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A Financial and Population Survey of the School Districts of Williams County, North Dakota

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A FINANCIAL AND POPULATION SURVEY OF THE SCHOOL DISTRICTS OF WILLIAMS COUNTY, NORTH DAKOTA

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This thesis, offered by Ivar Knapp in partial fulfillment of the requirements for the Degree of Master of Science in Education in the University of North Dakota, is hereby approved by the Committee under whom the work has been done.

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CHAPTER 1

IMPORTANCE OF THE STUDY

Never before in the history of public education in North Dakota have the general public and especially school patrons become so conscious of the inequalities which exist among school districts in methods of school support and of the comparative effort put forth to maintain schools, as they are today. With the steady improvement of educational service by schools and a general recognition on the part of the rural population of the desirability and advantages of both the elementary and the high school education, have come greatly increased enrollments in the upper grades and high schools. Accompanying this enrichment of the curriculums and increase in attendance there had come an increase in school expenditures to a point where the source of income had become a primary factor in determining what class of school is to be developed and maintained in any particular district.

The realization of inequalities became even greater with the depression, the lowering of farm products and the most devastating drought for a long period of years. The latter began in western North Dakota in 1930 and reaching its peak in the summer of 1934. The relative inability of the majority of taxpayers to pay their tax allotments not only led to a wholesale clamoring for a radical reduction in taxes but caused some to study the tax levies, assessed valuations, and other financial aspects of their own and surrounding districts. Taxpayers are becoming aware of the inequalities in the ability and comparative effort put forth to maintain schools in various school districts. School officers and educators have come more and more to see these inequalities and the ultimate

necessity for a complete reorganization not only in the means of supporting schools but also in the size of the individual school units.

Such a feeling led the writer to undertake a study of the financial status of the individual school districts in Williams County. Complete county surveys of this type have been comparatively few in number thus far. A. F. Neutzman made a comparative study of school expenditures and school support in Polk County, Minnesota, in which he pointed out the inequalities that existed between the independent and common school districts of that county.[1] He compared the abilities of districts, the effort put forth by the various districts on the basis of tax rates, and finally the aids, apportionments, receipts and expenditures of the various districts.

Olton Hewitt completed a similar study of Traill County, North Dakota in 1932 and also included special chapters on the period and rate of tax collections, setting them forth by months over a period of five years; and on incomes, expenditures, and balances of four of the special school districts.[2]

Matt Lagerberg, in making a financial survey of the schools of McKenzie County, North Dakota, included a splendid chapter on land classification, the factors involved, and finally plotted the land units in one of the districts according to classification standards set up by the

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[1]A. F. Neutzman. A Comparative Study of School Expenditures and School Support in Polk County, Minnesota, Unpublished Master's Thesis, University of North Dakota Library, 1932.

[2]Olton Hewitt. The Control of Income and Debt Service in the School Districts of Traill County, North Dakota, Unpublished Master's Thesis, University of North Dakota Library, 1932.

government survey.[3] He showed the location of the school children on the farms and then brought out the relation of the land classification to the financial status of the school district.

Karl Abrahamson conducted a survey of Renville County, North Dakota, in which he brought out the inequalities in school support, school costs, transportation, and indebtedness that existed among the individual school districts of the county.[4]

The Problem

The problem as presented in this study may be said to have two aspects as follows: first, to make a survey of the school incomes, the debt service, the ability to support schools and the effort put forth by each of the school districts of Williams County, North Dakota, with the purpose of pointing out such inequalities as may become evident through such study; second, to present data on farm and school population in Williams County with the purpose of eliminating small and expensive schools either through the transportation of children to larger school units or through the re-districting of those parts of the county where re-districting seems feasible.

Brief Description of the County

Williams County, which ranks fourth of the fifty-three counties of North Dakota in size is located in the extreme northwest corner of the state. It reaches the Montana line on the west and is separated

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[3]Matt. Lagerberg. Financial Survey of Schools of McKenzie County, North Dakota, Unpublished Master's Thesis, University of North Dakota Library, 1934.

[4]Karl Abrahamson. Survey of Schools of Renville County, North Dakota, Unpublished Master's Thesis, University of Minnesota Library, 1933.

from the Canadian line on the north only by the comparatively small county of Divide. The Missouri River constitutes the southern boundary of the entire county and separates Williams from McKenzie County. Burke and Mountrail Counties border on the east. The county includes a land area of 2, 138 square miles, three per cent of the state land area of 70,183 square miles.[5] Of this, 477, 569 acres were under cultivation in 1930.

Spring wheat makes up the chief crop, although durum wheat, flax, oats, barley are also harvested in considerable quantities. Williams ranks high in the state in the number of pounds of butter made by families and ranks average in the number of pounds of cream sold, showing that farm incomes from these sources are an important factor.[6] In 1931, Williams County had twenty-nine lignite coal mines, which produced 39,393 tons of lignite coal, although this county has no large scale production mines such as found in some of the other counties.[7]

The total population of Williams County was 19,553 persons in 1930, having increased from 17,980 persons since 1920. The 1930 figure, which represents 2.9 per cent of a state population of 680,845 persons, gave the county an average population of nine and one tenth persons per square mile in 1930.[8] The county includes one city, Williston, whose population was listed as 5,106 persons, just over one-fourth that of

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[5]Abstract of the Fifteenth Census of the United States, 1930, United States Department of Commerce, Bureau of the Census, p. 76.

[6]Compiled Agricultural Statistics of North Dakota for the period ending June 30, 1932. Department of Agriculture and Labor, State of North Dakota, pp. 1-30.

[7]Ibid. p. 72.

[8]Abstract of the Fifteenth Census of the United States, op.cit. p. 67.

the county. Williston necessarily maintains the largest school system in the county, and ranks highest in assessed valuation, although the land area within the district is the smallest in the county.

The school systems of Williams County are typical of those found in western North Dakota. Eight classified schools are maintained in the eight largest villages and towns within the county. Buford, Wheelock and Corinth (Bigstone District) maintain graded schools. Of the eleven consolidated school districts, four are located in the open country. The forty-three rural school districts maintain one hundred eleven one-room rural schools. Inasmuch as the names of many of the individual districts are too lengthy to be included in the individual tables that are to be set up later in this study, Table 1 has been included for identification purposes.

Method and Sources of Data

The data for this study have been gathered through the personal investigation of the records in the offices of the county superintendent of schools and the county auditor. From them were gathered facts on assessed valuation of real estate, tax rates, school enrollment, school expenditures, school incomes and all such material as related to the financial and educational data of the individual school districts in the county for a period of five years beginning July 1, 1929 and ending June 30, 1934. The figures under each individual item for each year were averaged and that average used as a basis for the construction of tables and the drawing of conclusions.

Reliability and Limitations

This study applies to Williams County, North Dakota, and is

Table 1

Classified, Graded and Consolidated, and Rural School Districts of Williams County, North Dakota June 30, 1934

Name of School District	Number of Schools	Number of Teachers
classified schools		
Williston Special #1	3	41
Nesson #2 (at Ray)	2	9
Sauk Valley Special #3 (McGregor)	1	5
Tioga #15	1	8
Cottonwood Lake #64 (Alamo)	1	6
Epping Special #88	1	6
Wildrose Special #90	1	9
Grenora Special #94	1	8
graded and consolidated schools		
Buford #5 GRADED	2	2
Eight Mile #6 (Trenton)	3	4
Lindahl Consolidated #14	1	2
Wheelock #25 GRADED	1	3
Barr Butte Consolidated #37	1	4
Round Prairie Consolidated #40	1	2
Pioneer Consolidated #41	2	3
Bigstone #59 (Corinth) GRADED	4	5
Hartland Consolidated #63 (Appam)	1	2
Thorstad Consolidated #75 (Zahl)	1	4
Brooklyn Consolidated #78	2	3
Springbrook Special #81	1	3
Golden Valley #85 (Temple)	2	2
Hamlet Special #95	1	4
rural schools		
East Fork #3	1	1
Grinnel #4	3	3
Tande #7	7	7
Pleasant Valley #16	3	3
Roosevelt #17	1	1
Champion #23	3	3
Stewart #24	1	2
Medicine Lodge #28	5	5
Freeman #29	3	3
Pherrin #30	2	2

Table 1 (continued)

Classified, Graded and Consolidated, and Rural School Districts of Williams County, North Dakota
June 30, 1934

Name of School District	Number of Schools	Number of Teachers
rural schools		
Newhome #31	4	4
Rainbow #33	4	4
Wildrose Rural #34	3	3
Bonetrail #35	3	3
Gladys #36	2	2
Judson #38	3	3
Formosa #39	3	3
Bull Butte #42	4	4
Scandinavia #43	2	2
Hazel #44	2	2
Cedar #46	1	1
Ellisville #65	4	4
Twin Lake #66	1	1
Sandy Creek #67	2	2
Hankey #70	1	1
Lincoln #71	4	4
Blacktail #72	3	3
Hofflund #73	1	1
Eureka #76	3	3
Spring Coulee #77	2	2
Adams #79	3	3
Twin Butte #80	2	2
Marshall #82	3	3
Nesson Valley #83	2	2
Liberty #84	1	1
West Bank #86	4	4
Bluff #87	1	1
Marley #89	1	1
View #91	3	3
Farmvale #92	3	3
Twelve Mile #93	3	3
South Barr Butte #96	2	2
North Star #97	2	2

limited entirely to its school districts. Because the findings have been transferred from the county records and later transcribed into a five-year average, errors may have been committed in some instances without being detected by the writer. However, every precaution has been used in order to make the results as reliable as possible. Undoubtedly the individual figures in amounts of incomes, valuations and other factors have been affected by the extended period of drought and depression which lasted throughout the entire period of the years studied. Nevertheless, the conditions have been uniformly prevalent in all sections of the county; so that the relationship of the various items would remain true among the individual school districts that were included.

CHAPTER 2

SOURCES OF INCOME

When the state legislature, in providing for the establishment of educational facilities for the children of North Dakota delegated the authority of control to the individual local districts, it provided little or no income for them except such as the districts themselves could provide. Inasmuch as individual districts vary in size, population, industries, natural resources, and many other factors, great variations and inequalities have tended to spring up not only among the districts within any one county, but also among the counties within any one section of the state and probably most noticeably among the various sections of the state.

The extent to which those inqqualities in income exist in Williams County become apparent with the study of records kept by the clerks and treasurers of the school districts under the new system of school accounting forms furnished them by the county superintendent's office since 1932. Here sources of income may be secured from the columns of receipts, which are subdivided into ten classes as follows: state apportionment, county tuition fund; state aid, federal aid, taxes levied by school board, other revenue receipts, sale of bonds, sale of certificates, other non-revenue receipts, and total receipts. By deducting the "sale of bonds," "sale of certificates," and "other non-revenue receipts"from the "total receipts," the total income was determined for each year. Separate consideration was given to the incomes from state apportionment, county apportionment, state and federal aid, and from property taxes levied. Federal aid, generally a

subvention for Smith Hughes work, was listed for two schools only; and so it was combined with state aid. Tuition could not be considered separately because the new accounting forms made no separate item of that source of income. Tables which follow list total income, income from property taxation, income from state apportionment, that from county apportionment and that from state aid. Each amount listed opposite the name of the school district represents a five-year average for that particular school district. A five-year average was also made in the state aid column even though aid was discontinued by the state after the year 1933. The school districts were grouped in each table according to classification with the exception that the graded and consolidated districts were considered in one group because of their similarity in characteristics.

A study of the first column of Table 2 immediately made plain the variations among districts in the matter of total school incomes. Sauk Valley Special indicated the lowest total income in the classified school group with a 9,782 dollars income. Grenora ranked slightly above with 10,652 dollars and Tioga and Cottonwood Lake came next with incomes slightly above 12,000 dollars. Williston, because it includes the only city of any size in the county, had the largest income with 72,652 dollars; Nesson (Ray) and Wildrose ranking second and third with 18,994 dollars and 16,379 dollars respectively. Most noticeable is the fact that Williston's income made up nearly forty-five per cent of the 164,842 dollar income for classified schools. Hamlet led the graded and consolidated school districts with an average of 7,270 dollars approximately 2.26 times as large as Round Prairie which has the low

Table 2

The Average Income for School Districts of Williams County for the Five-Year Period 1930-1934

District	Total[a] Income	Property[a] Taxation	State Apportion	County Apportion	State[b] Aid
		classified schools			
Williston	$ 72,652	52,079	5,015.12	2,717.22	407.98[c]
Nesson	18,994	10,672	1,272.02	516.86	500.82[c]
Sauk Valley	9,782	7,863	431.84	166.07	216.10
Tioga	12,278	8,980	756.75	393.58	277.90
Cottonwood Lake	12,073	8,226	690.88	272.84	216.10
Epping	12,032	9,646	819.47	240.54	178.30
Wildrose	16,379	10,542	1,337.51	598.61	444.20
Grenora	10,652	7,662	949.92	297.39	298.50
Total	$164,842	115,670	11,273.51	5,203.11	2,539.90
Average	$ 20,607	14,459	1,409.19	650.40	317.49
		graded and consolidated schools			
Buford	3,863	2,469	104.23	78.06	22.44[d]
Eight Miles	6,930	4,985	392.56	187.67	210.24
Lindahl	3,705	2,472	374.90	155.91	295.56
Wheelock	6,625	5,910	274.65	121.57	74.02
Barr Butte	5,241	4,258	441.63	243.59	261.90
Round Prairie	3,192	2,405	413.91	176.19	161.40[e]
Pioneer	4,343	2,530	426.23	165.75	250.20
Bigstone	4,964	4,105	421.38	171.96	235.44
Hartland	4,090	3,348	344.08	147.82	204.84
Thorstad	7,098	5,728	344.99	187.34	284.70
Brooklyn	4,989	3,907	295.45	133.53	250.20
Springbrook	5,167	3,952	250.96	105.24	271.89
Golden Valley	5,675	4,347	243.93	106.56	250.20
Hamlet	7,270	5,977	454.01	200.30	295.56
Total	$ 73,152	56,398	4,788.91	2,181.49	3,068.59
Average	$ 4,028	4,028	342.06	155.82	219.19
		rural schools			
3	2,957	2,288	204.29	111.09	204.84
4	1,499	910	148.06	89.25	85.25
7	7,935	6,328	479.84	203.35	172.94
16	3,075	1,492	504.12	168.93	136.50
17	1,621	1,056	201.43	110.68	174.43
23	1,879	1,368	247.86	116.03	100.49
24	3,458	1,943	295.83	105.37	204.84
28	5,976	3,314	355.47	186.66	27.38
29	2,549	1,983	230.00	129.53	101.84

Table 2 (continued)

The Average Income for School Districts of Williams County for the Five-Year Period 1930-1934

District	Total[a] Income	Property[a] Taxation	State Apportion	County Apportion	State[b] Aid
		rural schools			
30	$ 3,794	3,180	287.21	125.99	165.26
31	2,915	1,943	394.48	190.24	146.48
33	2,818	1,995	359.41	203.78	141.53
34	1,210	724	216.28	94.74	75.67
35	2,853	1,667	333.78	149.25	137.99
36	2,636	1,874	360.20	197.21	147.37
38	1,858	1,231	245.94	126.75	80.57
39	2,228	1,517	289.49	128.71	161.40[e]
42	2,331	1,642	360.30	158.91	76.56
43	1,674	1,176	283.46	112.59	74.03
44	1,680	1,165	131.84	79.89	71.77
46	748	516	102.94	50.62	37.40[e]
65	2,532	1,534	487.04	238.37	174.83
66	2,690	2,115	170.03	79.98	204.84
67	1,699	1,046	290.31	112.84	82.69
70	1,081	882	188.70	37.86	67.56
71	3,429	2,676	294.22	161.70	166.97
72	1,531	929	292.14	124.74	64.91
73	1,695	987	146.71	51.54	137.52
76	2,323	1,760	275.50	117.58	142.84
77	974	603[f]	67.20[f]	35.20[f]	
79	2,208	1,380	251.58	86.92	129.34
80	1,383	876	239.44	113.15	80.46
82	941	724	137.45	73.33	42.17
83	1,084	802	119.61	56.98	56.04
84	839	604	117.41	44.48	33.49
86	2,406	1,652	264.79	106.96	140.90
87	662	486	150.33	63.44	
89	682	461	92.88	34.68	38.90
91	2,174	1,582	242.54	123.04	159.01
92	1,980	1,190	243.74	126.76	101.88
93	2,318	1,814	342.07	117.23	
96	1,333	909	197.12	80.91	81.46[e]
97	1,600	1,189	173.02	90.25	121.64
Total	$93,158	65,513	10,816.17	4,917.52	4,551.99[g]
Average	$ 2,166	1,291	251.30	114.36	113.80[g]

[a]To the nearest dollar
[b]Five-Year average of data given for four years
[c]Includes federal aid for Smith-Hughes
[d]Three years of data
[e]No 1933 report given
[f]No 1934 report given
[g]Forty schools only

ranking income with 3,192 dollars. The rural school districts showed the largest range in total income. District 87 and District 89 had surprisingly low total incomes, averaging 662 dollars and 682 dollars respectively. District 7 had the highest income with 7,935 dollars. Although the majority of the rural districts had incomes ranging between one thousand and three thousand dollars, most of them supported two, three or four schools within the district. The most startling condition is revealed in comparing the number of schools supported by the districts with its total income. District 82 supported three schools on an income of 941 dollars, an average of about 314 dollars per school. District 77 supported three schools on an income of 974 dollars, an average of 325 dollars per school. Four other districts had incomes of less than 500 dollars per school; six districts had a per school income of 500 dollars to 600 dollars; two districts had an income between 600 dollars to 700 dollars per school. District 7, with the high income of the rural districts, supported seven schools with an average of 1,418 dollars per school.

