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AN ANALYSIS OF THE EFFECT OF THE STATE TAX SYSTEM ON THE
MINIMUM FOUNDATION PROGRAM FOR EDUCATION IN MONTANA

by

S. HERBERT BERG

Presented in partial fulfillment
of the requirements for the degree of
Master of Education

MONTANA STATE UNIVERSITY

1951

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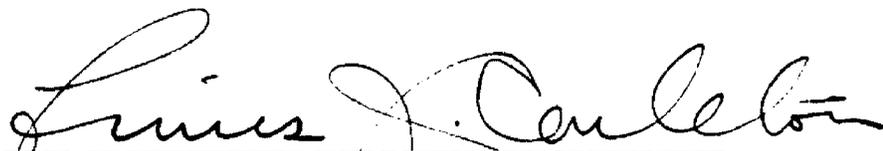
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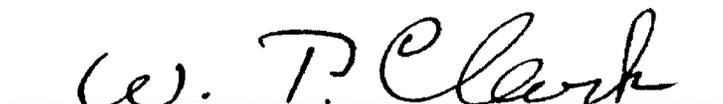
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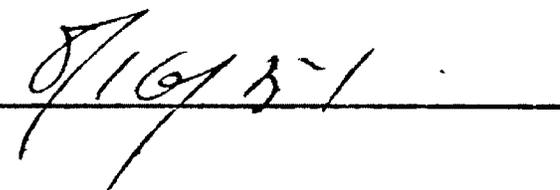
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CHAPTER I

THE PROBLEM

In 1949 the Montana Legislative Assembly enacted legislation which set up a minimum financial foundation program.¹ This program is a requirement for every school in the state and the purpose of this program was and is to provide a minimum program of education that every child is entitled to receive under the American standard of living and the American way of life. Under this system the state undertakes to guarantee this minimum program if uniform local taxes do not bring in sufficient revenue to the various districts.

The major support for education in Montana comes from property taxes. The assessment of property is on the county basis and each county has its own tax evaluation procedure. The problem of equalization within the state of Montana is complicated by the tax structure of the state.

Valuations of properties within districts and counties in Montana are varied. Some have high valuations, while others have low valuations. Many districts and counties have railroads, power lines, factories and mines within their borders, while others have nothing to tax but land and buildings with each district and county levying a uniform

¹School Laws of the State of Montana, 1949. p. 115.

tax. The richer counties and districts can raise more money than the poorer, therefore making it necessary for the state to distribute more money to the poorer districts and counties in order for them to reach the foundation program. This latter distribution is the equalization feature of the state school finance law.

Since valuations are set, excepting for public utilities between counties, by local assessors, the reader can see that some counties may be assessed low and some high. By assessing low, a particular county or district can be assured of more state aid in order to reach the minimum foundation program. In order that the state funds will be distributed equitably, a more uniform assessment of property in all counties is required.

Therefore, the purpose of this study is to determine the extent of variations in the assessment of property in Montana, the effect of these variations on the foundation program, and the feasibility of certain other assessment procedures in bringing about equality of assessment and more equitable distribution of state school funds.

Importance of the problem. The matter of uniform assessments is of extreme importance. The primary purpose of the minimum foundation program can easily be defeated unless there is a uniform system of assessing in the various counties. There is always present the hazard of the counties

lowering their assessments in order to secure more state aid. In addition Montana has a state wide property tax and counties with low assessments are favored in the payment of this tax to the state. Approximately 47 percent of the property tax dollar was used for school purposes in 1950.² The total amount of taxes levied for school purposes in 1950 was \$18,865, 298. Since such a large share of the property tax dollar goes toward financing of schools and since the amount of state aid hinges on the amount raised by the local and county school levies, it is very important that property be assessed uniformly and according to the best assessment practices.

In the 1949 and 1951 Legislative Assemblies of Montana much attention was given to this problem. Senate Bill No. 22 which was introduced in the 1951 session by Anderson (Pondera), Wedemeyer, Moss, James and Tibbals was intended to provide for a general and uniform method of classifying lands in the State of Montana for the purpose of securing an equitable and uniform basis of assessment of such lands for taxation purposes.

Preview of the organization of the remainder of this paper. The remainder of this paper is divided into three parts. Chapter II deals with the history and philosophy of

²Fourteenth Biennial Report of the Montana State Board of Equalization, July 1, 1948 to June 30, 1950. p. 19.

the foundation program. A description of a typical unit of the foundation program in operation will be given in an effort to show how the raising and lowering of assessments would affect it. This is important because if the foundation program would not be affected by inequalities of assessments, this study would be of little value as far as school support is concerned.

Although it is generally assumed that there are inequalities in our assessment practices, it is the purpose of Chapter III to determine whether or not there are inequalities and, if there are such, to determine whether or not they are extensive enough to defeat the aims of the foundation program. It would be difficult to bring out all of the inequalities of assessment practices in Montana and they would be beyond the scope of this paper. Other questions which should be answered are: (1) why is it that assessments are not uniform between the various counties and (2) what conditions promote inequality of assessments?

Other states that have adopted minimum foundation programs have found that inequalities in assessments have been one of their greatest problems. Therefore, in Chapter IV a review of what other states have done in regard to this problem will be presented.

Chapter V will present conclusions and recommendations as to the best plan for Montana to follow.

History and present status of the problem. Organizations such as the Montana Taxpayer's Association, The Citizens' Committee, The Montana Education Association, and the State Department of Public Instruction have recognized the problem of inequalities of assessments. These inequalities have become more evident since the adoption of the minimum foundation program. The 1951 Legislative Assembly was very much concerned over reclassification of land for assessment purposes. However, the bill for reclassification of land was defeated.

In 1949 a committee of four prominent educators reviewed the problem of equalized assessments and did some work on an economic index for distribution of state funds. However, the results of this work were not used because of the lack of fundamental data upon which to base an index.

Several studies have been made of the Montana Tax system. Harold G. Halcrow, Agricultural Economist formerly of the Montana Agricultural Experiment Station and H. R. Stucky, Extension Economist of the Montana Extension Service of Montana State College, made a very extensive study of Montana's Tax System. Most of their studies were concerned with classification of lands for assessment rather than the modification of assessment practices.

The State Board of Equalization in its biennial report³

³Ibid., pp. 8-16.

presented a survey of Montana's tax system and recommended certain changes in it. For instance, it was through their recommendations that the position of Field Supervisor was created in 1939 to meet the need for a liason man to coordinate the work of the various county taxing officials and establish closer relationships between such officials and the State Board.

They have also from time to time recommended legislation for reclassification of land and the reappraisal of city and town lots for taxation purposes.

In January of 1951 the Montana Taxpayer's Association made a study of assessments and the market value of property in four Montana counties.

CHAPTER II

HOW THE FOUNDATION PROGRAM WORKS

During the years prior to 1949 schools in Montana were financed by each individual district. This resulted in many inequalities in educational opportunity. A high levy was required in districts of low valuations to maintain a school while it required a low levy for the richer districts to maintain a school. As a result a program to equalize the burden of education was written into law in 1949. This is known as the foundation program. It is necessary to know something about the philosophy behind that program and how it operates in order to determine whether or not inequalities of assessments would affect it.

Education is generally accepted as being the function of the state, and in Montana this fact has been recognized in the Constitution, Section I, Article XI, which states that, "It shall be the duty of the Legislative Assembly of Montana to establish and maintain a general, uniform and thorough system of public, free common schools."¹

In the past the legislative assemblies of Montana have recognized this duty by setting up local school districts whose school boards under the supervision of county and the state have the power to locate, construct,

¹School Laws of the State of Montana, 1949, p. 9.

maintain and operate schools.

However, since the end of World War II with construction costs, teacher's salaries, cost of equipment and supplies reaching a new and all time high, the district system as established in Montana was found to be inadequate for the purposes for which it was set up. In addition, there was a demand by the people of the various localities for additional features in their educational programs. These new demands were in the form of more music, health, and physical education, vocational training, better buildings, and better equipment, safer transportation, more visual and audio training equipment, a longer school year, smaller teaching loads, art, kindergartens, and more provisions for the handicapped child.

However, since it became increasingly difficult for the various districts to finance these new obligations or demands on education, it became apparent to different groups of citizens within the state that some new system of finance would have to be developed. As a result citizens groups over the state were formed to study the possibilities of a minimum foundation program.

