



5-1-1942

A Comparative Educational Survey of Carlton and Pine Counties in Minnesota

O. A. Homme

Follow this and additional works at: <https://commons.und.edu/theses>

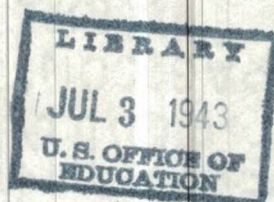
Recommended Citation

Homme, O. A., "A Comparative Educational Survey of Carlton and Pine Counties in Minnesota" (1942). *Theses and Dissertations*. 524. <https://commons.und.edu/theses/524>

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.

A COMPARATIVE EDUCATIONAL SURVEY OF
CARLTON AND PINE COUNTIES IN MINNESOTA

A Thesis
Submitted to the Graduate Faculty
of the
University of North Dakota



By
O. A. Homme
In Partial Fulfillment of the Requirements
for the
Degree of
Master of Science in Education
May
1942

T1942
H762
COP

This thesis, offered by O. A. Homme, as a 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 in charge.

C. L. Gustad

Chairman

A. V. Overm.

Sam Hagen

J. W. Brechtwieser
Director of the Graduate Division

ACKNOWLEDGMENTS

The writer wishes to express his deep appreciation for the valuable suggestions, guidance and criticisms of Dr. C. L. Kjerstad of the University of North Dakota and to County Superintendent of Schools, Louise Swenson, of Carlton County and Arthur E. Gustafson of Pine County for their courtesies in making available all the reports and documents of their respective offices. He also wishes to express his thanks to Superintendent C. G. Aakhus of Willow River for his many valuable suggestions and to Laverna Medjo for her assistance in the preparation and typing of this thesis.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	1
TABLE OF CONTENTS.....	11
LIST OF TABLES.....	111
LIST OF FIGURES.....	iv
 Chapter	
1. INTRODUCTION.....	1
Problem.....	3
Methods of Procedure.....	4
Limitation.....	4
Justifications.....	5
Educational Set-up in Carlton and Pine Counties.....	8
2. ENROLLMENT AND ATTENDANCE.....	19
Enrollment and Completion of Grades.....	24
3. RECEIPTS, EXPENDITURES AND DEBTS.....	31
Receipts.....	31
Expenditures.....	33
Debt Service.....	34
4. TEACHERS QUALIFICATIONS, TRAINING, TENURE AND EXPERIENCE	43
Tenure and Experience.....	46
Salaries.....	52
5. RELATIVE ABILITY OF THE TWO COUNTIES TO SUPPORT EDUCA- TIONAL PROGRAMS.....	55
Maintenance Cost and Average Daily Attendance.....	74
6. CONCLUSION.....	82
Summary of Findings.....	83
Recommendations.....	85
Advantages of Larger Units.....	87

LIST OF TABLES

Table	Page
1. Items of Comparison as per 1940-41.....	17
2. General Comparative Statistics of Carlton and Pine Counties, 1940.....	18
3. Statistics of Teachers and Enrollment, Carlton and Pine Counties.....	20
4. Length of School Terms Graded and Ungraded Schools....	21
5. Enrollment Graded, Elementary and Secondary Schools by Ages.....	23
6. Enrollment Ungraded Elementary Schools by Ages.....	23
7. Enrollment and Average Daily Attendance.....	23
8. Enrollment Graded and Secondary Schools by Grades.....	26
9. Enrollment Ungraded Schools by Grades.....	26
10. Enrollment All Schools by Grades.....	26
11. Enrollment, Completing Eighth Grade, Graded, Elementary and Secondary.....	27
12. Enrollment, Completing Eighth Grade Ungraded Elementary	27
13. Total Completing Eighth Grade, All Schools.....	27
14. Ungraded School Enrollments.....	28
15. Receipts 1940-41, Graded, Elementary and Secondary Schools of Carlton and Pine Counties.....	36
16. Receipts 1940-41, Ungraded Elementary Schools of Carlton and Pine Counties.....	37
17. Expenditures 1940-41, Graded, Elementary and Secondary Schools of Carlton and Pine Counties.....	38
18. Expenditures 1940-41, Ungraded Elementary Schools of Carlton and Pine Counties.....	39
19. Debt by Districts, Graded, Elementary and Secondary Schools of Carlton County 1940-41.....	40
20. Debt by Districts, Ungraded Elementary Schools of Carlton County 1940-41.....	40

LIST OF TABLES (Continued)

Table	Page
21. Bonded Indebtedness of Ungraded Elementary Schools of Pine County 1940-41.....	41
22. Bonded Indebtedness of Graded, Elementary and Secondary Schools of Pine County 1940-41.....	42
23. Teacher Training, Ungraded Elementary Schools of Carlton and Pine Counties.....	44
24. Teacher Training, Graded, Elementary and Secondary Schools of Carlton and Pine Counties, High School.....	44
25. Teacher Training, Graded, Elementary and Secondary Schools of Carlton and Pine Counties, Grades.....	45
26. Teacher Tenure, Ungraded Elementary Schools of Carlton and Pine Counties.....	47
27. Teacher Experience, Ungraded Elementary Schools of Carlton and Pine Counties.....	48
28. Teacher Tenure, Graded, Elementary and Secondary Schools of Carlton and Pine Counties, High School.....	50
29. Teacher Tenure, Graded, Elementary and Secondary Schools of Carlton and Pine Counties, Grades.....	50
30. Teacher Experience, Graded, Elementary and Secondary Schools of Carlton and Pine Counties, High School.....	51
31. Teacher Experience, Graded, Elementary Schools of Carlton and Pine Counties, Grades.....	51
32. Salary Comparison of Elementary Ungraded Schools of Carlton and Pine Counties.....	53
33. Salary Comparison of Ungraded Elementary Schools of Carlton and Pine Counties.....	53
34. Average Teacher Salaries of Graded, Elementary and Secondary Schools of Carlton and Pine Counties.....	54
35. Average Salaries of Men and Women Teachers in the Graded, Elementary and Secondary Schools of Carlton and Pine Counties.....	54
36. Ratio of Assessed Valuation and Total Expenditures to Enrollment and Pupils in Average Daily Attendance in the Graded, Elementary and Secondary Schools of Carlton County 1940-41.....	57

LIST OF TABLES (Continued)

Table	Page
37. Ratio of Assessed Valuation and Total Expenditures to Enrollment and Pupils in Average Daily Attendance in the Graded, Elementary and Secondary Schools of Pine County 1940-41.....	58
38. Comparison Between Total Maintenance Cost and Average Daily Attendance in the Graded, Elementary and Secondary Schools of Carlton County 1940-41.....	60
39. Comparison Between Total Maintenance Cost and Average Daily Attendance in the Graded, Elementary and Secondary Schools of Pine County 1940-41.....	60
40. Ratio of Assessed Valuation and Total Expenditures to Enrollment and Pupils in Average Daily Attendance in the Ungraded Elementary Schools of Pine County 1940-41	62
41. Ratio of Assessed Valuation and Total Expenditures to Enrollment and Pupils in Average Daily Attendance in the Ungraded Elementary Schools of Carlton County, 1940-41.....	69
42. Comparison Between Total Maintenance Cost and Average Daily Attendance in the Ungraded Elementary Schools of Pine County 1940-41.....	71
43. Comparison Between Total Maintenance Cost and Average Daily Attendance in the Ungraded Elementary Schools of Carlton County 1940-41.....	73
44. State Grants in Aid to Local School Districts, 1939-40	77
45. Percentage of Total Assessed Valuation Located Within Ungraded Districts in Minnesota Counties, 1938.....	78

LIST OF FIGURES

Figure	Page
1. Map of Carlton County.....	12
2. Map of Pine County.....	15
3. Proposed reorganization of school districts in Pine County into area set-up.....	29
4. Proposed reorganization of school districts in Carlton County into area set-up.....	30
5. Pine County tax rate for 1941.....	80
6. Carlton County tax rate for 1941.....	81

CHAPTER I
INTRODUCTION

General

It is generally conceded that if Minnesota is to provide equal educational opportunities to all the children of the state and if this service is to be provided as economically as possible, reorganization of the school districts of the state is absolutely essential. To persuade the people of the state as well as the people of the various school districts to accept a plan for reorganization of its schools is very difficult to accomplish. The Commissioner has made recommendations to this effect, and several times Bills have been introduced to eliminate schools with no result. Lack of knowledge, prejudice, misunderstanding, and self-interest tend to make the educational program of this state remain status quo.

The various experiments with larger school units such as, for example, Lake County, is often discredited by the skeptic with the claim that it is not a typical Minnesota County. Carlton County, located in the Northeastern part of Minnesota, often referred to as the Arrowhead Country, is much more typical of the counties of the state and therefore serves as a good subject for a survey. We find that in this county, especially during the last ten or twelve years, there has been a pronounced and steady development toward the creation of larger school units. This process has been going on without any organized campaigns of any kind. When the Legislature authorized the payment of \$63.00 per pupil per year in state aid for all non-resident high school

students it became profitable for districts that were maintaining high schools to accept students from outside their district limits. In most cases the school facilities were not taxed in taking care of the district needs and the addition of even up to one hundred more high school students did not materially increase the overhead cost. We find districts as a consequence extending transportation routes outside of the limit of their home districts to bring in non-resident high school students as a profitable venture. There were instances when neighboring high schools put on active campaigns to induce non-resident high school students to attend their respective schools.

As the residents of these adjoining districts became more and more familiar with the work of the central school system they became more and more interested in its educational and recreational program. Educational interest shifted from the elementary school to where their high school students were attending. They observed that their older high school students were being transported in modern comfortable buses to the neighboring high schools in less time than it took their much younger grade children to walk to the district school. As a consequence there developed a natural demand to discontinue the local one-room ungraded school and transport both grade and high school students to the central school. In this way all the children received transportation, the grades had the opportunity of attending the graded elementary schools and often times at a reduced cost over that of maintaining their own school system. In view of the developments of the last few years

it is logical to assume that before long all the ungraded elementary schools of the county will discontinue operating and the grade pupils, together with the high school students of these districts, will be transported to one of the eight strategically located graded and secondary schools of the county.

This survey brings into comparison the adjoining county of Pine. Although there has been considerable movement towards the elimination of the smaller schools in this county, it has lagged way behind the neighboring county of Carlton in this respect. By referring to Table 1, we find that in Carlton County there has been a distinct reduction in the number of ungraded elementary schools while in Pine County the corresponding reduction has been much less. There remained in 1941, 106 ungraded elementary schools in this county and 32 in Carlton County.

Problem

This study involves a comparative educational survey of Carlton and Pine Counties for the purpose of trying to ascertain which one of these two units is furnishing the best educational programs. These two counties of Carlton and Pine will be brought into comparative focus with reference to the following pertinent points.

1. Classification of schools
2. Enrollment
3. Comparative costs and ability to support education
4. Teachers - their qualifications, training and tenure
5. Possibilities for readjustment

Methods of Procedure

Both the statistical and questionnaire method will be used in this study. The following procedure has been followed.

1. Selection of source material
2. Analysis
3. Tabulation
4. Interpretation

Limitation

This survey will be limited to these two adjoining counties in Northeastern Minnesota; Carlton and Pine. The facts and figures are largely derived from materials supplied by the County Superintendent of Schools in each of the two counties with special reference to the annual reports of these Superintendents to the State Department of Education. It was also found advisable to limit the study to one school year and the year 1940-41 was selected because of its recency and because it is a year in which we have complete data.

No attempt is to be made to evaluate the educational outcomes of the school systems of these two counties from the standpoint of programs, results of standardized tests, or the like. It is assumed that a superior type of education is provided where more funds are expended, greater tenure is found, teachers are better paid and better trained, the teacher load less, and superior classification exists.

A pertinent comment in this regard was made by Dr. Paul R. Mort, Teachers College, Columbia University, in an address

delivered Monday night, March 30, 1942 at the Schoolmen's Week program at the University of Minnesota. He said: "Level of expenditure is the single most important element in determining the goodness of any school. And if school systems spend less than the average, home rule and administration is nothing more than a mill stone around its neck."^a

Justifications

A great number of surveys involving a single county in this and other states have been made and much valuable information has been obtained. The common findings growing out of these surveys have as a rule been centered around the following:

1. School cost is too high
2. Programs are limited
3. Teachers are inadequately paid and trained
4. Educational facilities are inadequate
5. Ability to support an educational program is limited

It is hoped that by bringing into comparison and contrast the educational set-ups of these two comparable adjoining counties, valuable practical information may be obtained that will show under actual working conditions a program of educational development that has accomplished real progress.

MINNESOTA PUBLIC SCHOOL SYSTEM

The support of the public school system in the State of Minnesota goes back to the "Ordinance of 1789". This act among many others paved the way for subsequent federal grants for

^aMinneapolis Morning Tribune
Thursday, March 31, 1942, Page 13

education and also provided that Section 16 and 36 in each township be reserved to the state for the support of its schools.

The whole area of the state is organized into school districts ranging from the small rural district maintaining a single one-room school to the unorganized territory found in counties such as St. Louis and Koochiching. Included are the county school district of Lake and the school districts of the larger municipalities of the state such as Minneapolis, St. Paul, Duluth and others. Every school district in the state is under the direction of a local school board elected by the people with the exception of a few special districts in which the administration of school affairs is vested in other municipal or county bodies.

The Constitution of the State of Minnesota makes it "The duty of the legislature to establish a general and uniform system of public schools". It also establishes the permanent school fund and requires the legislature to "Make such provisions by taxation or otherwise as, with the income arising from school fund, will secure a thorough and efficient system of public schools in each township in the state".

There was created in 1919 a state department of education under the direction of a board of five representative citizens appointed by the Governor for a term of five years. This board has charge of all public school education in the state of Minnesota and is required by law to hold an annual meeting the first Tuesday in August and to hold regular meetings quarterly.

The Commissioner of Education is elected by the board for a term of six years. He is ex officio member of the state teachers retirement fund board, secretary and executive officer of the state board of education, and he is responsible for the administration and discipline of the various offices and divisions in the organizations of the department of education and has the authority to propose plans for organization and to nominate persons to carry on its work subject to the approval of the state board of education.

The schools of the state of Minnesota derive support from both local and state sources. The states share approximates from year to year one-third of the entire cost of school maintenance. This state share comes from the following four funds:

1. The endowment fund
2. Current school fund
3. Special state aid fund
4. Income tax school fund

There are various purposes behind this allocation of state support to school districts. First, is that of equalization of educational opportunities; second, to establish minimum standards; third, to stimulate the educational program; fourth, to assist the school district with an extra high tax levy; and fifth, to maintain in high schools departments for the training of teachers, especially for rural schools.

In 1935 the legislature authorized the transfer of \$500,000.00 annually from current school fund to the special state aid fund if the sums appropriated were insufficient to pay state aids in full. Even with this transfer it has been impossible to

pay aids in full and as a result they have been prorated as low as 60.7% in 1937.

The receipts from the state income tax is apportioned to the various districts of the state on the basis of \$10.00 per year per child 6 to 16 years of age according to the school census.

The state department of education directs the distribution of these aids according to the law. This department also exercises general supervision over the public schools of the state, makes studies of curriculum building and teaching devices, inspects the schools of the state at least once a year, conducts rural school institutes, and supervises school buildings, etc. It has a vocational educational division which supervises the program of training in agriculture, home economics and industrial education, also a division of vocational rehabilitation as well as of health and physical education. One of its very important duties is to issue teachers certificates and check upon qualifications of teachers.