Income from District Tax

Column two indicates the five-year average income or money received from district taxes levied by the school board for general school purposes. These figures have been somewhat affected by the fifty per cent assessed valuation law effective in 1932, especially in those districts where the maximum levy was already being made. However, the reductions were not uniform in that in some districts the levies were merely raised so as to bring in the same income as before, while in others the maximum levy fell just short of bringing in the former income.

The table points out clearly that districts having the high and low in the amount brought in from this sources are identically the districts with high and low in total income. There is, however, a difference in the relationship of income from property taxation to the total income. The income from property taxes at Epping made up nearly eighty-two per cent of the total income, while Nesson (Ray), where the property tax income made up about fifty-six per cent of the total income, set the other extreme. The property tax income of Wheelock in the graded and consolidated group made up eighty-nine per cent of the total income while Pioneer with its fifty-three sections of land and no railroad mileage found a fifty-eight per cent relationship. Among the rural school group the relationship in the income from property tax to total income varied from approximately eighty-three per cent in Districts 28 and 30 to approximately forty-eight per cent in District 16.

Income from State and County Apportionments

The principal source of income outside of income from property taxation especially in districts maintaining only eight or ten grades in their schools, consists of money received from the state apportionment and county apportionment. The state apportionment, which is derived from (1) fines and penalties arising from the violation of state laws, (2) the proceeds from the leasing of school lands and (3) the interest and income arising from the state permanent school fund created by money accumulated through the sale of school lands, is distributed among the various districts throughout the state by the Superintendent of Public Instruction in proportion to the children listed in the census enumeration. The county apportionment, which consists of money derived

from the county mill tax and the county poll tax, is distributed by the county superintendent among the various districts of the county according to the census enumeration. The incomes from these two sources are by no means stable but tend rather to fluctuate from year to year. Their greatest value lies in the fact that their distribution is proportionate and thus present no inequalities in that respect. A weakness might be evident, however, in that the more able districts are given the same aid as the less wealthy ones.

The study of columns three and four indicate two things: first, that the state apportionments were in nearly all cases much larger than the county apportionment; and second, that the amounts in each column varied greatly among the groups themselves and also among the various districts within each group. The classified school districts showed an income of 11,273.51 dollars from state apportionment, Williston receiving the most with 5,015.12 dollars. Wildrose ranked next with 1,337.51 dollars and Sauk Valley the lowest with 431.84 dollars. The county apportionment for this group totaled 5,203.11 dollars, the ratio and ranking being necessarily the same as under the state apportionment. The graded and consolidated group had an income of 4,788.91 dollars from state apportionment, Buford being lowest with 104.23 dollars and Hamlet the highest with 454.01 dollars. The county apportionment totaled 2,181.49 dollars, the districts ranking identically with the state apportionment. This group had an average income of 342.06 dollars from state apportionment and 155.82 dollars from county apportionment. The forty-three rural districts received an income of 10,816.17 dollars in the state apportionment and 4,917.52 dollars in the county

apportionment, averaging 251.30 dollars per school in the former and 114.36 dollars per school in the latter.

State Aid

Up until the year 1934, when the state legislature failed to appropriate money for that purpose, North Dakota had a second form of aid to its schools commonly known as state aid. This aid had been apportioned each year in amounts varying with the class of school maintained and the standard kept within that class. Classified schools had received aid as follows: first class, 800 dollars; second class, 500 dollars; third class, 300 dollars. Consolidated schools received aid as follows: first class, 300 dollars; second class, 250 dollars; third class, 200 dollars. Graded schools received: first class, 100 dollars; second class, seventy-five dollars; and third class, fifty dollars. Rural schools received: first class, fifty dollars; second class, forty dollars; third class, thirty dollars. When the tax rate for the preceding year in rural, graded and consolidated schools is four mills and less than seven, the above amounts shall be doubled, and when the tax rate for the preceding year is seven mills or above, the above amounts shall be trebled. If appropriations made were not sufficient to meet the demand for state aid, the amounts were distributed pro rata to the schools entitled to it. The main weakness of state aid as a subvention to school districts lay largely in the fact that aid was given only to the more wealthy districts who could afford the expense of bringing its schools up to the required standards, while the less wealthy, who were really in need of aid, received none in its failure to meet the standards. Then the amounts of aid granted made up such a small percentage of the

income required that it failed in its purpose as an incentive for schools to raise its standard.

Column five of Table 2 indicated the average state aid received the five-year period. As mentioned previously the figures represent a five-year average, so the annual amounts received are considerably more than the reader would tend to deduce from the table. As would be expected, the larger schools in the clasified group received the larger amounts in that they were first class, the others ranking in proportion according to classification. The graded and consolidated group ranged rather consistently between two and three hundred dollars, showing a uniform standardization into the three classes. Most variation is apparent in the rural group, where District 3 received 204.84 dollars, District 28 received 27.38 dollars and Districts 87 and 93 received none. State aid totaled as follows among the three groups of schools: classified school districts, 2,539.90 dollars; graded and consolidated schools, 3,068.59 dollars, and rural schools, 4,551.99 dollars. The three groups averaged 317.49 dollars, 219.19 dollars and 113.80 dollars per school respectively.

Comparison of Sources of Income of Classified, Graded and Consolidated, and Rural School Districts

Table 3 indicates not only the per cent of income from each of the various sources in each of the classes of school but also brings out an interesting comparison between the different classes in the matter of income. Here it will be seen the graded and consolidated school districts received a higher percentage of their income from property taxation than did either of the two classes of schools. The rural group, with 11.6 per cent of their income coming from state apportionment, ranked con-

Table 3

The Average Per Cent of Income Obtained from Various Sources During the Five-Year Period 1930-1934

Type of School	Property Taxation	State Apportion	County Apportion	State Aid
Classified	70.8%	6.9%	3.2%	1.5%
Graded and Consolidated	74.9	6.5	3.0	4.2
Rural	70.3	11.6	5.3	4.8

siderable over the other two groups in this source. They also ranked first in both the county apportionment column and the state aid column, although the relative percentage had dropped considerably lower. Reading the percentages horizontally under each type of school gives one a good idea of the relative importance of each source of income to each type of school. In the classified group, significance may be attached to the fact that the state and county apportionments made up approximately ten per cent of the income and that state aid only made up one and one-half per cent of the income. Undoubtedly tuition from other districts made up a greater portion of the remaining seventeen per cent of the total income not shown in the table. Attention may be called to the fact that state and county apportionments together made up approximately ten per cent of the income in the graded and consolidated group and became approximately seventeen per cent of the income in the rural group. In these two groups state aid was four to five per cent of the total income. Undoubtedly all these percentages were affected by the large percentage of tax delinquencies in this five-year period, a factor which had cut down the figures representing income from property taxation an appreciable degree. However, this may be offset somewhat by the

study of the annual amounts apportioned to the various school districts by the state and county, which also indicate a reduction of over fifty per cent during the five-year period in an extremely large number of cases.

Comparison of Average Property Tax Income with Average Property Taxes Levied

The extent to which the incomes actually received are fulfilling the anticipated incomes as made by the district boards of education through their property tax levies may be gathered from Table 4. In this table the average property tax income actually received is listed together with the average property taxes levied so that a comparison may easily be made. The relationship or ratio between the total property tax income and the total property taxes levied were as follows in the three groups: classified school districts, seventy-five per cent; graded and consolidated school districts, seventy-nine per cent; and rural districts, sixty-nine per cent. A closer study of the individual districts in each group indicate wide variations in ratio, with the greatest range evident among the rural group, as is to be expected in that the tax income comes entirely from farm lands, which have been nearly totally unproductive through a series of drought years. The tax levy in mills is brought into the table merely as an indication of the extent to which each district is using the maximum possible income that might be available under the excess levy law. It may be noted that six of the eight classified schools are or have, at some time during the five-year period, been using the maximum levy. Many of the schools in the other two classifications have also found it necessary to use the maximum levy to seek the income necessary to maintain their schools.

Table 4

Average Property Tax Income and Average Property Taxes Levied in School Districts of Williams County for the Five-Year Period 1930-1934

District	Property Tax Income[a]	Property Taxes Levied[a]	Property Tax Levy in Mills
	classified schools		
Williston	$ 52,079	$ 65,846	25.676
Nesson	10,672	15,633	23.174
Sauk Valley	7,863	9,650	23.144
Tioga	8,980	10,443	18.000
Cottonwood Lake	8,236	11,260	22.590
Epping	9,646	11,475	18.000
Wildrose	10.542	13,990	26.540
Grenora	7,662	9,584	22.736
Total	153,881	115,670	
	graded and consolidated schools		
Buford	2,469	2,555	8.470
Eight Mile	4,985	5,817	10.388
Lindahl	2,472	3,901	20.392
Wheelock	5,910	7,459	22.354
Barr Butte	4,258	5,317	20.700
Round Prairie	2,405	3,960	15.626
Pioneer	2,530	4,205	16.400
Bigstone	4,105	5,162	13.688
Hartland	3,348	4,208	11.908
Thorstad	5,728	6,897	20.00
Brooklyn	3,907	5,376	21.188
Springbrook	3,952	4,941	19.886
Golden Valley	4,347	5,601	13.164
Hamlet	5,977	6,083	26.188
Total	71,482	56,393	
	rural schools		
3	2,288	3,186	16.400
4	910	1,517	12.492
7	6,328	6,972	10.818
16	1,492	1,812	9.008
17	1,056	1,467	11.740
23	1,368	749[b]	12.000[b]
24	1,943	5,723	16.714
28	3,314	3,734	4.674
29	1,983	2,562	11.638
30	3,180	3,886	8.840
31	1,943	2,264[c]	12.522[c]

Table 4 (continued)

Average Property Tax Income and Average Property Taxes Levied in School Districts of Williams County for the Five-Year Period 1930-1934

District	Property Tax Income[a]	Property Taxes Levied[a]	Property Tax Levy in Mills
	rural schools		
33	$ 1,995	$ 2,890	12.280
34	724	2,164[b]	14.000[b]
35	1,667	2,852	13.070
36	1,874	2,731	13.560
38	1,231	1,751	9.154
39	1,517	1,851	10.100
42	1,642	2,644	11.382
43	1,176	1,290[b]	8.462[b]
44	1,165	1,354	9.34
46	516	923	11.486
65	1,534	2,655	12.312
66	2,115	3,573	21.200
67	1,046	1,348[b]	9.084[b]
70	882	1,100	17.788
71	2,676	3,632	18.002
72	929	1,106[b]	7.574[b]
73	987	1,528	17.552
76	1,760	3,277	15.324
77	603[f]	1,226[b]	10.100[b]
79	1,380	2,039[b]	14.800
80	876	1,743	21.000
82	724	1,395[b]	10.620[b]
83	802	1,251	13.334
84	604	717[b]	7.736[b]
86	1,652	2,790	14.486
87	486	670[b]	8.948[b]
89	461	481[b]	4.024[b]
91	1,582	2,722	18.042
92	1,190	1,810[b]	12.980[b]
93	1,814	2,727	16.140
96	909	1,175[b]	10.676[b]
97	1,189	1,847	13.784
Total	$95,044	65,513	

[a]Includes levy for tuition in districts not maintaining high schools.

[b]No levy in 1930

[c]No levy in 1933

[d]No levy in 1931

[f]No report made in 1934

Conclusions

Great variations in total incomes exist among the school districts of Williams County.

One-fourth of the rural districts have per school incomes of less than 600 dollars.

The district tax supplies the greater portion of funds available for school purposes in Williams County.

The state and county apportionments supply a comparatively small portion of the total income, but, nevertheless, ranking second in amount of revenue furnished. The rural schools show the highest percentage from this source.

The state apportionment furnishes a little more than twice as much revenue to the school districts as does the county apportionment.

State aid contributed a small portion of the total income to classified school districts, but ranks somewhat higher in percentage in the other two groups.

Property tax incomes fall short of reaching the property tax levies by a comparatively large percentage.

CHAPTER 3

DEBT SERVICE

In order that they may secure better facilities of housing, plant operation, instructional service and the meeting of other expenses, the school districts of North Dakota are permitted by law to secure credit from various sources under restrictions specified by law. Such credit may be in one of the three following forms: (a) the sale of bonds, (b) the sale of certificates of indebtedness, and (c) the issuance of registered warrants. Bonds had been used almost exclusively in the financing of building programs until a recent law[1] made it possible to refinance certificates of indebtedness through the sale of bonds. Payments on such bonds are met through special levy on the school district by the county auditor, the receipts handled and paid by the auditor without distribution to the local districts.

Certificates of indebtedness are short term loans of from one to eighteen months, issued on the security of due and uncollected taxes for specified years. The uncollected taxes pledged for this purpose are held by the county auditor until the collections for those years reach a sum covering the certificates.

In a law[2] effective July 1, 1933, school districts are permitted, on inability to find market for their certificates of indebtedness after the fulfillment of advertising requirements, to issue and register warrants to the amount of previously unpledged uncollected taxes. This last form of indebtedness has become widely used during the depression

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[1]Laws of North Dakota, 1931, pp. 341-343.
[2]Laws of North Dakota, 1933, p. 370.

and drought period when the securing of short term credit became almost impossible.

Total Indebtedness of School Districts

Table 5 represents the total indebtedness of school districts in Williams County on June 30, 1934, the date terminating the five-year period herein studied. This total was secured by adding the bonded indebtedness, the certificates of indebtedness outstanding, and the warrants outstanding on that date. As indicated in the table, the eight classified school districts were carrying an indebtedness which ranged from 12,382.01 dollars to 297,151 dollars. The grand total for the classified schools reached 604,502.61 dollars, an average of 46,500.20 dollars per district. Twelve of the fourteen graded and consolidated school districts had an indebtedness of some kind. Buford and Eight Mile (Trenton) districts had no debt. Of the others Hartland, Thorstad, Brooklyn and Golden Valley had bonded indebtedness only, while Wheelock had an indebtedness of bonds and certificates, but recorded no outstanding warrants. This group had a total indebtedness of 147,601.76 dollars, an average of 10,542.98 dollars per district. Eight of the forty-three rural districts had no debt whatsoever. The other districts indicated some form of indebtedness ranging from 80.24 dollars to 14,390.88 dollars in amount. Those rural districts had a grand total indebtedness of 171,505.38 dollars, an average of 3,988.50 dollars per district.

