

COOPERATIVE SCHOOL PLAN FOR RURAL HIGH SCHOOL
DISTRICTS OF RILEY COUNTY

by

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INTRODUCTION

The writer, having taught in Riley County for ten years, has had an opportunity to become familiar with some of its school problems. Old settlers relate the early school experiences of the one room country schools which were originally planned to care for the educational needs of the pioneer. There were many pupils ranging up to the age of twenty-one and older, generally forty or fifty in number. The qualifications of the teacher were in most cases based on his physical fitness.

Our society has changed rapidly. A statement by Elliot Merrill, Wright, and Wright (1) explains the changes in the following statement: "During the fifty years from 1880 to 1930, the United States changed from a society that was largely rural, both in residence and point of view, to one largely metropolitan and urban. In 1880 the rural population was 71.4 per cent and the urban 28.6 per cent. In 1930 these figures had changed to 43.8 per cent rural and 56.2 per cent urban.

The change in Kansas according to the Bureau of the Census (2) was in a similar direction. In 1890 the rural population was eighty and nine-tenths per cent and nineteen

and one-tenth per cent was urban. In 1930 the rural population was sixty-one and two-tenths per cent rural and thirty-eight and eight-tenths per cent was urban.

The school organization in the rural districts has not changed to meet the needs of the rural children. As a result of this lagging tendency, the rural school problem in Kansas is deplorable.

Markham in an address stated that Kansas, during the school year 1935-36, had two school districts paying a salary to a teacher without a pupil attending the school. There were forty schools with an enrollment of one pupil each, and two-thousand four-hundred forty schools with an enrollment of six to ten pupils.

As the result of the small enrollments modern educators advocate a change. The one room school is no longer serving its purpose to the degree to which larger school systems are serving a similar purpose. In a government like ours, it is tremendously important that education should be broad and general. Modern education should give training in group action and thinking. The rural schools are lacking in the number of pupils attending. The enrollments have dropped in many cases to the point where individual pupils complete the eight years of grade school training without experiencing the association of fellow pupils in a class. Such

an individual lacks a competitive and cooperative spirit which is fundamental in life today.

Other facts of interest were found in Circular 234-M (3) pertaining to valuation of rural districts. There are seventy-four districts having an assessed valuation of twenty-six to fifty thousand, four-hundred-ten districts with an assessed valuation of fifty-one to seventy-five thousand, and seven-hundred eighty-two districts with an assessed valuation of seventy-six to one-hundred thousand dollars. The lowest valuation in the state is thirty-one thousand five-hundred forty-eight dollars in Cherokee County. The highest valuation is found to be in Labette County which is four-million five-hundred twenty-two thousand, five-hundred eighty-three dollars. There are twelve-hundred sixty-six school districts in Kansas with an assessed valuation of one-hundred thousand or less.

The young, inexperienced teacher generally found in a rural school does not receive proper supervision. It is impossible for a county superintendent to function effectively in this respect. According to data compiled by Sheffer* there are in Kansas thirteen-hundred and eight inexperienced teachers in the rural districts, ten hundred

*Found in Appendix, Table 8.

and twenty-six with one year's experience, and eight-hundred ninety-eight with two year's experience. In the same study it was revealed that there are twenty-one hundred ninety-five teachers in rural schools with ten or fewer college hours of preparation.

The salary in many cases does not warrant college preparation. In the same data as referred to by Sheffer, it was revealed that twenty-nine hundred sixty-five teachers in the rural districts receive fifty dollars or less per month. There were four receiving twenty-five dollars or less. Their salary figured on a twelve month basis would be a meager living wage. The salary scale does not compare favorably with other employees of the government. The best talent will not be attracted to the teaching profession if salaries remain on the same plane.

The present rural school system needs overhauling if we are to progress educationally. Cubberly (4) states, "The rural and village schools of most of our states, cut off by law from securing such directive oversight from outside the county, and split up into thousands of little unrelated school districts, inspired by no unity of purpose and animated by no modern conception of educational work, have gone along without much change since the days of the sixties."

Rural people are prone to stay with the old established institutions. This is due probably to the conservatism in thinking which is evident among rural people who resent giving up the long established close to home and close to heart school system. As a result Kansas is not abreast with some other states in regard to progress in education.

THE PROBLEM STATED

The purpose of this study is to present a plan for establishing cooperative school areas, and to give a comprehensive picture of the proposed plan to the public for its consideration. Recognition will be given to the transportation, building, and financial problems involved in each proposal. It is proposed to show the educational advantages offered by the resulting larger school system with its better teaching staff, a larger social group, and better equipment. All of this may be obtained with no greater expense than is experienced under the present plan.

The cooperative school plan as will be presented in this study has been worked out in order that the difficulties of reorganization may be overcome more easily. It is the hope of the writer that reorganization may be a reality

in the near future. An educational program on the part of the public is essential to future action. An attractive system open to public observation will help speed up the movement toward better schools.

As previously stated, the small rural district generally has too low a valuation to finance a better school adequately. The school population is too small to form a desirable sized group for a modern school. Consolidation has been a method whereby the above difficulties may be overcome. However, the rural people have not reacted favorably to the consolidation of schools, therefore, a different means of obtaining better schools for Kansas has been suggested.

The cooperation of two or more schools in one larger system was made possible by the Rees Bill passed during the 1935 session of the state legislature. There were apparently several obstacles standing in the path of educational progress in rural areas. The reasons for the system as it exists today were pointed out by Sheffer (5) in an editorial from which the following statement is taken:

"The significant reasons were first, the fear of many farm people that if they should close their small one teacher schools for a period of three years in succession, their

districts would be disorganized. The second was that no readily usable pattern for closing one teacher schools without consolidating school districts had been provided by law. A third was a lack of a wide spread knowledge of the advantages which could be obtained by uniting several small schools, and fourth was the devotion of the rural people to their little one teacher school." The cooperative plan presented in this study furnishes a readily usable pattern for the public's consideration.

The plan as it applies to the Riley county rural high school districts would include six areas with the centers located at the present sites of the six rural high schools, namely, Riley, Keats, Randolph, Leonardville, Stockdale, and Cleburne. The areas would include practically the same area as is now included in the rural high school districts. The school districts to be created are referred to in this study as follows:

1. Riley school area
2. Leonardville school area
3. Randolph school area
4. Keats school area
5. Stockdale school area
6. Cleburne school area

ACHIEVEMENT TESTS

In order to add to the significance of this study an achievement test was administered during the fall of 1935-36 to the freshmen of the six rural high schools of the county. The Metropolitan Achievement Test, Advanced Bettery-Complete, Form C, published by the World Book Company was used. This test is fitted for seventh and eighth grade pupils. The freshmen having finished the eighth grade should have ranked high on this test. It includes nine separate tests. The tests included are as follows: reading, vocabulary, arithmetic fundamentals, arithmetic problems, English, literature, history and civics, geography, and spelling.

There are several achievement tests similar to the one used. The Metropolitan Achievement Test was chosen for use in this study because of its arrangement. The authors have given special attention not only to validity, reliability, and objectiveness; but to size of page, length of line, and arrangement of questions. All similar mechanical details have been worked out for the purpose of producing a test that would be pleasing to the pupils, easy to grade, and simple to administer.

The principals of the rural high schools in the county administered the tests in their respective schools. Previous to the testing, a conference was held and attended by the several principals who were instructed in a method of procedure in order that all testing be done in a uniform manner.

The tests were given one test a day and returned in a month's time. In some cases the testing was delayed by absence of students. The testing was done as early in the school year as possible in order to eliminate the effect of both rural and graded students being now under the same school environment.

Each student marked on the cover of the test the type of school in which he had received his elementary education. As soon as all tests had been returned they were divided into two groups. One group was made up of the tests representing the achievement of the graded school graduates; the other group represented the rural school graduates' achievement.

The tests which were objective were graded and the result tabulated in Table 1, pages 11 and 12, and Table 2, pages 13, 14, and 15. The key was used and all grading checked. The rating of the different students was first obtained in the form of raw scores found by the simple

addition of all the points for correct answers. The raw scores were then changed into grade equivalents which are more significant than the raw scores. It is impossible to make comparisons using the latter scores because there were a varying number of points possible for each test.

The grade equivalents are tabulated in Table 3, pages 16 and 17, and Table 4, pages 18, 19, and 20. For refinement in interpreting scores the school grade is considered as divided into tenths or ten months. The grade equivalent shows the achievement of the individual in terms of school grade and months in that grade. For instance a grade equivalent of 8-7 would be interpreted as the achievement of an eighth grade pupil at the beginning of the seventh month of the school year. Seven dash ten would be interpreted as the achievement at the beginning of the tenth month of the seventh year.

There were fifty-nine rural school graduates and forty-five graded school graduates tested in this study. Three tests were not usable due to incompleteness.

The scores in some cases were below the interpretation chart of grade equivalents found at the end of the test. The charts in those cases were extended down to the level of the raw score. The extension downward was accomplished

Table 1. Raw Scores of Achievement Tests,
Graduates of Graded Schools.

Student Number	Reading	Vocabulary	Arithmetic Fundamentals	Arithmetic Problems	English	Literature	History Civics	Geography	Spelling	Total Average
1	4-6	5-5	3-3	2-9	5-9	4-8	6-7	5-3	4-0	4-30
2	4-3	4-7	4-5	2-9	5-9	4-9	5-5	5-3	3-6	4-16
3	2-2	2-3	4-2	2-5	4-0	2-9	2-6	3-6	1-8	2-61
4	2-6	2-6	2-6	1-0	4-6	3-2	4-9	3-8	3-4	2-87
5	4-2	4-4	4-9	2-7	5-9	5-1	7-2	5-9	3-7	4-40
6	3-3	3-7	4-1	2-6	6-0	5-2	5-8	5-3	3-3	3-93
7	4-1	5-3	5-3	3-7	7-5	5-0	6-6	5-5	4-5	4-75
8	4-2	5-4	4-3	2-7	5-9	5-2	5-1	3-5	4-4	4-07
9	4-0	5-6	4-5	3-6	6-7	5-5	7-8	6-2	4-8	4-87
10	2-7	4-1	5-0	3-4	5-3	3-9	3-3	4-7	3-9	3-63
11	4-5	4-8	4-6	3-1	6-1	5-0	5-7	4-9	3-8	4-25
12	3-5	4-6	4-3	2-2	6-9	4-1	4-3	4-2	4-2	3-83
13	3-0	3-3	4-6	2-0	6-6	4-4	6-7	5-5	3-3	3-94
14	2-2	2-6	5-3	3-5	4-2	3-4	5-5	4-9	3-1	3-47
15	2-6	3-6	4-6	3-5	5-7	4-2	5-1	5-2	4-4	3-89
16	3-1	4-3	4-6	3-1	6-5	4-4	4-7	4-6	2-7	3-80
17	1-3	2-7	8-0	7-0	3-7	3-1	3-3	3-9	1-4	2-09
18	4-6	5-4	5-3	3-7	7-8	5-6	6-1	4-9	4-2	4-86
19	3-8	3-7	1-2	4-0	5-5	3-9	4-3	3-7	4-2	3-07
20	2-8	3-5	4-9	3-2	5-5	4-5	5-0	3-9	3-1	3-64

Table 1. Continued.

