The five-or-less pupil school in six counties of Montana
by Agnes B Wiggenhorn

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics
Montana State University
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Abstract:
This study presents the problem of the five-or-less-pupil school, where it is the only educational unit located within and supported by an independent school district in Montana.

The discussion is carried forward under three divisions; first, the theory of elementary education in urban and rural Ameriea; second,' the financing of the five-or-less-pupil school, third, the social value of the small isolated schools The underlying theory of our present educational system in urban and rural areas is discussed. Also some curriculum revisions which are designed to meet the needs of our changing social order are presented.

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The social value of the small school in an, isolated area is evaluated in terms of population mobility, land settlement patterns, and curriculum extension for rural living.

THE FIVE-OR-LESS-PUPIL SCHOOL IN SIX COUNTIES OF MONTANA

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Submitted to the Graduate Committee
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The author is indebted to Dr. Carl F. Kraenzel for his helpful suggestions for procedure and interpretation of the data of this study and for the constructive criticism. Further acknowledgment is made to the State Department of Public Instruction, the County Superintendents of Schools of the six sample counties, and the W.P.A. for assistance in gathering and compiling data.

THE FIVE-OR-LESS-PUPIL SCHOOL IN SIX COUNTIES OF MONTANA

ABSTRACT

This study presents the problem of the five-or-less-pupil school, where it is the only educational unit located within and supported by an independent school district in Montana.

The discussion is carried forward under three divisions; first, the theory of elementary education in urban and rural America; second, the financing of the five-or-less-pupil school; third, the social value of the small isolated school.

The underlying theory of our present educational system in urban and rural areas is discussed. Also some curriculum revisions which are designed to meet the needs of our changing social order are presented.

The financial discussion is limited to the income and operating cost of the selected schools. The income for the district is analyzed to establish the sources of revenue, to determine the proportion of the total revenue derived from each source and to consider the method of distribution. The operating cost is analyzed with reference to pupil attendance, teacher activity and curriculum offered.

The social value of the small school in an isolated area is evaluated in terms of population mobility, land settlement patterns, and curriculum extension for rural living.

INTRODUCTION

The goal of American education is that all children shall have the opportunity of development according to their abilities and their needs. 1/ Theoretically, neither location nor economic condition of the parents or the children changes the major objectives. Actually, the formal and informal educational curricular offerings to urban children should not be more extensive than for rural children. In the past, the idea was to permit variations in taxation and to foster small local school districts. It was believed that after provision was made for a minimum program, the people should decide for themselves what additional education they wished to offer. A community wanting to extend its educational facilities would then support an enlarged program for extra tax.

Apparently this was logical in the early history of America when people seldom moved but lived in one community most of their lives. Today, because of higher mobility of population and changes in occupation, the principle is no longer applicable. It is recognized, however, that the means and methods of providing like educational facilities to rural-urban youth is more difficult of accomplishment in sparsely populated areas than in those of greater population density. This is especially true if the facilities are supported by the local revenue and income alone. It is only recently that the idea of state aid has been extensively applied. By this method of taxing larger units, it is possible to make money available to poor revenue areas from well-to-do areas.

1/ This ideal for education has been expressed by Dr. Bess Goodykoontz, Assistant Commissioner of Education in "Biennial Survey of Education in the United States, 1934-36", Chapter V, p. 1.

The idea of state aid has spread rapidly. Undoubtedly, it will be necessary in the future to develop legislation along the line of wider grants. 2/ Stephen Leacock in The Unsolved Social Justice says, "The chief immediate direction of social effort should be towards the attempt to give to every human being in childhood adequate food, clothing, education, and an opportunity in life. This will prove to be the beginning of many things." In order to meet these demands, the total revenue of the nation will need to be made available to all the school population.

This statement is verified by Mr. O. M. Kile who writes, "The states have not yet realized the responsibility of the cities and the general public for the maintenance of an adequate school system in the rural sections. Most city residents still look upon this as purely a local problem for the township or at most the county. They do not realize that the rural schools have educated a goodly share of the population of the cities at any given time. Calculations indicate that more than 200,000 farm boys and girls, 15 to 18 years of age are turned over to the cities each year with their education to that point fully paid for by farmers. If the village and small-town migrants to the larger cities are included, the debt of the cities becomes much greater. Figuring only the 200,000 farm boys and girls each year needed to keep up virility and size of the cities, and calculating the average taxation cost of educating these young people to the aged indicated--approximately $100 per year or $1,000 through the second year of high school--we find that the cities really owe the

2/ Cook, K. M., "Biennial Survey of Education in the United States, 1934-36", United States Department of Education, Washington, D. C., Chapter V, p. 12.

farm taxpayers the sum of $200,000,000 per year. Since there are 150,000 one-room schools in the United States, 20,000 two-room schools, and 18,000 consolidated schools, this $200,000,000, if distributed back to the places where the educational work is done, would mean about $1,000 per rural school per year. If figured on the total number of school rooms educating rural children, the distribution would amount to about $6,700 per room per year." 3/

If the rural areas are to have comparable educational facilities with the urban areas, the method for extending the offerings must differ from that of the past in order to enable education to utilize the environmental resources and adjust the program to the individual and community requirements. The financing of such democratic educational methods needs to be based, not on ability to pay, but on the larger principles of public welfare. Modern transportation, communication, and population mobility bring the once isolated areas close together. Because of these factors, the inadequately educated people of one area may become the financially dependent of another area. It might pay this latter area to properly educate the former, so as to cut down its future cost.

Purpose of the Study

The educational situation in sparsely populated sections may best be understood by considering some of the outstanding problems. These are:

1. The financial cost of the five-or-less-pupil schools in comparison with the cost of schools with larger enrollments.

3/ Kile, O. M., "The New Agriculture", The Macmillan Company, 1932.

2. The need for keeping isolated school children and the children of the five-or-less-pupil school near the home and the community by bringing the educational plant to the children rather than the children to the educational plant.

3. The essentials of education in a five-or-less-pupil school from the standpoint of curriculum and facilities.

4. The development of a philosophy of rural and community life as an adjunct to education in the five-or-less-pupil school.

This study is designed to call attention to these problems in other than conventional fashion and will concern itself largely with 1, 2, and 3 above. Some inferences concerning 4 will be developed.

Background for Educational Policy

In order to understand the present educational practices in the rural school in America, it is necessary to briefly review the history of our national economy. At the beginning of our national life, agriculture was the basis of our economy. Agriculture then depended for growth and prosperity upon individual effort and initiative. Later with the introduction of manufacturing, many new phases developed in our economic system. In order to have the necessary labor in previously undeveloped agricultural and industrial areas, public and private agencies fostered population movements, while the federal government enacted legislation for the purpose of disposing of the public domain for agricultural settlement. Both the federal government and the states now shared the management of public lands, and the mutual programs for land settlement and agriculture were based on

the assumption of an indefinite agriculture expansion with unlimited national and international markets. Later with a shift from an agricultural economy to an industrial economy, enlarged domestic markets opened as people engaged in industry purchased goods they did not produce. Both agriculture and industry continued to expand due largely to foreign immigration which influenced our markets at home and abroad. European nations did buy from us but we, in turn, did not buy from them. Consequently, the debtor nations were forced into a nationalistic position, the result of which was the loss of our foreign markets and a change in our land policy.

Several other modifying factors have been projected into the economy. For example, population of the country has failed to increase at its former rate, and the tendency is toward a more stable population. 4/ Furthermore, the total supply of world agriculture produce has been increased by the development of new lands in foreign countries. 5/ These then are some of the factors responsible for the depressed agricultural prices. Likewise, they are some of the factors that must be considered in planning the future policy for land use and population settlement, hence they are important in any consideration of our rural school policies.

It now appears necessary to aim at a new purpose or objective in rural life, if agriculture and our entire economy are to continue its contribution to society. The school, therefore, becomes of primary importance since it represents fundamentally the American way of building.

4/ Thompson, Warren S., "Population Problems", Megraw-Hill Company, Inc., 1935, Chapter XV.

5/ Bowman, I., "The World and Its People", Ginn and Company, 1933.

It is because of the belief in this democratic process of building that the Americans conceived the idea that public education is the function of the local community. Mr. Edmund deS Brunner says, "As early as the 1640's the colony of Massachusetts passed two laws requiring that each town (township) tax its citizens for the support of a school". 6/ Later with the development of manufacturing began the development of the urban centers. People moved to cities in large numbers, and our total educational plant was expanded to prepare people for urban life and not rural life. 7/ Education itself, the curriculum and its content, was created by urban individuals for urban use. It was not thought necessary to prepare an adequate program for the rural, much less the rural isolated areas. At present, however, we are confronted with the problem of continuing as an industrial nation with large centers of population, or of devoting some attention to agriculture as a way of life in more scattered areas.

If ours is to be the latter course, then the school and its program must concern itself with vision as well as facts. It must admit the importance of linking up the child's school with community life. It must conceive of the child's educational course in terms of activity and experience rather than the acquisition of knowledge alone.

Rural Education in European Countries

Many European countries including Norway, Denmark, and Finland have based their educational planning on the assumption that both formal

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6/ Kolb, J. H., and Brunner, E. deS., "Study of Rural Sociology", Houghton Mifflin Company, 1935, Chapter XVI.

7/ Chapin, F. S., "Social Heritage Rolls up on the Back of Schools", School and Society, Aug. 19, 1933.

and informal training is for every day life, rural as well as urban. 8/ It would appear that America might well consider this as a definite goal in considering its educational curriculum and its adaptation to the child's need.

The school of Norway does not separate itself from the workaday world. The laborer and the farmer are not educated away from their jobs, but are taught to bring to it a personal joy in working and a deeper appreciation of their work. 9/

In Denmark the youth, by formal and informal training, are imbued with a philosophy that symbolizes the concept of her national life. "Leaders in homesteading movements in Denmark believe that a real community life close to the soil can result in a popular culture of a high order and can produce the durable satisfaction that results when one's daily work is made intelligent and touched with imagination. Rural life on small farms is profitable and enjoyable. The subsistence homestead seeks to provide a comfortable standard of living on relatively small income", states Dr. R. H. Eckleberry. 10/

The Finnish State assumes the preservation of its national life to be dependent upon the solidity of thought and action among its people. For this reason it maintains a dual school system; one division trains for urban life, a second division trains for rural life. The enrollment

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8/ Downs, S. W., "Education Progress in Foreign Countries", School and Society, December 26, 1936.

9/ Williams, T. C., "The School for the New Social Order", School Life, June, 1933.

10/ Eckleberry, R. H., "Subsistence Homesteading and Progressive Education", School and Society, February 24, 1934.

in the rural school is limited in order that the program of self-help, self-seeking, and individual initiative may more successfully condition the pupil to life in small groups. The state, however, does not contemplate rearing a citizenry divided in purpose. Hence, throughout the entire system cooperation in all its phases is a subject of major rank. The state considers rural life and the problems of rural life, and city life and the problems of city life as being of sociological and economic importance to the extent that all should be as familiar with one of them as with the other. 11/

Rural Education in America

In the United States the idea of education such as has been attempted by European nations is taking hold. Modern leaders acknowledge that a curriculum which fits itself to the requirements of a people is more desirable than a curriculum which meets standard set for accomplishment without reference to application.

It is from this latter viewpoint that the worth of the small school as an institution has been debated by educators and economists. It is contended that the limited curriculum of traditional outline results in unequal opportunities. Small enrollments, evaluated for efficiency on the teacher-pupil ratio, thus result in high costs of maintenance. In the past the only solution proposed for the problem has been consolidation. This is in keeping with the idea of emphasis on urban curriculum expansion.

11/ Karttenun, Hanna, "Schools of Finland", a graduate student paper prepared while a graduate student in Home Economics at Montana State College, 1938-39.

It is believed that the consolidated school, with its enlarged enrollment and more extensive curriculum, tends to equalize opportunity. The five-or-less-pupil school, as a study group and equipped with the proper tools for a program adjusted to its condition, has received small attention. The need for such attention can not be questioned. After analysizing data compiled in a survey of rural schools of Iowa, Mr. O. H. Benson concluded that the boys and girls who favored country life were those who had been given opportunity at home, at school, and during leisure time to study and to follow programs of adventure with educational and recreational value and into which elements of local interest had been interwoven. 12/

Two Methods of Consolidation

There are several ways by which the advantages of modern education can be extended to a larger proportion of the rural population. One method is the consolidation of small districts into a whole for a common educational plant and taxing unit so that the revenue is sufficient to carry on the functions of modern education. Under this sytem the children of outlying areas are transported as a rule to a common school. The second method by which modern education can be made available requires the consolidation of small school districts into a common taxing base but encourages the maintenance of the small school. Such a tax base is large enough in area and wealth to create a common fund which can be reapportioned to the individual units according to needs and requirements irrespective of taxable property.

12/ Benson, O. H., "Country Boys and Girls Speaking", Rural Scouting Survey, Emmet County, Iowa, October 9, 1931.

In America we have followed the first of these principles. Thus a favorably located area and urban center has found it possible to take advantage of modern education. But by this very practice those schools which, because of isolation, location, condition of roads, low taxable value, and other resources, have been excluded from consolidation, have been deprived of these modern educational facilities.

The districts supporting consolidated schools embrace large geographic areas. In this manner the tax base is sufficiently broad to produce an income adequate to meet the school needs. On the other hand, the schools with a small tax base are deprived of sufficient resources to support a similar program. If the idea of consolidation of tax base were extended to all areas including small districts, a tax base would be established wide enough to produce ample revenue for the support of consolidated schools where practical, and of isolated schools where necessary. The common revenue would be distributed according to necessity, and the small district would continue only from the standpoint of operating and educational plant.

