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A Survey of the Schools in Tower County, North Dakota

Theodore S. Grimsrud

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A SURVEY OF THE SCHOOLS IN TOWNER COUNTY, NORTH DAKOTA

A Thesis

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Submitted to the Graduate Faculty

of the

University of North Dakota

headed by
T. S. Grimsrud

In partial fulfillment of the requirements

for the degree of

Master of Science in Education

July 1936

T1936
G865

Bdg. 70'36 Hertzberg 1.00

This thesis, offered by Theodore S. Grimsrud as a partial fulfillment of the requirements for the degree of Master of Science in Education At the University of North Dakota, is hereby approved by the Committee under whom the work has been done.

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ACKNOWLEDGEMENTS

In the preparation of this thesis the writer is deeply indebted to Dr. Erich Belke for his assistance and information which he so generously gave in the writing of the manuscript. Appreciation is also expressed to the County Treasurer and the County Superintendent of Schools in Towner County for the use of the records and for the suggestions given by them.

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CHESTNUT BOND

CHAPTER 1

INTRODUCTION

One of the important problems facing those people who are interested in education is the inequality of educational opportunity offered by various sections of the country. It takes much more effort on the part of some districts to provide educational facilities than it does for others. This problem affects all districts, however, as the successful working of a democratic form of government depends upon the education of all the people.

The inequalities in educational opportunity may be caused by a difference in ability to support education. The extremes in this respect would be the district with a large amount of taxable property and few children in contrast with another district with little property and a large number of children. Another cause for inequality in educational opportunity is the variation in the density of population. Windes¹ found that in North Dakota only twelve per cent of the population fifteen to nineteen years of age were enrolled in high school, while forty two and eight tenths per cent of the non-farm population of the same ages were enrolled in high school.

"The average term in rural schools (all types) in the United States was twenty-seven days shorter in 1925-26 than in urban schools. The cost per pupil in average daily attendance in urban schools was \$130; in rural schools, \$75, a difference of \$45 per pupil. The average value of school property was \$299 in urban communities and \$99 in rural, a difference of \$200 in per pupil investment."²

¹E. E. Windes, The High School Education of the Farm Population in Selected States, U. S. Bureau of Education, Bulletin No. 6, 1925, pp. 32.

²The Status of Rural Education, Thirtieth Yearbook of National Society for the Study of Education, Part 1 (Public Publishing Co., Bloomington, Ill. 1931), pp. 81-83. (Mistake in subtraction in original quotation.)

The corrections of many of these inequalities will be made possible by the creation of a larger district organization created for school support and administration purposes. Whether this larger district should consist of a county or some smaller area will depend largely on the conditions within the county.

It is the purpose of this study to survey the school situation in Towner County in order that an intelligent appraisal of the possibilities for re-organization may be made. The following problems will then be considered:

1. What inequalities exist in school population in the different districts in the county? In this connection, a comparison of the high school enrollment in the rural and town districts will show if the same conditions as Windes found to exist in the state exist in this county.

2. What inequalities exist in regard to ability to support education? A comparison of the amount of assessable property in the various districts will give an indication of the relative wealth and the ability to provide educational facilities.

3. What effort are the various districts making to provide educational facilities? This is shown by comparing the districts as to cost per pupil, the tax rate, the amount of debt, and the teacher load.

4. What are the transportation facilities and possibilities in this county? A consideration of the problem is very essential in attempting to discover how much consolidation is possible in this county.

5. Are there possible changes that would help to eliminate the inequalities in educational opportunity? Many possible changes will at once be evident, but an effort is made to consider only those that would be practical in the light of the conditions existing in this county.

Limitation

This survey is limited to a consideration of inequalities in educational opportunity in Towner County and possible means of elimination of part of this inequality. These findings are not necessarily applicable to any other county or to the state as a whole.

Source of Data

The annual reports of the county superintendent of schools and the county treasurer of Towner County were the main sources for the material used in this study. The 1930 census reports gives considerable material on counties and townships and was also a source of useful material.

CHAPTER 2

CHARACTERISTICS OF TOWNER COUNTY

Towner County is one of the northern tier of counties in North Dakota, its position in the state being shown in Figure 1. The greatest dimensions of the county is from north to south, measuring $43\frac{1}{2}$ miles, while its width from east to west is 24 miles. It is nearly rectangular in shape.

The county was first opened for settlement in 1863, and under the homestead and other similar enactments, such as the tree claim and pre-emption acts, all of the land has been taken up. No land was sold by the government or granted to transportation companies. Upon the organization of the state in 1889, sections 16 and 36 of each township were given to the State for the purpose of creating a School Fund from the money derived from the sale of such land, which is disposed of at public auction at a price of not less than ten dollars per acre.

This area, with an average precipitation of nearly 20 inches, belongs to the semi-arid division of the country, but there are certain modifying factors that almost place it in the humid division. About seventy-five per cent of the rainfall occurs in the warmer months, from April to October, inclusive. These figures are normal for a series of years, and there are wide fluctuations from year to year, unusually dry seasons alternating with seasons in which the rainfall is sufficient to class the region with the humid country farther east. On the whole, the problem of sufficient moisture supply is the most important one in the region, and the one that most largely determines the crop returns under the methods practiced.

GOODE'S SERIES OF BASE MAPS AND GRAPHS: NORTH DAKOTA; NO. 51.

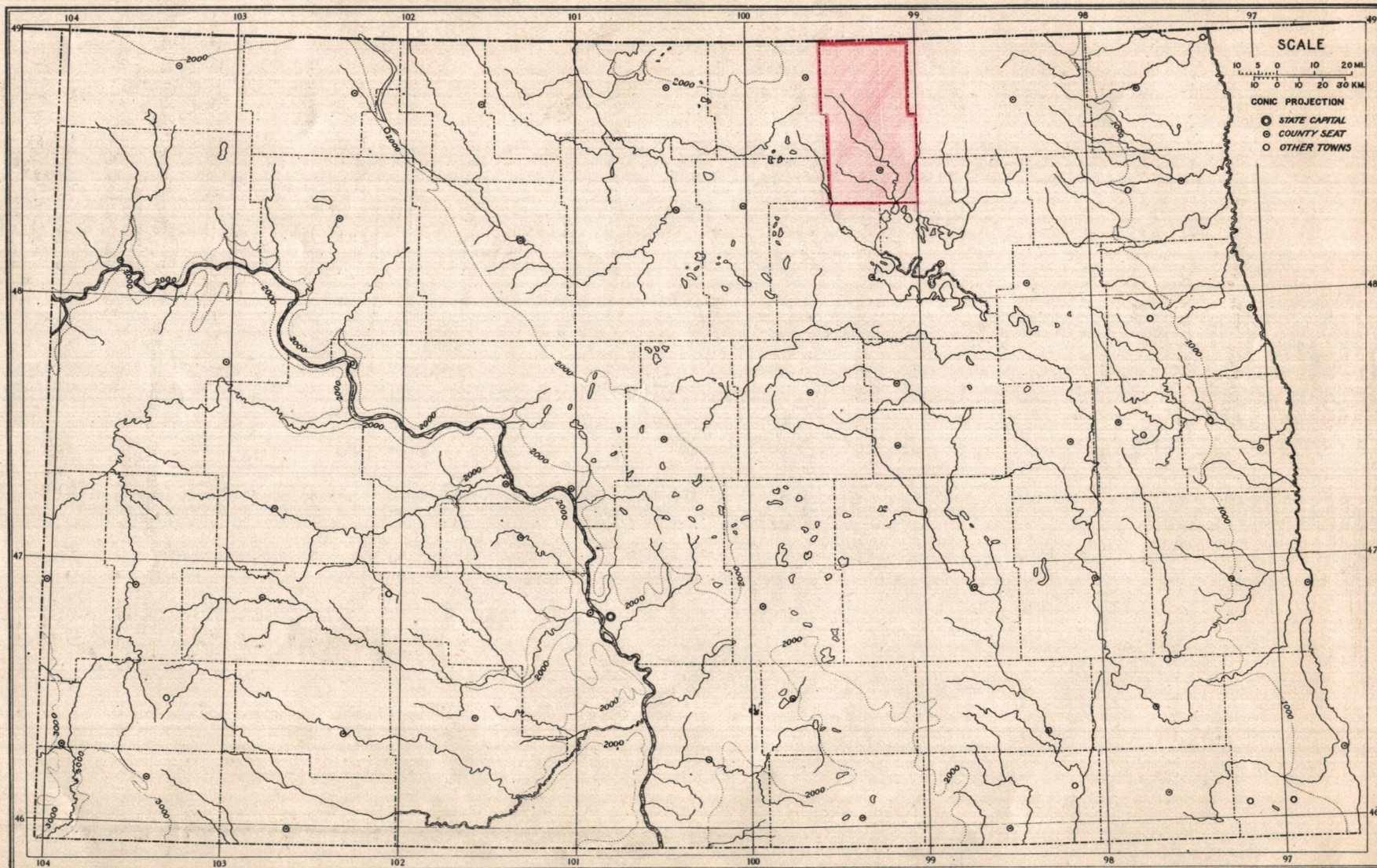


Figure 1. Position of Tower County in North Dakota.