In general, the educational program set-up in the state of Minnesota is centered around the state board of education of five members. This board selects a Commissioner who is directly responsible for the educational set-up of the state as formulated by the state department of education.

EDUCATIONAL SET-UP IN CARLTON AND PINE COUNTIES

General

Both Carlton and Pine Counties are located in the timber belt and originally contained a magnificent stand of Norway and

White Pine. During the lumbering era of our state the entire stand of timber was cut down and in this cut over area farming started on a small scale. We might say that in both counties the development of agriculture dates from about the turn of the century. At the present time there are in Pine County 3,542 farms as compared to 3,288 in 1930. Dairying is the main agricultural activity of these counties, Carlton having developed a national reputation for Guernsey cattle. Although the soil is not what you might call fertile nor especially adapted to agriculture, farming has been quite successful due to the excellence of the markets and the advanced agricultural methods that are being used.

Carlton County

History of Carlton County

The ground which now comprises Carlton County was originally included in the Royal Grant of 1609 by the King of England to the Virginia Colony. After exploration and occupation France took possession of this territory under the name of Louisiana and retained possession for about 80 years until it was ceded to England by the Treaty of 1763. The Treaty of Paris in 1783 ceded the territory to the United States and in that way Carlton County is part of the original 13 states. Since Minnesota territory was established Carlton County has been part of Minnesota. It was finally established by its present boundaries by Act of the Legislature on May 23, 1857. The first meeting of the Board of County Commissioners was held on December 26, 1870 when other county officers were appointed. Here, as elsewhere, the earliest known inhabitants were Indians who by treaty in 1854 ceded the

lands for settlement by the white people.

The first white man to set foot on Carlton County soil was undoubtedly Sieur DuLuth, a native of France. David Thompson, an Englishman employed by the Northwest Fur Company traveled through the county in 1798 on his return from Fort Garry or Winnipeg. Lieutenant Zabulon and Pike visited the county in 1806 and General Lewis Cass, Governor of Michigan territory, with a party came through here in 1820. Included in the Cass party was Henry R. Schoolcraft who later discovered the source of the Mississippi River.

The County of Carlton is named in honor of Reuben B. Carlton, a native of New York who settled at Fond du Lac in 1847 and lived there until his death in 1863. The first county seat was Twin Lakes on the Military Road, later designated Thomson. In 1890 it was moved to its present location in Carlton.

Carlton County has, according to the federal census of 1940, a population of 24,165. It contains 867 square miles of land area and is located in what is known as the Arrowhead Country of Minnesota.

Three railroads traverse the county: the Northern Pacific, the Great Northern and the Soo Line. Paved state highway No. 61 runs from the South Central border near Moose Lake to the Northeast corner passing through Moose Lake, Barnum, Mahtowa, Atkinson, Carlton, Scanlon and Esko. No. 210 which is also a splendid paved highway traverses the county from East to West, through the towns of Iverson, Sawyer, Cromwell, and Wright. State highway No. 45, also paved, joins Cloquet with highway No. 61 at Scanlon. State

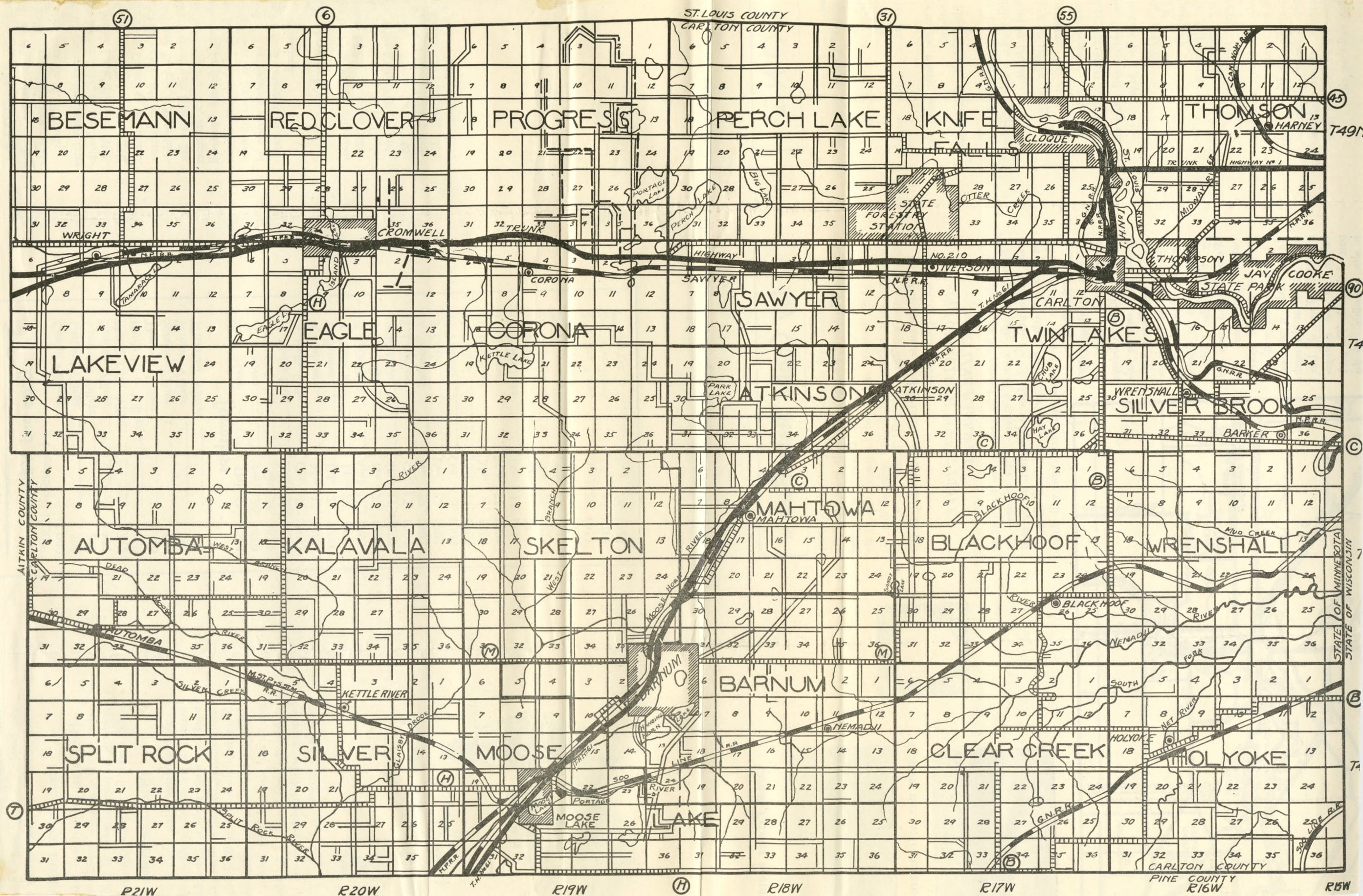
highway No. 73 traverses the county from North to South, running through Cromwell, Kettle River and down to Moose Lake, where it joins No. 61.

There are a total of 25 organized townships in the county. The first one is Thomson, being organized September 26, 1870 and the last Sawyer, June 26, 1920. The county has nine incorporated villages and one city. The nine villages and their populations are: Barnum, 327; Thomson, 104; Carlton, 696; Moose Lake, 1428; Scanlon, 461; Cromwell, 211; Kettle River, 221; Wright, 190; Wrenshall, 167. Cloquet, the only city in the county, has a population of 7286. Table 2 shows that the total valuation of Carlton County in 1940 was \$6,848,575.00, which on a per capita basis amounts to \$322.56.

Carlton County has at the present time 34 school districts, 46 school houses and 196 teachers. The school districts are organized as independent, consolidated, common, and unorganized. Out of the 34 school districts 7 are classified as graded and secondary schools. These schools are the following:

Township of Thomson	Moose Lake
Carlton	Cloquet
Barnum	Cromwell
Wrenshall	

The same are all consolidated districts with the exception of Cloquet which is an independent district. Kalavala, a six-teacher school located in the open country is the only graded elementary school in the county that is not maintaining a high school. According to Table 1 there remains a total of 32 districts



in the county maintaining ungraded elementary schools, 11 of these are either unorganized or transport their grades to neighboring schools. We find that within the last year two more were added to this list, leaving a total of only 21 districts that now maintain in operation ungraded elementary schools in the county. We find that in these districts we have 33 teachers, 4 men and 29 women. Out of the total number of ungraded elementary schools, only 12 are employing one teacher while nine have two or more. All but two of these elementary schools have nine-month terms.

Pine County

History of Pine County

The territory now included in Pine County located due South and adjoining Carlton County was vast primeval forest on the arrival of the white man inhabited by the Sioux and Chippewa Indians and teeming with game and fish. It is well drained by three streams, the St. Crouix, the Kettle and the Kanabec with numerous tributaries. Within its boundaries are found numerous beautiful lakes of which Pokegama, Cross, Grindstone, Sturgeon, Island, Oak, and Pine Lakes are the largest. The soil is chiefly sandy with an unusual abundant rainfall making it very adaptable for agriculture, principally dairying.

When Minnesota territory was organized, Pine County was a part of St. Crouix County, Wisconsin. In succession it became a part of Ramsey and Chisago. In 1854 it was organized under its present name of Pine but did at that time include in its territory the present counties of Carlton and Kanabec. The county seat in the early years was located at Chengwatona near Cross Lake but

in the election of 1872 it was decided to move the county seat to Pine City where it remains to this day. The county has experienced two very destructive forest fires; the so-called Hinckley fire of 1894 in which 413 people lost their lives, millions of feet of timber destroyed, villages and farms burned. Again in October, 1918 the so-called Moose Lake fire struck the area causing damage close to hundreds of thousands of dollars and the loss of many lives.

The first school district was organized in 1868 in the old county seat of Chengwatona. In the same year district 2 and district 3 were organized in Hinckley and Pine City respectively. These remained the only schools in the county until 1875 when district 4 was organized at Rock Creek. The first high school was started at Pine City in 1904 followed shortly thereafter by high schools in Sandstone, Willow River and Hinckley. At the present time there are nine high schools located throughout the county.

There are three main railroads that traverse this county, the Great Northern, the Northern Pacific and the Soo Line. Three main trunk highways are also found in the county, No. 61 which runs the entire length of the county through Sturgeon Lake, Willow River, Rutledge, Sandstone, Hinckley, Beroun, Pine City and Rock Creek. Trunk highway No. 23 enters the county in the Northeastern part and connects up with 61 at Sandstone. Trunk highway No. 48 runs due East from Hinckley to the Wisconsin State Line at Danbury and No. 70 extends from Rock Creek due West to Kanabec County.

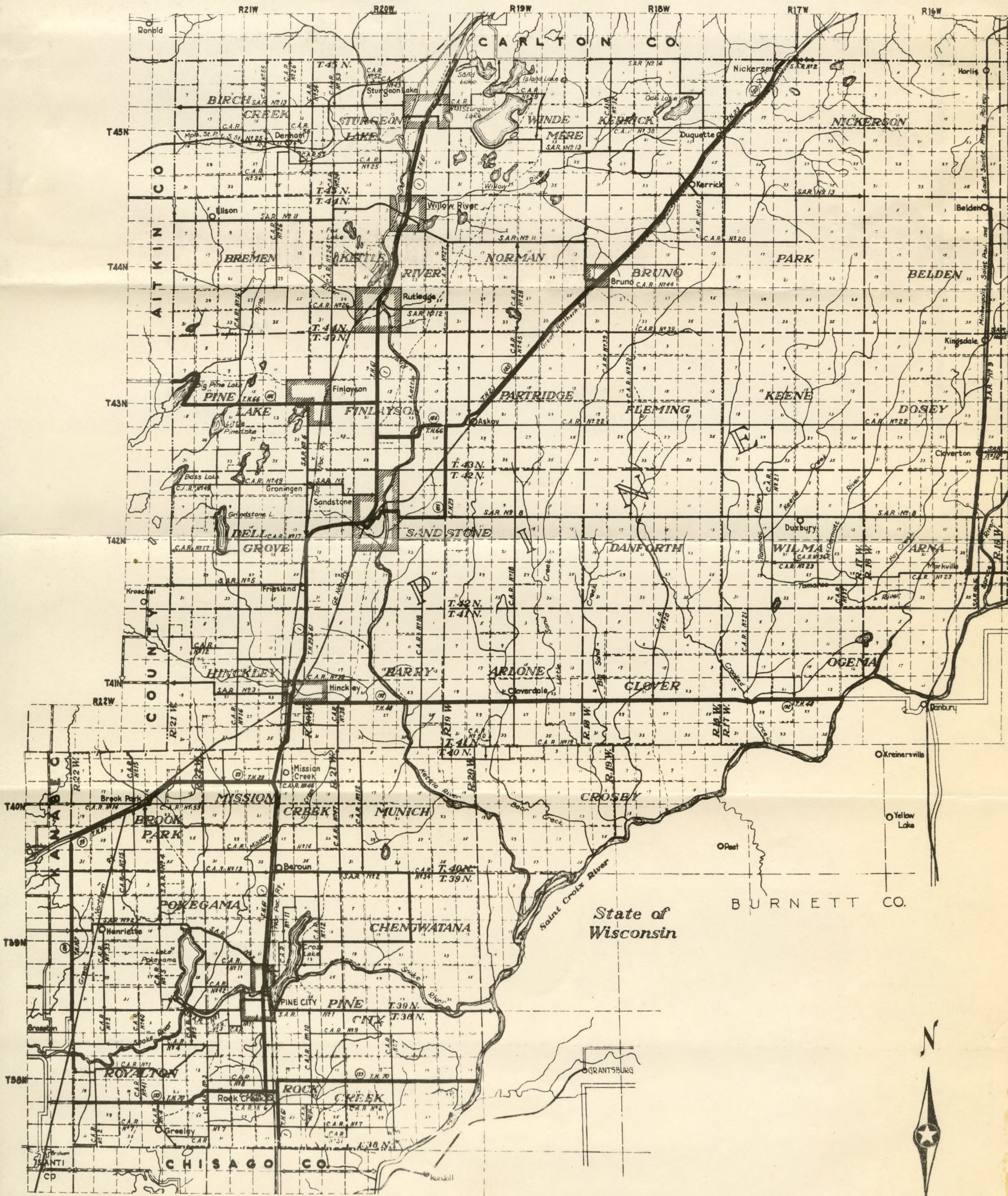
According to the 1940 census the total population of Pine County was 21,447. There are a total of 36 organized townships

Figure 2

OFFICIAL HIGHWAY MAP PINE COUNTY MINNESOTA

Prepared by
N. C. Peterson
County Highway Engr.

- Legend
- State Trunk Highway
 - State Aid Road
 - County Aid Road
 - Township Road



and the following villages: Askov, Brook Park, Bruno, Denham, Finlayson, Henrietta, Rutledge, Willow River, Pine City, Sandstone and Sturgeon Lake.

In the county of Pine we find that there are only two classes of schools, namely, the graded elementary and secondary and the ungraded elementary. In the former group we find:

Hinckley	Brook Park
Pine City	Finlayson
Sandstone	Askov
Willow River	Cloverton

Bruno

We see by Table 1 that there are a total of 106 ungraded elementary schools, 85 of these employ one teacher while seven have two or more teachers. Fourteen have closed and are transporting to neighboring graded schools, including the nine graded, elementary and secondary districts. Of the ungraded elementary schools, 17 have 8-month school term while 87 have a 9-month school term. There are 100 ungraded elementary teachers employed, 14 men and 86 women.

