's Salary	Tax Rate per $1000
Brookline	$24,844	12.68	$315	$ 9.28	$356	$2770	$4721	$38.90
Barnstable	20,273	8.20	166	18.58	222	3760	3396	30.50
Webster	19,776	6.24	123	84.77	244	800	2565	34.10
Wellesley	17,133	13.07	223	8.50	250	2740	4082	38.80
Ayer	8,794	15.22	60.91	6.93	290	790	2948	42.80
Natick	7,626	18.15	138	25.90	176	1460	3419	45.60
Saugus	6,277	19.81	124	32.65	163	1220	3456	41.80
Maynard	5,725	29.13	166	28.76	202	870	3008	65.50

Ayer, possessing average wealth as measured by the equalized valuation per pupil of $8794, and with an assessed valuation per capita of only $790 needs a school tax of $15.22 to provide a total school support of $290. Ayer provides only $60.91 local taxation as it receives a substantial grant from the Federal government for school tuition for the establishment of school facilities for the children of servicement at Camp Devens, which is located in the town limits of Ayer. Its teachers are paid an average salary of $2948.

School Taxation in Class III towns.- Bourne, possessing large wealth as measured by equalized valuation per pupil of $19,452, and by assessed valuation per capita of $3410, needs only $14.48 school tax in order to spend $237 for total school support per pupil, while receiving $32.37 state aid per pupil. Bourne provides $158 in local taxation per pupil. It pays an average salary of $2999 to its teachers. Like Ayer, Barnstable, and other towns, Bourne receives federal aid for tuition for the children of servicemen.

Hadley, possessing less than average wealth as measured by equalized valuation per pupil of $7,179, and by assessed valuation per pupil of $1320, needs a school tax of $20.26 from a tax rate of $42.00 to spend $243 for total school support per pupil, while receiving $60.67 in

Table XV.- Principal School Taxation Expenditures of a Group of Selected Class III Municipalities

Municipality	Equalized Valuation per pupil 1951-52	1951 Tax Rate Support for Schools	Local Taxation per pupil	State Aid per pupil 1951-52	Total School Support	Assessed Valuation per capita	Average Teacher's Salary	Tax Rate per $1000
Manchester	$21,571	$12.06	$260	$ 9.15	$278	$3260	$3342	$46.00
Bourne	19,452	14.48	158	32.37	237	3410	2999	37.00
Yarmouth	18,708	7.14	133	60.10	272	3680	2813	36.00
Hadley	7,179	20.26	145	60.67	243	1320	2492	42.00
Groveland	5,405	20.35	94	47.72	143	780	2701	60.00
Georgetown	5,282	18.03	95	58.29	162	1000	2647	55.00
Sutton	4,145	17.05	115	63.16	203	810	2574	68.00

state aid. Hadley provides $145 in local taxation per pupil. It pays an average salary of $2492 to its teachers.

Georgetown, possessing poor wealth, as measured by equalized valuation per pupil of $5,282 and by assessed valuation per capita of $1000, needs a school tax of $1803 from a tax rate of $55.00 to spend $162 for total school support per pupil, while receiving state aid of $58.29. Georgetown spends but $95 in local school support per pupil. It pays an average salary of $2647 to its teachers.

Groveland, possessing little wealth as measured by equalized valuation per pupil of $5,405 and by assessed valuation per capita as low as $780 needs $20.35 from a tax rate of $55.00 to provide total school support per pupil of $143, while receiving state aid of only $47.72. Groveland supplies $94 in local taxation per pupil. It pays an average salary of $2701 to its teachers.

School Taxation in Class IV towns.- It will be observed that Longmeadow, possessing higher than average wealth, as measured by an equalized valuation per pupil of $13,210, and an equalized valuation per capita of $2660, still needs a high school-tax of $18.19 per pupil in order to spend $247 per pupil in total school support. Longmeadow receives a small amount of state aid, $5.95 per pupil, expends $240.25 locally to support schools,

Table XVI.- Principal School Taxation Expenditures of a Group of Selected Class IV Municipalities

Municipality	Equalized Valuation per pupil 1951-52	1951 Tax Rate Support for Schools	Local Taxation per pupil	State Aid per pupil 1951-52	Total School Support	Assessed Valuation per capita	Average Teachers' Salary	Tax Rate per $1000	Amount spent per elementary class
*Gosnold	$126,516	$ 4.61	$583.27	$248.34	$831	$18,070	$3000	$30.00	$3794
Chilmark	37,636	5.67	213	118.00	334	6790	2454	22.00	3219
Tolland	28,818	7.49	215	416.08	631	4310	4073	38.00	7084
Gayhead	19,326	10.99	211	174.74	386	3300	2477	56.00	3281
Longmeadow	13,210	18.19	240	5.95	247	2660	3713	35.00	5656
E.Longmeadow	10,326	21.19	155	34.01	206	2050	2803	40.00	4569
Sunderland	9,178	12.58	115	53.32	197	1700	2692	36.00	3934
Oakham	6,131	7.18	44	202.60	251	1050	2270	61.00	3256
Dudley **	5,476	18.34	100	71.81	184	630	3008	60.00	4478
Clarksburg	3,702	34.64	128	76.64	204	610	2630	57.00	3670

NOTE: * Gosnold not included in statistical analysis (See page 130)
** See note on pages 128-129 re Dudley. Population exceeds 5000 but it has no High School.

An extra column for comparison pupposes has been added to this table as the towns in Class IV have mainly grade schools, and no high schools.

pays its teachers an average salary of $3713, while expending $5656 per elementary classroom. As the pupil-teacher ratio is approximately 40, the cost per pupil by classrooms is $126. The property tax rate is $35.00.

Chilmark, with excessive wealth as measured by an equalized valuation per pupil of $37,636, and an assessed valuation per capita of $6,790, needs only a bare $5.67 in school tax from a tax rate of $22.00, which is approximately 26 per cent of the 1951-1952 state average tax rate, in order to spend $334 per pupil in total school support. Chilmark allocates $213.16 in local effort per pupil, pays its teachers (two) an average salary of $2454, while expending $3,219 per elementary classroom. With 14 pupils in attendance, the cost per classroom per pupil runs approximately $230. The state aid received is $118.64, which is away out of proportion to its financial needs.

Clarksburg has very small wealth, both as measured by property valuation of $3702 per pupil and an assessed valuation per capita of $610. It receives $76.14 in state aid. Clarksburg expends $34.64, or 61 per cent of the tax rate, the largest local percentage for schools, from a tax rate of $57.00 to spend $204 for total school support, pays its teacher $2630 in average salary, provides $128.15 of the total school support in local effort,

and expends $3670 per elementary classroom. With a pupil ratio of about 22, the cost is approximately $167 per pupil using the average classroom cost as a criteria.

Oakham has a little over one-half the average equalized valuation of the various municipalities in the Commonwealth, with $1050 in equalized valuation per capita. It spends only $7.18, or 12 per cent of its real estate taxes, for schools, from a local tax rate of $61.00. Its total school support is $251, while it receives $202.60 in state aid per pupil. It contributes only $44.02 in local effort for school support, while paying its teachers an average salary of less than the minimum $2260, while spending $3236 per elementary classroom. With 20 pupils per teacher, the average cost per pupil in the average elementary classroom of Oakham approximates $164. Oakham, like most of its Class IV associates, pays tuition for its high school students in the nearby community of Barre. Its vocational high school students are sent to the Worcester Boys' High School, a trade school, on a tuition basis.

Dudley, while over the 5000 population mark, has special permission to continue in Class IV, although not providing a Senior High School as required by law. Most of its secondary students attend the nearby Webster High School. Dudley has only less than one-half of the average equalized valuation per pupil for the state of Massachusetts

of about $11,000. Dudley spends $184 in total school support per pupil, but only $100.42 in local effort per pupil, while receiving $71.81 in state aid. To provide the $184 total support per pupil, it spends $18.34, or 31 per cent of its total taxes for school support, from a tax rate of $60.00. It pays its teachers an average salary of $3008 and spends $4478 per elementary classroom. Dudley has about 28 pupils for each teacher, which approximates about $160 per pupil per elementary classroom.

Tolland has high wealth as measured by an equalized valuation per pupil of $28,818 and an assessed valuation per capita of $4,310. It pays $7.49, or 22 per cent of its local tax rate of $38.00 for school support. For total school support, Tolland expends $631, with $215.77 in local effort, while receiving a towering $416.08 grant per pupil in state aid. Tolland is thus enabled to pay its one teacher $4073, with a high expenditure of $7,084 for its elementary school classroom. With the pupil-teacher ratio at 11, the cost per pupil in the elementary classroom was about $644 per pupil.

Municipalities Excluded from this Study.- Two municipalities, Mount Washington, and Gosnold, have been omitted entirely when considering the Commonwealth of Massachusetts as a whole and Class IV towns individually. The former, Mount Washington, has no schools, and therefore it receives no state aid. Gosnold may be considered

a freak municipality, and as it is not a representative sample, it has been left out of this study for the following reasons:

Gosnold has excessive wealth in an equalized valuation per capita of $18,070. It expends $831 per pupil for its six pupils in total school support. It spends $583.27 in local effort per pupil. Gosnold receives $248.34 in state aid for each of its pupils -- a gross inequality -- while expending only $4.61, or 15 per cent of its tax rate of $30.00. It pays its one teacher $3000 in average salary, about the rate paid a beginning elementary school teacher in a municipality such as Worcester. It expends $3784 for one elementary classroom which means that it costs about $462 to educate each of its pupils in average daily attendance. Clearly, this is not a representative district in any way, and as such it has been omitted from any statistical consideration.

At the present time, only about 67 per cent of the children of the Commonwealth between the ages of 7 and 16 years are enrolled in the public schools in cities. The other 33 per cent are enrolled in private and parochial schools. This percentage of non-public-school children means that one-third of all children upon whom state aid in the Foundation Formulas are apportioned have no participation as regards school expenses in Massachusetts, outside of, perhaps in certain districts, some transportation expenses.

In the following chapter, the effects of counting all the 7- to 16-year-olds on both equalized valuation and state aid will be studied.

The following minority statement by Norman MacDonald, a member of the recent Recess Commission for the study of state aid is of supreme interest due to its implications:

> Public school costs have risen so high that many students of the problem raise serious doubts that local tax levies can reasonably bear them. The Commission is unanimous in believing that equal educational opportunity is the right of all children, and that one of the means of assuring it is to apportion some reasonable share of state-collected taxes to cities and towns to relieve serious economic pressures where local resources are meager.
>
> But the majority would not relate the distribution of such money to the public school problem itself -- a problem whose dimensions can only be established by knowing how many children are to be educated at public expense or how many classrooms are to be operated. The majority would base the distribution upon the count of all children of school age, whether or not the children were enrolled in the public schools.[7]

Such a distribution, of course, would mean that communities supporting public schools for nearly all their children would receive low per pupil payments, while communities where a substantial percentage of children were educated outside the public school system would receive large payments per pupil

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[7]Commonwealth of Massachusetts, Report of the Recess Commission on State Aid for Schools, House 2323, Boston, Mass., 1952, p.84.

> In other words, the fewer of these eligible children who turn up in public schools, the greater payment for each of them by the State. If other educational facilities are not available, in the community or area, then the payment in the public schools would be less, thus perpetuating, if it does not in fact create, an indefensible inequity.[8]

Facts and figures concerning the implications resulting from the above statement have been sought without success. In the absence of such first-hand data therefore, an attempt will be made in Chapter V to show the effect on state aid per pupil allotments of equalized valuation apportionments in the various municipalities -- with comparisons of the old and new figures both in money distributions and in standard scores.

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[8]Commonwealth of Massachusetts, Report of the Recess Commission on State Aid for Schools, Boston, Mass., 1952, p.84.

CHAPTER V

A STATE AID PROGRAM FOR MASSACHUSETTS

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A STATE AID PROGRAM FOR MASSACHUSETTS

In this chapter an effort will be made to present some practical examples of the workings of a fully equalized Foundation Program for the Commonwealth of Massachusetts. Using the Strayer and Haig concept of a plan based on a flat cost per pupil of school age, data will be shown in both standard scores and dollar values, to demonstrate the net differences to a municipality of using a Foundation or Partnership Program of State Aid.

Studies of proposed equalized valuation and proposed state aid apportionments will be shown which include all children in the 7- to 16-year age bracket attending private as well as public schools. Comparisons can then be made between the merits of the two proposed apportionments and the presently-used equalized valuation and state aid appoftionments, which include only children between the ages of 7 and 16 in attendance at public schools.

In recent years, most states have allocated larger sums in financial aid for the support of public schools. These funds are derived from property taxation,

income, sales, inheritance, and corporation taxes, and other sources. Even the smallest states allocate several million dollars for public school support. In a small number of states, considerably more than 50 per cent of all school funds are provided by the State. In Delaware, over 90 per cent of public education is state-supported. From this trend towards having the state provide most of the money for school support, three desirable effects seem to emerge:

1. Educational opportunities for all pupils have been made more equal.
2. The taxation burden among the various districts has been made more equal.
3. The tax on real estate has been lowered.[1]

The Strayer-Haig Principle of Equalization.- One of the principal aims of every Foundation Program is to achieve the highest equalization possible. The following may serve as a criterion for proposing adequate equalization plans for the Commonwealth of Massachusetts.

> To achieve perfect equalization, each local unit must contribute to the support of its own foundation program, as defined by state law, in proportion to its ability to raise revenues for this purpose, as compared with the ability of other local units within the state to raise revenues for the support of their programs, similarly defined.
>
> ... Also for perfect equalization, a local tax rate should be specified which is no higher than that which the wealthiest district must levy in order to support the defined foundation program.[2]

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[1] W.G.Reeder, The Fundamentals of Public School Administration. New York, Macmillan, 1945, p.349.

[2] National Education Association, Research Bulletin: Statutory Bases of State Foundation Programs for Schools, issue of April 1948, Vol.26, No.2, p.15.

While it is simple justice for the state to tax the wealthier districts to help the poorer ones, and while very few valid objections can be raised against the state attempting to help local districts meet certain educational standards, certain dangers lie hidden when local and central governments are involved in financing public school expenditures.

Dr. Mort, Director of the New York State Educational Conference Board, listed a few of these obstacles to adjustment of public school expenditures to the increased cost of a state's basic program:

1. Low valuation per pupil in the great mass of school districts;
2. Lack of non-property taxing powers for most school districts;
3. Tax limits in cities; and
4. The lag in adjustment of full valuations in cities to postwar price levels.[3]

In almost every state in the Union, the amount spent per pupil enrolled in certain local school districts is several times that spent in other school districts of the same state. In Massachusetts, the city with the highest per-pupil expenditure, Salem, allots $293.73 in total school support per pupil, while the lowest, Brockton, spends $176.88. Using Class I scaled scores for comparison purposes, Salem is +1.98 scaled scores above the total

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[3] Paul R. Mort, Effects of Price Increases on State Aid and Local Support for Schools, report of the New York State Educational Conference Board, Albany, Dec. 1952, p.9.

school support mean of 0.00, while Brockton is - 1.82 scaled scores below the mean. If true equalization existed, both cities would be within a very narrow margin of the zero mean. This same procedure can be worked out for the highest and lowest towns in Class II, Class III and Class IV as will be seen in Appendix Five.

That there is ample justification for believing that present-day allocations of funds are not equalized is supported by the following quotation:

> Although an increasing number of states are developing reasonably acceptable plans of equalization, it appears nevertheless, the state aid in the majority of states is not so distributed as to equalize adequately educational opportunity. In general, state-administered school funds do not appear to be equitably distributed between rural and urban areas or between the richer and poorer counties. Although there is an increasing number of exceptions, the majority of states are not, at present, distributing their own funds in a manner that could be recommended for the distribution of federal funds.
>
> If the federal government should adopt the policy of granting aid to the states for the purpose of equalizing educational opportunity, it would seem that some precaution should be taken to insure an equitable distribution of funds with respect to geographical areas and population elements within the states.[4]

In order to meet the tests of "wholesomeness" as defined in Chapter one, the following proposals based on the Strayer and Haig equalization concept are offered. These two research workers emphasized that as the Foundation Program was a state responsibility, the cost of

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[4] N. Edwards and H.G.Rickey, The Extent of Equalization Secured through State School Funds, Staff Study No.6, Advisory Committee on Education, Washington, Government Printing Office, 1938, p.18.

equalization of educational opportunity and equalization of school support entirely from state funds.

> The concept of the "foundation" program is that of establishing an equitable fiscal partnership between the state as a whole and the individual school system charged with the responsibility and privilege of operating the public schools. Its purpose is to assure the financing of an acceptable educational offering in all school systems regardless of their taxpaying abilities.[5]

In theory, the Foundation Program should embrace all the services the state wishes each individual community to have at acceptable levels. This comprises whatever amount is required to operate classroom units, including transportation and the extra costs of secondary schools over elementary school costs, together with any such factors as building costs, etc. Whatever local taxes were levied would be used to supplement the basic program.

However, Strayer and Haig, while pointing out such a possibility felt that it would mitigate against the highly desirable local control of schools and school finances. Here again their wisdom is undenied for

> ... they pointed out that the maximum local support which could be required and still bring about equalization of the burden of the Foundation Program would be the support resulting from a local school tax equivalent to that which would provide the cost of the Foundation Program in the richest district.[6]

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[5] Mort and Reusser, Public School Finance, p.382

[6] Ibid., p.405.

A summary of the proposal that would evolve from such a step is given further consideration by Strayer and Haig in the following quotation:

> 1. A local school tax in support of the satisfactory minimum offering would be levied in each district at a rate which would provide the necessary funds for that purpose in the richest district.
>
> 2. This richest district then might raise all of its school money by means of the local tax assuming that a satisfactory tax, capable of being locally administered, could be devised.
>
> 3. Every other district could be permitted to levy a local tax at the same rate and apply the proceeds toward the costs of schools, but
>
> 4. Since the rate is uniform, this tax would be sufficient to meet the costs only in the richest districts and the deficiency would be made up by state subventions.[7]

This quotation resolves itself into saying that the minimum amount of state aid needed to effectively and adequately support a Foundation Program is the difference between the cost of the program and the amount of local effort as measured by its financial ability. In Massachusetts, this measure of financial ability is the equalized valuation per pupil attending the public schools.

If we accept the hypothesis of providing a $200 Foundation Program, or a $150 Foundation Program should the larger figure be considered too rapid a transition, we must also accept the following basic assumptions:

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[7] G. D. Strayer and R.M.Haig, The Financing of Education in the State of New York, quoted in Public School Finance. p.405.

1. If a key district such as Gosnold, with its disproportionate and unrepresentative valuation, be chosen, the state portion would be very high and the local contribution to the foundation program very low.

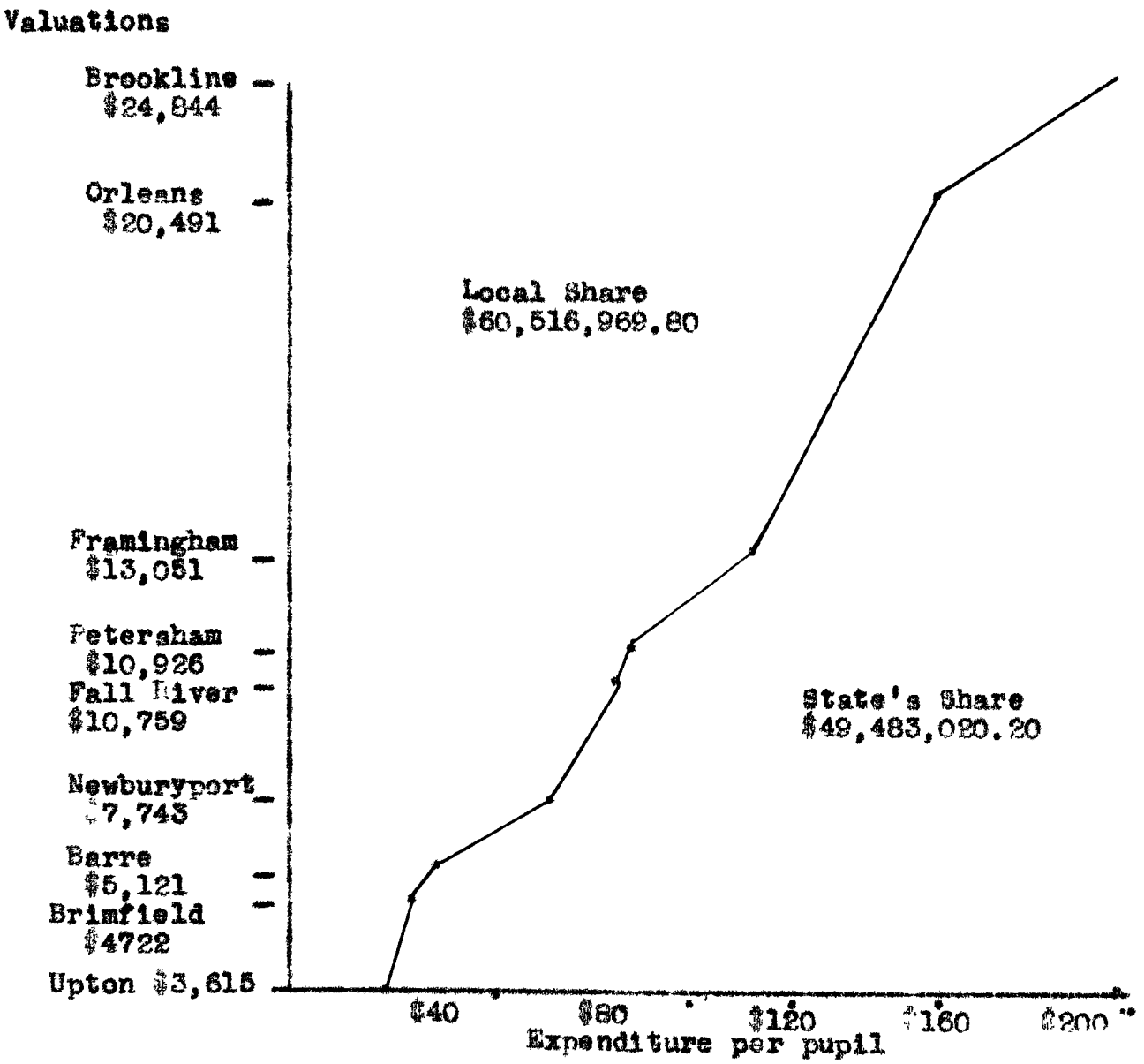
2. If the cities, in rank of valuation, are placed in order of highest to lowest, state aid depends on the position of rank. The farther down the scale, the key town is chosen, the less state aid needs to be allocated. Furthermore, raising the key city would raise the state's contribution to the Foundation Program.

3. State Aid varies inversely as valuation -- e.g. the higher the state aid, the lower the valuation per pupil, and conversely, the higher the valuation, the lower will be the amount of state aid required.

4. Such a program gives justice to all participating towns. At the same time it furnishes a $200, or a $150, Foundation Program, whichever amount may be selected.

In Massachusetts, there are approximately 600,000 children. If a Foundation Program of $200 is sought, the total cost of such a program would be $120,000,000. For a practical illustration, Brookline, a wealthy town with an equalized valuation of $24,844, is taken as the key city. (See Figure 4).

Dividing the amount of equalized valuation of the key municipality, Brookline, into the amount chosen for the Foundation Program, produces the following formula:



Key: Wealthiest District Chosen - Brookline $24,844
Poorest District - Upton $3,615

Scale: Horizontal - ¼" = $10 expenditure per pupil
1" = $4000 valuation

Figure 4. A Proposed $200 Foundation Program for Massachusetts.

$200.00 divided by $24,844 = $8.05 per $1000 valuation
$150.00 divided by $24,844 = $6.04 per $1000 valuation

Using the formula referred to above, the amount of the program, $200, divided by the valuation, $24,844, produces a basic equalizing factor of $8.05 per $1000 of valuation. The total state valuation in 1951-1952 was $7,517,636. Multiplication of this valuation by the factor $8.05 gives $60,516,969.80 as the amount of local contributions to be made by all municipalities to the Foundation Program for the entire state. The difference between this total school support from all districts, and the total cost of the program, estimated at $120,000,000, is the amount of the contribution required from the state. In other words, the state would contribute $49,483,030.20, and the 350 local districts would contribute $60,516,969.80. The Foundation or Partnership Program is therefore comprised of a state share and a local share -- a more equitable distribution.

If the plan chosen by the Commonwealth is the total plan of $150 per pupil, the same procedure is followed. Based on 600,000 children, the total cost of the program would be $90,000,000. Again, using Brookline as the key city, the basic equalizing factor becomes $6.04 $\left(\frac{\$150.00}{\$24,844}\right)$ per thousand of valuation. The total municipal valuation of $7,517,636.12 multiplied by $6.04 results in $45,406,522, the local share of the Foundation Program. This local

share subtracted from the $90,000,000 -- the total cost of the program -- gives the state's share, $44,693,478.

The Foundation Program, based on $200 and $150, with resultant state aid and local apportionment was worked out for each municipality. Scaled scores were calculated in both programs, resulting in every instance in a high local contribution with a low state aid grant. In the $200 program, state aid ran from a low negative scaled score, (- 2.478) to a high scaled score of + 1.843, almost perfect negative correlation between high local contributions and low state aid, and high state aid with low local contributions.

As the justice of figuring any desired type of program has been demonstrated, it can readily be appreciated that equality of both educational opportunity and financial burden would result in all communities if either of the programs were adopted. In either of these programs, the Commonwealth would bear the lesser share of the financial burden.

As mentioned at the end of Chapter IV, a study as to the usefulness of counting all the children of ages 7 to 16 in Massachusetts, rather than simply those within that group in attendance at public schools, seemed indicated. The results of just such a survey follow:

School Census vs Net Membership as a Basis for Apportioning Aid.- It has been claimed that the practice

in Massachusetts of basing state aid, not on a count of all children of school age, but on the net average membership of children attending the public schools, is an inadequate and unreliable measure for providing state support for schools. On the other hand, there are some proponents who argue that if state aid to education is justifiable at all, it can be justified, not on population count of all children from 7 years of age to 16, but upon the net average membership in the public schools.

The majority of the members of the Special Commission on Taxation in the Commonwealth favor counting all the children of school age, whether or not these children attend public schools. The result of counting all children between the ages of 7 and 16 would mean that municipalities supporting public schools for all, or nearly all, their children would receive lower per pupil payments than those municipalities where a large percentage of children were educated outside the public school system. The fewer 7- to 16-year olds who attend public schools, the greater would be the payment for each of them. It is claimed as a corollary to this statement that in municipalities without private or parochial schools, the payments would be less, thus continuing a serious inequity. A brief study of this problem and its implications is now presented.

The present equalized valuation per pupil was established by dividing the 1951 valuation by the net

membership in the public schools. The valuation was obtained by dividing the 1951 valuation by the total number of children in each municipality between the ages of 7 and 16 years.

The Proposed Valuation table is found in Appendix III.

An interesting picture is presented if we select a group of Class I cities having a large number of children attending other than public schools. The pertinent data will be found in Table XVII.

If we single out Lowell, the picture of communities sending a goodly proportion of their children to private or parochial schools presents itself. Lowell has a total of 12,985 children of school age. Of these, 4,815 attend private or parochial schools, and 8,170 pupils attend public schools. The equalized pupil valuation, counting net membership, was $13,175. Counting all pupils of school age results in an equalized valuation of $8,334, a loss of $4,841 per pupil. However, the use of the census might give some trifling aid to those parents with children in the private and parochial schools, since it may reduce their tax rate by a few dollars per $1000 of valuation. It seems, however, more likely to increase the amount of money spent by these cities on their public schools.

If the 12,985 students eligible to attend the Lowell schools actually did so, the real estate tax, which includes the school tax, would have to advance or new sources of revenue would have to be found.

TABLE XVII.- Selected Class I Cities Having a Large Number of Pupils Attending Other Than Public Schools.

TABLE XVII

City	Old Eq.Val. per pupil	Scaled Score	New Eq.Val. per pupil	Scaled Score
Fitchburg	$16,259	+1.83	$11,614	+ .04
Lowell	13,149	+ .44	8,334	- .23
Lawrence	13,146	+ .42	9,360	- .83
Holyoke	16,699	"2.12	13,226	+ .67

The picture in respect to the valuation attributed to a community does not always tell the whole story. For example, such cities as Holyoke, Lowell, Lawrence and Fitchburg would seem to be relatively wealthy if judged on their capacity to support education exclusively from their rank on equalized valuations. Of course, this is far from the fact. Their rank is due primarily to so many children in these communities attending other than public schools, and that at the present time, state aid per pupil apportionment in Massachusetts is based on the net average membership, which includes only those children between the ages of 7 and 16 years who attend the public schools.

Statistical Evaluation of Equality in the Present Program.- The principal Foundation Formula in the Commonwealth of Massachusetts is based on a school population of all children between the ages of seven and sixteen. However, the equalized valuation per pupil and the state aid apportionment per pupil are based on the net average membership in the public schools.

Any city or town's position in the Commonwealth will be made more meaningful to the interpretation of the standard scores if the hypothetical desirable situation of an equalized distribution of state aid is described. In analyzing any community's position, it can be readily seen that the more financially able a municipality is to pay its

way, the less state aid it should receive, while the poorer the town, the more state aid it should receive. Using the terminology of statistics, a high plus scaled score of ability should be accompanied by a low state aid score -- a high minus score. If the municipality is of average ability, that is, if its mean is near the scaled score of 0.00, its state aid should also be near the state aid mean of 0.00.

In order to clarify the interpretation of standard scores, it will be profitable to look at an extreme example, as well as one that shows a highly satisfactory distribution of state aid.

The formula for changing net figures to comparable scores follows:

$$Z = \frac{X - M}{\sigma}$$

where Z equals the standard or comparable score; X equals the raw data involved; M equals the mean of the series of which X is a member, and σ (sigma) is the standard deviation of the series of which X is a member.

An examination of this formula reveals that the scaled score represents any figure's relationship to the mean of its series in terms of the series dispersion measure or standard deviation. Scaled scores are represented as plus or minus denoting whether the figure may be below or above its mean. A standard score of 1.00 above the mean

is directly comparable to any score of 1.00 below the mean. Moreover, a standard score of 3.00 above the mean is directly comparable to any score of 3.00 above the mean. The distance 1.00 from the mean is the same in either direction, plus or minus. Likewise, the distance plus or minus 3.00 from the mean is the same.

In order to investigate whether or not equality would occur in respect to comparisons of state aid, critical ratios were found for all classes. These are summarized in Tables XVIII and XIX which follow.

In not one case was there any equalization when each of the four classes was compared with the other. This shows that an entirely new method of distributing state aid must be evolved.

Similar comparisons in respect to Equalized Valuations were made and the results of these investigations form Tables XX and XXI.

When all the children between the ages of seven and sixteen years are included to obtain the proposed Equalized Valuations, equalization takes place between each and every group. This indicates that such a method possesses merit and should be investigated more thoroughly.

Table XVIII.- Statistics Used in Computing the "t" for Each of the Four Classes of Municipalities in Massachusetts in Respect to Proposed State Aid.

Classes	N	M	O	O_m
I	39	$32.37	$ 7.35	$1.18
II	96	39.58	13.85	1.42
III	94	66.30	24.00	2.49
IV	120	116.00	73.25	6.72

Table XIX.- Proposed State Aid Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio.

Classes	II	III	IV
I	3.91	12.34	12.26
II		9.34	11.14
III			6.94

Table XX.- Statistics Used in Computing the "t" for Each of the Four Classes of Municipalities in Massachusetts in Respect to Proposed Equalized Valuations

Classes	N	M	σ	σ_m
I	39	$11,654	$2,630	$421.13
II	96	10,554	4,230	433.99
III	94	11,059	6,782	703.26
IV	120	12,350	6,695	614.01

Table XXI.- Proposed Equalized Valuations Between Four Classes of Municipalities in Massachusetts Checked in Terms of the "t" Ratio

Classes	II	III	IV
I	1.81	.73	.934
II		1.18	2.17
III			1.38

Chapter V has shown how a Foundation Program set up for equalizational purposes in Massachusetts would appear in workable form.

A proposed State Aid Apportionment for Massachusetts has also been worked out showing the ineffectiveness of such a program as far as equalization is concerned in all four classes.

Another proposed program for Massachusetts has also been worked out showing the effectiveness in all four classes of municipalities of including all children between the seven and sixteen-year age limits to establish truly equalized valuations.

The need for further study in regard to acquiring better state aid apportionment among the four classes of municipalities can be readily seen.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

The Foundation Program of school support in Massachusetts is for the most part one of local and state partnership with a small contribution on the part of the federal government. In this Foundation Program, the state is the responsible partner and, although having the larger tax base assumes the smaller share of the total cost of the Partnership Program. In general, the local municipalities, having the smaller tax base, assume the larger share of the total cost of the Partnership Program. This means that Massachusetts has only a partly equalized state supported program of state aid. The greatest effort of the poorest towns to allocate a larger proportion of the tax rate is not sufficient to support educational facilities adequately without state aid assistance.

In establishing the school Foundation Formula in 1948, the State Legislature decided that it should be based upon the census of all children seven to sixteen years of age enrolled in both public and private schools.

This method of census apportionment -- namely of counting all the children in the 7 to 16-year age bracket attending both public and private schools has been of no direct financial assistance to private schools. It has only slightly lessened the cost of public schools for parents of children attending private schools by maintaining a higher equalized valuation per pupil. The only positive result of this study shows that cities such as Lawrence, Lowell, Fitchburg, and Holyoke, which have large numbers of pupils in attendance in parochial schools have more money to spend on their public schools than their economic status would seem to warrant.

The school census apportionment makes no provision for differences in school costs between elementary and high school students in Massachusetts.

This study indicates that the law has not been carried out effectively. Equalization of educational opportunity has not been achieved because the amount of $130 for each person between the ages of seven and sixteen is inadequate to carry out the requirements of a Foundation Program.

The Foundation Program seems to encourage the retention of small school districts. Of the 349 municipalities considered, approximately ten per cent have less than 100 pupils in average daily attendance. Many of these districts, although having high valuations per

pupil in average daily attendance are nevertheless receiving the highest amounts per pupil in state aid. This is one of the outstanding inequities in school support.

State transportation aid affects Total School Support in Class IV more than in any of the other classes due to the greater distances travelled by Class IV high school students travelling to various high schools. Distance is also an important factor for its elementary school pupils, entailing considerable bus travel.

State aid in towns under 5000 population which make use of the secondary part of the Foundation Formula and the additional twenty-five per cent state aid allotment gives considerably more revenue to Class III and Class IV towns than if the principal part of the Foundation Formula was used.

State aid is unequal when all classes are compared with the exception of a comparison of Class I with Class II, showing the need for a more equitable allotment of state aid.

Equalization of local taxation per pupil with state aid per pupil does not occur either when one class is correlated with another or when the whole 349 municipalities are used.

In 1951-1952 there were a number of communities in Massachusetts supporting their schools on a high level of

expenditure per pupil. However, only four of these, Brookline, Belmont, Concord, and Weston, met the requirements of the adaptability principle, namely they had populations with the characteristics required, plus a level of expenditure in excess of $300 per pupil.

Cities and towns must adjust the levies on their tax bases, consisting almost exclusively of real and personal property to the amount of state tax collections and the size of the state budget. The excessive earmarking of state taxes is bad and should be abolished.

A proposed state aid apportionment for Massachusetts shows the ineffectiveness of counting all the children seven to sixteen years of age in such a program in order to bring about equalization.

A Foundation Program set up according to the principles of Strayer and Haig would appear workable at least for the purposes of equalization in respect to a Partnership Program, as shown in Chapter Five.

The lack of equalization which occurs in equalized valuation between Class I and Classes II, III, IV, shows that municipalities vary in their ability to provide needed educational services. State aid is a necessary supplement for any community which suffers economically in order to provide each child an adequate minimum program of education.

When Class II was compared with Class III and Class IV, and when Class III was compared with Class IV another definite pattern emerged, namely that these Classes were in conformity with the principle of equalization.