For class use in Geography, History, Civics, Economics, etc. Prepared by J. Paul Goode. Published by the University of Chicago Press, Chicago, Ill. Copyright 1919, by the University of Chicago

The elevation varies from 1475 to 1600 feet, and the general slope is southward. The topography consists of low elevations, the great majority of which have a general northerly and southerly trend. All of the elevations have gentle, gracefully rounded slopes. In some parts of the county, the surface is made up of knolls and kettle-like depressions, some of which contains small lakes.^{1.}

Many of the streams, or coulees as they are called in this section of the country, are quite large, and their meandering course indicates that at the time they were developed the fall was not great and the water moved rather slowly. The main stream is the Big Coulee, which starts in Monroe township and flows southeastward, being joined in Cando township by Badger Coulee.

The surface geology of the area is of the glacial type.¹ The Dakota love of ice pushed down over this country forming a continuous mantel of glacial till, and, during its recession and temporary advances, formed lines of gravelly hills called terminal moraines. Associated with these is the roughest topography of the area, in which are formed the small glacial lakes. The melting of the ice during the period of recession produces large volumes of water that drained off to the south, and it was this water, derived from the glacier in the immediate vicinity and from regions many miles to the north, beyond the Turtle Mountains, that produced the system of coulees mentioned above. Professor Willard² describes the Big Coulee as forming an outlet from large bodies of glacier water far to the northward into Devils Lake and thence into the Red River Valley.

^{1.}Field Operations of the Bureau of Soils, Sixth Report,
(U. S. Government Printing Office), 1904 pp. 925-931.

^{2.}Daniel E. Willard, The Story of the Prairies, (Webb Publishing Co., St. Paul), 1921 page 115.

The passage of this large volume of water through the area as flood, laden with sediment and with varying currents, is responsible for the deposit of the large masses of material giving rise to the soils of the area, other than those formed from boulder clay. The most prominent characteristic of the soils in this area is the large amount of organic matter and lime they contain.

The industries of the people consist almost entirely of agriculture and the industries serving the farmer. Of the 3146 persons ten years old or over engaged in gainful occupations in 1930, 2127, or 67 per cent, were engaged in agriculture. Next in importance came professional and semi-professional service, which engaged 207 persons, or six and five tenths per cent. Table I, on the following page, lists all the occupations and the number of persons engaged in these occupations, together with the percentages of the total.

Table I
Occupations of Persons Gainfully Employed in Towner County, 1930^a

Occupations	Number of Persons	Percentage
All Occupations	3146	100.0
Agriculture	2127	67.5
Building Industries	54	1.7
Clothing Industry	4	.1
Garages, repair shops, greasing stations	48	1.4
Postal service	26	.8
Steam railroads	43	1.3
Telegraph and telephone	16	.5
Other transportation and comm.	24	.7
Banking and brokerage	16	.5
Insurance and real estate	12	.3
Auto agencies and filling stations	27	.8
Wholesale and retail trade, except automobiles	157	4.9
Other trade industries	44	1.3
Other public service	21	.6
Recreation and amusement	19	.6
Other professional and semi- professional service	207	6.5
Hotels, restaurants, boarding houses, etc.	34	1.0
Other domestic and personal service	168	5.2

^aData from Fifteenth Census of the United States, 1930, Volume III, Part 2, p. 433.

The population of Towner County was less in 1930 than in 1910, although it showed a small increase from 1920 to 1930. Table II shows the changes in population for these two decades for Towner County and for the state as a whole. It appears that the trend is for the population of Towner County to remain about the same.

Table II
Population of Towner County and North Dakota, 1910-1930^a

Year	Towner County	Percentage of 1910 Population	North Dakota	Percentage of 1910 Population
1910	8963	100	577,056	100
1920	8327	93	646,872	112
1930	8393	94	680,845	118

^aData from 1930 and 1920 Census Reports.

The country population seems to be evenly distributed.

Table III gives the population in the various townships outside of the incorporated cities and villages, with the number of persons per square mile. The average number of persons varies from three to seven. Relative location does not determine population rank, as Zion, with seven persons per square mile, and Olson, with four, are adjoining townships in the southern part of the county. This is also true of Armourdale, with seven persons per square mile, and Sidney, with only four, both being in the northern part of the county and adjoining. It may be said, therefore, that the farm population is of about equal density in all parts of the county.

Table III
Distribution of Population in Towner County

Township	Population ^a	Average number of persons per square mile
Armourdale	275	7
Atkins	191	5
Bethel	198	5
Cando	234	6
Coolin	160	4
Crocus	194	5
Dash x	219	4
Gerrard	215	6
Grainfield	219	6
Howell	180	5
Lansing	150	4
Maza	140	3
Monroe	180	5
Mount View	220	6
New City	163	4
Olson	150	4
Paulson	163	4
Picton x	225	5
Rock Lake	187	5
Sidney x	204	4
Smith x	187	4
Sorenson	206	5
Springfield	221	6
Teddy	196	5
Twin Hill	216	6
Victor	218	6
Virginia	254	7
Zion	256	7

^aData from 1930 Census Reports.

^xContains forty-five sections.

Being so close to Canada, it is natural that there would be many Canadian born people in Towner County. Of those born in Europe, the Norwegians are of the greatest number, with the people from Germany, Finland, Sweden, and Russia present in large numbers. The settlers from Finland are largely in the northwestern part of the county. The composition of the population as to nationality is shown in Table IV.

Table IV

Distribution of Persons According to Nationality in Towner County, 1930^a

Country	Number of foreign-born white persons	Number of Native Whites of foreign or mixed parentage
All countries	1255	3336
England	27	80
Scotland	50	97
Ireland	22	87
Norway	379	1027
Sweden	119	227
Denmark	21	67
Netherlands	2	1
Switzerland	5	19
France	1	8
Germany	142	512
Poland	16	23
Czechoslovakia	5	16
Austria	12	24
Hungary	3	2
Russia	105	205
Finland	116	387
Rumania	3	9
Canada-French	35	101
Canada	167	401
Iceland	-	2
All Other	25	41

^aData from Fifteenth Census of the United States, 1930, Volume III, Part 2, pp. 428-429.

Summary

Towner County, which is in the north central part of North Dakota, has predominantly a farming population which is fairly evenly distributed over the county. The soil is rich due to glacial deposits. Although not in the dry area of the state, rainfall is the determining factor in the size of the crop. Many of the people are foreign born or of foreign parentage, with the northern European peoples predominating.

CHAPTER 3.

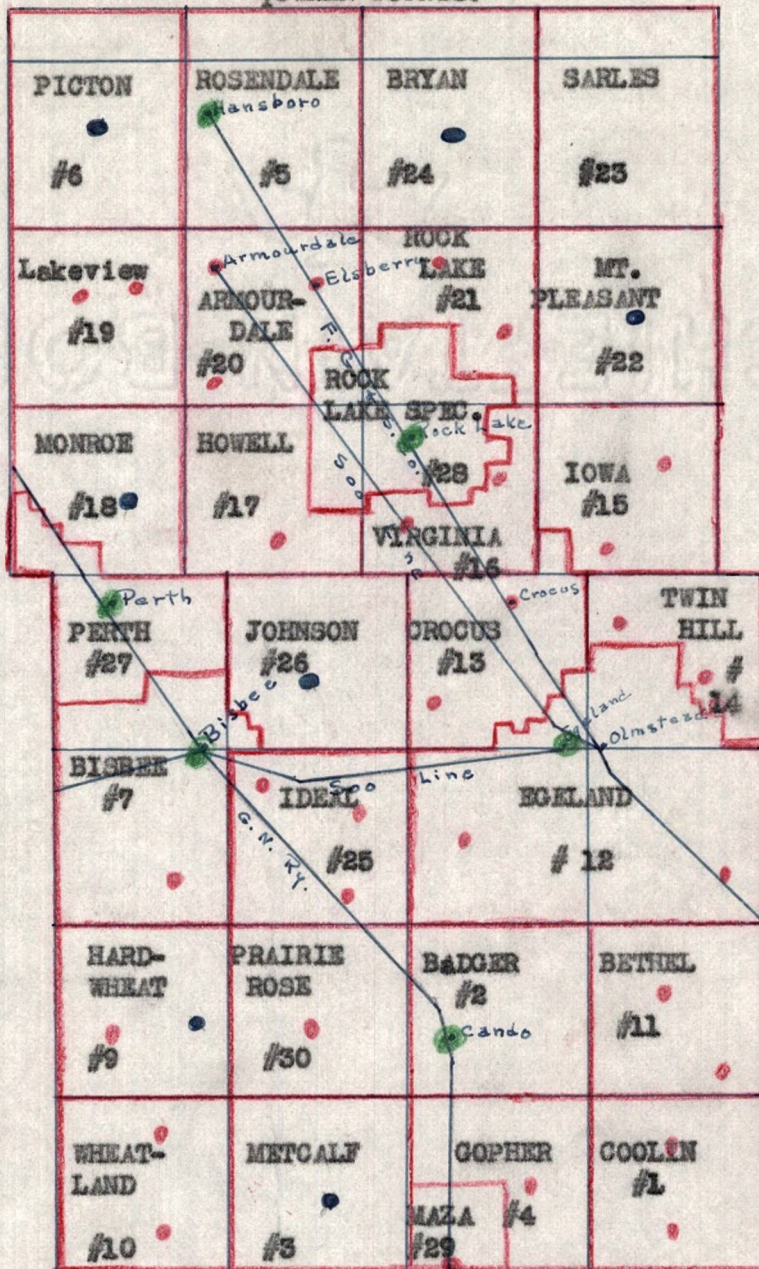
SCHOOL ORGANIZATION IN TOWNER COUNTY

Towner County is divided into twenty-nine school districts, seven of which are special districts and the remainder are common districts. The special districts do not support any particular class of school nor do they have any extra powers, but are merely so named because they were formed by the breaking up of some other districts. As the special district has no special significance, no comparisons will be made between it and the common district.