These groups concluded that every child in Montana, no matter where he resides, should be entitled to a minimum program of education. If the local district cannot afford this program, due to low property valuations, the state should assist in the program. The general idea is that each school

district, or county, will make the same initial effort, i.e., levy the same number of mills, and if this is not enough, the state will step in and pay the balance needed to support the foundation program. Should any school system want a better program than the foundation program guaranteed by the state, the responsibility for such additional cost would become the obligation of the district in which the school is located.

Foundation Program for Elementary Schools. As a result of this thinking on the part of various groups a minimum foundation program was written into law by the 1949 Legislative Assembly. The 1949 law provides for the following in elementary school financing:²

- (1) a uniform 5 mill district school levy;
- (2) a 10 mill county-wide levy with the proceeds to be distributed to the districts according to the allocation which is desired in the county toward meeting the foundation program;
- (3) that each district add interest and income money from the State (about \$12 per census child 6-21 years old) and all other sources of revenue such as Indian tuition, forest money, etc.;

²School Laws of the State of Montana, 1949, pp. 119-120.

- (4) that the district may participate in State appropriated funds if the first three sources do not yield enough to meet the foundation program;
- (5) that if these first four sources do not yield enough to meet the foundation program, the district will levy the difference up to the foundation program;
- (6) that the district may levy up to an additional 20 percent of the foundation program without a vote of the people, (amended to 30 percent but not more than 15 mills, in 1951); and,
- (7) that any funds raised in the district beyond the foundation program plus 20 percent must be voted by the taxpayers of the district.

Foundation Program for High Schools. The main source of high school funds has been the county-wide high school levy, with some high schools making an additional levy on their own district.

The 1949 law provides for the following high school financing:³

- (1) that each county must levy a maximum of 10 mills for high schools before it is eligible to

³School Laws of the State of Montana, 1949, pp. 122-122.

- participate in the State equalization fund;
- (2) that each high school must add any other revenue it may receive, such as Indian tuition, forest money, fines, etc.;
 - (3) that if these two sources do not yield enough money to meet the foundation program the high school may participate in State funds;
 - (4) that if these three sources do not yield enough to meet the foundation program, the difference up to the foundation program is to be levied by the district, high school district, or county, whichever unit is directly responsible for financing the high school;
 - (5) that the high school board may levy up to an additional 15 percent of the foundation program without a vote of the people, (increased to 25 or 30 percent, but not more than 10 mills, in 1951); and
 - (6) that any funds raised in the district, high school district or county, beyond the foundation program plus 15 percent, must be voted by the taxpayers in the unit where the levy applies.

A basic change has been made in the budgeting standards for public schools and in the methods to be used in meeting these budgets. The expenditure policies of individual

school boards in Montana are now tied to the foundation program.⁴ This should result in the development of more uniform educational opportunities and in the achievement of greater equality in the tax burden imposed.

How equalization works. In order to show how the state participates in the equalization program, it would be well to take a typical school district in Montana and show how its budget is figured and how the budget is financed. Because of the availability of records, School District No. 1 of Fort Benton is used as an example. For School District No. 1 the elementary Average Number Belonging⁵ was 227 pupils. According to the schedule in chapter 199, laws of 1949, the rate for the foundation program is \$210, less \$.19 for each pupil over 100. This amounted to \$185.87 per pupil; $227 \times \$185.27 = \$42,192.49$ or the total foundation program budget for the elementary school in District No. 1 of Chouteau County.

For the Fort Benton High School the A.N.B.⁶ was 161. The schedule provides for \$290, less \$.40 for each pupil over 100, for this size high school. This amounted to \$265.60. Therefore, the foundation program budget was $161 \times \$265.60$ or \$42,761.60.

⁴School Laws of the State of Montana, 1949, Chp. 199, Sec. 3, pp. 114-116.

⁵Loc. cit., A.N.B. (Average Number Belonging) is determined by dividing total pupil days present plus pupil days absent by 180.

⁶Loc. cit.

It is shown in Fig. I and Fig. II how the county, state and district participate in the foundation program in School District No. 1 of Chouteau County.

ALLOCATION OF FUNDS BY DISTRICT, COUNTY, AND STATE TO THE FOUNDATION PROGRAM OF DISTRICT NO. I OF CHOUTEAU CO.

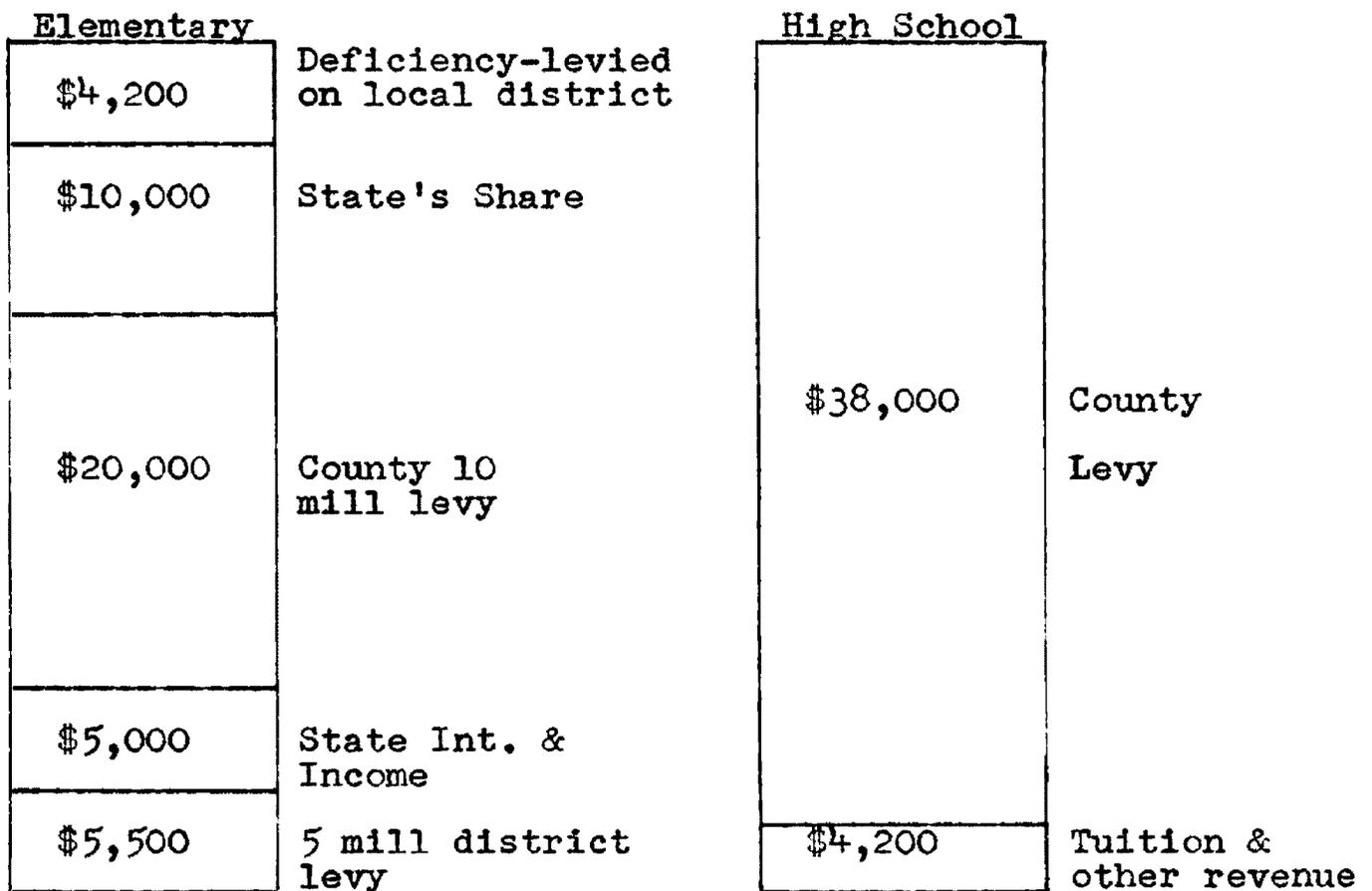


Fig. I

Fig. II

As indicated by Fig. I on the elementary school the county 10 mill levy plus the State Interest and Income Fund plus the 5 mill tax brings the amount up to \$30,500 or 66 percent of the total foundation program. All districts were brought up to 66 percent of the total foundation program in Chouteau County. The percentage varies in different counties.