Bonded Indebtedness of School Districts

Table 6 presents the figures relating to the bonded indebtedness of each of the districts in Williams County during the period beginning

Table 5

The Total Indebtedness of School Districts of Williams County for the Year Ending June 30, 1934

District	Bonded Indebtedness	Certificates of Indebtedness	Warrants Outstanding	Total Indebtedness
		Classified schools		
Williston	$ 285,000		12,151.95	297,151.95
Nesson	40,000	9,000	9,368.00	58,368.00
Sauk Valley	27,800	5,500		33,300.00
Tioga	12,000		5,364.99	17,364.99
Cottonwood Lake	50,400	2,200	6,000.14	58,200.14
Epping	12,000		382.01	12,382.01
Wildrose	83,000	16,515.63	4,019.89	103,535.52
Grenora	23,00	1,200		24,200.00
Total	533,200	34,415.63	37,286.98	604,502.61
Average	66,680	4,301.98	4,660.87	46,500.20
		graded and consolidated schools		
Buford				
Eight Mile				
Lindahl	6,000	4,330.00	2,689.26	13,019.26
Wheelock	14,000	5,000.00		19,000.00
Barr Butte	21,000	1,900.00	1,595.13	24,495.13
Round Prairie	5,000	4,050.00	1,720.90	10,770.90
Pioneer	6,000	2,455.00	3,637.27	12,092.22
Bigstone	1,000	1,050.00	2,726.55	4,776.55
Hartland	3,500			3,500.00
Thorstad	6,000			6,000.00
Brooklyn	3,000	1,500.00	2,543.64	7,043.64
Springbrook	15,500			15,500.00
Golden Valley	3,000			3,000.00
Hamlet	20,000	5,000.00	3,404.06	28,404.06
Total	104,000	25,285.00	18,316.76	147,601.76
Average	7,428.57	1,806.07	1,308.34	10,542.98
		rural schools		
3	4,500	3,247.22	1,362.59	9,109.81
4		1,300.00	1,232.54	2,532.54
7				
16	7,000	2,020.75		9,020.75
17	7,500		881.59	8,381.59
23	2,400	1,500.00	1,947.11	5,847.11
24	7,000	2,552.00	4,557.80	14,109.80
28		1,000.00		1,000.00

Table 5 (continued)

The Total Indebtedness of School Districts of Williams County for the Year Ending June 30, 1934

District	Bonded Indebtedness	Certificates of Indebtedness	Warrants Outstanding	Total Indebtedness
		Rural schools		
29	$ 3,100	3,090.00		6,190.00
30				
31				
33		2,000.00		2,000.00
34			3,204.04	3,204.40
35	11,600		2,790.88	14,390.88
36	3,000	1,077.96		4,077.96
38				
39	2,000		816.08	2,816.08
42	2,000	2,556.68	889.89	5,446.57
43				
44				
46	1,000		155.53	1,155.53
65	6,000	4,412.00	1,019.42	11,431.42
66		2,500.00	1,491.89	3,991.89
67			880.24	880.24
70	3,000		347.78	3,347.78
71	3,500			3,500.00
72				
73	500	1,500.00		2,000.00
76	6,000	2,600.00	766.29	9,366.29
77			1,527.35	1,527.35
79	1,200	1,000.00	1,372.37	3,572.37
80	4,000	772.50	2,199.84	6,972.34
82		1,000.00	1,821.32	2,821.32
83	4,000	1,245.64	2,203.64	7,449.28
84	1,000			1,000.00
86	3,500	3,435.00		6,935.00
87		600.00	397.42	997.42
89				
91	900	2,000.00	1,721.32	4,621.82
92		900.00	456.24	1,356.24
93	1,000	700.00	2,599.06	4,299.06
96	1,500		852.88	2,352.88
97		1,800.00	2,000.00	3,800.00
Total	$ 87,200	44,809.75	39,495.63	171,505.38
Average	2,027.88	1,062.08	918.50	3,988.50

July 1, 1929 and ending June 30, 1934. At the beginning of the five-year period, all eight classified schools had bonds outstanding. Epping listed the lowest with 25,000 dollars and Williston the highest with 156,000 dollars. The total for all classified districts was 476,700 dollars. During the five-year period, four classified school districts sold bonds totaling 301,400 dollars. Of this amount, Williston issued bonds totaling 270,000 dollars in the erection of a new building and the other three districts issued bonds to take up certificates of indebtedness as permitted under the new law. They redeemed 294,000 dollars in bonds (62 per cent of the 1929 amount) during the five-year period but this redemption did not offset the new amounts issued so that the 1934 total of 533,000 dollars surpassed the initial amount by 46,500 dollars. Two districts, Williston and Sauk Valley Special, showed a greater bonded indebtedness on June 30, 1934 than in 1929. Sauk Valley has issued 7,000 dollars in bonds for the purpose of meeting past dus certificates of indebtedness, meanwhile redeeming only 2,700 dollars in bonds. During the five-year period Tioga, Epping, Ray and Grenora, show a favorable retirement of bonds: Tioga retired sixty-seven per cent; Epping, fifty-three per cent, Ray thirty per cent and Grenora, twenty-seven per cent of the bonded indebtedness.

Graded and consolidated school districts had 138,600 dollars outstanding in bonds in 1929. This amount was reduced but sixteen per cent to 116,400 dollars by 1934 because of the issuance of 15,500 dollars in bonds in the erection of a new building at Springbrook. During the five-year period, only three graded and consolidated districts issued new bonds, Springbrook for the constructions of the new

Table 6

Trends in Bonded Indebtedness of School Districts of Williams County, July 1, 1929, to June 30, 1934

District	Bonds Outstanding July 1, 1929	Bonds Issued	Bonds Redeemed	Balance in Bonds June 1934
		classified schools		
Williston	$ 156,000	270,000	141,000	285,000
Nesson	57,000		17,000	40,000
Sauk Valley	23,500	7,000	2,700	27,800
Tioga	31,200		9,200	12,000
Cottonwood Lake	60,000	9,400	19,000	50,400
Epping	25,000		13,000	12,000
Wildrose	90,000	15,000	22,000	83,000
Grenora	34,000		9,000	23,000
Total	476,700	301,400	294,900	533,200
		graded and consolidated schools		
Buford				
Eight Mile				
Lindahl	10,600		4,600	6,000
Wheelock	18,000		4,000	14,000
Barr Butte	33,000		12,000	21,000
Round Prairie	3,000	3,000	1,000	5,000
Pioneer	20,000		14,000	6,000
Bigstone	1,000			1,000
Hartland	8,000		4,500	3,500
Thorstad	10,000	9,000	600	18,400
Brooklyn	4,000		1,000	3,000
Springbrook		15,500		15,500
Golden Valley	6,000		3,000	3,000
Hamlet	25,000		5,000	20,000
Total	138,600	27,500	49,700	116,400
		rural schools		
3	6,500		2,000	4,500
4				
7				
16	7,000			7,000
17	5,000	3,500	1,000	7,500
23	1,200	2,400	1,200	2,400
24	11,000		4,000	7,000
28	2,400		2,400	

Table 6 (continued)

Trends in Bonded Indebtedness of School Districts of Williams County, July 1, 1929, to June 30, 1934

District	Bonds Outstanding July 1, 1929	Bonds Issued	Bonds Redeemed	Balance in Bonds June 1934
		rural schools		
29	3,100			3,100
30				
31				
33				
34				
35	10,000	6,600	5,000	11,600
36	4,000		1,000	3,000
38				
39	4,000		2,000	2,000
42	4,000		2,000	2,000
43				
44				
46		1,000		1,000
65	6,000			6,000
66	3,850		3,850	
67				
70		3,000		3,000
71	3,300	2,000	1,800	3,500
72				
73	2,500		2,000	500
76	13,000		7,000	6,000
77				
79	2,400		1,200	1,200
80		4,000		4,000
82				
83	4,000			4,000
85	2,500		1,500	1,000
86		3,500		3,500
87				
89				
91		900		900
92	3,200		2,200	1,000
96		1,500		1,500
97				
Total	$98,900	86,180	40,150	87,200

building and Round Prairie and Thorstad for the payment of certificates of indebtedness. Two districts, Buford and Eight Mile (Trenton), had no bonded indebtedness during the period. The graded and consolidated group redeemed 49,700 dollars in bonds (36 per cent of the 1929 total) during the five-year period. Golden Valley, Hartland, Pioneer, Lindahl redeemed a very high percentage of their bonds. All other districts made satisfactory attempts to retire their bonds, with the exception of Thorstad, which redeemed only six per cent and Bigstone, which failed to reduce its indebtedness. Springbrook naturally failed to enter the redemption column due to the recentness of its bond issue.

Twenty-three rural districts were free from any bonded indebtedness in 1929 and seventeen of these same districts were still bond debt free in 1934. The other twenty districts indicated a total bonded indebtedness of 98,950 dollars in 1929. Ten districts issued new bonds totaling 28,400 dollars (an increase of nearly 29 per cent over the 1929 total) during the five-year period. These thirty districts redeemed 40,150 dollars in bonds during the period which left a bonded indebtedness of 87,200 dollars still outstanding in 1934. Only two districts fully retired their bonds during the period.

Certificates of Indebtedness

A study of the certificates of indebtedness column of Table 7 indicates a widespread use of this form of short term credit. Four classified districts had sold a total of 30,686.65 dollars in 1929, of which Wildrose had 24,000 dollars. All districts, except Williston, availed themselves of the use of certificates of indebtedness, during the five-year period studied, issuing a total of 58,419.23 dollars.

Table 7

Trends in Certificates of Indebtedness of School Districts of Williams County, July 1, 1929 to June 30, 1934

District	Certificates Outstanding July 1, 1929	Certificates Issued	Certificates Redeemed	Balance in Certificates June 1934
		classified schools		
Williston				
Nesson	$ 660.00	17,600.00	9,260.00	9,000.00
Sauk Valley	9,000.00	6,385.60	9,884.60	5,500.00
Tioga		3,000.00	3,000.00	
Cottonwood Lake	6,026.65	10,569.00	14,395.65	2,200.00
Epping		2,650.00	2,650.00	
Wildrose	24,000.00	15,515.63	23,000.00	16,515.63
Grenora		2,700.00	1,500.00	1,200.00
Total	39,686.65	58,419.23	63,690.25	33,415.63
		graded and consolidated schools		
Buford				
Eight Mile				
Lindahl		7,828.75	3,498.75	4,330.00
Wheelock	7,000.00	12,000.00	14,000.00	5,000.00
Barr Butte	1,500.00	4,450.00	4,050.00	1,900.00
Round Prairie	2,500	15,618.00	14,068.00	4,050.00
Pioneer		4,455.00	2,000.00	2,455.00
Bigstone	1,800.00	1,050.00	1,800.00	1,050.00
Hartland				
Thorstad	6,000.00	5,000.00	11,000.00	
Brooklyn		4,000.00	3,500.00	1,500.00
Springbrook				
Golden Valley				
Hamlet	8,000.00	8,877.89	11,877.89	5,000.00
Total	26,800.00	63,279.64	64,794.64	25,285.00
		rural schools		
3		3,247.22		3,247.22
4		1,300.00		1,300.00
7				
16		2,092.75	72.00	2,020.75
17	3,000.00	500.00	3,500.00	
23		4,400.00	2,900.00	1,500.00
24		5,052.00	2,500.00	2,552.00
28		1,000.00		1,000.00

Table 7 (continued)

Trends in Certificates of Indebtedness of School Districts of Williams County, July 1, 1929 to June 30, 1934

District	Certificates Outstanding July 1, 1929	Certificates Issued	Certificates Redeemed	Balance in Certificates June 1934
		rural schools		
29		6,090.00	3,000.00	3,090.00
30				
31		139.86	139.86	
33		4,000.00	3,000.00	2,000.00
34		3,000.00	3,000.00	
35		2,500.00	2,500.00	
36		1,077.96		1,077.66
38				
39				
42		5,056.68	2,500.00	2,556.68
43				
44				
46		1,600.00	1,600.00	
65		7,612.00	3,200.00	4,412.00
66		3,000.00	500.00	2,500.00
67		700.00	700.00	
70		1,600.00	1,600.00	
71		2,400.00	2,400.00	
72				
73		1,500.00		1,500.00
76		5,800.00	320.00	2,600.00
77				
79		1,000.00		1,000.00
80		1,522.50	750.00	772.50
82		1,000.00		1,000.00
83		1,245.64		1,245.64
84				
86		7,435.00	4,000.00	3,435.00
87		600.00		600.00
89				
91		2,000.00		2,000.00
92		1,020.00	120.00	900.00
93		700.00	1,000.00	700.00
96				
97		1,800.00		1,800.00
Total	$ 3,000.00	82,991.61	41,181.86	44,809.45

However Ray, Alamo, and Wildrose made the major use of them. Certificates totaling 63,690.25 dollars were redeemed during the five-year period. The records show that at least 31,400 dollars of the above amount was paid off through the issuance of bonds.

In the graded and consolidated group, six of the fourteen districts had 28,800 dollars in certificates of indebtedness outstanding in 1929. Nine districts availed themselves of the use of certificates during the five-year period, selling 63,279.64 dollars, with Wheelock, Lindahl and Hamlet heading the list. The nine districts redeemed 64,794.64 dollars during the same period, in which Wheelock, Thorstad and Hamlet retired more than they issued and Barr Butte and Round Prairie very nearly as much as they issued. One rural district, out of the forty-three, had certificates of indebtedness outstanding in 1929 to the amount of 3,000 dollars. Thirty-two sold certificates totaling 82,991.61 dollars. Eight districts redeemed all certificates of indebtedness they had issued during the five-year period; fifteen redeemed a portion; while nine districts failed to redeem any. The year 1934 saw 44,809.45 dollars in certificates of indebtedness still outstanding, ranging from 600 dollars in District 87 to 4,412 dollars in District 65.

Warrants Outstanding

The criterion for determining to what extent warrants outstanding could be considered a part of the district's indebtedness presented somewhat of a problem. The records did not in any way separate the registered warrants from the cash warrants but did record the cash on hand at the end of the year, thus giving an arbitrary standard by which

to determine what districts were financing themselves through registered warrants. The data of warrants outstanding for the various districts as listed in Table 5 were determined by comparing warrants outstanding with cash on hand as listed in the records of the county superintendent. School districts with sufficient cash on hand to cover the listed warrants outstanding were omitted from the table as it was felt that the warrants had merely failed to be presented before the date of the report. Where the outstanding warrants greatly exceeded the cash on hand, the general deduction was made that the warrants were of a registered type. Classified school districts showed a total of 37,286.96 dollars in outstanding warrants, an amount exceeding the total of the certificates of indebtedness. Sauk Valley and Grenora indicated a lack of outstanding warrants while Epping had a very small amount. In the graded and consolidated group, seven districts had an indebtedness of 18,316.76 dollars in the form of warrants. Barr Butte had the lowest amount with 1,595.13 dollars and Pioneer had the highest amount with 3,637.27 dollars. Twenty-six rural school districts indicated enough outstanding warrants over cash on hand to conclude that the total indebtedness of outstanding warrants was 39,495.63 dollars, approximately 6,000 dollars below the total for certificates of indebtedness.

Tax Levies for Interest and Sinking Fund

Table 8, which displays the individual levy for interest and sinking fund, the general levy and the total levy, is probably of greatest interest to the tax power in that it gives him an idea how his school tax dollar is distributed. The averages are somewhat affected

Table 8

The Comparison in Mills of the Average Tax Fund Levy and Average Sinking Fund Levy with the Average Total Levy of the School Districts of Williams County for the Five-Year Period 1930-1934

District	Total Levy	General Fund Levy	Sinking Fund Levy	Per Cent of Sinking Fund Levy
		classified schools		
Williston	38.742	25.676	13.066	34
Nesson	30.996	23.174	7.822	25
Sauk Valley	30.262	23.144	7.118	24
Tioga	22.12	18.00	4.12	19
Cottonwood Lake	37.51	22.59	14.92	40
Epping	21.33	18.00	3.33	16
Wildrose	41.958	26.54	15.418	37
Grenora	33.212	22.736	10.476	32
		graded and consolidated schools		
Buford	8.47	8.47	-	-
Eight Mile	10.388	10.388	-	-
Lindahl	25.154	20.392	4.762	19
Wheelock	27.736	22.354	5.382	19
Barr Butte	31.818	20.70	11.118	35
Round Prairie	17.580	15.626	1.954	11
Pioneer	22.142	16.40	5.742	26
Bigstone	13.714	13.668	.046[a]	-
Hartland	13.400	11.908	1.492	11
Thorstad	24.422	20.00	4.422	18
Brooklyn	23.684	21.188	2.496	11
Springbrook	22.102	19.886	5.216[b]	20
Golden Valley	15.258	13.164	2.094	14
Hamlet	34.790	26.188	8.602	25
		rural schools		
3	19.75	16.40	3.35	17
4	12.492	12.492	-	-
7	10.818	10.818	-	-
16	12.540	9.008	3.532	28
17	17.428	11.74	5.688	33
23	13.358	12.00[c]	1.358	10
24	22.338	16.714	5.624	25
28	4.738	4.674	.064[a]	2
29	12.148	11.638	.51	.04
30	8.84	8.84	-	-
31	12.522	12.522[c]	-	-
33	12.28	12.28	-	-

Table 8 (continued)

The Comparison in Mills of the Average Tax Fund Levy and Average Sinking Fund Levy with the Average Total Levy of the School Districts of Williams County for the Five-Year Period 1930-1934

District	Total Levy	General Fund Levy	Sinking Fund Levy	Per Cent of Sinking Fund Levy
		rural schools		
34	14.112	14.00	.112[a]	1
35	22.698	13.07	9.628	42
36	15.544	13.56	1.984	13
38	9.134	9.134	-	-
39	12.05	10.10	1.95	16
42	12.494	11.382	1.112	9
43	10.08	8.462	1.618[a]	16
44	9.852	9.34	.512[a]	5
46	12.362	11.486	.876[d]	7
65	15.362	12.312	3.508	22
66	22.24	21.20	1.04[e]	5
67	9.084	9.084[g]	-	-
70	23.288	17.788	5.50[b]	2
71	18.976	18.002	.974	5
72	7.574	7.574[g]	-	-
73	19.228	17.552	1.676[f]	7
76	18.860	15.324	3.536	19
77	10.10	10.10[g]	-	-
79	15.634	14.80[g]	.824	5
80	24.918	21.00	3.918[b]	12
82	10.62	10.62[g]	-	-
83	18.670	13.334	5.336	30
84	9.822	7.736[g]	2.086	21
86	16.278	14.486	1.742[b]	11
87	8.948	8.948[g]	-	-
89	4.024	4.024[g]	-	-
91	18.042	18.042	-	-
92	19.98	12.98[g]	-	-
93	17.50	16.14	1.37[b]	7
96	11.976	10.676[g]	1.30	-
97	13.784	13.784	-	-

[a]Retired in 1930 (first year)
[b]First Levy 1932
[c]Retired in 1931 (second year)
[d]First Levy 1933
[e]Retired in 1932 (third year)
[f]One year omitted - no report
[g]No levy made one year

by the reduction of taxable valuations from seventy-five to fifty per cent under the law passed in 1932. This reduction tended to cause an increase in the levies after that year for although the valuations had been lowered, the expenditures remained constant and therefore could only be met through an increased levy.