The districts vary considerably in size. Maza, with only nine square miles, is the smallest; while Egeland, with ninety-two square miles, is the largest. Ten of the districts follow the same boundaries as the township and include thirty-six square miles, which is also the average size of all of the districts in the county. Sarles School district is not included in this study because all of their pupils are sent to the adjoining school district in Cavalier County.

There are two major classes of schools in Towner County, namely the one room school and the graded school. By graded school is meant the school which employs more than one teacher. The graded schools may also be divided into two classes, namely those located in the open country and those located in town.. This is the classification used in the county superintendent's reports. Another common division of the graded schools is to group those together which include a classified high school, and group the remainder as consolidated schools. For the comparisons used in this study, the first grouping will be used, as the schools in these groups are more nearly alike both as to size and as to work done than in the second grouping. There are seven open graded schools in the county, five

SCHOOLS AND SCHOOL DISTRICTS
TOWNER COUNTY.



BOUNDARIES OF SCHOOL DISTRICTS SHOWN BY RED LINES

CODE: # MEANS DISTRICT NUMBER

● REPRESENTS ONE ROOM SCHOOL

● REPRESENTS GRADED SCHOOL IN COUNTRY

● REPRESENTS GRADED SCHOOL IN TOWN.

of which do one, two, or three years of high school work. There are six town graded schools in the county, all maintaining a four year high school, four of which are classified. Figure II is a map of Towner County, showing the location of the various schools, the type of school being shown by a red dot for a one room school, a blue dot for an open country graded school, and a green dot for a graded school located in a town.

Enumeration and Enrollment

A comparison of enrollment by age groups for Towner County and the state is made in Table V. In the group of elementary school age, Towner County had the nearly perfect record of ninety-nine and four tenths per cent enrollment. As is the case for the state as a whole, the record is not as good for the older children, falling to eighty-eight and five tenths per cent for ages fourteen and fifteen, and down to fifty-seven and two tenths per cent for ages sixteen and seventeen.

Table V

School Enrollment in North Dakota and Towner County, 1930^a

Number of Children	North Dakota	Towner County
Total number seven to thirteen years old	111,275	1,378
Number attending school	108,178	1,370
Per cent attending school	97.2	99.4
Total number fourteen and fifteen years old	31,391	409
Number attending school	27,693	362
Per cent attending school	88.2	88.5
Total number sixteen and seventeen years old	30,712	362
Number attending school	17,927	208
Per cent attending school	58.4	57.2
Total number eighteen to twenty years old	42,927	539
Number attending school	10,789	128
Per cent attending school	25.1	23.7

^aData from the 1930 Federal Census.

A comparison of enrollment and enumeration is made for each district in Table VI. The pupils enumerated are those between the ages of six and twenty-one inclusive who are not married. The difference between the enrollment and enumeration does not necessarily mean that the children are not in school, as they may be enrolled in another district, a parochial school, or in college. As an example, the enrollment in Badger District is greater than its enumeration, because of the attendance of children from other districts. A comparison of the enrollment and enumeration does show what percentage of the children are being educated by the district in which they live.

Table VI

Comparison of Enrollment and Enumeration in School Districts
in Tower County, 1934-35^a

District Number	Name	Number of Schools	Number of Children Enumerated	Number of Children Enrolled	Ratio of Enrollment to Enumeration
Districts Maintaining Only One Room Schools					
1	Coolin	2	51	27	53%
4	Gopher	1	17	4	23%
10	Wheatland	2	45	14	31%
11	Bethel	2	41	22	54%
13	Crocus	2	70	50	71%
14	Twin Hill	2	39	28	72%
15	Iowa	2	36	18	50%
16	Virginia	2	47	17	36%
17	Howell	1	51	12	23%
19	Lakeview	2	46	23	50%
20	Armourdale	3	67	39	58%
21	Rock Lake	2	48	26	54%
25	Ideal	3	62	44	71%
29	Maza	1	16	11	69%
30	Prairie Rose	1	39	16	41%
	Average		45	23	51%

^aData based on County Superintendent's Annual Report, 1934-35.

Table VI (Continued)

District Number Name	Number of Schools	Number of Children Enumerated	Number of Children Enrolled	Ratio of Enrollment to Enumeration	
Districts Maintaining Open Country Graded Schools					
3	Metcalf	1	62	28	45%
6	Picton	1	93	65	70%
9	Hardwheat*	2	58	58	100%
18	Monroe	1	27	19	70%
22	Mt. Pleasant	1	36	19	53%
24	Bryan	1	46	34	73%
26	Johnson	1	37	30	81%
Average			51	36	70%
Districts Maintaining Town Graded Schools					
2	Badger	1	396	449	113%
5	Rosedale	1	148	126	83%
7	Bisbee*	2	245	207	84%
12	Egeland**	3	233	219	94%
27	Perth	1	90	81	90%
28	Rock Lake	1	186	175	94%
Average			216	209	97%

*Maintains one one-room school.

**Maintains two one-room schools.

Table VII was prepared to show the trend in enrollment. The enrollment for each grade is shown for the ten-year period 1926-35. The figures show a tendency toward a smaller enrollment in the lower grades. The diagonal lines show the change in numbers for each group as they advanced through school. Although there is a reduction of numbers in the first eight grades, the very noticeable decrease comes from the eighth grade and through high school. With 222 in the eighth grade in 1925-26, there were only 129 in the ninth grade the following year, 105 in the tenth grade in 1927-28, 73 in the eleventh grade in 1928-29, while 70 were seniors in high school in 1929-30. The decrease in total enrollment for the county in the last five

years appears to be caused by the decrease in grade enrollment for the corresponding period, as the high school enrollment has remained quite constant. When the enrollment in the town schools and the country schools is compared, it appears that the trend is toward smaller enrollment in the country schools, while the six town schools are maintaining their enrollment at nearly the same total.

Table VII

Enrollment by Grades in Towner County for Years 1926-35^a

Grade	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
1	286	281	271	284	280	236	230	197	203	164
2	227	245	223	228	233	217	212	184	164	176
3	228	224	240	232	220	250	232	216	172	168
4	236	218	221	233	226	203	233	205	206	164
5	221	238	231	226	236	224	192	206	197	191
6	219	202	232	199	205	215	219	183	182	184
7	187	211	181	216	199	196	215	192	173	190
8	222	234	222	184	210	186	183	206	195	168
9	140	129	124	128	132	149	132	114	143	154
10	89	84	105	95	119	103	114	90	110	134
11	93	79	76	73	84	98	92	101	84	100
12	75	83	71	63	70	78	81	82	79	68
1-8	1826	1851	1821	1802	1809	1727	1716	1589	1497	1405
9-12	397	375	376	366	405	428	419	387	416	456
Total	2223	2226	2197	2168	2214	2155	2135	1976	1907	1861
Town Schools*	1190	1171	1239	1290	1285	1263	1201	1188	1225	
Rural Schools#	1036	1026	929	1024	870	872	775	719	636	

^aData from County Superintendents Annual Reports, 1926-35.

*Graded Schools located in towns.

#All other schools.

SUMMARY

The twenty-nine school districts in Towner County are placed in three divisions for the purpose of comparisons in this study:

Group I: Those districts that support only one room schools.

Group II: Those districts that maintain graded schools which are located in the open country.

Group III: Those districts that maintain graded schools which are located in towns.

Although Towner County has a splendid record of having ninety-nine and four tenths per cent enrollment for the elementary schools, the record is not nearly as good for the high school.

Group III of the school districts have an enrollment which represents a much larger percentage (ninety-seven) of the children enumerated in their districts than is the case for the other groups of districts. Group II ranks next (seventy per cent), and Group I is third with fifty-one per cent.

A decrease in school enrollment has taken place in the county in the last five years. This decrease is found in the enrollment in the elementary grades and in the schools located in the country.

CHAPTER 4.

ABILITY OF TOWNER COUNTY TO SUPPORT EDUCATION

In deciding whether or not to loan some money to a customer, a banker considers two things of primary importance. These are the customer's ability to repay the loan, and the customer's willingness to repay the loan. Likewise, in determining the educational possibilities of a county, both ability and effort must be considered.

In considering the ability of the school districts to support schools, it is necessary to determine the sources of support, how many children are to be educated, and how concentrated is this school population in the different districts.

When the present sources of support are studied, the figures show that about three-fourths of the revenue comes from local district taxes. Table VIII shows the total revenue receipts of the schools in Towner County for the years 1933-35, the amount of these receipts which came from local taxes, and the percentage which came from local taxes.

TABLE VIII

Comparison of All Revenue Receipts with Taxes Levied by
School Boards in Towner County in 1933-35^a

Year	Receipts of General Fund Not Including Loans and Non-revenue Receipts	Receipts from Taxes Levied by School Boards	Ratio of Taxes Levied by School Boards to All Revenue Receipts
1932-33	\$110,571.16	\$78,287.01	70.8%
1933-34	118,603.81	90,768.64	76.5%
1934-35	108,495.21	80,664.27	74.3%

^aData from County Superintendent's Annual Reports, 1933, 1934, 1935.

With three-fourths of the revenue coming from local district taxes, the importance of the amount of property in the district upon which to levy these taxes is apparent.

Some may claim that assessed valuation is not a true measure, which may be granted because of its variability. Mr. Converse, as tax commissioner, stated, "Some will tell you that the assessed valuation is only sixty per cent of the actual value, while others will tell you that the assessed valuation is eighty per cent or ninety per cent or possibly 100% of the actual value."¹ There are equalization boards to equalize this among districts. However, the assessed valuation is the best measure that can be used to measure the amount of property in the district.