21	2-0	4-1	2-3	2-0	5-5	3-5	3-3	4-5	2-1	2-93
22	3-4	4-5	4-4	3-2	6-0	4-7	5-6	5-4	2-1	3-93
23	3-3	3-5	3-9	2-7	6-7	4-5	5-5	5-0	2-9	3-80
24	2-3	3-5	4-3	2-3	5-9	4-5	4-1	3-6	3-4	3-39
25	2-0	3-5	1-6	8-0	5-6	4-6	3-8	2-7	3-5	2-91
26	2-3	2-3	2-6	1-2	4-1	3-3	4-6	3-7	2-0	2-61
27	3-5	4-6	3-3	2-4	4-2	4-9	4-6	4-5	2-7	3-45
28	2-6	2-6	2-2	1-3	3-5	3-1	4-4	3-1	9-0	2-37
29	3-4	3-6	2-2	1-9	4-8	4-5	5-8	4-9	1-3	3-24
30	3-7	4-2	4-0	2-6	6-0	4-4	5-4	5-5	3-1	3-79
31	7-0	2-2	2-2	1-0	4-2	2-1	2-7	2-9	1-9	1-99
32	1-9	2-6	3-8	2-4	4-5	3-8	6-5	4-6	2-8	3-29
33	2-6	3-6	3-3	2-3	5-7	4-1	4-6	4-6	2-3	3-31
34	2-2	2-0	3-3	9-0	4-9	4-1	5-2	3-9	2-6	2-91
35	3-2	2-0	4-3	3-2	7-0	4-3	4-3	4-4	2-7	3-54
36	2-2	4-2	3-5	2-0	5-6	3-6	4-1	2-9	2-6	3-07
37	3-2	2-7	2-5	1-7	5-3	4-1	4-7	3-8	1-6	2-96
38	2-8	3-5	4-5	2-2	6-3	6-1	6-8	5-8	3-9	4-19
39	4-7	5-6	5-3	3-4	6-9	6-0	7-3	6-4	4-8	5-04
40	2-0	4-0	3-6	2-2	4-4	3-9	4-2	3-1	3-1	3-05
41	3-0	4-5	2-0	3-2	5-3	3-4	5-5	4-8	3-4	3-51
42	1-7	2-5	3-0	1-7	3-8	2-4	3-5	4-0	1-4	2-41
43	2-9	4-1	3-2	1-3	3-9	4-3	3-0	3-1	2-8	2-86
44	4-0	2-4	9-0	1-4	2-7	3-2	2-2	2-9	2-8	1-89
45	2-6	3-5	3-0	2-4	4-6	3-4	3-9	4-3	3-6	3-13
Mean	29.4	37.3	36.0	23.4	54.1	42.0	40.4	44.3	30.7	346.7

Table 2. Raw Scores of Achievement Tests,
Graduates of Rural Schools.

Student Number	Reading	Vocabulary	Arithmetic Fundamentals	Arithmetic Problems	English	Literature	History Civics	Geography	Spelling	Total Average
1	4-4	4-7	4-0	3-0	6-0	4-5	5-8	4-0	3-9	4-03
2	2-4	3-7	2-5	2-8	4-1	4-4	7-0	3-3	2-4	3-26
3	1-6	2-3	1-4	1-3	4-3	3-5	3-3	3-0	2-4	2-31
4	9-0	2-0	1-1	6-0	2-7	1-4	2-1	1-5	3-0	1-26
5	2-5	4-2	1-0	2-0	4-3	3-6	5-2	4-2	1-5	2-67
6	1-9	3-7	3-1	2-1	3-8	4-1	5-2	4-3	1-8	3-00
7	3-4	4-0	3-8	2-7	4-6	3-6	6-3	5-5	3-0	3-69
8	1-1	2-5	1-0	1-0	2-3	3-0	2-8	1-0	9-0	1-38
9	2-7	4-5	3-2	2-8	6-5	3-5	5-0	3-4	3-9	3-55
10	2-0	4-5	1-2	2-3	4-9	4-9	6-3	5-0	3-2	3-43
11	1-3	3-0	3-0	1-5	5-2	3-7	5-4	4-3	2-7	3-01
12	2-3	3-4	4-0	2-8	5-5	4-0	5-0	4-2	2-1	3-33
13	4-5	6-1	1-7	2-4	5-9	6-2	6-0	5-4	3-4	4-16
14	1-9	3-0	2-5	2-0	3-9	3-3	4-4	4-1	3-4	2-85
15	2-2	3-5	4-9	3-1	5-9	3-7	5-8	5-8	2-3	3-72
16	2-1	3-3	2-8	1-4	5-4	6-3	5-4	4-4	2-8	3-39
17	1-9	2-3	2-7	1-8	5-2	4-1	4-4	3-8	1-4	2-76
18	2-4	3-0	3-7	2-3	5-0	5-6	3-6	3-1	3-9	3-26
19	1-3	1-7	2-9	1-9	3-8	2-3	2-7	3-4	2-4	2-24
20	2-8	3-6	4-5	3-4	6-0	3-4	3-9	4-2	4-3	3-61

Table 2. Continued.

21	2-5	5-0	4-3	3-5	6-7	6-3	7-1	6-1	2-4	4-39
22	2-3	2-3	2-8	1-7	4-5	3-6	4-0	3-8	3-7	2-87
23	1-3	2-0	2-5	1-7	4-9	2-6	3-8	3-0	1-3	2-31
24	1-0	2-3	5-0	1-0	1-4	2-0	2-7	3-0	1-0	1-31
25	9-0	2-3	2-7	2-3	2-8	2-3	4-0	3-2	1-1	2-16
26	2-8	3-9	3-3	3-2	5-6	5-0	5-7	4-9	2-9	3-73
27	2-5	2-4	1-6	8-0	3-3	2-7	3-0	2-7	2-7	2-17
28	1-6	2-1	2-4	1-0	3-4	3-1	3-5	3-8	9-0	2-18
29	1-6	3-3	2-8	1-4	4-8	3-8	2-8	4-2	3-0	2-77
30	2-4	2-4	2-3	1-6	4-3	3-1	2-6	3-3	1-2	2-32
31	2-2	3-6	3-8	2-9	6-6	4-9	4-6	4-3	2-4	3-53
32	2-9	3-7	4-1	3-3	6-2	2-9	4-0	2-9	4-2	3-42
33	1-5	2-1	9-0	2-0	3-6	3-0	2-6	3-2	1-2	1-83
34	1-5	1-6	1-3	9-0	2-7	2-1	2-9	2-6	1-0	1-66
35	2-7	3-2	3-3	2-1	5-5	3-8	5-1	4-0	3-3	3-30
36	3-2	3-5	3-3	2-0	6-0	3-5	3-9	3-2	4-5	3-31
37	1-7	3-3	3-7	2-0	4-7	2-7	3-7	4-4	3-0	2-92
38	1-9	4-1	2-4	1-9	5-3	4-6	5-0	3-0	2-5	3-07
39	1-2	2-3	2-4	2-0	4-3	2-1	3-6	3-0	2-1	2-30
40	1-8	3-5	2-4	2-1	5-5	3-1	4-4	2-8	3-2	2-88
41	3-3	3-2	2-9	2-1	5-3	3-5	4-5	3-3	3-0	3-11
42	1-7	1-9	1-9	1-1	4-4	2-8	4-2	4-0	4-0	2-24
43	2-2	3-0	3-5	2-2	3-7	2-9	4-0	5-1	2-5	2-91
44	2-8	4-7	3-5	2-9	6-5	4-5	4-3	4-9	3-0	3-71
45	1-4	2-9	2-4	2-1	4-4	4-2	4-7	4-0	9-0	2-70
46	4-8	4-3	5-4	3-2	6-0	5-0	7-0	5-1	4-2	4-50
47	2-5	3-3	3-3	1-8	6-2	3-7	4-0	3-7	4-1	3-26
48	1-9	2-7	1-9	1-0	4-6	2-6	3-3	3-6	2-5	2-41

Table 2. Continued.

49	4-6	4-1	4-6	3-1	5-9	4-5	6-0	5-6	4-2	4-26
50	2-9	2-9	2-9	1-6	5-5	3-6	5-0	5-2	1-8	3-04
51	3-4	5-1	4-4	3-1	6-3	5-6	6-7	5-7	4-5	4-48
52	2-5	3-2	2-5	1-7	3-6	3-7	3-1	3-7	8-0	2-48
53	3-2	3-1	3-3	1-8	5-1	4-2	5-2	4-6	2-2	3-27
54	2-7	2-8	1-9	1-9	3-9	2-8	4-1	3-4	9-0	2-44
55	4-7	5-6	4-2	3-1	6-0	5-6	7-2	6-8	4-6	4-78
56	2-3	3-4	3-7	2-5	6-3	3-6	5-0	3-7	2-7	3-32
57	4-3	5-0	4-5	3-0	7-3	5-9	6-8	6-0	4-9	4-77
58	2-1	2-5	4-4	2-7	5-5	3-7	5-1	4-0	3-1	3-31
59	4-4	4-7	3-2	6-6	6-6	4-9	5-9	5-4	4-7	4-42
Mean	24.2	33.3	29.0	21.1	49.2	37.9	45.9	40.0	26.0	306.4

Table 3. Grade Equivalent Scores,
Graduates of Graded Schools.