Contrasted to this, Meagher County receives no state aid due to the fact that it can raise all of its foundation program through local levies. On the other hand Richland County has such low valuations that it receives fifty percent of all of its foundation programs from the state.

A ten mill levy in 1950 brought the foundation program up to sixty-six percent of the total foundation program for elementary schools in Chouteau County. Then the state contributed its part which is 24 percent of the county foundation program. It was the original intention that the state would finance up to one hundred percent of the foundation program. In 1950, the state was able to finance up to only 90 percent of the foundation program. In the case of School District No. 1 of Chouteau County, if it were not for a cash balance it would have been necessary to levy an additional 3.7 mills on the local district to furnish the remaining ten percent of the foundation program.

In 1947 the approximate taxable valuation⁷ of Chouteau County was \$8,500,000, while in 1949 this amount was raised to approximately 10,000,000 dollars.⁸ This is an increase of \$1,500,000 over the taxable value in the year that the

⁷Thirteenth Biennial Report of Montana State Board of Equalization, July 1, 1946 to June 30, 1948, p. 112.

⁸Fourteenth Biennial Report of Montana State Board of Equalization, July 1, 1948 to June 30, 1950, p. 112.

foundation program was put into effect. If this increase had not occurred, it would have been necessary for the state to contribute more to the Chouteau County Program.

CHAPTER III

SOME INEQUALITIES IN MONTANA'S TAX STRUCTURE

Perhaps some of the most glaring discrepancies in the modern tax structure are in the methods of assessments. The assessment of properties is on the county basis and each county has its own tax evaluation procedure. As a result no uniform system of taxation can exist between the various counties.

Since a number of studies have been made of the tax structure in Montana this chapter will be devoted to a review of inequalities found in these studies. Since it is important to this study, an attempt will be made to determine how extensive these inequalities are.

According to Montana State College Extension Circular 204, Land Reclassification for Tax Purposes in Montana:¹

The land classification which is now in effect in most Montana counties was done between 1919 and 1923 under provisions of the 1919 land classification law. This classification has proved to be inequitable because lands of similar producing ability were not placed in the same class.

Some of the provisions of the 1919 law are as follows:²

1. The State Board of Equalization is required to provide for a general uniform method of classifying

¹Land Reclassification for Tax Purposes in Montana, Extension Circular 204, Jan. 1949, p. 3.

²Ibid., p. 4.

land for the purposes of securing an equitable and uniform basis of assessment.

2. The State Board of Equalization is responsible for prescribing maps, plats, and record books for recording the official classification of the county.

3. The County Commissioners are responsible for the classification of all lands in their county.

4. The County Assessor is required to assess all lands for taxation purposes in accordance with the classification as made by the Board of County Commissioners.

According to the 1919 law, the County Commissioners are responsible for classification of all lands within their respective counties, while the assessors have the responsibility of assessing the lands for taxation purposes.

Land must be classified according to use and according to ability to produce before an equitable assessment can be made. In the classification done in the early 1920's, however, two major errors were made. (1) Large acreages of grazing land and of low yielding farm land were classed as high-grade farm land. (2) The higher-producing farm land was in many cases put in the same class as some of the poorer quality land.³

In most Montana counties the 1919 classification which was inequitable at the time it was made is still in effect. Few of the original errors have been corrected. Failure to record changes in land use has resulted in a classification that has become more inequitable than the first classification. For example, land that was once classed as grazing land and has come under irrigation is still classed as non-irrigated

³Ibid., p. 4.

farm land. A considerable acreage of land which is now producing wheat still carries a grazing classification.

There are several reasons why the work done between 1919 and 1923 did not result in a satisfactory classification:⁴

1. In the early 1920's little reliable information was available regarding the producing ability of Montana land.

2. The classification maps established for all counties indicate that the land was classed primarily on surface features. Soil characteristics and the ability of the land to produce received little consideration.

3. No state-wide standard of grades was established as a guide to classification. In each county the Commissioners established individual standards for their county. This resulted in a wide variation of classes among counties.

4. In most counties the classification work was done under contract. Many of the contractors hired inexperienced men to do the field work. The thoroughness of the job depended to a considerable extent on the individual man in the field. Some men did a good job of mapping surface features, while others did a hurried and inaccurate job.

Following are some of the results of the faulty classification of Montana's agricultural land:⁵

1. By 1939, 4½ million acres of land in Montana were delinquent in taxes 5 years or more. Another 4½ million acres of land had been taken by the counties through tax foreclosure. Another 12 million acres were delinquent from 1 to 4 years. In other words 21 million acres or 40 percent of the taxable land in Montana was tax delinquent or foreclosed. While depression, drouth, and improper land use contributed to delinquency, the major part of delinquent land was classed too high in comparison

⁴Ibid., p. 5.

⁵Ibid., p. 6.

with its ability to produce.

2. The failure to pay taxes on the poorer lands, which were classed too high, caused a heavier tax burden on the better lands. This also put a heavier tax on livestock, machinery, personal property, utilities, and city and town property.

3. Non-payment of taxes disrupted schools and other activities in the community.

4. Tax foreclosures caused many families to lose their farms and homes.

Deficiencies of the 1919 classification law have been recognized not only by Halcrow and the group working with him, but also by the Board of Equalization.

The following comments were taken from the Fourteenth Biennial Report of the Montana Board of Equalization:⁶

Classification under the 1919 law was not satisfactory. No information such as that provided by production records, soil surveys, soil maps, aerial maps and other pertinent records now accessible were available at that time. Almost the sole guide was topography. In some counties land was classified as "tillable" if it was level enough to be plowed. In others only land actually under cultivation was so classified. Unbroken productive land was considered "grazing". In one instance tillable land was further classified into "horse plow land" "engine plow land", and graded under each division.

No time limit was fixed for completion of the work. As late as 1924 more than 2,000,000 acres were on the roll as railroad lands. By 1926 they had been assimilated, somewhat haphazardly, into other classes.

In grading land within the classes, each county usually started at the top and worked down. In grading dry tillable, the best land in the county in that class was designated No. 1 or in some counties, 100 percent land. Land considered not quite so good was called

⁶State of Montana, Fourteenth Biennial Report of Montana State Board of Equalization, July 1, 1948 to June 30, 1950, p. 7.

No. 2, or 80 percent land, and so on. There being no reliable information bearing on actual productive capacity, land grade No. 1 tillable in one county might, and was, considered No. 2 or 3 in a more productive county. The same was true of lands classified as grazing. Timber lands were quite uniformly graded originally because of the assistance rendered by the state forester and private owners of large holdings.

As a result the program of state-wide uniformity⁷ contemplated by the legislature was split in 54 programs, all different. There was some improvement within each county. Land with substantially the same topographical features were classified alike; but as related to other counties differently situated there was no uniformity at all. With the passage of years the situation has undergone changes, but it has improved little, if at all.

There are not only wide variations in land classifications which naturally affect assessed valuations but there are indications of wide variations in assessment of taxable properties as they are now classified. Some of the variations in assessment valuations are shown in Table I.

⁷There were only 54 counties in Montana in 1926.

TABLE I
 VARIATIONS AMONG COUNTIES IN
 ASSESSMENT VALUATIONS, 1946

| | Highest County | Lowest County | Average for State |
|-------------------------------------|-------------------|------------------|----------------------|
| Irrigated lands | \$61.90 | \$11.84 | \$32.08 |
| Non-irrigated and tillable lands | 31.17 | 3.06 | 8.02 |
| Grazing land | 4.05 | 1.28 | 2.58 |
| All agricultural land | 12.39 | 2.07 | 5.00 |
| Horses | 38.70 | 18.80 | 28.10 |
| Cattle | 58.45 | 47.91 | 50.77 |
| Sheep | 6.74 | 4.83 | 5.66 |

Source: State of Montana, Twelfth Biennial Report of the Montana State Board of Equalization, pp. 58-89.