A comparison of the assessed valuation per district does not mean much unless the number of children in the district is also considered. Obviously, if two districts had an equal amount of property upon which to levy taxes, their task would not be equal if one had twice as many children to educate as the other one had. In determining the number of children in each district, the question arises as to whether the number of children enumerated should be used, or the number of children in average daily attendance in the district. If the districts are to be compared on the basis of their ability to support education such as they are providing at the present time, the number of children in average daily attendance in their schools should be used. On this basis, the range in the amount of assessed valuation per child is very large in Towner County, as is shown in Table IX, on the following page.

¹Harold Wakefield, "Suggestions for Curing Financial Ills of Education", North Dakota Teacher, February, 1924, p. 24.

TABLE IX
Comparison of Districts as to Assessed Valuation per Child
in 1934-35

District Number	Assessed Valuation ¹	Number of Children Enumerated ¹	Assessed Valuation per Child Enumerated	Average Daily Attendance ¹	Assessed Valuation per Child in Average Daily Attendance
Group I:					
1	\$271,851	51	\$5,330	22	\$12,357
4	251,931	17	14,819	4	62,984
10	273,777	45	6,083	13	21,059
11	283,385	41	6,911	17	16,669
13	249,837	70	3,569	38	6,574
14	142,885	39	3,643	24	5,953
15	214,008	36	5,941	15	14,267
16	152,848	47	3,209	14	10,917
17	159,623	51	3,130	10	15,962
19	195,627	46	4,687	21	9,315
20	229,642	67	3,427	33	6,959
21	139,052	48	2,897	24	5,794
25	365,911	62	5,901	34	10,762
29	130,726	16	8,170	11	11,884
30	<u>357,968</u>	<u>39</u>	<u>6,614</u>	<u>14</u>	<u>18,425</u>
Average	221,271	45	4,917	19	11,289
Group II:					
3	251,453	62	4,055	25	10,058
6	216,718	93	2,330	51	4,249
9	272,279	58	4,694	54	5,042
18	157,678	27	5,839	17	9,274
22	197,782	36	5,494	16	12,361
24	215,604	46	4,687	27	7,985
26	<u>223,987</u>	<u>37</u>	<u>6,053</u>	<u>27</u>	<u>8,296</u>
Average	219,357	51	4,279	31	7,076
Group III:					
2	746,606	396	1,885	391	1,959
5	247,209	148	1,670	111	2,227
7	611,558	245	2,496	188	3,253
12	774,718	233	3,325	187	4,142
27	343,740	90	3,817	73	4,708
28	<u>324,132</u>	<u>186</u>	<u>1,742</u>	<u>153</u>	<u>2,118</u>
Average	507,994	216	2,347	182	2,788

¹Data from County Superintendent's Annual Report, Year Ending June 30, 1936.

District number two has only \$1959 in assessed valuation for each child in average daily attendance compared with \$62,984 in assessed valuation for each child in average daily attendance in district number four. The average for all districts maintaining only one room schools is \$11,289 for each child in average daily attendance. In the districts having rural graded schools, the average is \$7,076, while the districts with the town graded schools has only an average of \$2788. On the basis of the amount of assessable property for each child in average daily attendance, the districts with one room schools were four times more able to support education than were the districts with graded schools in town.

Some districts are paid tuition for pupils coming to their schools from other districts. This partly compensates for the difference in ability shown above. Because of this, the assessed valuation per child was also computed on the basis of the number of children enumerated, as is also shown in Table IX. In other words, the children are counted where they reside, rather than where they attend school. This also includes many children who are not in school, but it is safe to say that some of these would be in school if educational facilities were provided. When the assessed valuation per child is computed in this manner, the average is not as large, but is still significant. District number four again leads with \$14,819 per child, while district number five with \$1670 in assessed valuation per child enumerated, has the least. Again the districts with one room schools have the most property per child (\$4,919) although the districts with rural graded schools have nearly as much (\$4,279). The districts with town graded schools have approximately half as much property for each child enumerated as either of the other two groups of districts.

What are the contributing causes to these differences in ability in the districts? Three causes that should be mentioned are the existence of a large amount of tax exempt land in some districts, the existence of railroad property in only fourteen of the twenty-nine districts, and the recent tendency of the un-employed to move to town for relief purposes, which has placed an additional burden on the town schools.

The Enabling Act at the time of the admission of North Dakota into the Union, provided for grants of land to the different state institutions as well as sections sixteen and thirty-six in each township for the common schools. This institutional land was located in the counties where there was still government land which had not been homesteaded or sold. Towner County had considerable government land, and so more than their proportional share was set aside for these grants. The land could not be sold for less than ten dollars per acre. Some of the land sold on contract has remained in the possession of the state, because the contracts have not been fulfilled. On July 6, 1936, there were 40,679 acres of this land in Towner County.¹ This land was located mostly in the northern half of the county, as will be seen from Figure III. As a result, School District Number Five, which has the lowest assessed valuation per child, has 4078 acres of tax exempt land belonging to the state institutions. In contrast, District Number Four, with the highest valuation per child, has only 160 acres of institutional tax-exempt land.

The Bank of North Dakota has been forced to foreclose some of their loans on farms in Towner County and in July 1936 had a total of 8,141.76 acres of land in their possession. This is also located largely in the northern half of the county as is also shown on Figure III.

¹ Computed from Leasing List for Towner County in Treasurers Office, Cando, North Dakota

901 320	778 0	902 289	320 0
2272 792	3300 0	3966 449	3265 640
3040 0	1935 480	1230 160	2240 160
3200 1080	480 641	2080 0	1280 0
760 160	1920 0	1400 0	2400 160
0 0	640 545	240 1436	400 0
160 0	120 320	360 0	0 0
40 320	160 0	480 0	320 160

Figure 3

Distribution of State Tax-exempt Land in Towner County, 1936^a

TOWNER COUNTY

Code:

Upper figures are number of acres of school and institutional lands.

Lower figures are number of acres of land owned by the Bank of North Dakota

^aData from Leasing List, Towner County Treasurers Office, Cando, North Dakota.

The state institutions and the Bank of North Dakota together owned 48,820.76 acres in the county in July 1936. This is seven and three tenths per cent of the 668,160 acres in the county. In the four northern school districts which lie along the Canadian border, there is a total of 17,714.57 acres of tax-exempt land out of a total of 115,200 acres, or fifteen and three tenths per cent of the total. Obviously this is a serious problem as some of the land is improved and the families living on them have children to be educated, about three-fourths of the cost of which has to be paid by the property of the owners of land that is not tax-exempt.

Another cause for the inequality of the amount of property per child is the fact that the valuation of the railroad property is all included in the district through which the railroad passes. This means that only fourteen of the twenty-nine districts in Towner County have railroad property included in their assessed valuations. The number of miles of railroad property and the valuation of the same is shown in Table X. District Number Twenty-Five, with sixty-two children enumerated, has fourteen miles of railroad property to help them in supporting their schools, while District Number Six, with ninety-three children enumerated, has no railroad to help it but has 3965 acres of tax-exempt land.

Table X
 Number of Miles and Valuation of Railroad Property
 in Towner County, 1935^a

Number of District	Number of Miles of Railroad	Valuation of Railroad Property
2	8.18	\$40,137
4	3.0	22,274
5	6.0	29,298
7	11.0	59,764
12	30.0	106,785
13	8.0	29,012
16	5.0	22,672
18	1.5	11,174
20	13.0	35,345
25	14.0	72,417
27	7.0	53,502
28	10.25	40,757
29	3.0	22,707
30	1.87	12,950

^aData from County Treasurer's Tax Lists, 1935.

Summary

The school districts as they are now organized in Towner County, have a wide range in ability to support schools, as measured by the amount of assessed valuation per child. The districts with one room schools rank highest in ability, the districts with rural graded schools rank next, and the districts with town graded schools rank lowest. This difference in ability between the different districts is partly due to the wide range in the number of children in the different districts and partly due to the difference in the amount of assessable property. This difference in assessable property is increased by the exemptions granted to considerable state land in the northern half of the county and is also increased by the fact that only fourteen of the twenty-nine districts have railroad property within their borders.

CHAPTER 5.

EFFORT ON THE PART OF DISTRICT TO SUPPORT EDUCATION

Does it take more effort on the part of some districts to support education than for others? One may expect that such a wide variation in ability as was shown in the preceding chapter would lead to a corresponding wide variation in effort, and such is the case, as can be seen from Table XI.

Table XI

Comparison of Assessed Valuation and Tax Levy in School Districts
in Tower County, 1934-35^a

District Number Name	Assessed Valuation Per Child Enumerated	Tax Levy In Mills
4 Gopher	\$14,819	9.93
29 Maza	8,170	5.00
11 Bethel	6,911	5.84
30 Prairie Rose	6,614	6.13
10 Wheatland	6,083	7.30
26 Johnson	6,053	11.43
15 Iowa	5,941	7.63
25 Ideal	5,901	6.50
18 Monroe	5,839	16.00
22 Mt. Pleasant	5,494	15.20
1 Coolin	5,330	0.00
9 Hardwheat	4,694	5.50
19 Lakeview	4,687	10.80
24 Bryan	4,687	20.26
3 Metcalf	4,055	14.63
27 Perth	3,817	23.16
14 Twin Hill	3,643	14.00
13 Orcus	3,569	12.60
20 Armourdale	3,427	9.36
12 Egeland	3,325	12.91
16 Virginia	3,209	11.90
17 Howell	3,130	14.00
21 Rock Lake	2,897	12.70
7 Bisbee	2,496	19.20
6 Picton	2,330	20.40
2 Badger	1,885	19.43
28 Rock Lake Special	1,742	24.69
5 Rosedale	1,670	27.22

^aData from 1935 County Superintendent's Annual Report.