Student Number	Reading	Vocabulary	Arithmetic Fundamentals	Arithmetic Problems	English	Literature	History Civics	Geography	Spelling	Total Average
1	6-8	7-4	6-4	7-9	7-1	7-4	7-1	6-1	6-2	7-2
2	6-5	6-6	7-6	7-9	7-1	7-5	7-2	6-1	5-8	7-1
3	4-8	4-7	7-3	7-2	6-6	5-5	4-1	5-5	3-1	5-6
4	5-1	4-9	5-7	4-9	7-2	5-9	6-9	5-7	5-6	5-8
5	6-4	6-3	7-1	7-5	7-1	7-7	8-3	7-5	5-9	7-4
6	5-6	5-7	7-2	7-4	8-1	7-8	7-3	6-1	5-5	6-8
7	6-3	7-2	8-4	9-2	9-1	7-6	7-8	7-1	6-7	7-7
8	6-4	7-3	7-4	7-5	7-1	7-8	6-1	5-4	6-6	6-1
9	6-2	7-5	7-6	8-1	8-6	8-1	8-8	7-8	6-1	7-8
10	5-1	6-1	8-1	8-7	7-7	6-6	5-6	6-5	6-1	6-7
11	6-7	6-7	7-7	8-2	8-2	7-6	7-3	6-6	5-1	7-2
12	5-7	6-5	7-4	6-7	8-7	6-8	6-5	6-1	6-4	6-8
13	5-3	5-4	7-7	6-4	8-5	7-1	7-9	7-1	5-5	6-8
14	4-8	4-9	8-4	8-8	6-8	6-1	7-2	6-6	5-3	6-5
15	5-1	5-7	7-7	8-8	7-9	6-9	6-1	6-9	6-6	6-1
16	5-4	6-3	7-7	8-2	8-4	7-1	6-8	6-4	4-8	6-8
17	4-3	4-1	3-1	4-4	6-3	5-8	5-6	5-8	3-7	4-1
18	6-8	7-3	8-4	9-2	9-3	8-2	7-5	6-6	6-4	7-7
19	5-1	5-7	4-4	3-1	7-8	6-6	6-5	5-6	6-4	5-9
20	5-2	5-6	7-1	8-4	7-8	7-1	6-9	5-8	5-3	6-7

Table 3. Continued.

21	4-7	6-1	5-4	6-4	7-8	6-2	5-6	6-3	4-2	5-8
22	5-6	6-4	7-5	8-4	8-1	7-3	7-2	6-1	4-2	6-9
23	5-6	5-6	6-1	7-5	8-6	7-1	7-2	6-7	4-1	6-7
24	4-9	5-6	7-4	6-9	7-1	7-1	6-4	5-5	5-6	6-5
25	4-7	5-6	4-8	4-6	7-8	7-2	6-1	4-7	5-7	5-7
26	4-9	4-7	5-7	5-2	6-7	5-1	6-7	5-6	4-2	5-5
27	5-7	6-5	6-4	6-1	6-8	7-5	6-7	6-3	4-8	6-4
28	5-1	4-9	5-3	5-3	6-1	5-8	6-6	4-1	3-4	5-3
29	5-6	5-7	5-3	6-3	7-3	7-1	7-3	6-6	3-7	6-1
30	5-9	6-2	7-1	7-4	8-1	7-1	7-1	7-1	5-3	6-8
31	3-1	4-7	5-3	4-9	6-8	4-6	5-1	4-9	4-1	4-9
32	4-6	4-9	6-9	6-1	7-1	6-5	7-7	6-4	4-9	6-2
33	5-1	5-7	6-4	6-9	7-9	6-8	6-7	6-4	4-4	6-3
34	4-8	4-5	6-4	4-8	7-4	6-8	6-1	5-8	4-7	5-8
35	5-5	4-5	7-4	8-4	8-8	6-1	6-5	6-2	4-8	6-6
36	4-8	6-2	6-6	6-4	7-8	6-3	6-4	4-9	4-7	5-1
37	5-5	4-1	5-6	5-1	7-7	6-8	6-8	5-7	3-9	5-9
38	5-2	5-6	7-6	6-7	8-3	8-8	7-9	7-4	6-1	7-2
39	6-9	7-5	8-4	8-7	8-7	8-7	8-4	7-1	6-1	7-1
40	4-7	5-1	6-7	6-7	6-1	6-6	6-4	4-1	5-3	5-1
41	5-3	6-4	5-1	8-4	7-7	6-1	7-2	6-6	5-6	6-8
42	4-5	4-9	6-1	5-1	6-4	4-9	5-8	5-9	3-7	5-4
43	5-3	6-1	6-3	5-3	6-5	6-1	5-4	4-1	4-9	4-9
44	3-8	4-8	4-1	5-5	5-2	5-9	4-6	4-9	4-9	4-9
45	5-1	5-6	6-1	6-1	7-2	6-1	6-2	6-2	5-8	6-1
Mean	5-4	5-7	6-7	6-1	7-7	6-9	6-8	6-2	5-3	6-4

Table 4. Grade Equivalent Scores,
Graduates of Rural Schools.

Student Number	Reading	Vocabulary	Arithmetic Fundamentals	Arithmetic Problems	English	Literature	History Civics	Geography	Spelling	Total Average
1	6-6	6-6	7-1	7-1	8-1	7-1	7-3	5-9	6-1	6-1
2	4-1	5-7	5-6	7-7	6-7	7-1	8-1	5-2	4-5	6-2
3	4-5	4-7	4-6	5-3	6-9	6-2	5-6	4-9	4-5	5-2
4	4-1	4-5	4-3	4-3	5-2	3-9	4-6	3-8	3-1	4-2
5	4-1	6-2	4-2	3-8	6-9	6-3	6-1	6-1	3-8	5-7
6	4-6	5-7	6-2	6-6	6-4	6-8	6-1	6-2	3-1	5-9
7	5-6	5-1	6-9	7-5	7-2	6-3	7-6	7-1	5-1	6-6
8	4-2	4-9	3-3	3-7	4-8	5-6	5-2	3-5	3-4	4-3
9	5-1	6-4	6-3	7-7	8-4	6-2	6-9	5-3	6-1	6-5
10	4-7	6-4	4-4	6-9	7-4	7-5	7-6	6-7	5-4	6-3
11	4-3	5-2	6-1	5-7	7-6	6-4	7-1	6-2	4-8	5-9
12	4-9	5-5	7-1	7-7	7-8	6-7	6-9	6-1	4-2	6-3
13	6-7	8-1	4-9	6-1	7-1	8-9	7-4	6-1	5-6	7-1
14	4-6	5-2	5-6	6-4	6-5	5-1	6-6	5-1	5-6	5-8
15	4-8	5-6	7-1	8-2	7-1	6-4	7-3	7-4	4-4	6-7
16	4-8	5-4	5-9	5-5	7-7	9-1	7-1	6-2	4-9	6-3
17	4-6	5-4	5-8	6-2	7-6	6-8	6-6	5-7	3-7	5-8
18	4-1	5-2	6-8	6-9	7-4	8-2	5-9	4-1	6-1	6-3
19	4-3	4-3	5-1	6-3	6-4	4-8	5-1	5-3	4-5	5-2
20	5-0	5-7	7-6	8-7	8-1	6-1	6-2	6-1	6-5	6-7

Table 4. Continued.

21	4-1	6-9	7-4	8-8	8-6	9-1	8-2	7-7	4-5	7-4
22	4-9	4-7	5-9	5-1	7-1	6-3	6-3	5-7	5-9	5-9
23	4-3	4-5	5-6	5-1	7-4	5-1	6-1	4-9	3-7	5-3
24	4-1	4-7	5-4	3-7	4-1	4-5	5-1	4-9	2-1	4-4
25	4-1	4-7	5-4	6-9	5-3	4-8	6-3	5-1	3-5	4-9
26	5-2	5-9	6-1	8-4	7-8	7-6	7-3	6-6	4-1	6-8
27	4-1	4-8	5-5	4-6	5-9	5-2	5-4	4-7	4-8	5-1
28	4-5	4-6	5-2	4-9	5-1	5-8	5-8	5-7	3-4	5-1
29	4-5	5-4	5-9	7-7	7-3	6-5	5-2	6-1	5-1	5-1
30	4-1	4-8	5-4	6-9	6-9	5-8	4-1	5-2	3-6	5-4
31	4-8	5-7	6-9	9-3	8-5	7-5	6-7	6-2	4-5	6-7
32	5-3	5-7	7-2	9-8	8-2	5-5	6-3	4-9	6-4	6-7
33	4-4	4-6	4-1	4-8	6-2	5-6	4-1	5-1	3-6	4-8
34	4-4	5-5	4-5	5-3	5-2	4-6	5-3	4-6	3-5	4-8
35	5-1	5-4	6-4	8-5	7-8	6-5	6-1	5-9	5-5	6-5
36	5-5	5-6	6-4	8-5	8-1	6-2	6-2	5-1	6-7	6-5
37	4-5	5-4	6-8	6-4	7-2	5-2	5-1	6-2	5-1	5-9
38	4-6	6-1	5-5	6-3	7-7	7-2	6-9	4-9	4-6	5-1
39	4-2	4-7	5-5	6-4	6-9	4-6	5-9	4-9	4-2	5-3
40	4-6	5-6	5-5	6-6	7-8	5-8	6-6	4-8	5-4	5-9
41	5-6	5-4	5-1	6-6	7-7	6-2	6-7	5-2	5-1	6-1
42	4-5	4-4	4-1	4-1	6-1	5-4	6-4	5-9	3-2	5-2
43	4-8	5-2	6-6	6-7	6-3	5-5	6-3	6-8	4-6	5-9
44	5-2	6-6	6-6	7-9	8-4	7-1	6-5	6-6	5-1	6-7
45	4-3	5-2	5-5	6-6	6-1	6-9	6-8	5-9	3-4	5-7
46	6-1	6-3	8-6	8-4	8-1	7-6	8-1	6-8	6-4	7-5
47	4-1	5-4	6-4	6-2	8-2	8-4	6-3	5-6	6-3	6-2
48	4-6	4-1	4-1	4-9	7-2	5-1	5-6	5-5	4-6	5-3

Table 4. Continued.