Referring to Table 2 we find that the finances of the two counties differ greatly. There is a difference of \$151.2 in per capita valuation. Of special significance is the difference between per capita levy for school purposes. The Carlton County rate is 12.97, while the Pine County rate is 7.39. For county purposes the rate is 35 to 61.

Table 1
Items of Comparison as per 1940-41

Item	Carlton Graded, Elem. & Secondary	Pine Graded, Elem. & Secondary	Carlton Ungraded Elementary	Pine Ungraded Elementary
No. of School Districts	7	9	32	106
No. of School Houses	13		20	93
Total value of sites & bldgs.	\$1,614,600.00	\$1,032,110.00	\$254,600.00	\$392,910.00
Total value of equipment	185,000.00	97,396.00	33,281.00	64,581.00
Total receipts	431,444.58	239,274.35	81,597.54	126,417.43
Total expend.	436,104.37	283,013.25	85,333.25	145,498.98
Average expend. per child per yr.	105.16	106.11	86.76	64.39
Having two or more teachers	7	9	9	7
School term 8-months	0	0	2	17
School term 9-months	7	0	19	89
Total	7	0	21	106
Teachers--men	50	43	4	14
women	108	65	29	86
total	158	108	33	100
Average Enrollments	4,147	2,668	983	2,277
No. of schools transp. to neighboring schools	0	0	11	14

Table 2
GENERAL COMPARATIVE STATISTICS OF
CARLTON AND PINE COUNTIES
1940

	CARLTON	PINE	DIFFERENTIAL
Population	24,212	21,478	2,734
All-purpose levy	\$ 818,673	\$ 515,747	\$ 303,926
Per capita levy	38.56	25.45	13.11
Valuation	6,848,575	3,472,454	3,376,121
Per capita valuation	322.56	171.36	151.20
School purpose prop. tax levy	275,432	149,652	125,780
Per capita school purpose prop. levy	12.97	7.39	5.60
Indebtedness of school dist.	285,720	430,413	144,693
Uncollectable tax	213,553	761,118	547,565
Tax rate for county purposes	35	61	26

Minnesota Year Book 1941
League of Minnesota Municipalities
15 University Avenue
Minneapolis, Minnesota

CHAPTER II

ENROLLMENT AND ATTENDANCE

The problem of enrollment and school attendance, affecting as it does school cost, the school program of studies, the health and recreational services as well as gregarious growth of the pupils, has long received recognition in school administration.

Territorial legislation established the township as the fundamental local school unit; but pressure, prompted often by scattered population, forced recognition of smaller school units. Advancing time has brought changes in the condition of living which often reversed the original arrangement.

Reference to Table 3 shows a decided shift in enrollment figures over a period of 10 years in the counties considered. In Carlton County the most apparent observation is the reduction in the number of teachers in the ungraded schools ranging from 71 in 1930 to 30 in 1940. This was accompanied by a similar drop in the number of pupils in the same schools from 1,556 to 876 during the same period. In the graded and secondary field we find the number of teachers increasing from 145 in 1930 to 166 in 1940 and the enrollments in this group of schools increasing from 3,899 to 4,204. Pine County during the same period changed, but not as appreciably as Carlton. The ungraded enrollment decreased from 2,808 to 2,212 with teachers from this group falling from 128 to an even 100. In the graded and secondary schools of Pine County 104 teachers taught 2,366 pupils in 1930 as compared with 111 teachers for 2,620 pupils in 1940.

Table 3
 Statistics of Teachers and Enrollment
 Carlton and Pine Counties

Year	Teachers				Enrollment			
	Graded Elem. & Sec.	Graded Elem. & Sec.	Ungrad. Elem.	Ungrad. Elem.	Graded Elem. & Sec.	Graded Elem. & Sec.	Ungrad. Elem.	Ungrad. Elem.
	Carlton	Pine	Carlton	Pine	Carlton	Pine	Carlton	Pine
1930-31	145	104	71	128	3899	2366	1556	2808
1931-32	139	98	71	118	3775	2515	1704	2752
1932-33	134	97	65	112	3822	2689	1658	2737
1933-34	132	101	54	112	3859	2677	1607	2736
1934-35	140	102	57	111	3959	2623	1510	2647
1935-36	149	107	52	113	4103	2629	1273	2575
1936-37	154	106	49	112	4091	2548	1206	2482
1937-38	165	109	36	111	4299	2539	948	2408
1938-39	165	107	38	106	4269	2554	897	2239
1939-40	157	110	34	103	4279	2563	875	2238
1940-41	166	111	30	100	4204	2620	875	2212

We find that we have a teacher-pupil load of 27.9 pupils in the graded elementary and secondary schools of Carlton County in 1930 while in the ungraded the ratio was 29.9 pupils. In 1940 this ratio had been changed to 26.6 in the graded and 29.1 in the ungraded. Pine County similarly established a ratio of 22.7 in the graded schools and 21.9 in the ungraded schools in 1930, while in 1940 this teacher load had changed to 23.6 in the graded schools and 22.1 in the ungraded schools of Pine County.

The educational outcomes must to a large extent coincide with the length of the school term and the habits of attendance each school develops. Table 4 illustrates clearly that in Carlton County only two schools operate on an 8-month basis, the remaining have a 9-month school term. In Pine County 17 schools have 8-month terms and the remaining have 9-month terms. The schools of Carlton County with 8-month school enroll a total of 45 pupils. In Pine County the 8-month schools enroll a total of 246 pupils. Further interpretation reveals that Carlton County lost 900 pupil days through shorter days as compared to 39,360 pupil days for Pine County.

Table 4

Length of School Terms
Graded and Ungraded Schools

County	8-month	9-month	Total
Carlton	2	14	16
Pine	17	89	106

The comparison of enrollments and average daily attendance of the schools in the two counties reveals that Carlton County has a much better average. Considering the graded elementary and secondary schools of the two counties we find that Carlton has an average daily attendance of 90.3% as to Pine County's average daily attendance of 84.8%. The ungraded schools of Carlton County have 87.2% while the corresponding classification of schools in Pine County have 83.3%, the average for the two counties being 88.7% for Carlton and 84% for Pine. From this we observe that in both instances the rural ungraded schools have a higher absence mortality than the graded schools and also that Carlton County has a 4.7% better attendance record. Irrespective of the facts mentioned above, this means that the average child in Pine County received 8.46 days less of instruction per year than the pupils in Carlton County.

In analyzing this difference in attendance it may be well to note the following as contributory factors:

1. The ungraded school child is compelled to walk to school in all types of weather while the child that attends the graded and secondary schools as a rule rides in modern comfortable buses to school.
2. Ungraded school buildings with faulty heating, ventilation and sanitation cannot protect the health of the children as well as the much better buildings and facilities of the graded schools.
3. Closer supervision of compulsory attendance is usually maintained in the graded schools.
4. Health control through better health services in the larger schools promote better attendance.

Table 5

Enrollment Graded, Elementary
and Secondary Schools by Ages

County	5-8	8-16	16-21	Total
Carlton	777	2591	779	4147
Pine	422	1667	578	2667

Table 6

Enrollment Ungraded Elementary
Schools by Ages

County	5-8	8-16	16-21	Under 5	Total
Carlton	288	694	1	0	983
Pine	573	1695	8	1	2277

Table 7

Enrollment and Average
Daily Attendance

County	Graded Enroll.	Gr. Avg. Daily Attend.	Ungr. Enroll.	Ungr. Avg. Daily Attend.	Total Enroll.	Total Avg. Daily Attend.
Carlton	4147	3748.54	983	857.50	5130	4606.04
Pine	2667	2264.18	2277	1886.72	4945	4150.90

ENROLLMENT AND COMPLETION OF GRADES

The enrollments of the two counties are very similar as to number of pupils. Significantly, Pine County does not provide kindergarten education. It does, however, have spring primary grades in one school which also has a teacher training department. Carlton County, on the other hand, does not have a teacher training department in any of the schools. A comparison of the 8th grade enrollment with the 8th grade graduates shows that Pine County has 443 enrolled and graduated 397 or 10.3% failures, while Carlton County enrolled 414 and graduated 385 or a record of 7% failures.

Additional analysis of this statement reveals that the ungraded schools of Pine County enrolled 269 pupils in the 8th grade and 229 completed, a mortality of 14.8% as compared to a mortality rate of 3.4% for the 8th grade of Carlton County. In the ungraded schools of Carlton County the 8th grade mortality rate is 3.7% as compared with 6.7% in the graded schools of Pine County. It is safe to assume that this evident reduction of 8th grade mortality in the Carlton County schools is the product largely of longer school terms, better attendance record and superior teaching and equipment of these schools.

Further scrutiny of the enrollment tables for the two counties reveals that the number of pupils continuing school through high school is higher in Carlton County. The enrollment of the grades 5 through 8 in Carlton County is 1,677 pupils and in grades 9 through 12, 1,537 or a drop of 140 pupils in the four grades. Applying the same comparative yardstick to Pine County

for the same grades, we find an enrollment from grades 5 through 8 of 1,770 pupils as against 1,270 in the grades 9 through 12, or a drop of 500 pupils in the four grades. It is logical to imply from this information that the larger school units do promote a longer period of educational opportunity for the boys and girls. Becoming acclimated to the entire school environment by their association with the larger school unit in the elementary grades, the children find it natural to continue in school. Also, the establishment of bus routes for the transportation of elementary pupils means that all the high school pupils likewise will obtain better transportation. In Pine County, on the other hand, which has not carried out such an extensive program, more pupils drop out at the end of the completion of the 8th grade.

This situation finds corroboration in experiments conducted elsewhere in the state, a typical example is Lake County which operates on a county unit entirely. Speaking before the Regional Association of Public Schools Business Officials, Supt. C. E. Compton expressed himself as follows: "According to the report of the Minnesota State Planning Board last year, there were more pupils between the ages of 16 and 17 years of age attending high school in Lake County than any other county of the state according to population -- a record of which we feel justly proud".^a

It is also safe to conclude that as the rural people make contacts through their children with the central school systems, they recognize more definitely their responsibility to provide

^aReport of the Interim Committee on Education
Submitted to the 52nd Legislature of Minnesota, Page 139

high school education for their children. Without this association it becomes a much more difficult task to persuade parents of the responsibilities in this respect.

Table 8

Enrollment Graded and Secondary Schools
by Grades

County	Kindergarten	1	2	3	4	5	6
Carlton	150	315	295	313	290	305	304
Pine	-	185	150	179	152	177	162
County	7	8	9	10	11	12	Total
Carlton	296	309	440	413	408	276	4147
Pine	159	174	373	316	305	276	2668

Table 9

Enrollment Ungraded Schools
by Grades

County	1	2	3	4	5	6	7	8	Total
Carlton	143	128	135	114	124	122	112	105	983
Pine	308	286	293	289	276	278	275	269	2277

Table 10

Enrollment all Schools
by Grades

County	Kindergarten	1	2	3	4	5	6
Carlton	150	458	423	448	394	429	426
Pine	-	493	436	472	441	453	440

Table 10 (continued)

County	7	8	9	10	11	12	Total
Carlton	408	414	440	413	408	276	5130
Pine	434	443	373	316	305	276	4945

Table 11

Enrollment Completing Eighth Grade
Graded, Elementary and Secondary

County	Boys	Girls	Total
Carlton	150	138	288
Pine	87	81	168

Table 12

Enrollment Completing Eighth Grade
Ungraded Elementary

County	Boys	Girls	Total
Carlton	47	50	97
Pine	109	120	229

Table 13

Total Completing Eighth Grade, All Schools

County	Boys	Girls	Total
Carlton	197	188	385
Pine	196	201	397

Among the ungraded schools that operate their own school system in the two counties we find that Pine County has 12 schools with less than 10 pupils enrolled and in one case a school is operated for 4 children. Carlton County has only one school which has an enrollment of as few as 10 pupils. In Pine County we find 43 schools with an enrollment from 11 to 20 pupils while in Carlton County there are only 3. In the groups of 21 to 30 pupils enrolled, Pine County has 20 while Carlton County has 5. In the group of 50 pupils, Pine County has 3 while Carlton County has 6 such schools. Apparently this would suggest that several of the small schools in Pine County should have educational advantages as well as economy by closing and transporting to one of the districts maintaining graded elementary schools. There are very few positive elements in favor of maintaining the schools with less than 20 pupils. The minimum size of schools is a more serious problem than the maximum size. It has been shown by comparative figures that the per pupil cost may be lowered for equilateral educational programs by increasing the elementary schools as much as 600 pupils.¹

Table 14

Ungraded School Enrollments

Size	No. Pine	No. Carlton
0-10	12	1
11-20	43	3
21-30	20	5
31-40	11	4
41-50	6	0
51-	3	6

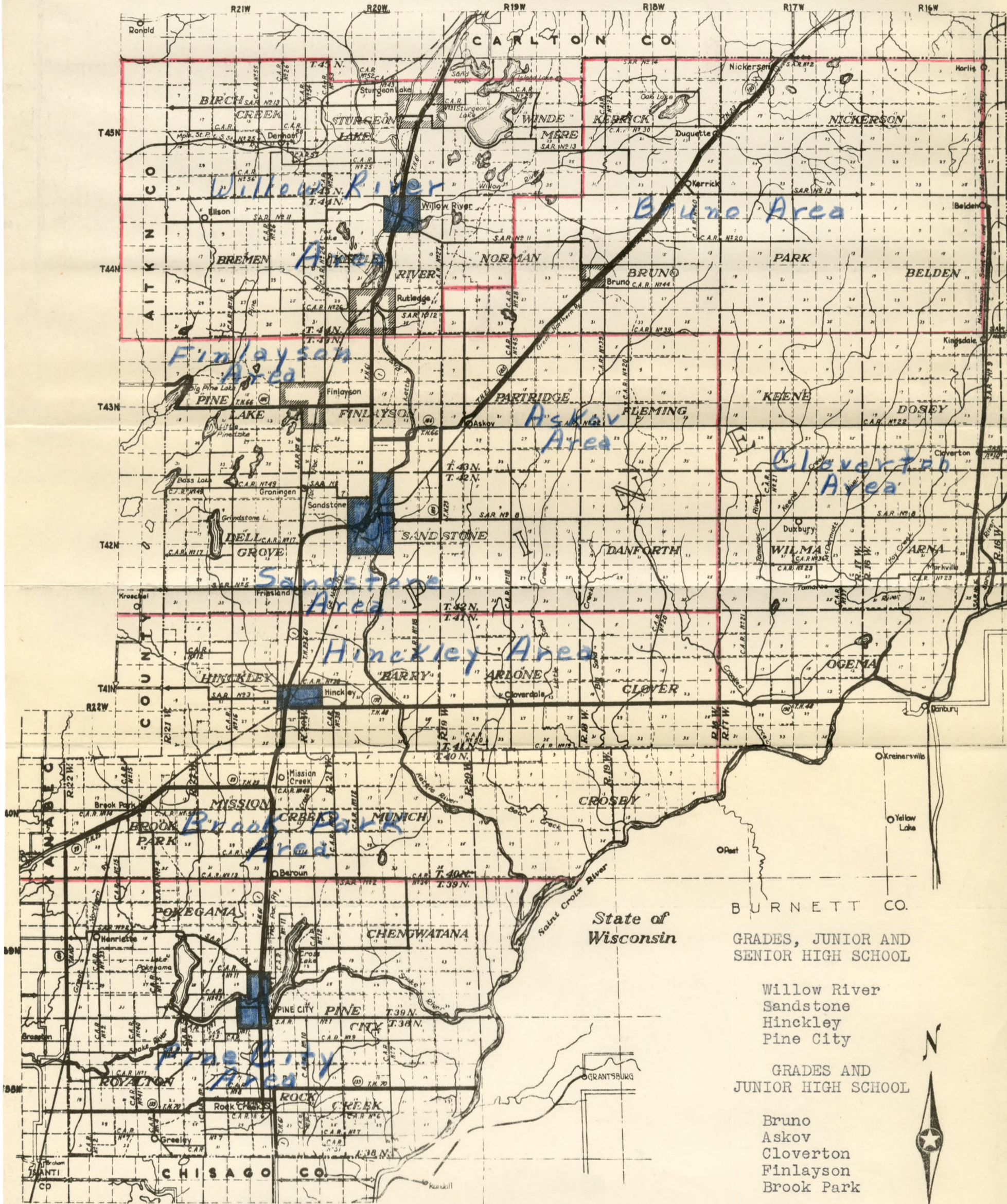
¹Engelhardt, N. L. and Engelhardt, Fred
 "Planning School Buildings", Bureau of Publication
 Teachers College, Columbia
 Pages 232-34

Figure 3

OFFICIAL HIGHWAY MAP PINE COUNTY MINNESOTA

Prepared by
N. C. Peterson
County Highway Engr.