The districts are listed in Table XI in descending order as to amount of assessed valuation per child which they possessed. The tendency as shown by this table is for the districts having a large amount of property per child to have a low tax rate, while the districts having the high tax rates are those with a small amount of assessable property for each child enumerated. This would naturally be expected.

This condition would not be considered serious if the districts were furnishing equal opportunity for education. It might even be expected that these schools that have more wealth per child would provide schools that would cost more per child. To test this phase of the problem, Table XII was prepared. The districts are arranged within their group in order of the amount of assessed valuation per child which they possess. Are the wealthier districts spending as large a proportion of their wealth as the poorer districts? The table shows that they are not. Among the districts maintaining one-room schools, District Number Seventeen, with the lowest valuation per child in the group (\$3130) is spending the highest percentage of that wealth. None of the first eight districts in point of wealth in this group are spending as much as one tenth per cent of their assessable wealth for schools, while five of the last six in point of wealth in this group are spending more than one tenth per cent of their assessable wealth for education. This tendency does not seem to hold among either of the groups that maintain graded schools.

When the three groups of districts are compared, it is evident that the districts maintaining graded schools are spending a larger proportion of their wealth than those maintaining one-room schools.

Table XII

Comparison of Effort by School Districts in Towner County, 1935

District Number	Assessed ^a Valuation per Child Enumerated	School ^a Cost per Child Enumerated	Ratio of Cost to Assessed Valuation
Group I:			
4	\$14,919	\$11.60	.0782%
29	8,170	8.07	.0985%
11	6,911	3.53	.0510%
30	6,614	4.71	.0712%
10	6,083	5.38	.0882%
15	5,941	4.62	.0777%
25	5,901	4.42	.0745%
1	5,330	4.12	.0773%
19	4,687	6.88	.1467%
14	3,643	4.88	.1339%
13	3,569	3.54	.0991%
20	3,427	3.58	.1043%
16	3,209	5.50	.1714%
17	3,130	6.66	.2137%
Average	4,917	5.16	.1051%
Group II:			
26	6,053	7.50	.1239%
18	5,839	10.57	.1810%
22	5,494	5.80	.1055%
9	4,694	6.16	.1310%
24	4,687	6.51	.1388%
3	4,055	5.40	.1331%
6	2,330	3.96	.1699%
Average	4,279	6.55	.1531%
Group III:			
27	3,817	10.69	.2800%
12	3,325	6.79	.2042%
7	2,946	6.57	.2632%
2	1,885	5.47	.2901%
28	1,742	5.12	.1936%
5	1,670	4.92	.2946%
Average	2,347	6.59	.2810%

^aData from 1935 County Superintendent's Report.

The districts maintaining town graded schools spend a larger proportion of their wealth than the districts with graded schools in the country.

The amount of effort expended does not necessarily measure the amount of educational results obtained, as some of the effort may be wasted. An analysis of the expenditures per pupil by the various districts will help to determine how the effort is being expended. Table XIII lists the various items of school expenditures per pupil by each group of districts for the school year ending June 30, 1935

Table XIII
Comparison of Average per Pupil Expenditures by Types
of Districts in Towner County, 1935 ^a

Kind of Expenditures	Group I 351 pupils	Group II 253 pupils	Group III 1257 pupils
School Board Salaries	\$4.58	\$2.95	\$1.04
School Board Expenses	.67	.54	1.13
Teachers Salaries	39.55	36.11	29.78
Teachers Retirement Fund	.39	.37	.37
Textbooks	1.04	1.00	1.32
Library Books	.35	.19	.22
Teaching Supplies	1.27	.91	2.32
Transportation	8.31	19.89	5.73
Tuition	12.09	4.17	.02
Health, Play, Lunches	.04	.02	.02
Operation of Plant	8.34	11.00	10.51
Maintenance	3.27	2.94	1.83
Fixed Charges	3.81	1.49	1.99
Debt Service	<u>2.49</u>	<u>13.22</u>	<u>1.59</u>
Total	<u>86.20</u>	<u>94.80</u>	<u>57.87</u>

^aComputed from Data from County Superintendent's 1935 Report.

The total average expenditure per pupil by the town graded school group is \$57.87, while that for the one-room school group is \$86.20 and the graded county school group is \$94.80. This is true in spite of the fact that the first group of districts all maintain four year high schools at a higher per pupil cost than for the elementary school.

The Teacher Situation

The largest single item of expense is teacher's salaries, consisting of one-half of the total expenditure for the town graded schools, forty-six per cent of the total for the one-room schools, and thirty-eight per cent for the rural graded schools. It is important to notice that, although their cost per child for teacher's salaries was the lowest of any group, the town graded schools paid their teachers the highest percentage of the total costs.

It has been said that no school is any better than its teachers, so a more complete analysis of the teacher situation in Towner County will help to show what effort the different districts are putting forth to get good schools. Why do teacher's salaries represent the greatest per pupil cost for the one-room schools, and yet the largest percentage of the total cost for the town graded schools?

Having taught a one-room school without having had the advantage of any normal training, the writer realizes that training is one of the most important requisites of good teaching. The training of the teachers of Towner County is shown in Table XIV, on the following page. The table covers years 1930-31, 1932-33, and 1934-35 in order to determine the trend in the amount of training for the different types of schools.

Table XIV

Training of Teachers in Towner County for the Years 1930-31,
1932-33, and 1934-35^a

Amount of College Training	Number of Teachers in		
	One-room Schools	Country Graded Schools	Town Graded Schools
1930-31			
12 weeks	4	3	0
1 year	22	3	0
2 years	6	15	29
4 years	0	0	25
1932-33			
12 weeks	1	0	0
1 year	9	2	0
2 years	23	13	25
4 years	0	0	21
1934-35			
12 weeks	1	0	0
1 year	12	6	0
2 years	17	7	24
4 years	2	2	23

^aData from County Superintendent's Report for the years 1930-31, 1932-33, and 1934-35.

The training of the teachers in the town graded schools is much more complete for all three years. In 1930-31 the one-room schools, in general, had teachers with less training than either kind of graded school. The districts with the one-room schools seem to be making an effort to get better trained teachers, so that by 1934-35 these teachers were fully as well trained as those in the graded schools in the open country.

The experience of a teacher is also an important factor in judging his or her ability. As a result of investigating the amount of experience the teachers have in the three types of schools, Table XV was prepared, and is found on the following page.

Table XV

Experience of Teachers in Tower County, 1934-35

Number of Years Experience	Number of Teachers in			Total
	One-room Schools	Country Graded Schools	Town Graded Schools	
1st year	4	1	5	10
2nd year	3	1	4	8
3rd year	6	3	9	18
5th year	8	5	11	24
8th year	2	1	3	6
10th year or more	<u>5</u>	<u>5</u>	<u>18</u>	<u>28</u>
Total	28	16	50	94

From the above table, it appears that the teachers in both types of graded schools were equally experienced, while the teachers in the one-room schools were only slightly less experienced. To see if that was the general rule, or just the result of the present over supply of teachers, a comparison of the averages for 1934-35 was made with the experience of the teachers for the years 1930-31, 1932-33, and 1934-35.

The average experience of all the teachers in each type of school was computed by dividing the aggregate experience of all the teachers by the number of teachers. The aggregate experience was computed as if the teachers with ten years or more experience had taught only ten years, for want of more exact information. The error in the average will likely be greatest in the case of the town graded schools, as there are more teachers with ten years experience in this group.

Table XVI

Average Experience of Teachers in Towner County for the Years
1930-31, 1932-33, 1933-34 and 1934-35

Years	Average Experience of Teachers in		
	One-room Schools	Country Graded Schools	Town Graded Schools
1930-31	3.4	4.9	4.6
1932-33	3.9	5.0	5.4
1933-34	4.9	5.3	6.1
1934-35	4.3	5.9	5.9

The figures in the above table show that both types of graded schools hire teachers with an average of one and one-half years more experience than the one-room schools. The town graded schools have slightly more experienced teachers than the country graded schools. All types of schools are getting more experienced teachers in the last two years, possibly because the greater supply of teachers makes it possible for the school boards to hire the more experienced individuals, and the number of marriages are not so many due to depression.

What efforts in the way of salary inducements are the districts making in order to get good teachers? With the more experienced and better trained teachers found in the graded schools, especially the town graded schools, it is natural to expect that this is caused by higher salaries being offered by these schools. The average salaries for the years 1928-29, 1930-31, 1932-33, and 1934-35 substantiate this, and is shown in Table XVII. In 1928-29, the average salary in the one room school was only sixty-three per cent of the average salary in the town graded school, and the country graded school had an average salary of only seventy-two per cent of the

average salary of the graded school in town. However, the salary in the country graded school is often in addition to free house rent and free fuel, which makes the salary in this type of school compare much more favorably with the town graded school. It is at once apparent that there has been a forty per cent reduction in salaries in all three types of schools from 1931 to 1935. In proportion to the average salaries in the other two types of schools, the average salary in the town graded school is as much greater in 1934-35 as it was in 1928-29.