Assessment practices, while lower in Class II, III, and IV, than in Class I, appear to assess property with a slightly greater degree of uniformity than in Class I cities.

These three latter conclusions attest that other means of support for education than real estate taxation will have to be found.

Class I cities consistently allocate more money to local support of education than the other three classes of municipalities due to their more numerous sources of revenue.

Local school support alone cannot provide equality of educational opportunity because the ability to finance schools varies widely from one municipality to another, making state aid an essential supplement to communities lacking this financial support.

When local school support was correlated with State Aid and when Total School Support was correlated with state aid for the 349 municipalities, no equalization took place other than trends in a positive direction.

Class I cities and Class IV towns have the highest Total School Support due to cities having the largest number of avenues of revenue in addition to state aid. Class IV towns receive about 2½ times as much state aid as do Class I cities, thus increasing Total School Support in this class a slightly larger amount over cities.

Equalization in Total School Support occurred in four out of six comparisons between the four classes of municipalities, proving that with slight adjustments in state aid procedures, equalization could be brought about readily in the two Classes showing inequalities.

Five of the six comparisons in state aid between municipalities showed no equalization, the exception being when Class I was compared with Class II. Here, equalization occurred justifying the hypothesis that the larger towns and cities have a larger total number of students from whom they receive state aid allotments than do the smaller towns. Also, Class I cities and Class II towns use the same principal state aid formula, thus aiding equalization.

Class III and Class IV showed a very high state aid per pupil revenue due to taking advantage of the secondary part of the Foundation Program -- along with having a high state aid transportation item with the extra allotment of state aid for towns under 5000 population.

State aid is not distributed equitably in the four classes of municipalities, as shown in the comparisons drawn between them. A revision in the present Foundation Program in the Commonwealth of Massachusetts is necessary.

RECOMMENDATIONS

The equalization of the burden of the costs of the schools to the various municipalities has fallen short of the goal desired. It is recommended that Massachusetts adopt the "Key District" formula as developed by Strayer and Haig and later modified by Mort, as described in Chapter Five. The Mort modification would make use of a predetermined rich district as the key district, determining the rate of contribution to bring effective justice in distributing the cost of the Foundation Program.

Instead of earmarking taxes, the state legislature could, with full authority and responsibility, divide each year what the total state expenditure requirements might be. Continuation of earmarking might leave a great portion of each source of revenue dedicated, thus giving the legislature inadequate control over the spending of state revenues.

The provisions of the school building assistance law as it concerns the health and safety of children might be extended to include the private schools of the state. Many dioceses are sorely in need of regional high schools, but cannot undertake their construction because of the costs involved. If the provisions of the law were amended so as to include diocesan boards of education, a building program could be undertaken that would eventually result

in a greatly improved educational program for the children attending those schools.

It is only by adopting such measures that the benefits of the Foundation Program can be extended to include all the children in all the schools of the state.

Regional school consolidation legislation in Massachusetts through the medium of state aid grants varying from 20 per cent to over 50 per cent may be the real Foundation Program or Partnership Program in which the state establishes itself as a substantial paying partner.

Rather than continue with census apportionment, the weighted pupil or its mathematical equivalent, the weighted classroom unit, might be a more appropriate measure of need to use being in practical use in other states for over a quarter of a century. It is recommended that this measure of need be applied to the public schools of the state and some other means be found to bring assistance to private and parochial school pupils in order that the equalization of educational opportunity be extended to all pupils and that the equalization of the burden of the costs of schools to the citizens be more justly distributed.

If the state of Massachusetts adopts the $200 expenditure limit for the Foundation Program and a predetermined rich large district as the key district be

chosen, many additional municipalities, particularly in metropolitan Boston might be classified as "Pilot School" communities -- schools capable of experimentation and tryout. Every effort should be made to increase the number and effectiveness of such adaptable schools. Newton, Wellesley, Milton, Winchester and probably Cambridge and Springfield could, with a slight modification in state aid, spend as high as $300 per pupil in average daily attendance in the public schools.

Again the adoption of the "key district" method might well eliminate many inadequately organized districts in Massachusetts. Their valuation per pupil being so high as to make them ineligible to receive aid from the Foundation Program. State Aid for such municipalities would have to come from transportation charges or allowances or from the adoption of a sparcity formula.

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This valuable reference is concerned with fundamental issues and problems in public school finance. Specifically, in this reference, the Foundation Program is shown as more than a device for apportioning state aid for schools.

JOHNS, R.L., Local Ability and Effort to Support Schools, appearing in Problems and Issues in Public School Finance, (see note above).
This study shows how initiative, and experimentation, are related to local school taxation. It implies that even the best school systems need to raise their Foundation Program standards.

KENTUCKY, State of, A Proposed Foundation Program for Education in Kentucky, State Advisory Committee on Educational Policy.
This is a functionary survey of a Foundation Program. In its suggested plan of a practical Foundation Program for the state, it makes some interesting suggestions in its intention to provide an adequate educational opportunity for all children regardless of race, residence, physical handicaps, etc.

MARTIN, George, The Evolution of the Massachusetts School System, D.Appleton, 1908.
The outstanding book in history of early education in Massachusetts. The laws of 1642 and 1687 are most completely discussed in the light of state and parental participation in education.

MILLER, Herbert F., A Plan to Reduce Inequalities in School Support, Education Research Bulletin, Vol.31, No.5, May 14, 1952.
Certain specific recommendations for the reduction of inequalities in school support.

MORPHET, E.L., Characteristics of State Support Programs in Problems and Issues in Public School Finance, Bureau of Publications, Teachers' College, Columbia University, New York, 1952.
A thorough discussion of state provisions for school support, including the Foundation Program. It shows the content of a completely state-supported program as well as statistics on the number of states participating in the Foundation Program idea.

MORPHET, E.L. and E. L. Lindman, Public School Finance Systems of the Forty-Eight States, Washington, D.C., Circular 274 of the Federal Security Agency, Office of Education, Superintendent of Documents, 1950. 110 pp.
In advancing the theory that the majority of states have made some progress in improving their school finances, it supplies a wealth of material pertinent to state and local support with excellent statistics.

MORT, Paul R., Cost-Quality in Education, in Problems and Issues in Public School Finance, National Conference of Professors of Educational Administration, Bureau of Publications, Teachers' College, Columbia University, New York, 1952,
This article throws much light on the cost-quality in public education. Imperfections in the adaptative process are brought out in detail. It concludes that a strong education needs a large expenditure.

--------, Educational Adaptability, Metropolitan School Study, Teachers' College, Columbia University, New York.
This study gives the outstanding research and findings on the question of educational adaptability, including the ways and means of attaining it in local communities.

--------, Effects of Price Increases on State Aid and Local Support for Schools, Report of the New York Educational Conference Board, Albany, N.Y., Dec.1952.
Lists the obstacles preventing adjustment of public school expenditures to the increased cost of a state's basic educational program.

--------, State Support for Education, Institute of Field Studies, Teachers' College, Columbia University, New York.
Contains the basic knowledge for evaluation of state supported programs of education. It concludes that the reward for effort and the stimulation principles are not valid criteria for measuring public school finance.

MORT, Paul R. and F. G. Cornell, Adaptability of Public School Systems, Teachers' College, Columbia University, 1948.
A valuable exposition of the manner in which adaptability can be attained in the average school system. It emphasizes functionally the importance of this factor in education through local support in both the U.S. and in foreign countries.

--------, American Schools in Transition, New York, Bureau of Publications, Teachers' College, Columbia University, 1941.
An excellent investigation of many aspects of the expenditure level of education in the forty-eight states. It advances the theory that the presence or absence of certain characteristics in the community environment of a school may definitely react to the establishment of educational improvement.

--------, The Foundation Program and the Measurement of Educational Need, in Problems and Issues in Public School Finance, National Conference of Professors of Educational Administration, Bureau of Publications, Teachers College, Columbia University, New York, 1952.
A detailed discussion of the Foundation Program, its cost, sources of revenue, apportionment of state school revenues, etc. The norms of adaptability used to measure this factor were first furnished in 1937 by an instrument produced by Mort and Cornell.

MORT, Paul R. and Walter C. Reusser, Public School Finance, New York, McGraw-Hill, 1951, p
A monumental work containing in text-book form the complete principles of school finance both in theory and in practice. It is easily the best presentation of Foundation Programs, Adaptability and Equalization to be found in the literature.

NATIONAL EDUCATION ASSOCIATION, Federal State Relations in Education, Educational Policies Commission, Washington, D.C., 1945.
A valuable study of the limitations of federal participation in state school support throughout the United States

--------, Guides to the Development of State School Finance Programs, Committee on Tax Education and School Finance, Washington, D.C.
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--------, Statutory Bases of State Foundation Programs for Schools, Research Bulletin, Washington, Vol.26, No.2, April 1948.
Concerned with the legal aspects of Foundation Programs generally, it gives concrete suggestions for the establishment of a program, and shows how perfect equalization can be attained in theory.

NATIONAL EDUCATION ASSOCIATION, Your School District, National Commission on School District Reorganization, Washington, D.C., 1948, 286 pp.
A comprehensive Commission study of school district reorganization. It discusses the direct relationship between unit school costs and the cost of education.

NEW YORK, State of, What Education Our Money Buys, New York State Educational Conference Board, Albany, 1943.
A valuable survey giving the type and kind of education purchased at various expenditure levels. It concludes that the largest number of approved educational practices have come from the school systems with the largest expenditure.

NORTON, John K. and Edmund Reutter, Jr., Federal Participation in the Financing of Education, Teachers' College, Columbia University, 1952.
Another publication dealing with the federal level of financing education. It shows how state and federal governments can aid in raising the levels of educational attainment on the state level.

OHIO School Survey Commission, Equalizing Educational Opportunity in Ohio, Columbus, Ohio, Report of a Survey of State and Local Support of Public Schools, 1932.
This publication gives the first indication of the existence of the adaptability principle in the state of Ohio.

PIERCE, Truman M., Controllable Community Characteristics in the Quality of Education, New York, Bureau of Publications, Teachers College, Columbia University, 1947.
A study of the relationships between community characteristics and the quality of education, pointing out that generally, simple facts about the community show the quality of a school better than the expenditure level.

REEDER, W.G. The Fundamentals of Public School Administration, New York, Macmillan, 1945, 756 pp.
Provides an excellent resume of state school support. It holds that educational opportunities are dependent on a number of outside factors for improvement, viz. the lowering of personal and real estate taxation to include more people in its scope.

State Fiscal Aids to Cities and Towns for Public Elementary and Secondary Schools in Massachusetts, Boston, Massachusetts Federation of Taxpayers' Associations, Inc., March 1945, 31 pp.
A history of state aid programs up to 1945, recalling that Massachusetts has only helped with state aid to schools since 191 9.

STRAYER, George B. and Robert M. Haig, The Financing of Education in the State of New York, Report of the Finance Inquiry Commission of New York, 1924.
A monumental work which first established, with the help of Dr. Mort, the Foundation Program in New York. Over the years, the most popular and successful of any technique for providing school finance.

STRAYER, George B., A Report of a Survey of Public Education in the State of West Virginia, Charleston, W.Va. Legislative Interim Committee, 1945.
The West Virginia study represents the middle part of the expenditure range of state school support in the United States. It accents the part played by expenditure in the attainment of the necessary adaptability.

U.S.DEPARTMENT OF EDUCATION, Report of the United States Commissioner of Education, 1914, Vol.1. Washington, D.C., Government Printing Office, 1915.
Although an old reference, this report contains many excellent suggestions pertaining to education. The quotation on equality of education was the most comprehensive and succint in all the readings studied.

WOOLATT, Lorne, The Cost-Quality Relationship on the Growing Edge, New York, Bureau of Publications, Teachers' College, Columbia University, 1948.
A valuable study showing what education is attainable by school systems possessing large funds for expenditure. It points out that the schools having the highest expenditure are willing to pay more year after year for a better kind of education.

White House Conference on Children in a Democracy, General Report by the Conference, Washington, Superintendent of Documents, Jan.1940.
An exhaustive survey of children's needs by a most searching committee. It holds that equality of education is not being attained on a nationwide scale.

APPENDIX 1

COMMONWEALTH OF MASSACHUSETTS
CHAPTER 70, GENERAL LAWS

SCHOOL FUNDS AND STATE AID FOR PUBLIC SCHOOLS

APPENDIX 1

COMMONWEALTH OF MASSACHUSETTS

CHAPTER 70, GENERAL LAWS

SCHOOL FUNDS AND STATE AID FOR PUBLIC SCHOOLS

Section 1. To promote the equalization of educational opportunity in public schools of the commonwealth and the equalization of the burden of the cost of schools to the respective towns, the state treasurer shall pay annually to the several towns sums as provided in this chapter, which sums shall be known as school aid.

Section 2. The present school fund of the commonwealth, known as the Massachusetts School Fund, with future additions, shall continue to constitute a permanent fund. The commissioner of education, hereinafter referred to as the commissioner, and the state treasurer shall continue to be commissioners to invest and manage said fund, and they shall report annually the condition and income thereof. All investments shall be made with the approval of the governor and council. The annual income of the Massachusetts School Fund shall be expended in accordance with the provisions of section three.

Section 3. The state treasurer shall annually, on or before November twentieth, pay to the several towns the amounts required under this chapter. The revenue of the Massachusetts School Fund, any federal funds available for the purposes of this chapter, and such additional amounts as may be necessary from the proceeds of the taxation on incomes under chapter sixty-two, or if such proceeds are insufficient, from such other revenues as may be appropriated therefor, shall be applied to such payments. The amount of such grant for each town shall be determined annually by the commissioner from the returns required by this chapter and by chapter seventy-two for the preceding school year, and shall be fifty per cent of the amount by which the foundation program, as defined in section four, exceeds the product of each one thousand dollars of the equalized valuation of such town multiplied by six.

Section 3A. In addition to the payments provided by section three, the state treasurer shall annually on or before November twentieth pay to any city or town certified by the commissioner to have paid teachers of classes conducted to meet the requirements of section forty-six of chapter seventy-one compensation in excess of the regular compensation paid to its teachers, out of the proceeds of the taxation on incomes under chapter sixty-two or if such proceeds are insufficient from other revenues as may be appropriated therefor, a sum not to exceed five hundred dollars for each such teacher so paid.

Section 3B. The state treasurer in making annual payments to the several towns of the amounts required under this chapter shall pay to each town comprising a regional school district an additional amount equal to fifteen per cent of the amount to which such town would be entitled if such regional school district had not been formed. No payment shall be made under this section to any such town prior to the date of award of a contract for the construction of a regional school by the regional district school committee.

Section 4. The foundation program shall be an amount of one hundred and thirty dollars for each person between the ages of seven and sixteen in the several towns as determined in the registration of minors required by section two of chapter seventy-two, which amount shall be increased or decreased on one dollar for each one hundred million dollars, or major fraction thereof, of increase or decrease respectively in the total equalized valuation of the commonwealth, after the effective date of this chapter; provided, that in any town of less than five thousand population, the foundation program may, on approval of the commissioner, be the product of one hundred and twenty-five dollars multiplied by the number of equivalent full-time teachers, principals, supervisors and guidance directors in the public day schools of such town multiplied by twenty-three.

Section 5. For the purposes of section eight, the net average membership in the public day schools of a town for any school year shall be the average membership for such year as shown by the school registers, increased by the number of pupils resident therein whose tuition in the public schools of another town, for not less than half such year, the town has paid, decreased by the number of non-resident pupils attending its schools for not less than half such year.

Section 6. No allotment to a town under this chapter shall be less than the amount of the reimbursement to such town in the year nineteen hundred and forty-eight under the provisions of this chapter and of sections five, eight, ten and thirty-eight A of chapter seventy-one which were then in force; provided, that in any town having a valuation of two million dollars or under, the amount of school aid under this chapter shall not be less than the amount of the aforesaid reimbursement to such town in the year nineteen hundred and forty-eight together with an additional sum equal to twenty-five per cent thereof.

Section 7. The equalized valuation of a town for the purposes of this chapter shall be the valuation established by the general court for the purpose of this chapter, or, if no such valuation is made, the last preceding valuation made for the purpose of apportioning the state tax.

Section 8. A town shall not be eligible to receive said school aid in any year if the amount expended for school support, exclusive of cost of transportation and of noon lunches and cafeterias, during the preceding year was less than one hundred and ten dollars per pupil in net average membership in the public day schools in such town, unless the commissioner recommends otherwise.

Section 9. Every superintendent of schools shall file annually with the commissioner, not later than July thirty-first, a sworn statement, upon blanks prepared by the commissioner, containing the data necessary to determine the amounts payable under this chapter. The commissioner shall cause such statements to be examined and shall, not later than November first, certify to the comptroller the amount due each town for payment by the state treasurer in accordance with section three.

Section 10. School committees shall annually, in submitting estimates of the amount of money necessary for the proper maintenance of the schools, include their estimate of the amount of school aid the town will receive under this chapter, and of other reimbursements to be received from the commonwealth on account of the support of schools. In making recommendations for appropriations for the support of schools, the finance committee of towns and similar committees in cities shall specify the estimated amount to be received as such school aid or reimbursements from the commonwealth and the amount to be raised by local taxation. All amounts paid to any town

under this chapter shall at the time of payment be accompanied by a written statement from the state treasurer designating such payments as "School aid according to chapter seventy of the General Laws" and state the amount of the payment.

Section 11. The income of the Todd Fund shall be paid to the department of education, and applied by it to specific objects, in connection with the teachers' colleges, not provided by appropriation.

(Chapter 70 was wholly revised by Chapter 648, Acts of 1948, and has been amended several times since then, all of which revisions are included above.)

APPENDIX 2

COMMONWEALTH OF MASSACHUSETTS

AN ACT ESTABLISHING THE BASIS OF APPORTIONMENT OF STATE AND COUNTY TAXES

CHAPTER 559

APPENDIX 2

COMMONWEALTH OF MASSACHUSETTS

An Act Establishing the Basis of Apportionment of State and County Taxes

CHAPTER 559

Be it enacted, etc., as follows:

The amount of property and the proportion of every thousand dollars of state tax for each city and town in the several counties of the commonwealth, as contained in the following schedule, are hereby established, and shall constitute a basis of apportionment for state and county taxes for the years nineteen hundred and forty-six to nineteen hundred and fifty, inclusive, or until another is made and enacted by the general court, to wit:-

Index of Towns	Cities & Towns	Registration of minors 7 - 16 years Column 135	1945 Apportionment of Property	Proposed House 2172
		BARNSTABLE COUNTY		
84	Barnstable	1528	$28,978,980	$77,489,880
142	Bourne	675	10,944,806	41,046,238
291	Brewster	129	2,357,135	10,202,258
197	Chatham	323	7,944,594	32,684,109
252	Dennis	300	4,922,252	30,422,363
299	Eastham	103	1,594,532	10,136,822
97	Falmouth	1394	24,765,020	72,130,461
189	Harwich	421	8,612,531	26,737,648
322	Mashpee	80	1,044,419	3,589,666
210	Orleans	240	4,997,518	14,428,312
155	Provincetown	464	7,343,047	15,647,481
198	Sandwich	156	3,189,064	11,773,835
307	Truro	93	1,802,515	7,154,668
172	Yarmouth	504	7,163,768	30,618,862

Index of Towns	Cities & Towns	Registration of minors 7 - 16 years Column 135	1945 Apportionment of property	Proposed House 2172
		BERKSHIRE COUNTY		
73	Adams	1625	$13,013,716	$20,776,587
341	Alford	37	367,936	1,029,744
302	Becket	128	987,076	2,412,038
262	Cheshire	307	1,418,354	3,154,667
271	Clarksburg	206	996,763	1,958,573
140	Dalton	693	7,895,650	18,377,185
305	Egremont	91	1,109,240	3,595,180
315	Florida	110	1,582,506	2,136,822
121	Great Barrington	830	9,871,900	24,308,140
320	Hancock	78	538,698	1,347,590
274	Hinsdale	249	1,047,374	4,091,767
258	Lanesborough	335	1,607,506	6,136,822
139	Lee	730	5,734,825	10,799,427
159	Lenox	430	4,999,940	10,442,629
327	Monterey	33	970,585	2,083,283
351	Mt.Washington	2	207,982	517,846
347	New Ashford	14	138,655	611,898
225	New Marlborough	134	1,605,345	4,150,510
34	North Adams	2721	24,144,671	54,101,477
328	Otis	63	765,104	2,565,895
346	Peru	35	317,936	1,029,744
17	Pittsfield	6904	69,889,174	158,285,475
304	Richmond	118	834,047	2,571,385
323	Sandisfield	60	762,602	2,565,437
335	Savoy	58	260,762	1,023,795
206	Sheffield	264	1,871,842	6,175,850
303	Stockbridge	262	5,088,589	11,448,159
338	Tyringham	49	531,662	1,549,698
396	Washington	52	235,762	717,846
286	W. Stockbridge	163	1,579,183	3,205,562
124	Williamstown	741	7,955,430	22,212,061
326	Windsor	60	528,698	1,547,590

Index of Towns	Cities and Towns	Registration of Minors 7 - 16 years	1945 Apportionment of property	Proposed House 2172
		BRISTOL COUNTY		
236	Acushnet	139	$ 3,751,180	$12,433,199
32	Attleboro	3195	33,208,469	60,500,962
283	Berkley	212	1,062,998	4,595,766
77	Dartmouth	1608	14,210,270	43,219,498
181	Dighton	1486	3,813,012	14,709,361
299	Easton	103	5,942,996	15,612,325
69	Fairhaven	1927	12,445,006	31,275,941
5	Fall River	15359	123,706,694	193,618,698
258	Freetown	344	1,733,187	10,150,418
113	Mansfield	1047	9,235,948	20,351,199
6	New Bedford	12512	127,244,377	211,103,444
72	N.Attleborough	1709	12,071,962	34,381,126
147	Norton	726	2,703,722	10,321,412
254	Raynham	444	2,149,152	7,190,090
240	Rehoboth	649	3,203,043	7,798,134
231	Seekonk	984	6,746,576	15,588,799
100	Somerset	1362	15,818,775	39,385,008
126	Swansea	1119	4,991,579	17,535,563
24	Taunton	4615	40,436,468	66,851,705
136	Westport	856	6,564,528	18,592,217
		DUKES COUNTY		
343	Chilmark	21	843,047	4,071,385
217	Edgartown	218	5,378,180	22,470,502
349	Gay Head	9	210,762	1,017,846
350	Gosnold	6	1,371,744	4,618,975
216	Oak Bluffs	257	5,270,307	17,953,006
209	Tisbury	308	6,325,956	22,543,546
329	West Tisbury	45	831,930	3,371,385
		ESSEX COUNTY		
80				
80	Amesbury	1390	9,990,650	21,221,771
70	Andover	1686	20,955,953	38,133,109
28	Beverly	3815	42,971,059	74,480,818
295	Boxford	139	1,317,222	7,113,027
61	Danvers	1806	15,472,011	36,451,467

Index of Towns	Cities & Towns	Registration of Minors 7-16 years	1945 Apportionment of Property	Proposed House 2172
265	Essex	270	$ 1,802,615	$ 5,154,668
199	Georgetown	350	1,140,152	3,184,562
30	Gloucester	3522	39,620,271	69,771,122
202	Groveland	367	1,714,765	4,148,779
196	Hamilton	378	6,215,676	10,635,390
19	Haverhill	5653	56,080,188	105,690,843
120	Ipswich	691	3,149,158	13,781,449
12	Lawrence	9644	103,336,930	197,830,037
8	Lynn	11436	151,194,710	277,521,863
239	Lynnfield	325	5,509,086	20,602,863
182	Manchester	375	10,560,807	19,907,617
65	Marblehead	1955	25,286,228	57,178,253
185	Merrimac	1403	2,173,238	5,335,969
46	Methuen	3149	22,711,939	47,672,034
243	Middleton	369	2,433,023	5,784,621
249	Nahant	371	5,722,850	10,193,748
263	Newbury	255	2,365,117	6,735,690
39	Newburyport	1774	13,489,930	44,498,611
101	North Andover	1084	9,386,690	24,442,176
33	Peabody	2913	28,494,861	56,344,449
149	Rockport	513	6,476,555	18,881,219
266	Rowley	306	1,902,515	5,154,668
23	Salem	4934	63,120,514	108,157,350
248	Salisbury	476	3,395,562	8,323,335
58	Saugus	2586	17,446,731	31,559,690
74	Swampscott	1320	26,905,763	52,333,325
219	Topsfield	239	3,189,064	12,374,192
270	Wenham	264	4,475,995	13,386,670
273	West Newbury	305	1,502,806	4,636,822
	FRANKLIN COUNTY			
226	Ashfield	139	1,595,905	3,637,050
224	Bernardston	105	1,103,808	3,595,180
272	Buckland	220	3,196,995	7,293,833
227	Charlemont	117	1,006,563	2,591,191
275	Colrain	229	1,754,249	3,263,182
296	Conway	128	1,060,563	2,091,457
179	Deerfield	380	4,644,942	15,415,080
280	Erving	192	2,512,889	4,553,013
288	Gill	149	1,086,099	3,097,814
56	Greenfield	2319	33,341,806	66,299,602

Index of Towns	Cities and Towns	Registration of Minors 7-16 years	1945 Apportionment of Property	Proposed House 2172
337	Hawley	30	$ 274,349	$ 723,795
333	Heath	66	471,523	1,041,641
301	Leverett	116	541,100	1,356,408
332	Leyden	44	342,936	1,029,744
344	Monroe	25	1,109,240	1,801,545
107	Montague	1035	11,368,189	25,743,426
229	New Salem	57	367,936	1,129,744
204	Northfield	297	2,119,591	7,690,376
130	Orange	895	4,991,579	17,677,408
342	Rowe	19	762,602	1,574,766
211	Shelburne	222	3,716,047	7,337,116
340	Shutesbury	33	421,523	1,235,693
296	Sunderland	122	1,571,744	4,136,822
324	Warwick	85	421,523	2,035,693
330	Wendell	81	363,673	737,378
294	Whately	147	1,455,877	4,124,924
		HAMPDEN COUNTY		
86	Agawam	1535	10,672,450	34,033,998
310	Blandford	87	950,221	3,083,283
222	Brimfield	207	1,178,567	3,105,025
220	Chester	186	1,471,145	3,690,500
18	Chicopee	5987	46,976,058	107,301,668
234	E. Longmeadow	768	6,776,216	22,082,980
303	Granville	98	2,224,766	7,200,004
281	Hampden	269	1,057,396	3,589,232
325	Holland	67	277,310	1,723,795
16	Holyoke	6203	90,616,710	163,749,879
230	Longmeadow	1007	19,996,004	78,714,912
98	Ludlow	1201	9,066,188	17,302,064
125	Monson	632	3,882,339	10,524,159
345	Montgomery	20	317,936	1,029,744
90	Palmer	1975	8,439,266	21,841,021
282	Russell	191	4,474,928	8,761,943
244	Southwick	538	2,565,117	9,225,283
3	Springfield	18481	286,363,486	629,192,108
348	Tolland	13	475,110	1,041,641
313	Wales	96	419,594	2,244,986

Index of Towns	Cities and Towns	Registration of minors 7-16 years	1945 Apportionment of property	Proposed House 2172
50	West Springfield	2670	$31,054,868	$88,770,988
35	Westfield	2802	23,678,418	68,063,846
238	Wilbraham	520	3,674,357	13,486,787
		HAMPSHIRE COUNTY		
179	Amherst	975	11,633,775	34,034,275
144	Belchertown	484	1,955,792	5,711,022
314	Chesterfield	81	683,203	2,060,140
309	Cummington	86	623,947	1,853,539
81	Easthampton	1282	12,609,011	22,486,297
331	Goshen	59	446,523	1,335,693
264	Granby	263	1,109,240	7,095,180
190	Hadley	353	3,266,435	7,280,604
205	Hatfield	259	3,268,335	8,281,955
221	Huntington	189	1,180,256	3,114,833
334	Middlefield	40	367,936	1,029,744
27	Northampton	2651	30,592,298	88,321,378
311	Pelham	94	740,046	1,865,854
339	Plainfield	26	367,936	1,029,744
88	South Hadley	1232	10,540,021	31,268,756
277	Southampton	239	1,274,619	3,611,601
109	Ware	908	7, 463,536	15,265,410
319	Westhampton	72	415,965	1,535,693
208	Williamsburg	329	1,605,991	6,153,520
317	Worthington	68	843,047	2,071,385
		MIDDLESEX COUNTY		
161	Acton	513	4,470,756	12,553,050
41	Arlington	5516	63,327,779	118,471,212
218	Ashby	206	1,386,550	4,119,189
162	Ashland	489	3,258,392	12,371,097
133	Ayer	476	4,243,855	14,377,698
233	Bedford	411	3,171,805	12,278,473
45	Belmont	3169	57,954,895	108,974,030
78	Billerica	2039	9,859,433	26,085,967
321	Boxborough	77	415,965	1,335,693
174	Burlington	659	2,639,902	8,226,053
4	Cambridge	12108	188,516,872	421,806,838
297	Carlyle	106	1,268,157	3,607,078
92	Chelmsford	1298	8,916,746	21,100,395
99	Concord	1070	13,803,606	36,252,720
96	Dracut	1478	4,991,579	15,711,549

Index of Towns	Cities & Towns	Registration of Minors 7-16 years	1945 Apportionment of Property	Proposed House 2172
312	Dunstable	94	$ 485,282	$ 2,541,641
21	Everett	5832	88,165,414	108,319,586
44	Framingham	3338	40,078,973	89,534,390
182	Groton	493	4,991,579	11,713,788
156	Holliston	549	4,226,969	11,368,669
163	Hopkinton	554	3,727,396	11,342,635
105	Hudson	1045	8,143,059	17,283,984
57	Lexington	2368	26,354,606	67,264,665
253	Lincoln	386	4,847,518	14,416,414
200	Littleton	325	3,267,821	9,347,591
9	Lowell	12985	108,160,927	214,752,493
15	Malden	7798	77,119,332	132,301,409
38	Marlborough	2150	17,268,288	41,730,074
119	Maynard	871	7,905,617	12,732,133
13	Medford	8389	86,696,291	157,828,473
29	Melrose	3580	43,827,859	83,805,358
51	Natick	2851	22,482,880	72,145,169
11	Newton	10920	184,961,300	326,102,397
235	North Reading	786	3,050,409	10,262,218
167	Peperell	472	3,327,719	9,450,425
64	Reading	2136	19,856,099	46,938,648
284	Sherborn	191	3,466,374	9,297,439
237	Shirley	400	2,556,218	6,518,668
7	Somerville	13184	122,784,622	191,670,546
67	Stoneham	1902	16,420,347	41,452,104
213	Stowe	219	1,525,205	5,168,413
192	Sudbury	449	4,203,275	14,364,575
110	Tewsbury	869	4,991,579	15,428,312
184	Townsend	428	2,703,772	8,344,644
261	Tyngsborough	290	1,582,506	5,136,822
52	Wakefield	2714	24,960,810	47,292,621
20	Waltham	6151	62,078,958	103,577,662
42	Watertown	4665	59,318,707	106,345,259
146	Wayland	823	6,332,763	18,543,285
148	Westford	693	4,809,930	8,802,704
135	Weston	768	12,634,820	31,087,693
115	Wilmington	1445	6,651,106	18,398,568
62	Winchester	2758	37,874,919	78,358,776
36	Woburn	2808	23,747,647	57,933,812

Index of Towns	Cities and Towns	Registration of minors 7-16 years	1945 Apportionment of property	Proposed House 2172
		NORFOLK COUNTY		
188	Avon	361	$ 2,118,339	$ 10,189,485
150	Bellingham	753	3,050,409	12,348,575
47	Braintree	3420	31,968,400	73,370,112
40	Brookline	5507	164,949,098	299,188,683
111	Canton	1126	10,101,349	25,462,079
158	Cohasset	564	11,063,194	31,951,803
54	Dedham	2687	29,105,423	74,584,030
212	Dover	291	6,325,116	24,545,500
116	Foxboro.	872	7,539,747	20,784,781
106	Franklin	1145	9,668,968	22,305,828
152	Holbrook	664	3,792,488	10,392,315
143	Medfield	382	3,304,925	10,311,370
157	Medway	520	3,674,357	10,380,656
195	Millis	413	3,466,374	9,608,957
48	Milton	2822	44,725,777	75,970,007
60	Needham	2420	30,261,434	64,788,435
247	Norfolk	301	1,687,042	6,211,997
59	Norwood	2263	30,838,574	64,622,531
339	Plainville	26	1,941,170	6,236,099
10	Quincy	10801	145,077,833	221,438,650
89	Randolph	1801	8,432,118	25,744,228
138	Sharon	807	6,648,006	21,573,665
76	Stoughton	1785	10,505,378	29,175,572
93	Walpole	1399	19,489,960	38,155,018
49	Wellesley	2667	49,542,385	94,301,154
132	Westwood	892	8,630,467	25,737,648
42	Weymouth	4922	57,187,043	105,097,613
134	Wrentham	520	4,622,368	11,464,541
		PLYMOUTH COUNTY		
114	Abbington	1074	6,429,134	16,636,459
91	Bridgewater	962	7,349,734	23,791,733
14	Brockton	7799	78,054,984	108,103,529
276	Carver	300	3,119,737	9,268,537
174	Duxbury	487	8,430,467	25,725,750
145	E.Bridgewater	726	5,568,815	18,681,397
293	Halifax	201	1,663,860	6,142,771
171	Hanover	493	5,358,206	11,597,658
242	Hanson	563	3,050,409	11,306,490
82	Hingham	1689	18,999,428	49,659,570

Index of Towns	Cities and Towns	Registration of minors 7-16 years	1945 Apportionment of Property	Proposed House 2172
241	Hull	671	17,900,393	34,534,783
166	Kingston	467	5,121,176	14,479,829
260	Lakeville	292	1,793,268	7,154,668
256	Marion	383	5,797,739	18,499,697
173	Marshfield	843	8,955,577	28,767,392
255	Mattapoisett	377	4,115,233	13,350,978
87	Middleborough	1486	10,206,055	23,993,902
196	Norwell	442	2,639,902	10,226,053
193	Pembroke	403	3,466,374	9,397,636
66	Plymouth	1775	25,422,539	52,954,312
306	Plympton	135	893,047	5,577,334
279	Rochester	237	1,686,093	5,642,771
94	Rockland	1239	10,285,241	23,071,458
128	Scituate	937	14,731,793	35,267,088
108	Wareham	1323	16,371,443	33,447,091
151	W. Bridgewater	642	4,004,472	13,345,029
102	Whitman	1190	9,125,439	21,032,916
		SUFFOLK COUNTY		
1	Boston	94139	1,437,779,078	4,139,027,562
25	Chelsea	4963	46,441,609	95,348,151
26	Revere	5046	42,040,213	83,700,284
53	Winthrop	2438	26,644,419	47,291,262
		NANTUCKET COUNTY		
164	Nantucket	408	14,507,782	38,246,625
		WORCESTER COUNTY		
281	Ashburnham	398	1,983,466	4,257,437
75	Athol	1544	14,785,913	32,697,016
95	Auburn	1418	8,186,929	25,828,508
169	Barre	528	3,478,189	11,659,771
278	Berlin	202	1,369,021	4,119,590
137	Blackstone	657	2,773,100	6,787,951
292	Bolton	168	1,247,895	3,607,078
267	Boylston	260	1,078,808	3,595,180
215	Brookfield	245	1,538,216	5,241,587
176	Charlton	531	2,297,156	5,320,875
71	Clinton	1547	12,420,644	28,605,633
191	Douglas	397	2,560,496	6,019,159
232	Dudley	745	4,093,701	8,257,453
285	E. Brookfield	183	1,178,567	3,112,269
22	Fitchburg	5338	55,481,773	136,918,168