- Legend**
- State Trunk Highway
 - State Aid Road
 - County Aid Road
 - Township Road



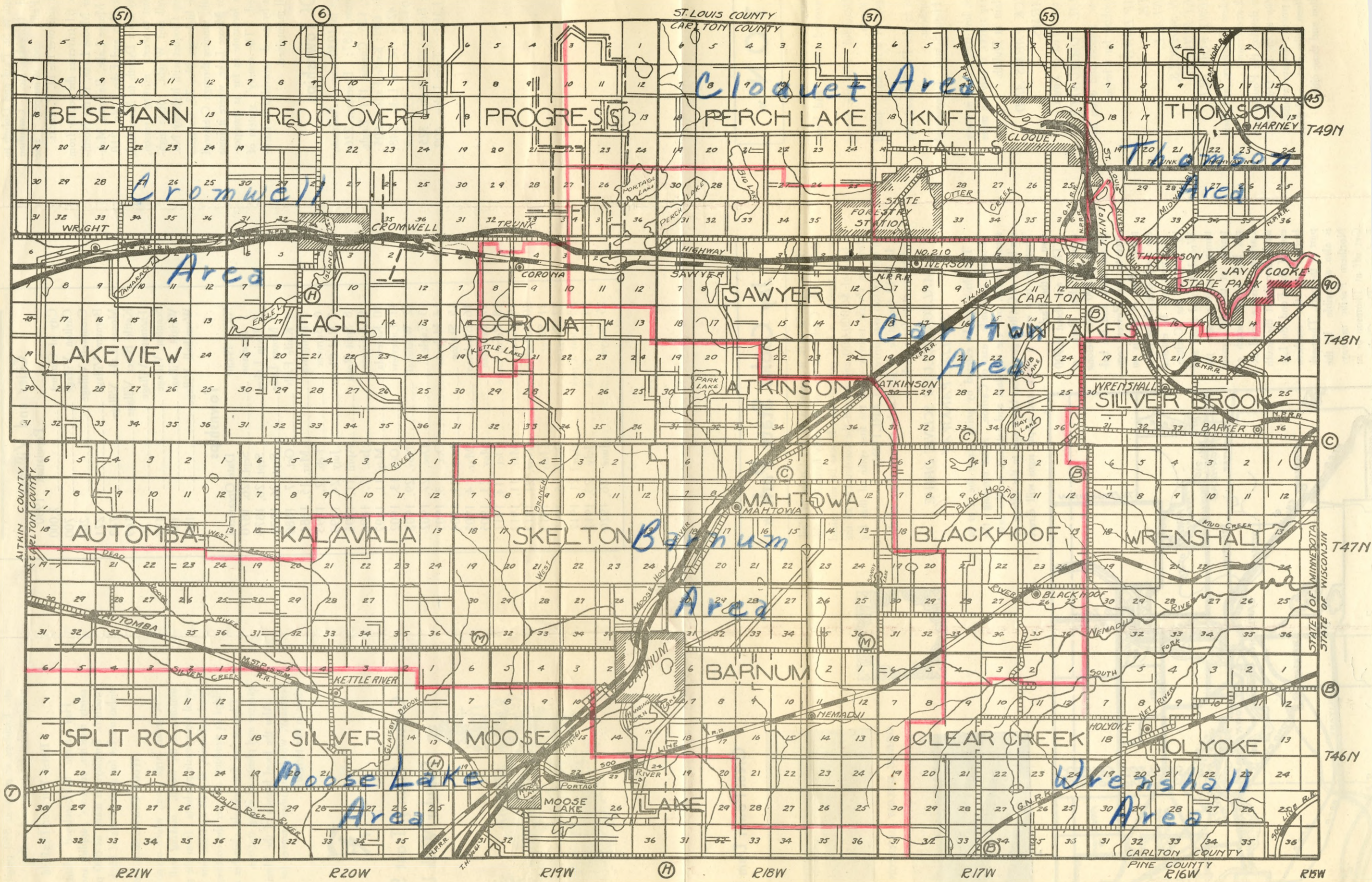
BURNETT CO.
GRADES, JUNIOR AND
SENIOR HIGH SCHOOL

Willow River
Sandstone
Hinckley
Pine City

GRADES AND
JUNIOR HIGH SCHOOL

Bruno
Askov
Cloverton
Finlayson
Brook Park





CHAPTER III
RECEIPTS, EXPENDITURES AND DEBTS

Receipts

In Minnesota the following are the main sources of income to schools: Apportionment, income tax, special state aid, local one-mill tax and special tax for maintenance.

Besides the above mentioned, considerable income is derived from the sale of bonds, contracts for instruction of children outside of the district, federal aid and miscellaneous other sources. Tables 15 and 16 show the receipts from the various sources for the graded elementary and secondary schools and the ungraded elementary of Carlton and Pine Counties.

The special state aid is the most important single item of income for the schools of Pine County both in the graded elementary and secondary field and the ungraded, amounting for the year 1940-41 to a total of \$167,384.64. It is worthy of note that this amount from the special state aid fund in this county for one year exceeded the total receipts from the maintenance tax by \$93,663.76. For Carlton County the reverse is true, caused largely by the big tax for school maintenance in the city of Cloquet. However, when the income tax, apportionment, and special state aid is combined it becomes by far the most important source of revenue for the schools of both counties.

From the standpoint of average income per child from all sources in the graded elementary and secondary schools there is a difference of \$10.77, Pine County having an average income per

child enrolled of \$91.85 to \$102.62 in Carlton County. Comparing the average per pupil total income in the ungraded elementary schools of the two counties we find an even greater differential exists illustrated by the following figures: \$59.85 per child enrolled in Pine County to \$93.25 in Carlton County, which represents a difference of \$33.45.

The supplemental aid which is included in the special state aids is predicated on the theory of equalization of educational opportunities and support of education. The law provides that if a 30-mill levy for maintenance does not provide \$60.00 per pupil per year in average daily attendance in the elementary grades and \$100.00 in the high school, the state will make up the difference by what is termed supplemental aid. Although this aid has been prorated at less than the stated amount in recent years it has been a vital factor in making it possible for districts with low valuation to maintain creditable school systems in their respective communities. Also included in this special state aid is what is known as non-resident high school tuition which amounts to \$7.00 per month, a total of \$63.00 per pupil per year. Another considerable amount of special state aid is for transportation which is based upon the per pupil per mile travel during the year. It is to be observed that especially the ungraded elementary schools of Pine County with a per pupil rate of \$59.85 is not receiving sufficient revenue to provide acceptable educational programs.

Expenditures

School expenditures are classified under eight headings as follows:

1. General control
2. Instruction
3. Operation of plant
4. Maintenance
5. Auxiliary agencies
6. Fixed charges
7. Capital outlay
8. Debt service

Tables 17 and 18 clearly illustrate that instruction, including teachers salaries, supplies, text books, and the like, constitutes the largest portion of expenditure, in fact approaches that of the aggregate total of the other seven.

Due to the large number of school districts and boards of education, the amount of expenditure under general control in Pine County is unusually large in ratio to total expenditures. If the number of common school districts and boards of education were reduced and these districts consolidated with larger units the amount spent for general control could be materially reduced.

Transportation is a very vital factor in the school system of both Carlton and Pine Counties. With the exception of the city of Cloquet in Carlton County and Pine City in Pine County, both counties are predominantly rural and to provide transportation both for the high school students and the grades is very essential. In consolidated districts of the state, transportation must be provided for all who reside two or more miles from the school house. Besides they cannot be required to walk in excess of $3/4$ mile to meet the bus. Districts are reimbursed by state sources on a per

pupil per mile basis not to exceed \$36.00 per pupil per year. In districts that do not maintain high schools, transportation may be provided for high school students attending the high school of the area and the state in this instance will reimburse the home district to the amount of $\frac{2}{3}$ of the actual cost not to exceed \$4.00 per pupil per month. Both of these aids are directly dependent upon appropriation by the state legislature and the amount is pro-rated depending upon the inadequacy of the amount appropriated.

During the school year of 1940-41, \$51,893.01 was spent by the graded elementary and secondary schools of Carlton County for transportation and \$31,218.71 by the same classification of schools in Pine County. The ungraded elementary schools of Carlton County expended the amount of \$21,336.01 for the transportation of pupils and \$26,039.49 was spent by the ungraded elementary schools of Pine County. It is to be noticed that although Pine County has more pupils in the ungraded elementary schools, only \$4,703.48 more was expended for the transportation of these pupils.

Debt Service

The total school debt of Carlton County is \$285,720.00 as compared to \$430,413.00 for Pine County, while the total valuation of the two respective counties is \$6,848,575.00 and \$3,472,454.00. In 1940, \$1,820.57 was paid out for the redemption of bonds and the interest of outstanding bonds by the ungraded elementary schools of Pine County and \$9,212.00 by the graded elementary and secondary schools totaling \$11,032.57. For the schools in Carlton County we find the following expenditures for interest and redemption of bonds: ungraded elementary \$6,222.42 and the graded elementary and secondary \$11,149.72, a total of \$17,372.14.

The per capita school debt in the two respective counties of Carlton and Pine we find to be \$11.76 and \$20.50.

The ratio of debt to valuation in these two counties is:

Carlton County 23.97

Pine County 8.07

Tables 19, 20, 21 and 22 show the bonded indebtedness of the various districts of the schools of the two counties. They are grouped by graded elementary and secondary and ungraded elementary. Note that in Pine County all but two of the districts, namely 24 and 127, have a bonded debt ranging from \$1,500.00 in district 29 to \$55,500.00 in district 100. By scrutinizing the bonded indebtedness of the graded elementary and secondary schools of Carlton County, we find all but one, that is district 1, having some bonded indebtedness. By the way, district 1 has often been referred to as the richest rural district in the state of Minnesota in that it has an inland village, highly developed concentrated agriculture, and the Minnesota Power and Light Power Dam. The valuation of this district exceeds \$1,000,000.00. The ratio of debt to valuation in Carlton County is not excessive.

When one considers the bonded indebtedness of the ungraded elementary schools of both counties, we find that not very many districts have a bonded debt. Fourteen in Pine County ranging from \$44,100.00 in district 18 to \$200.00 in district 104. This district is very unusual in that the bonded debt exceeds total valuation by \$11,419.00. In Carlton County the range of indebtedness is from \$9,500.00 in district 25 to \$300.00 in district 31. In no instance is the bonded debt out of balance with reference to valuation.

Table 15
 Receipts 1940-41
 Graded, Elementary and Secondary Schools
 of Carlton and Pine Counties

Carlton County	Sources	Pine County
\$ 28,827.75	Apportionment	\$ 15,704.22
36,740.00	Income tax	9,007.04
115,215.98	Special state aid	127,478.65
5,908.12	Local one-mill tax	1,149.88
211,866.94	Special tax for maintenance	54,019.51
9,189.19	Capital outlay, bonds, int.	3,733.40
5,333.39	Other Revenue	4,399.08
1,284.50	Received from bonds	15,000.00
398.13	Received from sale of text books	264.43
16,680.60	Received from all other sources	8,518.14
431,444.58	Total receipts	239,274.35
102.62	Average per child	91.32

Table 16
 Receipts 1940-41
 Ungraded Elementary Schools of
 Carlton and Pine Counties

Carlton County	Sources	Pine County
\$ 5,829.00	Apportionment	\$ 13,332.01
9,840.00	Income tax	14,365.40
24,160.06	Special state aid	39,905.99
660.99	Local one-mill tax	1,820.22
30,186.44	Special tax for maintenance	39,644.25
221.39	Capital outlay, bonds, int.	1,043.32
2,946.03	Other revenue	4,841.75
225.23	Received from bonds	--
--	Received from sale of text books	9.85
7,528.40	Received from all other sources	11,454.64
81,597.54	Total receipts	126,417.43
93.25	Average per child	59.85

Table 17
Expenditures 1940-41
Graded Elementary and Secondary Schools
of Carlton and Pine Counties

Carlton County	Items	Pine County
\$ 26,072.72	General Control	\$ 15,517.08
	Instruction	
206,862.73	(a) teachers salaries	106,797.06
6,577.42	(b) textbooks	4,498.83
2,528.74	(c) library books	1,468.78
15,739.66	(d) supplies	6,471.88
2,039.92	(e) other expenses	2,298.79
	Operation of plant	
24,974.75	(a) janitors salaries	12,248.00
13,841.47	(b) fuel	10,376.49
15,565.48	(c) supplies	5,609.15
	Maintenance	
11,698.22	(a) repair of bldgs. upkeep of grounds	7,252.06
6,394.00	(b) repair of equipment	3,125.55
	Auxiliary agencies	
51,893.01	(a) transportation	31,218.71
4,189.33	(b) promotion of health	436.82
2,328.82	(c) other auxiliary expense	528.23
	Fixed charges	
8,166.36	(a) insurance	3,432.25
2,808.22	(b) rent, interest, etc.	1,499.14
401,689.85	Total for Maintenance	212,778.82
	Capital Outlay	
7,631.91	(a) land, additions, etc.	57,493.18
15,632.99	(b) new equipment	3,529.09
	Debt Service	
2,454.66	(a) interest	2,025.00
8,695.06	(b) bonds	7,187.15
436,104.37	Grand Total	283,013.24
105.16	Average per pupil enrolled	109.82

Table 18
Expenditures 1940-41
Ungraded Elementary Schools of
Carlton and Pine Counties

Carlton County	Items	Pine County
\$ 2,934.29	General Control	\$ 6,301.51
	Instruction	
24,137.28	(a) teachers salaries	62,043.33
1,165.31	(b) textbooks	5,001.40
566.97	(c) library books	1,538.95
1,356.29	(d) supplies	3,726.82
3,211.02	(e) other expenses	2,272.16
	Operation of plant	
4,264.50	(a) janitors salaries	5,711.29
3,826.67	(b) fuel	4,854.72
2,073.88	(c) supplies	2,187.01
	Maintenance	
2,748.99	(a) repair of bldgs. upkeep of grounds	4,804.72
352.98	(b) repair of equipment	1,006.05
	Auxiliary Agencies	
21,336.01	(a) transportation	26,039.49
106.02	(b) promotion of health	182.25
141.05	(c) other auxiliary expenses	1,399.03
	Fixed Charges	
1,401.63	(a) insurance	1,839.83
1,023.12	(b) rent, interest, etc.	911.14
70,646.01	Total for Maintenance	129,819.70
	Capital Outlay	
7,546.72	(a) land addition	13,082.60
918.10	(b) new equipment	676.11
	Debt Service	
1,176.16	(a) interest	540.57
5,046.26	(b) bonds	1,380.00
85,333.25	Grand Total	145,498.98
86.81	Average per pupil enrolled	63.90