The classified school districts indicated a total tax levy range from the low of 21.33 mills at Epping to the high of 41.958 mills at Wildrose. Six districts had a total levy of thirty mills or more. The general fund levy for these six districts ran well above eighteen mills, indicating that an extra levy election had been resorted to in order to raise the funds necessary to maintain their schools. The sinking fund levies ranged from the low of 3.33 mills at Epping to the high of 15.418 mills at Wildrose, each of the individual school districts holding approximately the same ranking as in the total levy column. Buford ranked lowest in the graded and consolidated group with a total tax levy of 8.47 mills and Hamlet ranked the highest with a total tax levy of 34.79 mills. Barr Butte also had a tax levy above thirty mills. Three other districts run total levies averaging between twenty-five and thirty mills. Seven districts of this group have general fund levies above the legal limit of sixteen mills, while the general fund tax levt range is from 8.47 mills to 22.354 mills. Three districts show no levy for sinking fund purposes. Barr Butte ranks highest in this column with 11.118 mills levied for interest and sinking fund purposes and Bigstone low with .046 mills. The rural districts also show a great total tax levy range with a low of 4.024 mills in District 89 and a high of 24.918 mills in District 80. The general fund levy

extends from a low of 4.024 mills in District 89 to a high of 21.20 mills in District 66. Twelve school districts had levies with the legal limit of fourteen mills. Fifteen rural districts show no levy for interest and sinking fund; eight had a five-year average of less than one mill. District 35 indicated the high levy for this purpose, reporting 9.628 mills.

Column four of Table 8, the per cent that the interest and sinking fund is to the total levy, brings out very clearly the relationship of indebtedness levy to the general fund levy. In the classified school districts the percentages range from six per cent as the low to thirty-six per cent as the high, with four school districts having over thirty per cent of the total tax levy going for interest and sinking fund purposes and with two other districts having approximately twenty-five per cent going for those purposes. In the graded and consolidated group, an extraordinary range existed. Burr Butte indicated thirty-five per vent of the total levy going for sinking fund purposes while Bigstone had no levy for that purpose. The other graded and consolidated districts indicated figures scattered between eleven per cent and twenty-six per cent. A study of the rural districts in this column indicates an even greater spread. District 35 has a sinking fund levy which is forty-two per cent of the total levy. Fifteen rural districts had no levies whatsoever for interest and sinking fund purposes.

Indebtedness Per Child Enrolled

The true picture of inequalities in debt service is presented most clearly in Table 9 on average indebtedness per child in enrollment. Cottonwood Lake (Alamo) ranked highest with an indebtedness of

Table 9

The Average Indebtedness Per Child Enrolled of School Districts of Williams County for the Five-Year Period 1930-1934

District	Average Indebtedness Per Child Enrolled
classified schools	
Williston	$ 204.37
Nesson	218.61
Sauk Valley	346.88
Tioga	78.22
Cottonwood	388.00
Epping	84.23
Wildrose	359.55
Grenora	163.30
Total	1,843.16
Average	230.40
graded and consolidated schools	
Buford	-
Eight Mile	-
Lindahl	265.70
Wheelock	372.55
Barr Butte	260.55
Round Prairie	207.21
Pioneer	198.23
Big Stone	58.97
Hartland	76.10
Thorstad	68.21
Brooklyn	119.38
Springbrook	262.71
Golden Valley	65.21
Hamlet	368.88
Total	2,323.70
Average	165.98
rural schools	
3	350.38
4	97.30
7	-
16	122.02
17	320.06
23	146.18
24	369.48
28	11.76

Table 9 (continued)

The Average Indebtedness Per Child Enrolled of School Districts of Williams County for the Five-Year Period 1930-1934

District	Average Indebtedness Per Child Enrolled
rural schools	
29	$ 187.57
30	-
31	-
33	47.62
34	89.00
35	259.77
36	72.82
38	-
39	56.37
42	111.15
43	-
44	-
46	82.54
65	158.77
66	147.92
67	63.21
70	334.79
71	106.06
72	-
73	142.85
76	283.83
77	84.85
79	94.01
80	268.17
82	128.23
83	338.60
84	85.34
86	126.10
87	99.74
89	-
91	112.73
92	35.69
93	116.19
96	235.29
97	146.15
Total	$5,799.54
Average	134.18

388.00 dollars per child enrolled, nearly five times higher than the 78.22 dollars of Tioga or the 84.23 dollars of Epping. Wildrose and Sauk Valley Special at McGregor ranked next with 359.56 dollars and 346.88 dollars respectively, nearly four and one-half times that of Tioga or Epping. The graded and consolidated districts present an even greater range, with Buford and Eight Mile districts having no indebtedness at one extreme and Hamlet with a per child indebtedness of 368.88 dollars at the other extreme. The forty-three rural districts indicated a very similar range with eight districts having no indebtedness per child and District 24 having a 369.48 dollar indebtedness per child in enrollment. Further inequality among rural schools is shown in that five districts have an indebtedness of over three hundred dollars per child, while nineteen districts have less than one hundred dollars per child.

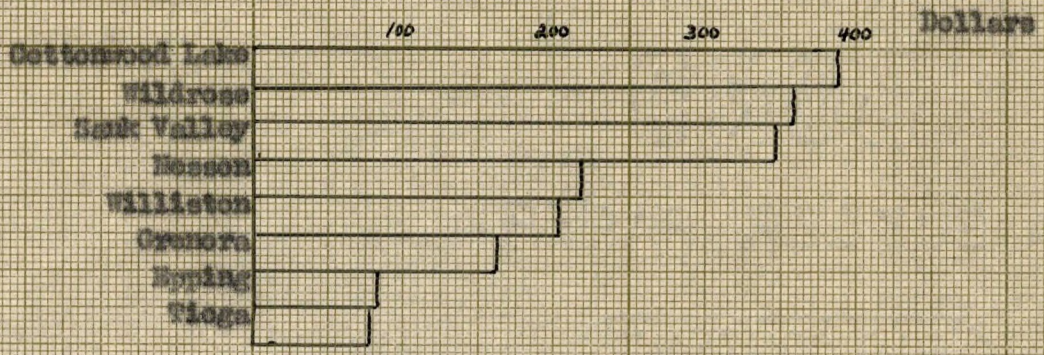
Figures 1 and 2 picture the indebtedness per child enrolled in the rank order of amounts. A glance reveals the wide range of indebtedness. Inasmuch as the same scale is used in the two figures, the similarity in variations of indebtedness within each group becomes apparent, as does the fact that the upper limits of indebtedness per child are nearly identical in amounts.

A comparison of the average indebtedness per child as they exist within the three groups of school districts finds the classified school districts ranking highest with an average indebtedness of 230.40 dollars per child, the graded and consolidated group next with an average indebtedness of 165.98 dollars per child and the rural group lowest with an average of 134.18 dollars per child. Undoubtedly much of the higher

Figure 1

Average Indebtedness Per Child Enrolled

classified schools



graded and consolidated schools

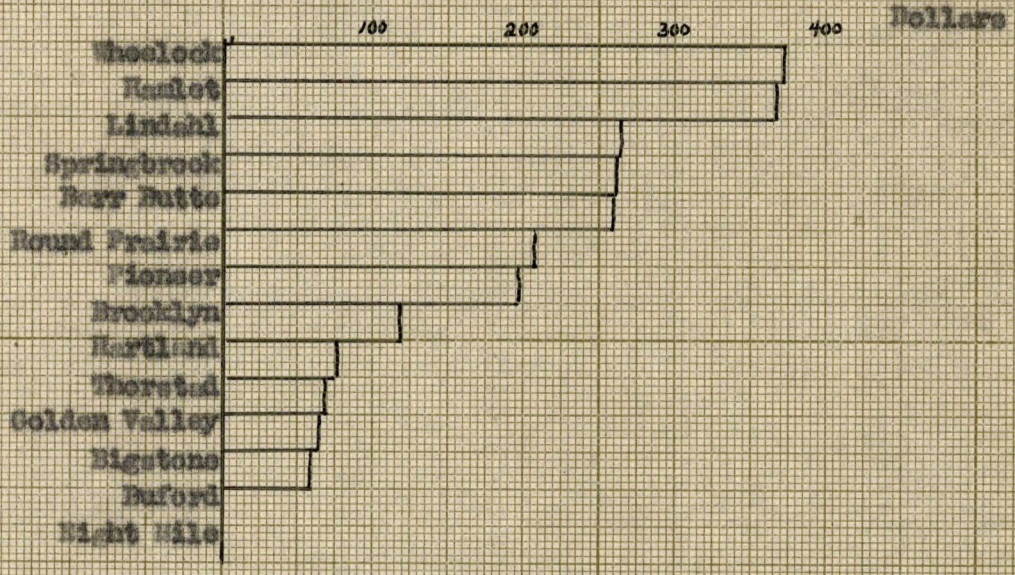
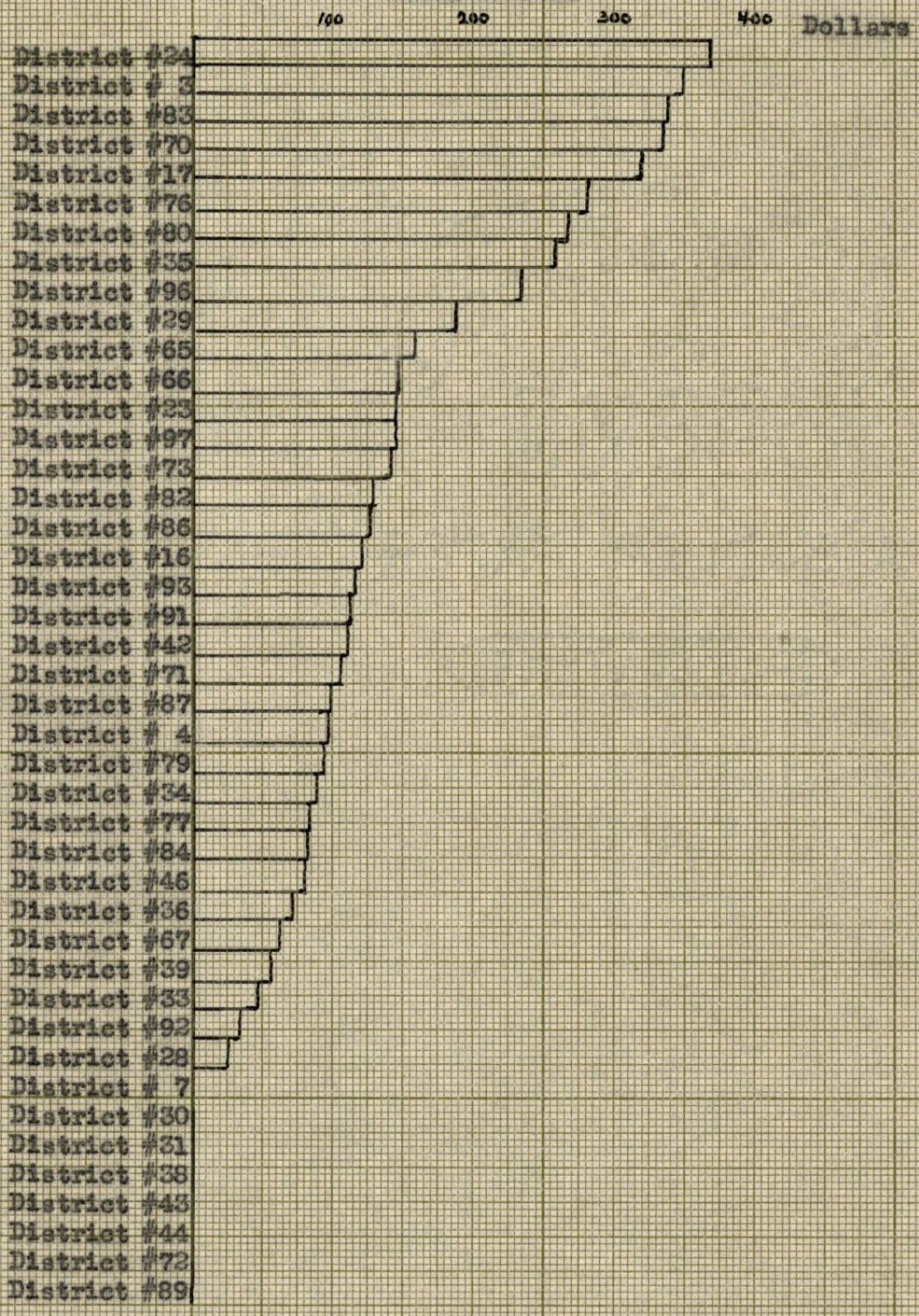


Figure 2

Average Indebtedness Per Child Enrolled

rural schools



per child indebtedness in the classified group and the graded and consolidated group may be attributed to the erection of new buildings in most of the districts of these two groups some time in the past ten or fifteen years.

Conclusions

Great variations and inequalities exist in debt service among the school districts of Williams County.

Three-fourths of the school districts of Williams County have an indebtedness of some kind.

The bonded indebtedness of the classified school group increased slightly in amount during the five-year period studied, although sixty-two per cent of the previously issued bonds were retired. Even though the graded and consolidated school group issued some new bonds during the five-year period they retired a larger amount to reduce their bonded indebtedness approximately one-sixth. Rural school districts show a reduction in total bonded indebtedness, issuing approximately three-fourths as much as they retired.

Approximately thirty-one thousand dollars in bonds were issued to take up certificates of indebtedness in the classified school group.

Four of the eight classified school districts show a favorable reduction and retirement of outstanding bonds. The majority of the districts in both the graded and consolidated group and the rural school group made favorable reductions in their bonded indebtedness.

All three groups of schools made extensive use of certificates of indebtedness during the five-year period.

The classified school districts and the graded and consolidated

school districts redeemed slightly more certificates than they issued during the five-year period, although the records show the former issued bonds to redeem approximately one-half of their amount and the latter issued bonds to retire approximately one-fifth of their amount.

Rural school districts increased their total certificates of indebtedness from three thousand to nearly forty-five thousand dollars.

Indebtedness in the form of outstanding warrants exceed the amount of outstanding certificates in the classified group. It was approximately two-thirds as large in the graded and consolidated group and fell just short of reaching the amount of outstanding certificates in the rural group.

Levies for interest and sinking fund purposes show a great range among the school districts of each group.

Classified school districts show a high of thirty-six per cent of the total levy going for interest and sinking fund purposes, with six of the eight classified school districts using twenty-five per cent of their total levy for that purpose. In the graded and consolidated school group and the rural school group, the interest and sinking fund levy ranged from no per cent to thirty-five per cent in the former and from no per cent to forty-two per cent in the latter.

Great inequalities exist among districts in indebtedness per child enrolled. The indebtedness per child enrolled ranks four and one-half to five times higher in some classified school districts than in other classified school districts. The other two groups also show tremendous variations.

The amount of indebtedness per child enrolled of the high ranking school district in each of the three groups of school districts is nearly identical.

CHAPTER 4

THE COMPARATIVE ABILITY OF THE SCHOOL DISTRICTS IN WILLIAMS COUNTY TO SUPPORT EDUCATION

Inasmuch as great variations and inequalities exist in sources of income, it may be expected that such inequalities should also exist in ability of school districts to support education. Because the greater part of the school revenue in this state comes from property taxation, ability to support schools must necessarily be estimated through assessed valuations. Nor will the mere study of valuations reveal the true ability in that many individual factors such as variations in the number of children attending school tend to increase the burden of support. The ability index seems therefore best arrived at through the medium of assessed valuation per child enrolled. A high valuation with a low enrollment cannot but mean a greater ability to support schools than a high valuation with a high enrollment or the more extreme instances of a low valuation and a high enrollment.

Data relating to assessed valuations, enrollments, assessed valuations per child and such other factors as bear on these elements have therefore been gathered and compiled. The railroad mileage and land area in sections have been included because of the part they play in the assessed valuations of the districts in which they are found. The 1932 law which reduced taxable valuations from seventy-five to fifty per cent prohibited the use of the straight taxable valuations as a basis for data, so valuations listed in the reports of the county superintendent were increased to one hundred per cent in order to make the amounts throughout the five-year period proportionate.

Total Assessed Valuations

As is to be imagined, average assessed valuations for the five-year period varied greatly among the various districts as indicated by Table 10 and Table 11. Williston with 4,057,840 dollars had the highest assessed valuation in the county and in the classified school group, Grenora with 601,282 dollars had the lowest in the same group. Outside of Nesson, whose valuation averaged above the million dollar mark, the other classified districts ranked uniformly close together. It is interesting to note that Grenora has only about one-half the number of sections of land in its district and holds less railroad mileage than the other classified school districts, factors which undoubtedly have a great influence in determining its relative rank.

Eight Mile District led the graded and consolidated group with an assessed valuation three times as large as that of Lindahl's. Eight Mile District takes in forty sections of land and eight and one-half miles of railroad as compared with Lindahl's thirty-six sections and no railroad mileage. Of the other four districts in this group who had an assessed valuation just below 400,000 dollars, Round Prairie, Pioneer, and Brooklyn have less than a mile of railroad, while Barr Butte includes only eighteen and one-half sections of land.