TABLE II
 VARIATIONS AMONG COUNTIES IN
 ASSESSMENT VALUATIONS, 1950

| | Highest County | Lowest County | Average for State |
|-------------------------------------|-------------------|------------------|----------------------|
| Irrigated lands | \$61.48 | \$12.21 | \$32.68 |
| Non-irrigated and tillable lands | 30.15 | 3.14 | 8.31 |
| Grazing land | 4.52 | 1.13 | 2.65 |
| All agricultural land | 12.31 | 2.04 | 5.16 |
| Horses | 43.78 | 17.09 | 31.26 |
| Cattle | 85.42 | 59.02 | 64.25 |
| Sheep | 7.81 | 5.00 | 6.84 |

Source: State of Montana, Fourteenth Biennial Report of the Montana State Board of Equalization, pp. 60-89.

As can be seen from the accompanying tables there is a wide variation between the highest and lowest county for some of the different taxable properties. These variations exist not only for the one year but for every year. Even with all the pressure for reclassification and reassessment there is very little difference between the 1946 and 1950 highest, lowest, and average valuations.

Indices of assessment variations of the highest and lowest counties taking the state average as 1.000 are shown in Table III.

TABLE III
INDEX OF ASSESSMENT VARIATIONS OF THE
HIGHEST AND LOWEST COUNTIES, 1946

| | Highest County | Lowest County | Average for State |
|--------------------|-------------------|------------------|----------------------|
| Irrigated land | 1.929 | .3420 | 1.000 |
| Non-irrigated land | 3.886 | .3815 | 1.000 |
| Grazing land | 1.569 | .4962 | 1.000 |
| All lands | 2.476 | .4140 | 1.000 |
| Horses | 1.377 | .6690 | 1.000 |
| Cattle | 1.151 | .9436 | 1.000 |
| Sheep | 1.190 | .8533 | 1.000 |
| Average | 1.940 | .4990 | 1.000 |

Based on data in Table I

From Table III it can be seen that there is not much variation between the highest and lowest county on cattle and sheep assessments. However, on the different classes of land there is wide variation. It is probable that there could be

a wide variation in the true values of certain lands within each classification considered but it is unlikely that the county averages would vary to the extent indicated in Table III.

The State Board of Equalization sets the valuations on all public utilities which are intercounty, and they are uniform throughout the counties.⁸ There is very little opportunity for setting standard procedures on many of the items assessed for taxation other than a general policy from the State Board of Equalization to the county assessors.

According to the reports of the State Board of Equalization property is divided into seven classes for tax purposes with each class taxed at a different percentage of its assessed valuation.⁹

(1) The annual net proceeds of all mines and mining claims, after deducting only the expenses specified and allowed by section 2565 of the Revised Codes of Montana (2090).

(2) All household goods and furniture, including clocks, musical instruments, sewing machines, wearing apparel of members of the family, and all personal property actually used by the owner for domestic and personal purposes, or for the furnishing or equipment of the family residence: All agricultural and other tools, implements and machinery, gas and other engines and boilers, threshing machines and output used therewith automobiles, motor trucks, and other power-driven cars, vehicles of all kinds, boats and all water craft, harness, saddlery and robes.

⁸State of Montana, Fourteenth Biennial Report of the Montana State Board of Equalization, July 1, 1948 to June 30, 1950. p. 14.

⁹State of Montana, Fourteenth Biennial Report of the Montana State Board of Equalization, July 1, 1948 to June 30, 1950. p. 59.

(3) Livestock, poultry and all agricultural products, stocks of merchandise of all kinds; together with furniture and fixtures used therewith; and all office and hotel furniture and fixtures.

(4) All land, town and city lots, with improvements, manufacturing and mining machinery fixtures and supplies, except as otherwise provided by the constitution of Montana.

(5) All moneys and credits, secured or unsecured, including all state, county, school district and other municipal bonds, warrants and securities without any deduction or offset; Also all poles, lines, transformers, transfer stations, meters, tools, improvements, machinery and other property used and owned by cooperative rural electrical associations organized under the laws of Montana.

(6) The shares of stock of national banking associations and the moneyed capital employed in conducting a banking business by any other banking corporation, association or individual in this state.

(7) All property not included in the six preceding classes.

Basis for imposition of taxes. As a basis for the imposition of taxes upon the different classes of property specified in the preceding section, a percentage of the true and full value of the property of each class shall be taken as follows:

Class 1, one hundred percent; class 2, twenty percent; class 3, thirty-three and one-third percent; class 4, thirty percent; class 5, seven percent; class 6, forty percent; class 7, forty percent.

Thus far, this chapter has dealt chiefly with real estate and rural property and the variations of valuations between counties. However, the following quotation from the Great Falls Tribune¹⁰ indicates that assessors are not getting all property on the tax rolls and at the proper

¹⁰Tribune Staff Writer, The Great Falls Tribune, May 2, 1951. p. 4.

valuations. This report does show a tendency toward a lack of uniformity of assessment practices.

In 1950 Montanans paid taxes on livestock valuations that were less than 40 percent of figures compiled for statistical purposes.

The State Board of Equalization reported livestock values as of March 1 last year at \$96,606,000. "Montana Agricultural Statistics" published jointly by the State Department of Agriculture and the Federal Bureau of Agricultural Economics, found values as of January 1 to be \$263,739,000.

If these animals had been on the assessment rolls at the values established for statistical purposes it would have broadened the tax base sufficiently to produce more than \$400,000 for the state alone, with corresponding increases for counties, municipalities and school districts.

The state has imposed no tax for general fund purposes in the last nine years but has 6 mills for support of the university system and an additional one and one-half mills for debt retirement. The Board of Equalization, however, may be forced to return to the 2 mill general fund levy this year to keep from incurring a deficit.

Granting that no assessor ever would be able to count accurately all the cattle, hogs and chickens on a given day the fact still remains that there probably is privately owned immovable real estate in Montana that is not being taxed. This statement is based on the addition in Granite County of the equivalent of almost a full township to the tax rolls as a result of a recent land reclassification survey. Granite is one of the state's smaller counties.

Board of Equalization figures showed 1,316,233 cattle taxed in 1950. The Bureau of Agricultural Economics reported 1,731,000. For tax purposes the animals were valued at \$84,568,833. The federal agency listed them as worth \$221,568,000.

Similar variations were shown in sheep and horses. Taxwise Montana had 1,042,730 sheep worth \$7,135,923. The BAE census showed 1,623,000 sheep worth \$31,486,000.

Assessors counted only 103,894 horses and mules in the state last year. The BAE reported 154,000.

Poultry, bees, and "other livestock" listed with the Board of Equalization were shown as worth \$648,782 in 1950. The federal-state co-operative survey listed chickens alone as worth \$2,855,000.

For statistical purposes Montana Farmers valued their sheep at \$19.40 a head in 1950. The assessment figures show an average value for sheep at only \$6 with no county reporting a figure higher than \$8.

Both the equalization board and the agricultural division reports give detailed breakdowns by counties on livestock. The trend of fewer numbers and lower values for tax purposes persist throughout the list with few exceptions.

Since assessors of rural property at the county level also assess the urban property it is probably true that there are also inequalities in urban assessments. It might be pertinent to cite an example of inequality in assessment in one of the larger cities in Montana, namely, Great Falls.

In a study made by a Great Falls realtor in which the assessments for tax purposes on twenty-four pieces of property were used, it was found that there were great variations in assessed values. A comparison between two of these pieces of property will show a wide variation in assessed values.

For the purpose of this paper one of the houses described will be called X and the other Y. These houses were of the same size, built from the same plans, located in the same general area with access to the same school which is to be built in the near future, and the cost of the lot or ground on which they are built was the same. The tax levy for the

two houses was the same. Although the houses were built by different contractors they were both completed the same year.

A county tax of \$196.41 was levied on house X while a tax of \$156.40 was levied on house Y. House X was assessed at \$5,193 while house Y was assessed \$4,136. This was a difference of more than a thousand dollars on two identical houses with no apparent reason for the difference.

Now it could be pointed out that this was only one case of inequality. But this was only one example out of twenty-four in which some of the inequalities were much greater. Also these twenty-four cases were just a small sampling and the results obtained were from a limited inquiry.

CHAPTER IV

METHODS OF EQUALIZATION AND THE DISTRIBUTION OF STATE FUNDS

Since it has been found that there are many inequalities in assessment practices in Montana, this study would not be complete without a review of some of the common methods of equalizing assessments for the purpose of distributing state funds to the local units.