Table XVII

Average Salaries Paid Teachers in Towner County in 1928-29,
1930-31, 1932-33, and 1934-35^a

Years	Average Salary Paid Teachers in			
	One-room Schools	Country Graded Schools	Town Graded Schools	All Schools
1928-29	\$94.81	\$107.04	\$149.12	\$123.57
1930-31	95.12	105.15	144.87	123.11
1932-33	76.44	84.42	119.29	94.71
1934-35	57.33	64.89	88.86	75.20

^aData from County Superintendent's Reports for years named above.

It seems contradictory that the teachers in the one-room schools have the lowest average salary, yet it was found in Table XIII that teacher's salaries represented a greater cost per pupil in the one-room schools than in the graded schools. The explanation is apparent when Table XVIII is studied. This table is an attempt to present the teaching load. The analysis is limited in that it shows the number of pupils only, and not the number of grades or classes taught per teacher.

Table XVIII

Teaching Load in Tower County in 1934-35

Kind of Schools	Number of Teachers	Number of Pupils	Pupils Per Teacher
One-room	32	399	12
Country Graded	15	238	16
Town Graded	47	1225	26

The average number of pupils taught by the teacher in the one-room and the country graded school is so few that the teaching cost per pupil is high even though the average teacher's salary is low.

In 1934-35 the districts with one-room schools spent \$4.58 per pupil enrolled for school board salaries, as compared with \$1.27 per pupil for teaching supplies and \$1.04 per pupil for textbooks. The districts with graded schools in the country spent \$2.96 per child for school board salaries, as compared with \$.91 per child for teaching supplies. The districts with the graded schools located in town spent only \$1.04 per child for school board salaries, as compared with \$2.32 per child for teaching supplies and \$1.32 for textbooks. It should not be inferred from the above figures that the school board officers are receiving salaries that are too high, but it is rather the result of too many officers for the number of pupils and teachers concerned.

In the operation of plant, the average cost for the districts with one-room schools is \$8.34 per pupil. The graded schools spend more for this kind of service, the districts with the town schools spending \$10.51 per pupil and the country graded schools \$11.00 per pupil.

However, operation of plant in the case of the one-room school does not usually include any janitor's wages, as the janitor's work is usually considered part of the teacher's work. The operation of plant in this type of school only means the cost of fuel and supplies such as soap, sweeping compound, and a few other supplies. When the comfort of the steam heated graded school with its paid janitor is compared with that of the one-room school with its jacket-stove fired by a much too busy teacher, it is evident that the additional effort of paying two dollars per child is well directed.

Insofar as the debt of a district usually represents an effort on the part of that district to provide better school buildings, a comparison among the three types of districts is made in Table XIX.

Table XIX

The Ratio of School Bonds to Assessed Valuation in Towner County
1934-35

Type of Districts	Assessed Valuation ^a	Amount of Bonds Outstanding ^a	Average Per Cent of Assessed Valuation
Group I	\$3,319,071	\$2,500	.08
Group II	1,535,499	20,300	1.3
Group III	3,047,964	45,700	1.5

^aData from County Superintendent's 1935 Report.

Summary

The effort put forth on the part of school districts to support education varies greatly among the districts in Towner County. The districts with a small amount of assessable property are forced to levy high tax rates, while the opposite is true for those districts which have much wealth for each child. When the wealth per child was compared with the cost per child it was found that the poorer districts are spending a much larger share of their wealth in an effort to provide schools for their children.

The districts with graded schools, especially those in town, make an effort to get better trained and more experienced teachers by paying higher salaries. In spite of this, teacher's salaries represent a smaller cost per child in the town graded school than in the other two types, because the teachers each teach a greater number of pupils.

The one-room school districts put forth a greater effort per pupil in way of school board salaries, tuition, maintenance, and fixed charges. This is largely due to the form of organization and is not especially beneficial to the children enrolled. Their greater effort in the matter of library books is commendable, but is largely offset by the fact that so many small schools do not permit each child to have access to very many books. The graded schools show a greater effort per child in the way of textbooks, teaching supplies, operation of plant, and debt service, which are all forms of effort in an attempt to provide as good schools as is possible with the money available.

CHAPTER 6

SCHOOL TRANSPORTATION IN TOWNER COUNTY

In the analysis of school costs per pupil in Table XIII, it was found that transportation was a big part of the total cost in the case of graded schools in the country, amounting to \$19.89 per pupil, compared to a total cost of \$94.80 per pupil. For the town graded schools the cost was not as great, amounting to \$5.73 out of a total of \$57.87. The one-room schools also had a low cost for transportation, only \$8.31 out of a total of \$36.20. The above figures show that the problem of transportation is large enough to warrant a thorough discussion in an attempt to survey the school system of Towner County.

One of the factors that must be considered in any discussion of the problem of transportation is the distribution of the school population. Table XX shows the distribution of the school population in Towner County. To show the trend, the enumeration by districts for the last six odd-numbered years was taken. From this the average enumeration for this period was calculated, and by dividing by the number of sections in the district, the average number of persons of school age per section was determined. It was also found that the average density of the districts with one-room schools was 1.7, while the average density of the districts with graded schools in the country was only 1.5. It is not only the more densely populated districts that have consolidated in Towner County. There are nine districts with one-room schools that have an average density greater than the country graded schools. The table follows.

Table XX

Distribution of School Population in Towner County, 1927-35

Dis- trict Number	Number of Children Enumerated in					Average	Number of Sections	Average Density per Square Mile
	1927	1929	1931	1933	1935			
Group I								
1	48	46	62	80	51	53	36	1.4
4	42	36	29	25	17	30	27	1.1
10	72	70	75	52	45	64	36	1.8
11	40	59	47	45	41	46	36	1.3
13	50	55	65	65	70	61	31½	1.9
14	24	25	42	42	42	34	24	1.4
15	71	65	43	47	36	52	34½	1.5
16	48	58	58	51	47	52	23	2.2
17	74	61	51	46	51	57	27	2.1
19	114	96	75	64	46	79	36	2.1
20	100	77	86	78	67	82	32	2.5
21	71	70	54	37	43	56	25½	2.5
25	50	74	70	80	62	67	36	1.8
29	18	9	12	20	16	15	9	1.6
30	47	24	36	46	39	38	36	1.0
Average	54	51	50	47	45	49	28	1.7
Group II								
3	34	45	65	66	62	54	36	1.5
6	94	94	105	87	93	95	45	2.1
9	86	84	77	78	58	77	36	2.1
18	36	40	36	30	27	34	27½	1.2
22	54	47	33	42	36	42	36	1.2
24	50	42	53	58	46	50	45	1.1
26	63	51	44	32	37	45	34	1.3
Average	59	58	59	56	51	57	37	1.5
Group III								
2	356	404	434	387	396	395	36	10.9
5	118	138	141	139	148	137	45	3.0
7	234	258	263	256	245	251	52½	4.8
12	295	277	276	248	233	266	92	2.8
27	111	95	108	96	90	99	29½	3.3
28	119	131	159	160	186	151	36½	4.1
Average	205	219	230	214	216	215	48½	4.8

^aData from County Superintendent's Reports for Years 1926-27, 1928-29, 1930-31, 1932-33, 1934-35.

Another important factor in the transportation problem is the condition of the available roads. Towner County is served by a network of state and county roads. The state roads are all surfaced and cover 127 miles in the county. The county system covers 272 miles, of which only 184 miles have been graded, and only part of that surfaced. Besides these roads, there are a number of well built township roads, which have been built to meet local needs. Figure 4 shows the location of the highways and the schools in Towner County. It is noticeable at once how many of the roads follow the township boundaries. Highways have either been built or are designated to be built on 150 of the 366 miles which compose the boundary lines of the townships. Because of the fact that most of the schools are located within the districts which correspond to the townships, only 21 of the 45 schools in the county were located on the highways, either built or designated. This naturally makes the task of transportation under the present district organization more difficult than it should be.