Table 19

Debt by Districts
Graded, Elementary and Secondary Schools
of Carlton County 1940-41

District	Valuation	Bonded Debt	Ratio
1	\$1,383,049.00	----	----
2	685,804.00	\$35,500.00	19.318
3	228,370.00	34,000.00	6.716
6	132,563.00	47,300.00	2.702
7	3,307,151.00	60,000.00	55.119
13	71,022.00	15,200.00	4.672
15	52,653.00	11,650.00	4.519
16	53,429.00	1,400.00	38.163

Table 20

Debt by Districts
Ungraded Elementary Schools
of Carlton County 1940-41

District	Valuation	Bonded Debt	Ratio
11	\$ 38,082.00	\$ 1,000.00	38.082
21	30,536.00	2,000.00	15.268
25	86,464.00	9,500.00	9.101
28	13,126.00	1,400.00	9.375
31	7,569.00	300.00	25.230

Table 21

Bonded Indebtedness of Ungraded Elementary
Schools of Pine County 1940-41

District	Valuation	Bonded Debt	Ratio
4	\$ 40,843.00	\$ 1,000.00	40.843
12	34,644.00	3,000.00	11.548
18	32,681.00	44,100.00	.741
28	28,614.00	400.00	71.035
38	34,839.00	3,900.00	8.933
40	16,293.00	6,800.00	2.396
46	45,804.00	4,000.00	11.451
83	18,383.00	2,500.00	7.353
101	5,545.00	400.00	13.862
104	18,039.00	200.00	90.195
120	6,438.00	700.00	9.197
122	27,682.00	400.00	69.205
123	8,120.00	1,475.00	5.505
124	11,102.00	700.00	15.860

Table 22

Bonded Indebtedness of Graded, Elementary
and Secondary Schools of Pine County
1940-41

District	Valuation	Bonded Debt	Ratio
2	\$ 208,534.00	\$ 6,000.00	34.755
3	404,036.00	51,000.00	7.922
5	253,821.00	46,000.00	5.517
21	65,363.00	44,000.00	1.485
24	41,872.00	-----	-----
29	67,752.00	1,500.00	45.168
91	154,503.00	36,640.00	4.216
100	9,326.00	55,500.00	.168
127	75,603.00	-----	-----

CHAPTER IV

TEACHERS QUALIFICATIONS, TRAINING,
TENURE AND SALARIES

The preparation and experience of teachers is perhaps the most important determinant of teaching efficiency. It may be true that a few good teachers "are born" and not "trained", but even these would most certainly be better teachers with additional preparation. Long recognized as an important factor in teaching efficiency, training has been a subject of discussion in practically every gathering of educators. Resolutions calling for increased training periods of teachers have been prepared, duly passed and published.

Legislation in Minnesota still holds to what may be called a triple standard of preparation, that is, one year preparation for ungraded elementary schools, two years training for graded elementary and four years training for high school teaching positions. The assumption is, it seems, that a teacher needs progressive "quantities" of training to teach in each age group. This practice is also a result of legislative accumulations over a period of years rather than educational philosophy. State departments of education have established such standards by offering higher financial aid to districts employing better trained teachers. It is, of course, erroneous to conclude that different levels of teaching require more or less training. Certainly, there should be a differential in the kind of training, but not in the amount. Many educators feel the most difficult teaching position is the rural school with its many problems. Inversebly, the training for this

type of teaching is also, as a rule, the most inadequate.

Teachers are the most important factors in the whole educational scheme. Buildings, laboratories, gymnasiums, and libraries are essential, but without properly trained and qualified teachers to utilize them they are of little value. The human equation, instead of bricks, determines the worth of our schools.

Table 23

Teacher Training
Ungraded Elementary Schools of
Carlton and Pine Counties

Training	Carlton County Per Cent	Pine County Per Cent
1 yr. Teachers College	6%	56%
2 yr. Teachers College	94%	42%
4 yr. Teachers College	--	2%

Table 24

Teacher Training
Graded, Elementary and Secondary Schools
of Carlton and Pine Counties
High School

Training	Carlton County Per Cent	Pine County Per Cent
M. A.	15.1%	7.1%
B. A.	84.9%	90.2%
Dip.	--	2.7%

Table 25
 Teacher Training
 Graded, Elementary and Secondary Schools
 of Carlton and Pine Counties
 Grades

Training	Carlton County Per Cent	Pine County Per Cent
2 years	72.6%	62.8%
3 years	9.6%	20.0%
4 years	17.8%	17.2%

In the rural schools of Pine and Carlton Counties, we find a majority of the teachers are meagerly prepared. It is encouraging to note that only 6% of the teachers in Carlton County are graduates of one-year High School Teacher Training Departments although Pine County has over 56% in this class. The fact that Pine County has a teacher training department at Hinckley and a few years ago had two others in the county, while in Carlton County there are no high school training departments, may account to some extent for this big difference. The majority of Carlton County teachers are graded teachers, that is, 97% are graduates of a two-year teachers college course. Pine County in comparison has 42% with the same type of preparation. Two teachers in Pine County have two years of training. This is conclusively brought out in Table 23 dealing with types of training.

The superior salary range of the Carlton County schools over Pine County seems to attract better trained teachers to the faculties of the various graded, elementary and secondary schools of that County. According to Table 24, 15.1% of the teachers in

the secondary schools of Carlton County have Masters degrees as compared to 7.1% in Pine County. There are no teachers in the secondary schools in Carlton County without degrees while in Pine County there are 2.7% in that group.

Tenure and Experience

The problem of teacher tenure compels the assent of everyone's interest in the welfare of our school program. Irrespective of qualifications, new teachers in a school must spend considerable time in orientation both to the school and the community situation as well as to the pupil personalities. Exhaustive studies have been carried out to determine causes of teacher turnover, but certainly the small rural schools, whose salary offering is not commensurate with training nor responsibilities, must always remain as a major contributing factor.

One of the poorest places to start an inexperienced teacher, it would seem, would be in a rural school. A school of this kind which necessarily would have little, if any, supervision nor in training service and unusually heavy teaching program affords very little encouragement to a beginner teacher. It must be recognized that teacher tenure and experience expedite the smooth functioning of any school. This situation is important not only for the security of the teaching profession but also in the interest of the pupils. Continual change in teaching personnel makes for disorganization, bringing about slipshod, chaotic ideas in the minds of the students. Frequently one teacher drills a set of habits into the pupils only to have them reversed or uprooted by her successor. As the tenure of a teacher increases she becomes

more of a leader and guide in the lives of the boys and girls in her classes. Oftentimes we read of instances of where a whole generation of a community have been positively influenced by such a situation.

Table 26

Teacher Tenure
Ungraded Elementary Schools of
Carlton and Pine Counties

Tenure in Present Position	Pine County Per Cent	Carlton County Per Cent
1 yr.	49%	43.4%
2 yr.	21%	23.4%
3 yr.	13%	6.6%
4 yr.	3%	6.6%
5 yr.	2%	6.6%
6 yr.	3%	3.4%
7 yr.	2%	3.4%
8 yr.	---	---
9 yr.	---	---
10 yr.	1%	---
over 10 yr.	1%	6.6%

Table 27
 Teacher Experience
 Ungraded Elementary Schools of
 Carlton and Pine Counties

Pine County Per Cent	Years of Experience	Carlton County Per Cent
13%	1	27.3%
18%	2	12.1%
11%	3	18.2%
10%	4	9.1%
13%	5	---
21%	6-10	18.2%
6%	11-15	9.1%
5%	16-20	---
1%	21-25	6.0%
2%	25 over	---
	Median Carlton County	- 5 yr.
	Median Pine County	- 4 yr.

In the survey of the ungraded schools of Pine and Carlton Counties we find that neither tenure nor experience rate very high. According to Table 27, 13% of the teachers in Pine County experience their first teaching job in their present position and 27% of Carlton County rural teachers were inexperienced. The median for Carlton County is 5 years and the median for Pine County is 4 years of experience. In comparing the tenure Table 26 with the experience Table 27 we further find that there is a considerable shifting of teachers in the county from one school to another. In Pine County for example while 13% of the teachers were entirely without experience 49% were new to the schools they were employed in while in Carlton County the percentage was 27.3% without experience but 43.4% were with their present employers for the first time. Only 9% of the teachers in Pine County and 8% of the teachers in Carlton County have remained in their present position 5 or more years. Suffice to say that until measures are taken to provide ability, to pay adequate salaries, teacher tenure or experience cannot make any appreciable improvement in the rural schools of the counties.

In both the graded and secondary schools of Carlton County we find that over 50% of the teachers have four or more years of tenure. The exact figures being 56.1% in the secondary schools and 76% in the grades. In Pine County the percentages are 37% and 35.6% respectively.

The experience ratios of the two systems run parallel to the tenure figures. In Carlton County 45% of the teachers in the secondary schools have had over ten years of experience and 73%

in the grades. In comparison, 24.2% of the teachers of the secondary schools in Pine County have over ten years of experience and only 22.2% in the grades.

Table 28

Teacher Tenure
Graded, Elementary and Secondary Schools
of Carlton and Pine Counties
High School

Years of Tenure	Pine County Per Cent	Carlton County Per Cent
1	27.7%	26.8%
2	18.5%	13.4%
3	16.8%	3.7%
4 or more	37.0%	56.1%

Table 29

Teacher Tenure
Graded, Elementary and Secondary Schools
of Carlton and Pine Counties
Grades

Years of Tenure	Pine County Per Cent	Carlton County Per Cent
1	32.2%	18.5%
2	32.2%	3.7%
3	---	1.8%
4 or more	35.6%	76.0%

Table 30
 Teacher Experience
 Graded, Elementary and Secondary Schools
 of Carlton and Pine Counties
 High School

Years of Experience	Pine County Per Cent	Carlton County Per Cent
1	21.4%	16.1%
2	7.2%	10.0%
3	22.8%	6.1%
4	7.2%	1.1%
5	2.8%	2.4%
6	5.8%	7.5%
7	2.8%	3.5%
8	5.8%	4.8%
9	---	3.5%
10 or more	24.2%	45.0%

Table 31
 Teacher Experience
 Graded, Elementary and Secondary Schools
 of Carlton and Pine Counties, Grades

Years of Experience	Pine County Per Cent	Carlton County Per Cent
1	16.7%	8.3%
2	2.7%	1.7%
3	14.0%	3.3%
4	22.2%	1.7%
5	5.6%	3.3%
6	5.6%	3.3%
7	5.6%	3.3%
8	2.7%	---
9	2.7%	1.7%
10 or more	22.2%	73.4%

Salaries

Every individual in life must give thought to the economic problems involved in the choosing of a life work. While it is true that one does not live on bread alone, it is just as true that one cannot live without bread. Salaries to a large degree determine the training, the amount of practically all advanced work as well as the mental and social well-being of the teacher.

The evidence gathered in the two counties reveals that the least training commands the least remuneration. The rural schools which hire one-year graduates are even more prone than the other districts to pay smaller salaries. In the Pine County rural schools the average monthly salary according to Table 32 is \$70.63. There is a difference of \$19.99 in the salaries of men and women, the former receiving the higher pay. In the Carlton County rural schools the average salary is \$81.29 with a differential of \$24.17 in favor of the men teachers. We also find that the average salary of Carlton County is \$10.66 higher than in Pine County with approximately the same difference found in the salaries of the men. The fact that Carlton County pays higher salaries also explains the reason for the better training of its teachers as shown by Table 33. Pine County had five teachers with less than \$60.00 per month in salaries and over 50% had less than \$75.00 per month. Carlton County, on the other hand, has no teachers with a salary less than \$60.00 per month but here too, over 50% of the teachers receive less than \$75.00 per month.

According to Tables 34 and 35 there exists a very wide salary range between the two counties. For the teachers in the

graded schools of Carlton County the average salary per month is found to be \$36.40 higher than for the teachers in the same class of schools in Pine County. The average salaries in the secondary schools of the two counties differ to the amount of \$23.48 in favor of the teachers of Carlton County.

Table 32

Salary Comparison
of Elementary Ungraded Schools
of Carlton and Pine Counties

County	Monthly Average Men	Monthly Average Women	Monthly Average Both
Pine	\$ 87.82	\$ 67.83	\$ 70.63
Carlton	102.50	78.33	81.29

- - - - -

Table 33

Salary Comparison
of Ungraded Elementary Schools
of Carlton and Pine Counties

Monthly Salary	No. Pine	No. Carlton
\$ 50-60	5	--
61-70	29	6
71-80	49	12
81-90	13	5
91-100	3	3
101-110	1	6
111-120	--	1

Table 34

Average Teacher Salaries
of Graded, Elementary and Secondary Schools
of Carlton and Pine Counties

County	Monthly Average Men	Monthly Average Women	Monthly Average Both
Pine	\$136.32	\$101.73	\$115.51
Carlton	168.56	143.60	151.91

Table 35

Average Salaries
of Men and Women Teachers in the
Graded, Elementary and Secondary Schools
of Carlton and Pine Counties

County	District Number	Location	Monthly Average Men	Monthly Average Women	Monthly Average Both
Carlton	1	Thomson	\$183.13	\$143.33	\$159.25
	2	Carlton	238.89	133.75	166.28
	3	Moose Lake	142.71	114.55	126.40
	6	Barnum	132.42	105.00	122.14
	7	Cloquet	201.30	143.35	154.59
	13	Cromwell	130.00	102.74	112.27
	15	Wrenshall	156.11	102.50	120.37
	16	Kalavala	105.00	90.25	93.20
Pine	2	Hinckley	145.95	109.42	122.88
	3	Pine City	158.98	103.27	121.52
	5	Sandstone	136.25	107.38	117.00
	21	Willow River	133.50	124.33	129.57
	24	Brook Park	121.50	84.50	99.00
	290	Finlayson	104.17	89.50	87.98
	71	Askov	126.67	90.42	104.92
	100	Cloverton	117.50	83.33	97.00
127	Bruno	110.33	86.00	95.13	

Average Monthly Salary, Carlton County \$131.81

Average Monthly Salary, Pine County 108.33

CHAPTER V

RELATIVE ABILITY OF THE TWO COUNTIES
TO SUPPORT EDUCATIONAL PROGRAMS

The ability of any school unit to support a complete and up-to-date educational program depends upon the total valuation of all the property within the unit, the amount of state and federal aids, and the number of children attending school in the district. The index of ability to support education in any area is predicated upon the total amount of value back of every school child enrolled. It stands to reason that a district with a low valuation and a high enrollment cannot provide the same kind of an educational program as a district having high assessed valuation and a comparatively small enrollment. Investigations reveal that inequalities of ability of districts to support education is very common in the state of Minnesota. This condition exists in spite of general acceptance by educators and the guarantee in the State Constitution that all children of the state shall have equal educational opportunities.