In short, modern educators would need to learn to think in terms of a distinction between consolidation for revenue purposes and consolidation for educational purposes. In the past the only consideration has been consolidation to accomplish a larger tax base and a central school plant. Wherever consolidation for educational purposes was being hindered by the isolated areas, these isolated areas were omitted from the tax as well as school plant consolidation. This statement is verified by Dr. Julian Butterworth who, when reporting on consolidation, said, "As was

to be expected, therefore, there has been a tendency to bring together areas in which the consolidation could be effected with minimum cost, neglecting those children who live in territory contiguous, but of little wealth, where their inclusion would have produced little additional income and serious educational responsibilities." 13/

Five-or-less-pupil School as a Problem

The problem of the five-or-less-pupil school is not confined to Montana or any special section of our country. It is a by-product of a sparse population pattern in which the schools enroll few pupils. Evidence to substantiate this statement is found in the 1934 report of the Federal Department of Education which listed for the United States, some 7,500 or more one-teacher schools, not all of these schools belonged to the five-or-less-pupil school category. The report, however, estimated that 30,000 elementary school children were enrolled in five-or-less-pupil schools in 1934. 14/ For the same year, Dr. R. R. Renne accounted for 315 five-or-less-pupil schools in Montana. 15/

For the year 1935-36 there were, in 48 Montana counties, about 329 five-or-less-pupil schools with a total attendance of 1,306 pupils. In the six counties studied in this survey, there were 72 such schools with an enrollment of 195 pupils. On the other hand, in 1937-38, 54 Montana

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13/ Butterworth, Julian, "Biennial Survey of Education in the United States, 1932-34", United States Department of Education, Washington, D. C., Chapter V, p. 54.

14/ Cook, K. M., Op. cit., p. 20.

15/ Renne, R. R., "Financing Montana Schools", Montana State College, Agricultural Experiment Station, Bulletin No. 307, 1935, p. 9.

counties had 358 five-or-less-pupil schools. The total enrollment for this period reached 1,351. The six counties studied had 74 such schools with an enrollment of 247 pupils. While there was only a net addition of two five-or-less-pupil schools in the areas of study, comparing 1935-36 with 1937-38, the total enrollment for all the five-or-less-pupil schools in the sample had increased 26.7 per cent. This indicates that enrollment had increased in some but not all schools, and that the increase was such that the average enrollment per school remained five or less pupils.

In 1937-38 the counties which had opened for the first time or reopened five-or-less-pupil schools were with one exception located west of the Rocky Mountain divide. 16/

The small schools of Montana are gaining in number in spite of the fact that consolidation both of districts and school plants has been effected in some parts of the state.

In sparsely settled communities education is by no means wholly a problem of schools with small attendance. School financing is a problem of equal rank. This is especially the case where the expense of maintaining a small unit is relatively greater than the per capita expense of maintaining a large unit. Again reference to the Federal Department of Education and Dr. Renne's reports will verify this statement. Comparison of data from several states lead to the assumption that when a school enrolled between one and five pupils the average per pupil cost ranges from

16/ Some five-or-less-pupil schools that had been closed for two or more years were reopened.

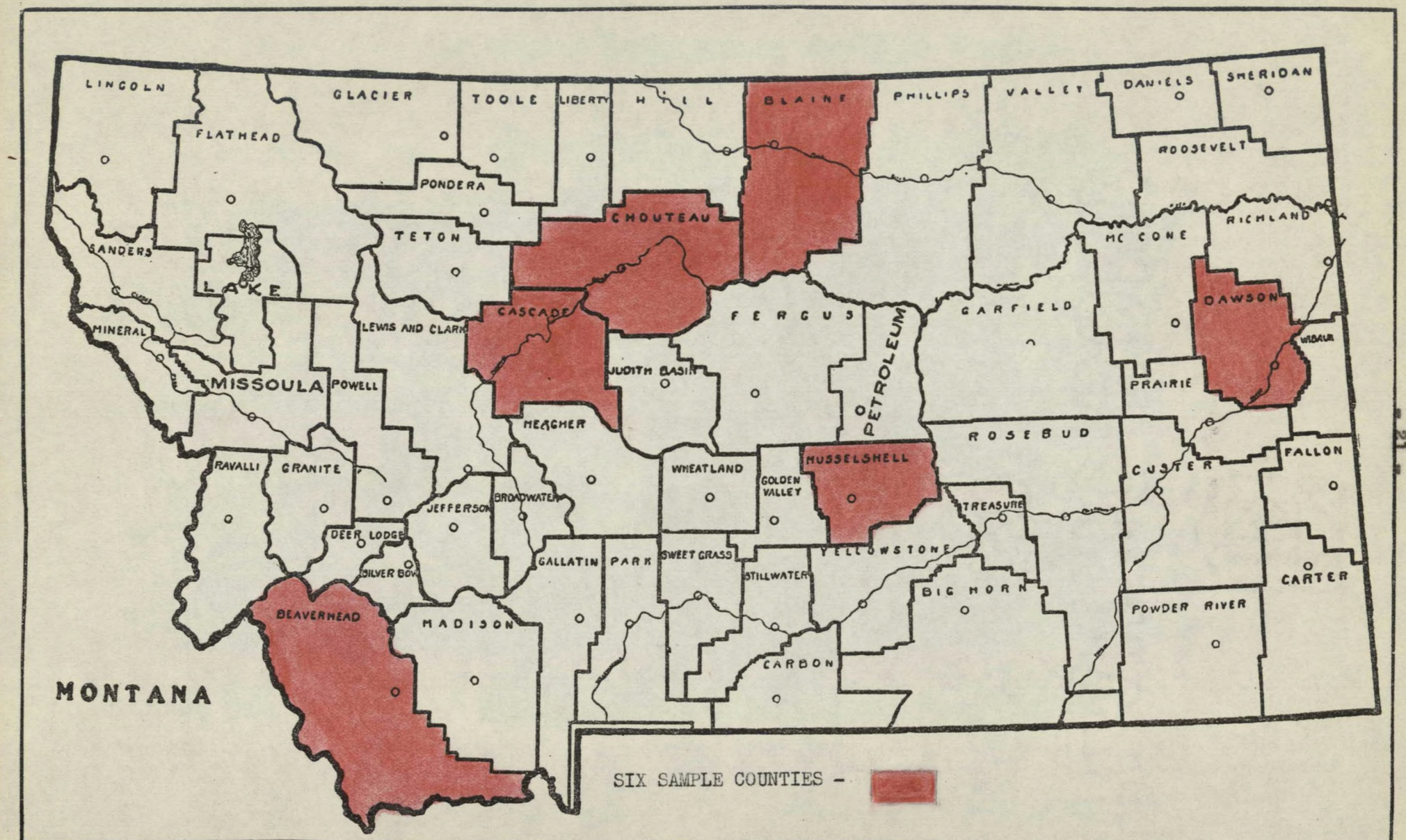
$250 to $300, as compared with a $75 per pupil cost in elementary schools based on the national enrollment. 17/ Data compiled for Montana showed the average per pupil cost was $150 for schools that enrolled five or less pupils although the average cost per elementary pupil based on state enrollment was approximately $87. 18/

The consideration of neither enrollment nor cost of the small school will solve the educational problem if the persistent movement of people from urban centers back to the land and from one area into another area continues. It would seem rather to indicate there will be added need for a kind of service such as the five-or-less-pupil school can render.

THE SAMPLE COUNTIES

In view of the fact that all counties in Montana with five-or-less-pupil schools could not be studied, a sample of six counties was taken. These sample counties are located in different sections of the state and geographically well distributed (see map). Although, in part, these counties present differences between the various areas of the state, they nevertheless have a number of common characteristics. First, with one exception, the per capita wealth and debt does not differ greatly. Second, they all are rural from the standpoint of population density and occupation. Four of the counties have no city larger than 2,500, while two counties have one city each that exceeds this number. Third, in each case the land surface includes rough hilly country as well as plains,

17/ Cook, K. M., Op. cit. p. 25.
18/ Reane, R. R., Op. cit., p. 10.

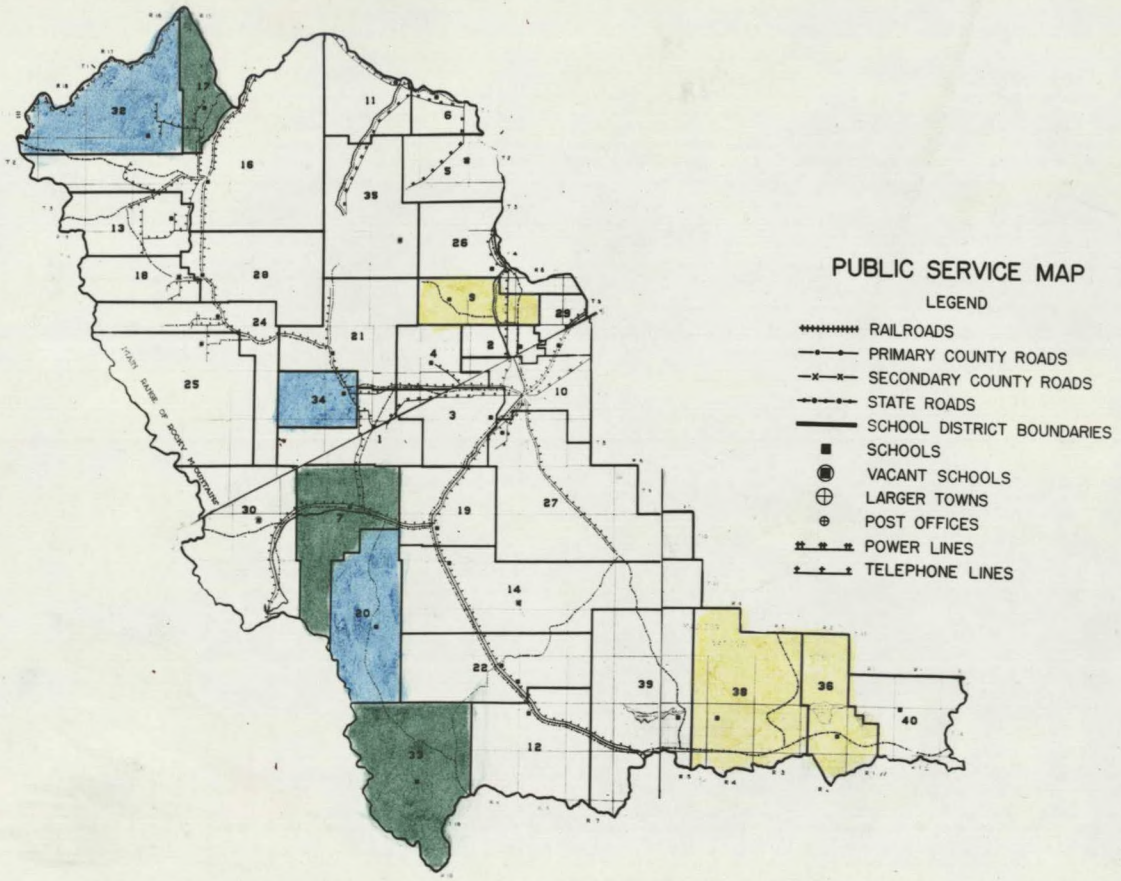

LINCOLN
GLACIER
TOOLE
LIBERTY
HILL
BLAINE
PHILLIPS
VALLEY
DANIELS
SHERIDAN
FLATHEAD
ROOSEVELT
PONDERA
CHOUTEAU
TETON
RICHLAND
MC CONE
SANDERS
LAKE
CASCADE
FERGUS
GARFIELD
DAWSON
MINERAL
LEWIS AND CLARK
JUDITH BASIN
PETROLEUM
WIBAUX
MISSOULA
POWELL
PRAIRIE
MEAGHER
ROSEBUD
RAVALLI
GRANITE
WHEATLAND
MUSSELSHELL
GOLDEN VALLEY
CUSTER
FALLON
JEFFERSON
BROADWATER
TREASURE
DEER LODGE
SILVER BOW
GALLATIN
PARK
SWEET GRASS
YELLOWSTONE
STILLWATER
CARTER
BEAVERHEAD
MADISON
BIG HORN
POWDER RIVER
CARBON
MONTANA
SIX SAMPLE COUNTIES -

with both irrigated and non-irrigated farms. Fourth, every county is supplied with one or more public utility services. In addition, five of the counties claim an outstanding industry. These vary as to size, kind, and value by county.

The sample counties are Beaverhead, Blaine, Cascade, Chouteau, Dawson, and Musselshell.

Short History of Sample Counties

Beaverhead County.--Beaverhead County was created by the first territorial legislative assembly of Idaho in 1863, and when Montana became a territory in 1864, the county was incorporated within the latter's limits. Montana's first territorial legislative assembly held its sessions at Bannack, a thriving mining camp in Beaverhead County. In 1863 cattle were brought into the county and immediately stock raising became an important industry. It has continued up to the present time to be the ranking business. This is due in part to the topography and the natural resources as wild hay covers 152,058 acres of land while 821,453 acres are classified as good only for grazing land. On 144,509 non-irrigated acres additional hay, the leading crop, is raised. Beaverhead County has 50,358 acres of irrigated land used for the growing of small grains, alfalfa, and garden produce. Mining, which led to the exploration and settlement of the county, still claims a place in the commercial activities. Patented mining claims aggregate 8,937 acres. A considerable portion of the county is in a federal forest reserve which contributes to the public school money. In 1932 the per capita wealth was