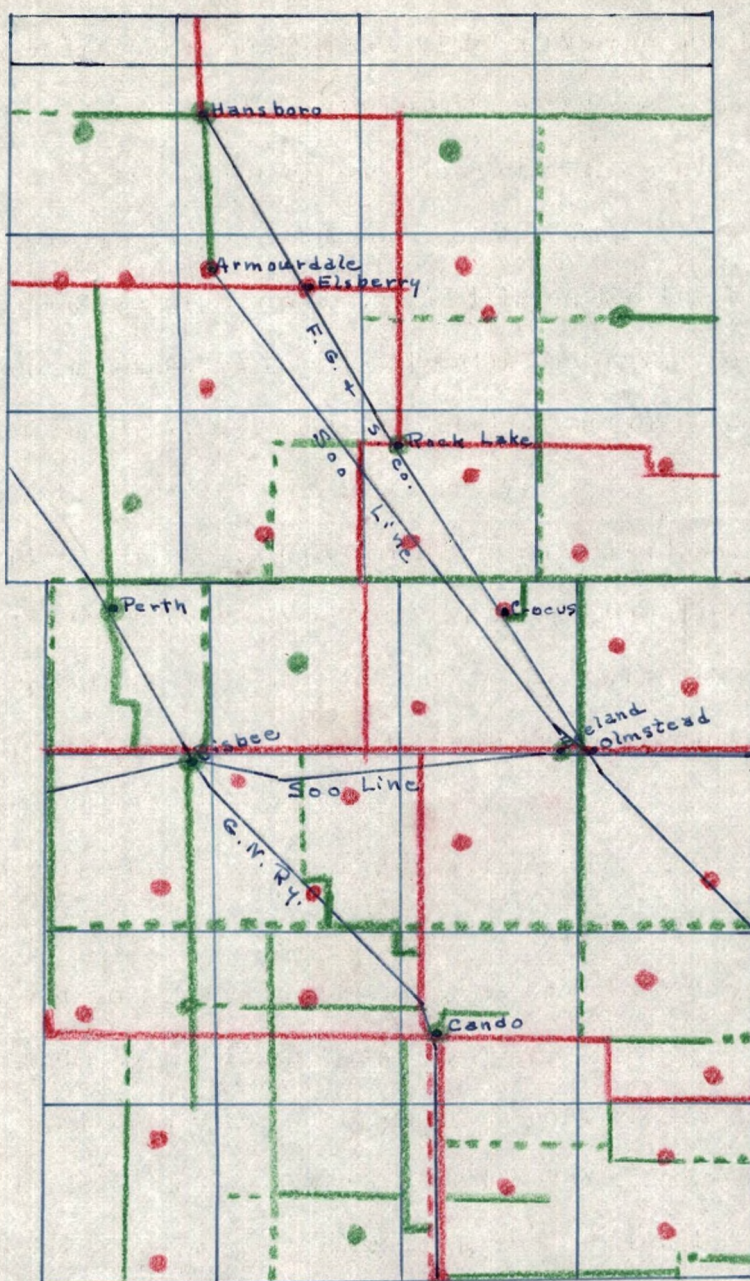


Figure 4

Location of Highways and Schools in
TOWNER COUNTY

Code: ——— State Highways
 - - - Designated State Highways
 ——— County Highways
 - - - Designated County Highways
 ● One-room Schools
 ● Graded Schools

Table XXI is presented to show what the districts did in 1934-35 with the problem of transportation. The law provides that the district may establish bus lines or may pay the families living more than two miles from the school on the basis of the distance from school and the number of days present at school.

Table XXI

Cost of School Transportation in Towner County, 1934-35^a

District Number	Total Number of Pupils Transported by the		Average Amount Paid per Year per Pupil by the	
	Bus System	Family System	Bus System	Family System
Group I				
4		7		\$29.00
10		12		30.00
14		11		11.98
17	11	4	\$50.96	50.96
19	11		37.79	
20		10		7.22
Group II				
3		28		23.38
6	65		29.77	
9		20		10.28
18	19		43.86	
22		9		30.25
24		20		9.00
26		30		16.88
Group III				
2	21	20	31.67	17.59
5		70		27.75
12		65		22.22
27		40		41.50
28		50		4.92
Total	127	396	36.74	21.31

^a Data from the 1934-35 County Superintendent's Report.

Only sixty-six or sixteen per cent of the 399 pupils enrolled in the one-room schools were transported in 1934-35. In the country graded

schools there were 191 or eighty per cent of the 238 pupils enrolled who were transported. In the town graded schools, 266 or twenty-one per cent of the 1225 pupils enrolled, were transported.

Five of the districts used the bus system of transportation and fifteen used the family system in 1934-35. The difference in cost per pupil transported may be responsible for the preference shown for the family type. Table XXII shows that in the last ten years, the family system of transportation has been used by an average of four times as many districts, with the cost of the bus system of transportation being nearly twice as much per pupil as the family system.

Table XXII

Comparison of Use of Bus and Family System of School

Transportation in Towner County during 1926-35^a

Year	Number of Districts Using Bus System	Average Amount Paid per Year per Pupil by Bus System	Number of Districts Using Family System	Average Amount Paid per Year per Pupil by Family System
1926	4	\$37.16	21	\$25.22
1927	4	37.57	19	27.71
1928	4	48.76	21	26.87
1929	6	48.00	19	33.69
1930	6	47.91	21	21.58
1931	6	54.42	22	19.12
1932	8	36.53	21	23.68
1933	3	47.98	24	20.46
1934	4	32.79	21	20.62
1935	5	36.74	15	21.31
Average	5	42.78	20	24.10

^a Data from the 1935 County Superintendent's Report.

Summary

The policy of paying for the transportation of the pupils to school is practiced largely by the districts which maintain graded schools in the country, the so-called country consolidated schools. Their consolidation does not seem to be caused by their greater density of school population or by any difference in size. The road system of the county does not favor the transportation of pupils in the districts as they are not/organized.

There has been an average of twenty districts during the past ten years which have used the family system of transportation, compared to an average of five districts which have used the bus system. The cost per child of the family system has been slightly more than half the cost per child of the bus system.

CHAPTER 7

SUMMARY AND CONCLUSIONS

Towner County's System of Schools is based on the township unit. This has resulted in districts averaging six miles square, which was considered sufficiently large at the time of the organization of the state. There are some weaknesses in the township unit that have appeared in this county survey and they will be discussed at this time.

Many of the township districts are too small to operate a high school efficiently. This has meant that no high school has been readily accessible and a large proportion of the pupils have been forced to drop out of school at the end of the eighth grade as was shown in Table VII.

These small districts have led to the preservation of some one-room schools where they are no longer justified. In these schools the teacher is less experienced and not as well trained as in the graded schools of the larger districts. Naturally she is also paid a smaller salary. In spite of her low salary and the small amount spent per pupil for teaching supplies, textbooks, and other equipment, it has been shown that the cost per pupil for this type of school is higher than for the graded school. Extremes of her pupil cost are greater in the one-room schools.

Some of the present districts are forced to operate high schools which offer only enough courses that will permit the student to graduate. This is due to lack of teachers which in turn is due to lack of funds and lack of pupils. As a result, many pupils do not find the course they want, and drop out of high school.

One of the most glaring weaknesses in having the township and the school district of the same size comes from the fact that the natural congregating point in the district is not the geographical center. For

example, every incorporated town in Towner County is a mile or less from one edge of the township in which it is located, while Bisbee, Egeland, and Rock Lake are a mile or less from two edges of the township in which they are located. This has resulted in roads being built on or near the edges of the townships, which increases the transportation problem for the schools in the county. It is true that Egeland, Bisbee, and Rock Lake have remedied the situation somewhat by organizing special districts, thereby including some of the adjacent territory in adjoining townships, but much more in this respect should be done.

A mere possibility in this direction is shown in Figure 5. This is not an attempt to locate new districts as this can best be done by local people who know local conditions such as roads, centers of population, and other important factors. It is inserted merely to show how eight districts will provide good-sized districts around each of the natural congregating points. Some advantages of a few large districts, such as these, can be shown more clearly with the help of a map such as this.

The wide variation in assessed valuation per child that Table IX revealed would be largely eliminated. For example, district Number 4, which has \$14,819 of assessed valuation for each child enumerated, and District Number 2, which has \$1,385 in assessed valuation, would be included in the same district and would tend to equalize this inequality.

Substantial savings would result in the cost of supplies as they would be purchased in large lots for the larger districts.

Shively¹, in studying the possible saving in purchasing school supplies on a county wide basis in North Dakota, found that a saving of

¹D. D. Shively, A County Unit Plan of Purchasing and Distributing School Supplies for North Dakota, (unpublished Master's Thesis University of North Dakota Library, 1934) pp. 68, 72.

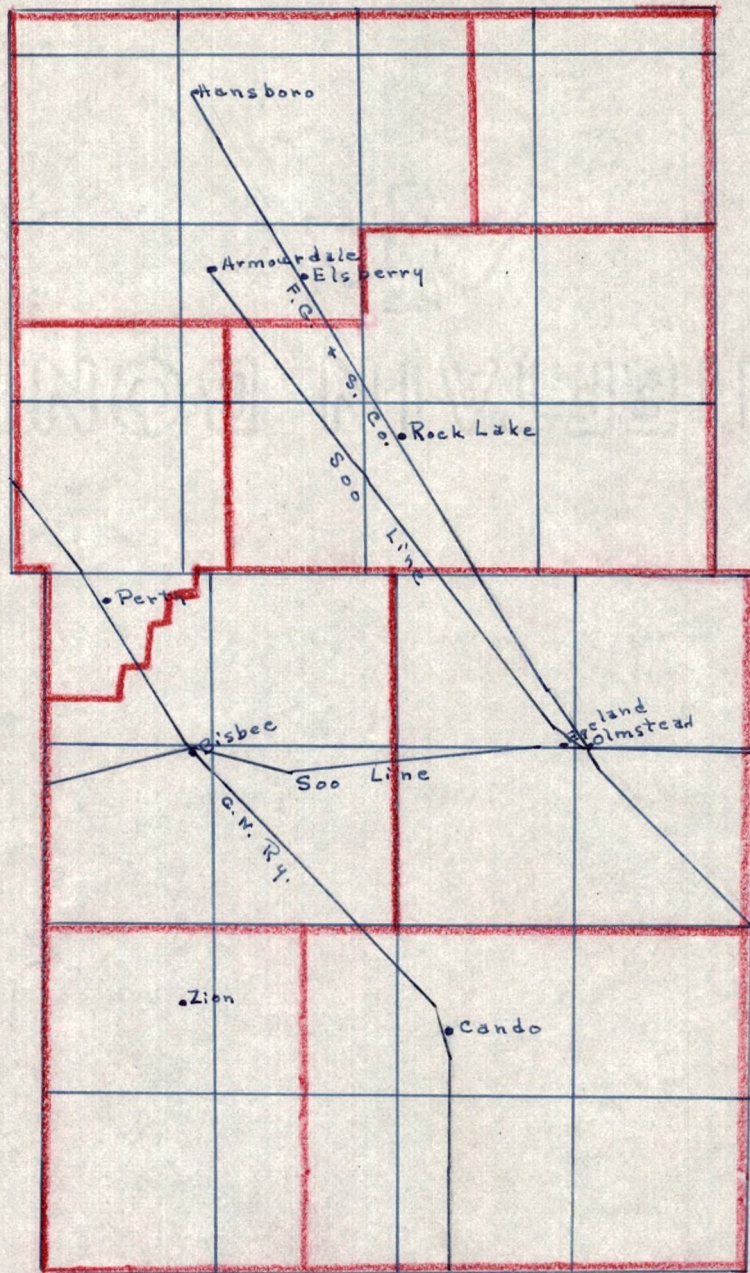


Figure 5

Possible Consolidation of School Districts in
TOWNER COUNTY

at least twenty-five per cent could be made.