Referring to Tables 36 and 37 it is very evident that there is a great span between the assessed valuation per pupil in the graded, elementary and secondary schools of Carlton County. The range is from \$3,799.60 in district 1 to \$226.95 in district 15. This means that a school child residing in district 1 has 16 times as much taxable wealth back of it for school purposes. In spite of supplemental aids from state sources it is absolutely impossible for district 15 to maintain a school program comparable to district 1. If we examine the amount spent per child in average

daily attendance we find a variation from \$221.77 in district 1 to \$89.96 in district 7. It is absolutely beyond reason to try to argue that the same quality of educational program can be purchased for \$89.96 per year as compared to \$221.77 per child in average daily attendance. Comparing Pine County we find the difference isn't so pronounced, the range in assessed valuation running from \$689.70 in district 71 to that very low figure of \$107.20 in district 100. The per pupil in average daily attendance from the standpoint of total cost varies from \$100.90 in district 2 to \$177.79 in district 3.

Comparing the total efforts of the two counties in the support of education we find that the average cost for the graded, elementary and secondary schools of Carlton County per pupil in average daily attendance is \$130.37 as compared to \$110.68 in Pine County. Considering it from the standpoint of the per pupil enrolled valuation the average for Carlton County is \$1,139.66 as compared to \$430.35 in Pine County.

When comparing the graded, elementary and secondary schools of the two counties with reference to average maintenance cost per pupil in average daily attendance we find that according to Tables 38 and 39 that the range in Carlton County varies from \$81.18 in district 3 to \$203.15 in district 1. In Pine County the range is from a low of \$45.19 in district 27 to \$120.47. The average expended for maintenance per pupil in average daily attendance amounts to \$117.11 in Carlton County as compared to \$99.49 in Pine County, a difference of \$17.62.

Table 36

Ratio of Assessed Valuation and Total Expenditures to Enrollment and Pupils in Average Daily Attendance in the Graded, Elementary and Secondary Schools of Carlton County, 1940-41

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
1	364	\$1,383,049	3799.60	\$ 73,433.79	331.12	\$ 221.77	45
2	361	685,804	1899.70	57,074.45	321.00	177.80	55
3	528	228,370	432.50	47,165.11	484.20	97.41	58
6	390	132,563	339.90	41,461.93	341.60	121.38	61
7	1875	3,307,151	1763.81	154,013.82	1712.00	89.96	36
13	255	71,022	278.52	25,575.12	222.30	114.79	81
15	232	52,653	226.95	23,665.96	203.20	116.47	52
16	142	53,429	376.26	13,714.19	132.62	103.41	95

Table 37

Ratio of Assessed Valuation and Total Expenditures to Enrollment
and Pupils in Average Daily Attendance in the Graded, Elementary
and Secondary Schools of Pine County, 1940-41

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
2	510	\$ 208,534	408.9	\$ 43,184.57	428.00	\$ 100.90	61
3	590	402,036	681.4	87,652.67	493.02	177.79	49
5	462	253,821	549.4	48,204.18	401.49	120.06	43
21	334	65,363	195.7	30,317.25	280.44	108.11	64
24	132	41,872	317.2	11,260.00	106.92	105.31	120
29	131	67,752	517.2	12,473.45	113.07	110.32	113
71	224	154,503	689.7	23,909.15	189.42	126.22	90
100	87	9,326	107.2	7,938.65	76.82	102.10	31
127	186	75,603	406.5	7,938.65	175.02	45.36	72

The assessed valuation of the districts maintaining ungraded elementary schools in Pine County varies from \$1,725 in district 96 to a high of \$66,417 in district 11, and from the per pupil valuation, the variation of these two districts range from \$95.83 to \$962.56 respectively. A total of 12 of the ungraded schools in Pine County have a valuation of less than \$10,000 while 18 have over \$30,000. In Carlton County the valuation of the ungraded elementary schools range from \$128,566 in district 27 to \$5,411 in district 41. From the standpoint of per pupil valuation the variation runs from \$328.15 in district 32 to \$2,233.67 in district 40. Only 5 of the 25 districts in Carlton County have a valuation less than \$10,000 while 8 have over \$30,000.

Further study of Tables 40 and 41 reveals an unusual range in the amount of assessed valuation in Pine County to every child enrolled. District 120 with only 1 pupil enrolled would have the total valuation of that district back of it to the amount of \$6,438 while 46 children enrolled in district 92 have only \$80.41 of total assessed valuation backing up their educational program. District 96 with its 18 pupils enrolled has a per pupil valuation of \$95.83.

Considering the schools of this county from the standpoint of total expenditures and pupils in average daily attendance the range runs from a high of \$230 in district 109, \$224 in district 120, \$212.45 in district 72. It is interesting to note that all these three districts with the highest average per pupil cost had an attendance of 2, 1, and 5 pupils, respectively.

Table 38

Comparison Between Total Maintenance Cost
and Average Daily Attendance in the Graded, Elementary
and Secondary Schools of Carlton County
1940-41

District	1	2	3	6
Maintenance Cost	\$ 67,262.00	\$ 53,580.22	\$ 39,308.86	\$ 54,285.09
Avg. Attendance	331.12	321.00	484.20	341.60
Ratio	203.13	166.92	81.18	100.37
District	7	13	15	16
Maintenance Cost	\$151,211.16	\$ 23,701.90	\$ 20,330.55	\$ 12,010.07
Avg. Attendance	1,712.00	222.80	203.20	132.62
Ratio	88.32	106.38	100.05	90.56

Table 39

Comparison Between Total Maintenance Cost
and Average Daily Attendance in the Graded, Elementary
and Secondary Schools of Pine County
1940-41

District	2	3	5	21
Maintenance Cost	\$ 38,789.92	\$ 41,639.20	\$ 34,036.03	\$ 26,292.13
Avg. Attendance	428.00	493.02	401.49	280.44
Ratio	90.63	84.46	84.77	93.75
District	24	29	71	100
Maintenance Cost	\$ 11,229.13	\$ 12,313.45	\$ 22,820.10	\$ 7,606.24
Avg. Attendance	106.92	113.07	189.42	76.82
Ratio	105.02	108.90	120.47	99.30
District	127			
Maintenance Cost	\$ 7,909.57			
Avg. Attendance	175.02			
Ratio	45.19			

Further scrutiny of this table shows that district 69 and 30 have the unusually low per pupil cost of \$36.70 and \$36.79, respectively. Two more districts have an average pupil cost ratio of less than \$40 and 12 have between \$40 and \$50. Considering the enrollment we find that 32 schools in Pine County have an enrollment of less than 12, one school having 1 pupil enrolled and an average daily attendance of .81. When we consider the matter from the average per pupil cost in attendance we find that 32 schools with an enrollment of 12 or less had a per pupil cost of \$117.42 while the 35 schools with an enrollment of over 20 and an average daily attendance of 31 had the per pupil cost of \$57.26. This is unimpeachable evidence that the cost of maintaining schools where the enrollment is low is excessive and that a large number of rural schools are too small to be considered capable of providing the most effective school program.

Table 40

Ratio of Assessed Valuation and Total Expenditures to Enrollment
and Pupils in Average Daily Attendance in the Ungraded
Elementary Schools of Pine County, 1940-41

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
1	31	\$ 19,514	629.48	\$ 1,263.75	23.76	\$ 53.19	31
4	41	40,843	991.29	1,404.20	32.76	42.86	25
6	44	31,613	718.48	2,251.42	36.82	61.15	31
7	32	30,672	958.50	906.90	28.71	31.59	7
8	21	17,024	810.67	854.60	13.64	62.65	36
9	22	19,875	903.41	870.28	20.42	42.63	15
10	25	28,330	1133.20	1,220.46	19.11	63.86	31
11	69	66,417	962.56	4,360.22	54.71	79.37	43
12	30	34,644	1154.80	1,090.75	27.17	40.14	52
13	30	38,922	1297.40	1,482.72	25.01	59.28	13
14	19	26,576	1398.74	1,146.89	17.41	65.88	22
15	15	31,842	2122.80	1,114.06	10.90	102.21	32
17	14	30,591	2185.07	855.17	9.62	88.90	17
118	19	32,681	1720.05	2,966.59	12.38	239.63	48

Table 40 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
19	47	\$ 32,679	695.30	\$ 3,264.56	42.62	\$ 76.60	31
20	36	33,702	936.14	1,591.09	27.20	58.50	17
22	10	13,797	1379.70	575.98	8.88	64.86	22
23	26	22,089	849.58	1,187.49	19.67	60.37	31
25	37	25,118	678.86	1,212.59	30.42	39.86	12
26	34	12,325	362.50	1,730.02	27.41	63.12	31
27	28	17,558	619.93	1,333.18	24.87	53.60	31
28	24	28,614	1192.25	1,169.03	20.09	58.19	25
30	33	30,658	929.00	988.11	26.86	36.79	10
32	36	33,395	927.64	1,394.64	31.75	43.92	31
33	32	25,210	787.81	1,551.04	27.87	55.65	12
34	26	23,143	890.12	1,566.83	22.12	70.83	65
35	53	32,536	613.89	3,957.23	43.00	92.03	37
36	18	15,626	868.11	977.32	17.08	57.22	20
37	24	16,954	706.42	1,500.20	17.60	85.24	32
38	32	34,839	1088.72	1,170.74	26.54	44.11	23
39	40	19,299	482.48	1,311.36	34.09	38.47	16

Table 40 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
41	16	\$ 16,293	1018.31	\$ 581.66	13.87	41.94	16
42	29	17,251	594.86	1,126.37	24.92	45.20	17
43	11	19,064	1733.09	964.83	8.70	110.90	41
44	19	11,912	626.95	766.68	14.73	52.05	34
45	14	12,718	908.43	804.78	13.20	60.97	31
46	87	45,804	526.48	5,636.30	74.20	75.96	56
47	13	21,781	1675.46	1,855.86	10.45	177.59	31
48	22	14,889	676.77	871.51	18.68	46.65	31
49	19	15,059	792.58	856.55	17.40	48.08	21
50	11	14,749	1340.82	1,129.44	10.54	107.16	32
51	16	11,711	731.94	1,140.32	13.39	85.16	31
53	31	19,828	638.65	1,177.14	26.50	44.42	16
55	6	7,308	1218.00	679.12	3.89	174.58	31
56	9	15,081	1675.67	967.47	7.31	132.35	31
59	24	15,870	661.25	693.19	17.74	39.07	9
60	18	17,119	951.06	1,063.53	16.44	64.69	31
61	26	22,902	880.85	1,007.76	22.65	44.49	22

Table 40 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
62	11	\$ 16,718	1519.82	\$ 1,221.33	10.33	118.23	16
65	19	11,797	620.89	1,027.50	13.95	73.66	31
66	16	18,982	1186.38	995.75	11.45	86.97	26
67	37	34,855	942.03	1,495.27	31.37	47.67	23
69	30	34,505	1150.17	951.68	25.93	36.70	8
72	5	7,702	1540.40	922.04	4.34	212.45	31
73	10	14,908	1490.80	895.36	7.84	114.20	34
74	13	27,615	2124.23	724.24	8.70	83.36	17
75	15	15,453	1030.20	749.76	11.86	63.22	31
77	11	18,743	1703.91	1,009.39	10.54	95.77	32
78	13	9,841	757.00	822.15	11.97	68.68	31
80	17	11,463	674.29	812.81	13.39	60.70	9
81	26	19,703	757.81	1,116.26	22.61	49.37	31
82	4	21,980	5495.00	339.75	3.73	91.09	37
83	13	18,383	1414.08	773.29	11.48	67.36	32
84	16	11,116	694.50	1,334.68	13.53	98.65	33
85	27	11,174	413.85	1,241.84	24.19	51.34	31

Table 40 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
86	8	\$ 17,670	2208.75	\$ 964.90	7.55	127.80	31
87	14	15,702	1121.57	790.21	12.78	61.83	31
90	18	29,081	1615.61	1,162.41	15.90	73.11	18
91	19	19,619	1032.58	1,660.50	16.78	98.96	31
92	46	3,699	80.41	4,394.57	31.52	139.42	1
93	16	15,691	980.69	874.97	13.44	65.10	31
94	15	15,580	1038.67	838.67	11.84	70.82	21
95	16	10,710	669.38	821.75	13.13	62.59	31
96	18	1,725	95.83	1,202.15	15.88	75.70	31
97	14	23,488	1677.71	1,204.11	9.98	120.65	31
98	8	8,312	1039.00	662.79	6.93	95.64	31
99	14	6,949	496.36	884.74	13.28	66.62	36
101	11	5,545	504.09	1,464.37	9.68	151.28	88
102	30	10,463	348.77	1,412.70	21.14	66.83	31
103	20	8,316	415.80	1,075.61	17.92	60.02	31
104	26	18,039	693.81	993.20	22.81	43.54	31

Table 40 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
106	62	\$ 14,901	240.34	\$ 3,930.92	52.06	75.51	200
107	6	12,467	2077.83	829.05	5.59	148.31	31
108	8	15,370	1921.25	838.87	7.18	116.83	31
109	2	12,464	6232.00	255.85	1.11	230.50	1
111	8	17,111	2138.88	829.49	6.19	134.00	31
112	16	9,496	593.50	1,095.22	13.45	81.43	31
113	12	7,460	621.67	771.42	8.43	91.51	108
114	19	10,433	549.11	1,128.17	17.04	66.21	36
116	18	9,641	535.61	1,088.79	12.03	90.51	30
117	18	16,103	894.61	659.42	14.94	44.14	29
118	6	7,831	1305.17	650.00	4.67	139.19	64
120	1	6,438	6438.00	182.22	.81	224.96	40
122	20	27,682	1384.10	2,177.51	16.26	133.92	21
123	16	8,120	507.50	1,143.61	11.44	99.97	41
124	9	11,102	1233.56	1,020.56	7.50	136.07	31
125	54	32,025	593.06	4,695.73	49.20	95.44	76
126	26	14,245	547.88	1,394.07	18.28	76.26	31

When comparing Carlton County from the same standards we find that there are 10 schools with an average per pupil cost of over \$100 represented by a high of \$194.73 in district 11. In this county we find none with an average per pupil cost of less than \$60. The assessed valuation of the districts maintaining ungraded elementary schools in Carlton County varies from \$128,566 in district 27 to a low of \$5,411 in district 41. The per pupil value ratio of these two districts varies from \$1,477.77 in district 27 to \$541.10 in district 41. District 40 in Carlton County has the highest per pupil assessed valuation ratio, that of \$2,233.67. The average total expenditures of pupils in average daily attendance varies in Carlton County from \$194.73 in district 11 to \$71.32 in district 34.

Table 41

Ratio of Assessed Valuation and Total Expenditures to Enrollment
and Pupils in Average Daily Attendance in the Ungraded
Elementary Schools of Carlton County, 1940-41

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
4	22	\$ 12,416	564.36	\$ 1,810.84	20.00	\$ 90.54	31
5	63	48,698	772.98	5,105.21	58.00	88.02	31
8	79	48,310	611.52	8,700.45	72.00	120.84	53
10	36	19,107	530.75	2,147.62	28.90	74.31	31
11	85	38,082	448.02	14,156.94	72.70	194.73	99
12	18	13,846	769.22	2,287.23	17.40	131.45	111
19	15	31,180	2078.67	2,208.73	13.50	163.61	41
21	57	30,536	535.72	6,458.97	51.80	124.69	121
22	25	16,267	650.68	1,497.39	19.00	78.81	51
25	105	86,464	823.47	11,949.98	97.10	123.07	59
26	31	19,544	630.45	2,232.94	23.20	96.25	46
27	87	128,566	1477.77	6,686.55	80.20	83.37	36
28	14	13,126	937.57	1,104.10	13.00	84.93	55
31	4	7,569	1892.25	351.91	3.80	92.61	51

Table 41 (cont.)