Selected Districts - 1937

Selected Districts - 1935

Selected Districts - 1935 & 1937

BEAVERHEAD COUNTY

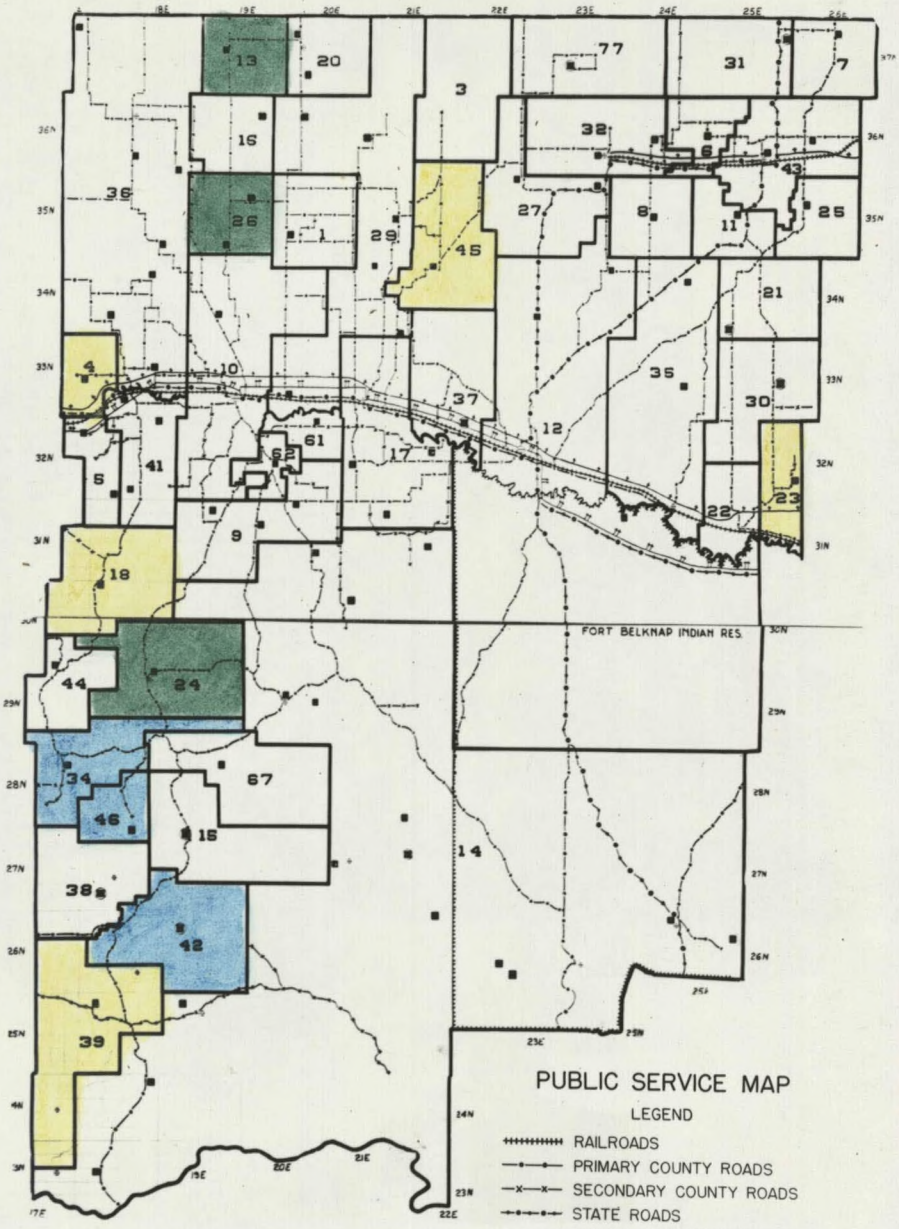
$2,000 and the per capita county and school debt was $35.65. The total population was 6,654 persons, making an average density of 1.2 persons per square mile.

It is apparent from this description that the nature of agricultural and non-agricultural enterprises makes for a sparse population. If this continues to be the best method of land use, the small school problem will be ever present.

Blaine County.--Blaine County was created in 1912 by petition and election. The original area was 6,700 square miles which was cut in 1915 to 4,271 square miles by the loss of areas to the newly created Phillips County. In early years the entire land of this section of Montana was controlled by stockgrowers. However, in 1910 the homestead act brought settlers and a part of the 235,086 acres of tillable land which lies within the boundaries of the present Blaine County, was converted to farming.

Since that period small grain agriculture has flourished and become the ranking industry. On the flat dry prairie land small grains such as wheat, oats, and flax are grown, while the irrigated section of 45,840 acres bordering the Milk River is given over to the production of sugar beets and potatoes largely. The sugar beet industry with a factory at Chinook, the county seat, is a leading business, serving not only Blaine County but all of northern Montana. Here also is located an abundance of coal, mined extensively for local use, while natural gas, commercially exploited, is piped to many of the neighboring communities. Stock raising, with about 1,349,258 acres of available grazing land,

BLAINE COUNTY



Selected Districts - 1937

Selected Districts - 1935

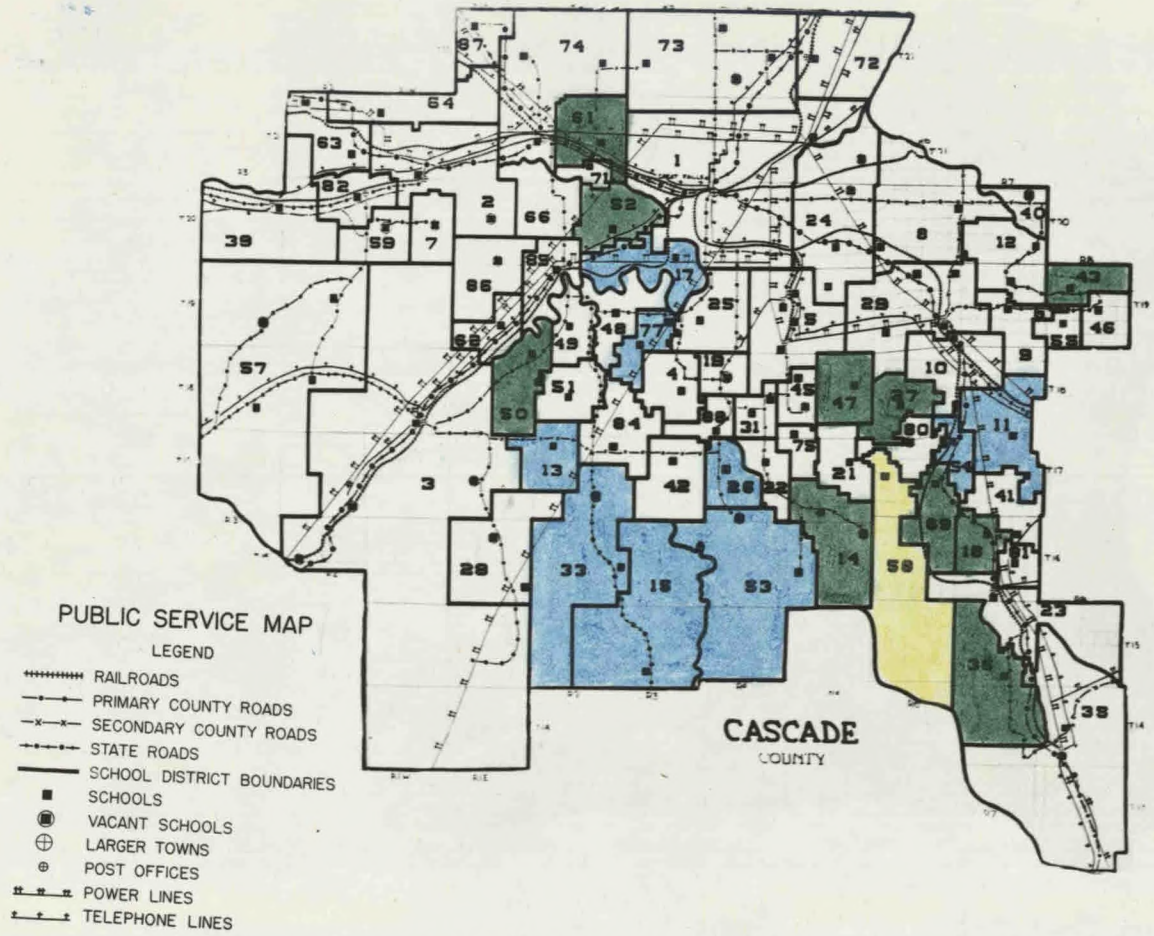
Selected Districts - 1935 & 1937

continues as a profitable business. The per capita wealth was $2,000 with a per capita county and school debt of $53.83 in 1932. The population was 9,006 persons, making an average density of 2.1 per square mile.

The above description of the existing economy again shows that portions of the county are sparsely populated, confronted with the small school problem.

Cascade County.--Part of the land now included in Cascade County was crossed by the Lewis and Clark expedition, which, in 1805, camped for several weeks on the present site of Great Falls. A member of the party, scouting for his leader, discovered Black Eagle and Rainbow Falls. His description of these falls, published later in a St. Louis paper, led to further exploration of the falls to determine their commercial value. In 1908 a syndicate secured a franchise, whereby it gained authority to construct a power site and generate electricity. This was followed by the erection of a wire and cable mill, a ferro-manganese plant and a electrolytic zinc plant. Great Falls, the center of Cascade County, became the second ranking industrial city of Montana.

Stock raising, an early occupation, continued to grow and the 791,624 acres of grazing land furnished feed. On a portion of the 457,271 acres of non-irrigated land, large quantities of grain, especially wheat, are grown. The irrigated land, some 28,829 acres, is used principally for the production of alfalfa. It is estimated that there are 1,310,504 acres of agricultural land in the county, a great part of which has not as yet been developed. Gold, silver, and quartz mining was formerly a thriving business. However, the present high cost of working the mines



Selected Districts - 1937

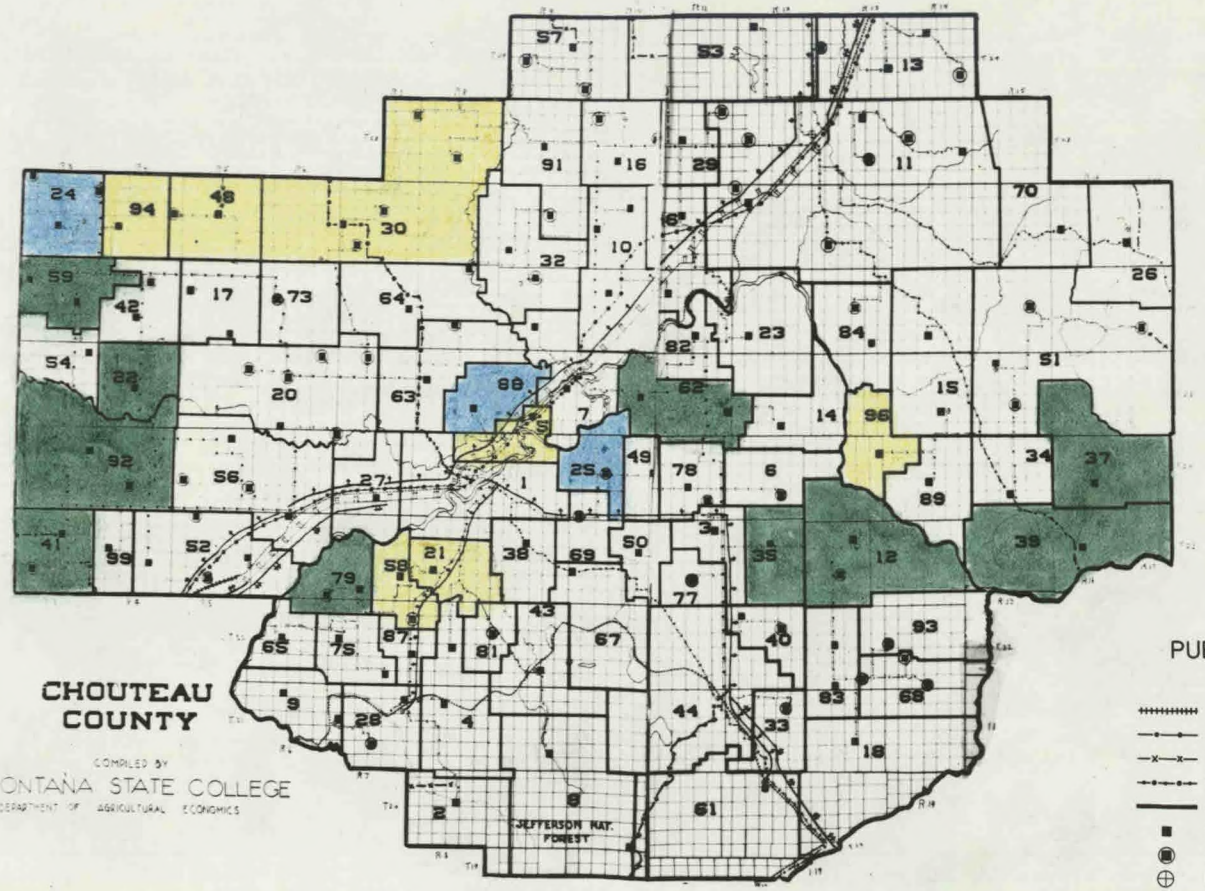
Selected Districts - 1935

Selected Districts - 1935 & 1937

has restricted the production. In 1932 the coal output of the Belt and Sand Coulee mines amounted to $1,000,000. At present the total output has been decreased, due to the loss of local markets because of the introduction of natural gas. Cascade in 1937 had the largest taxable valuation among the counties of the state. In 1932 the per capita wealth was $2,672 with a per capita county and school debt of $17.04. The total population was 41,146, making an average density of 15.2 persons per square mile.

Chouteau County.--Chouteau, one of Montana's nine original counties, was created by the first territorial assembly in 1865. The area of the original county was 30,000 square miles which has since been reduced to 3,842 square miles. Stock raising has always been the leading industry. The rolling prairie land affords good pasturage, while the Missouri River and other small streams provide water facilities. There are 644,908 acres of classified grazing land and another 1,281,896 acres of dry land, most of which is covered with natural grass. Only a small part is under cultivation and that is used for wheat and oats. Chouteau County has but 8,652 acres of irrigated land which lies mainly in the Missouri River bottom and is devoted to the growing of alfalfa. In 1932 the per capita wealth of the county was $2,000 and the county and school debt was $67.44. The total population numbered 8,635, making an average density of 2.2 persons per square mile.