The rural school district groups showed extraordinary extremes. District 7 with its valuation of 1,214,523 dollars even surpassed all the schools in the classified group except Williston. This is not surprising when it is noted that it includes sixty-nine sections of land and seven miles of railroad. This figure becomes even more impressive when compared with District 70, whose valuation is 92,310

Table 10

The Average Assessed Valuation Per Child in School Districts of Williams County, 1930-1934

District	Assessed Valuation[a]	Children Enrolled	Assessed Valuation Per Child[a]	Miles of Railroad	Sections of Land
		classified schools			
Williston	$4,057,840	1,454	2,791	12.5	7
Nesson	1,023,700	267	3,839	6.5	36
Sauk Valley	608,636	96	5,411	5.0	35
Tioga	702,217	222	3,145	6.0	36
Cottonwood Lake	685,227	150	4,568	6.5	36
Epping	964,766	147	6,570	6.5	37
Wildrose	801,700	288	2,784	8.0	48
Grenora	601,282	214	2,810	5.0	18
Total	9,445,348	2,838	31,918	56.0	253
Average	1,180,668	355	3,990	7.0	31.7
		graded and consolidated schools			
Buford	372,355	31	12,170	4.5	14
Eight Mile	895,809	78	11,485	8.5	40
Lindahl	296,544	49	6,052	-	36
Wheelock	511,140	51	10,022	7.5	13
Barr Butte	388,270	94	4,130	4	18.25
Round Prairie	382,545	52	7,485	1	57
Pioneer	394,314	61	6,464	-	51
Bigstone	594,473	81	7,339	6	36
Hartland	536,342	46	11,225	6	36
Thorstad	529,639	88	6,019	4	30
Brooklyn	376,997	59	6,390	.5	34
Springbrook	384,028	59	6,509	4.6	18
Golden Valley	639,148	46	13,894	6	36
Hamlet	355,207	77	4,613	4.5	34
Total	6,661,911	872	113,747	64.1	453.25
Average	475,837	62	8,125	4.6	32
		rural schools			
3	296,745	26	11,413	-	36
4	214,655	25	9,333	-	36
7	1,214,533	74	16,412	7	69
16	324,728	42	7,731	-	36
17	195,313	27	7,236	-	33
23	328,430	40	8,210	-	36
24	314,923	39	8,075	-	36
28	866,834	85	10,198	6	50

Table 10 (continued)

The Average Assessed Valuation Per Child in School Districts of Williams County, 1930-1934

District	Assessed Valuation[a]	Children Enrolled	Assessed Valuation Per Child[a]	Miles of Rail-road	Sections of Land
		rural schools			
29	$ 323,414	33	9,800	-	36
30	529,725	28	18,919	3.5	35
31	293,328	55	5,333	-	36
33	360,077	42	8,575	-	36
34	330,833	36	9,192	-	36
35	336,650	40	8,414	-	36
36	249,748	56	4,460	-	36
38	299,290	36	8,313	-	36
39	280,264	50	5,605	-	36
42	387,290	49	7,904	-	51
43	258,460	34	7,602	-	33
44	212,952	25	8,518	-	18
46	123,094	14	8,792	-	27
65	354,707	72	4,926	-	36
66	255,925	27	9,478	-	36
67	280,821	25	11,232	-	36
70	92,310	10	9,231	-	17
71	328,220	33	9,946	-	36
72	293,701	39	7,531	-	36
73	144,352	14	13,168	-	22
76	337,525	33	10,228	-	36
77	144,688	18	10,816	-	36
79	316,295	38	8,324	-	60
80	138,020	26	4,924	-	26.5
82	229,890	22	10,450	-	23.5
83	148,987	22	6,772	-	27
84	151,484	12	12,624	-	27
86	299,951	55	5,454	-	36
87	176,724	10	17,672	-	36
89	190,403	11	17,309	1.5	36
91	327,102	41	7,978	-	28
92	232,362	38	6,220	-	36
93	253,101	37	6,840	-	36
96	198,807	10	19,881	.5	36
97	206,742	26	7,952	-	36
Total	$12,855,489	1,475	408,991	18.5	1,513
Average	298,965	34	9,511	.43	35
Grand Total	28,962,548	5,185	554,656	138.6	

[a]To the nearest dollar

Table 11

The Average Assessed Valuation of School Districts in Williams County for the Five-Year Period 1930-1934

Thousands of Dollars	Classified	Graded and Consolidated	Rural
4,000-4,099	Williston		
- -			
- -			
1,200-1,299			#7
1,100-1,199			
1,000-1,099	Nesson		
900- 999	Epping		
800- 899	Wildrose	Eight Mile	#28
700- 799	Tioga		
600- 699	Sauk Valley	Golden Valley	
	Cottonwood		
	Gramora		
500- 599			#30
		Wheelock	
		Bigstone	
		Hartland	
		Thorstad	
400- 499			
300- 399		Buford	
		Barr Butte	#16, 23, 24
		Round Prairie	29, 33, 34
		Pioneer	35, 42, 65
		Brooklyn	71, 76, 79
		Springbrook	91
		Hamlet	
200- 299		Lindahl	#3, 4, 31
			36, 38, 39
			43, 44, 66
			67, 72, 82
			86, 92, 93
			97
100- 199			#17, 46, 73
			77, 80, 83
			84, 87, 89
			96
0- 99			#70

dollars in view of only seventeen sections of land and no railroad property was the lowest in the rural school group. As shown in Table 11, two other districts, Districts 28 and 30, ranked above the 500,000 dollar mark. The majority of the rural districts, however, were grouped very definitely between one hundred thousand and four hundred thousand dollars.

A glance at the enrollment column of Table 10 indicates that no relationship existed between the size of the assessed valuation and the size of the enrollment in any one school district. Epping had a larger assessed valuation than most of the classified schools but ranked next to the lowest in enrollment. School districts in both the graded and consolidated and the rural groups which ranked very close in respect to assessed valuation, indicated a very high variation in enrollments. Some of the schools had twice the enrollment that the others had.

Assessed Valuation Per Child

Column three of Table 10 and especially Table 12 reveal the inequalities which existed throughout the county in assessed valuations per child enrolled. Especially striking are the rankings indicated by the latter. Epping, with 6,570 dollars per child, led the classified group in ability to support its schools and Sauk Valley ranked second. The former had approximately 2.4 times the ability and the latter nearly twice the ability to support its schools than did the three lowest ranking classified schools Williston, Wildrose, and Grenora. Wildrose seems the least able with the low ranking of 2,784 dollars per child. Golden Valley, Buford, Eight Mile, Hartland and Wheelock led the graded

Table 12

The Average Assessed Valuation Per Child Enrolled of School Districts of Williams County for the Five-Year Period 1930-1934

Thousands of Dollars	Classified	Graded and Consolidated	Rural
19 to 20			#96
18 to 19			#30
17 to 18			#87, 89
16 to 17			#7
15 to 16			
14 to 15			
13 to 14		Golden Valley	#73
12 to 13		Buford	#84
11 to 12		Eight Mile	
		Hartland	#3, 67
10 to 11		Wheelock	#76,77,82,28
9 to 10			#4, 29,34 66,70,71
8 to 9			#23,24,33 35,38,44 46,79
7 to 8		Round Prairie	#16,17,42
		Bigstone	43,72,91 97
6 to 7	Epping	Lindahl	#83,92,93
		Pioneer	
		Thorsted	
		Brooklyn	
		Springbrook	
5 to 6	Sauk Valley		#31,39,86
4 to 5	Cottonwood Lake	Barr Butte	#36,65,80
		Hamlet	
3 to 4	Nesson		
	Tioga		
2 to 3	Williston		
	Wildrose		
	Crenora		
1 to 2			
0 to 1			

and consolidated group in the order listed, Golden Valley having 13,894 dollars per child enrolled. These districts have considerable railroad mileage and a happy balance of land or small enrollments. Barr Butte ranked the lowest in this group in assessed valuation per child, indicating 4,130 dollars.

The rural districts seemed by far the most able to maintain their schools. District 96, because of a full thirty-six sections of land and an exceedingly small enrollment of ten pupils for the entire district showed an extraordinary per child valuation of 19,881 dollars. District 30 came a close second with 18,919 dollars per child. District 7, which had the highest total assessed valuation in the rural group, showed a per child valuation of 16,412 dollars even though its enrollment totaled 78 pupils. Very noticeable is the fact that all but six rural districts showed a per child valuation above Epping, the highest in the classified group. All but nine rural districts ranked higher than the lower half graded and consolidated districts. District 30 ranked lowest with 4,460 dollars per child. The ranges in assessed valuation per child from high to low in each one of the three groups were as follows: classified school districts, 6,570 dollars to 2,784 dollars; graded and consolidated school districts, 13,894 dollars to 4,613 dollars; and rural school districts, 19,881 dollars to 4,460 dollars.

Comparison of Assessed Valuations Per Child

To obtain a comparison of the three groups of school districts in total assessed valuations, assessed valuations per child and the other facts pertaining thereto, the following table was derived from Table 10:

Table 13

Comparison of Classified, Graded and Consolidated, and Rural School Districts in Average Assessed Valuations

Districts	Assessed Valuation[a]	Children Enrolled	Assessed Valuation Per Child[a]	Miles of Railroad	Sections of Land
classified	$1,180,668	335	$ 3,990	7.0	31.7
consolidated and graded	475,637	62	8,125	4.6	32.0
rural	298,965	34	9,511	0.43	35.0

[a]To the nearest dollar

Per Child Income as a Unit of Measure

Previous paragraphs have indicated the inequalities that exist among the districts of Williams County using assessed valuation as a unit of measure. With tax payments far below normal and the percentage of delinquent taxes extremely high, some question may arise as to whether or not school incomes might not have a place as a unit of measure for determining ability to support schools. Using the total average incomes as listed in Table 2 of Chapter two, the income per child enrolled was determined and arranged in the rank order distribution in Table 14. A comparison of the position of each district in this table with its position in Table 12 based on the average assessed valuation per child enrolled reveals some interesting differences as well as similarities. The classified schools maintain a fairly constant position. Sauk Valley interchanges with Epping and takes the top position and Wildrose moves up above Tioga, Williston, and Grenora. The top ranking school in this group still seems over two times more able to support its schools than does the low ranking school under this unit of measure.

Table 14

The Average Income Per Child Enrolled of School Districts of Williams County for the Five-Year Period 1930-1934

Dollars	Classified	Graded and Consolidated	Rural
130 to 139			#30, 96
120 to 129		Buford	#73
		Golden Valley	
110 to 119			#3
100 to 109	Sauk Valley		#7, 70, 71
90 to 99			#66
80 to 89	Epping	Hartland	#24
	Cottonwood Lake	Eight Mile	
		Springbrook	
		Brooklyn	
		Thorstad	
70 to 79	Nesson	Lindahl	#33, 42, 35
		Hamlet	76
		Pioneer	
60 to 69		Bigstone	#84, 67, 44
		Round Prairie	33, 87, 89
			97, 17
50 to 59	Wildrose	Barr Butte	#4, 93, 77
	Tioga		46, 80, 91
			31, 79, 92
			38
40 to 49	Williston		#83, 43, 42
	Grenora		36, 23, 28
			39, 86, 82
30 to 39			#72, 65, 34
20 to 29			
10 to 19			
0 to 9			

Wheelock moves to the top of the graded and consolidated group. Golden Valley, Buford, and Hartland districts still rank high. It will be noted that Eight Mile district dropped out of first place to a ranking far down the list, while Hamlet has moved up and Springbrook and Brooklyn show a much more favorable position. The top ranking schools still show greater than two times the ability than the low ranking school.

Districts 30 and 96 still rank far above the other schools in the rural group. They are again followed closely by Districts 73, 3 and 7. Districts 84, 87, and 89 seem to rank considerably lower under the income unit of measure than the valuation unit, due undoubtedly to the lack of the stable income afforded by railroad property in the district. District 31 has moved far up the ranking and the apparent ability under this set-up. District 34 has moved far down to take the low place from District 30. It is still evident, however, that the inequality among rural schools was just as great using the income unit of measure. The high ranking district was still approximately four times more able than the low ranking district and twenty-nine districts indicate per child incomes of less than one-half that of the high ranking districts. The ranges in income per child from high to low rank in each of the three groups were as follows: classified group, 101.90 dollars to 42.62 dollars; graded and consolidated group, 139.90 dollars to 55.75 dollars; and rural group, 135.50 dollars to 33.60 dollars.

To obtain a comparison of the three groups of school districts in assessed valuation per child and income per child, the following table was set up:

Table 15

Comparison of Classified, Graded and Consolidated, and Rural School Districts in Ability to Support Schools[a]

Districts	Assessed Valuation Per Child	Income Per Child
classified	$ 3,990	$ 60
graded and consolidated	8,125	81
rural	9,511	68

[a]Amounts expressed to the nearest dollar

It will be noticed that the graded and consolidated school district group surpassed the other two groups in average income per child enrolled. More significance, however, can be placed in the indication that the ratio between the three groups was not nearly so large in the income per child column as in the assessed valuation per child column, indicating that tax delinquencies were greatest in the rural districts and that the schools in that group did not surpass the others in ability as much as the assessed valuation per child ratios seemed to indicate.

Conclusions

Extraordinary variations exist in assessed valuations within the three groups of school districts, the rural group showing the greatest variation. The above variations are influenced greatly by the size of the district and the presence of railroad property within the district.

High assessed valuations do not necessarily mean high ability to support schools.

One rural district has an assessed valuation far above six of the classified school districts.

Assessed valuation per child serves as a better unit in measur-

ing ability to support schools than does assessed valuation alone.

The rural districts show the greatest ability to support its schools. The graded and consolidated school districts rank next, while the classified school districts seem least able.

All but six rural districts have assessed valuations per child higher than the most able classified school district. The least able of the rural group and also of the graded and consolidated group seem approximately 1.6 more able to support its schools than the least able of the classified group.

The wealthiest of the rural districts in assessed valuation per child is three times more able to support its schools than the wealthiest classified district and approximately 1.4 times more able than the wealthiest graded and consolidated district. The high ranking school district in the graded and consolidated group is more than twice as able as the wealthiest classified district.

Income per child might well be used as a unit of measure for ability to support.

The proportion of variations between the high and the low in each group of school districts using the income unit of measure is nearly identical to that of the assessed valuation unit. The rank position of the same individual districts vary considerably in their position in the assessed valuation per child frequency table and the income per child frequency table.

The spread between the high ranking school district in each of the three groups is not nearly so distinct in the income per child unit as it is in the assessed valuation per child unit.

CHAPTER 5

COMPARISON OF EFFORT PUT FORTH BY THE SCHOOL DISTRICTS OF WILLIAMS COUNTY TO MAINTAIN THEIR SCHOOLS

The chapter just completed has shown the great inequalities that exist among the school districts of Williams County, North Dakota, in the matter of ability to support schools. A study of comparative abilities is not sufficient, however, in that it does not reveal the extent to which districts are using that ability to secure the highest possible educational facilities for its children. It does not indicate whether each district is putting forth the maximum effort to maintain the best type of schools. Effort to support schools must necessarily be estimated through the medium of expenditures. Nor will expenditures alone reveal the true effort, for school districts having an equal expenditure or an equal expenditure per child enrolled, may vary in their ability to support schools. Therefore the effort of a school district seems best revealed through a medium which takes both elements into consideration; namely, a medium expressed in the ratio of expenditure per child enrolled to wealth per child enrolled. Such a ratio would not only take into consideration the relative position of each district as to each of these elements but will also bring out the relation of the expenditure to the ability.

Other factors may also enter in the determination of effort put forth. Therefore, in order that the reader may interpret fully the comparative effort put forth by the various school districts, not only total expenditures, expenditures per child enrolled, and assessed valuations per child enrolled are presented but also the mill levy for

general fund running expense purposes and the average teachers' salaries per child are included.

Total Expenditures

Column one of Table 16 lists the average total expenditure, the average enrollment and the average expenditure per child for the five-year period. Little needs to be said about the range of total expenditures among the classified school districts as it is to be expected that they will vary. Most noticeable is the fact that the total expenditures are not proportionate to the number of children enrolled although the school districts with the highest enrollments tend to have the highest expenditures and vice versa. The graded and consolidated school districts show a range in total expenditures from a low of 3,102 dollars in Buford to a high of 9,586 dollars in Thorstad. The range in total expenditures among the rural school districts extends from 1,209 dollars in District 87 to 7,313 dollars in District 7. The average total expenditures for the three groups of school districts were: classified school districts, 27,274 dollars; graded and consolidated school districts, 6,453 dollars; and rural school districts, 3,143 dollars. It might also be noted that the average enrollment of sixty-two pupils in the graded and consolidated group was nearly twice as high as the average of thirty-four pupils in the rural group.