Index of Towns	Cities and Towns	Registration of Minors 7-16 years	1945 Apportionment of property	Proposed House 2172
37	Gardner	2293	24,570,073	63,012,486
104	Grafton	902	4,991,579	21,797,461
201	Hardwick	344	1,897,123	4,787,788
153	Harvard	191	2,639,902	10,226,053
129	Holden	883	4,382,143	18,490,899
165	Hopedale	446	7,531,331	13,167,694
287	Hubbardston	160	896,634	2,377,334
160	Lancaster	506	2,739,902	9,237,951
127	Leicester	975	3,972,932	13,392,858
31	Leominster	3393	27,876,040	73,741,010
154	Lunenburg	641	2,703,772	13,232,002
214	Mendon	292	1,632,181	5,657,765
63	Milford	1958	17,208,868	41,689,529
103	Millbury	1237	6,958,795	19,298,305
268	Millville	197	1,056,221	2,591,952
316	New Braintree	72	693,275	2,059,488
168	N. Brookfield	525	2,936,362	7,308,232
177	Northborough	529	2,429,536	10,208,488
85	Northbridge	1438	11,544,631	23,080,171
318	Oakham	64	525,110	1,547,590
131	Oxford	925	3,777,676	13,531,641
289	Paxton	140	1,285,983	6,113,027
288	Petersham	144	1,594,532	5,137,653
308	Phillipston	136	415,965	1,535,693
290	Princeton	171	1,386,550	4,618,975
300	Royalston	179	843,047	3,071,385
180	Rutland	290	1,663,860	6,142,771
83	Shrewsbury	1498	11,137,803	36,000,599
187	Southborough	1410	3,813,012	8,359,698
55	Southbridge	2296	16,988,677	38,233,799
117	Spencer	963	4,991,579	17,564,092
254	Sterling	305	2,439,789	10,220,880
245	Sturbridge	472	2,593,217	10,275,868
178	Sutton	509	2,315,889	6,263,092
141	Templeton	682	3,546,386	9,559,251
250	Upton	350	1,666,378	8,197,304
118	Uxbridge	947	8,693,293	18,191,929
170	Warren	484	3,327,719	11,415,935
68	Webster	1820	12,576,893	35,726,079
194	West Boylston	437	3,050,409	11,262,241

Index of Towns	Cities and Towns	Registration of Minors 7-16 years	1945 Apportionment of Property	Proposed House 2172
269	West Brookfield	277	$ 1,602,158	$ 6,148,244
112	Westborough	747	4,991,579	20,546,879
246	Westminster	381	2,111,204	9,178,463
122	Winchendon	1059	6,123,632	17,955,766
2	Worcester	23797	321,362,930	840,853,666

APPENDIX 3

EXPERIMENTAL STATE AID
AND
PROPOSED EQUALIZED VALUATION

Experimental State Aid

Group I - Cities

City	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Member-ship	Old State Aid	State Scaled Scores
Boston	1	1,848,870.12	94,139	19.63	-1.27	87,692	21.08	-1.22
Worcester	2	577,096.52	23,797	24.25	- .61	25,072	23.02	-1.04
Springfield	3	332,067.36	18,481	17.96	-1.44	18,962	17.51	-1.54
Cambridge	4	231,350.51	12,108	19.10	-1.32	10,121	22.86	-1.06
Fall River	5	563,541.05	15,359	36.69	+ .43	11,566	48.72	+1.29
New Bedford	6	424,508.21	12,512	33.92	+ .16	11,694	36.30	+ .16
Somerville	7	488,175.84	13,184	37.02	+ .47	11,986	40.73	+ .56
Lynn	8	288,931.49	11,435	25.26	- .71	10,817	26.71	- .71
Lowell	9	518,660.93	12,985	39.94	+ .66	8,170	63.48	+3.61
Quincy	10	236,287.86	10,801	21.87	-1.05	11,963	19.75	-1.34
Newton	11	150,053.02	10,920	13.74	-1.86	12,246	12.25	-2.02
Lawrence	12	343,610.17	9,644	35.62	+ .33	6,867	50.04	+1.40
Medford	13	285,531.13	8,389	34.03	+ .17	8,902	32.07	- .22
Brockton	14	245,997.42	7,799	31.54	- .83	8,669	28.38	- .56
Malden	15	281,997.00	7,998	35.25	+ .29	7,136	39.52	+ .45
Holyoke	16	130,214.51	6,203	20.99	-1.38	4,855	26.82	- .70
Pittsfield	17	238,087.34	6,904	34.48	+ .21	7,755	30.70	- .35
Chicopee	18	228,650.41	5,987	38.19	+ .58	5,389	42.43	+ .72
Haverhill	19	199,185.18	5,653	35.23	+ .29	4,863	40.96	+ .58
Waltham	20	226,248.25	6,151	36.78	+ .44	5,881	38.47	+ .37
Everett	21	114,063.76	5,832	19.55	-1.28	6,617	17.24	-1.56
Fitchburg	22	167,395.15	5,338	31.35	- .10	3,764	44.47	+ .90
Salem	23	137,936.30	4,934	27.95	- .44	3,625	38.05	+ .32
Taunton	24	198,135.59	4,615	42.93	+1.06	4,733	41.86	+ .66
Chelsea	25	200,318.26	4,963	40.36	+ .80	5,043	39.72	+ .47
Revere	26	194,719.36	5,046	38.58	+ .62	5,507	35.36	+ .08
Northampton	27	79,711.35	2,651	30.06	- .23	2,798	28.49	- .55
Beverly	28	100,146.82	3,815	26.25	- .61	4,002	25.02	- .86
Melrose	29	94,219.22	3,580	26.31	- .61	4,107	22.94	-1.05
Gloucester	30	105,698.19	3,522	30.01	- .24	3,792	27.87	- .60
Leominster	31	122,059.38	3,393	35.97	+ .36	2,573	47.44	+1.16
Attleboro	32	111,120.97	3,195	34.77	+ .24	3,450	32.21	- .22
Peabody	33	94,089.46	2,913	32.29	- .10	2,954	31.85	- .24
North Adams	34	114,885.87	2,721	42.22	+ .99	2,798	41.06	+ .59
Westfield	35	130,719.94	2,802	46.65	+1.42	2,950	44.31	+ .89
Woburn	36	113,003.74	2,808	40.24	+ .79	2,709	41.71	+ .65
Gardner	37	74,229.78	2,293	32.37	0.00	1,881	39.46	+ .45
Marlborough	38	86,670.85	2,150	40.31	+ .79	1,868	45.91	+1.03
Newburyport	39	73,665.21	1,774	41.52	+ .92	1,811	40.68	+ .55

*Commonwealth of Massachusetts, Annual Report of the Department of Education, Public Document No.2, Boston, 1952, 219 pp.

Experimental State Aid

Group II - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Member-ship	Old State Aid	State Scaled Scores
Brookline	40	59,606.05	5,507	10.82	-2.08	6,425	9.28	-1.95
Arlington	41	171,067.72	5,516	25.75	-1.00	5,777	29.61	- .53
Watertown	42	120,161.64	4,665	25.75	-1.00	4,867	24.69	- .88
Weymouth	43	125,076.01	4,922	25.41	-1.02	5,971	20.95	-1.14
Framingham	44	81,629.85	3,338	24.45	-1.09	3,600	22.67	-1.02
Belmont	45	37,346.36	3,169	11.78	-2.00	3,282	11.38	-1.78
Nathan	46	120,694.21	3,149	38.32	- .09	2,910	41.48	+ .36
Braintree	47	108,630.43	3,420	31.76	- .60	4,573	23.75	- .94
Melton	48	48,288.13	2,822	17.09	-1.62	3,080	8.50	-1.50
Wellesley	49	27,997.94	2,667	10.49	-2.03	3,292	8.50	-2.01
West Springfield	50	76,901.77	2,670	28.80	- .78	2,934	26.21	- .77
Natick	51	98,829.23	2,851	34.66	- .35	3,816	25.90	- .85
Wakefield	52	96,321.73	2,714	36.22	- .24	2,957	33.25	-. 28
Winthrop	53	73,856.75	2,438	30.29	- .67	2,951	25.03	- .85
Dedham	54	83,985.73	2,6877	31.20	- .61	2,853	29.43	- .54
Southbridge	55	84,117.39	2,296	36.63	- .22	1,612	52.18	+1.05
Greenfield	56	44,279.57	2,319	19.09	-1.48	2,485	17.82	-1.36
Lexington	57	66,132.70	2,368	27.94	- .84	2,935	22.53	-1.03
Saugus	58	108,993.70	2,586	42.14	+ .18	3,338	32.65	- .32
Norwood	59	45,389.65	2,263	20.05	-1.41	2,322	19.55	-1.21
Needham	60	49,459.95	2,420	20.43	-1.38	3,341	14.80	-1.57
Danvers	61	67,614.17	1,806	37.43	- .16	2,142	31.56	- .39
Winchester	62	30,910.72	2,758	11.20	-2.05	2,766	11.18	-1.83
Milford	63	74,509.16	1,958	38.05	- .11	1,827	40.78	+ .23
Reading	64	70,411.66	2,136	32.96	- .48	2,457	28.66	- .60
Marblehead	65	38,969.52	1,959	19.89	-1.42	2,235	17.44	-1.38
Plymouth	66	57,967.96	1,775	32.65	- .50	2,120	27.34	- .69
Stoneham	67	68,973.96	1,902	36.26	- .23	2,025	34.06	- .22
Webster	68	79,596.64	1,820	43.73	+ .29	939	84.77	+4.02
Fairhaven	69	85,678.70	1,927	44.46	+ .35	1,833	46.74	+ .66
Andover	70	55,495.34	1,686	32.91	- .48	1,710	32.45	- .33
Clinton	71	62,903.07	1,547	40.66	-. .08	1,282	49.07	+ .83
N.Attleboro	72	76,504.79	1,709	44.76	+ .37	1,547	49.45	+ .85
Adams	73	66,193.85	1,635	40.48	+ .06	1,530	43.26	+ .42
Swampscott	74	14,709.49	1,620	9.07	-2.20	2,028	7.25	-2.10
Athol	75	56,571.51	1,544	36.63	- .22	1,980	28.57	- .60
Stoughton	76	82,979.80	1,785	46.48	+ .57	1,779	46.64	+ .66
Dartmouth	77	79,331.22	1,608	49.33	+ .70	1,705	46.53	+ .66
Billerica	78	116,108.07	2,039	56.93	+1.25	2,467	47.06	+ .69
Amherst	79	34,501.53	975	35.38	- .30	1,252	27.56	- .68

Experimental State Aid (Cont)

Group II - Towns (Cont'd)

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Member-ship	Old State Aid	State Scaled Scores
Amesbury	80	59,673.67	1,390	42.93	+ .24	1,123	53.14	+1.11
Easthampton	81	46,931.04	1,282	36.60	- .22	1,039	45.17	+ .56
Hingham	82	43,479.03	1,689	25.74	-1.00	2,089	20.81	-1.15
Shrewsbury	83	63,343.08	1,498	42.28	+ .20	1,797	35.25	- .13
Barnstable	84	36,121.86	1,528	23.63	-1.15	1,945	18.58	-1.30
Northbridge	85	60,363.16	1,438	41.97	+ .19	1,325	45.56	+ .56
Agawam	86	77,054.20	1,535	50.19	+ .77	1,933	39.86	+ .18
Middleborough	87	94,967.10	1,485	63.95	+1.83	1,801	52.73	+1.08
S.Hadley	88	43,463.05	1,232	35.27	- .31	1,495	29.07	- .57
Randolph	89	80,773.31	1,801	44.84	+ .38	2,065	39.12	+ .13
Palmer	90	64,897.20	1,275	50.89	+ .83	1,312	49.46	+ .86
Bridgewater	91	41,578.97	962	43.22	+ .26	1,313	31.67	- .39
Chelmsford	92	73,392.24	1,298	56.54	+1.22	1,578	46.51	+ .72
Walpole	93	33,614.12	1,399	24.02	-1.12	1,815	18.52	-1.31
Rockland	94	47,456.38	1,239	38.30	- .09	1,252	37.90	+ .05
Auburn	95	65,570.10	1,418	46.24	+ .55	1,758	37.30	0.00
Dracut	96	75,720.00	1,478	51.23	+ .84	1,071	70.70	+2.34
Falmouth	97	28,927.07	1,394	20.75	-1.36	1,722	16.80	-1.43
Ludlow	98	55,037.60	1,201	45.82	+ .45	1,049	52.47	- .30
Concord	99	30,786.75	1,070	28.77	- .79	1,306	23.57	-.96
Somerset	100	41,648.94	1,362	30.57	-..65	1,413	29.48	- .53
N.Andover	101	37,597.57	1,084	34.68	- .35	1,027	36.61	-..05
Whitman	102	47,768.69	1,190	40.14	+ .04	1,441	33.15	- .29
Millbury	103	59,581.70	1,237	48.16	+ .62	1,342	44.40	+ .50
Grafton	104	50,718.81	902	56.22	+1.20	983	51.60	+1.00
Hudson	105	45,523.18	1,045	43.56	+ .29	891	51.09	+ .97
Franklin	106	61,123.58	1,135	53.38	+1.07	1,442	42.39	+ .36
Montague	107	41,642.08	1,035	40.23	+ .05	1,332	31.26	- .59
Wareham	108	44,868.67	1,323	33.91	- .41	1,558	28.80	+1.64
Ware	109	46,718.96	908	51.45	+ .86	769	60.75	+ .92
Tewksbury	110	49,602.76	869	57.08	+1.34	981	50.56	+ .49
Canton	111	43,723.73	1,126	38.83	+ .02	989	44.21	+ .49
Westborough	112	35,743.21	747	47.84	+ .60	918	38.94	+ .12
Mansfield	113	47,220.09	1,047	45.10	+ .40	1,333	35.42	- .12
Abington	114	43,265.63	1,074	40.28	+ .05	1,274	33.96	+ .28
Wilmington	115	80,183.69	1,445	55.49	+1.15	1,559	51.43	+ .99
Foxboough	116	37,677.58	872	43.20	+ .26	1,057	35.65	- .11
Spencer	117	49,688.66	963	51.59	+ .87	913	54.42	+1.20
Uxbridge	118	39,204.05	947	41.39	+ .13	1,210	32.40	- .39
Maynard	119	30,428.15	871	34.93	- .34	1,058	28.76	- .59

Experimental State Aid (Cont)

Group II - Towns (Cont'd)

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Member-ship	Old State Aid	State Scaled Scores
Ipswich	120	40,665.06	881	46.15	+ .55	1,007	40.38	+ .22
Gt.Barrington	121	28,399.08	850	34.21	- .39	1,037	27.39	- .69
Winchendon	122	48,787.42	1,059	46.06	+ .47	1,231	39.63	+ .17
Easton	123	44,586.28	883	50.49	+ .79	1,181	37.75	+ .04
Williamstown	124	45,141.06	748	60.91	+1.54	912	49.50	+ .86
Monson	125	49,790.21	632	78.78	+2.83	688	72.37	+2.45
Swansea	126	63,689.22	1,119	56.91	+1.25	1,014	62.81	+1.79
Leicester	127	58,539.36	975	60.04	+1.48	838	69.86	+2.28
Scituate	128	27,245.60	937	29.07	- .76	1,277	21.34	-1.03
Holden	129	74,699.05	883	84.59	+3.25	1,202	62.15	+1.74
Orange	130	49,378.76	895	55.17	+3.25	1,100	44.89	+ .54
Oxford	131	56,798.92	925	61.40	+1.58	1,126	50.44	+ .92
Westwood	132	37,739.20	892	42.30	+ .20	1,132	33.34	+ .27
Ayer	133	32,266.39	476	67.78	+2.04	514	62.78	+1.79
Rentham	134	19,182.92	520	36.89	- .19	579	33.13	- .29
Weston	135	46,588.76	768	60.66	+1.52	975	47.78	+ .74

Experimental State Aid (Cont)

Group IIIA - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Westport	136	46,257.80	856	54.03	- .51	999	$46.30	- .49
Blackstone	137	42,675.85	657	64.95	- .06	389	109.71	+1.58
Sharon	138	45,711.63	807	56.64	- .40	1,127	40.56	- .68
Lee	139	30,337.24	730	41.55	-1.03	699	43.40	- .58
Dalton	140	28,063.05	693	40.49	-1.08	862	32.56	- .94
Templeton	141	48,233.34	682	70.72	+ .18	842	57.28	- .13
Bourne	142	26,967.83	675	39.95	-1.10	833	32.37	- .95
Medfield	143	27,012.90	382	70.71	+ .18	503	53.70	- .25
Belchertown	144	43,127.85	484	89.10	+ .95	543	79.43	+ .59
E.Bridgewater	145	42,758.83	726	58.89	- .31	917	46.63	- .48
Wayland	146	43,272.16	823	52.57	- .57	1,011	42.80	- .61
Norton	147	54,661.30	726	75.29	+ .37	809	67.57	+ .20
Westford	148	42,562.72	693	61.41	- .20	788	54.01	- .24
Rockford	149	19,382.83	513	37.78	-1.19	676	28.67	-1.07
Bellingham	150	45,908.87	753	60.96	- .22	659	69.66	+ .27
W.Bridgewater	151	51,228.69	642	79.79	+ .56	782	65.51	+ .14
Holbrook	152	30,572.55	664	46.04	- .84	819	37.33	- .79
Harvard	153	19,880.04	191	10.40	-2.33	228	87.19	+ .84
Lunenburg	154	49,470.96	641	17.18	-2.06	736	67.22	+ .19
Provincetown	155	19,531.11	464	42.09	-1.008	547	35.71	- .84
Holliston	156	27,382.97	549	49.87	- .70	630	43.47	- .58
Medway	157	24,336.93	520	46.80	- .81	598	40.70	- .68
Scituate	158	27,920.37	569	49.06	- .71	744	37.53	- .78
Lenox	159	26,677.46	433	61.61	- .20	516	51.70	- .32
Lancaster	160	26,885.65	506	53.13	- .55	390	68.94	+ .25
Acton	161	32,852.88	513	63.51	- .12	604	54.39	- .23
Ashland	162	36,294.50	489	74.22	+ .33	623	58.26	- .10
Hopkinton	163	34,890.24	554	62.97	- .80	670	52.07	- .30
Nantucket	164	6,714.50	408	16.45	-2.08	507	13.24	-1.57
Hopedale	165	15,594.17	446	34.96	-1.31	582	26.79	-1.13
Kingston	166	25,466.86	467	54.53	- .49	583	43.68	- .58
Pepperell	167	35,601.01	472	75.42	+ .38	634	56.15	- .17
N.Brookfield	168	31,751.12	525	60.47	- .24	377	84.22	+ .75
Barre	169	43,380.06	528	82.16	+ .63	626	69.30	+ .28
Warren	170	28,812.82	484	59.53	- .28	455	63.32	+ .06
Hanover	171	29,868.24	493	60.58	- .25	643	46.45	- .49
Dunstable	172	39,006.00	504	77.39	+ .46	649	60.10	- .04
Marshfield	173	29,597.46	543	54.50	- .49	693	42.71	- .61
Burlington	174	39,540.76	659	60.00	- .26	709	55.77	- .18
Duxbury	175	31,968.11	487	65.64	-.03	660	48.44	- .42

Experimental State Aid (Cont)

GROUP III - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Charlton	176	36,248.65	531	68.26	+ .08	611	59.33	- .07
Northborough	177	33,676.92	529	63.66	- .11	581	57.96	- .11
Sutton	178	38,272.69	509	75.19	+ .37	606	63.16	+ .06
Deerfield	179	25,616.74	380	70.14	+ .16	451	59.02	- .08
Rutland	180	35,516.39	290	122.04	+2.32	324	109.62	+1.58
Dighton	181	39,570.55	486	81.42	+ .63	563	70.29	+ .29
Groton	182	31,644.82	493	64.18	- .09	563	56.21	- .17
Manchester	183	3,959.88	375	10.55	-2.32	433	9.15	-1.71
Townsend	184	38,162.33	428	89.16	+ .95	535	71.33	+ .31
Merrimac	185	21,309.27	403	53.37	- .54	476	45.19	- .53
Hamilton	186	19,965.41	378	52.82	- .56	503	39.69	- .71
Southborough	187	24,966.09	410	60.89	- .23	452	55.23	- .20
Avon	188	21,261.47	361	58.89	- .31	445	47.78	- .44
Harwich	189	16,909.62	421	40.16	-1.09	503	33.62	- .91
Hadley	190	29,484.46	353	83.52	+ .80	486	60.67	- .02
Douglas	191	25,117.44	397	63.41	- .12	486	51.68	- .32
Sudbury	192	23,502.04	449	52.34	- .58	537	43.77	- .58
Pembroke	193	30,036.72	403	74.53	+ .34	506	59.36	- .07
W.Boylston	194	35,820.77	437	81.98	+ .65	570	62.84	+ .05
Millis	195	33,069.08	413	80.07	+ .57	482	68.61	+ .25
Norwell	196	36,462.29	442	82.49	+ .68	502	72.63	+ .37
Chatham	197	15,791.58	323	48.89	- .73	458	34.48	- .88
Sandwich	198	15,335.87	156	98.30	+1.33	238	64.44	+ .10
Georgetown	199	26,685.51	350	64.81	- .06	458	58.29	- .10
Littleton	200	20,518.71	325	63.10	- .13	445	46.11	- .50
Hardwick	201	24,737.03	344	71.90	- .23	329	75.19	+ .45
Groveland	202	21,138.47	363	58.23	- .34	443	47.72	- .45
Stockbridge	203	20,837.06	262	79.53	+ .55	323	64.51	+ .10
Northfield	204	31,817.22	297	107.12	+1.70	318	100.05	+1.26
Hatfield	205	19,080.62	259	73.67	+ .31	316	60.38	- .03
Sheffield	206	26,908.52	264	101.92	+ 1.48	330	81.54	+ .66
Plainville	207	18,042.05	303	59.54	- .28	351	51.40	-.33
Williamsburg	208	23,020.98	329	69.99	+ .15	371	62.05	+ .02
Tisbury	209	7,753.58	308	25.17	-1.71	374	20.73	-1.33
Orleans	210	16,325.78	240	68.02	+ .07	289	56.49	- .16
Shelburne	211	25,185.43	222	113.44	+1.96	301	83.67	+ .73
Dover	212	11,561.12	291	39.72	-1.10	299	38.67	- .74
Blow	213	22,689.51	219	103.60	+1.55	298	76.14	+ .48
Mendon	214	20,601.81	292	70.55	+ .18	309	66.67	+ .18
Brookfield	215	18,527.92	245	75.62	+ .39	304	60.94	- .03

Experimental State Aid (Cont)

Group III - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Oak Bluffs	216	8,626.58	257	33.56	-1.36	317	27.21	-1.12
Edgartown	217	11,872.84	218	54.46	- .49	268	44.30	- .56
Ashby	218	22,660.96	206	110.00	+1.82	294	77.08	+ .55
Topsfield	219	16,192.39	239	67.75	+ .06	328	49.37	- .39
Chester	220	23,579.49	186	12.67	-2.24	235	100.34	+1.27
Huntington	221	17,054.98	189	90.23	+1.00	195	87.46	+ .85
Brimfield	222	28,167.05	207	136.07	+2.94	237	118.85	+1.88
Wellfleet	223	8,262.43	148	55.82	- .44	171	48.32	- .43
Bernardston	224	16,165.64	185	87.38	+ .88	242	66.80	+ .18
New Marlborough	225	17,143.62	134	127.93	+ 2.56	172	99.67	+1.26
Ashfield	226	14,870.62	139	107.02	+ 1.69	169	87.99	+ .87
Charlemont	227	21,326.80	117	182.28	+ 4.83	146	146.07	+2.77
Petersham	228	17,610.94	144	122.35	+ 2.33	151	116.63	+1.81
New Salem	229	15,206.42	67	22.69	-1.82	64	237.60	+5.90

Experimental State Aid (Cont)

Group IV - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Longmeadow	230	78,000.00	1,007	7.75	-1.48	1,311	5.95	-1.45
Seekonk	231	50,221.46	984	51.03	- .89	1,140	44.05	- .75
Dudley	232	43,374.40	745	58.22	- .79	604	71.81	- .23
Bedford	233	25,244.46	411	61.42	- .75	532	47.45	- .67
E.Longmeadow	234	32,921.63	768	42.86	- .98	968	34.01	- .93
N.Reading	235	60,079.89	786	76.43	- .54	927	64.81	- .36
Acushnet	236	35,800.20	723	49.51	- .89	579	61.83	- .41
Shirley	237	24,058.97	400	60.14	- .78	332	72.47	- .22
Wilbraham	238	39,561.15	520	76.07	- .55	626	63.20	- .39
Lynnfield	239	28,662.50	625	45.86	- .96	773	37.08	- .88
Rehoboth	240	44,551.04	649	68.64	- .65	746	59.72	- .46
Hull	241	24,816.60	671	36.98	-1.07	936	26.51	-1.07
Hanson	242	38,624.75	563	68.60	- .65	670	57.65	- .48
Middleton	243	20,744.74	369	56.21	- .81	463	44.81	- .72
Southwick	244	34,912.08	538	64.89	- .70	551	63.36	- .38
Sturbridge	245	34,210.96	472	72.47	- .58	428	79.93	- .08
Westminster	246	30,286.03	381	79.49	- .53	449	67.45	- .31
Norfolk	247	19,694.51	301	66.32	- .65	378	58.10	- .60
Salisbury	248	27,713.37	478	57.97	- .79	569	48.71	- .66
Nahant	249	10,862.70	371	29.27	-1.18	547	19.86	-1.19
Upton	250	29,478.15	350	84.22	- .43	449	65.65	- .34
Ashburnham	251	30,442.36	398	76.48	- .54	395	77.07	- .13
Dennis	252	26,341.22	300	87.80	- .38	384	68;60	- .29
Lincoln	253	21,994.33	386	56.98	- .79	476	46.21	- .71
Raynham	254	26,567.10	444	60.73	- .75	443	59.97	- .45
Mattapoisett	255	16,985.19	377	45.05	- .96	449	37,83	- .86
Marion	256	9,819.00	353	27.81	-1.20	418	23.49	-1.13
Sterling	257	30,669.58	305	100.55	- .21	426	71.99	- .22
Freetown	258	32,659.84	344	94.94	- .29	381	85.72	+ .02
Lanesborough	259	29,823.25	335	89.02	- .37	401	74.37	- .17
Lakeville	260	24,201.89	292	82.88	- .45	350	69.15	- .28
Tyngsborough	261	33,972.34	290	117.44	+ .02	420	80.89	- .06
Cheshire	262	22,660.78	307	73.81	- .58	368	61.58	- .41
Newbury	263	17,287.98	235	73.66	- .58	264	65.48	- .36
Granby	264	20,978.60	263	79.76	- .49	338	62.07	- .41
Essex	265	15,751.17	270	58.33	- .79	306	51.47	- .64
Rowley	266	21,882.39	306	71.51	- .61	373	58.67	- .46
Boylston	267	17,985.32	260	69.17	- .64	316	56.92	- .51
Millville	268	18,426.36	197	93.53	- .31	213	86.51	+ .04
West Brookfield	269	20,113.49	277	72.61	- .58	345	58.30	- .48

Experimental State Aid (Cont)

GROUP IV - Towns

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Wenham	270	8,382.87	264	31.75	-1.15	286	29.31	+1.02
Clarksburg	271	15,787.71	206	76.63	- .53	206	76.64	- .14
Buckland	272	14,558.62	220	66.17	- .68	268	54.32	- .56
W.Newbury	273	22,487.56	405	55.52	- .81	272	82.67	- .05
Hinsdale	274	20,930.80	249	84.05	- .43	292	71.68	- .23
Gelrain	275	23,786.88	229	103.87	- .17	287	82.88	- .03
Garver	276	24,547.82	300	83.83	- .47	325	75.53	- .16
Southampton	277	20,832.17	239	84.65	- .43	258	78.42	- .10
Berlin	278	12,771.96	202	63.23	- .72	212	60.25	- .45
Rochester	279	18,916.91	237	79.81	- .49	245	77.21	- .13
Irving	280	12,246.37	192	63.78	- .71	226	54.19	- .56
Hampden	281	26,514.90	269	98.56	- .24	297	89.28	+ .09
Russell	282	10,687.25	191	55.95	- .81	255	41.91	- .79
Berkley	283	17,806.72	212	83.99	- .44	237	75.13	- .17
Sherborn	284	8,568.06	191	44.86	- .96	221	38.77	- .84
E.Brookfield	285	10,311.92	181	56.97	- .79	228	45.33	- .72
W.Stockbridge	286	10,577.31	163	64.89	- .70	201	52.62	- .57
Hubbardston	287	20,329.87	160	127.06	+ .15	196	103.72	+ .36
Gill	288	19,585.32	149	131.44	+ .21	168	116.58	- .60
Paxton	289	11,230.70	140	80.22	- .48	161	69.76	- .27
Princeton	290	22,147.41	171	129.51	+ .18	213	103.98	+ .36
Brewster	291	12,150.90	129	94.19	- .29	154	78.90	- .10
Bolton	292	12,114.51	168	72.11	- .60	184	65.84	- .34
Halifax	293	12,756.52	201	63.46	- .71	213	59.89	- .45
Whately	294	14,276.94	147	97.12	- .24	165	86.53	+ .04
Boxford	295	12,637.03	139	90.91	- .35	170	74.34	- .22
Sunderland	296	8,958.37	122	73.43	- .53	168	53.32	- .57
Carlisle	297	11,691.66	106	110.30	- .08	167	70.01	- .27
Conway	298	22,731.72	128	177.60	+ .84	153	148.57	+1.19
Eastham	299	8,845.37	103	85.96	- .41	139	63.64	- .38
Royalston	300	19,863.29	179	110.97	+ .07	211	94.14	+ .19
Leverett	301	18,167.79	116	156.61	+ .55	136	133.59	+ .91
Becket	302	16,002.88	128	125.02	+ .12	138	115.96	+ .59
Granville	303	10,591.71	98	108.07	- .11	122	86.82	+ .05
Richmond	304	13,630.50	118	115.51	- .006	146	93.36	+ .17
Egremont	305	5,517.57	91	60.63	- .75	115	47.98	- .67
Plympton	306	11,890.61	135	88.11	- .38	146	81.44	- .05
Truro	307	5,524.51	93	59.40	- .77	111	49.77	- .64
Phillipston	308	16,732.99	136	123.03	+ .10	159	105.44	+ .39
Cummington	309	12,796.97	86	148.80	+ .45	110	116.33	+ .60

Group IV - Towns

Experimental State Aid (Cont)

Town	Index*	Valuation	All Children 7-16	Exper. State Aid	Exper. State Scores	Net Average Membership	Old State Aid	State Scaled Scores
Blandford	310	13,658.72	87	157.00	- .56	104	131.33	+ .87
Pelham	311	11,383.67	94	121.18	+ .07	103	110.52	+ .48
Dunstable	312	13,703.95	94	145.79	+ .41	110	124.58	+ .75
Wales	313	11,222.13	95	118.13	+ .04	95	118.13	+ .63
Chesterfield	314	13,409.15	81	165.55	+ .68	93	144.18	+1.11
Florida	315	11,338.98	110	103.05	- .17	131	86.53	+ .04
New Braintree	316	11,827.73	72	164.27	+ .66	91	129.98	+ .85
Worthington	317	9,587.15	68	140.99	+ .34	85	112.79	+ .53
Oakham	318	15,802.49	64	246.91	+1.79	78	202.60	+2.19
Westhampton	319	12,430.04	72	172.64	+ .77	75	165.73	+1.52
Hancock	320	8,665.83	78	111.10	- .07	90	96.29	+ .22
Hardwick	321	11,609.41	77	150.77	+ .47	97	119.68	+ .65
Washpee	322	5,892.77	80	73.66	- .58	85	69.33	- .28
Sandisfield	323	13,604.48	60	226.74	+1.51	65	209.30	+2.31
Warwick	324	15,520.01	85	182.59	+ .91	103	150.68	+1.23
Holland	325	7,835.42	67	116.95	+ .01	77	101.76	+ .32
Windsor	326	12,116.06	60	201.93	+1.17	73	165.97	+1.51
Monterey	327	3,689.35	33	111.80	- .06	41	89.98	+ .10
Otis	328	13,298.16	63	211.08	+1.30	82	162.17	+1.44
W.Tisbury	329	3,716.20	45	82.58	- .46	46	80.79	- .06
Wendell	330	8,098.56	34	99.98	- .22	67	120.87	+ .68
Goshen	331	13,055.20	33	221.27	+1.44	71	183.88	+1.84
Leyden	332	10,870.49	18	247.05	+1.79	57	190.71	+1.97
Heath	333	13,425.67	23	203.42	+1.19	66	203.42	+2.20
Middlefield	334	11,231.58	25	280.79	+2.25	47	238.97	+2.86
Savoy	335	12,461.05	28	214.85	+1.43	69	180.59	+1.78
Washington	336	9,954.29	30	191.43	+1.03	52	191.43	+1.98
Hawley	337	9,125.85	13	304.20	+2.57	41	222.58	+2.56
Tyringham	338	4,468.45	8	91.19	- .34	47	95.07	+ .19
Plainfield	339	5,176.93	12	199.11	+1.13	30	172.56	+1.63
Shutesbury	340	9,487.62	23	287.50	+2.34	47	201.86	+2.19
Alford	341	5,494.43	22	148.50	+ .45	39	140.88	+1.05
Rowe	342	7,532.00	14	396.42	+3.83	33	228.24	+2.66
Chilmark	343	3,911.70	11	186.27	+ .96	83	118.84	+ .63
Monroe	344	4,973.41	13	198.94	+1.13	32	155.42	+1.32
Montgomery	345	3,223.59	10	161.18	+ .62	30	107.45	+ .43
Peru	346	10,290.20	15	294.05	+2.43	45	228.67	+2.88
New Ashford	347	4,459.14	11	318.51	+2.76	18	247.73	+3.02
Tolland	348	6,657.20	7	291.22	+2.39	16	416.08	+6.13
Gay Head	349	2,621.02	6	331.11	+2.91	15	174.74	+1.67

GROUP I - Cities Proposed Equalized Valuation

Town	Index*	Valuation at Jan.1 1952	All Children 7-16	Proposed Equalized Valuation per pupil	Scaled Score	Net Aver. Member-ship	Old Eq. Val. per pupil	Scaled Score
Cambridge		$213,667,350.	12108	$17,646.	+2.37	10121	$21,111	+4.03
Boston		1,572,061,400.	94139	16,700	+2.01	87692	17,927	+2.62
Newton		217,533,700	10920	19,920	+3.26	12246	17,764	+2.51
Holyoke		82,045,810	6203	13,226	+ .67	4855	16,899	+2.12
Salem		59,736,540	4934	12,107	+ .23	4934	16,479	+1.93
Fitchburg		61,199,300	5338	11,614	+ .04	3764	16,259	+1.83
Springfield		300,571,565	18481	16,263	+1.84	18962	15,851	+1.15
Everett		100,481,025	5832	17,229	+2.21	6617	15,185	+1.35
Haverhill		71,847,025	5653	12,709	+ .47	4863	14,774	+1.13
Lowell		107,637,800	12985	8,334	-1.23	8170	13,175	+ .44
Gardner		24,733,974	2293	10,786	- .28	1942	13,149	+ .43
Lawrence		90,275,800	9644	9,360	- .83	6867	13,146	+ .42
Lynn		139,253,775	11435	12,177	+ .26	10817	12,874	+ .34
Pittsfield		99,331,340	6904	14,387	+1.12	7755	12,809	+ .27
Worcester		319,537,750	23797	13,427	+ .75	25072	12,745	+ .24
Quincy		149,893,575	10801	13,877	+ .92	11963	12,530	+ .14
Westfield		35,375,335	2802	12,625	- .44	2950	11,992	- .09
Northampton		32,246,495	2651	12,163	+ .26	2798	11,525	- .30
Waltham		67,415,300	6151	11,463	- .02	5881	11,463	- .33
Malden		81,245,700	7998	10,158	- .23	7136	11,385	- .36
Gloucester		42,376,020	3522	12,031	- .20	3792	11,175	- .46
Beverly		44,513,400	3815	11,667	+ .06	4002	11,123	- .48
Leominster		28,463,815	3393	8,388	-1.20	2573	11,063	- .51
N. Adams		30,766,050	2721	11,306	- .08	2798	10,996	- .54
New Bedford		126,728,625	12512	10,130	- .53	11694	10,837	- .61
Fall River		124,438,750	15359	8,102	-1.32	11566	10,759	- .65
Somerville		127,761,700	13184	9,690	- .70	11986	10,659	- .69
Melrose		43,700,300	3580	12,485	+ .38	4107	10,640	- .70
Medford		94,260,850	8389	11,237	- .10	8902	10,589	- .78
Attleboro		36,395,050	3195	11,391	- .04	3450	10,549	- .74
Woburn		27,251,960	2808	9,705	- .66	2709	10,060	- .96
Revere		54,491,750	5046	10,798	- .27	5507	9,895	-1.04
Brockton		82,460,800	7799	10,573	- .36	8669	9,512	-1.21
Peabody		27,776,050	2913	9,535	- .76	2954	9,403	-1.22
Chicopee		50,523,350	5987	8,438	-1.18	5389	9,375	-1.23
Marlborough		17,137,453	2150	7970	-1.37	1888	9,077	-1.41
Chelsea		44,733,700	4963	9,013	- .96	5043	8,870	-1.50
Taunton		39,252,980	4615	8,505	-1.16	4733	8,293	-1.81
Newburyport		14,022,105	1774	7,904	-1.39	1811	7,743	-2.01