Dawson County.--Dawson County, in 1882, was bounded on the north by Canada, on the east by Dakota. It was about 180 miles long, east and west, and 150 miles wide, but today its total area is only 2,303 square miles. A large portion of the county is flat prairie or low rolling hills



PUBLIC SERVICE MAP

LEGEND

- RAILROADS
- PRIMARY COUNTY ROADS
- SECONDARY COUNTY ROADS
- STATE ROADS
- SCHOOL DISTRICT BOUNDARIES
- SCHOOLS
- VACANT SCHOOLS
- LARGER TOWNS
- POST OFFICES
- POWER LINES
- TELEPHONE LINES

- 62 -

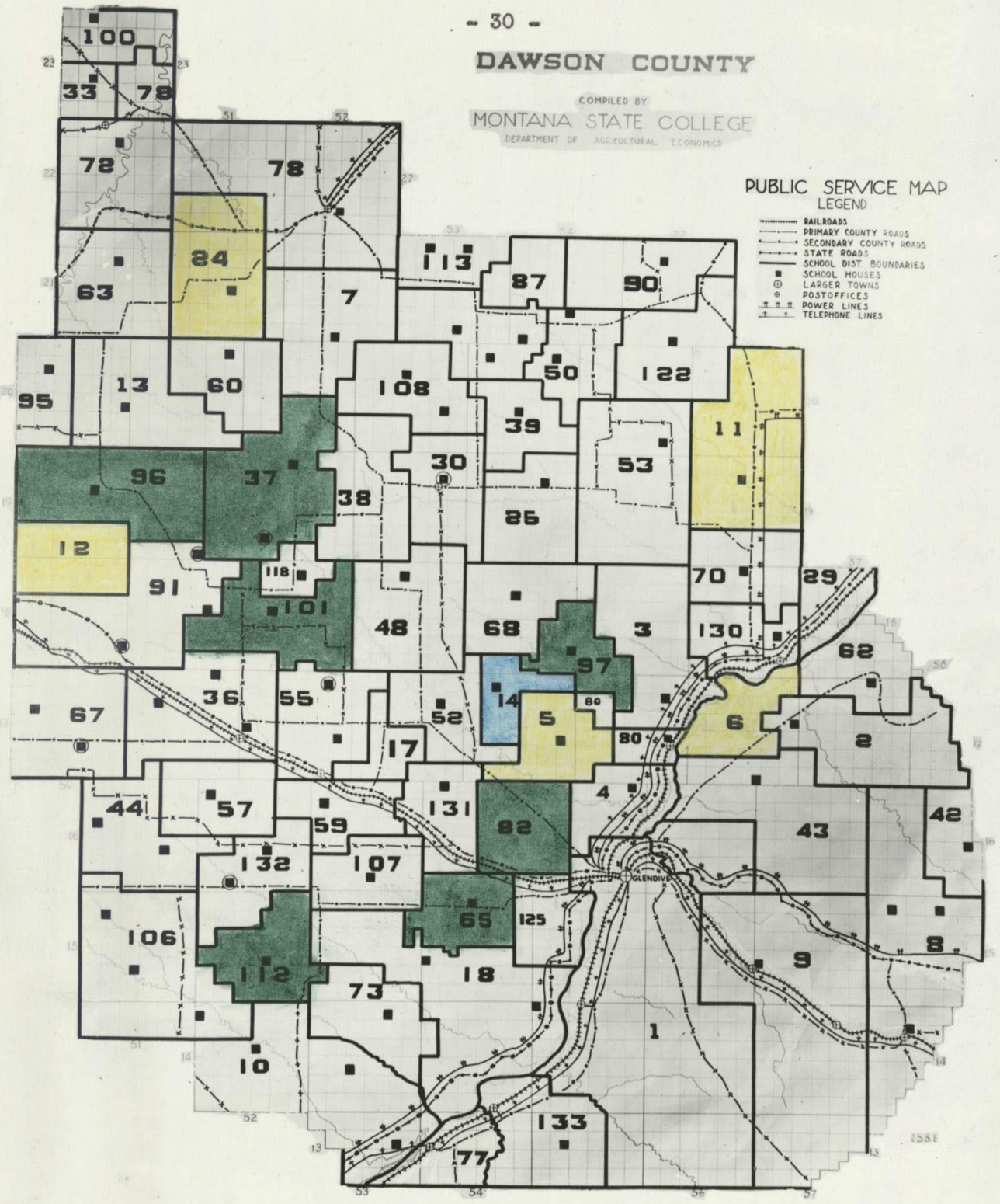
Selected Districts - 1937

Selected Districts - 1935

Selected Districts - 1935 & 1937

DAWSON COUNTY

COMPILED BY
MONTANA STATE COLLEGE
DEPARTMENT OF AGRICULTURAL ECONOMICS



Selected Districts - 1937

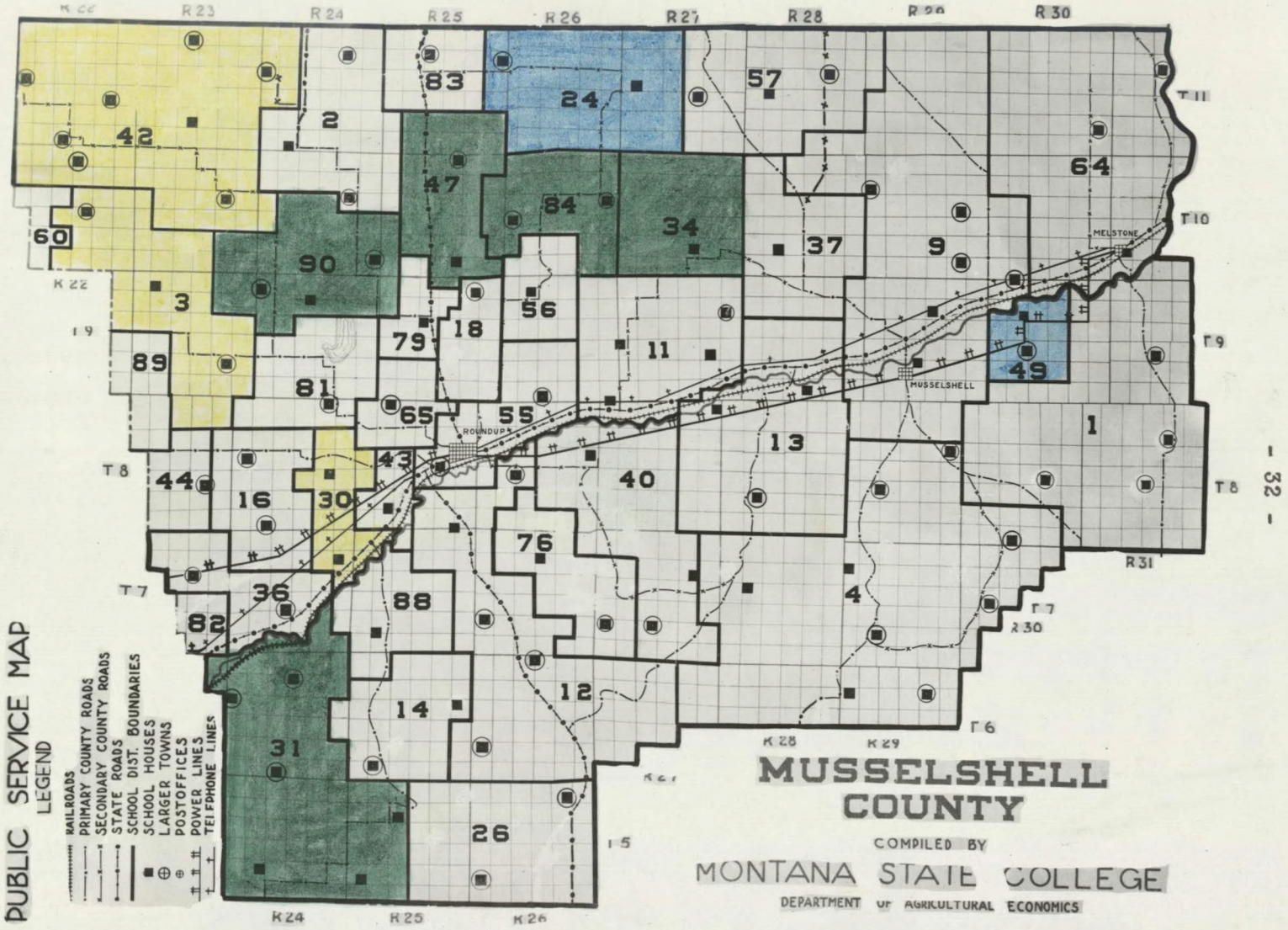
Selected Districts - 1935

Selected Districts - 1935 & 1937

better adapted to stock raising than agriculture. Stock raising was the leading industry until 1900, when small grain agricultural expansion began. After 1900 a considerable portion of the 554,999 acres of dry land was homesteaded. The principal crops grown are oats, corn, flax, and hay.

In recent years much agricultural land has been abandoned with the result that a second growth of native grasses is beginning to cover the prairie. In 1937 there were 713,403 acres of grazing land and 840 acres of irrigated land. An area of about 1,285,841 acres was classified as agricultural land with limited improvements. The Northern Pacific railroad shops, located in Glendive, the county seat, are among the largest assets of the county. In 1932 the total per capita wealth was $2,000 and the county and school debt was $56.50. The total population was 9,881, making an average density of 4.2 persons per square mile.

Musselshell County.--In 1866 Musselshell County included 8,500 square miles of land within its boundaries but by 1917 it had been reduced to 1900 square miles, its present size. For many years some of the world's largest bands of sheep ranged the territory and sheep growing was the foremost industry. In 1908, because of the homestead act, there was an influx of people. Barbed wire fences cut the open range. Everywhere farms were dotted over the 138,841 acres of dry land, which was put to the production of wheat, barley, corn, hay, and potatoes. However, recently wide sections have been deserted or withdrawn from agriculture by the federal land purchasing program. Some of this land, added to the 796,716 acres of former grazing land, is again supporting a considerable number of livestock. Musselshell County has no irrigated land at the present time. Coal mining



Selected Districts - 1937

Selected Districts - 1935

Selected Districts - 1935 & 1937

is the chief industry. More than 600 square miles of coal land has been charted and from these mines has come an annual output of about 1,000,000 tons. The county has various types of land surface, rough and hilly areas covered with scrub pine or flat open prairie bordering on bad land. The per capita wealth in 1932 was $1,500 and the per capita county and school debt was $126.46. 19/ The population was 7,242, making an average of 4.0 persons per square mile.

It is apparent from the above description of the sample counties that a sparse population is a common characteristic, and that the abandoning of small grain agriculture will contribute to further sparsity. Again, large farms and ranches, possibly the best use of land, will be more rather than less characteristic of all counties. Hence, the small school will be more typical of Montana than it has been in the past, unless a totally different plan of land use and settlement than practiced at present is in prospect. It is believed that the counties represent a fair cross-section of the state as a whole from the standpoint of the small school problem in its relation to sparsity of population, land use, and rural-urban distribution of population.

CHARACTERISTICS OF THE FIVE-OR-LESS-PUPIL SCHOOL

In this chapter we will concern ourselves with the financial status of the five-or-less-pupil schools, in comparison with the larger school units, emphasizing the following:

1. Assessed valuation, levies, and costs

19/ Milligan, M. B., "Historical Reviews", Helena Independent, 1932.

2. Income

3. Operating expenses

The five-or-less-pupil schools are to be compared among themselves on the basis of two subdivisions, namely, (a) those five-or-less-pupil schools with a low assessed valuation, and (b) those with a high assessed valuation. These two subdivisions and all five-or-less-pupil schools are to be compared with data for the county as a whole and the state in its entirety.

Assessed Valuations, Levies, and Costs

The taxable valuation of a school district is a controlling factor in the kind of school that can be supported because the district is the unit from which the larger part of all revenue is raised. The law includes the following provision: there shall be a levy of from 6 to 8 mills on all property of the county for the support of schools. This revenue is to be distributed on a census basis. Further, a levy of from 6 to 10 mills on all property of the district shall be assessed. If it is anticipated that this district millage will not produce enough income for the year, the law sanctions a special district levy over and above 10 mills on condition that the voters of the district approve such levy. In case a district has incurred a debt, the school statutes make it obligatory for the county commissioners to set an additional levy at a figure large enough to raise sufficient money for the purpose of retiring the district's outstanding debts during a given period of time. 20/ All

20/ These references are found in the Montana School Law, 1937. County Levy-Section 1202; District General Fund Levy-Section 1203; District Extra Levy-Section 1219; District Debt Fund-Section 1224.26.

district revenue is raised from district property even though the assessments are made by the county commissioners at large. The levies may differ in amounts by districts. The importance of the district as a tax base is shown in a statement by Dr. R. R. Renne, "In 1934 the schools with three pupils or less secured over 68 per cent of their total receipts from their own levies". 21/

The taxable valuation varies by districts and often it is found to be less than $75,000 per district although the state law forbids the creation of a district that has less than $75,000 worth of taxable property. 22/ A number of reasons may be assigned for the apparent violation of this statute. However, it frequently is the result of one of the following causes. First, the county assessors and the State Board of Equalization may reappraise all holdings raising or lowering the values. Hence a district that originally met the above legal requirement may find its taxable valuation lowered to a figure less than $75,000 in later years. Second, the district may have been created prior to the amendment of the law. Third, the total valuation of the district may have decreased because of the activities of the federal land purchase program, which withdrew large tracts of land from taxation.

In any case, the result is the same; namely, a lower taxable property value than established by law. Since each district carries its own burden to a large extent, these variations in county and district wealth mean unequal tax burdens and unequal educational opportunities.

21/ Renne, R. R., "Organization and Costs of Montana Schools", p. 55.

22/ Montana School Law, 1937, Section 1024, p. 39.

This is especially true of those districts dependent totally upon personal property and real estate for taxes, as in many cases the total income from the property will not justify a levy such as would be required to raise sufficient revenue for an adequate school program.

Personal Property and Real Estate, and Public Utilities.--In 1935, the combined taxable valuation of the six counties was distributed about 79.9 per cent to personal property and real estate and 20 per cent to public utilities (see table I). In the same year the personal property and real estate of the wealthiest of the six counties represented 85 per cent of the total taxable valuation and public utilities about 13 per cent while in the poorest of the six sample counties, 74 per cent of the total taxable valuation was classified as personal property and real estate, and 25 per cent as public utilities. The wealthiest county's total tax value was approximately eight times greater than that of the poorest county.