It is quite generally accepted that local tax paying ability should be one of the factors for participation in any state equalization program. A mathematical index could be used for determining the ability of the various counties to support their educational programs.

There are two types of indices which are commonly used: (1) The amount of property taxes paid, and (2) certain economic factors set up to measure local ability.

A mathematical index of taxpaying ability can be computed similar to Table III.¹ Using Beaverhead County as an example and if the state average is given the value of one, an index of taxpaying ability could be computed as in Table IV. The index of the remaining counties is listed in Appendix B.²

¹Supra, p. 21.

²Infra, p. 48.

TABLE IV
INDEX OF BEAVERHEAD COUNTY ASSESSMENTS
AS COMPARED TO STATE AVERAGE

| | County Assessment | State Average | Index |
|--------------------|----------------------|------------------|-------|
| Irrigated Land | \$21.37 | \$32.08 | .6661 |
| Non-irrigated Land | 10.74 | 8.02 | 1.339 |
| Grazing Land | 2.12 | 2.58 | .8217 |
| All Lands | 3.94 | 5.00 | .788 |
| Horses | 27.47 | 28.00 | .9775 |
| Cattle | 48.21 | 50.77 | .9495 |
| Sheep | 5.79 | 5.66 | 1.022 |

The type of an index as in Table IV is considered a poor one. The assessed valuation of the county is compared to the state average but it is difficult to determine whether or not the state average is a fair measure of taxpaying ability. If over-assessments would counter-balance under-assessments, then perhaps the state average would be a fair measure. But again without uniform assessments among the counties this is difficult to determine. Even with uniform assessments this would not guarantee that the ability to pay taxes would be taken into consideration.

The other type of index used is an economic index of ability to pay taxes.³ It is considered superior by tax experts and economists in measuring taxpaying ability and can be made a fair measure of taxpaying effort. This is

³Francis G. Cornell, A Measure of Taxpaying Ability of Local School Administrative Units. 114 pp.

further evidenced by the fact that five of the larger states are already using this type of an index.

In 1936 Francis G. Cornell⁴ recognized this problem of variations in assessments and undertook the task of developing an index employing a series of economic factors by which the true relative taxpaying ability of local school units could be predicted. Cornell studied the problem in the state of New York and after considerable experimentation used total population, retail sales, number of motor vehicle registrations, production (farming, mining, manufacturing), the number of individual income tax returns, and postal receipts as the economic factors best suited to determine the relative taxpaying ability of local school units.

The problem of taxpaying ability was also studied by R. L. Johns⁵ for the state of Alabama in 1939. As a result of his study an index was set up in Alabama for determining the ability of local units to raise tax revenues.

How the Economic Index is applied.

The Economic Index of Ability to Pay Taxes is used in five different states and each of them has a little different method of application. This can probably best be understood by quoting from the law of several of the states which make use of the index.

⁴Ibid., p. 7.

⁵R. L. Johns, An Index of the Financial Ability of Local School Systems to Support Public Education.

The Alabama Law⁶

Section 1. The State Board of Education shall calculate an average index of the financial ability of each county, including the cities therein, to support the minimum school program, said index to be determined as follows: (a) Calculate for each county its percent of the state total for each of the following items; sales tax paid, passenger automobile license paid, state personal tax paid, assessed valuation of public utilities, farm income, and value added for manufacture. (b) Find the sum total of the following; percent sales tax paid multiplied by six, percent passenger automobile license paid multiplied by five, percent assessed valuation of public utilities multiplied by three, percent state personal income tax paid multiplied by one, percent farm income multiplied by one, and percent value added by manufacture multiplied by one, and divide the aforesaid sum total by seventeen and the quotient shall be the economic index of the county.

Section 2. The State Board of Education shall calculate for each county, including the cities therein, its percent of the total assessed valuation of the state and said percent shall be the assessed valuation index of the county.

Section 3. The State Board of Education shall calculate average index of the financial abilities of each county, including the cities therein, to support the minimum school program, said index to be expressed in percent of the state total and to be calculated as follows: (a) Add the economic index for each county as provided in section 1 of this act to its assessed valuation index as provided in Section 2 of this act and divide the sum by the number two and the quotient shall be the average index of the financial ability of the county, including the cities therein, to support the minimum school program, provided, however, that the State Board of Education shall recalculate said index on the basis of the most recent available data once every two years.

Section 4. The State Board of Education shall determine the total local funds available to provide the minimum School Program for the entire State as follows: multiply one-half of one percent by the total assessed valuation of the State on which taxes were due and collectible for the final year beginning October 1, 1938, and the product shall be counted as the total local funds available for the support of the State Minimum School Program.

⁶A Survey of Public Education of Less than College Grade in Georgia, p. 347.

Section 5. The State Board of Education shall determine the total funds available to each county, including the cities therein, to provide the Minimum School Program by multiplying its average Index of financial ability as provided in Section 3 of this act by the local funds available to provide the State Minimum School Program as provided in Section 4 of this act and the product shall be counted as the local funds available to said county including the cities therein, to provide the Minimum School Program.

The Georgia Index⁷

In developing the Georgia Index the following steps were taken:

- (1) The selection and validation of economic factors.
- (2) The proper weighting of these factors and their combination into a workable index.
- (3) The validation of the final index.

The criteria for selecting the factors were objectivity, equitableness, simplicity, stability and common sense appeal. Many factors were judged in the light of these criteria with the following economic factors being finally selected:

- (1) Property digest less homestead exemption
- (2) Public utilities digest
- (3) Effective buying power--five-year average
- (4) Retail Sales--five-year average
- (5) Motor tag tax
- (6) State Income tax
- (7) Gasoline tax

⁷Ibid., p. 348.

The following was taken from the handbook, A Survey of Public Education of Less Than College Grade in Georgia.⁸

In order to weigh the above factors and combine them into a workable index, it was necessary to select a single statistical criterion for validation purposes. On this point Johns says:

. . . As has been pointed out previously, Mort used "yield of a modern tax system" as his criterion for validation purposes and Cornell "the valuation of property."

The vast majority of states do not have estimates of the full valuation of real property which could be used with confidence as a criterion of taxpaying ability. What, then, do many states generally use as a criterion for developing such formulas for relative ability of counties?

Two possibilities are suggested. In the first place, one might use assessed valuation as inaccurate as it is, assuming that the relationships determined between this as a criterion and several economic measures would give relative regression values which approximate true value better than such a criterion itself. In the second place taxes raised on property are universally available and they are reliable. Statistically, taxes raised are highly related to the basic criterion. They should be useful as a criterion measure for states in general.

Since the purpose of the index is to develop a better measure of ability to pay than can be ascertained by present assessed valuation, it must be remembered that a valid index of financial ability should not correlate perfectly with an index of financial ability calculated from present assessed values. It is assumed that an index of financial ability calculated from an economic series correlates higher with an index of financial ability determined from the true value of property than an index of financial ability determined from present assessed values. Cornell demonstrated in his study that such an assumption was justifiable

⁸Ibid., p. 349.

In accordance with the theory presented above it was decided that assessed valuations represented the best validating measures available for Georgia. Assessed valuations were used as the validating measure and the selected economic factors were assembled in various combinations and with assigned weighting. This experimentation revealed that the highest correlation of the index with present assessed valuation could be obtained by eliminating the economic factors of gasoline taxes and assigning the following weights to the factors included in the index:

- (1) Percent property taxes paid weight of 6
- (2) Percent public utility taxes paid . . . weight of 2
- (3) Percent effective buying power. weight of 6
- (4) Percent retail sales. weight of 2
- (5) Percent motor tag taxes paid. weight of 2
- (6) Percent state income tax paid weight of 1

In validating the economic index the relationship has been measured between the total tax digest and the economic index. The tax digest in individual instances is not a valid measure but for the state as a whole is a reliable validating measure in that average over-assessments counter-balance under-assessments.

Another plan of distribution of state aid is the plan used by Pennsylvania.⁹ In 1947, Pennsylvania passed a law creating a State Tax Equalization Board. The State Tax Equalization Board has no power to revise assessments. Its duty is to determine the relationships between assessed value and market value of real property in the various school districts in Pennsylvania and to report to the Department of Public Instruction the real value of taxable real estate in each school district. In the final analysis

⁹Public School Code of Pennsylvania--Act. 447

under this system it is necessary for each county or unit to levy a 4 mill levy on the full and true value of that county before it can participate in state funds.