The most significant facts in Table 16 as far as effort is concerned is shown in column three, average expenditure per child enrolled. This item is derived by dividing the average total average expenditure by the average enrollment. Sauk Valley indicated the highest expenditure per child in the classified school group with 126.82 dollars

Table 16

The Average Expenditure Per Child for School Districts of Williams County for the Five-Year Period 1930-1934

District	Average Total Expenditure[a]	Average Enrollment	Expenditure Per Child
	classified schools		
Williston #1	$ 102,288	1,454	$ 70.40
Nesson #2	23,764	267	88.59
Sauk Valley #13	12,175	96	126.82
Tioga #15	15,453	222	69.71
Cottonwood Lake #64	15,353	150	102.33
Epping #88	13,824	147	93.36
Wildrose #90	22,326	288	77.52
Grenora #94	13,009	214	60.88
Total	218,192	2,838	
Average	27,274	355	76.84
	graded and consolidated schools		
Buford #5	3,102	31	100.00
Eight Mile #6	6,631	76	85.01
Lindahl #14	5,297	49	108.10
Wheelock #25	8,119	51	159.02
Barr Butte #37	6,176	94	65.70
Round Prairie #40	7,190	52	138.27
Pioneer #41	5,895	61	117.90
Bigstone #89	6,322	81	87.80
Hartland #63	4,737	46	103.11
Thorstad #75	9,586	88	108.70
Brooklyn #78	6,838	59	115.92
Springbrook #81	5,534	59	93.80
Golden Valley #85	5,943	46	129.17
Hamlet #95	8,974	77	116.55
Total	90,344	872	
Average	6,453	62	103.60
	rural schools		
3	3,868	26	144.77
4	2,500	25	100.00
7	7,313	74	98.96
16	3,512	42	83.62
17	2,965	27	109.82
23	4,763	40	119.08
24	4,469	39	114.08
28	4,905	85	57.71

Table 16 (continued)

The Average Expenditure Per Child for School Districts of Williams County for the Five-Year Period 1930-1934

District	Average Total Expenditure[a]	Average Enrollment	Expenditure Per Child
	rural schools		
29	$ 3,240	33	$ 95.15
30	3,962	28	141.43
31	3,620	55	65.82
33	3,875	42	92.26
34	2,665	36	74.28
35	4,196	40	104.90
36	3,175	56	56.70
38	3,053	36	86.20
39	3,109	50	62.18
42	3,512	49	71.63
43	2,538	34	74.71
44	1,871	25	75.50
46	1,587	14	113.36
65	3,878	72	53.72
66	3,650	27	135.19
67	2,323	25	92.92
70	1,699	10	169.90
71	4,359	33	132.09
72	2,836	39	72.72
73	1,999	14	142.79
76	4,260	33	129.09
77	2,446	18	135.89
79	3,604	38	94.86
84	1,248	12	104.00
86	4,564	55	82.98
87	1,209	10	120.90
89	1,239	11	112.64
91	3,573	41	87.15
92	2,864	38	75.37
93	3,227	37	87.22
96	2,109	10	210.90
97	2,739	97	105.35
Total	$ 135,134	1,475	
Average	3,143	34	$ 91.61

[a]To the nearest dollar

per child as compared with the lowest of 60.88 dollars at Grenora. The expenditure per child in the graded and consolidated school group ranged from 159.02 dollars at Wheelock, which had a high total expenditure and an average enrollment, to 65.70 dollars at Barr Butte, which had an average total expenditure with a very large enrollment.

In the rural school group, District 96 indicated the astounding expenditure per child of 210.90 dollars. District 70 ranked second with 169.90 dollars per child. This extremely high expenditure was due to the fact that each of these two districts indicated only ten pupils in the entire district. The average expenditure per child for each of the three groups for the five-year period were as follows: classified school districts, 76.84 dollars; graded and consolidated school districts, 103.60 dollars; rural school districts, 91.61 dollars. It is especially significant that five of the eight classified school districts had a lower per child expenditure than the average of the rural school group; and seven of the eight classified school districts had an expenditure per child lower than the average for the graded and consolidated school group. Only one graded and consolidated school district had an expenditure per child lower than the average for the classified school group.

Effort as Expressed in Ratio of Expenditures Per Child Enrolled to Wealth Per Child Enrolled

As stated in the opening paragraph of the chapter, the ratio obtained by dividing the expenditure per child enrolled by the assessed valuation per child enrolled gives a good criterion for comparing the effort put forth by the various school districts of Williams County.

Column three of Table 17 expresses that ratio for each of the school districts carried to the ten-thousandths place, the decimal point and a zero having been dropped in the table. The division calculation was carried four places with the hope that larger numbers might better indicate the range in ratios. Table 18 derived from Table 17 brings out not only the rank position relationship of each school to the other schools in each group but also at the same time pictures the relative position of each as compared to schools in the other two groups. These two tables indicate a startling variation in effort put forth among school districts.

In the classified school group, Wildrose, which had a ratio of 277, put forth the nearly twice as much effort as Epping, which had a ratio of 142. Hamlet led the graded and consolidated group in effort with a ratio of 253, far above the other schools in its group. Eight Mile District ranked lowest with a ratio of 76, with Lindahl and Buford ranking just above. Hamlet, therefore, put forth nearly three times more effort to maintain its school than Eight Mile, Lindahl and Buford districts. District 70 had the highest ratio of effort in the rural school district group with 185 and District 28 had the lowest ratio with 56. District 70 thus put forth three and one-third times as much effort as District 28 and nearly three times as much effort as Districts 7, 87, and 89.

A glance at Table 18 indicates some decided variations. The following facts are very noticeable: (1) all but the lowest ranking school district in the classified group is located above the highest ranking school districts in the other two groups in degree of effort;

Table 17

The Ratio of Average Expenditures Per Child Enrolled to the Average Wealth Per Child Enrolled for the Five-Year Period 1930-1934

District	Expenditure Per Child	Valuation Per Child	Ratio in Ten-Thousandths
	classified schools		
Williston #1	$ 70.40	$ 2,790	252
Nesson #2	88.59	3,839	230
Sauk Valley #13	126.82	6,340	200
Tioga #15	69.71	3,145	229
Cottonwood Lake #64	102.33	4,568	224
Epping	93.36	6,570	142
Wildrose #90	77.52	2,784	277
Grenora #94	66.88	2,810	216
Total	695.61	31,918	
Average	86.95	3,990	218
	graded and consolidated schools		
Buford #5	100.06	12,170	82
Eight Mile #6	85.01	11,485	76
Lindahl #14	108.10	6,052	78
Wheelock #25	159.02	10,022	159
Barr Butte #37	65.70	4,130	159
Round Prairie #40	138.27	7,435	186
Pioneer #41	117.90	6,464	182
Bigstone #59	87.80	7,339	119
Hartland #63	103.11	11,225	91
Thorstad #75	108.70	6,019	180
Brooklyn #78	115.92	6,390	181
Springbrook #81	93.80	6,509	144
Golden Valley #85	129.17	13,767	93
Hamlet #95	116.55	4,613	253
Total	1,686.86	113,747	
Average	120.48	8,125	148
	rural schools		
3	144.77	11,413	127
4	100.00	9,333	107
7	98.96	16,412	63
16	83.62	7,731	108
17	109.82	7,236	152
23	119.08	8,210	145
24	114.08	8,075	141
28	57.71	10,198	56

Table 17 (continued)

The Ratio of Average Expenditures Per Child Enrolled to the Average Wealth Per Child Enrolled for the Five-Year Period 1930-1934

District	Expenditure Per Child	Valuation Per Child	Ratio in Ten-Thousandths
	rural schools		
29	$ 95.10	$ 9,800	97
30	141.43	18,919	75
31	65.82	5,333	123
33	92.26	8,575	108
34	74.28	9,192	80
35	104.90	8,414	125
36	56.70	4,460	129
38	86.20	8,313	107
39	62.18	5,605	110
42	71.63	7,904	90
43	74.71	7,602	98
44	75.50	8,518	88
46	113.36	8,792	129
65	53.72	4,926	109
66	135.19	9,478	140
67	92.92	11,232	82
70	169.90	9,231	185
71	132.09	9,946	132
72	72.72	7,531	98
73	142.79	13,168	108
76	129.09	10,228	126
77	135.89	10,816	126
79	94.86	8,324	114
80	82.58	4,924	168
82	101.32	10,450	97
83	101.64	6,772	150
84	104.00	12,624	82
86	82.98	5,454	152
87	120.90	17,672	68
89	112.64	17,309	65
91	87.15	7,978	109
92	75.37	6,220	121
93	87.22	6,840	113
96	210.90	19,881	105
97	105.35	7,952	132
Total	4,382.38	408,991	
Average	101.91	9,511	107

Table 18

Ratio of Expenditures Per Child Enrolled to the Assessed Valuation Per Child Enrolled for the School Districts of Williams County

Ratio in Ten-Thousandths	Classified Schools	Graded and Consolidated Schools	Rural Schools
270-279	#90		
260-269			
250-259	#1		
240-249			
230-239	#2		
220-229	#15, 64	#95	
210-219	#94		
200-209	#13		
190-199			
180-189		#40, 41, 75, 78	#70
170-179		#14	
160-169			#80
150-159		#25, 37	#17, 83, 86
140-149	#88	#81	#23, 24, 66
130-139			#71, 97
120-129			# 3, 31, 35, 36, 46, 76 77, 92
110-119		#59	#39, 79, 93
100-109			# 4, 16, 33, 38, 65, 73, 91, 96
90- 99		#63, 85	#29, 42, 43, 72, 82
80- 89		#5	#34, 44, 67, 84
70- 79		#6	#30
60- 69			# 7, 87, 89
50- 59			#28

(2) graded and consolidated districts are spread over a considerable space indicating a wide variation if effort; (3) eighty per cent of the rural school districts are located below the low ranking classified school district on this table. The average effort ratios for each of the three groups for the five-year period were as follows: classified school districts, a ratio of 218; graded and consolidated school districts, a ratio of 148; rural school districts, a ratio of 107.

Average General Fund Levy

The effort expended by each school district may also be estimated to some extent by a study of the general fund mill levy of that district. This levy is spread in each district to meet the general expense of running the schools within the districts. It is by law restricted to the following maximums: classified school districts, 18 mills; graded and consolidated school districts maintaining a four-year high school, 18 mills; other graded and consolidated school districts, 16 mills, and rural school districts, 14 mills. The law further provides that an extra levy of fifty per cent may be made for a designated period of one, two, or three years, if a sixty per cent favorable vote is received in a special election held for that purpose at that time. Rural school districts and graded and consolidated school districts that do not maintain high schools might also without vote levy an additional four mills above the legal limit for the purpose of paying high school tuition to other districts in which its students are attending high school. Thus the extent to which a district uses the maximum legal levy and the extra levy will determine somewhat the effort it is putting forth to maintain its schools.

In the first column, Table 19 lists the average general fund mill levy for the school districts of Williams County for the five-year period. The general fund mill levy for the year 1934 was included in the table that the reader might estimate the relative ranking of each district at the end of the five-year period should he wish to do so. A glance at the table indicates that all but Tioga and Epping of the classified school group used the extra levy some time during the five-year period. Wildrose seemed to use the greatest effort under this unit of measurement. Williston ranked a close second. Epping and Tioga were low with the use of the legal limit of 18 mills. It will be noticed that four of the eight classified districts were using the maximum extra levy and the maximum effort possible in 1934. Sauk Valley had dropped to 18 mills in 1934 because the patrons had failed to give the district the necessary sixty per cent majority in the special election of the previous summer.

Hamlet lead the graded and consolidated group with an average general fund levy of 26.188 mills, while Buford listed the lowest levy with 8.47 mills. These two districts still held the two extreme positions in 1934. The highest five-year average in the rural group was listed by District 66, which indicated a levy of 21.20 mills. District 89 indicated the remarkably low five-year average of 4.024 mills, and District 28 listed a levy of 4.674 mills. These same two districts held the two extreme positions in 1934.

The average general fund mill levy for the five-year period for each of the three groups were as follows: classified school districts, 22.47 mills; graded and consolidated school districts, 17.218 mills;

Table 19

The Average General Fund Mill Levy and the Average Teacher's Salary Per Child for the School Districts of Williams County for the Five-Year Period 1930-1934

District	Average General Fund Mill Levy	General Fund Mill Levy Year 1934	Teacher's Salary Per Child
	classified schools		
Williston	25.676	27.00	38.70
Nesson	23.174	27.00	51.62
Sauk Valley	23.124	18.00	53.70
Tioga	18.00	18.00	41.93
Cottonwood Lake	22.59	24.00	45.92
Epping	18.00	18.00	48.90
Wildrose	26.54	27.00	40.05
Grenora	22.736	27.00	40.93
Average	22.47	23.25	45.22
	graded and consolidated schools		
Buford	8.47	10.28[a]	61.97
Eight Mile	10.388	10.45[a]	52.43
Lindahl	20.392	19.00[a]	63.78
Wheelock	22.345	18.00	75.68
Barr Butte	20.70	16.00	32.24
Round Prairie	15.626	19.04[a]	25.23
Pioneer	16.40	20.00[a]	39.77
Bigstone	14.445	13.57	47.27
Hartland	11.908	19.70[a]	38.94
Thorstad	20.00	18.00	43.30
Brooklyn	21.188	18.00	49.12
Springbrook	19.886	18.00	59.32
Golden Valley	13.164	10.97[a]	58.50
Hamlet	26.188	27.00	50.96
Average	17.218	17.50	46.88
	rural schools		
3	16.40	16.00	59.19
4	12.492	6.75	72.96
7	10.818	10.54	64.60
16	9.008	2.69	43.33
17	11.74	11.35	27.90
23	12.00	- -	58.80
24	16.714	19.46	45.69
28	4.674	7.25	48.24

[a]Includes mill levy for high school tuition purposes.

Table 19 (continued)

The Average General Fund Mill Levy and the Average Teacher's Salary Per Child for the School Districts of Williams County for the Five-Year Period 1930-1934

District	Average General Fund Mill Levy	General Fund Mill Levy Year 1934	Teacher's Salary Per Child
	rural schools		
29	11.638	12.06	63.60
30	8.84	7.66	69.57
31	12.522	5.87	42.70
33	12.28	6.20	57.98
34	14.00	- -	42.00
35	13.07	10.35	46.07
36	13.56	7.80	32.68
38	9.134	4.53	52.67
39	10.10	4.29	36.24
42	11.382	4.32	47.02
43	8.462	- -	40.75
44	9.34	14.00	44.16
46	11.486	3.36	40.43
65	12.312	3.40	32.78
66	21.20	16.00	55.33
67	9.084	- -	53.12
70	17.788	21.00	70.58
71	18.002	14.00	71.76
72	7.574	- -	47.23
73	17.552	13.25	55.30
76	15.324	14.00	73.60
77	10.10	- -	91.11
79	14.80	- -	52.66
80	21.00	21.00	45.53
82	10.62	- -	70.60
83	13.334	7.98	46.81
84	7.736	- -	64.00
86	14.486	15.53	52.00
87	8.948	- -	70.70
89	4.024	- -	68.73
91	18.042	13.54	51.14
92	12.98	13.58	47.66
93	18.14	13.46	57.70
96	10.670	- -	138.60
97	13.784	14.00	57.46
Average	12.444	8.05	56.30

rural school districts, 12.444 mills.

Maximum Effort as Shown by a Combined Ratio and General Fund Mill Levy Relative Position Table

Table 20 undoubtedly gives not only the most complete but also the accurate comparison as to the amount of effort expended by each of the districts of Williams County in the maintenance of its schools. This two-way table lists the relative rank position of each district not only in effort ratio but also in regard to effort as shown by the general fund levy. The higher a district appears on the table the higher its effort is as shown by the effort ratio. The further to the right a district appears on the table the greater its effort as shown by the general fund levy. Thus the districts appearing fartherest to the right and highest on the table may be said to have expended the greatest effort in maintaining the schools. The lower and further to the left a district is found on the table, the smaller the effort it expended in the maintenance of its school. This table reveals that the classified school districts were putting forth the most effort as indicated by this two-way index. About one-half of the graded and consolidated school districts were also expending a very high effort. Wildrose District #90 had evidently put forth the greatest effort in the county. District 28, a rural district, had put forth the least effort in the county. Hamlet District #95 had expended the greatest effort and Eight Mile District #6 the least effort in the graded and consolidated school group. District 70 and District 80 had put forth the greatest effort and District 28 the least effort in the rural school group. In a similar fashion any district in any group may be compared with any other district in any other group by means of this table.

Table 30

Distribution Table of Effort Put Forth by the School Districts of Williams County on the Basis of Effort Ratio and Average General Fund Levy

Ratio in Ten-Thousands	General Fund Levy 4-5.9	6-7.9	8-9.	22-23.9	24-25.9	26-27.9
270-279						$90
260-269					$1	
250-259						
240-249						$95
230-239				$2		
220-229				$64		
210-219				$94		
200-209				$13		
190-199						
180-189						
170-179						
160-169						
150-159				$25		
140-149						
130-139						
120-129						
110-119						
100-109			$16,38			
90- 99		$73	$43			
80- 89		$84	$ 5,44, 62			
70-79			$30			
60-69	$89	$87				
50- 59	$28					

Conclusions

Effort put forth by a school district to maintain its school seems best arrived at through a ratio of expenditure per child to wealth per child index.