By 1937 a general downward adjustment of the tax base for the state and the six counties had been accomplished through the reduction of the appraised valuation of personal property and real estate and public utilities. For the state as a whole, a greater depreciation was assigned to the former than to the latter (see table I). In the total upper and lower half, and the upper half of all selected five-or-less-pupil districts, the tax valuation of personal property and real estate was increased between 17 and 18 per cent in 1937 over 1935, while the taxable valuation of public utilities was decreased between 3 and 4 per cent. During this period, in the lower half of all selected five-or-less-pupil districts,

TABLE I.--TOTAL TAXABLE VALUATION DISTRIBUTED ACCORDING TO SOURCE FOR THE STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS FOR THESE COUNTIES CLASSIFIED BY THE SCHOOL YEARS 1935-36 AND 1937-38

	1935-36			1937-38		
	Total taxable valuation	Personal property and real estate	Public utility	Total taxable valuation	Personal property and real estate	Public utility
	dollars	per cent	per cent	dollars	per cent	per cent
State	326,265,735	78.3	21.6	312,447,173	71.3	28.6
Six sample counties all districts	54,300,293	79.9	20.0	51,884,628	79.9	20.0
Total of all selected five-or-less-pupil districts for six sample counties	2,670,975	77.4	22.5	3,012,428	80.6	19.3
Upper half of all selected five-or-less-pupil districts for six sample counties	1,895,325	71.6	28.3	2,115,176	75.7	24.2
Lower half of all selected five-or-less-pupil districts for six sample counties	775,650	91.5	8.4	897,252	92.1	7.8

the tax value of personal property and real estate increased about 16 per cent and the tax value of public utilities about 7 per cent (see table II). It is seen from these comparisons that adjustments in the value of taxable properties may have a contrary effect in one tax division to that in another tax division.

Millage.--The effect of this change on county and district total taxable valuation is made clear by a comparison of the total average school levy. In 1935 the county of the first rank supported a total average levy of 27.32 mills and in 1937 it was lowered to 26.58 mills. Compared with this, the county of the lowest rank supported a total average school levy of 30.81 mills in 1935 which was raised to 33.00 mills in 1937. 23/

These county variations in taxable property and changes in levies between 1935-36 and 1937-38 were also evident when comparing individual districts of the same or different counties.

It is significant to observe that in the county of the first rank, 40 per cent of the selected districts included some type of public utility, while in the county of lowest rank only 16 per cent of the districts included like property. When the over capitalized private property and real estate had been adjusted to a lower level, the properties that continued to be taxed carried a greater levy. To meet the newly imposed obligation, the capacity of the land is taxed to the utmost. It is, therefore, conditions such as these that are assisting causes in the continued depreciation of monetary and productive value of land.

23/ These data are taken from the seventh and eighth biennial reports of the State Board of Equalization.

TABLE II.--PER CENT OF INCREASE OR DECREASE IN THE TAXABLE VALUATION OF PERSONAL PROPERTY AND REAL ESTATE, AND PUBLIC UTILITIES FOR ALL SELECTED FIVE OR LESS PUPIL DISTRICTS OF THE SIX SAMPLE COUNTIES CLASSIFIED FOR THE SCHOOL YEARS 1935-36 AND 1937-38

	Personal property and real estate		Gain or loss	Public Utilities		Gain or loss
	1935	1937	1937	1935	1937	1937
	dollars	dollars	pct.	dollars	dollars	pct.
Total of all selected five-or-less-pupil districts for six sample counties	2,067,377	2,428,989	17.4	603,598	583,439	-3.3
Upper half of all selected five-or-less-pupil districts for six sample counties	1,357,578	1,602,487	18.0	537,747	512,689	-4.6
Lower half of all selected five-or-less-pupil districts for six sample counties	709,799	826,502	16.3	65,851	70,750	6.9

Enrollment and Revenues.--The expenditures for education are directly influenced by the amount of revenue available coupled with the number enrolled. Between 1935 and 1937 considerable reduction in the available funds followed the lowered assessed valuations in the six counties. However, the decreased enrollment was proportionately much greater. For this reason the six counties could spend $110.28 per original enrollment in 1935 and $131.03 in 1937 without creating a deficit. A tax relief program seems not to have been considered, though from evidence presented it is likely some reduction in the expense per pupil could have been made without endangering the program. In 1935 the county of the highest rank spent $116.12 per child originally enrolled while in 1937 the cost advanced to $128.59. As shown, in the latter year the levy had decreased slightly although the tax base was substantially the same. The entire amount available for school was less, yet as in the previous case mentioned, smaller enrollment raised the per capita sum and accounted for the increased expenditure. With the exception of decreased enrollment a reversed situation appeared in the county of lowest rank. In 1935 the average pupil cost was $120.42, and by 1937 it had been lowered to $109.48. As previously stated, the levy had risen while the taxable valuation and enrollment had fallen. It is thus evident that in the county of lowest rank in spite of decreased enrollment and the higher levies, the units with low tax value were unable to produce sufficient revenue so that the per capita expenditure for each originally enrolled pupil could equal the per capita expenditure for the six sample counties collectively.

The expenditure per original enrollment for the total upper and lower

half, the upper half and the lower half of all selected five-or-less-pupil districts of the six counties were more in 1937 than in 1935, although the original enrollment had increased. But as previously pointed out, in each of the three divisions of the selected districts, the total tax value of all property had been adjusted upward. Consequently, there was increased revenue for the school program (see tables II and III, appendix B).

A change in the levy of tax base is commonly assumed to mean one of two things; (a) either a less efficient school with poorer instruction, a shorter term, inadequate equipment, or (b) personal property and real estate will support the full levy for an adequate school at the sacrifice of the property.

SCHOOL INCOME

Early in the history of this country the fact of public responsibility for financing and controlling free elementary education was adopted as a national policy. Public lands were granted by the federal government to the states under the provision that a system of public, free common schools should be organized and financed. 24/ This obligation was accepted by the states which in turn shifted the responsibility for finance and control to the smaller units, (the district and the township) to a large extent. In many cases the burden of locally financing education has been great, particularly is this true for some rural areas. From time to time educators and laymen have exerted considerable pressure in an effort to

24/ Montana School Law, 1937, Enabling Act, p. 5.

secure legislation whereby the state and federal governments would contribute substantially to the support of all schools. Concerted opposition has developed in both urban and rural areas to every movement of this kind. The opposition encountered in rural areas may be explained by the statement of Dr. J. E. Butterworth, "The rural population is a relatively conservative and independent one and, even in the face of emergency, tends to rely largely upon its own resources." 25/ An explanation for the opposition in urban centers may be traced to the prevailing thought held by a large per cent of city dwellers, namely, that education is a purely local problem for the township, district, or county. They do not realize that rural schools have educated a goodly share of the population of the cities at all times.

The present economic condition within our country has been instrumental in arousing unusual interest in public agencies so that all public agencies are now being carefully scrutinized to determine their value to society. Throughout the country the elementary school is profiting by this experience as the inequalities in both program and support are being disclosed. Movements toward reorganization of the system of state support are widespread. For the first time in many years there has been in a number of states a favorable reaction to this movement.

Public School General Fund

The Montana State Public School General Fund, only recently adopted, is designed to extend greater state aid to all schools and to provide for

25/ Butterworth, J. E., Op. cit. p. 39.

a more equitable method of distribution than is possible under the State Common School Interest and Income Fund. At the present time, all moneys accruing to the Public School General Fund are allocated to transportation. However, when the time arrives that this program shall operate in accordance with all of its provisions, there should be a decline in the property tax of the district while more money will be available for education. 26/

Common School Interest and Income Fund 27/

The constitution of Montana provided state aid for elementary education by establishing the Common School Interest and Income Fund. 28/ The annual allocations from this fund are uncertain because of the fluctuations in the incomes from its different sources, such as grazing fees, land rentals, and sales. Further, the method of distribution which is based on the census count rather than pupil enrollment, creates added difficulty, especially in rural areas where population shift among the age group 18 to 21 is large. These youths migrate to the larger centers which in turn profit by their residence.

In 1935 the per capita state allotment for elementary education from the State Common School Interest and Income Fund was $6.16. In 1937 the allotment had decreased to $5.03 per person. In 1935 the census rolls for all school districts listed 159,789 children between 6 and 21 years of age. In 1937 this number increased to 163,220 children. The result of the

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26/ Montana School Law, 1937, Section 1220.1, p. 91.

27/ The constitution of Montana established the Common School Permanent Fund. The earnings from the permanent school fund go into the Common School Interest and Income Fund.

28/ Montana School Law, 1937, Article XI, Section 5, p. 7.

increase in the census roll was a decrease in the per capita allotment from the State Common School Interest and Income Fund. If the allotments for the state from this fund had been distributed on the basis of original enrollment instead of on the basis of census count, the average per capita allotment for the state would have been twice as large as it actually was for both the years 1935 and 1937.

The three divisions of the selected five-or-less-pupil districts in 1935 received the equivalent of 2.5 to 3 times more aid from the State Interest and Income Fund when the state allotments to the selected districts were figured on the basis of original enrollment rather than census. Again in 1937, when these funds were redistributed within the selected five-or-less-pupil districts, the per capita apportionment for each original enrollment equaled from 2 to 3.5 times the per capita census apportionment (see table III). For 1935, the per capita aid for the upper half of all selected districts from the State Interest and Income Fund was more than for the lower half of all selected districts regardless of the method of distribution. A larger census count and equal enrollment is the explanation for the difference. In 1937 the difference in the original enrollment apportionment was even greater than in 1935 because in the lower half of all selected five-or-less-pupil districts the census count was smaller and the enrollment considerably larger (see table I, appendix B). Both of these factors will decrease the per capita support. It may be concluded that state aid distributed on the basis of census count does not provide an equal amount of support for all children enrolled in the public schools.

TABLE III.--TOTAL STATE INTEREST AND INCOME FUND DISTRIBUTED ACCORDING TO ORIGINAL ENROLLMENT FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS OF THESE COUNTIES, CLASSIFIED FOR THE SCHOOL YEARS, 1935-36 AND 1937-38

	1935-36 Original enrollment	1937-38 Original enrollment
	dollars	dollars
State	12.42	11.77
Six sample counties all districts	12.13	10.64
Total of all selected five-or-less-pupil districts for six sample counties	16.38	15.87
Upper half of all selected five-or-less-pupil districts for six sample counties	18.42	17.30
Lower half of all selected five-or-less-pupil districts for six sample counties	14.31	11.01

Special District Fund

By far the largest proportion of the total receipts for school purposes comes from the Special District Fund in rural areas. One reason for this is that the legal provisions for taxing property within a district are unlike the provisions for taxing property within the state or county. The law restricts or limits the number of mills that may be levied against property within the state and the county. On the other hand, there are no specified limits to govern the amount of tax levy that may be assessed against district property. However, this procedure is necessary, because with fluctuations in valuations, delinquent taxes, uncertain state support and changing school expenses, it is impossible to determine the school need except for the current year.

In 1937 the amount collected from the Special District Fund by all upper and lower half five-or-less-pupil districts was less than in 1935. A reduction in property valuations may have accounted for a small part of the difference. However, the change is more directly traceable to the fact that only 12 of the 58 districts had outstanding indebtedness for which sinking fund and interest levies were laid. Moreover, there were no levies for text books. Sufficient funds remained on reserve to buy books, the cost of which was about 1.25 per cent of the total school expenditure. 29/ An added reason, as before stated, was the direct relationship existing between a decreasing Special District Fund and an increasing All Other Sources Fund.

29/ Compiled from files of the State Superintendent of Public Instruction, Helena.

County Fund

The commissioners of each county are required, by law, to make a county-wide levy for the support of the elementary schools. The annual levy, which varies because of school operating cost, is not less than 6 mills nor more than 8 mills on all real and personal property in the county. 30/ The money derived from this tax, known as the General School Fund, is apportioned by the county superintendent of schools on the census basis. 31/

In 1935 the per cent of support obtained from the County General School Fund exceeded that of 1937 in the state, the six counties, all upper and lower half of districts, and the lower half of all districts. For the upper half of all districts, the apportionment was increased by a small margin in 1937 over that of 1935 (see tables IV and V). Several things may account for the changes. First, the total taxable valuation for the state and the six counties was higher in 1935 than in 1937. On the other hand, a reverse condition existed in the selected districts as a group, or when considered on the basis of those districts falling in the upper half and those falling in the lower half from the standpoint of assessed valuation. For these selected districts the taxable valuation was greater in 1937 than in 1935 (see table I). Second, in 1935 there was a general payment of delinquent taxes. These payments were the result of federal loans secured on property and outright personal grants. Third,

30/ Montana School Law, 1937, Section 1902, p. 95.
31/ Funds distributed to districts are based on the number of children between the ages of 6 and 21 residing in the district.

TABLE IV.--TOTAL RECEIPTS DISTRIBUTED ACCORDING TO SOURCE OF INCOME FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS FOR THESE COUNTIES, 1935-36

	Total receipts	Apportionment, State Interest & Income Fund	Apportionment, Co. 6-8 Mill Levy	Special Districts Levy	All Other Sources
	dollars	per cent	per cent	per cent	per cent
State	9,728,877.70	10.5	25.0	51.5	12.9
Six sample counties all districts	1,497,467.28	9.4	25.5	54.2	10.8
Total of all selected five-or-less-pupil districts for six sample counties	43,724.71	6.1	17.9	62.0	13.9
Upper half of all selected five-or-less-pupil districts for six sample counties	26,343.61	5.7	16.2	64.2	13.8
Lower half of all selected five-or-less-pupil districts for six sample counties	17,381.10	6.6	20.7	58.6	14.0

TABLE V.--TOTAL RECEIPTS DISTRIBUTED ACCORDING TO SOURCE OF INCOME FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS FOR THESE COUNTIES, 1937-38

	Total receipts	Apportionment, State Interest & Income Fund	Apportionment, Co. 6-8 Mill Levy	Special Districts Levy	All Other Sources
	dollars	per cent	per cent	per cent	per cent
State	9,276,680.12	8.9	21.2	43.2	25.6
Six sample counties all districts	1,598,589.25	8.0	21.2	44.5	26.2
Total of all selected five-or-less-pupil districts for six sample counties	48,191.22	6.2	16.2	45.5	32.0
Upper half of all selected five-or-less-pupil districts for six sample counties	26,495.53	6.5	16.8	52.1	24.5
Lower half of all selected five-or-less-pupil districts for six sample counties	21,695.69	6.0	15.4	37.4	41.1

the Montana tax moratorium was affecting tax collections. 32/ Since all taxes revert to the County General School Fund any increased payments affect the total amount to be apportioned and, therefore, affect the district allocations.

All Other Income Sources

All Other Sources of Income includes an accumulated revenue derived from state and county funds, such as equalization aid, forest receipts, fines, rentals, tuition, property sales, and insurance adjustments.

For any current year the amount of aid available from this source is unpredictable because an increase or decrease in the receipts from one or more contributing fund will affect the total sum.