GROUP II - Towns Proposed Equalized Valuation

Town	Valuation at Jan.1 1952	All Children 7-16	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Scores
Brookline	159,626,000	5501	$28,986	+4.33	6425	$24,844	+4.08
Barnstable	39,430,920	1528	25,810	+3.61	1945	20,272	+2.86
Webster	18,569,653	1820	10,203	- .08	939	19,776	+2.73
Belmont	59,498,000	3169	18,775	+1.95	3282	18,129	+2.29
W. Springfield	50,295,988	2670	18,837	+1.96	2934	17,142	+2.03
Wellesley	56,102,375	2667	21,036	+2.48	3292	17,133	+2.03
Falmouth	28,309,535	1394	26,308	+2.31	1722	16,440	+1.85
Weston	14,677,495	768	19,111	+2.03	975	15,054	+1.48
Winchester	40,613,825	2758	14,725	+ .99	2766	14,683	+1.38
Easthampton	15,225,696	1282	11,876	+ .97	1039	14,654	+1.37
Scituate	18,335,000	937	19,567	+2.14	1277	14,358	+1.30
Milton	44,010,245	2822	15,595	+1.20	3080	14,289	+1.28
Swampscott	27,371,507	1620	16,895	+1.50	2028	13,497	+1.07
Somerset	18,965,840	1362	13,924	+ .80	1413	13,433	+1.05
Plymouth	28,426,175	1775	16,014	+1.30	2120	13,409	+1.04
Watertown	64,706,795	4665	13,870	+ .80	4867	13,295	+1.01
Norwood	30,677,980	2263	13,556	+ .71	2322	13,212	+ .99
Framingham	46,984,212	3338	14,075	+ .84	3600	13,051	+ .95
Weymouth	76,214,700	4922	15,484	+1.17	5971	13,409	+ .87
Marblehead	27,913,295	1959	14,248	+ .87	2235	12,489	+ .80
Andover	21,103,797	1686	12,517	+ .47	1710	12,341	+ .76
N. Andover	12,622,480	1084	11,644	+ .26	1027	12,291	+ .75
Needham	39,591.725	2420	16,360	+1.38	3341	11,850	+ .63
Lexington	34,387,730	2368	14,521	+ .94	2935	11,716	+ .59
Greenfield	29,077,400	2319	12,538	+ .47	2485	11,701	+ .59
Arlington	64,127,650	5516	11,625	+ .27	5777	11,101	+ .43
Dedham	31,120,200	2687	11,581	+ .27	2853	10,908	+ .38
Wareham	16,820,239	1323	12,713	+ .52	1558	10,796	+ .35
Reading	26,255,917	2136	12,292	+ .42	2457	10,686	+ .32
Walpole	19,130,070	1399	13,674	+ .74	1815	10,640	+ .31
Methuen	29,923,700	3149	95,02	- .27	2910	10,283	+ .21
Hingham	21,260,261	1689	12,587	+ .49	2089	10,177	+ .19
Southbridge	16,377,060	2296	7,132	- .81	1612	10,159	+ .19
Canton	10,022,010	1126	8,900	- .39	989	10,133	+ .19
Concord	13,085,105	1070	12,229	+ .40	1306	10,019	+ .14
Westwood	11,180,237	892	12,533	+ .47	1132	9,877	+ .10
Dartmouth	16,775,575	1608	10,419	- .03	1705	9,838	+ .10
Harrington	10,103,295	830	12,172	+ .39	1037	9,743	+ .07
Wrentham	5,552,768	520	10,677	+ .03	579	9,590	+ .02
Ipswich	9,641,645	881	10,943	+ .10	1007	9,575	+ .02

GROUP II - Towns Proposed Equalized Valuation

Town	Valuation Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Member-ship	Old Eq. Valua-tion per pupil	Scaled Scores
Wakefield	$28,285,575	2714	$10,422	- .03	2957	9,566	+ .01
Clinton	12,256,315	1547	7,922	- .62	1282	9,560	+ .01
Stoneham	19,046,425	1902	10,013	- .13	2025	9,089	- .01
Amesbury	10,536,545	1390	7,580	- .70	1123	9,382	- .02
Amherst	11,713,025	975	12,013	+ .35	1252	9,355	- .02
Braintree	41,564,760	3420	12,154	+ .35	4573	9,089	- .10
Williamstown	8,207,955	741	11,076	+ .13	912	9,000	- .13
Adams	11,310,750	1635	6,917	- .83	1530	8,880	- .16
South Hadley	13,261,055	1232	10,763	+ .05	1495	8,880	- .16
Ayer	4,520,025	476	9,496	- .26	514	8,794	- .16
Milford	15,881,600	1958	8,111	- .58	1827	8,693	- .21
Winthrop	25,633,750	2438	10,514	- .007	2951	8,686	- .21
Ware	6,528,580	908	7,190	- .80	769	8,490	- .26
Hudson	7,448,585	1045	7,127	- .81	891	8,360	- .30
Montague	10,892,520	1035	10,524	- .007	1332	8,178	- .35
Agawam	15,216,265	1535	9,912	- .15	1933	7,872	- .43
Danvers	16,768,950	1806	9,285	- .30	2142	7,829	- .44
Rockland	9,780,995	1239	7,894	- .63	1252	7,812	- .44
Ludlow	8,138,158	1201	6,776	- .89	1049	7,758	- .46
Natick	29,100,200	2851	10207	- .08	3816	7,620	- .49
Tewksbury	1,394,710	869	8,509	- .48	981	7,538	- .52
Fairhaven	13,612,990	1927	7,064	- .83	1833	7,427	- .55
Shrewsbury	13,325,840	1488	9,229	- .31	1797	7,416	- .55
N. Attleboro	13,736,720	1709	8,037	- .60	1547	7,393	- .56
Randolph	14,982,870	1801	8,319	- .53	2065	7,256	- .59
Foxboro	7,641,963	872	8,763	- .42	1057	7,230	- .59
Stoughton	12,774,750	1785	7,156	- .80	1880	7,181	- .61
Franklin	10,056,222	1145	8,782	- .42	1442	6,974	- .67
Westborough	6,393,024	747	8,558	- .47	918	6,964	- .67
Dracut	7,263,460	1478	4,914	-1.34	1071	6,782	- .72
Chelmsford	10,599,150	1298	8,936	- .38	1578	6,717	- .73
Palmer	8,702,680	1275	6,825	- .88	1312	6,633	- .76
Bridgewater	8,707,938	962	9,051	- .61	1313	6,632	- .76
Mansfield	8,802,160	1047	8,407	- .51	1333	6,603	- .77
Uxbridge	7,904,226	947	8,346	- .52	1210	6,532	- .78
Billerica	16,040,540	2039	7,866	- .64	2467	6,502	- .78
Swansea	6,590,462	1119	5,889	-1.10	1014	6,499	- .78
Whitman	9,129,420	1190	7,671	- .68	1441	6,335	- .84
Saugus	20,952,283	2586	8,102	- .58	3338	6,277	- .85
Athol	12,126,907	1544	7,854	- .64	1980	6,125	- .89

APPENDIX 3

Group II - Towns

Proposed Equalized Valuation

Town	Valuation Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
Northbridge	$ 8,099,773	1438	$ 5,632	-1.21	1325	$ 6,113	- .89
Grafton	5,985,325	902	6,635	- .93	983	6,089	- .89
Middleborough	10,568,635	1485	7,116	- .81	1801	5,868	- .96
Abbington	7,373,475	1074	6,865	- .87	1274	5,788	- .98
Maynard	6,057,266	871	6,954	- .85	1058	5,725	- .99
Spencer	5,130,665	963	5,327	-1.24	913	5,620	-1.03
Auburn	9,814,925	1418	6,921	- .78	1757	5,583	-1.03
Easton	6,449,096	883	7,303	- .77	1181	5,461	-1.06
Leicester	4,511,450	975	4,627	-1.40	838	5,384	-1.09
Orange	5,895,875	895	6,587	- .94	1100	5,360	-1.09
Wilmington	8,343,328	1445	5,773	-1.14	1559	5,352	-1.09
Holden	5,972,047	863	6,763	- .93	1202	4,968	-1.20
Monson	3,410,469	632	5,396	-1.24	688	4,957	-1.20
Winchenden	6,080,240	1059	5,741	-1.16	1231	4,939	-1.21
Millbury	6,262,835	1237	5,062	-1.30	1342	4,667	-1.28
Oxford	4,349,602	925	4,702	-1.38	1126	3,833	-1.49

Group III - Towns Proposed Equalized Valuation

Town	Valuation Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled Scores	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
Chatham	$ 12,587,270	323	$ 38,969	+4.115	458	$ 27,483	+3.40
Nantucket	13,229,740	408	32,425	+3.16	507	26,094	+3.14
Harwich	11,356,970	421	26,976	+2.35	503	22,578	+2.49
Wellfleet	3,705,915	148	25,039	+2.06	171	21,672	+2.33
Manchester	9,340,291	375	24,907	+2.04	433	21,571	+2.31
Edgartown	5,523,614	218	25,337	+2.11	268	20,611	+2.13
Orleans	5,921,890	240	24,674	+2.00	289	20,491	+2.11
Oak Bluffs	6,244,369	257	24,297	+1.96	317	19,696	+1.96
Bourne	16,203,135	675	24,004	+1.90	833	19,452	+1.94
Yarmouth	12,141,700	504	24,090	+1.92	649	18,708	+1.78
Marshfield	12,329,800	543	22,706	+1.71	693	17,792	+1.62
Sandwich	3,869,910	156	24,807	+2.03	238	16,260	+1.33
Provincetown	8,767,100	464	21,049	+1.77	547	16,028	+1.29
Tisbury	5,888,080	308	19,117	+1.15	374	15,744	+1.25
Dover	4,677,520	291	16,073	+ .74	299	15,644	+1.22
Cohasset	11,198,255	569	19,680	+1.27	744	15,051	+1.11
Stockbridge	4,781,430	262	18,249	+1.06	323	14,803	+1.07
Duxbury	9,326,890	487	19,151	+1.19	660	14,132	+ .94
Hamilton	6,605,585	378	17,475	+ .95	530	13,132	+ .76
Kingston	7,296,700	467	15,624	+ .67	583	12,516	+ .65
Lancaster	4,545,260	506	8,982	+ .31	390	11,655	+ .49
N. Marlborough	1,980,859	134	14,782	+ .55	172	11,517	+ .46
Deerfield	5,106,130	380	13,437	+ .35	451	11,322	+ .43
Rockport	7,586,450	513	14,788	+ .55	676	11,223	+ .41
Hatfield	3,498,305	259	13,506	+ .36	316	11,071	+ .38
Petersham	1,649,814	144	11,457	+ .04	151	10,926	+ .35
Harvard	2,449,161	191	12,822	+ .27	228	10,742	+ .32
Norwell	5,384,930	442	12,183	+ .17	502	10,727	+ .32
Topsfield	3,238,570	239	13,793	+ .40	328	10,051	+ .19
Charlemont	1,462,047	117	12,496	+ .21	146	10,014	+ .19
Westport	9,553,600	856	11,160	+ .01	999	9,563	+ .10
Shelburne	2,860,407	222	12,884	+ .27	301	9,503	+ .09
Lenox	4,794,195	433	11,071	+ .0017	516	9,291	+ .05
Littleton	3,824,190	325	11,766	+ .10	445	8,594	- .07
N. Brookfield	3,227,071	525	6,146	- .72	377	8,560	- .08
Sheffield	2,788,800	264	10,563	- .07	339	8,451	- .10
Pembroke	4,237,475	403	10,514	-. 08	506	8,374	- .11
Brookfield	2,543,705	245	10,382	- .10	304	8,367	- .11
Ashfield	1,410,815	139	10,149	- .14	169	8,348	- .12
Sharon	9,155,882	827	11,345	+ .04	1127	8,124	- .16

Group III - Towns Proposed Equalized Valuation

Town	Valuation as of Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled score	Net Average Membership	Old Eq. Valuation per pupil	Scaled score
Wayland	$ 8,030,878	823	$ 9,758	- .19	1011	$ 7,943	- .19
Acton	4,689,135	513	9,140	- .28	604	7,763	- .23
Ashland	4,761,556	489	9,737	- .19	623	7,643	- .23
Medfield	3,726,115	382	9,754	- .19	503	7,408	- .29
Southbridge	3,307,235	262	8,066	- .45	452	7,317	- .21
Bellingham	4,794,530	753	6,234	- .70	659	7,275	- .32
Hadley	3,489,145	353	9,884	- .17	386	7,199	- .33
Lunenburg	5,235,825	641	8,168	- .43	736	7,114	- .35
Dalton	6,114,057	693	8,822	- .33	862	7,079	- .35
E. Bridgewater	6,476,035	726	8,920	- .31	917	7,062	- .35
Groton	3,920,984	493	7,971	- .46	563	6,964	- .37
Millis	3,352,730	413	8,117	- .43	482	6,956	- .37
Holliston	4,375,615	549	7,970	- .46	630	6,945	- .37
Medway	4,137,030	520	7,955	- .46	623	6,918	- .38
Huntington	1,328,185	189	7,027	- .68	195	6,811	- .40
W. Bridgewater	5,313,986	642	8,277	- .41	782	6,795	- .40
Lee	4,742,640	730	6,496	- .67	699	6,785	- .41
Hanover	4,336,672	498	8,796	- .33	643	6,744	- .41
Hopedale	3,874,878	446	8,688	- .35	582	6,658	- .43
Blackstone	2,588,981	657	3,940	-1.05	389	6,655	- .43
Warren	2,949,479	484	6,093	- .73	455	6,482	- .46
Dighton	3,635,916	486	7,481	- .53	563	6,458	- .46
Northfield	2,039,433	297	6,867	- .62	318	6,413	- .47
Sudbury	3,370,802	449	7,507	- .52	537	6,277	- .50
Stow	1,831,545	219	8,363	- .40	298	6,146	- .52
Rutland	1,990,917	290	6,894	- .61	324	6,145	- .52
W. Boylston	3,470,200	437	7,940	- .46	570	6,088	- .53
Bernardston	1,416,655	186	7,657	- .50	242	5,854	- .58
Hopkinton	3,921,050	554	7,077	- .59	670	5,852	- .58
New Salem	334,155	67	4,987	- .89	64	5,846	- .58
Plainville	2,051,699	303	6,771	- .63	351	5,845	- .58
Townsend	3,098,980	428	7,240	- .56	535	5,792	- .59
Mendon	1,769,320	292	6,059	- .74	309	5,726	- .61
Hardwick	1,859,614	344	5,405	- .83	329	5,652	- .62
Westford	4,433,466	693	6,397	- .69	788	5,626	- .62
Ashby	1,624,519	206	7,886	- .47	294	5,526	- .64
Georgetown	2,419,222	350	6,912	- .61	458	5,282	- .68
Leicester	1,239,184	186	6,662	- .65	235	5,273	- .68
Williamsburg	1,912,176	329	5,812	- .77	371	5,154	- .70
Barre	3,205,769	528	6,071	- .74	626	5,121	- .70

Group III - Towns Proposed Equalized Valuation

Town	Valuation as of Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
Pepperell	$3,171,786	472	$ 6,719	- .64	634	$ 5,003	- .73
Avon	2,195,871	361	6,082	- .73	445	4,935	- .75
Holbrook	4,036,669	664	6,079	- .73	819	4,929	- .75
Norton	3,950,075	726	5,440	- .83	809	4,883	- .75
Burlington	3,446,510	659	5,229	- .85	709	4,861	- .75
Merrimac	2,311,500	403	5,735	- .79	476	4,856	- .75
Douglas	2,306,421	397	5,809	- .77	486	4,746	- .78
Brimfield	1,119,160	207	5,406	- .83	237	4,722	- .78
Templeton	3,836,796	682	5,625	- .80	842	4,557	- .82
Northborough	2,597,880	529	4,910	- .91	581	4,471	- .83
Sutton	2,512,084	509	4,935	- .90	606	4,145	- .89
Groveland	1,834,995	363	5,055	- .89	443	4,142	- .89
Belchertown	2,086,944	484	4,311	- .99	543	3,843	- .95
Charlton	2,261,806	531	4,259	-1.002	611	3,702	- .97

Group IV - Towns Proposed Equalized Valuation

Town	Valuation as of Jan.1,1952	All Children 7-16 yrs	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
Chilmark	$1,241,995	21	$ 59,142	+6.99	33	$ 37,636	+4.68
Tolland	461,085	13	35,468	+3.45	16	28,818	+3.20
Dennis	10,525,590	300	34,085	+3.25	384	27,410	+2.97
Monterey	1,090,675	33	33,050	+3.09	41	26,602	+2.83
W.Tisbury	1,047,490	45	23,277	+1.63	46	22,772	+2.19
Truro	2,524,592	93	27,146	+2.21	111	22,744	+2.19
Monroe	715,536	25	28,621	+2.47	32	22,361	+2.13
Eastham	3,095,060	103	30,049	+2.64	139	22,267	+2.11
Hull	20,801,585	671	31,011	+2.49	936	22,224	+2.10
Mashpee	1,771,600	80	22,145	+1.46	85	20,842	+1.87
Rowe	687,500	19	36,184	+3.56	33	20,833	+1.87
Brewster	3,010,530	129	23,366	+1.63	154	19,548	+1.66
Gay Head	289,895	9	32,210	+2.97	15	19,326	+1.62
Granville	2,044,550	98	20,862	+1.27	122	16,759	+1.19
Sandisfield	1,069,869	60	17,831	+ .82	65	16,460	+1.14
Wenham	4,674,425	264	17,706	+ .80	286	16,344	+1.12
Plainfield	442,370	26	17,014	+ .70	30	14,746	+ .85
Otis	1,130,630	63	18,036	+ .85	82	13,788	+ .69
Marion	5,683,416	353	16,100	+ .56	418	13,597	+ .66
Tyringham	1,858,945	49	13,022	+ .10	420	13,587	+ .66
Longmeadow	17,317,960	1007	17,197	+ .72	1311	13,210	+ .60
Egremont	1,483,525	91	16,302	+ .59	115	12,900	+ .55
Lynnfield	9,645,259	625	15,432	+ .46	773	12,478	+ .48
Alford	472,480	37	12,769	+ .06	39	12,115	+ .41
Paxton	1,888,867	140	13,491	+ .17	161	11,722	+ .35
Florida	1,476,045	110	13,418	+ .16	131	11,268	+ .27
Montgomery	329,354	20	16,467	+ .61	30	10,978	+ .22
Buckland	2,930,985	220	13,362	+ .16	268	10,937	+ .22
Shutesbury	512,190	33	15,520	+ .47	47	10,898	+ .21
Carver	3,534,890	300	11,781	- .08	325	10,875	+ .21
Sherborn	2,390,650	191	12,516	+ .02	221	10,817	+ .21
Lincoln	5,059,518	386	13,107	+ .11	476	10,629	+ .17
Worthington	902,700	68	13,275	+ .14	85	10,620	+ .17
Russell	2,681,630	191	14,039	+ .25	297	10,516	+ .15
Newbury	2,740,197	235	11,667	- .10	264	10,380	+ .12
Nahant	5,675,268	371	15,297	+ .44	547	10,375	+ .12
E.Longmeadow	9,995,395	768	13,014	+ .10	968	10,326	+ .12
Holland	787,879	67	11,759	- .08	77	10,232	+ .10
Wattapoisett	4,553,260	377	12,024	- .04	449	10,096	+ .08
Halifax	2,093,705	201	10,416	- .29	213	9,830	+ .04

Group IV - Towns

Proposed Equalized Valuation

Town	Valuation as at Jan.1,1952	All Children 7-16	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
Middlefield	$ 455,445	40	$ 11,386	- .14	47	$ 9,690	+ .009
Blandford	973,465	87	11,189	- .17	104	9,360	- .005
Boxford	1,569,245	139	11,289	- .16	170	9,231	- .006
Sunderland	1,541,826	122	12,637	+ .04	168	9,178	- .008
Erving	2,061,815	192	10,738	- .24	226	9,123	- .009
Hawley	368,764	30	12,292	- .009	41	8,994	- .11
Wilbraham	5,588,766	520	10,747	- .24	626	8,928	- .11
New Ashford	158,373	14	11,312	- .16	18	8,799	- .14
Windsor	618,830	60	10,313	- .30	73	8,477	- .19
Bedford	4,479,645	411	10,899	- .22	532	8,420	- .20
Peru	374,352	14	10,695	- .24	45	8,319	- .23
Keekonk	9,378,110	984	9,530	- .43	1140	8,226	- .23
Carlisle	1,367,956	106	12,905	+ .08	167	8,191	- .23
Belton	1,485,289	168	8,841	- .53	184	8,072	- .26
New Braintree	733,220	72	10,183	- .32	91	8,057	- .26
Chesterfield	737,958	81	9,111	- .48	93	7,935	- .28
Westhampton	593,980	72	8,249	- .67	75	7,920	- .28
Goshen	559,885	59	9,489	- .42	71	7,886	- .28
Heath	503,673	66	7,631	- .70	66	7,632	- .33
Becket	1,052,698	128	8,224	- .62	138	7,628	- .33
Richmond	1,095,490	118	9,283	- .48	146	7,503	- .33
Hill	1,254,935	149	8,422	- .59	168	7,470	- .33
Whately	1,217,641	147	8,283	- .61	165	7,380	- .33
Hancock	663,055	78	8,500	- .58	90	7,367	- .39
Cummington	803,725	86	9,345	- .45	110	7,307	- .39
Lakeville	478,107	292	8,486	- .58	350	7,080	- .43
Essex	2,132,455	270	7,897	- .67	306	6,969	- .44
Salisbury	3,940,985	478	8,244	- .61	569	6,926	- .45
Granby	2,337,215	263	8,886	- .52	338	6,915	- .45
Conway	1,051,595	128	8,215	- .62	153	6,873	- .45
Rochester	1,663,463	237	7,018	- .80	245	6,790	- .47
Shirley	2,241,855	400	5,604	-1.00	332	6,753	- .48
Southwick	3,685,090	538	6,849	- .82	551	6,688	- .49
Leyden	375,986	44	8,545	- .54	57	6,596	- .49
W.Stockbridge	1,323,916	163	8,122	- .63	201	6,587	- .49
Pelham	677,548	94	7,207	- .77	103	6,578	- .49
Plympton	953,700	135	7,064	- .79	146	6,532	- .49
Princeton	1,377,248	171	8,054	- .64	213	6,466	- .53
Berlin	1,357,368	202	6,719	- .84	212	6,403	- .54
Raynham	2,803,596	444	6,314	- .90	443	6,329	- .55

Group IV - Towns

Town	Valuation as at Jan.1,1952	All Children 7-16	Proposed Equalized Valuation per pupil	Scaled Score	Net Average Membership	Old Eq. Valuation per pupil	Scaled Score
	Proposed Equalized Valuation						
Sterling	$2,684,700	305	$ 8,802	- .53	428	$ 6,302	- .55
Hanson	4,183,000	563	7,429	- .74	670	6,243	- .56
Dunstable	876,950	94	7,201	- .77	110	6,154	- .58
E.Brookfield	1,403,030	181	7,751	- .69	228	6,154	- .58
Sturbridge	2,627,452	472	5,566	-1.01	428	6,139	- .58
Oakham	478,235	64	7,472	- .73	78	6,131	-.58
Wales	572,436	95	6,025	- .94	95	6,026	- .60
Freetown	2,242,475	344	6,518	- .87	381	5,886	- .63
Southampton	1,516,546	239	6,345	- .90	258	5,878	- .63
Norfolk	2,213,117	301	7,352	- .75	378	5,855	- .63
Westminster	2,607,250	381	6,843	- .82	449	5,807	- .64
Colrain	1,648,885	229	7,200	- .77	287	5,745	- .65
Ashburnham	2,258,942	398	5,675	-1.00	395	5,719	- .65
Leverett	774,070	116	6,673	- .85	136	5,692	- .65
Wendell	376,815	81	4,652	-1.15	67	5,624	- .67
W. Newbury	1,520,215	405	3,753	-1.28	272	5,589	- .67
Acushnet	3,180,305	723	4,398	-1.19	579	5,493	- .69
Dudley	3,307,275	745	4,439	-1.17	604	5,476	- .69
Middleton	2,464,738	369	6,679	- .84	463	5,323	- .72
Boylston	1,670,578	260	6,445	- .88	316	5,287	- .72
W. Brookfield	1,802,792	277	6,508	- .87	345	5,225	- .74
Boxborough	498,969	77	6,480	- .88	97	5,144	- .75
Phillipston	816,040	136	6,000	- .96	159	5,132	- .75
Rehoboth	3,751,080	649	5,779	- .98	746	5,028	- .77
Hubbardston	984,423	160	6,152	- .93	196	5,02 3	- .77
N. Reading	4,634,773	786	5,896	- .96	927	5,000	- .77
Millville	1,053,234	197	5,346	-1.05	213	4,945	- .77
Hinsdale	1,423,014	249	5,714	- .99	292	4,873	- .79
Rowley	1,778,631	306	5,812	- .98	373	4,768	- .79
Hampden	1,412,298	269	5,250	-1.06	297	4,755	- .79
Lanesborough	1,810,483	335	5,404	-1.04	401	4,515	- .85
Tyngsborough	1,858,945	290	4,418	-1.17	420	4,426	- .87
Washington	,229,781	52	4,418	-1.17	52	4,419	- .87
Warwick	444,803	85	5,072	-1.09	103	4,319	- .89
Savoy	294,225	58	5,072	-1.09	69	4,264	- .90
Cheshire	1,529,480	307	4,982	-1.10	368	4,156	- .91
Royalston	871,258	179	4,861	-1.12	211	4,129	- .92
Berkley	964,401	212	4,549	-1.17	237	4,069	- .92
Clarksburg	762,655	206	3,702	-1.29	206	3,702	- .99
Upton	1,623,150	350	4,637	-1.15	449	3,615	-1.00

APPENDIX 4

"KEY DISTRICT" FOUNDATION FORMULAE

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	$200 Foundation Proposal State Aid	$200 Foundation Proposal State Scaled Score	$150 Foundation Proposal Local Contribution	$150 Foundation Proposal State Aid	$150 Foundation Proposal State Scaled Score
1	$126,517	Cosnold						
2	37,638	Chilmark						
3	28,818	Tolland						
4	27,483	Chatham						
5	27,410	Dennis						
6	26,602	Monterey						
7	26,094	Nantucket						
8	24,844	Brookline						
9	22,722	W. Tisbury	$183.31	$16.69	-2.475	$137.64	$12.43	-3.024
10	22,744	Truro	183.08	16.92	-2.469	137.37	12.63	-3.021
11	22,678	Harwich	181.75	18.25	-2.434	136.47	12.58	-3.019
12	22,361	Monroe	180.00	20.00	-2.388	135.06	12.94	-3.009
13	22,267	Eastham	179.25	20.75	-2.368	134.49	15.51	-2.912
14	22,224	Hull	178.90	21.10	-2.359	134.23	15.76	-2.902
15	21,672	Wellfleet	174.46	25.54	-2.242	130.90	19.10	-2.775
16	21,571	Manchester	173.65	26.35	-2.221	130.29	19.71	-2.751
17	21,111	Cambridge	169.94	30.06	-2.123	127.51	22.49	-2.646
18	20,842	Mashpee	167.78	32.22	-2.066	125.89	24.11	-2.584
19	20,833	Rowe	167.70	32.30	-2.064	125.83	24.17	-2.584
20	20,611	Edgartown	165.92	34.08	-2.017	124.49	25.51	-2.531
21	20,491	Orleans	164.95	35.05	-1.990	123.77	26.23	-2.504
22	20,273	Barnstable	163.20	36.80	-1.946	122.45	27.55	-2.454
23	19,776	Webster	159.20	40.80	-1.841	119.45	30.55	-2.340
24	19,698	Oak Bluffs	158.57	41.43	-1.824	118.98	31.02	-2.322
25	19,548	Brewster	157.36	42.64	-1.792	118.07	31.93	-2.287
26	19,452	Bourne	156.89	43.11	-1.780	117.49	32.51	-2.265
27	19,326	Gay Head	155.57	44.43	-1.745	116.73	33.27	-2.236
28	18,708	Yarmouth	150.60	49.40	-1.614	113.00	37.00	-2.094
29	18,129	Belmont	145.94	54.06	-1.489	109.50	40.50	-1.961
30	17,927	Boston	144.31	55.69	-1.449	108.28	41.72	-1.915
31	17,792	Marshfield	143.23	56.77	-1.420	107.46	42.54	-1.884
32	17,764	Newton	143.00	57.00	-1.414	107.29	42.71	-1.877
33	17,142	W. Springfield	137.99	62.01	-1.283	103.54	46.46	-1.738
34	17,133	Wellesley	137.92	62.08	-1.281	103.48	46.52	-1.733
35	16,899	Holyoke	136.04	63.96	-1.231	102.07	47.93	-1.679
36	16,759	Granville	134.91	65.09	-1.202	101.22	48.78	-1.647
37	16,469	Salem	132.66	67.34	-1.42	99.53	50.47	-1.583
38	16,460	Sandisfield	132.50	67.50	-1.138	99.41	50.59	-1.578
39	16,440	Falmouth	132.34	67.66	-1.34	99.30	50.70	-1.574
40	16,344	Wenham	131.59	68.43	-1.114	98.72	51.28	-1.552

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal			$150 Foundation Proposal		
			Local Contribution	State aid	State Scaled Score	Local Contribution	State aid	State Scaled Score
41	$ 16,280	Sandwich	$130.89	$69.11	-1.096	$98.21	$51.79	-1.532
42	16,259	Fitchburg	130.88	69.12	-1.096	98.20	51.80	-1.532
43	16,028	Provincetown	129.02	70.98	-1.064	97.71	52.29	-1.486
44	15,851	Springfield	127.60	72.40	-1.009	95.74	54.26	-1.439
45	15,744	Tisbury	126.74	73.26	- .987	95.09	54.91	-1.414
46	15,644	Dover	126.10	73.90	- .970	94.49	55.51	-1.391
47	15,185	Everett	122.24	77.76	- .868	91.72	58.28	-1.286
48	15,054	Weston	121.18	78.82	- .841	90.93	59.07	-1.256
49	15,051	Cohasset	121.16	78.84	- .840	90.91	59.09	-1.255
50	14,803	Stockbridge	119.16	80.84	- .787	90.90	59.10	-1.255
51	14,774	Haverhill	118.93	81.07	- .781	89.41	60.59	-1.98
52	14,766	Plainsfield	118.86	81.14	- .780	89.23	60.77	-1.191
53	14,683	Winchester	118.20	81.80	- .762	89.19	60.81	-1.90
54	14,654	Easthampton	117.96	82.04	- .756	88.69	61.31	-1.171
55	14,358	Scituate	115.58	84.42	- .693	88.51	61.49	-1.164
56	14,289	Milton	115.02	84.98	- .679	86.72	63.28	-1.096
57	14,132	Duxbury	113.76	86.24	- .645	86.31	63.69	-1.080
58	13,788	Otis	110.91	89.09	- .570	86.36	64.64	-1.044
59	13,597	Marion	109.46	90.54	- .532	83.22	66178	- .963
60	13,587	Tyringham	109.38	90.62	- .530	82.13	67.87	- .921
61	13,497	Swampscott	108.65	91.35	- .511	82.07	67.93	- .919
62	13,422	Somerset	108.05	91.95	- .495	81.51	68.48	- .898
63	13,409	Plymouth	107.94	92.06	- .492	81.07	68.93	- .881
64	13,295	Watertown	107.02	92.98	- .468	80.99	69.01	- .878
65	13,212	Norwood	106.36	93.64	- .451	80.30	69.70	- .852
66	13,210	Longmeadow	106.34	93.66	- .450	79.80	70.20	- .833
67	13,175	Lowell	106.06	93.94	- .443	79.79	70.21	- .832
68	13,149	Gardner	105.85	94.15	- .437	79.58	70.42	- .818
69	13,146	Lawrence	105.83	94.17	- .437	79.42	70.58	- .818
70	13,132	Hamilton	105.71	94.29	- .434	79.40	70.60	- .815
71	13,051	Framingham	105.91	94.09	- .432	79.47	70.53	- .820
72	12,900	Egremont	103.85	96.15	- .385	77.92	72.08	- .761
73	12,874	Lynn	103.64	96.36	- .380	77.76	72.24	- .755
74	12,809	Pittsfield	103.11	96.89	- .365	77.37	72.63	- .741
75	12,764	Weymouth	102.75	97.25	- .356	77.09	72.91	- .730
76	12,745	Worcester	102.88	97.72	- .344	76.74	73.26	- .717
77	12,580	Quincy	100.87	99.13	- .306	75.68	74.32	- .676
78	12,516	Kingston	100.75	99.25	- .303	75.60	74.40	- .673
79	12,489	Marblehead	100.54	99.46	- .298	75.43	74.57	- .667
80	12,478	Lynnfield	100.45	99.55	- .295	75.37	74.63	- .665