49	6-8	6-1	7-7	8-2	7-1	7-1	7-4	7-2	6-4	7-2
50	5-3	5-2	5-1	5-8	7-8	6-3	6-9	6-1	3-1	5-9
51	5-6	6-1	7-5	8-2	8-3	8-2	7-9	7-3	6-7	7-4
52	4-1	5-4	5-6	5-1	6-2	6-4	5-5	5-6	3-4	5-5
53	5-5	5-3	6-4	6-2	7-5	6-9	6-1	6-4	4-3	6-2
54	5-1	5-1	4-1	6-3	6-5	5-4	6-4	5-3	3-4	5-4
55	6-9	7-5	7-3	8-2	8-1	8-2	8-3	8-4	6-8	7-7
56	4-9	5-5	6-8	7-2	8-3	6-3	6-9	5-6	4-8	6-3
57	6-5	6-9	7-6	7-1	8-1	8-6	7-9	7-6	7-1	7-6
58	4-8	4-9	7-5	7-5	7-8	6-4	6-1	5-9	5-3	6-3
59	6-6	6-3	7-8	8-4	8-5	7-5	7-4	6-1	6-9	7-4
Mean	4-1	5-5	6-1	6-7	7-3	6-4	6-6	5-9	4-8	5-1

by the use of the Metropolitan Achievement Test chart for the fourth, fifth, and sixth grades which was made on a similar basis. The raw score was converted into the grade equivalent as shown by the latter chart.

After the grading was done and the results tabulated, the means were derived. The series method was used, consisting of adding the individual scores and dividing by the number of cases. This method was deemed the most satisfactory due to the smallness of the number of samples.

Table 5 shows the means, the probable error of each mean, and the differences of the means with their probable errors. The probable errors are given in terms of months. Interpret 6-10 as the achievement of six years and the beginning of the tenth month. The total average included in the table is the result of combining all cases in each group and thereby showing the grade status of the group.

The difference in each subject is in favor of the graded school. The differences range from two to six months. The difference in total averages may be thought of as the general difference between the two types of schools. This difference is four months.

Table 5. Means and Difference of Means with Probable Errors.

Subject	Graded School Median	Rural School Median	Difference in Months
Reading	5-4 \pm .74	4-10 \pm .48	4 \pm .89
Vocabulary	5-7 \pm .88	5-5 \pm .66	2 \pm .11
Arithmetic Fundamentals	6-7 \pm 1.2	6-1 \pm 1.0	6 \pm 1.6
Arithmetic Problems	6-10 \pm 1.5	6-7 \pm 1.2	3 \pm 1.9
English	7-7 \pm .87	7-3 \pm .9	4 \pm 1.2
Literature	6-9 \pm .9	6-4 \pm 1.0	5 \pm 1.4
History and Civics	6-8 \pm .88	6-6 \pm .79	2 \pm 1.2
Geography	6-2 \pm .86	5-9 \pm .86	3 \pm 1.2
Spelling	5-3 \pm .99	4-8 \pm 1.0	5 \pm 1.4
Total Average	6-4 \pm .81	5-10 \pm .74	4 \pm 1.1

The true meaning of the difference was obtained by a simple statistical calculation. In this manner, the significance of the differences may be determined. The procedure consisted of three steps as follows: first, calculating the difference of the means; second, calculating the probable error of this difference; and third, determining the critical ratio. The critical ratio determined the

significance of the difference, that is, whether the difference could be attributed to mere chance. Table 6 below contains the results of this calculation.

Table 6. Differences of Means, Probable Error of Difference, and Critical Ratio.

Subject	Difference of Means	Probable Error of Difference	Critical Ratio
Reading	4	4.52	4.52
Vocabulary	2	1.8	1.8
Arithmetic Fundamentals	6	3.82	3.82
Arithmetic Problems	3	1.6	1.6
English	4	3.2	3.2
Literature	5	4.7	4.7
History and Civics	2	1.7	1.7
Geography	3	2.4	2.4
Spelling	5	3.5	3.5
Total Average	4	3.6	3.6

The critical ratios as shown in Table 6 vary from 4.7 to 1.6. The probability of occurrence, when the critical ratio is 4.7, is ninety-nine hundred and eighty-five chances

in ten thousand cases. Therefore, the results of the tests furnish reliable evidence that the real difference will vary to the degree shown. The difference is great enough to substantiate the thought that the rural pupils are entering the rural high schools under a handicap.

There is a possibility that the difference is due to native ability, but evidence points toward the belief that native ability of rural school children is practically the same as that of graded school children. Sheffer (6) found in a study of four-hundred seventy-six Riley County boys and girls in 1932 that the intelligent quotients of rural and graded school pupils were on a par with each other. In conclusion, the evidence shows that the type of school was the important factor in the achievement of the pupils in the two types of schools.

In summarizing the results of the test, the grade school pupils' total averages indicate that they rank four months superior to the rural school pupils. The individual subjects show a variation in difference from two to six months. The difficulty of the several subjects was similar in both groups of students tested.

The greatest difference which was six months was found in the arithmetic fundamentals test. The difference in the history and civics test and vocabulary was the

smallest--two school months. The lowest scores in both groups were made in spelling. The remaining subjects and the differences found are as follows: arithmetic problems, three months; reading, four months; English, four months; literature, five months; geography, three months; and spelling, five months.

It is interesting to note that many individual scores were as low as the third and fourth grade levels. The wide variation in achievement would indicate some of the problems which the high schools encounter. There is more variability in the rural school than in the graded school. It should also be noted that the low scoring student in one subject ranks well in other subjects. For instance, student number thirteen in the rural school group scored 4-9 in arithmetic fundamentals and 8-9 in literature. Another example in the same group is student number five who ranks 3-8 in arithmetic problems and 6-10 in geography.

Similar testing in other studies show similar results. Quoting from Sheffer (6) are the following statements:
"May compared the intelligence quotients as determined by using the Terman Group Test of Mental Ability and school achievement as measured by Stanford Achievement Tests, of one-hundred and ninety-seven rural schools enrolled in

Robinson Township High School of Illinois, with pupils enrolled in the same school whose elementary work had been done in village schools. He also compared certain factors which determine the quality of education provided in the two types of schools, such as teachers' training, experience and salary. He found that on the Terman Group Test of Mental Ability the village pupils made a median score sixteen points above that made by the rural pupils, and that their intelligence quotient was 6.1 points higher. May points out that these tests probably measure in degree the quality of previous educational training and that the difference discovered may not indicate a real difference in native ability. In school achievement as measured by the Stanford Achievement Tests, the village pupils surpassed those from rural schools by twelve points in spelling, ten and five-tenths points in reading, seven and five-tenths points in history and literature, two points in arithmetic, two points in language usage, and five points in nature study.

The differences as shown in this study corresponds to May's result by showing a wide variation in spelling and in reading, but not so much of a variation in history. However, May tested with a history-literature combination

while a history-civics combination was used in this study. The differences in arithmetic were much greater than what May found.

The results of the various tests demonstrate clearly that the graded schools are doing superior work and are developing a superior pupil.

GENERAL CONDITIONS

A few facts pertaining to Riley County will aid in getting a comprehensive view of the conditions as they exist. Riley County has one-hundred forty-nine miles of county roads, seven-hundred nineteen miles of township roads. This information was obtained from the county engineer's office. Besides the above roads, Riley County has national Highway Seventy-Seven crossing the county near its center from north to south. National Highway Twenty-Four crosses in a similar manner from east to west. Highway Thirteen follows the course of the Blue River. The last four roads mentioned are all weather roads. Highway Forty is a paved highway from Manhattan to Junction City. The county roads, amounting to one-hundred forty-nine miles, are patrolled. A progressive program in road improvement is made evident by the fact that

Highway Twenty-Four is to be oiled and matted this summer. See road map of Riley County, Figure 1, page 31.

Another item of importance is the railroads. Riley County has four railroads serving the public. They pay a large amount of taxes for the support of the schools. Table 7 shows the valuation of the railroads in the county for the year 1935.

Table 7. The Enrollment, Valuation, and Levy of the Schools of Riley County.

District Number	Name	Enrollment	Valuation	Levy
	1 Strong	28	\$340,464	3.03
(Joint)	1 Vinton	11	163,313	2.27
	2 Hunters Island	15	160,447	2.27
	3 Moehlman Bottom	14	157,795	4.35
(Joint)	3 Hillside	7	197,442	1.96
(Joint)	5 Ogden	122	504,801	7.27
	6 Keats	26	337,364	5.58
	7 College Hill	43	443,771	6.19
(Joint)	7 Swede Creek	9	226,804	2.07
	9 Randolph	87	599,168	5.38
(Joint)	9 Ober	11	143,089	3.49
	10 Heller	15	223,601	2.79
	11 Hillside	7	229,816	2.27
	12 McDowell Creek	16	166,100	3.40
	13 Oak Grove	35	345,083	4.65
(Joint)	13 Myersdale	9	110,388	3.16
	14 Fairview	10	226,659	2.77
	15 Riley	65	506,044	6.30
(Joint)	15 Columbus	14	124,516	3.73
	16 Monterey	*	212,190	.59
	17 Kimble	9	323,719	1.89

*Districts not maintaining a school.

Table 7. Continued.

	18	Eureka Valley	*	\$267,827	.93
	19	Grant	17	182,631	3.63
	20	Grandview	14	170,709	3.16
	21	Baldwin Creek	4	111,048	2.43
(Joint)	22	Bala	27	324,395	1.71
	23	Three Mile	7	155,604	4.41
	24	Blue Valley	8	216,240	1.26
	25	Winkler	15	195,883	3.35
	26	Prairie Rock	8	110,364	4.93
	27	Monitor	9	149,847	3.43
	28	Mayday	5	155,896	3.49
	29	Stockdale	30	416,594	4.55
	31	Madison Creek	10	119,096	2.39
	32	Middle Seven Mile	11	103,976	2.84
	33	Upper Seven Mile	21	167,700	3.06
	34	Walsburg	12	227,258	3.21
	35	Arbor	7	130,414	2.80
	36	Peach Grove	23	187,590	2.88
	37	Alert	17	166,785	1.51
	38	Mound Meadow	1	158,684	1.13
	39	Union	9	137,255	2.07
	40	Pleasant Prairie	11	144,806	3.61
	41	Deep Creek	13	202,659	3.68
	42	Zeandale	27	483,168	2.50
	43	Sunflower	10	367,880	.44
(Joint)	44	Tabor Valley	11	227,325	4.35
	45	Ashland	32	355,335	1.48
	46	Prairie Grove	12	139,374	2.11
	47	Lasita	8	144,003	1.63
	48	Laurel Hill	7	175,797	2.15
(Joint)	49	Marine	9	107,544	3.91
	50	Star	6	97,017	5.66
	51	Rock Island	7	196,977	2.84
	52	Pleasant Hill	16	105,708	4.27
	53	Sedalia	18	113,064	.48
	54	Cleburne	32	371,189	3.91
	55	Crooked Creek	10	143,619	4.27
	56	Mt. Pleasant	15	216,979	.92
	57	Center Hill	7	123,334	5.98
	58	Rose Hill	11	126,106	3.74

Table 7. Continued.