Frequently the allocations from All Other Sources have greater influence on the finances of the ensuing year than on the current year. This is true because under the Montana elementary school budget law, the dictated expenditures for a fiscal year are not subject to change even though the funds for school purposes may be increased or decreased. The law further provides that all unappropriated funds shall revert to the school General Fund at the close of the fiscal year. 33/ The balance on hand then determines the amount of revenue that shall be raised by taxation for the next year's budget.

The per capita original enrollment allocation for the selected five-

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32/ The Montana moratorium law provided for the payment of delinquent taxes without penalty. Therefore, many property owners took advantage of the law. They borrowed federal money and paid the tax principal without the interest penalty.

33/ Montana School Law, 1937, Section 1019.17, p. 36.

or-less-pupil districts from the All Other Sources Fund was 2.5 times larger than the average allocation for the state and the six counties in 1935 and 1937. The distribution from All Other Sources Fund is based on the census count. Therefore, if the census roll is considerably greater than the original enrollment, which is true in all selected five-or-less-pupil districts, the per capita original enrollment aid will be large. A comparison of data (see tables IV and V) shows that an increase in the fund known as All Other Sources tends to decrease the revenue accrued in the Special District Fund. This may be further interpreted to indicate that a collection of moneys from sources other than tax revenue lowers the tax burden on personal property and real estate in the selected districts.

OPERATING COSTS

Many educators and laymen have considered the five-or-less-pupil school an unnecessary institution, the financial burden of which is intolerable. 34/ Nevertheless, comparisons of operating expense for schools of equal financial and educational standing show extreme variations in general cost and in cost of specific items. This lack of uniformity which exists among such comparable schools is associated with administrative policy. While the state law outlines a general scheme for school administrative procedure and designates the elementary subjects for study, the local school authorities decide on how the program will be put

34/ The unusual per capita cost in schools of five-or-less-pupils is seen in the following: for Maine, in a school with attendance of 1-5 pupils, the average cost per pupil was $232; for Idaho, the average cost per pupil in such schools was $288; for Minnesota, the average cost for a nine-month term in a school enrolling 5-9 was $216, while in a school enrolling 1-4, the average cost per pupil was $590.

TABLE VI.--TOTAL AMOUNT SPENT DISTRIBUTED ACCORDING TO ITEM OF EXPENSE FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS FOR THESE COUNTIES, 1935-36

	Total amount spent	Teacher salary	School Board & Business Office	Text books	Trans-portation	All other expenses
	dollars	per cent	per cent	per cent	per cent	per cent
State	8,490,101.48	44.8	2.0	1.8	7.0	44.3
Six sample counties all districts	1,274,016.58	47.8	2.3	1.5	6.6	41.7
Total of all selected five-or-less-pupil districts for six sample counties	37,353.01	67.0	2.7	1.4	12.5	16.3
Upper half of all selected five-or-less-pupil districts for six sample counties	21,127.05	65.0	2.8	1.3	15.1	15.7
Lower half of all selected five-or-less-pupil districts for six sample counties	16,225.96	69.7	2.7	1.4	9.1	17.0

into action. 35/ For this reason a phase of work emphasized by one school may be scarcely touched in another, hence the difference in school expenditures for schools of similar rating. Similarly, numberless problems are approached from entirely different angles. The purpose of the school is often expressed in the kind of expenditures that are made, and in some instances the worth of the physical plant seems to outweigh the value of the educational service.

The first concern of the five-or-less-pupil school is the operating cost (see tables VII and VIII). Those who recommend consolidation claim that efficiency in school administration and school technic would be increased by the elimination of the small school with its limited facilities and large expenditures. However, in sparsely settled areas the conditions imposed by this plan may deprive some children of school, while the cost of transportation may offset any gain accruing from other savings.

Transportation.--The transportation of public school pupils is now generally accepted as a function of the state school system. Therefore, it must be taken into account as a part of school cost. 36/ Only in recent years has this problem been seriously considered by many school directors. This is especially true in the case of isolated areas. Montana, for example, has a school law which provides for the payment of pupil transportation from the local district fund. However, this law has not been interpreted to compel the trustees to make such payment. They may do so

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35/ Montana School Law, 1937, Section 1054, p. 58.

36/ Roberts, Ray W., "Analysis of the Cost of Pupil Transportation in Arkansas", Agricultural Experiment Station, Fayetteville, Arkansas, Research Bulletin 316, 1935, p. 1.

TABLE VII.--TOTAL AMOUNT SPENT DISTRIBUTED ACCORDING TO ITEM OF EXPENSE FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS FOR THESE COUNTIES, 1937-38

	Total amount spent	Teacher salary	School Board & Business Office	Text books	Trans-portation	All other expenses
	dollars	per cent	per cent	per cent	per cent	per cent
State	8,399,090.45	45.4	1.8	1.8	9.3	41.6
Six sample counties all districts	1,392,858.19	43.1	1.7	1.1	7.8	46.2
Total of all selected five-or-less-pupil districts for six sample counties	52,443.65	64.9	2.9	1.3	16.3	14.5
Upper half of all selected five-or-less-pupil districts for six sample counties	29,369.26	62.1	3.1	1.4	18.7	14.6
Lower half of all selected five-or-less-pupil districts for six sample counties	23,074.39	68.2	2.8	1.2	13.3	14.4

TABLE VIII.--TRANSPORTATION COSTS FOR ELEMENTARY SCHOOLS WITHIN THE STATE, SIX SAMPLE COUNTIES, AND WITHIN ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS OF THESE COUNTIES, 1935-36 AND 1937-38

	1935-36	1937-38
	dollars	dollars
State	597,219.92	771,758.57
Six sample counties all districts	84,642.80	109,454.86
Total of all selected five-or-less-pupil districts for six sample counties	4,669.61	8,564.77
Upper half of all selected five-or-less-pupil districts for six sample counties	3,183.33	5,477.65
Lower half of all selected five-or-less-pupil districts for six sample counties	1,486.28	3,087.12

when they deem it to the best interest of the pupil or the district. 37/ The decision as to the need for individual or public transportation rests upon the personal opinion of the board members. For this reason the decisions are often biased and unfair. Frequently the desire to curtail and cut school costs rather than the needs of the children involved influence the action of the board.

This is shown by the amount of money allocated for transportation by the several districts (see table VIII). There are wide differences in the grants for individual transportation payments and the kind of bus service rendered by some districts as compared with those of adjoining districts even within the same county. The fact that each board of trustees in the state may act independently upon the question of district transportation payment accounts not only for the discrepencies in aid given but also for the lack of uniformity in the administration of the law.

In 1935 the Montana State Public School General Fund was established. 38/ This measure was intended to increase state aid, which was most inadequate, since according to a 1934 report, state aid amounted to less than one-tenth of the total support for schools. 39/ Under present conditions sufficient funds are not available to carry out the full intent of the law. Nevertheless, the State Public School General Fund, though limited, has provided additional aid for transportation to those children

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37/ Montana School Law, 1937, Section 1010, p. 24.
38/ Ibid, Section 1220.6, p. 93.
39/ See annual report of the State Superintendent of Public Instruction, Helena.

who live three or more miles from school. In 1937-38 all school agencies paid more for transportation than in any previous year. This upward trend may be expected to continue inasmuch as the money accumulated under the Public School General Fund will be greater each year as the revenues derived from the several sources increase. The transportation allocations will be in proportion to the total increase of the fund.

In 1937 the five-or-less-pupil schools of the selected districts of the six counties enrolled 218 pupils (see table I, appendix B). This was less than .3 per cent of the total state enrollment and approximately 1.1 per cent of the total enrollment for the six counties. Within the selected districts the cost of transportation was 1.1 per cent of the statewide cost for transportation and 7.8 per cent of the cost for the six counties (see table VIII). Since there is a definite relationship between enrollments and transportation for the five-or-less-pupil school, an analysis of the enrollment disclosed that 58 pupils of the 218 enrolled lived a distance of 3-6 miles, 21 lived a distance of 7-11 miles, 3 lived a distance of 18 or more miles, and 136 lived within 3 miles of the school. According to the law only the 83 pupils, or 37.6 per cent, who lived beyond the 3 mile limit were intitled to draw transportation. 40/

In 1935-36 the upper half of all selected districts paid about 46 per cent more for transportation than did the lower half of all selected districts. While in 1937-38 the upper half of all selected districts had increased their payments to about 56 per cent more than the lower half of all selected districts. In 1937-38 both the upper half and the lower half

40/ Montana School Law, 1937, Section 1220.1, p. 91.

of all selected districts had profited by the transportation allotments from the State Public School General Fund. The difference in these transportation payments made by the two groups may indicate one of two things. Either a more liberal allowance for transportation is made by one group than by the other, or it may mean the distance for transporting the average pupil was greater in one case than in the other, resulting in cost differences.

It is difficult to analyze and compare transportation costs in Montana because of the many and varying factors that enter into the problem as a whole. The preceding data show that a change in certain factors such as pupils transported, miles traveled and method for transporting are accompanied by changes in cost of transportation. The Montana law sets a distance of three miles as a limit for the first zone of payment. 41/ No allowances are made for the accessibility or inaccessibility of the school plant. Three miles in a bus on a paved city street or arterial highway can scarcely be compared with three miles on a horse on a mud road. However, in the eyes of the law, such differences are considered equal. In the five-or-less-pupil schools studied, no busses were used for transportation. Each child was responsible for his own transportation, a condition which added to the total school cost and raised the average cost per pupil. Transportation is recognized as an essential part of the consolidated school program. For this reason facilities for transporting the pupils are furnished either by district bus, or by public carry-all or by

41/ A distance of three miles usually measured from the school door to the front gate of the child's home.

direct payment to the individual pupil. On the other hand, the responsibility for transporting pupils has not been as fully accepted in the isolated school as in the consolidated school. Consequently, in many districts of the isolated areas, transportation is not accounted for as a necessary part of the program, although in the isolated school the need for transportation is as great or greater than in the consolidated school.

School Board and Business Offices.--Expenses incidental to the school boards and business offices are perhaps one of the most constant costs of education. However, the expense of the school boards and the expense of the business offices, the two items which go to make up the total expense, are influenced by different factors. Therefore, each of these administrative agencies should be analyzed separately.

The expenses for trustee meetings may vary within districts of the same class, but the degree of variation is limited, inasmuch as once the trustees are assembled the cost of the board meeting is the same whether the board is administrating the affairs of a system with several pupils or several hundred pupils. This is possible because the law designates the number of board members who shall serve in districts of each class. 42/ The law further limits the possible expense of board meetings by regulating the number of meetings for which mileage may be drawn, and mileage is the only compensation allowed a board member for his services. 43/

As a result of the above restriction, the school board expense within a district becomes nearly constant, and at the same time the busi-

42/ Montana School Law, 1937, Section 986, p. 20.
43/ Ibid, Section 1006, p. 16.

ness office expense which is unrestricted, and, therefore, less determinable, becomes the variable in the total school board and business office expense. The business office, which is an overhead charge, may be influenced by the pupil enrollment, since the work in this office is closely related to the administration of the school supplies and the physical plant. An increase enrollment may require additional building, equipment placement, and other activities which would tend to increase the work, and, therefore, the cost. On the contrary, decrease enrollment may result in reduced expenditures. Still, the change in the expense for this department is not in proportion to the change in other expenses that is affected by increased or decreased enrollment.

In the five-or-less-pupil schools for 1935-36 and 1937-38, the expenses for school board and business office in the upper half of all five-or-less-pupil districts exceeded those of the lower half of all five-or-less-pupil districts, while the enrollment was nearly the same. This may be interpreted to mean a larger trustee expense because of the greater distance the board members covered when attending the meetings, or it may mean added school business caused by other than pupil enrollment.

Between 1935-36 and 1937-38, the state and six counties decreased their total expenditures for school boards and business offices (see tables VI and VII). Also, during this period the total school enrollment for both the state and six sample counties decreased. These data would indicate that a decrease in the expense of the business office may be directly related to pupil enrollment, since as stated before, the expense for the Board of Trustee is not subject to wide variations. Therefore, the

increase or decrease in the total combined expenditure for school board and business office is largely governed by the expense of the business office.

Teacher Salary.--The teacher salary cost in practically all schools is the single item of greatest expenditure, regardless of enrollment. 44/ However, the total teacher cost tends to approach a favorable minimum on the basis of a teacher-pupil ratio that is approximately one teacher to each twenty pupils. 45/ This was the situation for the state as a whole in 1935, when with a larger enrollment than in 1937, the amount spent for teacher costs was smaller. For the selected district, the enrollment in 1937 increased over that of 1935 and the teacher cost decreased (see tables III and IV). This evidence supports the idea that at least up to a certain point the teacher cost decreases as enrollment increased without reference to the type of school. 46/ In 1937 the selected districts spent 65 per cent of their total budgets for teacher salary while for the state as a whole, the teacher cost was 46 per cent of the total budget. The expense for teacher salary in the districts amounted to .9 per cent of the total state teacher cost whereas the district original enrollment was .3 per cent of the state original enrollment. These data support the assumption

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44/ Gaumnitz, W. H., "Economics Through the Elimination of Very Small Schools", United States Department of Education, Bulletin No. 3, 1934, p. 4.

45/ The teacher cost in either an isolated, urban, or consolidated school represents the single elementary grade teacher cost. All salaries for superintendent, principals, and supervisors have been eliminated, since the comparison is to be based on the urban and rural elementary grade teacher costs when one teacher in an elementary room is responsible for the full program.

46/ Gaumnitz, W. H., Op. cit. p. 23.

that in all schools a large part of the total budget is spent for teacher cost.

Within the six counties, the county ranking highest from the standpoint of teacher cost spent twice as much as the county ranking lowest in all upper half districts. The same relationship is found to exist in counties of the same rank for all lower half districts. For the year 1935, the ability to pay was the determining factor as the enrollment in both groups was the same. The enrollment increased in 1937 in all selected districts. For the upper half of the selected districts the teacher cost was three times that of the lower half of the selected districts, while the enrollment was only one-third as large as that of lower half of the districts. In the combined total of the upper half and lower half of the selected districts, the county ranking highest in teacher cost spent twice as much as did the county ranking lowest with its one-third more enrollment. In 1937 the enrollment influenced the per pupil teacher cost in all divisions.