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	State aid	State Scaled Score	$150 Foundation Proposal Local Contribution	State aid	State Scaled Score
81	$12,341	Andover	$99.35	$100.65	- .266	$ 74.54	$74.46	- .671
82	12,291	N. Andover	98.94	101.06	- .256	74.24	75.76	- .633
83	12,115	Alford	97.53	102.47	- .219	73.17	76.83	- .581
84	11,992	Westfield	96.54	103.46	- .193	72.43	77.57	- .553
85	11,880	Needham	95.39	104.61	- .162	71.57	78.43	- .520
86	11,732	Paxton	94.44	105.56	- .137	70.86	79.14	- .493
87	11,716	Lexington	94.31	105.69	- .134	70.76	79.24	- .489
88	11,701	Greenfield	94.19	105.81	- .131	70.67	79.33	- .486
89	11,655	Lancaster	93.82	106.18	- .121	70.40	79.60	- .476
90	11,525	Northampton	92.78	107.22	- .094	69.61	80.39	- .448
91	11,527	New Marlborough	92.71	107.29	- .092	69.56	80.44	- .442
92	11,463	Waltham	92.28	107.72	- .081	69.24	80.76	- .432
93	11,385	Malden	91.65	108.35	- .064	68.77	81.23	- .414
94	11,322	Deerfield	91.14	108.86	- .051	68.38	81.62	- .399
95	11,268	Florida	90.72	109.29	- .039	68.06	81.94	- .387
96	11,223	Rockport	90.35	109.65	- .030	67.79	82.21	- .376
97	11,175	Gloucester	89.96	110.04	- .019	67.50	82.50	- .365
98	11,123	Beverly	89.54	110.46	- .008	67.18	82.82	- .353
99	11,101	Arlington	89.36	110.64	- .004	67.05	82.95	- .348
100	10,071	Hatfield	89.12	110.88	+ .002	66.87	83.13	- .342
101	11,063	Leominster	89.06	110.94	- .003	66.82	83.18	- .340
102	10,990	N. Adams	88.47	111.53	+ .019	66.38	83.62	- .323
103	10,978	Montgomery	88.37	111.63	+ .021	66.31	83.69	- .335
104	10,937	Buckland	88.04	111.96	+ .025	66.06	83.94	- .311
105	10,928	Shutesbury	87.94	112.06	+ .033	65.99	84.01	- .308
106	10,926	Petersham	87.95	112.05	+ .024	65.99	84.01	- .319
107	10,908	Dedham	87.81	112.19	+ .036	65.88	84.12	- .304
108	10,875	Carver	87.54	112.46	+ .043	65.82	84.18	- .302
109	10,837	New Bedford	87.24	112.76	+ .051	65.69	84.31	- .297
110	10,817	Sherborn	87.08	112.92	+ .055	65.46	84.54	- .288
111	10,796	Wareham	86.91	113.09	+ .060	65.34	84.66	- .283
112	10,759	Fall River	86.75	113.25	+ .064	65.21	84.79	- .278
113	10,742	Harvard	86.54	113.46	+ .069	65.09	84.91	- .274
114	10,727	Norwell	86.47	113.53	+ .071	64.93	85.07	- .268
115	10,686	Reading	86.35	113.65	+ .074	64.79	85.12	- .266
116	10,659	Somerville	86.02	113.98	+ .083	64.54	85.46	- .253
117	10,640	Melrose	85.65	114.35	+ .089	64.27	85.72	- .247
118	10,629	Lincoln	85.56	114.44	+ .095	64.20	85.80	- .240
119	10,620	Worthington	85.49	114.51	+ .097	64.14	85.86	
120	10,589	Medford	85.24	114.76	+ .104	63.96	86.04	- .231

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	State Aid	State Scaled Score	$150 Foundation proposal Local Contribution	State Aid	State Scaled Score
121	$10,549	Attleborough	$84.92	$115.08	+ .112	$63.72	$86.28	- .222
122	10,540	Walpole	84.85	115.15	+ .114	63.66	86.34	- .218
123	10,516	Russell	84.65	115.35	+ .119	63.52	86.48	- .214
124	10,380	Newbury	83.56	116.44	+ .122	62.70	87.30	- .183
125	10,378	Nahant	83.52	116.48	+ .123	62.67	87.33	- .182
126	10,326	E. Longmeadow	83.20	116.80	+ .157	62.43	87.57	- .173
127	10,283	Methuen	82.77	117.23	+ .169	62.10	87.90	- .160
128	10,232	Holland	82.37	117.63	+ .179	61.80	88.20	- .149
129	10,177	Hingham	81.92	118.08		61.47	88.53	- .132
130	10,169	Southbridge	81.78	118.22	+ .195	61.36	88.64	- .132
131	10,133	Canton	81.57	118.43	+ .200	61.20	88.80	- .126
132	10,096	Mattapoisett	81.27	118.73	+ .208	60.97	89.03	- .117
133	10,080	Woburn	81.02	118.98	+ .215	60.79	89.21	- .110
134	10,061	Topsfield	80.92	119.09	+ .218	60.71	89.29	- .107
135	10,019	Concord	80.65	119.35	+ .224	60.51	89.49	- .100
136	10,014	Charlemont	80.61	119.39	+ .225	60.48	89.52	- .099
137	9,895	Revere	79.65	120.35	+ .251	59.77	90.23	- .072
138	9,877	Westwood	79.51	120.49	+ .254	59.66	90.34	- .068
139	9,839	Dartmouth	79.20	120.80	+ .263	59.43	90.57	- .059
140	9,830	Halifax	79.13	120.87	+ .264	59.37	90.63	- .057
141	9,743	Gt.Barrington	78.43	121.57	+ .283	58.85	91.15	- .0037
142	9,690	Middlefield	78.00	122.00	+ .294	53.53	91.47	- .0025
143	9,590	Wrentham	77.20	122.80	+ .315	57.92	92.08	- .0019
144	9,575	Ipswich	77.08	122.92	+ .318	57.83	92.17	+ .0015
145	9,566	Wakefield	77.00	123.00	+ .320	57.78	92.22	+ .0034
146	9,563	Westport	76.98	123.02	+ .321	57.76	92.24	+ .0041
147	9,560	Clinton	76.96	123.04	+ .321	57.74	92.26	+ .0049
148	9,512	Brockton	76.57	123.43	+ .332	57.45	92.55	+ .0159
149	9,503	Shelburne	76.50	123.50	+ .334	57.40	92.60	+ .0178
150	9,406	Stoneham	75.72	124.28	+ .354	56.81	93.19	+ .0402
151	9,403	Peabody	75.69	124.31	+ .355	56.79	93.21	+ .0410
152	9,382	Amesbury	75.52	124.48	+ .359	56.67	93.33	+ .0452
153	9,375	Chicopee	75.47	124.53	+ .361	56.62	93.37	+ .0471
154	9,360	Blandford	75.38	124.65	+ .364	56.53	93.47	+ .0509
155	9,355	Amherst	75.31	124.69	+ .365	56.50	93.50	+ .0520
156	9,291	Lenox	74.79	125.21	+ .378	56.12	93.88	+ .0665
157	9,231	Boxford	74.31	125.69	+ .391	55.76	94.24	+ .0801
158	9,178	Sunderland	73.88	126.12	+ .402	55.44	94.56	+ .092
159	9,123	Erving	73.44	126.56	+ .414	55.10	94.90	+ .105
160	9,089	Braintree	73.17	126.83	+ .421	54.90	95.10	+ .112

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	State Aid	State Scaled Score	$150 Foundation Proposal Local Contribution	State aid	State Scaled Score
161	$9,077	Marlborough	$ 73.07	$126.93	+ .424	$54.83	$95.17	+ .115
162	9,000	Williamstown	72.45	127.55	+ .440	54.36	95.64	+ .133
163	8,994	Hawley	72.40	127.60	+ .444	54.32	95.68	+ .135
164	8,928	Wilbraham	71.87	128.13	+ .455	53.93	96.07	+ .149
165	8,880	N. Attleboro	71.48	128.52	+ .466	53.64	96.36	+ .160
166	8,870	South Hadley	71.40	128.60	+ .468	53.57	96.43	+ .163
167	8,870	Chelsea	71.40	128.60	+ .468	53.15	96.85	+ .164
168	8,799	New Ashford	70.83	129.17	+ .483	53.11	96.89	+ .180
169	8,794	Ayer	70.79	129.21	+ .484	53.11	96.90	+ .181
170	8,693	Milford	69.98	130.02	+ .505	52.51	97.49	+ .203
171	8,686	Winthrop	69.92	130.08	+ .506	52.46	97.54	+ .205
172	8,594	Littleton	69.18	130.82	+ .526	51.91	98.09	+ .226
173	8,560	N. Brookfield	68.91	131.09	+ .533	51.70	98.30	+ .234
174	8,490	Ware	68.34	131.66	+ .548	51.28	98.72	+ .250
175	8,477	Windsor	68.24	131.76	+ .551	51.20	98.80	+ .253
176	8,451	Sheffield	68.03	131.97	+ .556	51.04	98.96	+ .259
177	8,420	Bedford	67.78	132.22	+ .563	50.86	99.14	+ .266
178	8,374	Pembroke	67.41	132.59	+ .573	50.58	99.42	+ .277
179	8,367	Brookfield	67.35	132.65	+ .574	50.53	99.47	+ .280
180	8,360	Hudson	67.30	132.70	+ .575	50.49	99.51	+ .358
181	8,348	Ashfield	67.20	132.80	+ .578	50.42	99.58	+ .288
182	8,319	Peru	66.90	133.10	+ .586	50.19	99.81	+ .291
183	8,293	Taunton	66.76	133.24	+ .590	50.09	99.91	+ .295
184	8,220	Seekonk	66.17	133.83	+ .606	49.65	100.35	+ .335
185	8,191	Carlisle	65.94	134.06	+ .611	49.47	100.53	+ .342
186	8,178	Montague	65.83	134.17	+ .614	49.40	100.60	+ .344
187	8,124	Sharon	65.40	134.60	+ .625	49.06	100.93	+ .334
188	8,072	Bolton	64.98	135.02	+ .636	48.75	100.20	+ .306
189	8,057	New Braintree	64.86	135.14	+ .640	48.63	101.34	+ .349
190	7,943	Wayland	63.94	136.06	+ .664	47.97	102.03	+ .376
191	7,935	Chesterfield	63.88	136.12	+ .665	47.93	102.07	+ .377
192	7,920	Westhampton	63.76	137.24	+ .669	47.84	102.16	+ .381
193	7,886	Goshen	63.48	136.52	+ .676	47.63	102.37	+ .389
194	7,872	Agawam	63.37	136.63	+ .679	47.55	102.45	+ .392
195	7,829	Danvers	63.02	136.98	+ .688	47.29	102.71	+ .402
196	7,812	Rockland	62.89	137.11	+ .691	47.18	102.82	+ .406
197	7,763	Acton	62.49	137.51	+ .702	46.89	103.11	+ .417
198	7,758	Ludlow	62.45	137.55	+ .703	46.86	103.14	+ .418
199	7,743	Newburyport	62.33	137.67	+ .706	46.77	103.23	+ .421
200	7,643	Ashland	62.33	137.67	+ .706	46.77	103.23	+ .421

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local contribution	State aid	State Scaled Score	$150 Foundation Proposal Local Contribution	State aid	State Scaled Score
201	$ 7,632	Heath	62.24	$ 137.76	+ .709	$46.70	$103.30	+ .484
202	7,628	Becket	61.41	138.59	+ .730	46.07	103.93	+ .448
203	7,626	Natick	61.39	138.61	+ .732	46.06	103.94	+ .448
204	7,538	Tewksbury	60.68	139.32	+ .750	45.53	104.77	+ .468
205	7,503	Richmond	60.40	139.60	+ .757	45.32	104.68	+ .476
206	7,470	Gill	60.13	139.97	+ .767	45.12	104.88	+ .484
207	7,427	Fairhaven	59.79	140.21	+ .773	44.86	105.14	+ .494
208	7,416	Shrewsbury	59.70	140.30	+ .775	44.79	105.21	+ .497
209	7,408	Medfield	59.63	140.37	+ .777	44.74	105.26	+ .498
210	7,395	Adams	59.51	140.49	+ .780	44.65	105.35	+ .501
211	7,380	Whately	59.41	140.49	+ .780	44.58	105.42	+ .505
212	7,367	Hancock	59.30	140;70	+ .786	44.50	105.50	+ .508
213	7,317	Southborough	58.90	141.10	+ .796	44.19	105.81	+ .519
214	7,307	Cummington	58.82	141.18	+ .798	44.13	105.87	+ .522
215	7,275	Bellingham	58.56	141.44	+ .805	43.94	106.06	+ .529
216	7,256	Randolph	58.41	141.59	+ .809	43.83	106.17	+ .533
217	7,230	Foxborough	58.20	141.80	+ .815	43.67	106.33	+ .539
218	7,181	Stoughton	57.81	142.19	+ .825	43.37	106.67	+ .551
219	7,179	Hadley	57.79	142.21	+ .826	43.37	106.67	+ .551
220	7,114	Lunenburg	57.27	142.73	+ .839	42.97	107.03	+ .566
221	7,093	Dalton	57.10	142.90	+ .844	42.84	107.16	+ .571
222	7,080	Lakeville	56.99	143.01	+ .847	42.77	107.24	+ .574
223	7,062	E. Bridgewater	56.85	143.15	+ .850	42.65	107.35	+ .578
224	6,974	Franklin	56.14	143.86	+ .869	42.12	107.88	+ .598
225	6,964	Groton	56.03	143.97	+ .872	42.06	107.94	+ .600
226	6,964	Westborough	56.03	143.97	+ .872	42.06	107.94	+ .601
227	6,960	Essex	56.02	143.98	+ .872	42.04	107.96	+ .600
228	6,956	Millis	56.00	144.00	+ .873	4201	107.99	+ .602
229	6,945	Hollisten	55.91	144.09	+ .875	41.95	108.05	+ .604
230	6,926	Salisbury	55.75	144.25	+ .879	41.83	108.17	+ .609
231	6,918	Medway	55.79	144.31	+ .881	41.78	108.22	+ .611
232	6,915	Granby	55.67	144.38	+ .881	41.78	108.22	+ .611
233	6,873	Conway	55.33	144.67	+ .890	41.50	108.49	+ .621
234	6,811	Huntington	54.83	145.17	+ .903	41.14	108.86	+ .635
235	6,795	W.Bridgewater	54.70	145.30	+ .907	41.04	108.96	+ .639
236	6,790	Rochester	54.66	145.34	+ .908	41.01	108.99	+ .640
237	6,785	Lee	54.62	145.38	+ .909	40.98	109.02	+ .641
238	6,782	Dracut	54.60	145.40	+ .909	40.96	109.04	+ .642
239	6,753	Shirley	54.36	145.64	+ .916	40.79	109.21	+ .649
240	6,741	Hanover	54.29	145.71	+ .918	40.73	109.21	+ .649

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation proposal Local contribution	State aid	State Scaled score	$150 Foundation Local contribution	State aid	Proposal State Scaled Score
241	$6,717	Chelmsford	$54.07	$145.93	+ .923	$40.57	$109.43	+ .657
242	6,688	Southwick	53.84	146.16	+ .929	40.40	109.60	+ .663
243	6,658	Hopedale	53.60	146.40	+ .936	40.21	109.79	+ .671
244	6,655	Blackstone	53.57	146.43	+ .937	40.20	109.80	+ .671
245	6,633	Palmer	53.40	146.60	+ .941	40.06	109.96	+ .677
246	6,632	Bridgewater	53.39	146.61	+ .941	40.06	109.94	+ .676
247	6,603	Mansfield	53.15	146.85	+ .948	39.88	110.12	+ .683
248	6,596	Leyden	53.10	146.90	+ .949	39.84	110.16	+ .685
249	6,587	W.Stockbridge	53.03	146.97	+ .951	39.79	110.21	+ .687
250	6,578	Pelham	52.95	147.05	+ .953	39.73	110.27	+ .693
251	6,532	Uxbridge	52.58	147.42	+ .963	39.45	110.55	+ .699
252	6,532	Plympton	52.58	147.42	+ .963	39.45	110.55	+ .699
253	6,502	Billerica	52.34	147.66	+ .969	39.27	110.73	+ .706
254	6,499	Swansea	52.32	147.68	+ .969	39.25	110.75	+ .707
255	6,482	Warren	52.18	147.82	+ .973	39.15	110.85	+ .711
256	6,466	Princeton	52.05	147.95	+ .976	39.05	110.95	+ .717
257	6,458	Dighton	51.99	148.01	+ .978	39.00	111.00	+.718
258	6,413	Northfield	51.62	148.38	+ .988	38.73	111.27	+ .727
259	6,403	Berlin	51.54	148.46	+ .989	38.67	111.33	+ .729
260	6,335	Whitman	51.00	149.00	+1.004	38.68	111.34	+ .729
261	6,329	Raynham	50.95	149.05	+1.009	38.26	111.74	+ .745
262	6,302	Sterling	50.75	149.27	+1.011	38.23	111.77	+ .746
263	6,277	Saugus	50.55	149.47	+1.017	37.91	112.09	+ .754
264	6,277	Sudbury	50.55	149.47	+1.017	37.91	112.09	+ .766
265	6,243	Hanson	50.26	149.74	+1.024	37.71	112.29	+ .767
266	6,154	Dunstable	49.54	150.46	+1.043	37.17	118.83	+ .786
267	6,154	East Brookfield	49.54	150.46	+1.043	37.17	112.83	+ .886
268	6146	Stow	49.48	150.52	+1.044	37.12	112.88	+ .788
269	6,145	Rutland	49.47	150.53	+1.044	37.12	112.88	+ .788
270	6,139	Sturbridge	49.41	150.59	+1.046	37.08	112.92	+ .790
271	6,131	Oakham	49.35	150.65	+1.048	37.03	112.97	+ .791
272	6,125	Athol	49.31	150.69	+1.049	37.00	113.00	+ .793
273	6,113	Methbridge	49.21	150.79	+1.051	36.92	113.08	+ .796
274	6,084	Grafton	48.97	151.03		36.40	113.60	+ .815
275	6,088	W.Boylston	49.01	150.99	+1.056	36.78	113.22	+ .801
276	6,026	Wales	48.51	151.49	+1.070	36.40	113.60	+ .815
277	5,886	Freetown	47.38	152.62	+1.099	35.55	114.45	+ .848
278	5,876	Southampton	47.32	152.68	+1.101	35.50	114.50	+ .850
279	5,868	Middleborough	47.24	152.76	+1.103	34.44	114.56	+ .852
280	5,855	Norfolk	47.13	152.87	+1.106	35.36	114.64	+ .853

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	State aid	State Scaled score	$150 Foundation proposal Local Contribution	State aid	State Scaled score
281	$5854	Bernardston	$47.12	$152.88	+1.106	$35.36	$114.64	+ .855
282	5852	Hopkinton	47.11	152.89	+1.106	35.35	114.65	+ .855
283	5846	New Salem	47.06	152.94	+1.108	35.31	114.69	+ .857
284	5845	Plainville	47.05	152.95	+1.108	35.30	114.70	+ .857
285	5807	Westminster	46.75	153.25	+1.116	35.07	114.93	+ .866
286	5792	Townsend	46.63	153.37	+1.119	34.98	115.02	+ .869
287	5788	Abington	46.59	153.41	+1.120	34.96	115.04	+ .870
288	5745	Colrain	46.25	153.75	+1.89	34.70	115.30	+ .880
289	5726	Mendon	46.09	153.91	+1.33	34.59	115.41	+ .884
290	5725	Maynard	46.08	153.92	+1.34	34.58	115.42	+ .885
291	5719	Ashburnham	46.04	153.96	+1.35	34.54	115.46	+ .886
292	5692	Leverett	45.82	154.18	+1.140	34.38	115.62	+ .892
293	5681	Hardwich	45.50	154.80	+1.149	34.14	115.86	+ .901
294	5668	Wexford	45.29	154.71	+1.154	33.98	116.02	+ .907
295	5624	Wendell	45.27	154.73	+1.155	33.97	116.03	+ .908
296	56.20	Spencer	45.24	154.76	+1.156	33.94	116.06	+ .909
297	55.89	W.Newbury	44.99	155.01	+1.162	33.76	116.24	+ .916
298	55.83	Auburn	44.94	155.06	+1.164	33.72	116.28	+ .917
299	55.26	Ashby	44.48	155.52	+1.176	33.38	116.62	+ .930
300	54.93	Acushnet	44.22	155.78	+1.182	33.18	116.82	+ .938
301	5476	Dudley	44.08	155.92	+1.186	33.08	116.92	+ .942
302	5461	Easton	43.96	156.04	+1.189	32.98	117.02	+ .945
303	5384	Leicester	43.34	156.66	+1.206	32.52	117.48	+ .963
304	5360	Orange	43.15	156.85	+1.211	32.37	117.63	+ .969
305	5358	Wilmington	43.08	156.92	+1.212	32.33	117.62	+ .970
306	5323	Middleton	42.85	157.15	+1.219	32.15	117.85	+ .977
307	5287	Boylston	42.56	157.44	+1.226	31.93	118.07	+ .985
308	5282	Georgetown	42.52	157.48	+1.227	31.90	118.10	+ .986
309	5273	Chester	42.44	157.56	+1.229	31.84	118.16	+ .989
310	5225	W.Brookfield	42.06	157.94	+1.238	31.56	118.44	+ .999
311	5154	Williamsburg	41.49	158.51	+1.254	31.13	118.87	+1.016
312	5144	Boxborough	41.41	158.59	+1.256	31.07	118.93	+1.018
313	5132	Phillipston	41.22	158.78	+1.261	30.93	119.07	+1.023
314	5121	Barre	40.47	159.53	+1.281	30.37	119.63	+1.045
315	5028	Rehoboth	40.47	159.53	+1.281	30.37	119.63	+1.045
316	5023	Hubbardston	40.44	159.56	+1.282	30.34	119.66	+1.046
317	5003	Pepperell	40.27	159.73	+1.286	30.22	119.78	+1.050
318	5000	N.Reading	40.25	159.75	+1.287	30.20	119.80	+1.051
319	4968	Holden	39.99	160.01	+1.294	30.00	120.00	+1.059
320	4957	Monson	39.90	160.10	+1.294	29.94	120.06	+1.061

"KEY DISTRICT" FOUNDATION FORMULAE

	Equalized Valuation	Municipality	$200 Foundation Proposal Local Contribution	State aid	Scaled Score	$150 Foundation Proposal Local Contribution	State aid	Scaled score
321	$ 4945	Millville	$ 39.80	$ 160.20	+1.299	$29.87	$120.13	+1.064
322	4939	Winchenden	39.76	160.24	+1.300	29.83	120.17	+1.065
323	4935	Avon	39.73	160.27	+1.301	29.81	120.19	+1.066
324	4929	Holbrook	39.68	160.32	+1.302	29.77	120.23	+1.067
325	4883	Norton	39.31	160.69	+1.312	29.49	120.51	+1.078
326	4873	Hinsdale	39.23	160.77	+1.314	29.43	120.57	+1.080
327	4861	Burlington	39.13	160.87	+1.316	29.36	120.64	+1.083
328	4856	Merrimac	39.09	160.91	+1.317	29.33	120.67	+1.084
329	4768	Fowley	38.38	161.62	+1.336	28.80	121.20	+1.104
330	4755	Hampden	38.28	161.72	+1.339	28.72	121.28	+1.107
331	4746	Douglas	38.21	161.79	+1.341	28.67	121.33	+1.109
332	4722	Brimfield	38.01	161.99	+1.346	28.52	121.48	+1.115
333	4667	Milbury	37.57	162.43	+1.357	28.19	121.81	+1.333
334	4575	Lanesborough	36.83	163.17	+1.377	27.63	122.37	+1.149
335	4557	Templeton	36.68	163.32	+1.381	27.52	122.48	+1.153
336	4471	Northborough	35.99	164.01	+1.399	27.00	123.00	+1.173
337	4426	Tyngsborough	35.63	164.37	+1.408	26.73	123.27	+1.183
338	4429	Washington	35.57	164.43	+1.410	26.69	123.31	+1.186
339	4319	Warwick	34.77	165.23	+1.431	26.09	123.91	+1.207
340	4264	Savoy	34.33	165.67	+1.443	25.75	124.25	+1.220
341	4156	Cheshire	33.46	166.54	+1.465	25.10	124.90	+1.245
342	4145	Sutton	33.37	166.63	+1.468	25.04	124.96	+1.247
343	4142	Groveland	33.34	166.66	+1.469	25.02	124.98	+1.248
344	4129	Royalston	33.24	166.76	+1.471	24.94	125.08	+1.252
345	4069	Berkley	32.76	167.24	+1.484	24.58	125.42	+1.265
346	4863	Oxford	31.10	168.90	+1.528	23.33	126.67	+1.312
347	3843	Belchertown	30.94	169.06	+1.532	23.21	126.79	+1.317
348	3702	Clarksburg	29.80	170.20	+1.562	22.36	127.64	+1.349
349	3702	Charlton	29.80	170.20	+1.562	22.36	127.64	+1.349
350	3615	Upton	29.10	170.90	+1.843	21.83	128.17	+1.371

APPENDIX 5

COMPREHENSIVE DATA

COMPREHENSIVE DATA

GROUP I - Page 1

Municipality	Boston	Worcester	Springfield	Cambridge	Fall River	New Bedford	Somerville	Lynn	Lowell	Quincy	Newton	Lawrence	Medford	Brockton	Malden	Holyoke
Total school support	289.13	228.82	263.83	281.28	224.41	229.27	214.58	268.09	271.39	226.10	287.61	248.47	244.17	176.88	241.05	250.85
City rank	2	23	7	4	27	21	29	6	5	25	3	12	15	39	17	11
State rank	4	148	73	49	164	144	189	66	62	158	45	103	115	298	119	97
City scaled score	+ 1.84	- .13	+ 1.02	+ 1.59	- .27	- .11	- .59	+ 1.15	+ 1.26	- .22	+ 1.79	+ .52	+ .37	1.82	+ .27	+ .59
State scaled score	+ 1.04	.04	+ .58	+ .90	- .10	- .02	- .28	+ .67	+ .72	- .07	+ 1.00	+ .32	+ .25	.94	.19	+ .35
Local School support	258.89	198.76	212.79	247.24	164.26	176.74	163.23	213.72	196.80	194.71	256.49	187.85	201.34	137.13	198.34	201.13
City rank	1	13	6	3	28	26	30	5	15	16	2	18	9	34	14	10
State rank	8	58	33	11	110	96	115	31	62	64	9	73	49	175	59	51
City scaled score	+ 2.29	+ .53	+ .94	+ 1.94	.48	.11	.51	+ .97	+ .47	+ .41	+ 2.21	+ 2.10	+ .64	1.23	+ .52	+ .64
State scaled score	+ 2.20	+ 1.00	+ 1.29	+ 1.98	+ .32	+ .57	+ .36	+ 1.31	+ .97	+ .92	+ 2.16	+ .79	+ 1.10	- .24	+ 1.00	+ 1.10
State aid per pupil	21.08	23.02	17.51	22.86	48.72	36.30	40.73	26.71	63.48	19.75	12.25	50.04	32.07	28.38	39.52	26.87
City rank	35	32	37	34	3	20	13	30	1	36	39	2	23	27	16	29
State rank	325	319	335	321	188	263	238	309	122	330	341	181	283	301	247	307
City scaled score	- 1.22	- 1.04	- 1.54	- 1.06	+ 1.29	+ .16	+ .56	.71	+ 3.61	1.34	- 2.02	+ 1.40	- .22	.56	+ .45	.70
State scaled score	- .87	- .83	- .95	- .85	.35	- .58	- .50	.78	- .06	- .91	1.05	- .31	.66	- .74	- .52	.78
Equalized valuation per pupil	17,927	12,745	15,851	21,111	10,759	10,837	10,659	12,874	13,175	12,530	17,764	13,146	10,589	9,512	11,385	16,899
City rank	2	15	7	1	26	25	27	13	10	16	3	12	29	33	20	4
State rank	30	76	44	17	112	109	116	73	67	77	32	69	120	148	93	35
City scaled score	+ 2.62	+ .24	+ 1.15	+ 4.03	- .65	.61	- .69	+ .34	+ .44	+ .14	+ 2.51	+ .42	- .72	1.21	- .36	2.1.
State scaled score	+ 1.66	+ .63	+ 1.25	+ 2.29	+ .23	+ .25	+ .21	+ .77	+ .71	+ .59	+ 1.63	+ .71	.20	- .014	+ .36	1.46
Experimental state aid	19.63	24.25	17.96	19.10	36.69	33.92	37.02	25.26	39.94	21.87	13.74	35.62	34.03	31.54	35.25	20.99
City rank	35	32	38	37	13	21	11	31	8	33	39	15	20	24	16	34
City scaled score	1.27	- .61	1.44	- 1.32	+ .43	+ .16	+ .47	- .71	+ .66	- 1.05	- 1.86	+ .33	+ .17	- .83	.29	1.38
Experimental valuation per pupil	16,700	13,427	16,263	17,646	8,102	10,130	9,690	12,177	8,334	13,877	19,920	9,360	11,237	10,573	10,158	13,220
City rank	4	8	5	2	37	27	29	13	36	7	1	31	21	25	26	9
City scaled score	+ 2.01	+ .75	+ 1.84	+ 2.39	- 1.32	- .53	- .70	+ .26	- 1.23	+ .92	+ 3.26	- .83	- .10	- .36	.23	+ .67
Total tax per $1000 valuation	62.80	48.40	47.00	42.90	49.80	52.00	53.60	56.80	55.80	46.80	38.40	47.60	49.40	53.80	51.60	46.00
City rank	2	21	24	30	16	13	10	5	6	25	39	22	17	9	15	34
School support per $1000 valuation	14.44	15.60	13.42	11.71	15.37	16.31	15.31	16.60	14.94	15.54	14.44	14.29	19.01	14.48	17.42	11.90
City rank	22	14	33	37	18	10	17	9	20	15	23	25	2	21	7	36
State rank	224	192	258	290	203	164	200	156	212	194c	225	227	94	222	130	286
State scaled score	- .29	- .11	- .44	- .71	- .14	0.00	- .15	+ .05	- .21	.16	- .29	- .31	+ .42	- .28	+ .19	.68
Assessed valuation per capita	1,960	1,570	1,850	1,770	1,110	1,160	1,250	1,400	1,110	1,790	2,650	1,120	1,430	1,310	1,360	1,500
Average teachers' salaries	5,148	4,019	4,362	4,302	3,911	3,371	4,053	3,961	4,053	3,927	4,300	3,814	3,982	3,681	3,548	3,841

COMPREHENSIVE DATA

Municipality	Pittsfield	Chicopee	Haverhill	Waltham	Everett	Fitchburg	Salem	Taunton	Chelsea	Revere	Northampton	Beverly	Melrose	Gloucester	Leominster	Attleboro
otal school support	229 14	199.68	248.13	222.12	225.09	251.23	293.73	193.81	190.84	196.28	212.67	243.83	226.67	187.25	263.25	189.76
City rank	22	31	13	28	26	10	1	33	35	32	30	16	24	38	8	36
State rank	146	234	104	170	161	95	40	249	253	243	194	116	155	269	75	260
City scaled score	- .12	- 1.08	+ .50	- .35	- .25	+ .61	+ 1.98	- 1.27	- 1.37	1.19		+ .36	.20	1.47	+ .99	1.41
State scaled score	- .02	.54	+ .32	- .14	- .07	+ .36	+ 1.10	- .65	- .70	- .59	- .31	+ .2[illegible]	- .07	- .75	+ .58	- .72
ocal school upport	181.93	123.79	188.09	178.98	203.79	186.73	233.88	141.37	137.05	156.89	165.95	200.70	187.60	127.91	20[illegible].82	145.74
City rank	23	38	17	24	8	20	4	33	36	31	29	12	19	37	[illegible]	32
State rank	84	217	72	89	44	76	17	160	178	131	111	53	74	201	52	154
City scaled score	+ .04	- 1.66	+ .22	- .05	+ .68	+ .18	+ 1.55	- 1.14	- 1.27	- .69	- .49	+ .59	+ .20	1.54	.59	+ 1.02
State scaled score	+ .67	- .53	+ .81	+ .61	+ 1.11	+ .77	+ 1.70	- .16	.24	+ .16	+ .32	+ 1.05	+ .79	.47	+ 1.05	+ .00
State aid per pupil	30.70	42.43	40.96	38.47	17.24	44.47	38.05	41.86	39.72	35.36	28.49	25.02	22.94	27.87	47.14	32.21
City rank	25	8	12	18	38	6	9	9	15	21	26	31	33	28	4	22
State rank	288	229	236	253	337	215	254	232	244	267	300	314	320	302	19[illegible]	282
City scaled scpre	- .35	+ .72	+ .58	+ .37	- 1.56	+ .90	+ .32	+ .66	+ .47	+ .08	- .55	- .86	- 1.05	.60	+ 1.16	.22
State scaled score	.70	- .47	.50	- .54	- .95	- .43	- .54	- .49	- .52	- .[illegible]0	- .74	- .80	- .85	- .76	- .37	- .66
Equalized valuation per pupil	12,809	9,375	14,774	11,463	15,185	16,259	16,479	8,293	8,870	9,895	11,525	11,123	10,040	11,175	11,06[illegible]	10,[illegible]9
City rank	14	35	9	19	8	6	5	38	37	32	18	22	28	21	23	3[illegible]
State rank	74	153	51	92	47	42	37	183	166	137	90	98	117	97	01	123
City scaled score	+ .27	- 1.23	+ 1.13	- .33	+ 1.35	+ 1.83	+ 1.93	1.81	- 1.50	- 1.04	- .30	- .48	- .70	- .46	.51	.71
State scaled score	+ .64	- .04	+ 1.03	.37	+ 1.11	+ 1.33	+ 1.37	- .26	- .14	+ .06	+ .39	+ .31	- .09	.32	+ .29	- .19
Experimental state aid	34.48	38.19	35.23	36.78	19.55	31.35	27.95	42.93	40.36	38.58	30.06	25.25	26.31	30.01	35.97	[illegible].77
City rank	19	10	17	12	36	25	28	2	5	9	26	30	29	27	14	18
City scaled score	+ .21	+ .58	+ .29	+ .44	- 1.28	.10	- .44	+ 1.06	+ 80	+ .62	.23	.61	.61	- .24	+ .36	+ .24
Experimental valuation per pupil	14,387	8,438	12,709	11,463	17,229	11,614	12,107	8,505	9,013	10,798	12,163	11,667	12,485	12,031	8,388	11,[illegible]91
City rank	6	34	10	19	3	18	15	33	32	23	14	17	12	16	35	22
City scaled score	+ 1.12	- 1.18	+ 47	.02	+ 2.21	+ .04	+ .23	+ 1.16	- .96	- .27	+ .26	[illegible] .06	+ 38	+ .20	1.20	.04
Total tax per $1000 valuation	39.60	49.00	42.80	45.60	41.60	54.80	54.50	49.20	64.20	53.50	44.00	58.00	46.00	52.00	49.00	41.00
City rank	37	19	31	2[illegible]	32	7	8	18	1	11	29	4	26	12	[illegible]0	33
School support per $1000 valuation	14.20	13.20	12.73	15.61	13.42	11.48	14.19	17.05	15.45	15.86	14.23	18.04	17.63	11.45	18.15	13.81
City rank	27	34	35	13	32	38	28	8	16	12	26	5	6	39	4	31
State rank	233	260	268	191	257	297	234	139	195	180	229	117	127	299	114	246
State scaled score	- .32	- .48	- .55	- .11	- .44	.74	- .32	+ .12	- .13	- .07	.32	+ .27	+ .20	- .75	+ .28	+ .38
Assessed valuation per capita	1,860	1,030	1,520	1,430	2,190	1,430	1,430	980	1,150	1,480	1,060	1,540	1,620	1,680	1,180	1,530
Average teachers' salaries	3.985	3,583	3,592	3,931	3,662	4,274	3,896	3,185	3,783	3,464	3,644	3,369	3,940	3,217	3,459	3,421

COMPREHENSIVE DATA

Municipality	Peabody	North Adams	Westfield	Woburn	Gardner	Marlborough	Newburyport
Total school support	246.82	236.38	251.76	235.68	232.39	191.11	188.31
City rank	14	18	9	19	20	34	37
State rank	108	127	93	131	136	251	265
City scaled score	+ .46	+ .12	+ .62	+ .10	+ .01	- 1.36	- 1.45
State scaled score	+ .28	+ .10	+ .35	+ .09	+ .04	- .68	- .73
Local school support	2.0.74	178.25	171.23	183.08	185.79	137.18	109.14
City rank	7	25	27	22	21	35	39
State rank	36	91	101	82	77	177	267
City scaled score	+ .88	- .07	- .25	+ .07	+ .15	- 1.29	- 2.09
State scaled score	+ 1.25	+ .61	+ .48	. .71	+ .77	- .24	- .79
State aid per pupil	31.85	41.06	44.31	41.71	39.46	45.91	40.68
City rank	24	11	7	10	17	5	14
State rank	284	235	218	233	248	208	240
City scaled score	- .24	+ .59	+ .89	+ .65	+ .45	+ 1.03	+ .55
State scaled score	- .68	- .49	- .43	- .49	- .52	- .47	- .50
Equalized valuation per pupil	9,403	10,990	11,992	10,060	13,149	9,077	7,743
City rank	34	24	17	31	11	36	39
State rank	151	102	84	133	68	161	199
City scaled score	- 1.22	- .54	- .09	- 96	+ .43	- 1.41	- .20
State scaled score	- .04	+ .28	+ .48	+ .09	+ .71	- .10	- .37
Experimental state aid	32.29	42.22	46.65	40.24	32.37	40.31	41.52
City rank	23	3	1	6	22	7	4
City scaled score	- .10	+ .99	+ 1.42	+ .79	0.00	+ .79	+ .92
Experimental valuation per pupil	9,535	11,306	12,625	9,705	10,786	7,970	7,904
City rank	30	20	11	28	24	38	39
City scaled score	- .76	+ .08	+ .44	- .70	- .28	1.37	- 1.39
Total tax per $1000 valuation	51.80	45.00	40.00	39.80	39.00	47.60	62.00
City rank	14	28	35	36	38	23	3
School support per $1000 valuation	22 41	16.21	14.35	18.20	14.13	15.11	14.10
City rank	1	11	24	3	29	19	30
State rank	33	167	226	11	235	206	237
State scaled score	+ 94	0.00	- .30	+ .29	.33	..8	- .34
Assessed valuation per capita	1,230	1,430	1,690	1,330	1,260	1,090	990
Average teachers' salaries	3,449	3,621	3,672	3,781	3,658	2,958	2,865