	59	Leonardville	47	\$380,086	5.55
	60	Mineral Springs	9	156,320	2.47
	61	Walnut Creek	5	110,285	2.73
	62	Silver Creek	9	122,205	5.57
	63	Sunnyside	12	251,485	5.49
(Joint)	64	Magic	12	261,378	.66
	65	Elm Hollow	9	88,197	2.91
	66	Bethel	13	177,806	3.56
	67	Longview	10	73,175	2.02
	68	Highland	*		2.51
	69	Cleveland	11	198,794	.57
	70	Rocky Ford	10	294,448	3.37
	71	Oakview	11	65,581	7.85
	72	Lone Oak	*	140,235	5.46
	73	Lower Seven Mile	13	95,567	5.90
	74	Walnut Creek	8	228,504	3.25
	75	Harmony	5	190,101	1.39
	76	Sherman	9	96,364	4.35
	77	Eureka Lake	*	217,462	1.71
	78	Prairie Meadow	17	172,597	
	79	Lee	14	145,950	2.91
	80	Liberty	12	107,552	3.94
<hr/>					
Railroad:				Valuation	
	Union Pacific (Leavenworth)			\$	62,050
	Union Pacific (Manhattan branch)				916,856
	Union Pacific (mainline)				826,490
	Rock Island				1,185,556
	Total valuation				2,990,952

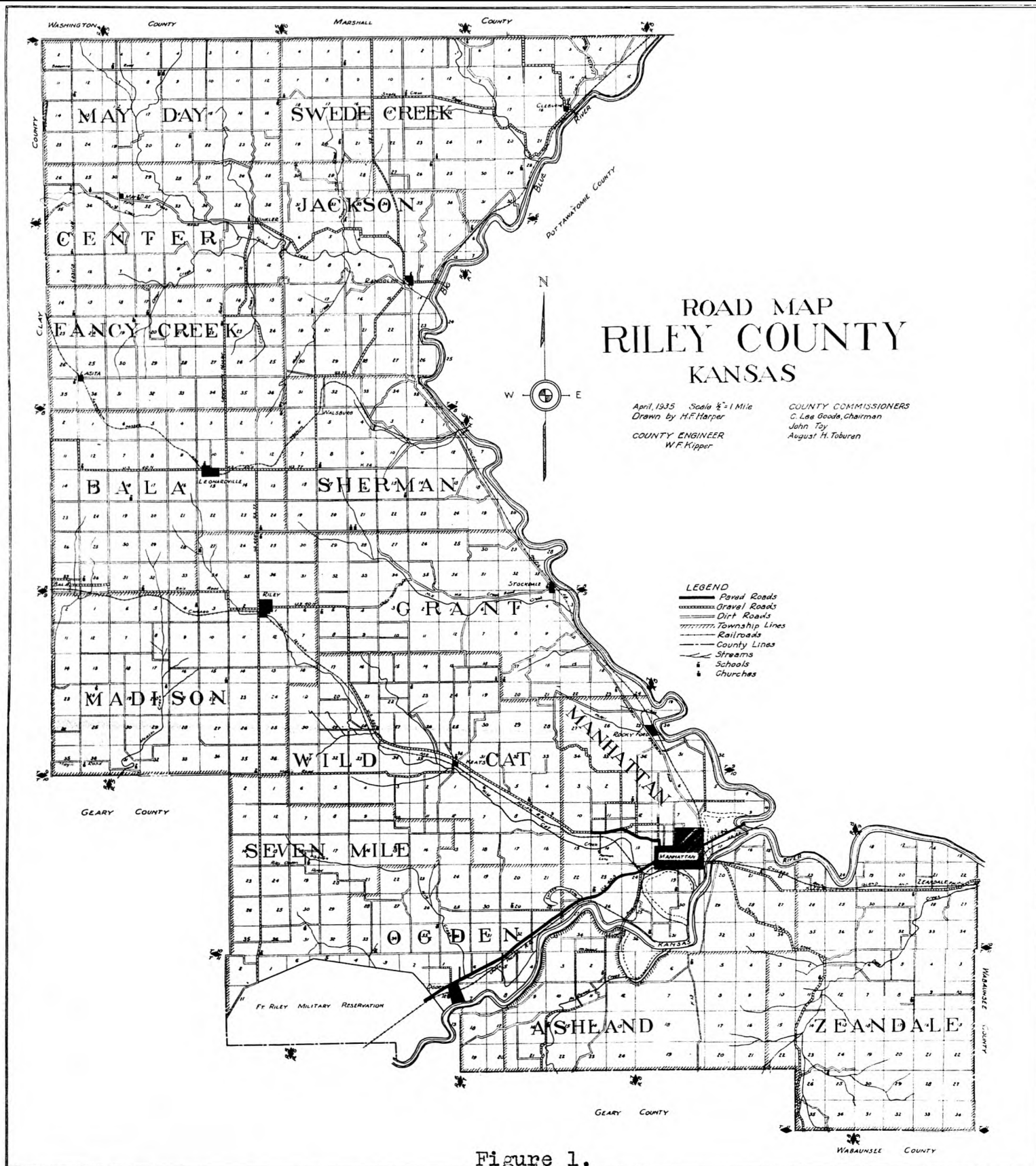


Figure 1.

Teachers employed:

	Average Experience	Male	Female	Total
Rural schools	4.9	1	26	27
Graded schools	8.8	4	12	16

The graded school teachers have an average of sixty-nine plus hours of college work compared with the rural teachers whose average is thirty-four. Table 8 shows the distribution of college hours on the basis of college preparation.

Table 8. The Distribution of College Hours on the Basis of College Preparation.

College Hours	Graded Teachers	Rural Teachers
129.5 or more	2	2
119.5-129.5		
109.5-119.5	1	
99.5-109.5		
89.5- 99.5	1	
79.5- 89.5	2	1
69.5- 79.5	2	
59.5- 69.5	2	1
49.5- 59.5	1	2
39.5- 49.5	3	
29.5- 39.5		4
19.5- 29.5		3
9.5- 19.5	1	5
Less than 9.5	1	11

Salaries:

	Average	Maximum	Minimum
Rural schools	\$52.15	\$62.50	\$35.00
Graded schools.....	67.00	90.00	60.00

Enrollment:

	Total	Average	Number of Schools
Rural schools	313	10.8	29
Graded schools.....	287	48.	6

Valuation of districts:

	Total	Maximum	Minimum
Rural	\$5,200,568	\$323,719	\$110,285
Graded	2,610,455	506,044	337,364

Of all the schools in the county there were thirty-three rural schools with an enrollment of ten or less during the school term of 1934-35. One school has been operating the past two years with one pupil enrolled. There were five rural districts not maintaining a school. Their children were cared for in the following manner: Eureka Valley, district eighteen; and Eureka Lake, district seventy-seven, transported the pupils to Manhattan; Monterey, district sixteen, transported their children to Garrison; Highland, district sixty-eight, united with College Hill; and Lone Oak, district seventy-two transported

to Randolph.

The state legislature, during the legislative session of 1935, passed Senate Bill Number 322. It is pertinent to this study as it offers a means of overcoming some of the obstacles which have apparently discouraged the consolidation of schools. The content of the bill is found in the Appendix, page 63. The permissive measures of this bill form the basis on which the following cooperative areas are suggested.

RILEY SCHOOL AREA

The Riley graded school building presents an ideal set up for the location of a cooperative school. Up until 1929 the building housed both the graded school and high school. During the time previous to 1929, the enrollment of the high school averaged from eighty to one-hundred students, while the graded school had as large an enrollment as it has at the present time which is sixty-five. In 1929 the high school pupils were moved into a new building, leaving the graded school with more rooms than necessary. Although the crowded condition necessitated a high school building, it is evident that a school twice the size of the present

enrollment could be cared for without additional building.

The town of Riley has a population of four-hundred thirty-one. It is located on the intersection of two graveled highways, Seventy-Seven and Twenty-Four. The town is surrounded by a diversified farming district making it strictly a farming community. The Rock Island Railroad passes through the town and furnishes excellent accommodations. The community spirit is strong--the high school plays an important part in building and maintaining this spirit.

The graded school at the present time is using three class rooms. There are three teachers employed. The school under normal times has a faculty of four teachers. The building contains six class rooms which are not being used at the present time. Five of the rooms are excellent class rooms, the other being a large room which was at one time the study hall of the high school. The study hall was also used as an auditorium for it has a stage of ample size. This room could serve as an auditorium for all school events. The building is heated by a modern steam heating system. Modern toilet facilities were installed during the school year 1935-36. The graded school is rated a superior school. The facilities could care for a school large enough to

employ eight teachers. Besides having eight class rooms, two more rooms are available for opportunity room purposes. The gymnasium is another feature which would serve during inclement weather for recreation.

The modern high school building was built, as previously stated, in 1929. The cost of construction was \$60,000. The building is a semi-fire proof structure, having six class rooms in addition to a study hall. The library is conveniently located with respect to the study hall. The auditorium which seats six-hundred serves as a community center for all large gatherings. It contains moveable chairs and may be converted into a gymnasium, thereby, serving a double purpose.

The gymnasium has ample seating capacity and a large playing space. For that reason the "B" elimination tournaments have been held in Riley every year with the exception of 1930-31 since the building was erected.

The present industrial arts room is of ample size to be divided into two class rooms by inserting a partition. A glass partition would be preferable, making the resulting two rooms convenient for use as a commercial department. This would no doubt take place if a department of vocational agriculture were made a part of the school system.

Vocational agriculture is a much desired need in this community. Public sentiment is against it due to the additional bonding of the district necessary to erect a shop building. The mistake was made by omitting the department in the new building campaign that was successfully carried out in 1929. The community which is a strictly farming community certainly should have courses of vocational agriculture and vocational home economics in its school.

Of the seventy-six students attending high school the past year, forty-six came from rural districts. This amounts to approximately sixty per cent of the high school population. There are students attending the high school from each of the rural districts in the proposed cooperative areas. It appears to be a logical idea to have the children all come together to one central point to attend school rather than have members of the same family attending at two different locations.