Teacher cost involves more than the expenditure of money, for the quality of education purchased is as important a consideration as the per capita cost. 47/ In the five-or-less-pupil school the quality of education depends largely upon the kind of leadership furnished, since there are decided limitations to the curriculum development, and leadership often replaces curriculum demands.

According to popular opinion the small isolated school has, in recent years, suffered more than the city or the town school by reason

47/ Gaumnitz, Op. cit., p. 2.

of untrained and inexperienced teachers. In 1924 a state law was enacted whereby the qualifications for teachers' certificates were raised. 48/ The provisions of the law were such that its effect upon the Montana elementary teaching staff was not noticeable until a considerable time had passed. By 1938, 30 of the 38 teachers reported in the selected five-or-less-pupil schools, held elementary state certificates. This grade certificate is issued only to those who are graduates of a normal school or its equivalent, or by examinations for which the admittance requirements are 96 quarter hours of training. The range of experience for these teachers was from one to sixteen years with an average of three years. Two teachers held the life certificate which is based on the elementary state certificate with additional training and experience. Of the remaining six teachers, four held first grade certificates and two were University graduates. 49/ These facts all point out (a) that the teacher problem in the isolated school may not be one of limited training or experience, but one of proper training for a special position, and (b) that the cost per pupil is an uncontrollable factor in areas of marked population mobility.

All Other Expenses.--The second largest item of the budget is "all other expenses". In this report the per cent of the total budget shown as all other expense for the state, all six counties, and total upper and lower half of all selected five-or-less-pupil districts, differs so widely from the accepted accounting plan that a full explanation is necessary (see

48/ Montana School Law, 1937, Section 1094, p. 70.

49/ These data were compiled from the teacher's certificate registration files in the six counties.

tables IX and X).

The salaries of superintendents in first and second class districts, principals in third class districts, supervisors and supervising principals, are included in the item "all other expenses" instead of under teacher cost. This is done because, in comparing teacher-cost between five-or-less-pupil school and city, town or consolidated school, a more equitable base is established if the single unit teacher cost is evaluated without the cost of added supervision. 50/ This classification is seldom noted when the expense of the rural and urban school is compared. In urban, town, and consolidated schools, supervision cost is an important item while in the five-or-less-pupil school this expense is absorbed in teacher salary. In 1937, supervision expense accounted for 4.8 per cent of the total school budget of the state.

In comparing the school of small enrollment with the school of large enrollment, two factors should be considered; (a) personal service expense other than teacher salary, and (b) maintenance and physical plant costs. There are a number of items directly connected with personal service expense in a large school which have no counterpart in a five-or-less-pupil school.

First of these is janitor service, which is exclusively an adjunct of the large schools and is performed by the teacher of the five-or-less-pupil school, with the possible exception of an annual cleaning of the building.

50/ An explanation of this arrangement is given in footnote 45, page 61.

TABLE IX.--TOTAL ALL OTHER EXPENSE DISTRIBUTED ACCORDING TO ITEM OF EXPENSE FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS WITHIN THESE COUNTIES, 1935-36

	Total	Salaries 1/	Janitor wages	Fuel	Promotion health	Compulsory education	Interest and sinking fund	Miscellaneous
	dollars	pct.	pct.	pct.	pct.	pct.	pct.	pct.
State	3,760,609.82	8.8	9.4	10.0	.8	.5	49.9	20.8
Six sample counties all districts	534,078.62	9.7	9.5	10.2	2.0	.6	45.1	22.8
Total of all selected five-or-less-pupil districts for six sample counties	6,089.80	-	4.6	26.8	-	-	8.0	60.4
Upper half of all selected five-or-less-pupil districts for six sample counties	3,329.71	-	4.9	26.1	-	-	7.4	61.5
Lower half of all selected five-or-less-pupil districts for six sample counties	2,760.09	-	4.3	27.7	-	-	8.8	59.1

1/ Salaries; superintendent, first and second class districts, supervisors, supervising superintendents and principals.

TABLE X.--TOTAL ALL OTHER EXPENSE DISTRIBUTED ACCORDING TO ITEM OF EXPENSE FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS WITHIN THESE COUNTIES, 1937-38

	Total	Salaries 1/	Janitor wages	Fuel	Promotion health	Compulsory education	Interest and sinking fund	Miscellaneous
	dollars	pct.	pct.	pct.	pct.	pct.	pct.	pct.
State	3,520,746.26	9.9	11.0	10.2	1.3	.6	44.8	22.1
Six sample counties all districts	672,707.98	8.6	8.6	7.5	1.2	1.1	53.3	19.6
Total of all selected five-or-less-pupil districts for six sample counties	7,612.61	-	7.2	30.9	-	-	.4	61.4
Upper half of all selected five-or-less-pupil districts for six sample counties	4,297.72	-	7.2	31.6	-	-	.2	60.9
Lower half of all selected five-or-less-pupil districts for six sample counties	3,314.89	-	7.3	29.9	-	-	.7	62.0

1/ Salaries: superintendent, first and second class districts, supervisors, supervising superintendents and principals.

Second, the health division and nursing service with its specially trained staff becomes a necessary department of a school system in which numbers of children are involved. In the isolated school, an occasional visit by the county nurse, if the county employs a public health nurse at all, and an answer to an emergency call by the county doctor is the only professional assistance given the rural grade teacher.

Third, the truant officer in the case of the city or town school, is an additional staff member (see table IX and X). On the other hand, the official truant officer of the isolated school is the county superintendent of schools, who, by law, acts in this capacity. 51/

It is obvious, therefore, that the local teacher in the rural school carries the responsibility for enforcement of the compulsory education law (see tables IX and X). If a comparison is to be made between teacher cost of urban schools and teacher cost of rural schools, consideration should be given to the fact that teacher salary of the five-or-less-pupil school is not for teaching services alone, but includes compensation for services furnished in other departments of the general school program.

Past building of urban, town, and consolidated school plants in order to meet the increasing enrollment, has created bond indebtedness, which has been liquidated in part. However, with the present building activities, the indebtedness is again increasing, and this, in spite of the fact that enrollment over the state and the six counties decreased in the past several years. These conditions in the state and six counties do not hold true for the selected districts, where practically all debts have

51/ Montana School Law, 1937, Section 963, p. 16.

been liquidated and no new obligations are being incurred (see tables IX and X). Here it is also found that the enrollment has increased in the past two years (see table I, appendix B).

The analysis of all other expenses, grouping the items as in this study, tends to show that undue emphasis is placed on teacher cost of the five-or-less-pupil school if each service rendered by the teacher is evaluated separately rather than all services evaluated collectively.

THE PECULIAR PROBLEMS OF THE FIVE-OR-LESS-PUPIL SCHOOL

There are many communities in which sparsity of population, undeveloped roads, transportation facilities and population mobility are such that it is not now possible to provide public education except through the five-or-less-pupil school. This statement is verified by Dr. Timon Covert who stated that "there will probably be some communities for a long time to come in which the five-or-less-pupil school will persist." 52/

Teacher Cost

In the five-or-less-pupil school, the most frequent criticism falls upon teacher cost since more than 60 per cent of the budget is expanded for this purpose (see tables VI and VII). However, the one teacher salary of the five-or-less-pupil school represents the total teacher cost, while the teacher salary of the elementary room in the urban or consolidated school is only a portion of the total teacher cost. In the five-or-less-pupil school, one teacher is responsible for the entire teaching program

52/ Covert, Timon, "Rural School Consolidation", United States Department of Education, Washington, D. C., Research Bulletin No. 6.

and for school administration. 53/ In the larger school the responsibility for the program is shared by a number of teachers. The elementary instructor in the urban or consolidated school is assisted in the teaching field by special supervisors and in the administrative field by a supervising principal or superintendent. These salaries are an additional teacher cost and should be charged to the salary of the elementary teacher, who is relieved of part of his duties.

If a comparison is to be made between the per capita cost of education in the small rural school and that of the urban or consolidated school, several adjustments are necessary. Either all salaries for supervision should be added to the salary of the elementary teacher in urban and consolidated schools, or in the five-or-less-pupil school a reduction comparable to the sum spent for supervision in the urban and consolidated school should be made from the teacher salary. It may be assumed on this basis that the per capita cost of teaching in rural and urban schools would not vary as widely as first indicated. 54/

Teacher Qualifications

Since the average salary of the rural teacher is lower than that of the urban or consolidated teacher salary, it is often assumed that his training is poorer in quality and his experience less extensive. Never-

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53/ The supervising officer of the five-or-less-pupil school is the county superintendent of schools. The county superintendant makes an annual visit to all schools under his jurisdiction. Montana School Law, 1937, Section 957, p. 16.

54/ The writer was unable to secure the enrollment for schools employing supervisors. Therefore, the exact per capita teacher cost was not computed.

theless the data presented in the paragraph on teacher cost would tend to discredit this statement at least for the five-or-less-pupil schools studied. However, the kind of training offered to him in preparation for rural teaching may be questioned. The unsatisfactory work of the small school should not rest entirely with the teacher. He is the product of our accepted plan for education, which, until recent years, has not recognized the need for special training for rural schools. It is only since the rural specialist has come to understand the problems peculiar to education in areas of relatively small population density, that a number of presidents of teacher training schools have considered rural teacher training a primary function of their institutions. Dr. W. M. Robinson speaking on trends of education for rural life said, "Of 184 State Teacher Colleges and Normal Schools training teachers in 1935, 84 per cent offered differentiated work for the preparation of rural teachers". 55/ Rural school practice teaching, rural school management, rural leadership and rural sociology are among the courses now offered in many schools. It would be profitable to society if this new challenge in teacher training were adopted more generally by the teacher training insitutions of the Great Plains Region. Still, most of the curricula offered by these institutions do not include rural sociology as a required course; it is an optional course for students in both elementary and secondary teacher training. In the past, rural sociology as an essential subject in the process of education, has not been emphasized, nor has the pupil, the

55/ Robinson, William M., "Professional Preparation for Rural Elementary Teachers", Biennial Survey of Education in the United States, 1932-34, United States Department of Education, Washington, D. C. Chapter V, p. 28.

future teacher, been encouraged to evaluate his environment and its particular accompaniments. No specific incentive such as the study of rural sociology has influenced him to seek a better understanding of rural life in order to better teach its value as a way of living. The acknowledgment of a need for teacher training in rural ways of living and thinking will mean not only increased efficiency of the school but a better leadership for adult groups. In isolated areas the school and the school teacher are often symbolic of both the educational and social life of the community. For this reason it may be unjust to charge the entire cost of the teacher's salary in the five-or-less-pupil school to the pupils enrolled. It may need to be apportioned further to include the adult groups that will profit by well trained leadership.

Transportation

The cost of transportation based on per capita original enrollment is four times greater for the upper and lower half of all selected five-or-less-pupil districts than for the state as a whole. These amounts are sufficiently different to indicate that the cost of transportation in isolated areas is a major item in the cost of rural education. The small number of pupils in the sparsely settled regions is a limiting factor in the use of bus transportation which has been found to be the cheapest means of transporting. This statement is verified by the conclusions of Dr. Paul R. Mort who suggests that, of all factors considered in trans-

portation cost, the greatest single factor is the number of pupils. 56/

The large part of all isolated schools in Montana are located in areas where the roads are impassible except with horses or very light cars during winter months or at times of unfavorable weather. Therefore, individual transportation has to be substituted for bus transportation even though the cost is increased. Many children who live ten or more miles from school are enabled through transportation payments to secure lodgings nearer school. There are many communities in which the sparsity of population and the undeveloped conditions of roads are such that it is now impossible to transport children by bus to avoid the maintenance of very small schools.

Assessed Valuations and Adjustments

There are two factors to be considered in the present plan for school finance. First, the amount of taxable valuation within a district, and second, the division of the taxable valuation as to (a) personal property and real estate and (b) public utilities (see table I). The first factor is important to all districts since a large per cent of the revenue for school purposes is raised within the local district. The second factor is of unusual interest to the districts of low valuation.

It is evident from the facts that in many districts the total revenue for the Special District School Fund was carried almost exclusively by the personal property and real estate (see table I).

56/ Mort, Paul R., "Needed Research on the Reorganization of School Districts in Rural Areas", Bureau of Publications, Teachers College, Columbia University, New York, 1924.

Under the present plan, favored districts profit by the entire revenue from utilities, while the less favored districts are deprived of any portion of it. This accounts for the inequalities of tax burden and the inequalities of educational opportunity. The revenue from the tax of public utilities is in reality an income from which all children should benefit, since utilities are a possible asset only because of grants and privileges accorded to them by the people as a whole. A public utility is supported not by the business of the local district in which the plant chances to be situated, but by a collective business. The immediate area, the adjacent area as well as the most remote area are all equally essential to the life of any utility. It is for this reason that contributing agencies should share alike in the benefits accruing from their activities.

A statewide distribution rather than a district distribution of revenue produced by utility taxation would tend to equalize the inequalities of tax burden. Districts with large utility holdings would relinquish part of the income derived from this source and the difference would be absorbed by personal property and real estate through added levies. This change in tax distribution would lead to the equalizing of taxable wealth within districts. It would both raise and lower levies according to the loss or gain by a district. Further, such adjustments would tend to equalize educational opportunities since every child, rather than a limited number, would participate in the income from these properties.

Ownership

The total area of a school district has small meaning when it is considered for public revenue. The controlling factor is ownership of taxable resources for the reason that all public lands are exempt from taxation. The effect of this exemption on the tax base may be observed in the fact that 43 million acres or nearly one-half of the total state acreage is owned by public agencies, and, therefore does not yield public revenue through taxes. 57/ The shift in land ownership has been unusually large in the past few years. The number of owners of real estate declined noticeably because of the activities of government land purchase programs and mortgage foreclosures. This latter practice has been most deplorable for two reasons. First, many evicted families, deprived of a home and an occupation, have been forced to become public charges. This is especially true of the middle and old age group. Second, under foreclosure procedure, corporations came into possession of hundreds of farms and frequently these farms were then abandoned so that the land decreased in tax value. Likewise, the farm buildings were allowed to deteriorate and soon ceased to be a source of public revenue. Other hundreds of acres were removed from the tax roll by the government land purchase programs. This caused financial difficulties in areas where public revenue fell below the income necessary to support the services of government. Perhaps at some future date the land now in subsistence homesteads will pass into private ownership, and its enhanced value will compensate for

57/ Renne, R. R., "Who Owns Montana's Land?", Agricultural Experiment Station, Bozeman, Montana, Mimeograph Circular No. 15.

the present withdrawal.