According to Act. 447, Section 7, which was enacted into law in Pennsylvania in 1947 the State Tax Equalization Board is empowered:

(1) To determine the market value of taxable real property in each of the school districts and to conduct investigations, require information and have access to whatever public records are necessary in making each such determination.

(2) To require the county commissioners of each county to furnish to it, monthly, a list of all conveyances or other transfers of real estate, or any interest therein, recorded within such county during the preceding month, stating the value of the federal tax stamps affixed to the deed for each such conveyance, and the assessed valuations for county tax purposes of such real estate.

(3) To certify to the Superintendent of Public Instruction, not later than the first day of July of each year, a list of all school districts showing the market value of taxable real property, and the assessed valuation for county tax purposes, and to furnish to the board of school directors of each school district as much of such information as pertain to such school district.

(4) To hear and decide appeals of parties who may feel aggrieved by any finding or conclusion of the board.

(5) To investigate the finances and any other general circumstances of any school district requesting special aid from the Superintendent of Public Instruction, and to advise the Superintendent of Public Instruction in making grants of special aid.

(6) To make surveys and investigations of the finances of the school districts in the interest of a more equitable distribution of school support.

(7) To subpoena state and local officials and to require from them such information as may be necessary for the proper discharge of its duties.

The act also provides for monthly reports from county commissioners, annual reports from local assessing officials and annual adjustment of valuations.

Ratio system. Another system for equalizing assessments is the one used by Oregon. The State of Oregon has a Tax Commission composed of three members. The duties and powers of one of these members are to supervise and equalize the general property assessments. One of the chief functions of this Tax commission is to establish an assessment ratio for each county.¹⁰

. . . Taking into account the value of properties in each county assessed by the county assessor and by the tax commission itself the commission is required to determine for each county its percentage of the equalized value of the whole state. In so doing the commission has from the beginning established each year for each county the ratio of the assessed valuation to "actual" or equalized valuation. In 1948 these ratios varied from .37 to .70.¹¹

After a county has been assigned an assessment ratio, the required district levy of 7 mills is divided by the ratio and the result would be the number of mills that each district in that county would have to levy in order to participate in any state aid. There are seven states that use this system.¹²

¹⁰Laws Relating to Assessment and Taxation, 1949, (Oregon), p. 11.

¹¹John F. Staehle, The Role of the Oregon Tax Commission in State Government, p. 10

¹²Public School Finance Programs of the Forty-eight States, p. 82.

The economic index as used in Alabama, Georgia, and Florida, the plan used by Pennsylvania and the one used by Oregon all accomplish about the same purpose but in a different way. This could probably be explained by using an assumed example.

Example: Assume that a district has a taxable valuation of \$500,000 with a compulsory levy of 5 mills.

Pennsylvania Plan. Under the Pennsylvania Plan supervisors of the State Tax Equalization Board from the State Education Department would determine the "real value" or equalized taxable valuation in the district. Assuming that this amounted to \$1,000,000, then 5 mills times \$1,000,000 = \$5,000. This would be the amount for that district to raise with a 5 mill levy in order to participate in state funds.

The Economic Index. Assuming that the state taxable valuation is \$500,000,000 and the economic index of the district is .002; i.e., it was computed that the district has .2 percent of the state's total taxpaying ability, $\$500,000,000 \times 5 \text{ mills} = \$2,500,000$ or the amount that a 5 mill levy would raise on the whole state's valuation. $\$2,500,000 \times .002 = \$5,000$ or the amount that the district is required to raise.

The Oregon System. If the county ratio is assumed to be .50 and the required millage is 5 mills, then the district would be required to levy 10 mills on the valuation of the

district. This is arrived at by dividing 5 mills by the ratio of .50. The county ratio of .50 means that the county assessment is 50 percent of the equalized or "real" valuation. Again, assuming that the taxable valuation of the district is \$500,000 then $\$500,000 \times 10 \text{ mills} = \$5,000$.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

In Chapter II it was shown that the inequalities in assessments definitely affect the foundation program. Education financed under the old district system did not promote equalized opportunity for all children of the state. Districts with much wealth were able to give their children a good education with little financial effort while the poorer districts had to put forth much financial effort just to provide a minimum educational opportunity to their children.

The organizations responsible for the foundation program did a good job in setting up a program to equalize the educational opportunity for all the youth in Montana. In general the patrons of the districts in Montana feel that the foundation program has gone a long way in solving their educational financial problems. But on the other hand with federal taxes increasing, they are becoming very tax conscious. About the only tax that they have any voice in is their own local property tax. Since a large share of the educational costs are financed by the property tax, the tax dollar for schools naturally comes under close scrutiny.

Although all counties levy the same number of mills under the foundation program there is still the program of unequal assessments between the various counties. It was

clearly demonstrated in Chapter III that there are wide variations of assessments between the various counties. Most of this, of course, stems from the fact that there has never been a reclassification of lands since the lands were originally classified in 1919. Figure 1 in Chapter III very clearly demonstrates that there are still wide variations of assessments, even though there have been some attempts on the part of a few counties for reclassifications. Some counties are now in the process of reclassification but even though this would mean equalization of assessments within the county, that does not necessarily mean that there would be equal and uniform assessments between the counties. There would still be fifty-six different assessors who would use their own methods in assessing properties within their counties. Since state aid of a necessity must be on a county basis, and there still is no uniform method of assessments, the problem of distribution of state funds on an equal basis still exists.

The question now arises as to what can be done about the problem of a more equitable distribution of state funds. Other states have recognized this problem and from their reports it was learned that they have not had much success in securing equal and uniform assessments between the various counties or taxing units. As a result these states have adopted into law one of the three following methods or a combination of the three, namely: (1) An index based on

the amount of property taxes paid, (2) An index based on certain economic factors set up to measure local taxpaying ability and (3) determination of the ratio between the assessed values and the market values of real property in the various counties.

Since this paper is concerned with the problem in Montana these methods will be discussed with regard to the Montana problem.

An index based on the amount of property taxes paid.

Advantages:

- (1) This type of index is quite readily understood by the average layman.
- (2) The items are broad enough to give a general index of the ability to pay within a county as the other properties follow the same general philosophy within the county.
- (3) It is easily computed and could be handled easily within one of the existing state agencies.

Disadvantages:

- (1) There is no way available to compare assessments of mining property, city lots, personal property and business properties by counties, from the present records available in the office of the State Board of Equalization. (The entire valuation of Silver Bow County consists of mining properties and business enterprises.)

- (2) The property assessment index breaks down when so little of the property can be compared.

An Economic Index

Advantages:

- (1) It is considered superior by tax experts and economists in measuring taxpaying ability.
- (2) This index is of special value because it can include all fundamental principles of school finance such as ability, effort, need and equalization.
- (3) Once the index is constructed it does not require much work to revise whenever necessary.
- (4) It takes into account factors other than taxable property.

Disadvantages:

- (1) A wide study and much research is required to construct an index.
- (2) The data for many of the best indices are difficult to secure in Montana.
- (3) Since Montana is a state with so many diversified industries it is difficult to weigh the factors properly.
- (4) Although this index is easily applied, its construction is not easily understood by the average layman.

The Pennsylvania Plan

Advantages:

- (1) This plan is readily understood by the average layman.
- (2) It is equitable in that it is based on full and true value.
- (3) This plan would provide for a hearing on the part of any dissatisfied patrons. (This is a feature not provided in the plans listed above.)

Disadvantages:

- (1) This plan would require a state board or probably a new agency to administer it. The recent Montana Legislature demonstrated that they were very much opposed to the creation of any new boards or agencies.
- (2) The cost of administration would probably be greater than either of the two other plans because it would require investigations down to the district level.

Ratio Plan Similar to the Oregon System

Advantages:

- (1) It can be readily understood by the average layman and it is easily applied.
- (2) It is equitable in that it is based on full and true value.

- (3) It is also equitable in that any dissatisfied party may have a hearing in regard to any grievance or inequality resulting from the decision of the Tax Commission.
- (4) It could also be used to equalize state-wide property taxes.
- (5) State equalization activity would not have to be extended to the school district level.