Great variations in average total expenditures and average expenditures per child exist among the districts of Williams County.

Great variations exist among the school districts of Williams County in effort as shown by the expenditure per child to assessed valuation per child ratio index.

Using this ratio index, the rural school districts of Williams County make less effort to support their schools than do the graded and consolidated school districts or the classified school districts. The graded and consolidated group rank next. The classified school districts put forth the greatest effort to maintain schools.

In the classified school group, Wildrose puts forth nearly twice as much effort in maintaining its school as Epping. In the graded and consolidated school group, Hamlet makes three times as much effort as Eight Mile District. In the rural school group, District 70 puts forth three and one-third times as much effort as District 7.

Effort might be measured according to the general fund mill levy index, although it cannot be considered as an efficient an index as the ratio index.

The combined use of the ratio index and the general fund mill levy index gives the best and the most accurate comparison of the effort actually expended by the various districts of Williams County.

Using this unit of measure, Wildrose put forth the greatest

effort in the county and District 28 put forth the least effort in the county in the way of maintaining its schools.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

As indicated in the introduction of this study, the purpose of this study is two-fold; first, to make a survey of the school incomes, the debt service, the ability to support schools and the effort put forth by each of the school districts of Williams County, North Dakota with the purpose of pointing out such inequalities as may be evident through such study; second, to present data on farm and school population in Williams County with the purpose of eliminating small and expensive schools either through the transportation of children to larger school units or through the re-districting of those parts of the county where re-districting seems feasible.

The first aspect of the study was developed in the first five chapters. Chapter 2 lists the incomes received by each of the school districts of Williams County from the most important sources. It was noted that great variations existed among the school districts of Williams County in total income. In the rural school district group, two districts supported three schools on incomes less than one thousand dollars, an average of just over three hundred dollars per school. Four districts had incomes of less than five hundred dollars per school. Six districts had incomes of between five and six hundred dollars per school.

The district tax supplied the largest percentage of the income in all the districts. Incomes from state apportionment and county apportionment made up a comparatively small percentage of the total income in each school district. Income from state apportionment was approximate-

ly twice that from county apportionment. State aid made up a very small part of the total income in that it was discontinued in 1933.

Table 4 showed that the property tax income actually received by each district was considerably below the amount of property taxes levied. Facts indicated that tax delinquencies were becoming greater and greater. The placing of the tax levy for general purposes in the same table indicated that many districts were not using the fullest amount of their incomes.

In Chapter 3, the debt service in bonded indebtedness, in certificates of indebtedness and in outstanding warrants was discussed. One is immediately impressed with the tremendous debt totaling 923,609 dollars charged to the districts of Williams County in 1934. Almost every district in the county had a debt of some kind. The 1929 bonded indebtedness had been reduced only slightly in 1934 even though a somewhat favorable percentage of the 1929 amount had been redeemed by payment. New bond issues for building purposes and especially for redemption of overdue certificates of indebtedness kept the total very near the 1929 level. Large bonded indebtedness naturally required that large levies be made for interest and sinking fund purposes, some of which were thirty to forty per cent of the total tax levied in the district.

Great use was made of certificates of indebtedness in all three groups of school districts in Williams County. Continuous crop failure during the five-year period studied made it impossible to meet these certificates when due, so many had to be redeemed through bond issues. The rural districts raised their indebtedness in certificates from 3,000 dollars to 45,000 dollars during the five-year period.

Registered warrants were used very extensively during the five-year period. An estimate puts the amount of outstanding warrants in 1934 at a figure above the amount of the certificates of indebtedness. When the total indebtedness in each group is interpreted in terms of indebtedness per child in enrollment, the average in each school district becomes extremely large. The average indebtedness per child enrolled for the entire county in 1934 was 178.44 dollars.

Chapter 4 took up the study of the ability of the school districts of Williams County to support their schools. The assessed valuation per child index indicated a great variation in ability. Rural school districts were the most able to support their schools. All but six rural schools showed more ability than the most able of the classified schools. The classified districts had an average assessed valuation per child of 3,990 dollars, the graded and consolidated school districts averaged 8,125 dollars per child, and the rural school districts averaged 9,511 dollars per child. A table presenting the average income per child as a basis for comparison of ability indicated wide variations in ability although the proportion of variations was almost identical to that indicated by the assessed valuations per child.

Chapter 5 on "Comparison of Effort Put Forth by the School Districts of Williams County" showed the extent to which each school district was making use of its ability to support its school. The index upon which effort is determined was derived through taking the ratio of expenditure per child to assessed valuation per child that both the factors of expenditure and wealth might be considered. The classified school districts were putting forth the most effort in maintaining their

schools as indicated by the high average effort ratio of 218. Seven of the eight classified schoolsdistricts listed a ratio above two hundred. The graded and consolidated school districts indicated an average ratio of 148. The rural school districts put forth the least effort as indicated by an average ratio of 107. The ratio of effort throughout the county ranged from a high ratio of 277 at Wildrose, a classified school district, to a low ratio of 56 in District 28, a rural school district. The most accurate indication of effort put forth by each district in the county is presented in a two-way table which lists the relative rank position of each district in effort ratio and in general fund mill levy. The evidence in this table points out conclusively that the classified school districts are called upon to put forth the most effort to maintain their schools; whereas the effort put forth in many of the rural school districts is relatively low.

The above facts bring out the fallacy of holding to the present school districts system in Williams County. It was in anticipation of this conclusion that the second phase of this study was undertaken; namely, to present data on farm and school population in Williams County with the purpose of eliminating small and expensive schools either through transportation of children to larger school units or through the re-districting of those parts of the county where re-districting seems feasible.

This data was secured through a questionnaire and spot map sent to one school administrator or teacher in each of the townships in Williams County. Each teacher spotted the location of farm buildings

and schoolhouses in each section and charted both the highly graded roads suitable for winter travel and the main traveled roads in the township. On an accompanying blank furnished for that purpose, each teacher gave the following facts: the name of the head of the family living on that farm, whether tenant or owner, married or single, approximate age, and the number of children under school age located on that farm. The school population for each school in the county was taken from the teachers' final reports as filed with the county superintendent of schools on or before June 1, 1935. The population in each school was then divided up into a four number index indicating grade classification and this index represented on the map at each schoolhouse. The first number in the index indicates the number of children in grades one, two and three; the second number in the index, the number of children in grades four, five and six; the third number, those in grades seven and eight; and the fourth number, those in high school if one is maintained.

All those facts are presented on the accompanying map, Map 2, with the hope that these data might prove valuable in the elimination of at least the most expensive one-teacher schools in the county and possibly provide a basis for a complete school re-organization and the setting up of a re-districting program where feasible.

Program of Re-organization

The writer, except for the two possible transportation projects set up later in this chapter, makes no attempt to draw up a complete system of motor bus lines transporting pupils from the one-teacher country schools to larger and more centralized units nor is any attempt

made to reorganize or re-district the entire county. To initiate such an undertaking without both a series of meetings with the school officials of the county and the personal investigation of the road conditions and topography of each section of the county would be unadvisable. Such an undertaking would also mean the complete financial and school population survey of the neighboring counties, especially Divide County, for nearly half of the new school units that would be set up in the county should logically include territory to the north and east outside of the limits of the county herein studied.

The program of reorganization would necessarily involve the consideration of many factors, some of which may be mentioned briefly at this point.

Roads

The system of roads established and maintained within the county will undoubtedly be one of the greatest factors in determining the feasibility of the transportation and reorganization program. The roads must be sufficiently high and so constructed that they will clear themselves of snow during the winter months sufficiently enough to be open for continual winter travel. Roads as shown on Map 2 are presented as found in the county on January 1, 1935. It is doubtful whether some of these roads indicated as highly graded and suitable for winter travel could be accepted as such for school transportation purposes. However, during the eighteen months that have elapsed since that time, many of the mainly traveled roads indicated on the map have been resurfaced with high grades suitable for winter travel through P.W.A. road projects. At the time of writing the federal government

has announced a complete new set-up of road re-surfacing projects for western North Dakota and Williams County as a part of the 1936 drought program. Such a program will undoubtedly do much for bettering the road conditions of the county.

Transportation Units and Building Facilities

Next to the consideration of roads, the setting up of transportition units and a careful study of school building and teacher facilities already existing in the county becomes absolutely necessary that it may be determined what new buildings would need to be constructed and where they should be located. The comparatively new buildings now found in practically every town along both lines of railroad which cross the county must be used to advantage under the new plan of district or school reorganization decided upon. The most feasible plan seems to be to begin the reorganization on a small scale. With such a plan in mind, the writer sent out a short questionnaire to the larger schools in the county asking that they indicate information as to facilities for handling a larger number of grade and high school pupils. The results are tabulated in Table 21. It is noticeable that some over three hundred grade pupils may be accommodated in the county without any further expenditure for teachers' salaries. The seven available grade rooms in the county not in use could accommodate 245 more grade pupils at a room capacity of 35 pupils. The nine school systems listed in the table indicate that they can accommodate over four hundred more high school students were they equipped with a full corps of teachers and other equipment. These two factors in themselves indicate that a reorganization program might easily be initiated with-

Table 21

Possible Enrollment Capacity of the Larger Schools in Williams County on June 1, 1935

	Grenora	Hanks	Alamo	Wildrose	Tioga	Hay	Wheelock	Epping	Williston	
Possible Extra Pupils Handled with Present Grade Faculty	40	10	10	40	40	60	22	15	75	312
Extra Grade Rooms Available	1			2		1			3	7
Number of High School Students in 1935	112	27	90	92	110	105	17	61	589	1203
Total Possible High School Students Handled with Maximum Faculty	125	50	100	140	110	150	40	100	800	1615

out need of expense for buildings.

Undoubtedly the reorganization plan would not entertain sponsoring of high schools in the smaller units that now exist. All the available space in those smaller units would be devoted to elementary instruction. The high school students who now attend and those who would be brought into this unit from the surrounding rural districts would be transported by special bus into a larger centrally located unit with high school facilities attached.

Planning of Transportation and Length of Routes

The planning of economical and efficient transportation routes becomes highly important if the reorganization set-up is to be a success. "Routes may be classified into two types.[1] The 'circular' type is laid out from the school or central point on one road, and, after making a loop or circuit returns to the school by another route. . . . The 'shoe string' route is the second type. It is laid out in one general direction from the school, usually along the main road. . . . At the last stop out or near it the bus is left." A glance at the map indicates the location of school houses would tend to favor the "shoe string" type of route because the waste cost that would be involved in having busses run many miles without a load would tend to make the circular routes prohibitive or at least far from practical.

Aside from the question of road conditions, the question of length of the routes set up will be determined largely by two factors: first whether the "circular" or "shoe string" type is to be used; and

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[1]John C. Almack and James F. Bursch, The Administration of Consolidated and Village Schools, pp. 143-144.

second, whether the busses are to pick up all children at bus stations or are to stop at the homes of those children living along the route. Working under the supposition that school houses maintained at present are to be used as bus stations in the new set-up, it should not be unreasonable to assume that such a route might have a maximum mileage of from fifteen to twenty miles. A study of transportation possibilities in Polk County, Minnesota,[2] suggested that a thirty-five mile route might not be unreasonable in Polk County. The same study made reference to the fact that California, one of the leading states in the transportation of school pupils, quotes that the average round trip of a school bus in California has been found to be between thirty-five and forty miles. A route in Williams County with a fifteen or twenty mile maximum mileage could be covered easily within a forty-five minute run and therefore not work a hardship on the pupil from that standpoint.

A careful study of Map 2 incidates that if bus routes carrying twenty-five to forty pupils and averaging fifteen miles in length were constructed so as to terminate at the various town school units, most of the routes originate approximately ten miles from that school unit. Therefore an arbitrary outer limit or boundary for bus transportation from the town units running approximately ten miles north and south of the town units has been set up by means of continuous lines drawn across the entire map. The rural school stations found within that

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[2]Knut P. B. Reishus, A Study of School District Reorganization in Polk County, Minnesota, Unpublished Master's Thesis, University of North Dakota Library, 1935, p. 78.

arbitrary boundary line represent those that might be said to logically belong to the nearest town unit. It will also be noted that the wide expense of territory between the towns in the western end of the county would make it necessary to set up at least two school units in the open country somewhere between Williston and Crenora.

Cost of Transportation

The cost of transportation will necessarily be a vital factor in the new set-up. Although very little data is available on the comparative costs of bus transportation, the previously mentioned study of transportation possibilities in Polk County, Minnesota,[3] did contain a table on comparison of average costs per pupil per day that is worthy of being reproduced here as Table 22. It will be noted that this table indicates an average per pupil cost range of thirteen cents to fifty-one cents with the Minnesota median listed at sixteen cents. Undoubtedly these figures have been gathered on school bus systems which call for the pupils at their individual homes and therefore list a higher pupil cost than would be expected under a bus station method of transportation. The same study[4] presents another table that is being reproduced here as Table 23. The information given in the upper portion of the table may be of value in considering transportation costs in Williams County as it not only compares the transportation costs according to three common indices used in calculating transportation costs but also compares costs for various types of conveyances.

Table 24 presents the Bus Driver's Salary Schedule as paid

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[3] Ibid. p. 82.
[4] Ibid. p. 86

Table 23[a]

Comparison of Average Costs Per Pupil Per Day in the Transportation of Pupils by District-Owned Motor Buses as Found in Several Communities

	The Studies	Average Cost Per Pupil Per Day
Santa Barbara County, California	Survey Report, Solano[b] County, California, 1929. California Taxpayers Association, Table 229, p. 90	$ .51
Kerns County, California	Survey Report, Kerns County, California, 1927, California Taxpayers Association, p.23-27	.26
California	Evans, F. O. "Factors Affecting the Cost of Transportation in California," 1930, U. S. Bulletin No. 29, p. 11	
	For High School Owned Buses	.257
Colorado	Greene, H. E. "Excessive Cost of Transportation Under the Contract System," American School Board Journal, October 26, 1926.	
	For Dry Land	.226
	For Irrigated Land	.17
Oklahoma	Payne, J. O. A Study of the Administration of Pupil Transportation in the Centralized Schools of Oklahoma 1928-29, p. 63. Unpublished Master's Thesis, Oklahoma A. and M. College.	.167
San Diego County, California	Survey Report for San Diego County. California Taxpayers Association p. 91-94	.15
Indiana	Mimeographed News Bulletin, Vol. 5, No. 6, 1931, Department of Public Instruction, State of Indiana.	.137
Solano County, California	Survey Report for Solano County, California, 1929, California Taxpayers Association, p. 88-91	.13
Minnesota	Median Cost Per Child-Day.	.16

[a]From T. C. Engum, A Study of Public School Transportation Costs in Minnesota 1929-30, Unpublished Master's Thesis, University of Minnesota, p. 107 as tabulated in Knut P. B. Reishus, A Study of School District Reorganization in Polk County, Minnesota, Unpublished Master's Thesis, University of North Dakota Library, 1935, p. 82.

[b]Question misprint for Santa Barbara?

Table 23[a]

Certain Median Values of the Transportation Costs and Reimbursement Aid for Various Types of Vehicles Used in Consolidated Schools of Minnesota, 1931-32.

Items	Classification by Type of Vehicle Used					State
	Motor Buses			Auto	Wagon	
	District	Joint	Private			
1	2	3	4	5	6	7
Median Costs						
Per C-M-D-U	.057 (.047)*	.082 (.075)#	.064	.082	.072	.073
Per Child-Day	.197 (.162)*	.233 (.212)#	.225	.235	.191	.211
Per Load-Mile	.294 (.241)*	.292 (.266)#	.308	.233	.24	.263
Median Aids						
Per C-M-D-U	.047	.064	.055	.071	.065	.065
Per Child-Day	.168	.17	.178	.194	.198	.176

*Figures in parenthesis are exclusive of the depreciation and interest charges which have been calculated at 22% of the operating costs.

#Figures in parenthesis are exclusive of the depreciation and interest charges which have been calculated at 10% of the operating costs.

[a]From a Study of Transportation Costs and Reimbursement Aids of the Consolidated Schools in Minnesota, 1931-1932. Mimeographed Material Prepared by the Department of Education, St. Paul, Minnesota, as tabulated in Knut P. B. Reishus, A Study of School District Reorganization in Polk County, Minnesota, Unpublished Master's Thesis, University of North Dakota Library, 1935, p. 86.

drivers of privately owned vehicles by School District #1, Itasca County, Grand Rapids, Minnesota, under a program recently drawn up and put into practice. The salary schedule is also supplemented with a special bonus voted by the board to help take care of the extra expense incurred during months when the weather and road conditions have been especially bad. As a special inducement in the promotion of better equipment, the district will also vote a driver a special premium of ten per cent of the initial cost of his transportation equipment for a period of three years and payable at the end of the third year if used as part payment on new transportation equipment. This district therefore not only has provided a definite salary schedule with special provision for extra expenses but has provided incentive for the purchase and use of better equipment on its privately owned bus lines.

This data on transportation costs at their best can hardly be used as a conclusive basis for determining transportation costs in Williams County but will rather serve as a foundation upon which more workable schedules may be drawn.