COMPREHENSIVE DATA

Municipality	Brookline	Arlington	Watertown	Weymouth	Framingham	Belmont	Methuen	Braintree	Milton	Wellesley	W.Springfield	Natick	Wakefield	Winthrop	Dedham	Southbridge
Total school support	356.35	251.47	249.78	194.65	244.82	335.57	200.38	190.60	235.63	250.34	259.93	176.20	229.11	226.08	228.12	205.88
Town rank	1	14	16	63	20	2	57	68	26	15	11	80	30	38	31	25
State rank	12	94	101	245	112	16	228	255	132	100	80	303	147	173	153	130
Town scaled score	+ 3.58	+ .91	+ .33	- .490	+ .78	+ 3.06	.32	- .58	+ .54	+ .92	+ 1.16	.94	+ .38	- .18	+ .36	- .55
State scaled score	+ 2.33	+ 2.25	+ .90	- .61	+ .25	+ 1.87	- .52	.70	+ .09	+ .35	+ .51	- .94	- .02	- .14	.04	+ .09
Local school support	315.10	203.43	222.79	159.99	193.34	304.18	154.78	151.57	199.67	223.93	217.61	138.39	164.94	183.60	194.98	164.93
Town rank	1	11	8	37	18	2	45	51	14	7	9	60	31	22	17	32
State rank	2	45	26	122	66	3	138	145	56	23	27	170	107	81	63	108
Town scaled score	+ 3.90	+ 1.29	+ 1.72	+ .27	+ 1.05	+ 3.87	+ .16	+ .09	+ 1.19	+ 1.72	+ 1.60	- .20	+ .39	+ .82	+ 1.08	+ .39
State scaled score	+ 3.34	+ 1.11	+ 1.49	+ .22	+ .93	+ 3.14	+ .12	+ .06	+ 1.03	+ 1.50	+ 1.38	.22	+ .32	+ .71	+ .93	+ .32
State aid per pupil	9.28	29.61	24.69	20.95	22.67	11.38	41.48	23.75	18.50	8.50	26.21	25.90	33.25	25.03	29.43	52.18
Town rank	94	62	76	82	79	92	36	77	90	95	73	74	53	75	64	13
State rank	344	289	315	326	322	343	234	316	346.5	346.5	311	312	275	313	291	169
Town scaled score	- 1.95	- .53	- .88	- 1.14	- 1.02	1.78	+ .36	- .94	- 1.50	- 2.01	- .77	- .85	- .28	- .85	- .54	+ 1.05
State scaled score	+ 3.04	+ .31	+ .74	+ .63	+ .69	+ 1.70	+ .14	- .10	+ .94	+ 1.50	+ 1.56	- .39	- .10	- .18	- .26	+ .11
Equalized valuation per pupil	24,844	11,101	13,295	12,764	13,051	18,129	10,283	9,089	14,289	17,133	17,142	7,626	9,089	8,686	10,908	10,159
Town rank	1	26	16	19	18	4	31	46	12	6	5	60	41	52	27	33
State rank	7	98	63	74	70	28	126	159	55	33	32	202	159	170	105	130
Town scaled score	+ 4.07	+ .43	+ 1.01	+ .87	+ .95	+ 2.29	+ .21	.10	+ 1.28	+ 2.03	+ 2.03	.49	+ .01	.21	+ .38	+ .19
State scaled score	+ 3.04	+ .31	+ .74	+ .63	+ .69	+ 1.70	+ .14	+ .10	+ .94	+ 1.50	+1.56	.39	0.00	- .18	+ .26	+ .11
Experimental state aid	10.82	25.75	25.75	25.41	25.45	11.78	38.32	31.76	17.09	10.49	28.80	34.66	36.22	30.29	31.20	36.63
Town rank	94	79.5	79.5	82	83	92	52	71	91	95	76	65	60	74	72	56
Town scaled score	- 2.08	- 1.00	- 1.00	- 1.02	- 1.09	- 2.00	- 1.09	- .49	- 1.62	- 2.03	- .78	- .35	- .24	- .67	.61	- .22
Experimental valuation per pupil	28,986	11,625	13,870	14,248	14,075	18,775	9,502	9,089	15,595	21,036	18,837	10,207	10,422	10,514	11,581	7,132
Town rank	1	33	19	16	17	7	47	50	12	3	8	43	41	40	34	73
Town scaled score	+ 4.33	+ .27	+ .80	+ .87	+ .84	+ 1.95	- .27	.35	+ 1.20	+ 2.48	+ 1.96	- .08	- .03	- .007	+ .27	- .81
Total tax per $1000 valuation	38.90	54.20	42.60	36.00	46.00	38.00	43.60	43.80	41.40	38.80	35.50	45.60	46.00	42.80	46.40	56.20
Town rank	84	22	70	90	51	87	65	63	76	85	91	53	52	69	50	19
School support per $1000 valuation	12.68	18.33	16.76	12.53	14.81	16.78	15.05	16.68	13.97	13.07	12.69	18.15	17.24	21.14	17.88	16.23
Town rank	86	39	49	88	72	47	68	51	78	83	85	41	45	21	43	56
State rank	272	106	149	276	215	147	208	152	240	262	271	115	152	55	122	166
State scaled score	- .57	+ .31	+ .07	- .58	- .23	+ .07	.21	+ .06	- .36	.50	- .56	+ .28	+ .14	+ .75	+ .24	0.00
Assessed valuation per capita	2,770	1,450	1,730	2,330	1,670	2,170	1,200	1,790	1,970	2,740	2,470	1,460	1,440	1,310	1,680	2,050
Average teachers' salaries	4,721	3,965	3,632	3,689	3,825	4,123	3,582	3,495	3,527	4,082	3,599	3,419	3,678	3,516	3,624	3,448

COMPREHENSIVE DATA

GROUP II

Municipality	Greenfield	Lexington	Saugus	Norwood	Needham	Danvers	Winchester	Milford	Reading	Marblehead	Plymouth	Stoneham	Webster	Fairhaven	Andover	Clinton
Total school support	197.23	209.93	163.16	264.60	200.16	224.39	255.06	211.61	247.23	218.43	261.98	186.98	244.56	222.43	186.16	245.13
Town rank	60	49	91	8	59	34	13	47	17	39	9	70	21	37	72	19
State rank	239	204	334	71	231	165	87	199	107	176	76	270	114	169	272	111
Town scaled score	- .42	.10	- 1.28	+ 1.27	.33	+ .26	+ 1.04	- .06	+ .84	+ .11	- 1.24	- .68	+ .77	+ .21	.68	- .78
State scaled score	- .58	- .36	- 1.17	+ .60	- .52	- .10	+ .44	- .34	+ .30	- .21	+ .54	- .77	+ .25	- .14	- .77	+ .26
Local school support	175.87	160.49	124.36	228.97	163.34	157.86	226.43	155.72	178.82	198.86	201.59	147.25	123.48	134.75	131.37	177.12
Town rank	27	36	72	4	34	40	6	43	24	15	12	52	76	63	67	26
State rank	99	121	211	19	113	129	21	135	90	57	47	150	218	183	192	95
Town scaled score	+ .64	+ .29	- .52	+ 1.86	+ .37	+ .23	+ 1.82	+ .16	+ .71	+ 1.19	+ 1.24	0.00	- .55	- .30	- .37	
State scaled score	+ .55	+ .24	- .50	+ 1.60	+ .30	+ .18	+ 1.56	+ .14	+ .61	+ 1.00	+ 1.10	- .06	- .52	- .30	- .36	. .59
State aid per pupil	17.82	22.53	36.65	19.55	14.80	31.56	11.18	40.78	28.66	17.44	27.34	34.06	84.77	46.74	32.45	49.07
Town rank	87	80	56	84	91	60	93	37	68	88	72	50	1	25	57	22
State rank	334	323	277	331	339	286	343	237	297	336	305	269	66	199	279	187
Town scaled score	1.36	1.03	- .32	- 1.21	- 1.57	- .39	- 1.83	+ .23	- .60	1.38	- .69	- .22	+ 4.02	+ .66	- .33	+ .83
State scaled score	+ .42	+ .42	.66	+ .72	- .45	.35	+ 1.01	- .18	+ .22	+ .58	+ .76	+ .04	+ 2.03	.43	+ .55	0.00
Equalized valuation per pupil	11,701	11,716	6,277	13,212	11,850	7,829	14,683	8,693	10,686	12,489	13,409	9,406	19,776	7,427	12,341	9,560
Town rank	25	24	79	17	23	57	9	51	29	20	15	43	3	62	21	42
State rank	87	86	262	64	84	194	52	169	114	78	62	149	22	206	80	146
Town scaled score	+ 59	+ .59	- .64	+ .99	+ .63	- .44	+ .14	- .21	+ .32	+ .80	+ 1.04	+ .003	+ 2.73	- .55	+ .76	.01
State scaled score	+ .42	+ .42	- .66	+ .72	+ .45	- .35	+ 1.01	- .18	+ .22	+ .58	+ .76	+ .04	+ 2.03	- .43	+ .55	0.00
Experimental state aid	19.09	27.94	42.14	20.05	20.43	37.43	11.20	38.05	32.96	19.89	32.65	36.26	43.73	44.46	32.91	40.66
Town rank	90	78	42	88	87	54	93	53	68	89	70	59	35	34	69	45
Town scaled score	- 1.48	- .84	+ .18	- 1.41	- 1.38	.16	- 2.05	.11	- .48	- 1.42	- .50	- .23	+ .29	+ .35	- .48	. .08
Experimental valuation per pupil	12,538	14,521	8,102	13,556	16,360	9,285	14,725	8,111	12,292	14,248	16,014	10,013	10,203	7,064	12,517	7,922
Town rank	24	15	62	21	10	48	14	61	27	16	11	45	44	76	26	64
Town scaled score	+ .47	+ .94	.58	+ .71	+ 1.38	- .30	+ .99	- .58	+ .42	+ .87	+ 1.30	- .13	.08	.83	+ .47	.62
Total tax per $1000 valuation	42.00	45.00	49.80	41.80	42.00	51.00	40.00	51.00	45.00	42.00	44.80	52.00	34.10	52.00	40.00	56.80
Town rank	72	56	38	75	74	33	81	34	58	73	60	32	93	28	79	17
School support per $1000 valuation	15.03	13.70	19.81	17.33	13.78	20.17	15.42	17.91	16.73	15.93	15.03	15.66	6.24	18.15	10.64	18.53
Town rank	69	81	30	44	79	27	65	42	50	60	70	64	96	40	91	38
State rank	209	252	80	132	247	74	197	121	175	179	210	190	348	113	306	104
State scaled score	- .21	.40	+ .54	+ .16	- .39	+ .60	- .14	+ .25	- .07	.06	- .21	- .10	1.55	+ .28	- .87	+ .34
Assessed valuation per capita	1,680	1,980	1,220	1,800	2,430	1,070	2,620	1,030	1,870	2,030	2,080	1,440	800	1,070	1,700	1,0000
Average teachers' salaries	3,253	3,817	3,456	3,587	3,426	3,317	4,161	3,302	3,601	3,435	3,651	3,443	3,461	3,223	3,602	3,585

COMPREHENSIVE DATA

GROUP II

Municipality	N.Attleborough	Adams	Swampscott	Athol	Stoughton	Dartmouth	Bellerica	Amherst	Amesbury	Easthampton	Hengham	Shrewsbury	Barnstable	Northbridge	Agawam	Middleborough
Total school support	176.88	194.26	224.79	174.80	174.82	213.74	151.71	259.69	260.97	240.45	288.84	222.57	222.53	207.73	177.63	201.20
Town rank	79	64	32	83	82	44	96	12	10	22	6	35	36	51	78	56
State rank	299	248	162	306	305	191	346	82	77	120	44	167	168	209	296	225
Town scaled score	- .94	- .49	- .27	- .99	- .99	.007	- 1.57	+ 1.15	+ 1.18	+ .67	+ 1.89	+ .21	. .21	.16	- .92	.32
State scaled score	- .94	.61	- .10	- .98	- .98	- .29	- 1.38	+ .51	+ .53	+ .18	+ 1.02	- .14	- .14	- .40	- .93	.51
Local school support	109.05	137.30	201.57	140.90	118.21	159.36	91.55	196.81	154.55	185.03	216.04	161.21	166.23	139.78	106.98	129.91
Town rank	86	61	13	56	79	38	94	16	46	21	10	35	30	58	88	68
State rank	268	176	48	163	231	123	319	61	139	79	29	120	106	165	274	197
Town scaled score	+ .69	.23	+ 1.24	.16	- .66	+ .27	+ 1.29	+ 1.12	+ .16	+ .87	+ 1.60	+ .32	+ .43	- .18	.94	.41
State scaled score	- .79	- .24	+ 1.10	- .18	- .61	+ .22	- 1.15	+ .97	+ .12	+ .75	+ 1.37	+ .26	+ .38	- .20	.85	.40
State aid per pupil	49.45	43.26	7.25	28.57	46.64	46.53	47.06	27.56	53.14	45.17	20.81	35.25	18.58	45.56	39.86	52.73
Town rank	21	34	96	69	26	27	24	70	10	30	83	49	85	29	39	11
State rank	185	226	348	298	200	202	198	303	165	212	327	267	332	209	243	166
Town scaled score	+ .85	+ .42	- 2.10	- .60	+ .66	+ .66	+ .69	- .68	+ 1.11	+ .56	1.15	.13	- 1.30	+ .56	+ .18	+ .08
State scaled score	- .14	- .44	- .78	- .69	- .48	+ .05	- .63	+ .07	+ .04	+ 1.00	+ .24	- .43	+ 2.13	.69	- .31	.74
Equalized valuation per pupil	8,880	7,393	13,497	6,125	7,181	9,839	6,502	9,355	9,382	14,654	10,177	7,416	20,273	6,113	7,872	5,868
Town rank	48	64	13	80	67	37	76	45	44	10	32	63	2	81	56	83
State rank	164	209	60	271	217	138	252	154	151	53	128	207	21	272	193	278
Town scaled score	- .56	.16	+ 1.07	- .89	- .61	+ .07	- .78	- .02	- .02	+ 1.37	+ .19	- .55	+ 2.86	.87	- .43	.96
State scaled score	- .14	- .44	+ .78	- .69	- .49	+ .05	.61	.07	- .04	+ 1.00	+ .24	- .43	+ 2.13	- .69	- .34	- .74
Experimental state aid	44.76	40.48	9.07	36.63	46.48	49.33	56.93	55.38	42.93	36.60	25.74	42.28	23.63	41.97	50.19	63.95
Town rank	34	46	96	67	26	23	10	61	39	57	81	41	85	43	22	4
Town scaled score	+ .37	+ .06	- 2.20	.22	+ .57	+ .70	+ 1.25	- .30	+ .24	.22	- 1.00	+ .20	- 1.15	+ .19	+ .77	+ 1.83
Experimental valuation per pupil	8,037	6,917	16,895	7,854	7,156	10,419	7,866	12,013	7,580	11,876	12,587	9,229	25,810	5,632	9,912	7,116
Town rank	63	70	9	17	72	42	66	30	69	31	23	49	2	88	46	75
Town scaled score	- .60	- .83	+ 1.50	- .64	.80	- .03	.64	+ .35	- .70	+ .27	+ .49	- .31	+ 3.61	- 1.21	- .15	.81
Total tax per $1000 valuation	39.00	52.00	44.00	57.00	50.00	43.60	39.00	47.00	58.00	34.50	52.60	52.80	30.50	52.00	45.00	57.00
Town rank	83	27	61	14	37	64	82	46	11	92	26	25	95	30	54	16
School support per $1000 valuation	12.28	18.57	14.94	23.01	16.47	16.20	14.08	21.04	16.47	12.63	21.23	21.74	8.20	22.87	13.59	22.14
Town rank	89	37	71	7	54	57	76	22	53	87	19	16	94	9	82	14
State rank	279	103	213	23	160	168	238	59	159	274	51	42	339	26	255	36
State scaled score	- .62	+ .35	- .21	- 1.03	+ .03	- .02	- .34	+ .73	+ .03	.58	+ .76	+ .84	- 1.25	+ 1.01	- .42	+ .90
Assessed valuation per capita	1,130	940	2,360	1,050	1,150	1,510	1,440	1,080	970	1,420	1,990	1,260	3,760	770	1,500	1,040
Average teachers' salaries	3,154	2,935	3,738	3,097	2,883	3,297	3,066	3,208	3,232	3,338	3,193	2,875	3,396	3,314	3,538	2,910

COMPREHENSIVE DATA

GROUP II

Municipality	S.Hadley	Randolph	Palmer	Bridgewater	Chelmsford	Walpole	Rockland	Auburn	Dracut	Falmouth	Ludlow	Concord	Somerset	N.Andover	Whitman	Millbury
Total school support	164.44	154.09	211.11	170.67	180.09	217.60	181.20	162.40	212.71	236.10	237.69	323.02	168.32	232.48	189.11	155.71
Town rank	90	95	48	87	76	41	75	92	45	24	23	3	88	27	69	94
State rank	331	345	201	317	289	179	284	337	193	129	124	23	320	135	262	343
Town scaled score	- 1.25	- 1.50	.06	- 1.09	- .85	+ .10	- .79	- 1.30	- .03	+ .56	+ .60	+ 2.75	- 1.14	+ .47	.00	1.47
State scaled score	- 1.46	- 1.33	.34	1.05	- .87	- .22	.86	- 1.17	- .31	1.10	+ .11	+ 1.66	- 1.09	+ .04	.72	1.31
Local School support	121.73	102.12	154.41	124.32	113.20	170.06	126.43	124.11	139.94	177.75	154.01	226.47	128.41	179.29	134.02	106.87
Town rank	78	92	47	73	82	28	71	74	57	25	49	5	69	23	64	89
State rank	221	295	240	213	251	103	206	215	164	92	142	20	199	87	184	275
Town scaled score	- .59	1.03	+ .16	- .52	- .78	+ .52	.48	.52	- .18	+ .69	+ .16	+ 1.82	- .43	+ .73	.30	.94
State scaled score	.56	- .93	+ .12	- .50	.71	+ .46	- .46	- .50	- .20	+ .59	+ .12	+ 1.56	.42	+ .63	.30	.85
State aid per pupil	29.07	39.12	49.46	31.67	46.51	18.52	37.90	37.30	70.70	16.80	52.47	23.57	29.48	36.61	33. 5	44.40
Town rank	65	41	20	59	28	86	43	45	3	89	12	78	63	46	54	32
State rank	294	249	184	286	203	333	255	260	95	338	168	317	291	262	277	216
Town scaled score	.57	+ .13	+ .86	- .39	+ .72	1.31	+ .05	+ .004	+ 2.34	+ 1.43	- .30	- .96	.53	- .05	- .29	+ .50
State scaled score	- .14	.46	- .59	.61	- .57	+ .19	- .35	- .80	- .56	+ 1.36	- .36	+ .09	+ .76	+ .54	- .65	.98
Equalized valuation per pupil	8,870	7,256	6,633	6,632	6,717	10,540	7,812	5,583	6,782	16,440	7,758	10,019	13,422	12,291	6,335	4,667
Town rank	49	65	72	73	71	30	58	87	70	7	59	35	14	22	78	95
State rank	166	215	244	245	240	121	195	297	237	38	197	134	61	81	259	332
Town scaled score	- .16	.59	- .76	- .76	- .73	+ .31	- .44	- 1.03	- .72	+ 1.85	- .46	+ .14	+ 1.05	+ .75	.84	- 1.28
State scaled score	- .14	.46	- .59	- .59	- .57	+ .19	.35	- .81	- .56	+ 1.36	- .36	+ .09	+ .76	+ .54	- .65	- .98
Experimental state aid	35.27	44.84	50.89	43.22	56.54	24.02	38.30	46.24	51.23	20.75	45.82	28.77	30.57	34.68	40.14	48.16
Town rank	62	32	20	37	12	84	52	27	19	86	30	77	73	64	49	24
Town scaled score	- .31	+ .38	+ .83	+ .26	+ 1.22	- 1.12	- .09	+ .55	+ .84	1.36	+ .45	.79	- .65	- .35	. .04	+ .62
Experimental valuation per pupil	10,763	8,319	6,825	9,051	8.936	13,674	7,894	6.921	4,918	20,308	6,776	12,229	13,924	11,644	7,671	5,062
Town rank	37	60	80	51	52	20	55	78	92	4	81	28	18	32	68	90
Town scaled score	+ .05	- .53	- .88	- .61	- .38	+ .74	- .63	.86	- 1.34	+ 2.31	- .89	+ .40	. .80	+ .26	.68	1.30
Total tax per $1000 valuation	33.00	45.00	43.00	46.80	48.00	41.20	52.00	47.00	48.40	38.00	52.00	56.80	30.50	48.00	58.00	59.40
Town rank	94	57	66	49	41	77	31	47	40	88	29	18	96	43	13	8
School support per $1000 valuation	13.72	14.07	23.28	18.75	16.85	16.14	16.19	22.23	20.64	10.81	19.85	22.60	9.57	14.59	21.15	22.90
Town rank	80	77	5	35	46	59	58	13	24	90	29	11	93	74	20	8
State rank	251	239	120	899	144	173	169	34	66	304	79	29	322	219	54	25
State scaled score	- .36	.34	+ 1.07	+ .38	+ .08	- .02	- .02	+ .91	+ .67	- .84	+ .55	+ .97	1.04	- .26	+ .75	+ 1.01
Assessed valuation per capita	1,310	1,500	910	920	1,130	2,100	1,090	1,110	840	3,260	940	1,520	2,210	1,490	1,080	750
Average teachers' salaries	3,311	2,897	2,966	2,565	2,958	3,548	2,964	3,085	2,979	3,408	3,345	3,604	3,250	3,690	2,761	3,262

COMPREHENSIVE DATA

GROUP II

Municipality	Grafton	Hudson	Franklin	Montagne	Warum	Ware	Tewksbury	Canton	Westborough	Mansfield	Abington	Wilmington	Foxborough	Spencer	Uxbridge	Maynard
Total school support	186.22	230.64	192.36	246.72	224.76	200.22	183.33	215.52	212.06	179.56	173.14	156.48	191.06	175.68	183.02	202.46
Town rank	71	28	65	18	33	58	73	43	46	77	86	93	66	81	74	55
State rank	271	142	250	109	163	229	277	187	195	290	313	342	252	304	279	223
Town scaled score	- .68	+ .42	- .55	+ .82	+ 27	- .32	- .77	+ .04	- .05	- .87	- 1.03	- 1.44	- .58	- .97	.77	.19
State scaled score	- .77	0.00	- .66	+ .28	/10	- .52	- .82	- .26	- .31	- .89	- 1.00	- 1.30	.68	.96	.82	.49
Local School support	115.72	156.63	135.92	185.66	158.75	123.80	96.41	154.30	152.92	133.63	115.31	89.12	142.38	110.28	141.14	166.76
Town rank	80	41	62	20	39	75	93	48	50	66	81	95	54	85	55	29
State rank	239	132	181	78	126	216	308	141	144	187	242	321	159	263	161	105
Town scaled score	- .73	+ .20	- .27	+ .87	+ .25	- .55	- 1.17	+ .16	+ .11	- .32	- .73	- 1.33	- .11	.85	- .14	+ .46
State scaled score	- .67	+ .16	- .28	+ .75	+ .20	- .52	1.05	+ .12	+ .08	- .32	- /67	- 1.19	.14	- .77	.16	- .38
State aid per pupil	51.60	51.09	42.39	31.26	28.80	60.75	50.56	44.21	38.94	35.42	33.96	51.43	35.65	54.42	32.40	28.76
Town rank	14	16	35	61	66	8	17	33	42	48	51	15	47	9	58	67
State rank	175	179	230	288	296	134	179	220	250	266	272	177	265	158	281	297
Town scaled score	+ 1.00	+ .97	+ .36	- .59	+ 1.64	+ .92	+ .49	+ .49	+ .12	- .12	- .12	+ .99	- .11	+ 1.20	.39	- .59
State scaled score	- .70	- .24	- .52	- .28	+ .24	- .22	- .41	- .43	- .54	- .60	- .64	- .29	- .65	- .23	.66	.74
Equalized valuation per pupil	6,089	8,360	6,974	8,178	10,796	8,490	7,538	10,133	6,964	6,603	5,788	5,352	7,230	5,620	6,532	5,725
Town rank	82	54	68	55	28	53	61	34	69	74	84	91	66	86	75	85
State rank	274	180	223	185	110	173	203	130	226	246	286	304	217	296	251	289
Town scaled score	- .89	- .30	- .61	- .31	+ .35	.26	- .52	+ .19	- .67	- .77	- .99	- 1.20	.59	1.03	- .78	- .99
State scaled score	- .70	- .34	- .52	- .28	+ .24	- .22	- .41	+ .11	- .52	- .59	- .76	- .84	- .47	- .79	- .61	- .77
Experimental state aid	56.22	43.56	53.38	40.23	33/91	51.45	57.08	33.83	47.84	45.10	40.28	55.49	43.20	51.59	41.39	34.93
Town rank	13	36	16	48	67	18	9	50	25	31	47	14	38	17	44	63
Town scaled score	+ 1.20	+ .29	+ 1.07	+ .05	- .41	+ .86	+ 1.34	+ .02	+ .60	+ .40	+ .05	+ 1.15	+ 1.26	+ .87	+ .13	- .34
Experimental valuation per pupil	6,635	7,127	8,782	10,524	12,713	7,190	8,509	8,900	8,558	8,407	6,865	5,773	8,763	5,327	8,346	6,954
Town rank	83	74	54	39	22	71	57	53	56	58	79	86	55	90	59	77
Town scaled score	- .93	- .81	- .42	- .007	+ .52	- .90	.48	.39	- .47	- .51	- .87	- 1.14	- .42	1.24	- .52	- .85
Total tax per $1000 valuation	57.00	60.00	45.00	51.00	41.00	54.00	14.00	58.60	49.00	47.00	56.00	54.00	58.00	60.00	47.50	65.50
Town rank	15	5	55	35	78	23	62	9	39	48	20	24	12	7	45	1
School support per $1000 valuation	19.01	18.74	19.49	22.70	14.70	14.58	12.79	15.23	21.96	20.24	19.92	16.65	19.68	19.63	21.61	29.13
Town rank	34	36	33	10	73	75	84	66	15	25	28	52	31	32	17	1
State rank	93	100	89	28	217	220	266	204	39	72	77	154	84	85	43	6
State scaled score	+ .42	+ .38	+ .50	+ .98	.25	- .26	- .54	- .16	+ .86	+ .61	+ .56	+ .05	+ .52	+ .51	+ .82	+ 1.97
Assessed valuation per capita	720	910	1,250	1,390	2,220	870	990	1,340	870	1,230	1.030	1,180	1,090	730	1,130	870
Average teachers' salaries	2,939	2,926	3,365	3,298	2,960	2,777	3,070	3,426	3,183	3,006	3,292	2,682	2,836	2,903	3,336	3,008

COMPREHENSIVE DATA

GROUP II

Municipality	Ipswich	Gt.Barrington	Winchenden	Easton	Williamstown	Monson	Swansea	Leicester	Scituate	Holden	Orange	Oxford	Westwood	Ayer	Wrentham	Weston
Total school support	230.20	218.15	173.86	208.68	265.55	216.95	206.57	197.21	190.68	196.60	174.60	167.09	206.26	290.72	206.38	313.39
Town rank	29	40	85	50	7	42	52	61	67	62	84	89	54	5	53	4
State rank	143	178	311	207	70	311	211	240	254	242	309	326	213	42	212	33
Town scaled score	+ .41	+ .10	- 1.01	- .13	+ 1.30	+ .07	- .19	.42	- .59	.44	- .99	- 1.18	- .19	+ 1.93	.19	+ 2.52
State scaled score	0.00	.21	- 1.00	/38	+ .62	- .24	- .42	- .58	- .70	- .59	- .98	- 1.08	.42	+ 1.05	.42	+ 1.46
Local school support	156.14	163.47	111.34	126.77	192.29	133.68	102.95	111.77	139.59	122.36	108.49	103.39	155.45	60.91	145.92	235.83
Town rank	42	33	84	70	19	65	91	83	59	77	87	90	44	96	53	3
State rank	133	112	259	204	69	259	293	256	166	219	270	289	137	346	152	16
Town scaled score	+ .20	+ .37	.82	- .48	+ 1.03	- .32	+ 1.03	- .82	- .18	- .57	- .89	+ 1.01	+ .16	2.00	- .04	+ 2.02
State scaled score	+ .16	+ .30	.75	- .46	+ .89	.32	- .93	- .75	- .20	- .54	- .81	- .91	+ .14	1.76	+ .08	1.72
State aid per pupil	40.38	27.39	39.63	37.75	49.50	72.37	62.81	69.86	21.34	62.15	44.89	50.44	33.34	62.78	33.13	47.78
Town rank	38	71	40	44	19	2	5	4	81	7	31	18	52	6	55	23
State rank	242	304	246	257	183	90	126	98	324	128	213	180	274	127	277	193.5
Town scaled score	+ .22	- .69	+ .17	+ .04	+ .86	+ 2.45	+ 1.79	+ 2.28	- 1.03	+ 1.74	+ .54	+ .92	+ .27	+ 1.79	- .29	+ .74
State scaled score	.50	.76	- .52	.56	.33	+ .16	.08	+ .10	- .87	- .08	.43	- .33	.64	.08	- .61	- .37
Equalized valuation per pupil	9,575	9,743	4,939	5,461	9,0000	4,957	6,499	5,384	14,358	4,968	5,360	3,863	9,877	8,794	9,590	15,054
Town rank	40	38	94	88	47	93	77	89	11	92	90	96	36	50	39	8
State rank	143	140	321	301	161	319	253	302	54	318	303	345	137	168	142	47
Town scaled score	+ .02	+ .07	- 1.21	1.06	- .13	- 1.20	- .78	- 1.09	+ 1.30	- 1.20	1.09	1.49	+ .10	+ .004	+ .02	+ .48
State scaled score	0.00	+ .03	- .92	- /82	- .12	- .92	- .61	- .84	+ .95	- .92	- .84	- 1.14	+ .06	- .16	0.00	+ 1.09
Experimental state aid	46.15	34.21	46.06	50.49	60.91	78.78	56.91	60.04	29.07	84.59	55.17	61.40	42.30	57.78	36.89	60.66
Town rank	28	66	29	21	6	2	11	8	75	1	15	5	40	3	55	7
Town scaled score	+ .55	- .39	+ .47	+ .79	+ 1.54	+ 2.83	+ 1.25	+ 1.48	- .76	+ 3.25	+ 1.16	+ 1.58	- .20	+ 2.04	.19	+ 1.52
Experimental valuation per pupil	10,943	12,172	5,741	7,303	11,076	5,396	5,889	4,627	19,567	6,763	6,587	4,702	12,533	9,496	10,677	19,111
Town rank	36	29	87	70	35	89	85	94	5	82	84	93	25	46	38	6
Town scaled score	- .10	+ .39	- 1.16	.77	+ .13	- 1.24	- 1.10	- 1.40	+ 2/14	- .93	- .94	- 1.38	+ .47	/26	+ .03	+ 2.03
Total tax per $1000 valuation	50.00	42.00	62.00	48.00	45.00	60.00	37.00	64.80	43.00	58.40	55.00	64.00	40.00	42.80	48.00	38.70
Town rank	36	71	4	42	59	6	89	2	67	10	21	3	80	68	44	86
School support per $1000 valuation	16.31	16.78	22.54	23.21	21.37	26.97	15.84	20.76	9.72	24.63c	20.24	26.97	15.74	6.93	15.22	15.67
Town rank	55	48	12	6	18	2	61	23	92	4	26	3	62	95	67	63
State rank	163	148	31	21	46	10	181	64	319	16	73	11	188	347	205	189
State scaled score	0.00	+ .07	+ .96	+ 1.06	+ .78	+ 1.64	- .07	+ .68	- 1.01	+ 1.28	+ .61	+ 1.64	.09	1.44	.17	.10
Assessed valuation per capita	1,400	1,510	920	1,030	1,320	560	1,070	750	3,060	1,000	1,000	740	1,910	790	1,040	800
Average teachers' salaries	3,206	3,350	2,752	3,713	3,364	3,322	3,354	3,020	3,282	3,044	3,755	3,051	3,101	3,948	2,690	3,847

COMPREHENSIVE DATA

APPENDIX 5

GROUP III

Municipality	Westport	Blackstone	Sharon	Lee	Dalton	Templeton	Bourne	Medfield	Belchertown	E.Bridgewater	Wayland	Norton	Westford	Rockport	Bellingham	W.Bridgewater
Total school support	180.36	263.66	189.21	202.94	226.09	169.65	237.33	187.84	211.73	188.84	225.17	164.63	162.65	166.80	188.16	196.69
Town rank	75	23	64	58	41	83	35	68	49	66	42	87	88	85	67	62
State rank	287	74	261	222	159	318	125	267	197	264	160	330	336	327	266	241
Town scaled score	- .75	+ .55	- .62	- .40	- .04	- .92	+ .14	- .63	- .27	- .62	- .05	- 1.00	- 1.03	- .97	.63	- .67
State scaled score	- .87	+ .58	- .72	- .49	- .07	- 1.07	+ .11	- .75	= .34	- 73	+ .07	+ 1.16	+ 1.20	1.13	- .73	- .59
Local school support	130.60	139.26	138.15	144.53	182.92	100.89	158.81	107.27	110.51	114.30	150.27	76.51	104.51	137.74	116.01	126.67
Town rank	49	37	39	35	16	80	26	74	70	65	30	92	77	42	61	51
State rank	196	167	171	155	83	299	124	273	262	246	146	338	284	174	235	205
Town scaled score	- .19	- .009	- .03	+ .12	+ 1.01	- .90	+ .45	- .74	- .67	- .58	+ .25	- 1.46	.79	- .04	- .54	- .29
State scaled score	- .38	- .20	- .22	- .10	+ .69	- .95	+ .20	.83	- .77	- .69	+ .02	- 1.45	- .89	- .24	- .65	- .46
State aid per pupil	46.30	109.71	40.56	43.40	32.56	57.28	32.37	53.70	79.43	46.63	42.80	67.57	54.01	28.67	69.66	65.51
Town rank	68	5	79	75	87	48	88	56	16	66	76	27	55	89	23	31
State rank	205	42	241	225	279	151	282	163	76	201	227	111	162	298	100	114
Town scaled score	- .39	+ .87	- .50	- .45	- .66	- .17	.66	- .25	+ .29	- .39	- .45	+ .06	.23	.74	+ .10	0.00
State scaled score	- .49	+ 1.58	.68	- .58	- .94	- .13	- .95	- .25	+ .59	- .48	- .61	+ .20	- .24	1.07	+ .27	+ .14
Equalized valuation per pupil	9,563	6,655	8,124	6,785	7,093	4,557	19,452	7,408	3,843	7,062	7,943	4,883	5,626	11,223	7,275	6,795
Town rank	31	60	40	57	49	89	9	44	93	50	41	84	75	24	46	56
State rank	146	244	187	237	221	334	26	209	347	223	190	325	294	96	215	235
Town scaled score	+ .10	- .43	- .16	- .40	- .35	- .82	+ 1.94	- .29	- .95	- .35	- .19	- .75	- .64	+ .41	.32	.40
State scaled score	0.00	- .58	- .29	- .56	- .50	- 1.00	+ 1.96	- .43	- 1.14	- .50	- .33	- .94	- .79	+ .33	- .46	- .56
Experimental state aid	50.03	64.96	56.64	41.56	40.50	70.72	40.55	70.71	89.10	58.89	52.58	75.29	61.42	37.78	60.97	79.79
Town rank	70	48	66	83	85	39	84	40	18	64	74	33	56	88	57	26
Town scaled score	- .51	- .06	- .40	- 1.03	- 1.08	+ .18	+ .10	+ .18	+ .95	.31	- .57	+ .37	- .20	- 1.19	.22	+ .56
Experimental valuation per pupil	11,160	3,940	11,345	6,496	8,822	5,625	24,004	9,754	4,311	8,920	9,758	5,440	6,397	14,788	6,234	8,277
Town rank	33	94	31	71	46	83	11	41	92	45	40	85	72	21	74	50
Town scaled score	+ .01	1.05	+ .04	- .67	- .33	- .80	+ 1.90	- .19	- .99	- .31	- .19	.83	- .69	+ .55	- .70	.41
Total tax per $1000 valuation	43.60	54.00	47.50	54.00	60.00	50.00	37.00	55.00	52.00	47.00	53.00	50.80	45.00	47.00	39.80	58.00
Town rank	57	18	45	19	6	37	75	17	24	47	23	29	53	48	68	12
School support per $1000 valuation	13.66	20.93	17.01	21.30	25.79	22.15	8.16	14.48	28.77	16.18	18.92	15.67	18.58	12.27	15.95	18.74
Town rank	69	2[illegible]	45	17	7	14	91	64	4	52	30	59	34	74	56	35
State rank	253	62	140	50	13	35	340	223	7	171	96	188	102	280	178	101
State scaled score	- .41	+ .72	+ .11	+ .77	+ 1.46	+ .90	- 1.25	- .28	- 1.92	- .02	+ .40	- .10	+ .35	- .62	- .05	[illegible] .38
Assessed valuation per capita	1,910	520	1,890	980	1,280	800	3,410	820	460	1,470	1,820	900	1,040	1,790	1,170	1,310
Average teachers' salaries	3,030	3,286	3,255	3,398	3,328	2,507	2,999	2,821	2,727	3,541	3,138	2,681	2,793	2,783	2,981	2,892