Disadvantages:

- (1) It would require a separate agency or board unless the present State Board of Equalization could be given the necessary power and duties similar to the Tax Commission. However, this would still require more funds.

Since it has been proven difficult to secure a reclassification of property in Montana on a state-wide basis, it would seem advisable for Montana to adopt one of the above plans. Even though Montana were to secure a reclassification of property, this could not be enacted before the next legislature convenes which would be in 1953. Then it would probably take another five years to complete the job. This would be a total of seven years and much harm could be done to the foundation program by the inequality of assessments in that much time.

Before any plan could be adopted in Montana, it would be necessary to determine which state agency would be re-

sponsible for the job of equalizing assessments on properties for school purposes. It would seem that a "ratio" plan or a plan similar to the one used in Pennsylvania would naturally be handled by the present State Board of Equalization in Montana. These plans require the same type of work that the board now performs and the board already has been granted broad supervisory powers over the county assessors.¹

In the exercise of its general supervisory powers over the administration of assessment, tax and revenue laws of the state, the Board prescribes rules and regulations governing county officials in the performance of their duties, prepares and prescribes uniform forms for the use and assistance of such officials, conducts hearings on appeal and on its own motion, advises, directs and assists municipal tax officials, collects and compiles information from administrators within the state and from state departments of other states, and performs a multitude of duties which naturally devolve upon it in connection with this phase of the work.

In view of the present power of the State Board of Equalization, it would seem that with the aid of the Board's field supervisors and a few added powers to be granted by the state legislature, it would not be too difficult to put a ratio plan or a plan similar to the one used in Pennsylvania into effect.

If an economic index were to be used to equalize assessed valuation for school purposes, it would appear that it would function best under the supervision of the State Department of Education.

¹State of Montana, Fourteenth Biennial Report of the Montana State Board of Equalization, July 1, 1948 to June 30, 1950. p. 14.

But taking into consideration the fact that Montana has a State Board of Equalization with supervisory powers over the county assessors, along with field supervisors, a ratio plan would probably be the best one for Montana to adopt. Another course that Montana could take would be to offer a scholarship to some capable person who is working for his or her doctor's degree with the understanding that that person working in conjunction with the State Department of Public Instruction and the Economic Departments of the State College and the State University, would develop an economic index by the time the legislature convenes in 1953. A ratio plan could be offered to the legislature first and then the economic index as an alternate plan. This would assure Montana of a plan whereby the problem of inequality of assessments could be solved without too many years of operation under an inequitable foundation program.

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APPENDIX

TABLE V
COUNTY ASSESSMENT VARIATIONS

| County | Irrigated Land | Non-Irrigated Land | Grazing Land | All Lands | Cattle | Horses | Sh |
|---------------|----------------|--------------------|--------------|-----------|--------|--------|-------|
| Beaverhead | 21.37 | 10.43 | 2.12 | 3.94 | 48.21 | 27.47 | |
| Bighorn | 36.09 | 5.50 | 2.15 | 3.69 | 52.83 | 31.97 | |
| Blaine | 21.64 | 6.17 | 2.68 | 3.82 | 50.90 | 30.04 | |
| Broadwater | 32.96 | 8.62 | 2.51 | 5.34 | 51.08 | 29.04 | |
| Carbon | 51.87 | 7.04 | 2.32 | 8.08 | 51.96 | 30.35 | |
| Carter | ----- | 5.12 | 2.75 | 3.55 | 48.49 | 27.53 | 5.83 |
| Cascade | 23.33 | 12.34 | 3.46 | 7.12 | 53.38 | 38.70 | 6.41 |
| Chouteau | 21.71 | 9.14 | 3.85 | 5.87 | 48.90 | 29.28 | 5.84 |
| Custer | 34.64 | 3.95 | 4.86 | 2.68 | 48.35 | 25.69 | 5.67 |
| Daniels | 16.33 | 11.42 | 2.71 | 8.29 | 49.68 | 19.94 | 5.90 |
| Dawson | 19.09 | 8.47 | 2.39 | 4.26 | 48.13 | 22.12 | 5.75 |
| Deer Lodge | 33.34 | 5.16 | 3.16 | 6.10 | 48.24 | 35.28 | 6.74 |
| Fallon | ----- | 5.32 | 1.53 | 3.18 | 47.78 | 25.64 | 5.42 |
| Fergus | 24.57 | 11.00 | 3.08 | 6.53 | 49.40 | 27.15 | 5.268 |
| Flathead | ----- | 31.17 | 3.95 | 9.96 | 54.06 | 33.22 | 6.00 |
| Gallatin | 44.36 | 16.92 | 2.54 | 10.06 | 56.44 | 34.72 | 5.80 |
| Garfield | 15.00 | 4.00 | 1.81 | 2.07 | 47.295 | 22.14 | 5.37 |
| Glacier | 19.99 | 6.79 | 4.05 | 5.03 | 48.92 | 25.94 | 5.56 |
| Golden Valley | 21.57 | 6.01 | 2.57 | 3.01 | 48.11 | 24.17 | 5.299 |
| Granite | 36.47 | ----- | 3.14 | 5.57 | 53.57 | 29.18 | 6.44 |
| Hill | 25.76 | 6.52 | 3.45 | 5.54 | 50.62 | 24.92 | 5.31 |
| Jefferson | 21.89 | ----- | 1.28 | 2.55 | 51.42 | 29.75 | 5.15 |
| Judith Basin | 24.38 | 14.85 | 4.39 | 9.97 | 51.17 | 29.59 | 5.76 |
| Lake | 29.03 | 12.04 | 4.22 | 12.39 | 53.01 | 28.65 | 6.37 |
| Lewis & Clark | 20.45 | 7.94 | 2.99 | 3.299 | 51.35 | 32.19 | 5.55 |
| Liberty | 29.00 | 8.266 | 2.84 | 5.66 | 48.71 | 18.80 | 5.16 |
| Lincoln | 28.31 | 17.57 | 2.39 | 3.87 | 52.09 | 27.86 | 5.38 |
| Madison | 26.93 | 7.39 | 2.13 | 4.18 | 49.43 | 30.39 | 5.77 |
| McCone | ----- | 6.00 | 1.79 | 4.49 | 50.01 | 23.50 | 5.38 |
| Meagher | 23.25 | 4.68 | 3.60 | 3.70 | 53.05 | 26.45 | 5.65 |

TABLE V (Continued)
COUNTY ASSESSMENT VARIATIONS

| County | Irrigated Land | Non-Irrigated Land | Grazing Land | All Lands | Cattle | Horses | Sheep |
|---------------|----------------|--------------------|--------------|-----------|--------|--------|-------|
| Mineral | 32.63 | 19.90 | 2.58 | 4.23 | 51.19 | 28.43 | 6.44 |
| Missoula | 28.59 | 14.20 | 2.53 | 5.94 | 51.64 | 27.82 | 4.85 |
| Musselshell | --- | 3.64 | 2.21 | 2.42 | 49.06 | 29.46 | 5.83 |
| Park | 37.95 | 8.33 | 2.44 | 6.04 | 52.05 | 32.63 | 5.22 |
| Petroleum | 16.13 | 3.06 | 1.98 | 2.38 | 47.74 | 22.69 | 5.47 |
| Phillips | 13.68 | 5.59 | 2.58 | 3.50 | 55.76 | 28.54 | 6.43 |
| Pondera | 30.42 | 9.22 | 3.42 | 10.00 | 53.09 | 20.30 | 5.53 |
| Powder River | --- | 5.73 | 2.23 | 3.18 | 49.44 | 29.93 | 5.64 |
| Powell | 29.77 | 9.31 | 3.64 | 5.63 | 49.53 | 31.91 | 5.72 |
| Prairie | --- | 6.29 | 1.92 | 4.04 | 47.72 | 23.30 | 5.54 |
| Kavalli | 32.36 | --- | 3.83 | 11.17 | 54.64 | 31.89 | 5.41 |
| Richland | 28.79 | 6.43 | 2.29 | 4.53 | 47.91 | 23.02 | 5.11 |
| Roosevelt | 11.84 | 8.56 | 3.32 | 6.27 | 49.91 | 26.26 | 5.77 |
| Rosebud | 27.38 | 7.46 | 1.65 | 2.26 | 48.09 | 24.34 | 5.44 |
| Sanders | 14.37 | 12.99 | 2.82 | 3.93 | 51.46 | 28.32 | 5.66 |
| Sheridan | --- | 10.30 | 2.58 | 7.09 | 50.00 | 26.68 | 5.91 |
| Silver Bow | 12.30 | 5.49 | 2.56 | 3.53 | 52.65 | 32.30 | 4.83 |
| Stillwater | 46.54 | 5.00 | 2.57 | 4.57 | 50.30 | 29.53 | 5.44 |
| Sweetgrass | 39.37 | 17.08 | 3.29 | 4.95 | 50.47 | 31.36 | 5.16 |
| Teton | 18.60 | 11.88 | 2.76 | 7.84 | 49.91 | 26.96 | 5.43 |
| Toole | --- | 5.79 | 3.23 | 4.27 | 47.56 | 22.47 | 5.33 |
| Treasure | 33.85 | 4.46 | 2.12 | 4.00 | 49.12 | 23.21 | 5.13 |
| Valley | 14.96 | 7.11 | 2.74 | 5.26 | 49.16 | 27.57 | 5.70 |
| Wheatland | 222.74 | 3.17 | 3.13 | 4.10 | 49.01 | 25.63 | 5.67 |
| Wibaux | --- | 10.00 | 2.21 | 4.98 | 50.34 | 23.76 | 6.16 |
| Yellowstone | 61.90 | 4.21 | 2.20 | 7.56 | 58.45 | 32.07 | 5.94 |
| State Average | 32.08 | 8.02 | 2.58 | 5.00 | 50.77 | 28.10 | 5.66 |