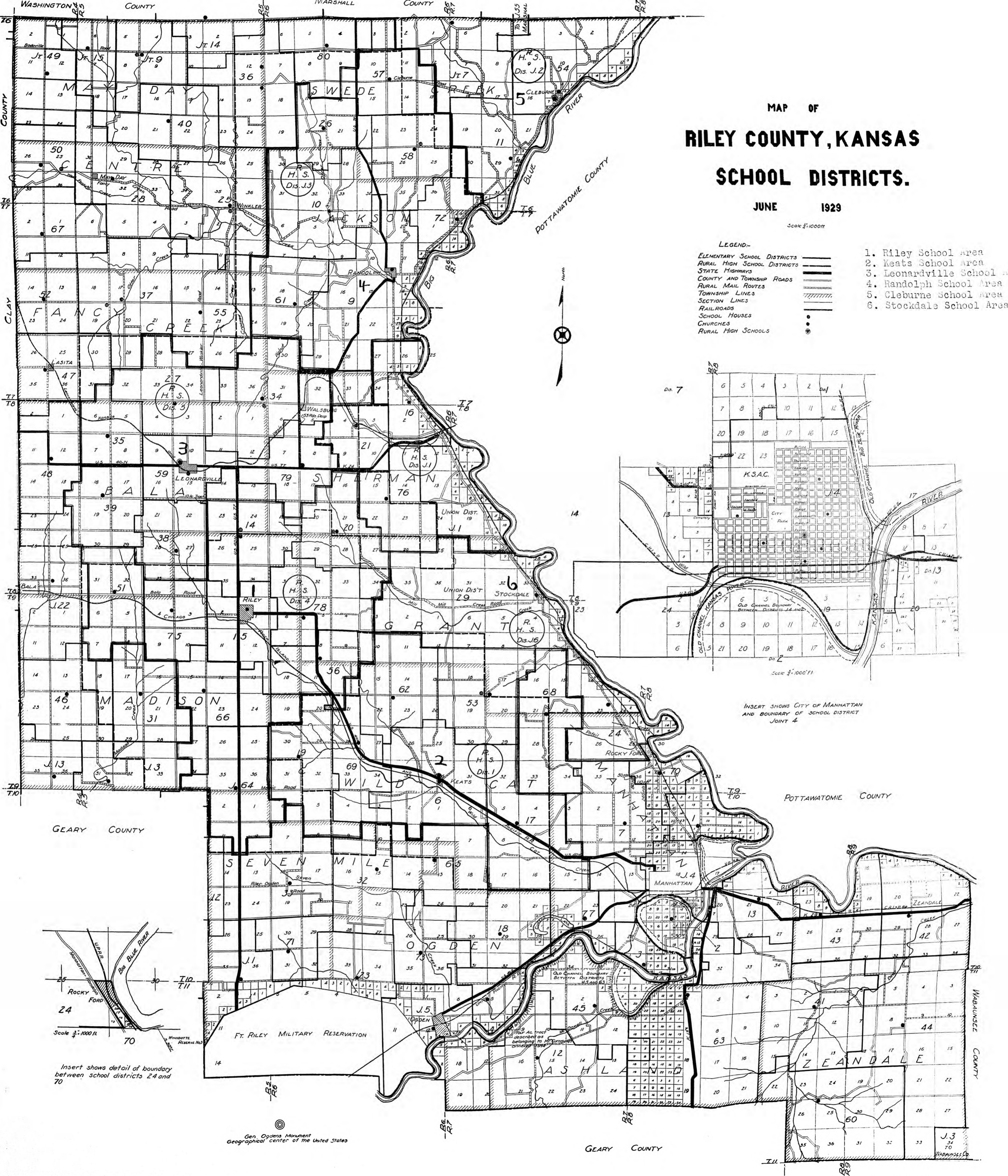
The actual cost of transportation for the extra pupils would hardly be noticeable. They would simply fill out the load and make the trips more worth while. The general practice among the high school students at the present time is to pay ten cents per day for transportation. The plan seems reasonable in view of the fact that the student

driving the car will make the trip anyway. The amount paid in most cases would defray the normal expense of operating the car. In the proposed plan it is assumed that ten cents per pupil per day would be a satisfactory amount to care for transportation.

Other expenses involved are the upkeep, repair, and insurance of the rural school building. The amount necessary to care for the above items is forty-two dollars according to Linscheid's (7) study of a similar problem. The tuition paid at the present time by pupils coming from adjoining districts is eighteen dollars per pupil per day.

The advantages of the proposed plan are better organization within the school, better housing facilities, more capable teachers, and a larger social group. These advantages may be obtained by combining the small rural district and creating a larger school area.

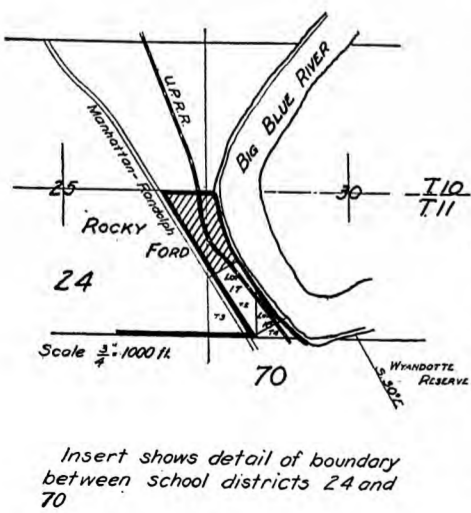
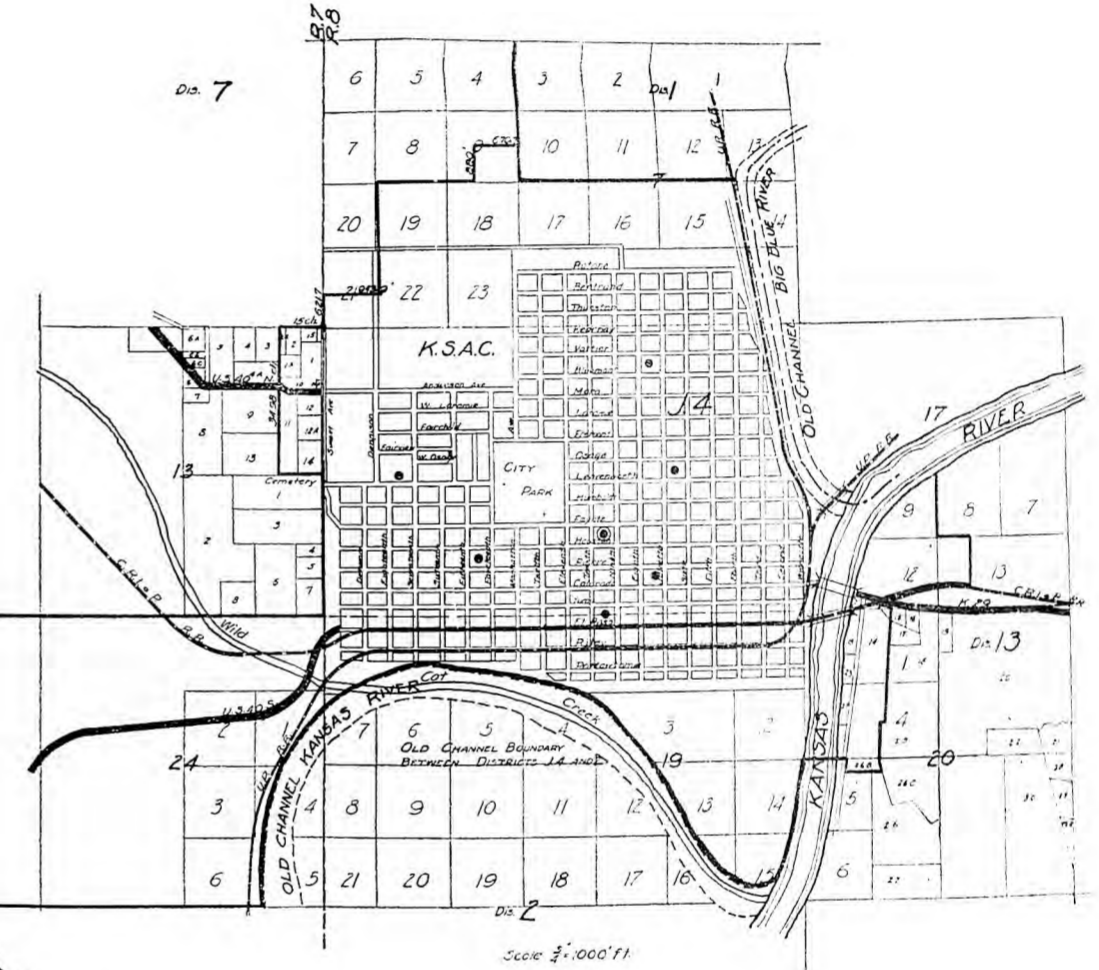
This plan proposes to include in the Riley school area the following schools: Fairview, district fourteen; Grandview, district twenty; Rock Island, district fifty-one; Mount Pleasant, district fifty-six, Magic, district sixty-four; Bethel, district sixty-six; Harmony, district seventy-five; and Prairie Meadow, district seventy-eight. (See Figure 2, page 39).



MAP OF
RILEY COUNTY, KANSAS
SCHOOL DISTRICTS.

JUNE 1929
 Scale 1:100000

- LEGEND-**
- ELEMENTARY SCHOOL DISTRICTS
 - RURAL HIGH SCHOOL DISTRICTS
 - STATE HIGHWAYS
 - COUNTY AND TOWNSHIP ROADS
 - RURAL MAIL ROUTES
 - TOWNSHIP LINES
 - SECTION LINES
 - RAILROADS
 - SCHOOL HOUSES
 - CHURCHES
 - RURAL HIGH SCHOOLS
1. Riley School Area
 2. Keats School Area
 3. Leonardville School Area
 4. Randolph School Area
 5. Cleburne School Area
 6. Stockdale School Area



Gen. Ogden's Monument
 Geographical center of the United States

The road situation in respect to the above schools is very favorable. Fairview, Rock Island, Magic, and Prairie Meadow are located on graveled roads. Mount Pleasant is one quarter of a mile from a graveled road. Bethel is located a mile and a half from a graveled road, and Harmony is only one-half mile off the all weather road. Grandview is the most unfavorably located district. It is two and one-half miles from the Grandview school to the graveled road but the dirt road is in very good condition and is a much traveled highway. The schools taken as a group average three and one-half miles from Riley. No school is further than five miles from town.