Dist.	Pupils Enrolled	Assessed Valuation	Pupil Value Ratio	Total Expenditures	Avg. Daily Attendance	Average Pupil Cost	Average Mill rate
32	33	\$ 10,829	328.15	\$ 2,399.19	29.80	80.51	31
34	104	44,265	425.63	6,589.61	92.40	71.32	31
36	26	15,936	612.92	2,336.51	21.80	107.18	39
38	10	11,805	1180.50	690.15	9.60	71.89	31
39	16	11,284	705.25	1,319.65	13.60	97.03	90
40	6	13,402	2233.67	435.00	3.60	120.83	21
41	10	5,411	541.10	830.96	8.20	101.34	31
42	5	7,120	1424.00	232.00	4.20	79.05	31
43	16	22,467	1404.19	1,505.18	14.60	103.09	31
45	7	7,975	1139.29	590.15	4.20	140.51	31
47	12	9,233	769.42	1,172.91	10.20	114.99	31

Table 42

Comparison Between Total Maintenance Cost
and Average Daily Attendance in the Ungraded Elementary
Schools of Pine County, 1940-41

District	1	4	6	7	8
Maintenance Cost	\$1263.75	\$1404.20	\$2251.42	\$ 906.90	\$ 854.60
Avg. Attendance	23.76	32.76	36.82	28.71	13.64
Ratio	53.19	42.86	61.15	31.59	62.65
District	9	10	11	12	13
Maintenance Cost	\$ 870.28	\$1183.74	\$4360.22	\$1090.75	\$1482.72
Avg. Attendance	20.42	19.11	54.71	27.17	25.01
Ratio	42.62	61.94	79.70	40.15	59.28
District	14	15	16	17	18
Maintenance Cost	\$1102.72	\$1114.06	\$1072.00	\$ 834.52	\$2466.59
Avg. Attendance	17.41	10.90	15.87	9.62	12.38
Ratio	63.34	102.21	67.55	86.75	199.24
District	19	20	22	23	25
Maintenance Cost	\$3227.06	\$1591.09	\$ 575.98	\$1187.49	\$1212.59
Avg. Attendance	42.62	27.20	8.88	19.67	30.42
Ratio	75.72	58.50	64.86	60.37	39.86
District	26	27	28	30	32
Maintenance Cost	\$1730.02	\$1333.18	\$ 999.03	\$ 988.11	\$1391.43
Avg. Attendance	27.41	24.87	20.09	26.86	31.75
Ratio	63.12	53.61	49.73	36.79	43.82
District	33	34	35	36	37
Maintenance Cost	\$1528.54	\$1539.93	\$3937.23	\$ 977.32	\$1500.00
Avg. Attendance	27.87	22.12	43.00	17.08	17.60
Ratio	54.85	69.62	91.56	57.22	85.24
District	38	39	40	41	42
Maintenance Cost	\$1170.74	\$1311.36	\$2785.35	\$ 581.66	\$1126.37
Avg. Attendance	26.54	34.09	42.36	13.87	24.92
Ratio	44.11	38.47	65.75	41.94	45.20
District	43	44	45	46	47
Maintenance Cost	\$ 964.83	\$ 766.68	\$ 804.78	\$5636.30	\$1329.86
Avg. Attendance	8.70	14.73	13.20	74.20	10.45
Ratio	110.90	52.05	61.73	75.96	127.26
District	48	49	50	51	53
Maintenance Cost	\$ 871.51	\$ 856.55	\$1129.44	\$1140.32	\$1086.14
Avg. Attendance	18.68	17.40	10.54	13.39	26.50
Ratio	46.65	49.23	107.16	85.16	40.98
District	55	56	59	60	61
Maintenance Cost	\$ 679.12	\$ 967.47	\$ 693.19	\$ 962.92	\$ 988.76
Avg. Attendance	3.89	7.31	17.74	16.44	22.65
Ratio	174.58	132.35	39.07	58.57	43.65

Table 42 (cont.)

District	62	65	66	67	69
Maintenance Cost	\$1221.33	\$1027.50	\$995.75	\$1495.27	\$894.21
Avg. Attendance	10.33	13.95	11.45	31.37	25.93
Ratio	118.23	73.66	86.97	47.67	34.49
District	72	73	74	75	77
Maintenance Cost	\$894.54	\$895.36	\$724.24	\$749.76	\$1009.39
Avg. Attendance	4.34	7.84	8.70	11.86	10.54
Ratio	206.12	114.21	83.25	63.22	95.77
District	78	80	81	82	83
Maintenance Cost	\$822.15	\$812.81	\$1116.26	\$338.75	\$773.29
Avg. Attendance	11.97	13.39	22.61	3.73	11.48
Ratio	68.68	60.70	49.37	90.82	67.36
District	84	85	86	87	90
Maintenance Cost	\$1249.18	\$1236.84	\$964.90	\$790.21	\$1157.41
Avg. Attendance	13.53	24.19	7.55	12.78	15.90
Ratio	92.33	51.13	127.80	61.83	72.79
District	91	92	93	94	95
Maintenance Cost	\$1660.50	\$4394.57	\$857.47	\$838.45	\$821.75
Avg. Attendance	16.78	31.52	13.44	11.84	13.13
Ratio	98.97	139.42	63.80	70.82	62.59
District	96	97	98	99	101
Maintenance Cost	\$1202.15	\$1204.11	\$662.79	\$884.74	\$1222.99
Avg. Attendance	15.88	9.98	6.93	13.28	9.68
Ratio	75.70	120.65	95.64	66.62	126.34
District	102	103	104	106	107
Maintenance Cost	\$1412.70	\$1075.61	\$993.20	\$3930.92	\$829.05
Avg. Attendance	21.14	17.92	22.81	52.06	5.59
Ratio	66.83	60.02	43.54	75.51	148.31
District	108	109	111	112	113
Maintenance Cost	\$838.87	\$255.85	\$829.49	\$1095.22	\$761.42
Avg. Attendance	7.18	1.11	6.19	13.45	8.43
Ratio	116.83	230.50	134.00	81.43	90.32
District	114	116	117	118	120
Maintenance Cost	\$1105.67	\$1088.79	\$659.42	\$650.00	\$182.22
Avg. Attendance	17.04	12.03	14.94	4.67	.81
Ratio	64.89	90.51	44.14	139.19	224.96
District	122	123	124	125	126
Maintenance Cost	\$1172.51	\$1143.61	\$985.66	\$4645.73	\$1394.07
Avg. Attendance	16.26	11.44	7.50	49.20	18.28
Ratio	72.11	99.97	131.42	94.43	76.26

Table 43

Comparison Between Total Maintenance Cost
and Average Daily Attendance in the Ungraded Elementary
Schools of Carlton County
1940-41

District	4	5	8	10	11
Maintenance Cost	\$1810.84	\$4440.21	\$8592.25	\$2147.62	\$7593.22
Avg. Attendance	20.00	58.00	72.00	28.90	72.70
Ratio	90.54	76.56	119.34	74.31	104.45
District	12	19	21	22	25
Maintenance Cost	\$1306.82	\$2208.73	\$6418.00	\$1497.39	\$6813.30
Avg. Attendance	17.40	13.50	51.80	19.00	97.10
Ratio	75.10	163.61	123.90	78.81	70.17
District	26	27	28	31	32
Maintenance Cost	\$2232.94	\$5587.05	\$1104.10	\$ 351.91	\$2395.19
Avg. Attendance	23.20	80.20	3.00	3.80	29.80
Ratio	96.25	69.66	84.93	92.61	80.38
District	34	36	38	39	40
Maintenance Cost	\$6547.11	\$2336.51	\$ 690.15	\$1319.63	\$ 435.00
Avg. Attendance	92.40	27.80	9.60	13.60	3.60
Ratio	70.85	107.18	71.89	97.03	120.83
District	41	42	43	45	47
Maintenance Cost	\$ 850.96	\$ 232.85	\$1490.18	\$ 558.39	\$1172.91
Avg. Attendance	8.20	4.20	14.60	4.20	10.20
Ratio	101.32	55.44	102.07	133.07	114.99

Approximately 95% of the total current cost of operation in the rural schools are "fixed" costs, of which the major expenditures are teachers salaries, janitors salaries, fuel, and so forth. In addition, capital expenditures and long time repairs are also "fixed" costs for any particular year. We find that these fixed charges are relatively uniform among rural schools up to a point where they become so large that they have to be divided into two or more units. This means that these fixed costs remain about the same whether the school has 4 or 40 pupils. It is very evident then, that the per pupil cost in any school decreases as these fixed charges are spread over an ever increasing number of pupils; hence, the greater the number of pupils, the smaller becomes the per pupil cost and the greater the economy of instruction.

Maintenance Cost and Average Daily Attendance

The total cost of maintaining a school system includes besides maintenance many other items such as general control and debt service. This total cost becomes unbalanced and does not represent the true picture with reference to the educational programs maintained in districts that built an addition to the school building or made extensive renovation and repair together with the purchase of new equipment. In order to get a picture of the situation with reference to maintenance cost, Tables 42 and 43 have been prepared. It will be noted that there is an unusually wide range in the maintenance cost in the ungraded elementary schools of Pine County. Twenty one schools in Pine County spend more than \$100 per pupil in average daily attendance, the average

for the 21 being \$144.37. On the other hand, 10 out of a total of 25 schools in Carlton County spend over \$100 for maintenance. These schools in Carlton County had an average daily attendance of 27.8 pupils while in Pine County the 21 schools had an average enrollment of 8.5 pupils. It is interesting to note that out of a total of 25 schools in Carlton County only one spent less than \$60 per pupil in average daily attendance while in Pine County 31 out of a total of 100 schools spent less than \$60, the average for Carlton County would be \$55.44 and for Pine County \$230.50, and this district had only two pupils enrolled with an average daily attendance of 1.11. District 109 with an average daily attendance of .81 spent the next largest amount for maintenance in the amount of \$224.96.

There are a total of 31 school districts in Pine County that spent less than \$60 per pupil in average daily attendance with \$31.59 in district 7 as the lowest amount. However, three more districts spent less than \$40 per pupil in average daily attendance and 12 between \$40 and \$50. The vast difference of expenditures for school purposes in the ungraded elementary schools of Pine County is so great that it is absolutely impossible for these districts to provide equal educational opportunities.

In an effort to equalize educational opportunities in the schools of the state, a program of state aid has been worked out. Table 44 shows the amount of state aid being given to the local school districts of the state of Minnesota in the school year 1939-40. It will be noted that there are four main sources of aid, namely, the income tax, general revenue fund, endowment fund

and current school fund. Definitely the most important in this group is the income tax, which furnishes 81% of the total.

These aids are distributed under 13 classifications. The largest amount comes back to the district from the amount collected on the income tax, totaling 36%, while supplemental aid, designed especially for the purpose of equalizing the educational opportunities in the various districts of the state, ranks second with 20.43%.

The total assessed valuation of all school districts in Minnesota as of January 1, 1938 was \$1,371,790,348. Of this total \$937,366,431 or 68.3% was located within the graded, elementary and secondary school districts while \$434,423,917 or 31.7% was found in ungraded elementary school districts.¹

Table 45 includes all the counties of the state with the exception of the three containing cities of the first class, namely, Hennepin, Ramsey, and St. Louis. The relative abilities of the individual counties are here strikingly demonstrated, showing by counties the percentage of valuation located in districts maintaining graded, elementary, and secondary schools and districts maintaining only ungraded elementary schools. It will be noted that Pine County ranks 61st with the percentage of 61.1% in the percentage of total assessed valuation located within ungraded districts, while Carlton County ranks 81st with only 10.3%.

Figures 3 and 4 show the tax rate in mills for the towns, school districts and the total mill rate. District 106 in Pine

Table 44

State Grants in Aid to Local School Districts
1939-40

A.	Source	Amount	Per Cent
	Income tax fund	\$14,169,037	81.0
	General revenue fund	342,723	1.9
	Endowment fund	1,913,659	10.9
	Current school fund	1,079,027	6.2
	Totals	\$17,504,446	100.0
B.	Distribution of Aid	Amount	Per Cent
	Income tax	\$ 6,419,037	36.47
	Apportionment	2,492,686	14.16
	Supplemental	3,596,323	20.43
	Tuition (Nonresident High School)	2,581,260	14.67
	Transportation	926,960	5.26
	Classification	826,224	4.69
	Special classes	319,753	1.82
	Special dept.	201,919	1.15
	Gross earnings	151,250	.86
	Teacher training dept.	50,997	.29
	Library	22,733	.13
	Crippled children	8,104	.05
	Evening schools	4,000	.02
	Totals	\$17,601,246	100.00

Table 45

Percentage of Total Assessed Valuation Located Within
Ungraded Districts in Minnesota Counties, 1938^a

Rank	County	Per Cent	Rank	County	Per Cent
1	Murray	85.4	44	Le Sueur	68.7
2	Isanti	83.2	45	Kanabec	67.9
3	Traverse	82.7	46	Otter Tail	67.7
4 ¹ / ₂	Sibley	81.6	47	Becker	67.6
4 ² / ₃	Lac Qui Parle	81.6	48	Faribault	67.3
6	Benton	80.5	49	Renville	66.8
7	Meeker	80.4	50 ¹ / ₂	McLeod	66.2
8	Carver	78.7	50 ² / ₃	Sherburne	66.2
9	Wilkin	78.4	52	Big Stone	66.0
10	Grant	77.6	53	Wabasha	65.7
11	Red Lake	77.4	54	Hubbard	65.2
12	Aitkin	76.8	55	Martin	63.9
13	Houston	76.7	56	Chisago	63.4
14	Rock	76.1	57	Goodhue	62.5
15	Kandiyohi	75.9	58	Freeborn	62.2
16	Pope	75.9	59	Yellow Medicine	62.1
17	Roseau	75.7	60	Mille Lacs	61.9
18	Marshall	75.6	61	Pine	61.1
19	Norman	75.4	62	Brown	59.6
20	Dodge	74.3	63	Lake of the Woods	58.6
21	Wright	73.5	64	Steele	58.0
22	Kittson	73.3	65	Cook	57.1
23 ¹ / ₂	Fillmore	73.1	66	Clay	56.3
23 ² / ₃	Watsonwan	73.1	67	Rice	55.7
25	Jackson	72.4	68	Wadena	54.4
26	Cottonwood	72.2	69	Washington	53.2
27	Redwood	72.0	70	Stearns	52.8
28 ¹ / ₂	Nobles	71.7	71	Pennington	50.3
28 ² / ₃	Todd	71.7	72	Mower	50.0
30	Mahnomen	71.5	73	Blue Earth	47.2
31	Clearwater	71.2	74	Winona	42.7
32	Lincoln	71.0	75	Anoka	40.3
33	Stevens	70.9	76	Olmsted	36.9
34	Nicollet	70.7	77	Dakota	36.8
35 ¹ / ₂	Lyon	70.0	78	Crow Wing	34.8
35 ² / ₃	Waseca	70.0	79	Cass	29.4
37	Douglas	69.9	80	Beltrami	27.6
38	Swift	69.5	81	Carlton	10.3
39	Pipestone	69.4	82	Hennepin	3.5
40	Scott	69.3	83	Ramsey	2.7
41	Morrison	69.2	84 ¹ / ₂	St. Louis	.4
42	Chippewa	68.9	84 ² / ₃	Itasca	.4
43	Polk	68.8	86 ¹ / ₂	Koochiching	.0
			86 ² / ₃	Lake	.0

^aState Department of Education, Statistical Report
1936-37, 1937-38 (p. 186)

County has a school tax in mills of 200.52. Many others have over 100 mills in school tax. During the same year, district 109 and district 92 had a mill rate of 1.00 and district 6 had 5.00.