COMPREHENSIVE DATA

Municipality	Holbrook	Harvard	Lunenburg	Provincetown	Holliston	Medway	Cohasset	Lenox	Lancaster	Acton	Ashland	Hopkinton	Nantucket	Hopedale	Kingston	Pepperell
Total school support	139.31	332.01	181.56	214.00	167.43	181.87	268.87	255.55	238.30	198.68	227.59	174.72	250.85	257.19	205.10	178.26
Town rank	94	4	74	47	84	73	21	27	34	61	39	81	31	26	53	78
State rank	350	19	283	190	323	282	65	85	123	235	152	307	98	84	215	293
Town scaled score	- 1.40	+ 1.62	- .73	- .23	- .96	- .73	+ .64	+ .42	+ .15	- .47	- .01	- .84	+ .35	+ .45	.37	.79
State scaled score	- 1.60	+ 1.82	- .86	- .28	- 1.08	- .86	+ .67	+ .44	+ .14	.54	- .05	- .98	+ .35	.47	.43	- .91
Local school support	95.08	177.44	111.94	158.76	121.79	109.28	206.65	192.90	137.91	131.79	137.97	110.84	229.57	226.14	130.81	119.89
Town rank	85	19	68	27	54	71	9	14	41	46	40	69	5	6	48	58
State rank	313	93	255	125	220	265	41	68	173	191	172	260	18	22	194	227
Town scaled score	- 1.03	+ .91	- .63	+ .45	- .41	- .70	+ 1.56	+ 1.25	- .03	- .17	- .03	- .66	+ 2.09	+ 2.02	- .19	- .45
State scaled score	- 1.07	+ .59	- .75	+ .20	- .56	- .79	+ 1.17	+ .89	- .24	.36	- .24	- .77	+ 1.63	+ 1.56	.38	- .59
State aid per pupil	37.33	87.19	67.22	35.71	43.47	40.70	37.53	51.70	68.94	54.39	58.26	52.07	13.24	26.79	43.68	56.15
Town rank	83	12	28	84	74	78	82	58	25	54	46	57	93	91	73	51
State rank	259	60	109	264	224	238	258	172	104	159	148	171	340	308	223	155
Town scaled score	- .56	+ .45	+ .06	- .60	- .45	- .50	- .56	- .29	+ 08	- .23	- .06	- .27	- 1.03	.78	.45	- .19
State scaled score	- .79	+ .84	+ .19	- .84	- .58	- .68	- .78	- .32	+ .25	.23	- .10	- .30	- 1.57	- 1.13	.58	- .17
Equalized valuation per pupil	4,929	10,742	7,114	15,744	6,945	6,918	15,051	9,291	11,655	7,763	7,643	5,852	26,094	6,658	12,5.6	5,003
Town rank	83	27	48	13	53	54	16	33	21	42	43	69	2	59	20	81
State rank	324	113	220	43	229	231	49	156	89	197	200	282	7	243	78	317
Town scaled score	- .75	+ .32	- .35	+ 1.29	- .37	- .38	+ 1.11	+ .05	+ .49	- .23	- .23	- .58	+ 3.14	- .43	+ .65	- .73
State scaled score	- .93	+ .23	- .49	+ 1.23	- .53	- .53	1.09	+ .06	+ .41	.36	- .39	- .74	+ 3.28	.58	+ .58	- .91
Experimental state aid	46.04	10.40	77.19	42.09	49.88	46.80	49.07	61.61	53.13	64.04	74.22	62.98	16.46	34.96	54.53	75.4.
Town rank	81	93	29	82	76	80	77	55	72	50		54	92	90	68	32
Town scaled score	- .84	- 2.33	2.05	- 1.00	- .70	- .81	- .71	- .20	- .55	.12	+ .33	- .14	2.08	- 1.31	- .49	+ .38
Experimental valuation per pupil	6,079	12,822	8,168	21,049	7,970	7,955	19,680	11,071	8,982	9,140	9,737	7,077	32,425	8,688	15,624	6,719
Town rank	77	27	51	12	54	55	13	34	44	43	42	63	2	48	20	69
Town scaled score	- .73	+ .27	- .43	+ 1.47	.46	.46	+ 1.27	0.00	+ .31	- .28	- .19	.59	+ 3.16	.35	+ .67	- .64
Total tax per $1000 valuation	50.00	38.00	48.00	38.00	46.00	46.00	47.50	56.00	43.00	47.00	44.00	50.00	38.00	42.50	37.00	49.00
Town rank	30	72	42	74	50	52	44	14	59	46	54	31	73	60	76	39
School support per $1000 valuation	19.29	16.52	15.74	9.91	17.54	15.79	13.73	20.76	11.83	16.98	18.05	18.94	8.80	33.98	10.45	23.97
Town rank	28	49	58	87	42	57	68	23	75	46	37	29	90	2	84	10
State rank	92	158	184	316	128	183	250	65	288	141	116	95	334	3	310	18
State scaled score	+ .46	+ .04	- .09	- .98	+ .19	- .07	- .40	+ .69	- .69	+ .10	+ .27	+ .41	- 1.15	+ 2.71	.90	+ 1.18
Assessed valuation per capita	1,000	610	1,330	2,310	1,170	1,100	3,000	1,320	1,260	1,340	1,360	1,120	3,800	1,100	2,110	920
Average teachers' salaries	2,597	2,250	2,725	2,550	2,837	3,150	3,183	3,090	2,756	2,745	2,884	2,461	2,815	3,278	2,518	2,855

COMPREHENSIVE DATA

GROUP III

Municipality	N. Brookfield	Barre	Warren	Hanover	Yarmouth	Marshfield	Burlington	Duxbury	Charlton	Northborough	Sutton	Deerfield	Rutland	Dighton	Groton	Manchester
Total school support	200.15	217.29	211.68	184.08	272.15	267.02	154.68	230.82	160.47	174.57	203.21	277.56	203.81	277.00	203.69	278.54
Town rank	60	45	51	70	19	22	91	38	90	82	57	16	55	17	56	15
State rank	232	181	198	276	60	69	344	140	339	310	221	52	219	54	220	51
Town scaled score	- .44	- .18	- .26	- .70	+ .68	+ 60	- 1.16	+ .04	- 1.07	.92	- .40	+ .77	- .39	+ .56	- .39	+ .79
State scaled score	- .52	.22	- .34	- .80	+ .74	+ .65	- 1.33	0. 00	- 1.23	.98	- .49	- .83	- .47	+ .83	.47	+ .84
Local school support	98.34	130.92	107.71	107.92	133.66	187.33	69.06	144.49	78.51	89.40	115.46	193.08	78.04	135.93	126.88	260.15
Town rank	83	47	73	72	45	15	93	36	90	88	63	13	91	44	50	2
State rank	305	193	272	271	186	75	342	156	335	320	240	67	336	180	203	7
Town scaled score	- .93	- .19	- .73	- .73	- .13	+ 1.11	- 1.63	+ .12	- 1.41	1.17	- .55	+ 1.25	1.42	- .08	- .29	+ 2.80
State scaled score	- 1.00	.38	- .83	- .83	- .32	+ .79	- 1.58	.10	- 1.41	- 1.19	- .67	+ .93	- 1.41	.28	- .46	. 2.24
State aid per pupil	84.22	69.30	63.32	46.45	60.10	42.71	55.77	48.44	59.33	57.96	63.16	59.02	109.62	70.29	56.21	9.15
Town rank	13	24	34	67	41	77	52	62	43	47	35	44	6	22	50	94
State rank	67	102	122	204	38	228	156	190	143	149	124	144	43	96	154	345
Town scaled score	+ .39	+ .10	+ .06	- .39	- .12	- .47	- .21	.35	- .14	- .17	- .06	.14	+ .87	+ .12	- .19	- 1.13
State scaled score	+ .75	+ .26	+ .06	- .49	- .04	- .61	- .18	- .42	- .07	.11	+ .06	.08	+ 1.58	+ .29	- .7	- 1.71
Equalized valuation per pupil	8,560	5,121	6,482	6,744	18,708	17,792	4,861	14,132	3,702	4,471	4,145	11,322	6,145	6,458	6,964	21,571
Town rank	35	80	61	58	10	11	85	18	94	90	91	23	66	62	51	5
State rank	173	314	255	240	28	31	327	57	348	336	342	94	267	257	226	16
Town scaled score	- .08	- .70	- .46	- .41	+ 1.78	+ 1.62	- .75	+ .94	- .97	- .83	- .89	+ .43	- .52	.46	- .37	+ 2.31
State scaled score	- .20	- .89	- .62	- .57	+ 1.82	+ 1.63	- .94	+ .90	- 1.17	- 1.02	- 1.08	+ .35	- .68	- .62	- .52	+ 2.38
Experimental state aid per pupil	60.48	82.16	59.53	60.58	77.39	47.14	115.32	65.64	68.26	63.66	75.19	70.04	122.47	81.42	64.18	10.55
Town rank	60	22	62	60	28	79	8	47	44	51	34	42	6	24	49	94
Town scaled score	- .24	+ .63	- .28	- .25	+ .46	- .49	- .28	- .03	+ .08	- .11	+ .37	+ .16	+ 2.32	+ .63	.09	2.32
Experimental valuation per pupil	6,146	6,071	6,093	8,796	24,090	22,706	5,229	19.151	4,259	4,910	4,935	13,437	6,894	7,481	7,971	24,907
Town rank	74	78	75	47	10	12	88	14	93	91	90	23	65	61	54	6
Town scaled score	- .72	- .74	- .73	- .58	+ 1.92	+ 1.72	- .85	+ 1.19	- 1.00	.83	- .89	+ .35	- .61	- .53	.46	+ 2.04
Total tax per $1000 valuation	50.00	59.10	48.00	53.00	36.00	42.50	57.00	43.00	63.00	66.00	68.00	39.00	46.00	34.00	53.00	46.00
Town rank	34	10	43	22	81	61	13	58	5	2	1	70	79	85	21	51
School Support per $1000 valuation	11.49	25.57	16.62	16.00	7.14	10.53	14.21	10.23	21.22	20.00	27.85	17.05	12.71	21.05	18.22	12.06
Town rank	78	8	48	55	94	82	65	85	18	26	5	44	71	20	35	74
State rank	296	14	155	177	346	308	230	312	52	75	9	137	270	58	109	282
State scaled score	.74	+ 1.43	+ .05	- .04	- 1.41	- .89	- .32	- .93	+ .76	+ .57	+ 1.78	+ .12	- .55	+ .73	+ .30	- .65
Assessed valuation per capita	940	940	870	1,280	3,680	3,770	1,060	2,940	720	830	810	1,650	650	1,230	1,350	3,260
Average teachers' salaries	2,881	2,884	2,776	2,955	2,813	3,151	2,775	2,863	2,595	2,857	2,574	2,849	2,479	2,988	2,533	3,342

COMPREHENSIVE DATA

Municipality	Townsend	Merrimac	Hamilton	Southborough	Avon	Harwich	Hadley	Douglas	Sudbury	Pembroke	W. Boylston	Millis	Norwell	Chatham	Sandwich	Georgetown
Total school support	187.49	148.64	236.20	251.84	165.16	276.70	243.72	178.19	189.67	233.43	210.90	211.96	218.27	259.85	323.05	162.39
Town rank	69	92	36	25	86	18	32	77	63	37	52	48	44	24	6	89
State rank	268	348	128	92	329	55	117	294	259	133	202	196	88	81	22	338
Town scaled score	- .64	- .25	+ .12	+ .35	- .99	+ .76	+ .39	.79	- .61	+ .08	.28	.26	.16	+ .49	+ 1.48	1.04
State scaled score	- .75	- 1.44	+ .10	+ .36	- 1.14	+ .81	+ .23	- .91	.12	+ .06	- .35	- .34	- .21	+ .51	+ 1.66	1.17
Local school support	88.65	101.58	171.17	176.71	105.41	199.79	145.41	124.35	114.24	148.04	136.51	119.86	112.78	197.48	206.07	95.25
Town rank	89	79	22	20	75	11	34	53	66	32	43	59	67	12	10	84
State rank	322	296	102	97	281	55	154	212	248	149	179	228	118	60	42	312
Town scaled score	+ 1.18	- .88	+ .74	- .87	.77	+ 1.40	+ .14	.35	- .58	+ .20	- .06	.45	- .58	+ 1.35	+ 1.55	1.02
State scaled score	- 1.21	- .95	+ .48	+ .51	- .87	+ 1.03	+ .08	.50	- .69	- .04	- .26	.59	- .73	+ .99	+ 1.17	1.07
State aid per pupil	71.33	45.19	39.69	55.23	47.78	33.62	60.67	51.68	43.77	59.36	62.84	68.61	72.63	34.48	64.44	58.29
Town rank	21	70	80	53	64	86	39	59	72	42	36	26	20	85	33	45
State rank	94	211	245	157	193	273	135	173	222	142	125	105	89	269	118	147
Town scaled score	+ .14	- .41	.52	- .21	- .37	- .64	- .12	- .29	- .45	- .14	- .08	+ .08	+ .16	.62	.04	.16
State scaled score	+ .31	.53	- .71	.20	- .44	- .91	.02	- .32	- .58	.07	+ .05	+ .25	+ .37	.88	.10	.10
Equalized valuation per pupil	5,792	4,856	13,132	7,317	4,935	22,578	7179	4,746	6,277	8,374	6,088	6,956	10,727	27,483	16,269	5,282
Town rank	72	86	19	45	82	3	47	87	64	37	67	52	28	1	12	77
State rank	286	328	70	213	323	11	219	331	264	178	275	228	114	4	41	308
Town scaled score	- .59	- .75	+ .76	- .31	.75	+ 2.49	- .35	- .78	- .50	- .11	- .53	.37	+ .32	+ 3.40	1.33	.68
State scaled score	.76	- .94	+ .71	- .45	- .93	+ 2.59	.48	- .96	- .66	.24	- .70	- .52	+ .23	+ 3.56	+ 1.33	.86
Experimental state aid	89.16	53.37	52.81	60.89	58.90	40.16	83.83	63.27	52.34	74.53	81.96	80.05	82.49	48.89	98.30	76.24
Town rank	17	71	73	58	63	86	20	52	75	35	23	25	21	78	5	30
Town scaled score	+ .95	- .54	- .56	- .23	- .31	1.09	+ .80	- .12	- .58	+ .34	+ .65	+ .57	+ .68	- .73	+ 1.33	.06
Experimental valuation per pupil	7,240	5,735	17,475	8,066	6,082	26,976	9,884	5,809	7,507	10,514	7,940	8,117	12,183	38,969	24,807	6,912
Town rank	62	82	18	53	76	3	39	80	60	36	57	52	29	1	7	64
Town scaled score	- .56	- .79	+ .95	- .45	- .73	+ 2.35	- .17	- .77	- .52	- .08	- .46	- .43	+ .17	+ 4.12	+ 2.03	.61
Total tax per $1000 valuation	52.00	64.00	38.00	50.00	53.00	32.00	42.00	51.00	65.00	52.00	40.00	50.00	35.00	27.00	37.00	55.16
Town rank	27	4	71	35	20	90	62	28	3	25	67	33	83	94	78	16
School support per $1000 valuation	15.31	20.92	13.04	24.45	21.37	8.85	20.26	26.20	18.20	17.68	22.42	17.24	10.52	7.19	12.68	18.03
Town rank	63	22	70	9	16	89	25	6	36	41	13	43	83	93	72	38
State rank	202	63	264	17	45	331	71	12	110	126	32	134	309	344	273	118
State scaled score	- .15	+ .71	- .50	+ 1.25	+ .78	1.46	+ .61	+ 1.52	+ .29	+ .21	+ .94	+ .14	- .89	1.40	.56	+ .27
Assessed valuation per capita	1,100	820	2,390	1,200	820	4,260	1,320	880	1,300	1,640	1,350	1,310	2,140	5,120	1,600	1,000
Average teachers' salaries	2,340	2,743	3,008	3,144	2,356	2,744	2,492	2,706	3,402	2,609	2,387	2,341	3,113	2,887	3,077	2,647

Municipality	Littleton	Hardwick	Groveland	Stockbridge	Northfield	Hatfield	Sheffield	Plainville	Williamsburg	Tisbury	Orleans	Shelburne	Dover	Stowe	Mendon	Brookfield
Total school support	200.95	216.27	143.27	283.37	252.18	226.89	220.37	178.83	182.51	329.28	380.25	337.31	312.47	204.40	188.96	177.91
Town rank	59	46	93	13	30	40	43	76	71	5	2	3	10	54	65	79
State rank	226	184	349	47	91	154	174	291	280	20	9	15	35	218	263	295
Town scaled score	- .43	- .19	- 1.33	+ .86	- .37	- .03	.13	.78	- .72	+ 1.58	+ 2.38	+ 1.70	+ 1.32	.38	.62	.79
State scaled score	- .52	.24	- 1.46	+ .93	+ .37	- .07	- .18	.91	- .82	+ 1.77	+ 2.68	+ 1.91	+ 1.44	- .45	- .73	.93
Local School support	119.92	115.01	94.55	169.69	120.83	125.85	138.83	104.81	100.85	297.61	207.90	146.79	253.03	94.04	120.71	115.96
Town rank	57	64	86	23	55	52	38	76	81	1	8	33	3	87	56	62
State rank	226	245	314	104	223	209	169	282	297	4	39	151	10	317	224	236
Town scaled score	- .45	- .56	- 1.04	+ .71	- .43	- .31	- .01	.80	- .90	+ 3.67	+ 1.59	+ .17	+ 2.64	- 1.07	- .43	.55
State scaled score	.59	- .67	- 1.09	+ .44	- .57	- .48	- .22	- .89	- .95	+ 2.97	+ 1.19	- .06	+ 2.09	- 1.09	- .57	- .67
State aid per pupil	46.11	75.19	47.72	64.51	100.05	60.38	81.54	51.40	62.05	20.73	56.49	83.67	38.67	76.14	66.67	60.94
Town rank	69	19	65	32	8	40	15	60	37	92	49	14	81	18	30	38
State rank	207	85	195	114	50	136	71	177	130	328	153	68	252	83	111	133
Town scaled score	- .39	+ .21	- .37	- .04	+ .70	- .12	+ .33	- .29	- .08	.88	.19	+ .37	- .54	+ .23	+ .04	.12
State scaled score	- .50	+ .45	- .44	+ .10	+ 1.26	.03	+ .66	.33	+ .02	+ 1.33	- .16	+ .73	.74	+ .48	+ .18	.03
Equalized valuation per pupil	8,594	5,652	4.142	14,803	6,413	11,071	8,451	5,845	5,154	15,744	20,491	9,503	15,644	6,146	5,726	8,367
Town rank	34	74	92	17	63	25	36	71	79	14	7	32	15	65	73	38
State rank	172	293	343	50	258	100	176	284	311	45	21	149	46	266	289	179
Town scaled score	- .07	- .62	- .89	+ 1.07	- .47	+ .38	- .10	- .58	- .70	+ 1.25	+ 2.11	+ .09	+ 1.25	- .52	.61	.11
State scaled score	- .20	- .78	- 1.08	+ 1.04	- .63	+ .30	- .23	.74	.88	+ 1.23	+ 2.17	+ .02	+ 1.21	- .68	.79	.24
Experimental state aid	63.13	71.91	58.23	79.53	107.13	73.67	101.93	59.54	69.97	25.17	68.02	113.45	39.73	103.61	70.55	75.62
Town rank	53	38	65	27	11	37	14	61	43	91	45	9	87	13	41	31
Town scaled score	- .13	.23	- .34	+ .55	+ 1.70	+ .31	+ 1.48	.28	+ .15	+ .71	+ .07	+ 1.96	- 1.10	+ 1.55	+ .18	+ .39
Experimental valuation per pupil	11,766	5,405	5,055	18,249	6,867	13,506	10,563	6,771	5,812	19,117	24,674	12,884	16,073	8,363	6,059	10,382
Town rank	30	87	89	17	66	24	35	68	81	15	8	26	19	49	79	37
Town scaled score	+ .10	.83	- .89	+ 1.06	- .62	+ .36	+ .07	- .63	- .77	+ 1.15	+ 2.00	+ .27	+ .74	.40	- .74	- .10
Total tax per $1000 valuation	35.00	49.00	60.00	42.00	60.00	33.00	36.00	52.00	47.00	33.00	29.50	44.00	28.50	50.00	50.00	34.00
Town rank	82	38	7	63	9	87	80	26	49	88	92	56	93	36	32	84
School support per $1000 valuation	13.95	20.35	22.84	11.46	18.84	11.37	16.43	17.94	19.57	18.90	10.15	15.45	16.18	15.31	21.09	13.86
Town rank	66	24	12	79	32	80	50	39	27	31	86	61	51	62	19	67
State rank	241	70	27	298	98	301	161	120	87	97	313	196	170	201	56	243
State scaled score	- .36	+ .62	+ 1.00	- .74	+ .39	- .76	- .02	+ .25	+ .50	+ .40	- .95	- .13	- .02	- .15	+ .74	- .38
Assessed valuation per capita	1,630	790	780	2,050	910	1,600	1,300	980	930	3,090	3,360	1,630	2,720	1,080	1,090	1,610
Average teachers' salaries	2,865	2,963	2,701	2,647	3,088	3,484	2,802	2,810	2,405	2,933	3,158	3,069	2,995	2,672	2,891	3,088

Municipality	Oak Bluffs	Edgartown	Ashby	Topsfield	Chester	Huntington	Brimfield	Wellfleet	Bernardston	New Marlborough	Ashfield	Charlemont	Petersham	New Salem
Total school support	210.26	269.44	181.91	254.83	315.42	305.80	292.67	252.53	176.79	278.74	242.83	315.74	318.89	581 16
Town rank	50	20	72	28	9	11	12	29	80	14	33	8	7	1
State rank	203	64	281	88	32	37	41	90	300	50	118	30	25	3
Town scaled Score	- .29	+ .64	- .73	+ .41	+ 1.36	+ 1.21	+ 1.00	+ .38	.81	+ .79	+ .22	+ 1.37	+ 1.42	+ 5.53
State scaled score	- .35	+ .68	- .86	+ .42	+ 1.49	+ 1.32	+ 1.09	+ .37	.94	+ .84	+ .21	+ 1.49	+ 1.55	+ 6.26
Local school support	181.64	223.03	64.25	162.50	158.00	157.78	103.25	164.51	99.31	179.06	148.84	116.33	176.10	244.20
Town rank	17	7	94	25	28	29	78	24	82	18	31	60	21	4
State rank	85	24	344	118	128	130	291	109	301	88	148	234	98	12
Town scaled score	+ 1.0	+ 1.94	1.74	+ .54	+ .43	+ .43	- .88	+ .59	- .90	+ .92	+ .22	.53	+ .85	+ 2.44
State scaled score	+ .67	+ 1.50	- 1.68	+ .28	+ .20	+ .18	- .91	+ .32	- .99	+ .63	.04	.65	+ .57	+ 1.90
State aid per pupil	27/21	44.30	77.08	49.37	100.34	87.46	118.85	48.32	66.80	99.67	87.99	146.07	116.63	237.60
Town rank	90	71	17	61	7	11	3	63	29	9	10	2	4	1
State rank	306	219	80	186	49	59	32	191	110	51	58	24	35	3
Town scaled score	.76	.43	+ .25	- .33	+ .70	+ .45	+ 1.05	- .35	+ .04	+ .68	+ .45	+ 1.59	+ 1.10	+ 3.36
State scaled score	- 1.12	.56	+ .55	.39	+ 1.27	+ .85	+ 1.88	- .43	+ .18	+ 1.26	+ .87	+ 2.77	+ 1.81	+ 5.90
Equalized valuation per pupil	19,698	20,611	5,526	10,051	5,273	6,811	4,722	21,672	5,854	11,517	8,348	10,014	10,926	5,846
Town rank	8	6	76	29	78	55	88	4	68	22	39	30	26	70
State rank	24	30	299	134	309	234	332	15	281	91	181	136	105	283
Town scaled score	+ 1.96	+ 2.13	- .64	+ .19	- .68	.40	.78	+ 2.33	- .58	+ .46	.12	- .19	+ .35	- .58
State scaled score	+ 2.01	+ 2.19	- .81	+ .09	- .86	.55	- .97	+ 2.40	- .74	+ .38	- .25	+ .08	+ .27	- .74
Experimental state aid	35.57	54.46	110.00	67.75	126.77	90.23	136.07	55.83	87.38	127.93	106.98	182.28	122.29	226.96
Town rank	89	69	10	46	5	16	3	67	19	4	12	2	7	1
Town scaled score	- 1.36	.49	+ 1.82	+ .06	+ 2.24	+ 1.00	+ 2.94	- .44	+ .88	+ 2.56	+ 1.69	+ 3.51	+ 2.33	1.82
Experimental valuation per pupil	24,297	25,337	7,886	13,793	6,662	7,027	5,406	25,039	7,657	14,782	10,149	12,496	11,457	4,987
Town rank	9	4	58	23	70	63	86	5	59	22	38	28	31	90
Town scaled score	+ 1.95	+ 2.11	- .47	+ .40	.65	.58	- .80	+ 2.06	.50	+ .55	.14	- .21	+ .04	.89
Total tax per $1000 valuation	40.00	33.00	48.00	32.00	58.00	44.00	55.00	33.00	48.00	37.00	39.00	40.00	40.00	60.00
Town rank	65	86	40	91	11	155	15	89	41	77	69	64	66	8
School support per $1000 valuation	9.22	10.82	11.63	16.17	29.47	23.17	21.87	7.59	16.97	15.56	17.84	11.62	16.13	41.79
Town rank	88	81	76	58	3	11	15	92	47	60	40	77	54	1
State rank	326	303	172		4	22	40	342	142	193	123	294	174	1
State scaled score	- 1.09	.84	.72	- .02	+ 1.72	+ 1.06	+ .86	- 1.34	+ .10	- .11	+ .24	- .72	- .03	+ 3.90
Assessed valuation per capita	4,100	3,660	1,110	2,330	960	1,010	950	3,280	1,270	2,000	1,440	1,710	2,040	950
Average teachers' salaries	2,929	3,480	2,306	2,842	3,075	2,720	2,763	2,416	2,529	2,829	2,611	2,687	2,709	2,603

COMPREHENSIVE DATA

GROUP IV

Municipality	Longmeadow	Seekonk	Dudley	Bedford	E.Longmeadow	N.Reading	Acushnet	Shirley	Wilbraham	Lynnfield	Rehoboth	Hull	Hanson	Middleton	Southwick	Sturbridge
Total school support	247.70	180.18	184.24	215.40	206.90	197.74	171.75	167.62	213.07	200.05	176.46	248.55	162.76	180.40	167.31	171.22
Town rank	46	100	96	71	77	85	107	111	72	84	104	44	118	99	114	109
State rank	106	228	275	188	210	236	314	321	192	233	302	102	335	286	325	316
Town scaled score	+ .02	- .92	- .87	- .42	- .55	- .68	- 1.05	1.10	- .47	- .64	- .97	+ .03	- 1.17	.92	- 1.10	1.05
State scaled score	+ .30	- .87	- .80	.26	- .42	- .58	- 1.04	- 1.09	- .29	.52	- .94	+ .32	- 1.20	- .87	1.08	- 1.04
Local School support	240.25	113.03	100.42	140.95	155.67	105.92	108.55	68.06	149.16	162.87	85.71	202.53	79.42	109.27	88.31	83.47
Town rank	4	66	87	38	33	77	73	116	35	28	102	17	111	72	100	106
State rank	13	252	298	162	136	279	269	343	147	116	325	46	334	266	323	329
Town scaled score	+ 2.54	- .46	- .75	+ .17	+ .50	.62	- .57	1.48	+ .35	+ .66	- 1.08	+ 1.56	- 1.22	.55	- 1.02	1.13
State scaled score	+ 1.84	- .71	- .77	- .18	+ .14	.87	- .81	1.60	- .02	+ .28	- 1.27	+ 1.11	- 1.39	.79	- 1.21	1.31
State aid per pupil	5.95	44.05	71.81	47.45	34.01	64.81	61.83	72.47	63.20	37.08	59.72	26.51	57.65	44.81	63.36	79.93
Town rank	120	110	71	106	115	82	87	69	85	114	92	117	95	109	84	59
State rank	349	221	92	196	271	116	131	89	123	261	141	310	150	214	121	75
Town scaled score	- 1.45	.75	.23	.67	- .93	.36	- .41	- .22	- .39	.88	.46	- 1.07	- .48	.72	- .38	- .08
State scaled score	- 1.18	- .43	+ .14	- .37	- .62	- .04	- .10	+ .16	- .06	.56	- .14	- .78	- .17	.43	.06	- .29
Equalized valuation per pupil	13,210	8,226	5,476	8,420	10,326	5,000	5,493	6,753	8,928	12,478	5,028	22,224	6,243	5,323	6,688	6,139
Town rank	22	53	99	51	38	107	98	73	48	24	105	10	83	100	74	86
State rank	66	184	301	177	126	318	300	239	164	80	315	14	265	306	242	270
Town scaled score	+ .60	.23	.69	- .20	+ .12	.77	- .69	- .48	.11	+ .48	- .77	+ 2.10	- .56	- .72	- .49	.58
State scaled score	+ .72	- .27	.82	- .23	+ .15	- .91	- .81	.56	.13	+ .58	- .91	+ 2.51	- .67	.85	- .57	- .69
Experimental state aid	7.75	51.03	58.22	61.42	42.86	76.43	49.51	60.14	76.07	45.86	38.64	36.98	68.60	56.21	64.89	72.47
Town rank	120	110	102	96	115	77	111	99	78	112	87	116	88	107	92	82
Town scaled score	1.48	.89	- .79	- .75	.98	- .54	.89	.75	- .55	- .96	- .65	- 1.07	- .65	.81	- .70	.58
Experimental valuation per pupil	17,197	9,530	4,439	10,899	13,014	5,896	4,398	5,604	10,747	15,432	5,779	31,011	7,429	6,679	6,849	5,566
Town rank	18	54	116	47	33	99	118	104	48	24	101	7	77	87	84	105
Town scaled score	+ .72	- .42	- 1.17	.22	+ .10	- .96	- 1.19	- 1.00	- .24	+ .46	.98	+ 2.77	.74	.84	.82	1.01
Total tax per $1000 valuation	35.00	30.50	60.00	50.00	40.00	64.00	44.00	44.00	36.00	34.00	44.00	54.00	54.80	51.00	50.00	55.00
Town rank	105	114	21	47	87	11	70	77	102	107	76	38	37	45	52	35
School support per $1000 valuation	18.19	13.74	18.34	16.74	15.08	21.19	19.76	10.08	16.71	13.05	17.05	9.11	12.72	20.53	13.20	13.60
Town rank	34	72	31	46	58	15	25	99	47	77	42	108	80	19	76	73
State rank	112	249	105	150	207	53	82	315	151	263	138	328	269	67	261	254
State scaled score	+ .29	.39	+ .31	+ .07	- .20	+ .75	+ .53	.96	+ .06	.50	+ .12	1.11	.55	+ .65	.48	.42
Assessed valuation per capita	2,660	1,540	630	860	2,050	1,050	720	530	1,400	2,460	1,110	6,150	1,280	840	1,290	940
Average teachers' salaries	3,713	2,646	3,008	3,218	2,803	2,550	3,159	2,736	2,978	2,748	2,211	3,497	2,607	2,414	2,791	2,698