County Unit Not Practical

Factors such as topography and location of towns within the county tend to indicate that the introduction of the county unit of school organization would not be practical in Williams County. The position of the towns along the northern and eastern boundary of the county, in which school units either elementary or high school or both would need to be located, in itself indicates that the logical territory to be attached to that unit and from which pupils are to be transported would extend from five to ten miles into the neighboring county. It certain-

Table 24

Bus Drivers Salary Schedule
School District No. One, Itasca County
Grand Rapids, Minnesota
Arranged by O. D. Hiebert

Load Miles	Miles Per Month	GROUP I Loads 3 to 8 5 passenger car		GROUP II Loads 8 to 14 Panel Body Type Delivery Truck		GROUP III Loads 12 to 25 Truck with home built body	
		Rate	Salary	Rate	Salary	Rate	Salary
3	120	25¢	30.00				
4	160	23	37.00	25	40.00	32	51.00
5	200	21	42.00	23	46.00	30.	60.00
6	240	19	45.50	21	51.00	28	67.00
7	280	18	50.00	20	56.00	26	73.00
8	320	17	54.50	19	61.00	24	77.00
9	360	16	57.50	18	65.00	22	80.00
10	400	15	60.00	17	68.00	21	64.00
11	440			16	71.00	20	88.00
12	480			15	73.00	19	91.00
13	520					18	94.00
14	560					17	96.50
15	600					165	99.00
16	640						
17	680						
18	720						
19	760						
20	800						
21	840						
22	880						
23	920						
24	960						
25	1000						
26	1040						
27	1080						
28	1120						
29	1160						

ly would be unadvisable to neglect to include one-half of the natural school territory in any one school unit just because a county line chanced to run near the town.

Two districts, Wildrose Special and Hamlet Special, already extend into Divide County. To expect that they would give up that territory because of the introduction of a county unit plan would be unreasonable.

Existing Bonded Indebtedness

The disposal of the existing bonded indebtedness would create a considerable problem if the redistricting plan be undertaken. To expect that the taxpayers in the school districts that now have little or no bonded indebtedness would submit to a plan by which they were to assume a share in the payment of the bonded indebtedness of another district under a redistricting plan can hardly be expected. On the other hand, if the buildings that are still unpaid for are to be used by the newly organized district, it seems fair to suggest that all the taxpayers in the new district should assume at least some of the responsibility for the payment of the bonds issued in the construction of the buildings. A carefully worked out and equitable plan of refinancing would certainly have to be worked out in the establishment of a redistricting program.

Possible Transportation Projects

At this point, it seems fitting to set up suggestive transportation projects for the various parts of the county. These projects are drawn up on the supposition that roads are or will be of sufficiently high grade to be suitable for continuous winter travel. The transporta-

tion costs, which are based on Minnesota costs as listed in Table 23 and Table 24, cannot be authoritatively presented as to what may be expected in the way of costs in Williams County. However, the fact that the Minnesota costs are based on transportation by bus systems which pick up the children at or near their individual homes makes the writer feel that they may be deemed sufficiently high to be considered a reasonably basic cost for bus systems which pick up pupils at centralized stations.

Hankey District #70 affords an excellent illustration of a financial saving that may be afforded by the establishment of a transportation unit which carries the pupils into the neighboring classified school at Wildrose. First, a few facts on the status of this district might be presented. Hankey District, whose average one hundred per cent assessed valuation was 92,511 dollars for the five-year period, had an average levy of 17.786 mills, an average total expenditure of 1,699 dollars, an average per child expenditure of 169.90 dollars and paid an average of 705.75 dollars annually in teachers' salaries for an average enrollment of ten pupils.

A glance at Map 2 indicates that these ten pupils, centered at the one schoolhouse in the district approximately ten miles from Wildrose, may be transported over roads that show factors favorable for a bus route. Wildrose, which has facilities to handle forty pupils without an increase in faculty and has two extra grade rooms with a capacity of thirty-five pupils each, have in the past accepted grade pupils from outside districts at the tuition charge of thirty-six dollats per pupil. On this basis, the average tuition expense of

Hankey District would be 360 dollars a year. Calculating transportation for the ten miles according to unit transportation costs in Table 23 and Table 24, the total annual expense for grade tuition and transportation would be as follows: Grand Rapids schedule for private bus load mile, 972 dollars; Minnesota median private bus per child-day, 765 dollars; Minnesota median private bus per load-mile, 914.40 dollars; Minnesota median district-owned bus per child-day, 714.60 dollars; and Minnesota median district-owned bus per load-mile, 889.20 dollars. The last two items included the depreciation and interest charges on the district owned bus. These figures indicate that even after adding such general expenses as tuition, fuel, general control and other fixed expenses, the saving to the district would amount to at least four or five hundred dollars annually. It might be stated that Hankey District had only seven grade pupils listed in the 1935 teacher's final report so the above listed costs would also provide transportation facilities for whatever high school students might be attending school at Wildrose, thereby affording these students the opportunity of living at home.

Hazel District #44, just south of Wildrose, offers another possibility of a transportation project into Wildrose. Hazel District, whose average total assessed valuation was 212,952 dollars, had an average levy of 9.34 mills, an average total expenditure of 1,871 dollars, an average per child expenditure of 175.50 dollars and paid out an average of 1,104 dollars annually in teachers salaries for an average enrollment of twenty-five pupils. Road conditions indicate very favorable facilities for a bus unit into Wildrose not exceeding

ten miles in length. The total cost to Hazel District for grade tuition and transportation on the above listed schedule would be as follows: Grand Rapids schedule for private bus per load-mile, 1,764 dollars; Minnesota median private bus per child-day, 1,212.50 dollars; Minnesota median private bus per load-mile, 1,454.40 dollars; Minnesota median district-owned bus per child-day, 1,786.50 dollars; and Minnesota median district-owned bus per load-mile, 1,454.60 dollars. Although the financial saving to the district is not so evident in this project, the increased educational facilities to their pupils would suggest that the project be seriously considered. In the 1935 reports, Hazel District is listed as having twenty-five pupils, but no doubt transportation facilities for high school students in this district could easily be arranged.

Champion District #23, just north of Ray, offers excellent facilities for a twelve-mile bus route into the Ray schools, which has ample room for extra grade pupils. Champion District, whose average total assessed valuation is 328,430 dollars, had an average levy of twelve mills, an average total expenditure of 4,763 dollars, an average expenditure per child of 119.08 dollars, and paid out an average of 2,352 dollars in teachers' salaries for an average enrollment of forty pupils. The total costs to Champion District for grade tuition and transportation would be as follows: Grand Rapids schedule for private bus per load-mile, 2,606 dollars; Minnesota median private per child-day, 3,060 dollars; Minnesota median private bus per load-mile, 2,096.28 dollars; Minnesota median district-owned bus per child-day, 2,858.40 dollars; and Minnesota

median district-owned bus per load-mile, 2,047.44 dollars. These figures indicate that hundreds of dollars could be saved by the district through the elimination of their one-room rural schools through transportation to a larger school unit. In the 1935 final teacher's reports, Champion District listed thirty pupils enrolled in the grades so these transportation costs would easily cover the transportation of high school students as well.

The many one-room rural schools located on the highly graded roads leading into Williston suggest a possibility of large savings to the surrounding districts through the transporting of pupils into the Williston schools. The transportation of the thirty-six pupils attending the two schools of Judson District #38, located on the highway west of Williston, through the formation of a ten-mile bus route into Williston suggests a large saving. The location of many of the one-room schools in Tande District #7 indicates excellent possibilities of bus transportation units. A careful study of road conditions within the county would undoubtedly present many indications for possible transportation units leading into the larger schools of the county.

The final general conclusion may therefore be drawn that because of the existence of school districts with exceedingly small incomes per school, because of the extraordinarily large indebtedness within the school districts of Williams County, because of extreme variations in ability to support schools and variations in comparative effort put forth by the districts, and because of the existence of many favorable possibilities of eliminating expensive one-room rural

schools, Williams County can well entertain a program for the re-organization of its system of school support and school maintenance.

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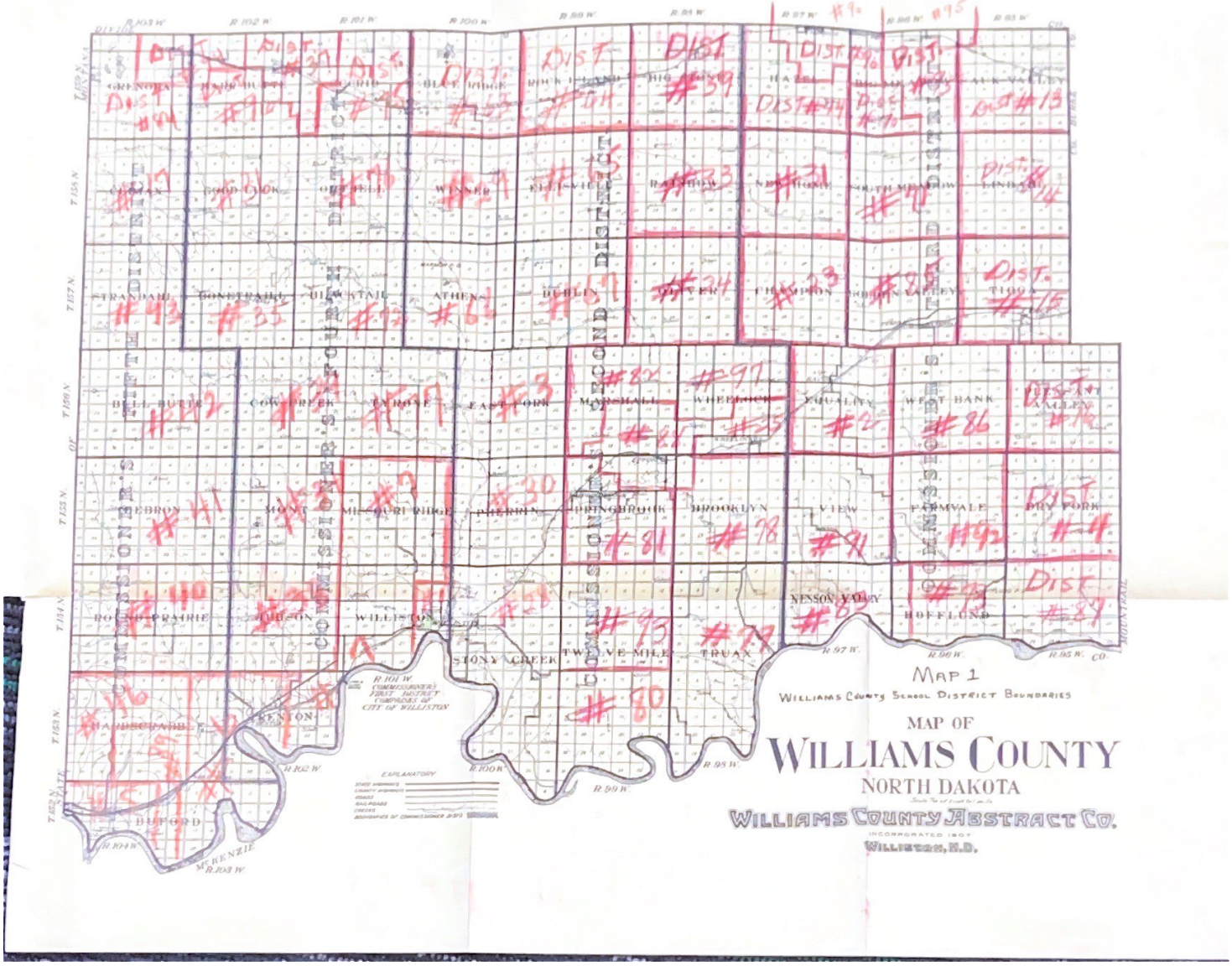
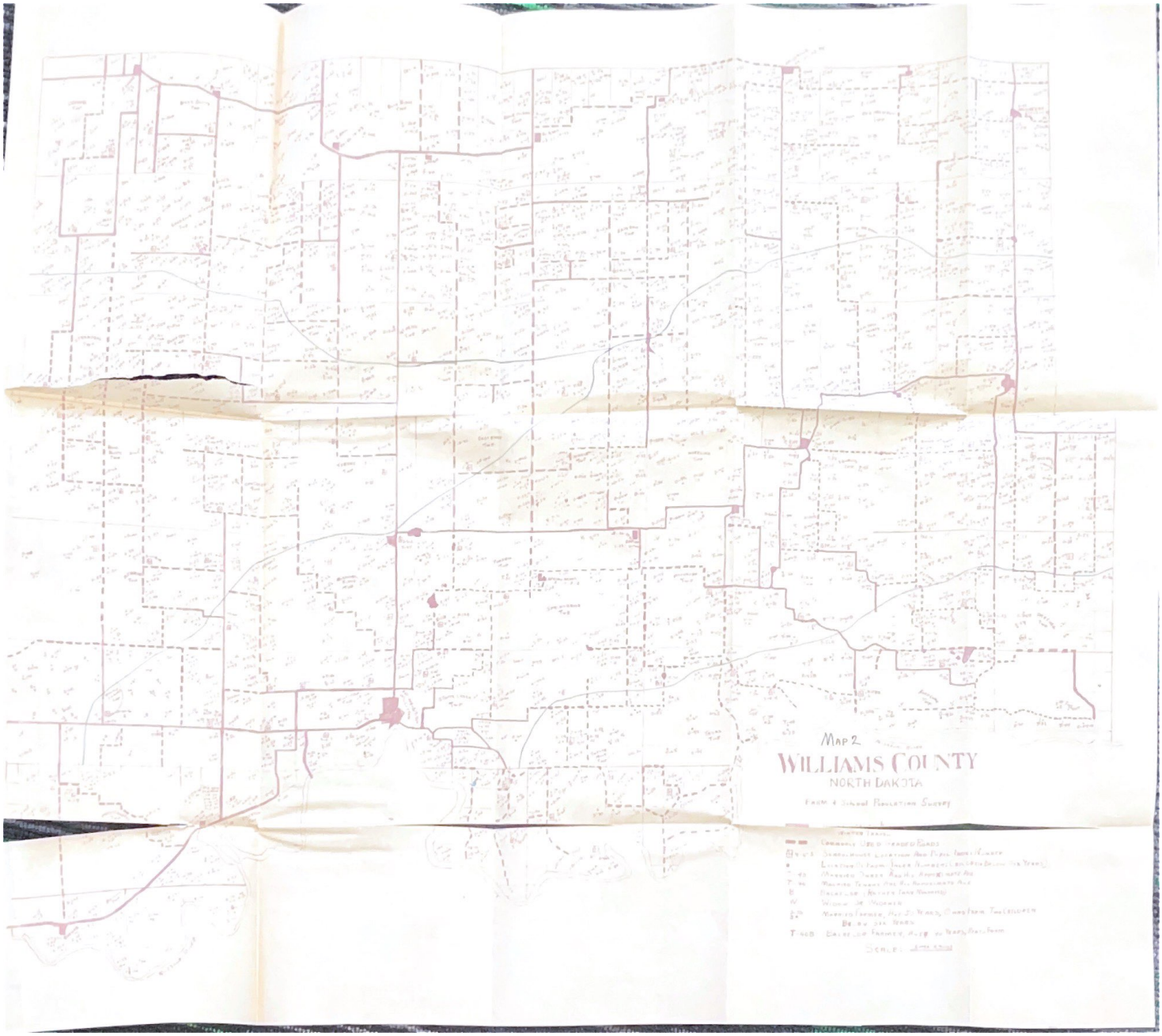

MAP 1
WILLIAMS COUNTY SCHOOL DISTRICT BOUNDARIES
MAP OF
WILLIAMS COUNTY
NORTH DAKOTA
WILLIAMS COUNTY ABSTRACT CO.
INCORPORATED 1907
WILLISTON, N.D.
EXPLANATORY
R.100W. COMMISSIONER'S FIRST DISTRICT COMPOSED OF CITY OF WILLISTON
GRENORA
BAND BUTTE
BLUE RIDGE
ROCK ISLAND
BIG MUDDY
HAZEL
ALEX VALLEY
CROSBY
GOOD LUCK
WINNER
ELLSWORTH
RAINBOW
SMITH MEADOW
LINDAHL
STANDARD
BONETRAIL
OLIVE STATE
ATHENS
DEBLIN
SILVER
CHAMPION
SOUTH CARLEY
TIOGA
BELL BUTTE
COW CREEK
EXPOSE
EAST FORK
MARSHALL
WHEELOCK
EQUALITY
WEST BANK
ALLEN
HEBRON
MONT
MISSOURI RIDGE
PIERRIN
SPRINGBROOK
BROOKLYN
VIEW
FARMVALE
DRY FORK
ROSEBUD PRAIRIE
ZAHL-ON
WILLISTON
STONY CREEK
TWELVE MILE
TRUAX
NESSON VALLEY
HOFFLUND
BUFORD
MCKENZIE CO.
WILLIAMS CO.


Map 2
WILLIAMS COUNTY
NORTH DAKOTA
FARM & RURAL POPULATION SURVEY