The amount of acreage owned by public agencies within the six counties varies from less than 17 per cent in Dawson County to more than 75 per cent in Beaverhead County. While the taxable acres in the lower half of all selected five-or-less-pupil districts exceeds the non-taxable acres by 7.7 per cent, and in the total all upper and lower half of selected districts by 14 per cent (see table XI), the excessive amount of non-taxable land puts an added burden on the remaining areas. Most non-taxable land yields some revenue through royalities and leasing fees and should likely be expected to yield more revenue in order to pay a larger share of the cost of public services. However, under the present leasing laws, the income from non-taxable land does not equal the revenue from like areas that are privately owned and operated.

The ownership problem of the five-or-less-pupil district is most vital if the district is to continue as an independent unit and is to support the major part of its public services.

Mobility

The size and kind of school fund in a sparsely settled area is the result of the population pattern, which is closely related to the economic resources that are available. 58/ In Montana there has been a definite migration of the people from the drouth-striken areas into the more favorable areas. Yet in no part of the state has there been complete abandonment of the land. In many sections, however, there has been a constant

58/ Cyr, Frank W., "Needed Research for Reorganization of School Districts in Rural Areas", p. 14.

TABLE XI.--TOTAL ACRES OF TAXABLE AND NON-TAXABLE LAND WITHIN STATE, FOUR SAMPLE COUNTIES, AND WITHIN ALL SELECTED DISTRICTS BY THESE COUNTIES, DISTRIBUTED ACCORDING TO KIND OF PROPERTY, 1937

	Taxable acres	Non-taxable acres
State	49,977,751	43,297,554
Six sample counties all districts	7,876,631	5,326,426
Total of all selected five-or-less-pupil districts for six sample counties	707,845	606,310
Upper half of all selected five-or-less-pupil districts for six sample counties	467,737	384,845
Lower half of all selected five-or-less-pupil districts for six sample counties	240,108	221,465

decrease in the population. This declining population is partially reflected in a decreased school attendance. Very often schools that formerly enrolled 8 to 10 pupils have become five-or-less-pupil schools. On the other hand, the settlement of new areas, where there is a sparsity of population, has increased the number of five-or-less-pupil schools. 59/ For this and several other reasons that definitely refer to mobility, the five-or-less-pupil school in Montana will continue to be a problem.

The reasons for this excessive mobility should receive serious consideration because of their influence on the state educational program. First, the lack of planning or of government control over marginal and submarginal land has resulted in the settlement of areas where the opportunity for earning a livelihood equal to an average standard is questionable. 60/ This will likely continue into the future unless Montana reverses its past policy. In the second place, a possible change towards a more favorable climatic condition may again cause an influx of people to the areas now abandoned. This is associated with the fact that an abundance of moisture temporarily changes the status of much of the land in Montana so far as farm productivity is affected. In the third place, the general economic conditions foster the movement of people from country to the city and vice versa. Mr. L. C. Gray has pointed out that "Poor land areas in general lost a larger proportion of their population than good land areas during

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59/ Cyr, Frank W., Op. cit. p. 14.

60/ A standard of living which shall provide not only the bare necessities of life but some added material and non-material things and objects which shall make for a more comfortable life. A standard of living for the farm family should compare favorably with the standard of living maintained by the highly skilled worker of the city, since the farmer is not only the manager, but in most cases an added worker.

the period of industrial prosperity from 1922 to 1929, and gained a larger proportion during the depression. Moreover, the poorer the land the greater were the increases of population stimulated by the depression". 61/ For these reasons it is to be expected that the deserted farm with its limited living accomodations and uncertain productive value will attract those people who are pressed elsewhere. Consequently, a continuous shift of population, particularly into the poorer areas, may be anticipated. 62/ The answer is that the educational problem for the children of the isolated homestead will be partially solved through the establishment and maintenance of the five-or-less-pupil school.

Education

Until recent years the school curriculum that was accepted as basically sound took small heed of the environment or the need of the individual pupil. Urban and rural schools attempted the same kind of program with such modification as financial conditions, curtailed enrollment and . ained leadership made necessary. The general trend in rural as well as urban education, was away from the farm, the emphasis of all education being upon the economic and social advantages of the urban

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61/ Gray, L. C., "Social and Economic Implications of the National Land Program", Journal of Farm Economics, May, 1936.

62/ In the project 103 districts were studied. Eighteen of the same districts were included for both 1935 and 1937. The total number of families in the 18 districts was 65. In the upper half of the 18 districts, or 10 in number, the names of 33 families appeared on the census roll for both 1935 and 1937. In 1935 there were in this group 53 families while in 1937 the number had decreased to 40 families. In the lower half of the 18 districts, or 8 in number, the names of 32 families appeared on the census roll for both 1935 and 1937. In this group for 1935 there were 34 families and in 1937 there were 40 families.

centers rather than upon the compensations of rural life. This type of training then led to a constant migration of the more progressive youths from the farm to the city with its lure of material gain. In this manner the rural areas were often depleted of their most capable leadership. In more recent years many social, economic, and technological changes have threatened to break down the social structure. This threat has been a challenge that awakened not only educators but leaders in many fields to the fallacy of a common plan for education. It has become evident that revision of the curriculum is necessary. On every side, leaders have advocated a school program which would supply the wants of both the youth and adults of the rural sections. This agitation has led to a widespread acceptance of the new philosophy for rural education; a philosophy which emphasizes the activities of rural life, and at the same time stimulates interest in a way of living adapted to environment and need of the isolated areas.

RECOMMENDATIONS AND CONCLUSIONS

This study has disclosed a number of factors which tend to create inequalities of financial burden and educational opportunity within certain areas. Therefore, the following recommendations are suggested as possible ways by which some of the inequalities might be corrected.

1. The state should assume an added financial responsibility for education in order to guarantee every child equal educational opportunities, regardless of the location of economic status of either the parents of the child or the community.

2. The increased state support should be drawn from sources other than property tax because in rural communities excessive taxation works a special hardship on the farmers and the land. Wealth centers in cities to a large degree and when the state assumes an increasing percentage of school support, drawing its money from other than property taxation, schools in rural areas benefit thereby.

3. The income from public utilities should be impounded in a state fund, and proceeds should be distributed to the school districts for the benefit of all elementary school children rather than the children of a single area, inasmuch as these funds arise from the exploitation of natural resources, leases of public domain, franchises, etc., all of which are holdings of the commonwealth.

4. The State Interest and Income Fund, established for the support of the elementary school, is apportioned on the basis of the census roll. This method appears to favor the centers of greatest population density. This, however, is not true. The five-or-less-pupil districts in 1935 and 1937 benefited more directly than did the larger districts. If the Interest and Income Fund were distributed on the basis of original enrollment, the educational program for the pupils actually registered could be subsidized.

5. School districts, enlarged by consolidation for the purpose of taxation, should include an area sufficiently wide to enable the poorer areas to draw on the wealthier areas for assistance in the financing of their schools.

6. Districts consolidated for the purpose of taxation should be

so combined that without reference to size the individual units would have approximately like tax value, and in determining this value public utilities should be excluded.

7. Individual aid for transportation might be made more purposeful and worthwhile if a transportation schedule were computed on a mileage and road type basis rather than mileage basis alone. A reimbursement schedule should be drafted in which apportionments are based on the accessibility of the school plant combined with the road type and individual transportation or public conveyance.

8. Teachers trained in rural practices should be given employment preference for rural areas. The training for the rural teacher should include not only methods for elementary teaching but additional methods for the development of community leadership through adult education. Those teachers who remain in the field of rural education should receive added compensation.

The following conclusions are the product of the study of the districts supporting one school and that for five-or-less-pupils in the six counties.

1. Districts dependent upon personal property and real estate without proportional support of public utilities, pay an unequal share of the educational cost.

2. When the tax burden on land is out of proportion to the income, the tendency is to exploit the land.

3. Outstanding indebtedness is not a factor in school finances for the five-or-less-pupil district. Some small indebtedness was

registered in only 11 per cent of the districts.

4. Continued settlement in isolated areas is to be expected unless government zoning is more widely introduced and enforced.

5. Population mobility will continue to be a factor in increasing and decreasing the number of five-or-less-pupil schools in sparsely populated areas.

6. The sparse settlement and resulting problems of isolation necessitate the continuance of the five-or-less-pupil school.

7. Individual transportation is more expensive than bus transportation. Bus transportation is not feasible in isolated areas.

8. The major expense of the five-or-less-pupil school is teacher cost.

9. The salary of the teacher in the five-or-less-pupil school represents the teaching, compulsory education, health service, and janitor costs.

10. The training and experience of the teacher in the five-or-less-pupil school is equal to the standard now required.

APPENDIX A

Sources of Data

The data for study of the five-or-less-pupil districts were compiled from the following sources:

1. Financial statistics for the five-or-less-pupil districts, files of the State Department of Public Instruction.

2. Financial statistics for the state and six counties, Biennial reports of State Board of Equalization, 1935-36 and 1937-38.

3. Census roll and teacher certificate registration, files of the County Superintendents of Schools for Beaverhead, Blaine, Cascade, Chouteau, Dawson, and Musselshell counties.

4. Assessed valuation for five-or-less-pupil districts, state and six counties, files of State Department of Public Instruction and State Board of Equalization.

5. Land ownership, Agricultural Economics Department, Agricultural Experiment Station, Montana State College.

6. Historical reviews, Helena Independent, 1932.

Method of Collecting Data

As a basis for constructing schedules, the forms for the annual report of the County Superintendent of Schools to the State Department of Public Instruction were used, a separate schedule being prepared for each item of the form. A complete set of schedules was arranged for the state, six counties, and the selected districts. Data for each division was tabulated from the official records. Additional information on finances

was gathered from the State Board of Equalization records and printed reports. The information on certification was assembled through correspondence with the several county superintendents of schools. Field workers of the W.P.A. collected the data on census rolls, while a resident member of the same staff compiled the facts on land ownership.

The per capita taxable wealth supporting each original enrollment was determined for the five-or-less-pupil districts of each of the six counties, after the raw data had been gathered. The districts were divided into two sections, those of higher per capita wealth forming the upper half of all selected five-or-less-pupil districts and those of lower per capita wealth forming the lower half of all selected five-or-less-pupil districts. The data collected were now tabulated according to the above plan.

Since the study was concerned only with the elementary school system, it was not considered feasible to use the total figure of the State Department reports for some items which will be discussed later. Therefore, after confering with a member of the staff in the State Department of Public Instruction and several county superintendents the following basis was selected for segregating the elementary cost from the high school cost. To the elementary school was charged (a) 40 per cent of the salary of superintendents in first and second class districts and principals of third class districts, (b) 55 per cent of expense of the office of superintendent in first and second class districts and principals of third class districts, (c) 85 per cent of the expense of school boards and business offices. The charges were based on the approximate amount of time

and service rendered to the elementary schools by these agencies.

APPENDIX B

TABLE I.--NUMBER OF CHILDREN BETWEEN THE AGES OF 6-21, AND NUMBER OF ORIGINAL ENROLLMENTS FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS OF THESE COUNTIES CLASSIFIED FOR THE SCHOOL YEARS, 1935-36 AND 1937-38

	1935-36		1937-38	
	Census	Original enrollment	Census	Original enrollment
State	159,769	82,562	163,220	78,178
Six sample counties all districts	23,203	11,553	22,231	10,630
Total of all selected five-or-less-pupil districts for six sample counties	445	163	576	218
Upper half of all selected five-or-less-pupil districts for six sample counties	251	82	327	99
Lower half of all selected five-or-less-pupil districts for six sample counties	194	81	249	119

APPENDIX B

TABLE II.--NET AMOUNT SPENT DISTRIBUTED ACCORDING TO ORIGINAL ENROLLMENT FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS OF THESE COUNTIES, 1935-36

	Net amount spent	Teacher salary	School board & business office	Text books	Transportation	All other sources
	dollars	per cent	per cent	per cent	per cent	per cent
State	102.83	44.8	1.9	1.9	7.0	44.3
Six sample counties all districts	110.28	47.8	2.3	1.5	6.6	41.7
Total of all selected five-or-less-pupil districts for six sample counties	229.16	67.0	2.8	1.3	12.5	16.3
Upper half of all selected five-or-less-pupil districts for six sample counties	257.65	65.0	2.8	1.3	15.1	15.7
Lower half of all selected five-or-less-pupil districts for six sample counties	200.31	69.7	2.7	1.4	9.1	17.0

APPENDIX B

TABLE III.--NET AMOUNT SPENT DISTRIBUTED ACCORDING TO ORIGINAL ENROLLMENT FOR STATE, SIX SAMPLE COUNTIES, AND ALL SELECTED FIVE-OR-LESS-PUPIL DISTRICTS OF THESE COUNTIES, 1937-38

	Net amount spent	Teacher salary	School board & business office	Text books	Trans-portation	All other sources
	dollars	per cent	per cent	per cent	per cent	per cent
State	107.43	45.3	2.0	1.8	9.2	41.6
Six sample counties all districts	131.03	43.1	1.7	1.1	7.8	46.2
Total of all selected five-or-less-pupil districts for six sample counties	240.56	64.8	2.9	1.4	16.3	14.5
Upper half of all selected five-or-less-pupil districts for six sample counties	296.65	62.1	3.1	1.4	18.6	14.7
Lower half of all selected five-or-less-pupil districts for six sample counties	200.87	65.9	2.4	1.3	12.9	17.4

APPENDIX B

TABLE IV.--STATE RECEIPTS FROM ALL OTHER SOURCES

Type of Income	1935	1937
	dollars	dollars
Equalization fund	141,482.92	241,663.20
Property sales insurance	21,577.77	144,791.41
Forest	23,258.15	24,139.83
Fines, rental, tuition, etc.	967,722.11	1,847,342.60
Total	1,154,040.95	2,257,937.04

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