Municipality	Westminster	Norfolk	Salisbury	Nahant	Upton	Ashburnham	Dennis	Lincoln	Raynham	Mattapoisett	Marion	Sterling	Freetown	Lanesborough	Lakeville	Tyngsborough
Total school support	165.51	174.62	200.18	209.30	173.22	217.06	317.18	267.20	176.79	171.79	227.83	167.49	194.45	232.64	185.30	180.59
Town rank	115	105	83	75	106	68	18	35	103	108	59	112	90	52	94	98
State rank	328	308	230	206	312	182	28	68	301	315	151	322	247	134	273	285
Town scaled score	1.13	1.00	- .64	.52	- 1.02	.41	+ 1.00	+ .29	- .97	- 1.05	- .26	1.10	- .73	.19	.86	.92
State scaled score	1.14	- .98	- .52	.36	- 1.00	.22	+ 1.53	+ .65	- .94	- 1.04	- .05	- 1.08	- .61	+ .04	.79	.87
Local school support	96.11	120.21	135.37	179.45	102.84	113.89	223.01	217.45	113.97	128.89	183.84	84.27	98.81	133.31	103.55	99.70
Town rank	95	53	40	24	86	65	7	8	64	45	23	105	89	42	83	88
State rank	310	225	182	84	294	250	25	28	249	198	80	328	302	189	288	300
Town scaled score	- .84	- .30	+ .04	+ 1.04	- .68	.44	+ 2.02	+ 1.90	- .44	.11	+ 1.14	1.11	.79	.006	- .68	.77
State scaled score	- 1.05	.57	- .28	+ .63	- .93	- .71	+ 1.50	+ 1.38	- .71	.42	+ .71	- 1.29	1.00	- .32	- .91	- .95
State aid per pupil	67.45	52.10	48.71	19.86	65.65	77.07	68.60	46.21	59.97	37.83	23.49	71.99	85.72	74.37	69.15	80.89
Town rank	78	101	104	119	80	63	77	107	90	113	118	70	53	67	76	57
State rank	108	170	189	329	113	81	106	206	139	256	318	91	65	87	103	73
Town scaled score	- .31	- .60	.66	- 1.19	- .34	.13	- .29	- .71	- .45	.86	- 1.13	.22	+ .02	.17	.28	- .06
State scaled score	+ .06	- .27	.35	- .91	0.00	+ .25	+ .08	.39	- .14	- .56	- .83	+ .14	- .41	+ .19	+ .10	+ .31
Equalized valuation per pupil	5,807	5,855	6,926	10,375	3,615	5,719	27,410	10,629	6,329	10,096	13,597	6,302	5,886	4,515	7,080	4,426
Town rank	92	91	69	37	121	94	4	33	81	40	20	82	89	112	67	113
State rank	285	280	230	125	350	291	5	118	261	132	59	262	277	335	222	337
Town scaled score	- .64	- .63	- .45	+ .12	- 1.00	- .65	+ 2.97	+ .17	- .55	+ .08	+ .66	- .55	- .63	- .85	.43	.87
State scaled score	- .75	- .74	- .53	+ .16	- 1.19	- .77	+ 3.55	+ .21	- .69	+ .10	+ .80	- .65	- .74	1.00	- .50	1.03
Experimental state aid	79.49	66.32	57.97	29.27	84.22	76.48	87.80	56.98	60.73	45.05	27.81	100.55	94.94	89.02	82.88	117.14
Town rank	74	89	104	118	65	86	62	105	97	113	119	51	55	60	68	41
Town scaled score	- .53	- .65	+ .79	- 1.18	+ .43	- .54	+ .38	- .79	- .75	.96	- 1.20	- .21	.29	.37	.45	+ .02
Experimental valuation per pupil	6,843	7,352	8,244	15,297	4,637	5,675	35,085	13,107	6,314	12,024	16,100	8,802	6,518	5,404	8,486	6,410
Town rank	85	78	68	25	114	103	4	31	95	39	22	60	89	106	64	93
Town scaled score	- .82	.75	- .61	+ .44	- 1.15	1.00	+ 3.25	+ .11	.90	- .04	+ .56	.53	.87	1.04	.58	- .88
Total tax per $1000 valuation	46.30	41.00	68.00	55.00	80.00	65.00	35.00	44.00	44.00	45.00	38.40	45.00	50.00	68.00	35.20	68.60
Town rank	63	82	8	33	2	9	104	73	75	65	95	68	51	5	103	4
School support per $1000 valuation	16.55	20.53	19.55	17.30	28.45	19.92	8.14	20.46	18.01	12.77	13.52	13.38	16.79	29.53	14.63	22.54
Town rank	49	20	28	40	3	23	117	21	35	79	74	75	45	2	62	7
State rank	157	68	88	133	8	78	341	69	119	267	256	259	146	5	218	30
State scaled score	- .04	+ .65	+ .50	+ .15	+ 1.87	+ .57	- 1.26	+ .64	+ .26	.54	- .43	- .45	+ .08	+ 2.03	- .26	+ .96
Assessed valuation per capita	940	820	1,460	2,120	610	870	4,210	2,080	1,150	2,000	2,530	1,240	1,070	870	1,200	900
Average teachers' salaries	2,612	2,679	2,727	2,833	2,744	2,172	2,586	2,618	2,380	2,783	2,959	2,591	2,708	2,585	2,380	2,690

Municipality	Cheshire	Newbury	Granby	Essex	Rowley	Boylston	Millville	W.Brookfield	Wenham	Clarksburg	W.Newbury	Hinsdale	Colrain	Carver	Southampton	
Total school support	163.17	195.68	167.40	215.94	150.84	201.49	194.46	178.40	245.38	204.99	232.21	229.22	190.37	209.72	226.52	200.89
Town rank	117	88	113	69	121	81	89	101	47	79	53	57	91	74	62	82
State rank	333	244	324	185	347	224	246	292	110	216	137	145	256	205	157	227
Town scaled score	- 1.17	- .71	- 1.10	.42	- 1.34	- .63	.73	- .95	.01	- .58	- .20	- .24	.78	- .53	.27	.64
State scaled score	- 1.17	- .61	- 1.08	.26	- 1.40	- .51	.61	.91	+ .25	- .45	+ .04	.02	.70	- .36	.07	.52
Local school support	98.38	127.75	97.50	139.26	84.79	121.27	106.58	111.35	193.87	128.15	162.05	117.48	104.07	125.07	130.69	86.92
Town rank	91	47	92	39	103	52	75	69	20	46	30	56	80	50	44	101
State rank	304	202	306	168	326	222	277	258	65	200	119	232	285	210	195	324
Town scaled score	- .80	- .12	- .82	+ .13	- 1.10	- .28	.61	.50	+ 1.36	- .12	+ .64	- .36	- .67	.19	.06	1.06
State scaled score	1.00	- .44	- 1.03	- .20	- 1.29	.56	.85	.75	+ 93	.42	+ .28	- .63	.89	- .48	.38	1.25
State aid per pupil	61.58	65.48	62.07	51.47	58.67	56.92	86.51	58.30	29.31	76.64	54.32	82.67	71.68	82.88	75.53	78.42
Town rank	88	81	86	102	94	97	53	95	117	65	98	56	73	55	66	62
State rank	132	115	129	175	145	152	64	146	293	82	160	70	93	69	84	78
Town scaled score	- .41	.36	- .41	- .64	.46	- .51	+ .04	- .48	+ 1.02	.14	.56	- .05	- .23	.03	- .16	.10
State scaled score	- .10	0.00	.08	.29	- .16	- .19	+ .43	.16	- .72	+ .23	.23	+ .37	+ .14	+ .21	- .27	.12
Equalized valuation per pupil	4,156	10,380	6,915	6,969	4,768	5,287	4,945	5,225	16,344	3,702	10,937	5,589	4,873	5,745	10,875	5,878
Town rank	117	36	70	68	110	101	108	102	17	120	29	97	109	93	31	90
State rank	341	124	232	225	329	307	321	310	40	349	104	297	326	288	108	278
Town scaled score	- .91	+ .12	- .45	- .44	.79	.72	.77	- .74	+ 1.12	- .99	+ .22	.67	.79	- .65	+ .21	- .63
State scaled score	- 1.08	+ .16	- .53	- .52	.16	- .19	+ .43	- .16	- .72	+ .23	.23	+ .37	+ .14	+ .21	- .27	- .12
Experimental state aid	73.81	73.66	79.76	58.33	71.51	69.17	93.53	72.61	31.75	76.63	66.17	55.52	84.05	103.87	81.83	84.65
Town rank	79	80	73	101	85	86	57	83	117	75	90	109	66	49	70	64
Town scaled score	- .58	- .58	- .49	- .79	- .61	- .64	- .31	.58	- 1.15	.53	- .68	.81	.43	- .17	- .47	- .43
Experimental valuation per pupil	4,982	11,667	8,886	7,897	5,812	6,445	5,346	6,508	17,706	3,702	13,362	3,753	5,714	7,200	11,781	6,345
Town rank	111	42	59	73	100	92	107	90	17	120	29	119	102	81	40	94
Town scaled score	- 1.10	- .10	- .52	- .67	- .98	.88	1.05	- .87	+ .80	- 1.29	+ .16	- 1.28	.99	.77	- .08	.70
Total tax per $1000 valuation	57.00	48.00	42.00	62.00	62.00	55.00	45.00	47.00	32.00	57.00	40.00	61.00	80.00	53.00	40.00	53.00
Town rank	26	57	78	14	15	32	66	61	113	27	84	20	1	40	85	43
School support per $1000 valuation	23.68	12.31	14.10	19.99	17.79	22.95	21.56	21.32	11.86	34.64	14.82	21.02	21.35	21.78	12.02	14.79
Town rank	5	83	67	22	37	6	11	14	88	1	60	17	13	10	85	61
State rank	19	278	236	76	125	24	44	49	287	2	108	60	48	41	283	216
State scaled score	+ 1.14	- .61	- .34	+ .45	+ .23	+ 1.02	+ .81	+ .77	- .68	+ 2.82	- .23	+ .73	+ .78	+ .84	.66	.23
Assessed valuation per capita	760	1,370	1,250	1,190	1,010	980	620	1,880	2,840	610	1,820	850	910	1,060	2,310	1,090
Average teachers' salaries	2,442	2,700	2,743	2,639	2,737	2,624	2,491	2,440	2,743	2,630	2,927	2,541	2,803	2,909	2,569	2,760

COMPREHENSIVE DATA

GROUP IV

Municipality	Berlin	Rochester	Erving	Hampden	Russell	Berkley	Sherborn	E/Brookfield	W.Stockbridge	Hubbardston	Gill	Paxton	Princeton	Brewster	Bolton	Halifax
Total school support	197.49	183.24	247.98	228.43	271.88	157.73	272.47	158.95	163.18	221.26	222.58	208.56	250.38	378.76	217.53	190.28
Town rank	87	97	45	58	32	120	31	119	116	65	63	76	43	8	67	92
State rank	238	278	105	149	61	341	59	340	332	172	166	208	99	10	180	257
Town scaled Score	- .68	- .88	+ .02	- .25	+ .37	- 1.24	+ .37	- 1.22	- 1.17	- .34	- .33	- .53	+ .06	+ 1.86	- .40	- .78
State scaled score	- .58	.82	+ .30	- .04	+ .72	- 1.28	+ .74	- 1.26	- 1.16	- .15	- .14	- .38	+ .35	+ 2.64	- .22	.70
Local school support	104.01	95.58	192.06	118.46	210.42	80.30	211.80	112.55	110.56	97.14	105.99	133.56	143.11	272.54	115.15	115.76
Town rank	81	90	21	55	13	109	11	67	70	93	76	41	36	1	61	59
State rank	286	303	70	230	37	332	34	254	261	307	278	188	157	5	243	238
Town scaled score	.87	- .85	+ 1.32	- .34	+ 1.74	- 1.20	+ 1.77	- .48	- .52	- .82	- .62	0.00	+ .22	+ 3.14	- .41	- .40
State scaled score	- .89	- 1.07	+ .89	- .61	+ 1.25	- 1.37	+ 1.27	- .73	- .77	1.03	.87	- .32	- .12	+ 2.47	- .67	- .67
State aid per pupil	60.25	77.21	54.19	89.28	41.91	75.13	38.77	45.23	52.62	103.72	116.58	69.76	103.98	78.90	65.84	59.89
Town rank	90	63	99	49	112	67	113	109	101	42	34	75	41	61	80	92
State rank	137	79	161	57	231	86	251	210	167	47	37	99	46	77	112	140
Town scaled score	- .45	.13	.56	+ .09	- .79	- .17	- .84	- .72	- .57	+ .36	- .60	- .27	+ .36	- .10	- .34	.45
State scaled score	- .12	+ .25	- .23	+ .49	- .49	+ .21	- .54	- .41	- .27	+ .76	+ 1.00	+ .10	+ .76	+ .27	0.00	- .14
Equalized valuation per pupil	6,403	6,790	9,123	4,755	10,516	4,069	10,817	6,154	6,587	5,023	7,470	11,732	6,466	19,548	8,072	9,830
Town rank	80	72	46	111	35	119	32	85	76	106	63	26	79	13	55	41
State rank	259	236	159	330	133	345	110	269	249	316	206	86	256	25	188	140
Town scaled score	- .54	- .47	.009	- .79	+ .15	- .92	+ .20	- .58	- .49	- .77	- .33	+ .35	- .53	+ 1.66	- .26	+ .04
State scaled score	- .12	+ .25	- .23	+ .49	- .49	+ .21	- .54	- .41	.27	+ .76	+ 1.00	+ .10	+ .76	+ .27	0.00	.14
Experimental state aid	63.23	79.81	83.78	98.56	55.95	83.99	44.86	56.97	64.89	127.06	131.44	80/22	129.51	94.19	72.11	63.46
Town rank	95	72	93	53	108	67	114	106	91	36	34	71	35	56	84	94
Town scaled score	- .72	- .49	- .71	- .24	- .81	.44	- .96	.79	- .70	+ .15	+ .21	- .48	+ .18	.29	- .60	- .71
Experimental valuation per pupil	6,719	7,018	10,738	5,250	14,039	4,549	12,516	7,751	8,122	6,152	8,422	13,491	8,054	23,366	8,841	10,416
Town rank	86	83	49	108	26	115	37	74	71	96	65	27	72	11	61	51
Town scaled score	- .84	- .80	- .24	- 1.06	+ .25	1.17	+ .02	- .69	- .63	- .93	.59	+ .17	- .64	+ 1.63	- .53	- .29
Total tax per $1000 valuation	62.00	40.00	36.00	56.00	24.00	58.00	48.80	49.00	50.00	61.00	40.00	34.00	51.00	32.50	44.00	41.00
Town rank	13	92	99	31	119	23	56	54	53	18	88	109	46	111	71	80
School support per $1000 valuation	16.25	14.52	21.06	24.92	20.01	19.74	19.59	18.29	16.80	19.35	14.20	11.39	22.14	13.94	14.27	11.78
Town rank	51	63	16	4	18	26	27	32	44	30	66	93	8	68	64	89
State rank	165	221	57	15	61	83	86	107	145	91	232	300	37	242	228	289
State scaled score	0.00	- .27	+ .73	+ 1.32	+ .57	+ .53	+ .51	+ .31	+ .08	+ .47	.32	- .76	+ .90	- .36	- .31	- .70
Assessed valuation per capita	1,010	1,250	1,560	1,070	2,060	750	1,920	1,130	1,140	860	1,170	1,770	1,330	3,050	1,550	2,210
Average teachers' salaries	2,756	2,421	2,788	3,388	2,881	2,605	2,933	2,329	2,356	2,790	2,137	2,414	2,938	3,425	2,498	2,544

COMPREHENSIVE DATA

Municipality	Whately	Boxford	Sunderland	Carlisle	Conway	Eastham	Royalston	Leverett	Becket	Granville	Richmond	Egremont	Plympton	Truro	Phillipston	Cummington
otal school support	239.16	239.73	197.56	230.82	260.28	317.90	189.78	290.96	267.22	315.70	221.99	176.98	215.58	277.14	169.45	275.32
Town rank	95	49	86	55	38	16	93	37	34	20	64	102	70	27	110	29
State rank	122	121	237	139	79	26	258	78	67	31	171	297	186	53	319	57
Town scaled score	- .10	- .09	- .68	- .22	+ .21	+ 1.00	+ .79	+ .21	+ .29	+ .98	- .34	- .97	- .42	+ .43	1.08	+ .42
State scaled score	+ .16	+ .16	- .58	0.00	+ .53	+ 1.53	+ .72	+ .53	+ .65	+ 1.49	- .15	- .94	- .26	+ .83	- 1.07	+ .81
ocal School support	126.06	153.89	115.35	158.64	105.61	208.64	81.62	93.42	119.73	207.82	103.67	124.30	103.29	191.67	45.20	155.83
Town rank	48	34	60	31	78	14	107	94	54	15	82	51	84	22	120	32
State rank	207	143	241	127	280	38	330	318	229	40	287	214	290	71	349	134
Town scaled score	- .17	+ .50	- .41	+ .57	.62	+ 1.70	- 1.18	.91	- .30	+ 1.68	- .67	- .21	.68	+ 1.32	2.00	+ .50
State scaled score	- .46	+ .10	- .67	+ .20	- .87	+ 1.21	- 1.35	- 1.12	- .59	+ 1.19	- .91	- .50	.91	+ .87	- 2.05	+ .14
tate aid per upil	86.53	74.34	53.32	70.01	148.57	63.64	94.16	133.59	115.96	86.82	93.36	47.98	81.44	49.77	105.24	116.33
Town rank	52	69	100	74	23	84	46	26	36	50	97	106	57	104	40	35
State rank	63	87	164	97	23	119	54	26	38	61	55	192	72	182	45	37
Town scaled score	+ .04	- .22	- .57	- .27	+ 1.19	- .38	+ .19	+ .91	+ .59	+ .05	+ .17	- .67	- .05	- .64	+ .39	+ .60
State scaled score	+ .43	+ .19	.25	+ .12	+ 1.63	- .06	+ .58	+ 1.34	+ .99	+ .43	+ .56	- .37	+ .33	- .33	+ .80	+ 1.00
qualized valuation er pupil	7,380	9,231	9,178	8,191	6,873	22,267	4,129	5,692	7,628	16,759	7,503	12,900	6,532	22,744	5,132	7,307
Town rank	64	44	45	54	71	9	118	95	61	15	62	23	78	7	104	66
State rank	211	157	158	185	233	13	344	292	202	36	205	72	251	10	313	214
Town scaled score	- .39	- .007	- .009	- .23	- .45	+ 2.11	- .92	- .65	- .33	+ 1.19	- .33	+ .55	.51	+ 2.19	- .75	.39
State scaled score	+ .43	+ .19	- .25	+ .12	+ 1.63	- .06	+ .58	- .78	- .39	+ 1.43	- .41	+ .66	.61	+ 2.62	- .92	.45
xperimental state id	97.12	90.01	73.43	110.30	177.60	85.96	110.97	156.61	125.02	108.07	115.51	60.63	88.11	59.40	123.03	148.80
Town rank	54	59	81	47	22	63	46	28	37	48	43	98	61	100	38	30
Town scaled score	- .24	- .35	- .53	- .08	- .84	- .41	- .07	+ .55	+ .12	- .11	0.00	- .75	- .38	.77	+ .10	+ .45
xperimental valua- on per pupil	8,283	11,289	12,637	12,905	8,215	30,049	4,867	6,673	8,224	20,862	9,283	16,302	7,064	27,146	6,000	9,345
Town rank	66	45	36	34	70	8	112	88	69	14	57	21	82	10	98	56
Town scaled score	- .61	- .16	+ .04	+ .08	- .62	+ 2.64	- 1.12	.85	- .62	+ 1.27	- .61	+ .59	- .79	+ 2.21	- .96	.45
otal tax per 1000 valuation	47.00	45.00	36.00	41.00	50.00	27.00	55.00	69.00	63.00	39.00	49.00	22.00	53.00	29.00	52.00	56.00
Town rank	62	64	101	79	49	117	34	3	12	93	55	121	42	116	44	29
chool support per 1000 valuation	17.09	16.67	12.58	19.38	15.37	9.37	19.77	16.47	15.71	12.40	13.82	9.64	15.82	8.43	8.81	21.35
Town rank	41	48	81	29	56	106	24	50	55	82	70	102	53	115	112	12
State rank	136	153	275	90	198	325	81	162	187	277	245	320	182	337	333	47
State scaled score	+ .12	+ .05	- .57	+ .47	- .14	- 1.07	+ .53	+ .03	- .09	- .60	- .38	- 1.02	- .07	- 1.21	- 1.15	+ .78
ssessed valuation r capita	1,300	1,690	1,700	1,560	1,200	3,590	1,040	980	1,380	2,760	1,490	2,030	1,370	3,810	1,280	1,300
verage teachers' alaries.	2,551	2,750	2,692	2,454	2,632	3,529	2,505	2,348	2,893	2,658	2,135	2,165	2,490	2,839	2,786	2,417

COMPREHENSIVE DATA

GROUP IV

Municipality	Blandford	Pelham	Dunstable	Wales	Chesterfield	Florida	New Braintree	Worthington	Oakham	Westhampton	Hancock	Boxborough	Mashpee	Sandisfield	Warwick	Holland
Total school support	334.13	236.38	231.46	184.43	226.64	259.64	244.68	270.80	251.15	263.93	218.92	205.87	296.86	352.24	230.70	204.52
Town rank	13	51	54	95	61	39	48	33	42	36	66	78	23	10	56	80
State rank	18	126	138	274	156	83	113	63	96	72	175	214	38	13	141	217
Town scaled score	+ 1.23	.14	.21	- .87	- .27	+ .19	- .03	+ .35	+ .07	+ .25	.38	- .57	+ .71	+ 1.75	.22	- .59
State scaled score	+ 1.86	+ .10	+ .02	- .80	- .07	+ .51	+ .25	+ .70	+ .36	- .21	- .21	- .43	+ 1.14	+ 2.18	0.00	.43
Local school support	163.27	117.15	106.76	60.69	76.32	172.69	96.31	109.69	44.02	94.19	115.81	54.47	205.08	142.54	72.71	95.89
Town rank	27	57	74	117	113	26	94	71	121	97	58	119	16	37	115	96
State rank	114	233	276	345	339	100	309	264	350	315	237	348	43	158	341	311
Town scaled score	+ .67	- .36	.61	- 1.65	- 1.30	+ .89	- .81	- .53	- 2.12	- .89	- .40	- 1.79	+ 1.62	+ .20	1.37	.85
State scaled score	+ .30	- .63	- .85	- 1.76	- 1.45	+ .50	- 1.05	- .79	- 2.08	- 1.09	- .67	- 1.90	+ 1.15	- .14	- 1.52	- 1.07
State aid per pupil	131.33	110.52	124.58	118.13	144.18	86.53	129.98	112.79	202.60	165.73	96.29	119.68	69.33	209.30	150.68	101.76
Town rank	27	38	29	33	24	51	28	37	10	19	44	31	76	8	22	43
State rank	27	41	29	34	24	63	28	40	10	19	52	31	101	8	22	48
Town scaled score	+ .87	+ .48	+ .75	+ .63	+ 1.11	+ .04	+ .85	+ .53	+ 2.19	+ 1.52	+ .22	+ .65	- .28	+ 2.31	+ 1.23	+ .32
State scaled score	+ 1.30	+ .89	+ 1.17	+ 1.05	+ 1.51	+ .43	+ 1.26	+ .93	+ 2.63	+ 1.96	+ .62	+ 1.07	+ .10	+ 2.82	+ 1.68	+ .72
Equalized valuation per pupil	9,360	6,578	6,154	6,026	7,935	11,268	8,057	10,620	6,131	7,920	7,367	5,144	20,842	16,460	4,319	10,232
Town rank	43	77	84	88	57	27	56	34	87	58	65	103	11	16	115	39
State rank	154	250	268	276	191	95	189	119	271	192	212	312	18	38	339	128
Town scaled score	0.00	- .49	- .58	- .60	.28	+ .27	- .26	+ .17	- .58	- .28	- .39	- .75	+ 1.87	+ 1.14	.89	+ .10
State scaled score	- .05	- .60	- .68	- .71	- .39	+ .34	- .30	+ .21	- .69	- .33	- .44	- .88	+ 2.24	+ 1.37	1.05	+ .13
Experimental state aid	157.00	121.16	145.79	118.13	165.55	103.05	164.27	140.99	246.91	172.64	111.10	150.77	73.66	226.74	182.59	116.95
Town rank	27	39	32	40	24	50	25	33	10	23	45	29	80	11	21	42
Town scaled score	- .56	+ .07	+ .41	+ .04	+ .68	- .17	- .66	+ .34	+ 1.79	+ .77	- .07	+ .47	- .58	+ 1.51	+ .91	+ .01
Experimental valuation per pupil	11,189	7,207	7,201	6,025	9,111	13,418	10,183	13,275	7,472	8,249	8,500	6,480	22,145	17,831	5,232	11,759
Town rank	46	79	80	97	58	28	63	30	76	67	63	91	13	16	109	41
Town scaled score	.17	- .77	- .77	- .94	- .48	+ .16	- .32	+ .14	- .74	- .61	- .58	- .88	+ 1.46	+ .82	- 1.06	- .08
Total tax per $1000 valuation	40.00	39.00	40.00	45.00	56.00	50.00	44.00	48.00	61.00	55.00	41.00	50.00	40.00	48.00	62.00	32.00
Town rank	83	94	86	69	28	50	74	60	19	36	81	48	89	58	17	112
School support per $1000 valuation	17.45	17.82	17.37	10.13	9.63	15.33	11.96	10.34	7.18	11.91	15.72	10.61	9.84	8.87	16.87	9.38
Town rank	38	36	39	98	103	57	86	97	119	87	54	96	100	113	43	105
State rank	129	124	131	314	321	199	284	311	345	285	186	307	317	335	143	324
State scaled score	+ .18	+ .23	+ .16	.95	- 1.03	.15	.67	- .92	- 1.40	- .68	- .09	- .88	- 1.02	- 1.14	+ .09	- 1.07
Assessed valuation per capita	1,600	1,170	1,300	1,150	1,480	3,080	1,530	1,940	1,050	1,310	1,490	1,140	4,000	2,440	1,030	2,080
Average teachers' salaries	2,672	2,300	2,557	2,341	2,268	2,385	2,712	2,205	2,270	2,658	2,155	2,518	2,634	2,240	2,476	2,628

COMPREHENSIVE DATA

GROUP IV

Municipality	Windsor	Monterey	Otis	West Tisbury	Wendell	Goshen	Leyden	Heath	Middlefield	Savoy	Washington	Hawley	Tyringham	Plainsfield	Shutesbury	Alford
Total school support	275.90	327.13	315.83	282.12	211.37	272.72	284.54	317.89	371.16	295.36	253.66	313.06	227.22	408.78	400.77	255.16
Town rank	28	14	19	26	73	30	25	17	9	24	41	21	60	4	6	40
State rank	56	21	29	48	200	58	46	27	11	39	89	34	153	5	7	86
Town scaled score	+ .42	+ 1.14	+ .98	+ .50	- .49	+ .37	+ .54	+ 1.00	+ 1.86	+ .69	+ .10	+ .94	- .27	+ 2.28	+ 2.17	+ .13
State scaled score	+ .81	+ 1.73	+ 1.49	+ .91	- .34	+ .74	+ .95	+ 1.53	+ 2.52	+ 1.14	+ .40	+ 1.46	- .05	+ 3.18	+ 3.03	+ .44
Local school support	102.99	237.15	125.99	201.33	79.76	84.34	76.53	104.73	111.50	94.07	57.02	80.78	132.14	236.22	162.82	114.28
Town rank	85	5	49	18	110	104	112	79	68	98	118	108	43	6	29	63
State rank	292	14	208	50	333	327	337	283	257	316	347	331	190	15	117	247
Town scaled score	- .68	+ 2.34	- .17	+ 1.53	- 1.21	- 1.11	- 1.29	- .65	- .50	.89	1.73	- 1.19	- .03	+ 2.32	+ .66	.44
State scaled score	- .93	+ 1.78	- .48	+ 1.10	- 1.39	- 1.29	- 1.45	- .89	- .75	- 1.09	- 1.82	- 1.37	- .34	+ 1.76	+ .28	- .69
State aid per pupil	165.97	89.98	162.17	80.79	120.87	183.88	190.71	203.42	238.97	180.59	191.43	222.58	95.07	172.56	201.86	140.88
Town rank	18	45	20	59	30	14	13	9	4	15	12	7	45	17	11	25
State rank	18	56	20	74	31	14	13	9	x3	15	12	7	53	17	10	26
Town scaled score	+ 1.51	+ .10	+ 1.44	- .06	+ .68	+ 1.84	+ 1.97	+ 2.20	+ 2.86	+ 1.78	+ 1.98	+ 2.50	+ .19	+ 1.63	+ 2.19	+ 1.05
State scaled score	+ 1.96	+ .49	+ 1.90	+ .31	+ 1.09	+ 2.31	+ 2.45	+ 2.70	+ 3.38	+ 2.25	+ 3.50	+ 3.07	+ .60	+ 2.10	+ 2.66	+ 1.48
Equalized valuation per pupil	8,477	26,602	13,788	22,772	5,624	7,886	6,596	7,632	9,690	4,264	4,419	8,994	12,587	14,746	10,898	12,115
Town rank	50	5	19	6	96	59	75	60	42	116	114	47	21	18	30	25
State rank	175	6	58	9	295	193	248	201	142	340	338	163	60	52	107	79
Town scaled score	- .19	+ 2.83	+ .69	+ 2.19	- .67	- .28	- .49	- .33	0.00	- .90	.87	- .11	+ .66	+ .85	+ .21	+ .41
State scaled score	- .22	+ 3.39	+ .84	+ 2.62	- .79	- .34	- .60	- .39	+ .02	- 1.06	- 1.05	.12	+ .80	+ 1.03	+ .26	+ .50
Experimental state aid	201.93	111.80	211.08	82.58	99.98	221.27	247.05	203.42	280.79	214.85	191.43	304.20	91.19	199.11	287.50	148.50
Town rank	16	44	14	69	52	12	9	15	8	13	19	4	58	17	7	31
Town scaled score	+ 1.17	- .06	+ 1.30	- .46	- .22	+ 1.44	+ 1.79	+ 1.19	+ 2.25	+ 1.43	+ 1.03	+ 2.57	- .34	+ 1.13	+ 2.34	+ .45
Experimental valuation per pupil	10,313	33,050	18,036	23,277	4,652	9,489	8,545	7,631	11,386	5,072	4,418	12,292	13,032	17,014	15,520	12,769
Town rank	52	5	15	12	113	55	62	75	43	110	117	38	32	19	23	35
Town scaled score	- .30	+ 3.090	+ .85	+ 1.63	- 1.15	- .42	- .54	- .70	.14	- 1.09	- 1.17	0.00	+ .10	+ .70	+ .47	+ .06
Total tax per $1000 valuation	38.00	34.00	40.00	25.00	48.00	53.00	64.00	58.00	59.00	62.00	58.00	44.00	33.00	68.00	45.00	37.00
Town rank	97	108	91	118	39	41	10	24	22	16	25	72	110	7	67	98
School support per $1000 valuation	12.17	8.92	9.14	8.85	14.21	10.71	11.63	13.74	11.52	22.08	12.95	9.00	9.72	16.03	14.95	9.44
Town rank	84	110	107	111	65	95	91	71	92	9	78	109	101	52	59	104
State rank	281	330	327	337	332	305	293	248	295	38	265	329	318	176	211	323
State scaled score	- .64	1.15	- 1.10	- 1.15	- .32	- .86	- .72	- .39	- .74	+ .89	- .52	- 1.22	- 1.01	.04	- .21	- 1.06
Assessed valuation per capita	1,660	2,970	3,140	3,020	1,100	1,740	1,230	1,650	1,540	1,0000	820	1,510	2,720	1,940	2,400	2,220
Average teachers' salaries	2,463	2,573	2,588	2,271	2,415	2,320	2,137	2,353	2,537	2,383	2,242	2,122	2,361	2,375	2,185	2,545

Municipality	Rowe	Chilmark	Monroe	Montgomery	Peru	New Ashford	Tolland	Gay Head
otal school support	405.47	334.72	419.45	307.47	345.01	321.03	631.85	386.39
Town rank	5	12	3	22	11	15	2	7
State rank	6	17	4	21	14	24	2	8
Town scaled score	+ 2.24	+ 1.24	+ 2.43	+ .86	+ 1.39	+ 1.05	+ 5.41	+ 4.97
State scaled score	+ 3.12	+ 1.86	+ 3.37	+ .35	+ 2.23	+ .60	+ 7.15	+ 2.78
ocal school upport	177.23	213.16	261.54	200.02	115.07	73.30	215.77	211.66
Town rank	25	10	3	19	62	114	9	12
State rank	94	32	6	14	244	340	30	35
Town scaled score	+ .99	+ 1.80	+ 2.90	+ 1.50	- .41	1.36	+ 1 86	+ 1.77
State scaled score	+ .59	+ 1.31	+ 2.25	+ 1.05	- .67	- 1.50	+ 1.35	+ 1.27
tate aid per pil	228.24	118.54	155.42	107.45	228.67	247.73	416.08	174.74
Town rank	6	32	21	39	5	3	1	16
State rank	5	34	21	44	5	3	1	16
Town scaled score	+ 2.66	+ .63	+ 1.32	+ .43	+ 2.88	+ 3.02	+ 6.13	+ 1.67
State scaled score	+ 3.18	+ 1.05	+ 1.77	+ .83	+ 3.18	+ 3.55	+ 6.80	+ 2.14
qualized valuation er pupil	20,833	37,636	22,361	10,978	8,319	8,799	28,818	19,326
Town rank	12	2	8	28	52	49	3	14
State rank	83	2	12	103	182	168	3	2
Town scaled score	+ 1.87	+ 4.68	+ 2.13	+ .22	- .23	.14	+ 3.20	+ 1.62
State scaled score	+ 2.25	+ 5.58	+ 2.54	+ .28	- .25	.16	+ 3.83	+ 1.94
xperimental state d	396.42	186.27	198.94	161.18	294.05	318.51	291.22	331.1
Town rank	1	20	18	26	5	3	6	2
Town scaled score	+ 3.83	+ .96	+ 1.13	+ .62	+ 2.43	+ 2.76	+ 2.39	+ 2.91
xperimental valua- on per pupil	36,184	59,142	28,621	16,467	10,695	11,312	35,468	32,210
Town rank	2	1	9	20	50	44	3	6
Town scaled score	+ 3.56	+ 6.99	+ 2.47	+ .61	- .24	- . 6	+ 3.45	+ 2.97
otal tax per 000 valuation	54.00	22.00	40.00	35.00	68.00	36.00	38.00	56.00
Town rank	39	120	90	106	6	.00	96	30
School support r $1000 valuation	8.51	5.67	11.81	18.24	13.85	8.35	7.49	10.99
Town rank	114	120	90	33	69	16	118	94
State rank	336	349	291	08	244	338	343	302
State scaled score	- 1.99	- 1.63	- .71	+ .30	- .38	- 1.22	- 1.35	- .82
Assessed valuation per capita	3,400	6,790	4,110	2,100	2,620	1,340	4,310	3,800
Average teachers' alaries	2,678	2,454	2,343	2,530	2,351	2,320	4,073	2,477

ABSTRACT

THE FOUNDATION PROGRAM IN MASSACHUSETTS

by

Joseph W. Riordan

Educational state fiscal patterns in the United States present a variety of methods of support. The complexity of these state-support programs makes classification extremely difficult. Considerable effort is made in all state programs to bring about both the equalization of educational opportunity and the equalization of tax support. To facilitate the equalization of educational opportunity, many states, including Massachusetts, have left considerable freedom and control with local school districts.

Consolidation or other methods in respect to small districts will save troublesome inequalities from occurring.

Inequalities between classes due to the factors of equalized valuation, size, wealth and local state support can be best equated by using correctly apportioned state aid techniques.

Equalization of educational opportunity is not being adequately taken care of in the Commonwealth of Massachusetts. The equalization of certain taxes such as Local School Support and State Aid per Pupil need supplementation and revision in the form of state support.

State aid apportionments formulated through school census techniques need revision, both when all public and non-public school children in the seven to sixteen-year old bracket are considered and when only public school children within those age limits are considered.

Methods could be evolved to administer more equitably those state tax refunds and educational state revenues intended for municipalities than merely to return them to the general fund of a particular community.

The present study questions the assumption as to whether or not the principal provisions of Chapter 70 of the General Laws of the Commonwealth of Massachusetts, (School Funds and State Aid for Public Schools) have been adequately carried out. Research shows that a properly financed Foundation Program will guarantee all children an equal opportunity. However, in Massachusetts the educational need factor of $130 in the principal state aid formula is totally

inadequate. A $200 Foundation Program amount would bring certain municipalities into a close relationship with the principle of adaptability. The West Virginia study referred to in Chapter I shows that higher investments in education lead to a higher economic status and toward adaptability.

The existing state aid formula makes no provision for the extra costs of educating secondary school pupils in Massachusetts.

The secondary part of the Foundation Program formula in Massachusetts leads to a basic inequality. In the long run this part of the formula gives certain towns more state aid than the principal formula. With the additional twenty-five per cent state aid such municipalities show larger state aid apportionment than other classes not receiving this consideration.

To attain economy and efficiency in the administration of school funds, established by legislative enactment and supported by designated tax rates, there should be a wider latitude of appraisal and use, particularly in regard to earmarking.

An extension of the provisions of the school building assistance program to include other than the public schools of the Commonwealth would, by its intrinsic improvement in the educational program

available to children attending such schools, tend to equalize educational opportunity for all children in the state.

Adoption of the Strayer and Haig formula for establishing a Foundation Program, would, if amended as suggested by Dr. Paul R. Mort, go a long way toward equalizing the burden of the costs of schools to the various municipalities.

Whatever methods be chosen to revise the present apportionment of state support, it is clear that at the date of writing, equality of taxation, or of opportunity, education-wise does not exist in the Commonwealth of Massachusetts.