TABLE VI
INDEX OF ASSESSMENTS VARIATIONS BY COUNTIES
AS COMPARED TO STATE AVERAGE

| County | Irrigated Land | Non-Irrigated Land | Grazing Land | All Lands | Cattle | Horses | Sheep |
|---------------|----------------|--------------------|--------------|-----------|--------|--------|-------|
| Beaverhead | .66 | 1.28 | .82 | .79 | .95 | .97 | 1.02 |
| Bighorn | 1.12 | .68 | .83 | .74 | 1.04 | 1.13 | .99 |
| Blaine | .67 | .76 | 1.04 | .76 | 1.00 | 1.06 | 1.03 |
| Broadwater | 1.02 | 1.07 | .97 | 1.06 | 1.00 | 1.03 | .98 |
| Carbon | 1.61 | .87 | .89 | 1.61 | 1.02 | 1.08 | .98 |
| Carter | --- | .63 | 1.06 | .71 | .95 | .97 | 1.03 |
| Cascade | .72 | 1.53 | 1.34 | 1.62 | 1.05 | 1.37 | 1.13 |
| Chouteau | .67 | 1.13 | 1.49 | 1.15 | .96 | 1.04 | 1.03 |
| Custer | 1.07 | .49 | .72 | .53 | .95 | .91 | .98 |
| Daniels | .51 | 1.42 | 1.05 | 1.65 | .97 | .70 | 1.04 |
| Dawson | .59 | 1.05 | .92 | .85 | .94 | .78 | 1.00 |
| Deer Lodge | 1.03 | .64 | 1.22 | 1.22 | .95 | 1.25 | 1.19 |
| Fallon | --- | .66 | .59 | .63 | .94 | .91 | .95 |
| Fergus | .76 | 1.37 | 1.17 | 1.30 | .97 | .96 | 1.00 |
| Flathead | --- | 3.89 | 1.52 | 1.87 | 1.06 | 1.18 | 1.06 |
| Gallatin | 1.38 | 2.10 | .98 | 2.01 | 1.11 | 1.23 | 1.02 |
| Garfield | .46 | .49 | .70 | .41 | .94 | .79 | .94 |
| Glacier | .62 | .85 | 1.58 | 1.00 | .96 | .92 | .98 |
| Golden Valley | .67 | .75 | .99 | .60 | .94 | .86 | 1.05 |
| Granite | 1.13 | --- | 1.21 | 1.11 | 1.05 | 1.03 | 1.13 |
| Hill | .80 | ..81 | 1.33 | 1.10 | .99 | .89 | .93 |
| Jefferson | .68 | --- | .49 | .51 | 1.01 | 1.05 | .90 |
| Judith Basin | .75 | 1.85 | 1.69 | 1.99 | 1.00 | 1.05 | 1.01 |
| Lake | .91 | 1.50 | 1.63 | 2.47 | 1.04 | 1.01 | 1.12 |
| Lewis & Clark | .63 | .99 | 1.15 | .79 | 1.01 | 1.14 | .98 |
| Liberty | .90 | 1.07 | 1.10 | 1.13 | .95 | .66 | .91 |
| Lincoln | .88 | 2.19 | .92 | .77 | 1.02 | .99 | .95 |
| Madison | .83 | .92 | .82 | .83 | .97 | 1.08 | 1.01 |
| McCone | --- | .74 | .69 | .89 | .98 | .83 | .95 |
| Meagher | .72 | .58 | 1.39 | .74 | 1.04 | .94 | .99 |

TABLE VI (Continued)
INDEX OF ASSESSMENT VARIATIONS BY COUNTIES
AS COMPARED TO STATE AVERAGE

| County | Irrigated Land | Non-Irrigated Land | Grazing Land | All Lands | Cattle | Horses | Sheep | Average |
|--------------|-------------------|-----------------------|-----------------|--------------|--------|--------|-------|---------|
| Mineral | 1.01 | 2.27 | 1.00 | .84 | 1.00 | 1.01 | 1.13 | 1.20 |
| Missoula | .89 | 1.77 | .98 | 1.18 | 1.01 | .99 | .85 | 1.09 |
| Musselshell | | .45 | .85 | .48 | .96 | 1.04 | 1.03 | .80 |
| Park | 1.18 | 1.03 | .94 | 1.20 | 1.02 | 1.16 | .92 | 1.06 |
| Petroleum | .50 | .36 | .76 | .47 | .94 | .80 | .96 | .68 |
| Phillips | .42 | .69 | 1.00 | .70 | 1.09 | 1.01 | 1.13 | .89 |
| Pondera | .94 | 1.14 | 1.32 | 2.00 | 1.04 | .72 | .97 | 1.16 |
| Powder River | | .71 | .86 | .63 | .95 | 1.06 | .99 | .86 |
| Powell | .92 | 1.15 | 1.41 | 1.12 | .97 | 1.13 | 1.01 | 1.10 |
| Prairie | | .78 | .74 | .80 | .93 | .80 | .97 | .83 |
| Ravalli | 1.00 | | 1.48 | 2.23 | 1.07 | 1.13 | .97 | 1.30 |
| Richland | .89 | .80 | .88 | .90 | .94 | .81 | .90 | .87 |
| Roosevelt | .36 | 1.06 | 1.28 | 1.25 | .98 | .93 | 1.01 | .98 |
| Rosebud | .85 | .93 | .63 | .45 | .94 | .86 | .96 | .80 |
| Sanders | .44 | 1.61 | 1.09 | .78 | 1.01 | 1.00 | 1.00 | .99 |
| Sheridan | | 1.28 | 1.00 | 1.41 | .98 | .94 | 1.04 | 1.10 |
| Silverbow | .38 | .68 | .99 | .70 | 1.03 | 1.14 | .87 | .82 |
| Stillwater | 1.47 | .62 | .99 | .91 | .99 | 1.05 | .96 | .99 |
| Sweetgrass | 1.22 | 2.12 | 1.27 | .99 | .99 | 1.11 | .91 | 1.23 |
| Teton | .57 | 1.48 | 1.06 | 1.57 | .98 | .95 | .95 | 1.08 |
| Toole | | .72 | 1.25 | .85 | .93 | .79 | .94 | .91 |
| Treasure | 1.05 | .56 | .82 | .80 | .96 | .82 | .90 | .84 |
| Valley | .46 | .89 | 1.06 | 1.05 | .96 | .98 | 1.00 | .91 |
| Wheatland | .71 | .39 | 1.21 | .82 | .96 | .91 | 1.00 | .85 |
| Wibaux | | 1.24 | .85 | .99 | .99 | .84 | 1.08 | .99 |
| Yellowstone | 1.92 | .52 | .85 | 1.71 | 1.15 | 1.14 | 1.04 | 1.17 |