The following is information pertaining to the districts:

<u>District Number</u>	<u>Enroll-ment</u>	<u>Tuition</u>	<u>Trans- portation</u>	<u>Upkeep Repair</u>	<u>Present Budget</u>	<u>Saving</u>
14	10	\$180	\$180	\$42	\$758	\$356
20	14	252	252	42	625	69
51	7	126	126	42	519	215
56	15	270	270	42	600	18
64	12	216	216	42	928.75	474.75
66	13	234	234	42	750	140
75	5	90	90	42	650	428
78	17	306	306	42	790	136

The tuition received by district fifteen would amount to one thousand six-hundred and seventy-four dollars which would care for the salary of two additional teachers. With five teachers composing the faculty, the additional pupils could be cared for with an average of thirty-one pupils per teacher. The total amount saved by the rural districts would be one thousand eight-hundred twenty-six dollars and thirty-four cents, an average of two hundred twenty-eight dollars and thirty-one cents per school.

In the five teacher school the grades would be divided on a 1-2, 3-4, 5-6, and 7-8 basis. A music and art teacher would teach those subjects to different groups within the school. The teacher, whose pupils would be in music or art, could use the time for preparation.

KEATS SCHOOL AREA

The small village of Keats is located on Highway Twenty-Four, nine miles northwest of Manhattan. The community has two fine school buildings, although the town has not grown materially. The road situation in this community is ideal for the cooperative school plan.

The grade school building is a modern brick structure

built in 1925 to replace a frame building which was destroyed by fire. There are two large class rooms and a large basement in this graded school building. In the basement is an opportunity and play room. The building is heated by a modern steam heating system--an advantage not to be found in the rural schools. Electric lights in this school serve on dark days to brighten the room, eliminating eye strain. The school is not operating to capacity. The twenty-six pupils in attendance are taught by two teachers. It would be a distinct advantage to the school to have a larger enrollment.

The people of the Keats community have provided a modern rural high school. During the past school year forty-four students have attended this high school. The faculty is made up of four members at the present time. The pupil per teacher average is eleven students which is too small. The school facilities are capable of caring for twice the present enrollment. The valuation of the high school district is one million, two-hundred-six thousand, two hundred ninety-five dollars with a levy of three and forty-seven hundredths mills for general purposes and forty-five hundredths mills for bonded indebtedness according to the records of the county superintendent.

The road system is most favorable for a cooperative plan to exist in this area. By referring to the road map Figure 1, page 31, it will be noted that the Kimble and Cleveland schools are located on Highway Twenty-Four. Plans are made to oil this road. The Silver Creek and Sedalia schools are located on roads to be graveled in fulfillment of a government project. The Grant school building is only one quarter of a mile from the Keats-Magic road--a graveled county road. All schools are within a four mile radius.

The plan as it is being presented includes the combining of five rural districts with Keats. The districts involved are Kimble, district seventeen; Grant, district nineteen; Sedalia, district fifty-three; Silver Creek, district sixty-two; and Cleveland, district sixty-nine. (See Figure 2, page 39).

The number of students to be transported would be sixty-four. The combined enrollment of the system amounts to ninety. One teacher would be added to the faculty which would create a thirty pupil per teacher school. The three teachers employed would eliminate the five teachers now employed in the several rural schools. This would naturally weed out the unprofessional person. The play

room would be made into a class room and the grades divided into three sections on a 1-2, 3-4-5, 6-7-8 basis.

The costs and savings of the above plan are presented as follows:

District Number	Enrollment	Tuition	Trans- portation	Upkeep Repair	Present Budget	Saving
17	9	\$102	\$102	\$42	\$700	\$250
19	17	306	306	42	740	-67
53	18	324	324	42	585	-105
62	9	102	102	42	523	277
69	11	198	198	42	815	377

The total savings amount to seven hundred and thirty-two dollars. Although the budget of districts nineteen and fifty-three is slightly increased, the patrons would profit by having a better school.

It is suggested by the writer that in the case of districts nineteen and fifty-three, with their enrollment amounting to seventeen and nineteen respectively, a bus be used for transportation. This would be left however for the patrons of the respective districts to decide at their annual meeting.

The costs, if transportation is provided by bus, would be as follows:

<u>Dis-</u> <u>trict</u>	<u>Enroll-</u> <u>ment</u>	<u>Distance</u> <u>to Travel</u>	<u>Bus Oper-</u> <u>ation</u>	<u>Tui-</u> <u>tion</u>	<u>Upkeep</u> <u>Repair</u>	<u>Present</u> <u>Budget</u>	<u>Saving</u>
19	17	3	\$288	\$306	\$42	\$740	\$104
53	18	4	324	324	42	585	-105

The cost of bus operation is figured at ten cents per mile plus a driver who is allowed one dollar per day, Sheffer (6). From the standpoint of time required, the driver is allowed approximately one dollar per hour.

The students would meet the bus at the present site of the rural school. The driver would be responsible for discipline. The bus would arrive at a prearranged time and remain for twenty minutes. The heated bus would provide means of protection in cold weather. A responsible man with good morals and good judgment should be employed as the bus driver. The drivers could be the janitors of the high school and graded school buildings. The combination of the jobs would attract the right type of men.

Keats has the building, thereby, eliminating any outlay of money for that purpose. The additional children could be cared for with the addition of one teacher. The tuition paid into the Keats district would more than

provide the salary. The one thing necessary to improve the Keats school, as the writer suggests, is a larger group of pupils. The above described plan is one whereby the handicap may be overcome.

RANDOLPH SCHOOL AREA

As one enters Randolph he is impressed by the progressiveness of the town. This is shown by its curb and gravelled streets, the modern high school building, and the new church. Randolph is located approximately twenty-three miles up the Blue River from Manhattan. Highway Seventy-Seven passes through the western edge of the town. Randolph has a population of four hundred eight. The people are most interested in their schools and as a consequence they have an excellent school system. A cooperative school would make an even better school than they now have. It would allow the rural pupils all the advantages to be found in Randolph.

The graded school building was formerly used for the grades and high school. The building is made of native stone. The school rooms, floors, walls, and arrangements have been remodeled and present a very good housing

situation for a graded school. Adjoining the building is an auditorium-gymnasium combination which serves the high school in indoor athletic contests. A stage is located on one end, and with the addition of moveable chairs, the gymnasium can be quickly transformed into an auditorium. The school district has a valuation of five-hundred ninety-nine thousand, one-hundred sixty-eight dollars with a levy of five and thirty-eight hundredths mills.

The school is now employing five teachers. The enrollment during the past school year, 1935-36, was eighty-seven. The teacher pupil load is seventeen plus. Sixty additional pupils could be cared for with the present school building. The space formerly used by the high school is available for graded school use.

The community reacts favorably to the cooperative plan. The Riverside pupils are transported in to the Randolph school by automobile. The school district also operates a bus which is driven by the janitor of the school. This bus travels a route on Highway Seventy-Seven. The trip is made five miles to the southwest of Randolph and returns on the same road. The bus is operated by the Randolph school district for the purpose of increasing their enrollment. Lone Oak school is transporting their children to Randolph.

The high school district at Randolph has a valuation of one million eight-hundred forty thousand, eight-hundred twenty-seven dollars with a general levy of four and five hundredths mills and a levy of one and twenty-six hundredths mills for bonded indebtedness. The school is the pride of Randolph and rightfully so as they have one of the best rural high schools in the county. The enrollment of this school is eighty pupils. The faculty consists of five teachers. The facilities would care for many more than the present enrollment. The high school students coming in from rural districts would be able to bring graded school pupils with them in many instances with very little added expense.

The high school would profit by the cooperative plan by an increased enrollment. The pupils would be less apt to drop out at the end of their elementary schooling because of the added interest in the larger and more efficient cooperative school. The schools which would cooperate in this plan are Walnut Creek, district sixty-one; Heller, district ten; Prairie Rock, district twenty-six; Rose Hill, district fifty-eight; Center Hill, district fifty-seven.

The schools involved have a combined enrollment of forty-six. The combined enrollment of the cooperative school amounts to one-hundred thirty-three. This number of

pupils can be cared for with the addition of one teacher. The teacher pupil load in this case would amount to twenty-two.

In the six teacher school which would result, the grades would be divided on the 1, 2-3, 4-5, 6-7, and 8 basis. The sixth teacher would be a music and art teacher. This teacher would teach the different groups throughout the school. The teacher in whose room the music or art would be taught would have time for preparation. The transportation, tuition, and upkeep and repair costs are figured similar to the other plans in this study.

District Number	Enroll-ment	Tuition	Trans- portation	Upkeep Repair	Present Budget	Savings
10	15	\$270	\$270	\$42	\$650	\$68
26	8	144	144	42	695	365
57	7	126	126	42	880	586
58	11	198	198	42	449.50	11.50
61	5	90	90	42	550	328

The total amount of tuition would be eight-hundred twenty-eight dollars which would provide salary for another teacher with a reasonable amount left to cover other necessary expense. The total amount saved by the plan would amount to fourteen-hundred, sixty-eight dollars and fifty

cents. The fact that the amount saved would be more than the tuition is a point in favor of this cooperative plan.

LEONARDVILLE SCHOOL AREA

A desirable location of a cooperative plan is to be found in Leonardville, located on Highway Twenty-Four, five miles north and one mile west from Riley. The town has a population of three-hundred ninety-two people. Leonardville was formerly served by the Leavenworth branch of the Union Pacific Railroad, but during the past year the service was discontinued and the track taken up. However, the trucking facilities of the present day furnish ample means of transportation. The added tax burden which ordinarily would be keenly felt is lightened by the maturing of the bonded indebtedness of the high school district. The bonds were destroyed during the recent annual district meeting.

The graded school building was formerly occupied by the high school and graded school combined. Leonardville is a similar case to that of Randolph and Riley. The building is located on the southern edge of town while the high school is in the northwestern part of town. The schools are approximately one-fourth of a mile apart. The graded school

is a brick structure heated by steam. There is ample space to care for twice the present enrollment which is forty-seven.

The high school is the only class "A" rural high school in the county. There are six teachers employed caring for an enrollment of eighty-five students. The valuation of the rural high school district is one million, nine-hundred forty-six thousand, nine-hundred ninety-two dollars with a general levy of three and eighty-five hundredths mills. The tax burden is relatively light in contrast to the graded school district levy of five and fifty-five hundredths mills.