In Carlton County for 1941 the highest mill rate for school purposes is 121 in district 21. The lowest tax rate in mills for schools is 21 in district 40.

CARLTON COUNTY TAX RATE IN MILLS FOR 1941

CITY, VILLAGE OR TOWNSHIP	School District Numbers	State Tax Rate Homestead	County Tax Rate	City, Village or Town Tax Rate	School Tax Rate	School Tax Rate Agricultural	School Tax Rate Non-agricultural	TOTAL TAX RATE
Cloquet City	7	.24	34.48	48.4	36.			119.12
Cloquet City	27	.24	34.48	48.4	36.			119.12
Barnum Village	6	.24	34.48	27.0		54.	69.	115.72-130.72
Carlton Village	2	.24	34.48	37.0	55.			126.72
Cromwell Village	13	.24	34.48	20.0		74.	89.	128.72-143.72
Kettle River Vill.	25	.24	34.48	20.0		59.		113.72
Moose Lake Vill.	3	.24	34.48	45.0		51.	66.	130.72-145.72
Scanlon Village	27	.24	34.48	47.0	36.			117.72
Thomson Village	1	.24	34.48	15.0	45.			94.72
Thomson Village	2	.24	34.48	15.0	55.			104.72
Wrenshall Village	15	.24	34.48	20.0		45.	60.	99.72-114.72
Wright Village	11	.24	34.48	34.0	99.			167.72
Atkinson Twp.	5	.24	34.48	21.0	31.			86.72
Atkinson Twp.	19	.24	34.48	21.0	41.			96.72
Atkinson Twp.	43	.24	34.48	21.0	31.			86.72
Automba Twp.	12	.24	34.48	28.0	111.			173.72
Automba Twp.	16	.24	34.48	28.0		83.	108.	145.72-170.72
Barnum Twp.	3	.24	34.48	26.0		51.	66.	111.72-126.72
Barnum Twp.	4	.24	34.48	26.0	31.			91.72
Barnum Twp.	6	.24	34.48	26.0		54.	69.	114.72-129.72
Barnum Twp.	8	.24	34.48	26.0	53.			113.72
Barnum Twp.	10	.24	34.48	26.0	31.			91.72
Barnum Twp.	22	.24	34.48	26.0	51.			111.72
Beseman Twp.	11	.24	34.48	60.0	99.			193.72
Beseman Twp.	26	.24	34.48	60.0	46.			140.72
Blackhoof Twp.	2	.24	34.48	26.0	55.			115.72
Blackhoof Twp.	4	.24	34.48	26.0	31.			91.72
Blackhoof Twp.	8	.24	34.48	26.0	53.			113.72
Blackhoof Twp.	9	.24	34.48	26.0		45.	60.	105.72-120.72
Blackhoof Twp.	36	.24	34.48	26.0	39.			99.72
Blackhoof Twp.	38	.24	34.48	26.0	31.			91.72
Blackhoof Twp.	47	.24	34.48	26.0	31.			91.72
Clear Creek Twp.	8	.24	34.48	47.0	53.			134.72
Clear Creek Twp.	31	.24	34.48	47.0	51.			132.72
Clear Creek Twp.	No	.24	34.48	47.0		15.	30.	96.72-111.72
Clear Creek Twp.	47	.24	34.48	47.0	31.			112.72
Corona Twp.	12	.24	34.48	22.0	55.			111.72
Corona Twp.	13	.24	34.48	22.0		74.	89.	130.72-145.72
Corona Twp.	28	.24	34.48	22.0	55.			111.72
Corona Twp.	42	.24	34.48	22.0	31.			87.72
Corona Twp.	43	.24	34.48	22.0	31.			87.72
Eagle Twp.	13	.24	34.48	25.0		74.	89.	133.72-148.72
Eagle Twp.	21	.24	34.48	25.0	121.			180.72
Holyoke Twp.	32	.24	34.48	41.0	31.			106.72
Holyoke Twp.	41	.24	34.48	41.0	31.			106.72
Holyoke Twp.	45	.24	34.48	41.0	31.			106.72
Kalevala Twp.	6	.24	34.48	51.0		54.	69.	139.72-154.72
Kalevala Twp.	16	.24	34.48	51.0		83.	108.	168.72-193.72
Kalevala Twp.	21	.24	34.48	51.0	121.			206.72
Knife Falls Twp.	7	.24	34.48	36.0	36.			106.72
Knife Falls Twp.	27	.24	34.48	36.0	36.			106.72
Lakeview Twp.	11	.24	34.48	30.0	99.			163.72
Lakeview Twp.	21	.24	34.48	30.0	121.			185.72
Lakeview Twp.	26	.24	34.48	30.0	46.			110.72
Lakeview Twp.	39	.24	34.48	30.0	90.			154.72
Mahtowa Twp.	4	.24	34.48	25.0	31.			90.72
Mahtowa Twp.	5	.24	34.48	25.0	31.			90.72
Mahtowa Twp.	6	.24	34.48	25.0		54.	69.	113.72-128.72
Mahtowa Twp.	8	.24	34.48	25.0	53.			112.72
Mahtowa Twp.	19	.24	34.48	25.0	41.			100.72
Mahtowa Twp.	22	.24	34.48	25.0	51.			110.72
Mahtowa Twp.	36	.24	34.48	25.0	39.			98.72
Moose Lake Twp.	3	.24	34.48	20.0		51.	66.	105.72-120.72
Moose Lake Twp.	6	.24	34.48	20.0		54.	69.	108.72-123.72
Moose Lake Twp.	8	.24	34.48	20.0	53.			107.72
Moose Lake Twp.	10	.24	34.48	20.0	31.			85.72
Perch Lake Twp.	2	.24	34.48	22.0	55.			111.72
Perch Lake Twp.	7	.24	34.48	22.0	36.			92.72
Progress Twp.	2	.24	34.48	22.0	55.			111.72
Progress Twp.	7	.24	34.48	22.0	36.			92.72
Progress Twp.	13	.24	34.48	22.0		74.	89.	130.72-145.72
Red Clover Twp.	13	.24	34.48	22.0		74.	89.	130.72-145.72
Sawyer Twp.	2	.24	34.48	22.0	55.			111.72
Sawyer Twp.	19	.24	34.48	22.0	41.			97.72
Silver Twp.	3	.24	34.48	39.0		51.	66.	124.72-139.72
Silver Twp.	6	.24	34.48	39.0		54.	69.	127.72-142.72
Silver Twp.	16	.24	34.48	39.0		83.	108.	156.72-181.72
Silver Twp.	25	.24	34.48	39.0	59.			132.72
Silver Brook Twp.	9	.24	34.48	25.0		45.	60.	104.72-119.72
Silver Brook Twp.	15	.24	34.48	25.0		45.	60.	104.72-119.72
Skelton Twp.	6	.24	34.48	32.0		54.	69.	120.72-135.72
Skelton Twp.	16	.24	34.48	32.0		83.	108.	149.72-174.72
Skelton Twp.	21	.24	34.48	32.0	121.			187.72
Skelton Twp.	28	.24	34.48	32.0	55.			121.72
Split Rock Twp.	34	.24	34.48	24.0	31.			89.72
Thomson Twp.	1	.24	34.48	21.0	45.			100.72
Twin Lakes Twp.	2	.24	34.48	18.0	55.			107.72
Twin Lakes Twp.	9	.24	34.48	18.0		45.	60.	97.72-112.72
Twin Lakes Twp.	15	.24	34.48	18.0		45.	60.	97.72-112.72
Twin Lakes Twp.	19	.24	34.48	18.0	41.			93.72
Twin Lakes Twp.	27	.24	34.48	18.0	36.			88.72
Twin Lakes Twp.	36	.24	34.48	18.0	39.			91.72
Wrenshall Twp.	9	.24	34.48	23.0		45.	60.	102.72-117.72
Wrenshall Twp.	15	.24	34.48	23.0		45.	60.	102.72-117.72
Wrenshall Twp.	40	.24	34.48	23.0	21.			78.72

The above totals are at the homestead rates. To find the non-homestead rate, add 8.76 mills to the homestead rate. The foregoing rates do not include local or special assessments or taxes on Money and Credits.

STATE OF MINNESOTA COUNTY OF CARLTON TAX DE 1941

CHAPTER VI

Conclusion

In this, the final chapter, the writer wishes to make a general statement and attempt a brief comprehensive survey with recommendations and comments.

The support and control of the public schools is vested in local school districts. The kind and quality of educational opportunities provided depend more upon the size and resources of these local districts than any other single factor.

Teacher salary is a large proportion of the cost of each school. It is obvious that the more pupils taught by each teacher the lower the cost. As a consequence, the very small school is expensive as well as relatively ineffective.

In 1939 there were in Minnesota 135 ungraded elementary schools with an enrollment of 5 or less pupils. In the same year Pine County had 4 and Carlton County 2. There were also 1,003 schools with an enrollment of 10 or less in the state while in Pine County there were 10 and in Carlton County 4. The average pupil enrollment as well as average daily attendance in these one-teacher schools is continually decreasing.

Many of our small, expensive, and ineffective schools continue to operate mainly through the financial aid derived from the state. The withholding of this aid by the state or decreasing it would eventually bring about the formation of larger school districts with its accompanying economy.

Summary of Findings

I

There were in Carlton County in 1940-41, 24 organized school districts employing 196 teachers with an enrollment of 5,079. In Pine County there were 110 organized school districts employing 211 teachers. Sixteen of the Carlton County school districts were graded elementary and 101 in Pine County. Carlton County ungraded elementary school districts maintained 32 schools and the ungraded elementary school districts in Pine County had 106 schools.

II

There were in Carlton County, 8 graded elementary and secondary schools and in Pine County, 9. We find that the graded, elementary and secondary schools of Carlton County had a total enrollment of 4,204 to 2,620 in Pine County. All the secondary schools of the two counties were organized either as 6-year high school or Junior and Senior 3-3 Plan. One of the graded elementary schools of Carlton County does not have a secondary school.

III

The teacher-pupil load in the graded, elementary and secondary schools of Carlton County was 26.6 as compared to 29.1 in the ungraded schools of that county. For Pine County the graded, elementary and secondary schools showed a teacher-pupil load of 23.6 to 22.1 for the ungraded schools. Two of the 16 districts maintaining ungraded elementary schools in Carlton County had 8-month terms, the rest being 9-months. In Pine County, of the 106 schools, 17 had 8-month terms.

272755

IV

Fifteen and one-tenth per cent of the teachers of the graded secondary schools of Carlton County have Masters Degrees to 7.1% in Pine County. Eighty four and nine-tenths per cent had B. A. or B. E. Degrees in Carlton County to 90.2% in Pine County. Two and seven-tenths per cent of the teachers in Pine County were reported teaching on Diplomas, none in Carlton County. For the ungraded elementary schools of the two counties we find that 6% of the teachers in Carlton County had only one year of college training as compared to 56% in Pine County. Ninety four per cent if Carlton County had two years training to 42% in Pine County. Two per cent of the teachers of the ungraded elementary schools of Pine County were reported to have four years college training.

V

From the standpoint of receipts and expenditures we find that the income per pupil in attendance in the graded, elementary and secondary schools varies from \$91.85 in Pine County to \$102.62 in Carlton County, a difference of \$10.77. For the ungraded elementary schools there is a difference in income from \$59.80 in Pine County to \$93.25 in Carlton County, a difference of \$33.45. In general, much more is spent for school serviced per pupil enrolled in Carlton County than in Pine County.

VI

While the total enrollment of the two counties varies but very little being 5,079 in Carlton County and 4,832 in Pine County, a difference of 257. The total valuation varies greatly being \$6,848,575 in Carlton County and \$3,472,454 in Pine County, a ratio

of almost two to one. The range of valuation by districts varied very much in both counties, district 1 in Carlton County having \$3,799.60 per pupil wealth as compared to \$226.95 in district 15. In Pine County this range runs from \$689.70 in district 71 to \$107.20 in district 100. Districts maintaining ungraded elementary schools varied in valuation per child enrolled from \$962.56 in district 11 to \$95.83 in district 96. In Carlton County the range is from \$2,233.67 in district 40 to \$328.15 in district 32.

VII

When the cost per pupil in the various districts of the two counties are compared, an extremely wide range is evident. The spread in average cost of maintenance per pupil in attendance varies from \$117.11 in Carlton County to \$99.49 in Pine County, a difference of \$17.62.

Recommendations

I

School districts should be centered around a city or village, including all the territory within its natural trade area and system of roads. This should be large enough in wealth and population to insure a constructive, economical administrative unit.

II

The districts within the area maintaining small ungraded elementary schools should either dissolve and consolidate with a larger central school maintaining a high school and a graded elementary school or carry their proportionate share of the local cost of the entire educational program of the whole area.

III

There should be one modern adequate plan providing all necessary space, fully equipped to provide a complete educational program through the 12 grades and maintaining as many graded elementary school buildings and schools as needed at points beyond the distance of economical transportation. These schools should be thoroughly supervised by the administrative head of the central school system and should include all the grades through the 6th.

IV

Figures 5 and 6 show Carlton and Pine Counties divided into these larger school units. All the ungraded elementary schools of Carlton County would be clustered around the seven units, Carlton, Cloquet, Town of Thomson, Cromwell, Barnum, Moose Lake and Wrenshall, that are now maintaining secondary and graded elementary schools. These schools would take care of all the grade pupils in the area either in the central school system as room and transportation was available, or by thoroughly supervised grade schools located as needed throughout the area. Pine County would be divided according to Figure 6 and the schools of that county would be centered around Willow River, Bruno, Sandstone, Finlayson, Cloverton, Hinckley and Pine City. The same requirements shall hold for this county as for Carlton with reference to the ungraded schools of the respective areas.

These school areas have been platted, keeping in mind population, valuation, enrollment, natural trade areas, systems of roads, and in general, the ability of these enlarged districts to provide adequate modern school programs for all the children.

Advantages of Larger Units

I

It will afford a better educational program for the rural children.

II

The tax burden for school purposes would be equalized.

III

Teaching personnel would be improved both from the standpoint of training, experience, tenure and salary.

IV

Economy in administration would be affected.

V

It would bring about a community solidarity reaching out from these respective villages to include the entire countryside.

VI

Improve the equipment and extend curricular and extra-curricular offerings, adapted to the local community needs.

BIBLIOGRAPHY

Annual Reports of the County Superintendent of Schools,
Carlton, Minnesota

Annual Reports of the County Superintendent of Schools,
Pine City, Minnesota

Engelhardt & Engelhardt, Planning School Buildings,
Bureau of Publication, Teachers College, Columbia

Report of the Interim Committee on Education
Submitted to the 52nd Legislature of Minnesota

1941 Minnesota Year Book
League of Municipalities, 15 University Avenue
Minneapolis, Minnesota

Tax Lists for Carlton County
County Treasurer's Office, Carlton, Minnesota

Tax Lists for Pine County
County Treasurer's Office, Pine City, Minnesota

Windes, E. E. The High School Education of the Farm
Population in Selected States, United States Bureau of
Education, Washington D. C., 1925