Textbooks and library books could be exchanged among the one-room schools in the district and the large central school. Although in the analysis of costs per child it was found that the one-room school spent more for library books than the graded schools, nevertheless the pupil in the one-room school does not have an advantage in this respect. Because of the small enrollment, the number of books to which each child has access is much smaller than in the graded schools. This would be largely eliminated by the exchange mentioned above.

Pupils would be able to attend the school most accessible to them. This is not always true under the present township plan, as is illustrated by a case which the writer has experienced. The children in a family living on a bus line going into a town graded school could not get into the bus as they lived on the wrong side of the road and would not pay tuition. As a result, they had to walk three miles to a one-room school. This inequality should and would be eliminated under the larger district plan.

The present system of highways could be utilized more fully in transporting pupils in the larger districts. As was shown in Figure 2 a large share of the highway system of the county is built on township lines leading into the natural congregating centers. As these would be near the center of the large districts, the highway system would be much more practical for the schools than at present. With the building of more winter roads, longer bus lines would be found cheaper to operate than small schools, but at the present time, most of the one-room schools would have to be used.

The reason there has not been more shifting of boundary lines is

that there are grave inequalities among the districts in regard to the amount of assessable property, number of children to be educated, and, as a result, tax levies for schools. Even though a farmer may like to have his children attend the graded school which is a mile or two from his home, he will usually not vote to do so if it will increase his tax levy for schools from a five to eighteen mills levy.

If the problem of costs, as represented by tax levies, could be equalized the increase in the size of the districts would come as a natural result. The people in the local district would take care of the re-districting and the authority would remain with the local people, as it should.

The big problem, then, is to equalize the tax burden. The increased amount of state aid that has come as a result of the sales tax has helped to do this. More state and federal aid is to be urged, as the correct apportionment of such aid would tend to equalize inequalities between counties and states. Three methods which will help to equalize the tax burden in Towner County have been suggested by conditions which were found to exist in the county.

One of the causes for the low assessed valuation per child in the northern districts is the large amount of tax free land in these districts, amounting to over fifteen per cent in the northern tier of districts in 1936. This land is not to be sold for less than ten dollars an acre, so a valuation of that amount would not seem excessive. At this rate, the taxable valuation would be five dollars per acre. If the land held by the Board of University and School Lands and by the Bank of North Dakota was put on the tax rolls for this amount, it would raise the assessed valuation in some of the poorer districts.

District Number 5 has the least amount of assessed valuation per child according to Table IX. There are 4068 acres of tax exempt land in this district at present. Under the above plan, the assessed valuation would be increased \$20,390. It is true that the revenue for the state tuition fund would be somewhat reduced, but in that event the burden would fall upon the entire state, while in this case it is concentrated on those districts which have considerable school land within their borders.

The inequality of having the taxes from the railroads benefit only the districts through which the railroads pass has often been pointed out. The railroad receives as much support from District Number 26 as it does from District Number 25 which adjoins it, yet one receives nothing in tax support while the other received \$470.71 in 1934-35. In most cases in Towler County the districts that receive the benefit from the railroad taxes are mainly the districts which have the most children enrolled, so the inequality is not as great as result. However, if all the railroad taxes went into a county fund which was apportioned on the basis of effort, the inequality of the burden of school support would be decreased. One basis to judge effort would be the five year average of tax levies, as shown in Table XXIII below. If the money would be apportioned on the basis of the amount of school taxes levied in excess of ten mils, for instance, it would be a definite help to those districts which are making the greatest effort to maintain good schools.

Table XXIII

Five Year Average of Tax Levies for Schools in Towner County,

1930-34^a

District Number	Tax Levy in Mills					Average
	1930	1931	1932	1933	1934	
1	0.0	0.0	12.35	5.62	6.95	4.98
2	19.43	15.51	19.64	17.41	18.78	18.15
3	14.63	8.63	7.10	9.25	7.70	9.46
4	9.93	0.0	0.0	0.0	0.0	1.99
5	27.22	26.98	18.00	18.00	18.00	21.34
6	28.40	18.74	18.42	9.52	16.85	16.78
7	19.20	18.00	18.00	16.05	14.93	17.24
9	5.50	6.25	0.0	9.01	7.40	5.63
10	7.30	10.90	6.60	4.40	2.33	6.31
11	5.84	3.56	2.24	3.94	3.07	3.53
12	12.91	12.09	11.91	10.32	13.15	12.08
13	12.60	12.23	10.32	8.09	6.98	10.04
14	14.00	8.80	13.40	8.34	11.76	11.26
15	7.63	3.76	8.23	5.41	4.46	5.90
16	11.90	7.06	14.00	6.40	8.50	9.57
17	14.00	14.00	14.00	5.56	8.25	11.18
18	16.00	10.80	10.36	10.06	11.50	11.74
19	10.80	13.19	13.22	2.91	2.32	8.49
20	9.36	1.73	9.80	9.85	0.00	6.15
21	12.50	4.70	18.47	12.64	18.42	13.35
22	15.20	00.70	11.21	12.11	7.11	9.27
24	20.26	20.15	19.83	14.14	11.36	17.15
25	6.50	4.21	3.45	5.03	4.36	4.71
26	11.43	10.52	5.72	7.54	7.05	8.45
27	23.16	20.52	20.30	19.49	19.29	20.55
28	24.69	20.98	25.23	22.56	21.79	23.04
29	5.00	5.07	4.27	4.53	6.18	5.01
30		6.15	7.68	6.57	1.05	5.36

^aData from lists in County Treasurers Office.

In the 1934 Legislature, an effort was made to have a four mill county tax included in the Equalization Law. That this would have been one of the most effective means of equalizing the burden in Towner County is shown in Table XXIV. In this table the districts are arranged in order of their tax levies, based on the five year average computed in Table XXIII.

Table XXIV
Suggested Distribution of Proposed Four Mill County Tax
in Towner County

District Number	Average Tax Levy 1930-34	Amount of Four Mill Tax Levy	Amount of Apportionment	Result to District Net Loss	Net Gain
4	1.98	\$1007.72	\$ 81.88	\$925.84	
11	3.53	1134.74	447.99	686.75	
25	4.71	1463.64	695.98	767.66	
1	4.98	1087.40	450.34	637.06	
29	5.01	522.90	225.17	297.73	
30	5.36	1031.87	286.58	745.29	
9	5.63	1089.11	1105.38		\$ 16.27
15	5.89	856.03	307.05	548.98	
20	6.14	918.57	675.51	243.06	
10	6.30	1095.01	266.11	828.90	
26	8.45	895.95	552.69	343.26	
19	8.48	782.51	429.87	352.64	
22	9.26	791.13	327.52	463.61	
3	9.46	1005.81	509.40	496.41	
16	9.57	611.39	286.58	424.81	
13	10.04	999.35	777.86	221.49	
17	11.18	638.49	204.70	433.79	
14	11.20	571.54	488.93	82.61	
18	11.74	630.71	447.99	182.72	
12	12.07	3098.87	3868.83		769.96
21	13.34	556.21	488.93	67.28	
6	16.78	866.87	1093.97		227.10
24	17.14	462.42	552.69		90.27
7	17.23	2446.23	3848.36		1402.13
2	18.15	2985.42	7799.07		4912.65
27	20.55	1374.96	1494.31		119.35
5	21.64	988.83	2272.17		1283.34

The apportionment of the fund was based on the number of pupils in average daily attendance. When the results of the operation of the law is computed for each district, it is found that there is almost perfect correlation among the districts with high tax levies and those making a gain by the operation of the law. There is also almost perfect correlation between the districts with low tax levies and those which paid in more than they received.

To be exact, there was only one district with an average tax levy of less than twelve mills which did not pay in more than was received from the apportionment. There was also only one district with an average tax levy of more than five mills that did not receive more than they paid in. The net gain would amount to six and one tenth mills on the tax levy in District Number 2, five and two tenths mills in District Number 5, two and two tenths mills in District Number 7, one mill in Districts Number 6 and 12, and four tenths mills in Districts Number 24 and 27.

At first glance it would seem like an impossibility to enact legislation which would adversely affect nineteen out of twenty-nine districts. However, only 3081 of the 8393 people in Towner County lived in these districts, so the majority of the people are being served by such a law.

The following general conclusions may reasonably be drawn:

1. Present inequalities in educational opportunities among districts in Towner County are sufficiently numerous and serious to call for vigorous efforts to eliminate them.
2. Most of the inequalities of support will be eliminated by the return and addition to the tax rolls of tax free land, apportioning the taxes from railroads to the needy districts, and the levying of a four mill county tax to be apportioned upon the basis of average daily attendance.
3. Equalizing the support will eliminate the barriers to larger districts. These large districts will tend to eliminate many of the other inequalities that exist at the present time.

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