The cooperating schools would include Riley county's one pupil school. The Mound Meadow school has been operating the past two years with one pupil. The teacher two years ago was the pupil's sister. The reasons given by some of the patrons of the district for maintaining the school are interesting. In the first place there are youngsters below school age who are prospective pupils in the future. In the second place, there is a possibility of some family moving into the district with children of school age.

How well the Rees Bill meets their problem by its suggestion of closing the school now and reopening if the conditions warrant. Certainly the patrons should see the

mistake made but they are prone to stay with the old institutions.

The schools included in the cooperative area are Monitor, district twenty-seven; Walsburg, district thirty-four; Arbor, district thirty-five; Mound Meadow, district thirty-eight; Union, district thirty-nine; Laurel Hill, district forty-eight; and Lee, district seventy-nine.

The road situation is favorable to this cooperative plan. Walsburg, Lee, and Laurel Hill are located on all weather roads leading into Leonardville. Arbor is one mile on a mail route from the graveled road. Union is one and one quarter mile from gravel. Monitor is one mile from the Leonardville-Winkler all weather road. The Mound Meadow school is two and one-half miles from Leonardville and has dirt road the entire distance.

Transportation in this plan would be cared for by individual automobiles. The high school and graded school children could ride together. An allowance of ten cents per pupil per day is proposed to meet the necessary added expense of transportation.

The following information applies to the Leonardville cooperative plan:

Dis- trict	Enroll- ment	Tuition	Trans- portation	Upkeep Repair	Present Budget	Saving
27	9	\$162	\$162	\$42	\$500	\$134
34	12	216	216	42	750	276
35	7	126	126	42	420	126
38	1	18	18	42	503	425
39	9	162	162	42	634	268
48	7	126	126	42	535	241
79	14	252	252	42	585	39

The Leonardville district receives one thousand, sixty-two dollars tuition which is more than the salary of the extra teacher needed in the cooperative school. The amount saved would be one thousand five-hundred nine dollars, the combined enrollment one-hundred six pupils, and the number transported in this plan fifty-nine. The number of pupils per teacher in the newly created cooperative school would be twenty-six.

The proposed school would be organized with two grades in a room. One of the teachers would teach music and art part time, and teach all pupils of the school in this respect. The teacher in whose room music or art was to be

taught would take charge of the room originally assigned to the music and art teacher.

CLEBURNE SCHOOL AREA

Cleburne, a small village, is located in the north eastern part of Riley County near the Blue River. Fires during recent years have destroyed a large portion of its business district. The territory to the west of Cleburne is primarily a grazing district--rather hilly with very little land level enough for tillage. East of the river, however, is a fertile river valley. The residents do their trading in Cleburne. The Blue Valley branch of the Union Pacific Railroad serves the community. It is unfortunate that the Cleburne bank was closed during the depression. The people are thrifty, are very much interested in their schools, and have a modern high school building for those desiring a secondary education.

The graded school building is located in the east part of town. It is a rather old building made of native stone. There are four class rooms in the building but just two are being used at the present time. The school has an enrollment of thirty-two pupils and two teachers are employed.

The valuation of three-hundred seventy-one thousand, one-hundred eighty-nine dollars with a levy of three and ninety-one hundredths mills is the least tax burden of any of the districts in which the cooperative schools are proposed in this study.

The Cleburne community has a splendid high school building located in the western part of the village. The class rooms are well arranged. The auditorium-gymnasium combination is adequate to care for community needs. It is the only rural high school in the county offering vocational home economics. The faculty consists of four teachers and the enrollment is thirty-eight at the present time. Cleburne has a joint district part of which is in Pottawatomie County.

The two rural schools, Swede Creek and Hillside are relatively close to graveled roads. The Swede Creek school is located two miles off the graveled road while Hillside is only one-half mile from an all weather road. It is proposed to have the graded school pupils of these rural districts ride with the high school students attending high school in Cleburne.

Swede Creek is approximately five miles to the north and west of Cleburne. The Hillside school is located three

miles north and west near the Blue River valley. The Swede Creek school has an enrollment of nine and the Hillside enrollment is seven. The sixteen pupils will be taught in the Cleburne school without an appreciable increase in teacher cost. The combined enrollment, fifty-one, could be taught by the two teachers now employed in the school. If the community should desire, the cooperative plan could be extended into Pottawatomie County. Three schools are favorably located in this area in regard to transportation. There are two more rooms available in the school building, and with an increase in enrollment to warrant it a four teacher school might be arranged.

An increase in enrollment would create a better school for all concerned. The advantages thus obtained are similar to those of the other proposed plans in this study.

The tuition figured on the basis of eighteen dollars per year will pay the additional expense of the Cleburne school district. It is not proposed to create a money making plan for any school district concerned, but rather to save money and at the same time create a better school. The allowance of ten cents per pupil per day for transportation is similar to the other proposed plans. Approximately one-half of the present budget is saved by the two cooperating districts.

The costs and savings are as follows:

District	Enroll- ment	Tuition	Trans- portation	Upkeep Repair	Present Budget	Saving
Joint	7	\$162	\$162	\$42	\$685	\$319
	11	126	126	42	655	361

STOCKDALE SCHOOL AREA

The sixth school area in this study is to be found in the Stockdale vicinity. This village is located on Highway Thirteen, west of the Blue River, approximately ten miles north of Manhattan. The village has not grown materially for several years and the only prospect of an increased enrollment in its school is the uniting of rural school districts. The railroad serving the community is the Blue Valley branch of the Union Pacific. The Mill Creek road, which is a graveled county road, carries traffic from the west into Stockdale.

The graded school district is a joint district and extends quite a distance to the west. Transportation has been provided for some of the pupils of the district. A bus is operated on the Mill Creek road and the pupils meet the bus as it passes the nearest point from their homes. The bus

is owned and operated by a private individual who receives thirty-five dollars per month for the service rendered. If there is room high school students may ride in the same bus. The high school students pay one dollar per week to the owner of the bus. The amount to be paid by high school students is determined by the bus driver.

The graded school and high school are in the same building. A large cooperative school would be impossible under the present conditions. However, the Blue Valley school, which has an enrollment of eight, could be cared for without additional building.

The Blue Valley school patrons in their recent annual meeting voted to transport their children to the Stockdale school. This action was the only one of its kind in the county this year. The pupils are to ride with students attending high school in Stockdale.

It is the understanding of the writer that the Blue Valley school took action without first consulting the Stockdale district. As a result the Blue Valley district voted without knowledge of tuition or the reaction to the plan by the Stockdale district. A special meeting will be necessary to reach a final agreement. An interview with the county superintendent before the annual meeting would

have been a wise procedure. However, it is a step in the right direction and shows the reaction of some rural people in regard to school problems.

The plan proposed by the writer is a reality in this particular incidence. If the costs are figured on the same basis as the other cooperative plans in this study, the Blue Valley school district will realize a saving of three-hundred eighteen dollars. The costs are one-hundred forty-four dollars for tuition, one-hundred forty-four dollars for transportation, and forty-two dollars for upkeep and repair.

RECOMMENDATIONS

In order to carry out the plan thus described the author wishes to suggest that the county superintendent conduct an educational campaign through the Parent Teachers' Association and local newspapers. The patrons of the rural district may thus be informed of the advantages of the cooperative school.

The cooperation of schools should take place as rapidly as roads are improved sufficiently to warrant such action. The rural schools should be more effectively

supervised until cooperation is possible. The principals of the rural high schools should serve as the supervisors. Legislative measures should be enacted which would provide for a 6-3-3 school organization when the enrollment would deem it advisable.

CONCLUSION

1. The rural pupils are handicapped by the type of school which they are attending. There is an average difference of four months between the rural and graded pupils achievement.
2. The building facilities now available in the central schools would care for the increase in enrollment. School maps, charts, and libraries could be combined and serve all pupils to an advantage.
3. Better qualified teachers could be employed, eliminating the unprofessional and inexperienced ones. The graded school teachers have approximately four more years of experience and thirty-five more hours of college preparation than the rural teachers included in the proposed areas.
4. The total enrollment of the six proposed areas would be five-hundred seventy-six. There would be two

hundred eighty-nine rural pupils profiting from the larger school system.

5. The tuition paid to the central school districts would be sufficient to care for the added expenses. A tuition of forty-three hundred and fifty-four dollars would be available for this purpose.

6. The advantages of the cooperative schools would be obtained and at the same time save a total of sixty-five hundred, forty-three dollars and thirty-four cents, an average of ten hundred ninety dollars and sixty-four cents per school area.

7. There are twelve of the rural schools in the proposed plan located on all weather roads leading into the central schools. Eight rural schools are located within a mile and no school is more distant than two and one-half miles from graveled highways.

8. The legislative enactment of the Rees Bill has made the proposed cooperative plan permissible. Many of the disadvantages of consolidation have thereby been overcome.

9. The several towns in which the cooperative schools would be located would profit from the larger school. The pupils attending the graded schools at the present time would become a part of the larger social group.

10. The high schools would be benefited by an increase in enrollment in years to come. There would be a fewer number of pupils drop out at the completion of the elementary course.

ACKNOWLEDGMENT

The author sincerely appreciates the help he has received in preparing this study. He wishes to thank especially Dr. V. L. Strickland for his guidance and constructive criticism; Miss Agnes Engstrand, Riley County Superintendent, for her permission to use the records of the office; and Dr. W. E. Sheffer for suggesting the problem and giving information concerning the one room teachers of Kansas.

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APPENDIX

Senate Bill No. 322

Section 1. That any two or more school districts in the state of Kansas are hereby authorized to cooperate in the maintenance of schools for the instruction of the pupils of their respective districts.

Section 2. On or before April 1 of each year the county superintendent of public instruction shall publish in the official county paper and supply to each member of district school boards a statement showing the possibilities for cooperation between districts in the county. This shall include all school districts whose school houses are not more than five miles apart and whose combined enrollments would not exceed twenty-eight pupils, and shall show the difference between the present cost and the probable reduced cost to districts cooperating.

Section 3. A joint meeting of school boards or boards of education to consider such cooperation may be called by any one of the following methods: (1) by voluntary agreement of two or more school boards or boards of education; (2) by the county superintendent upon the request of any school board or boards of education; (3) by the county superintendent upon the filing of a petition signed by ten per cent of the qualified electors of any school district. Such meeting shall be held not later than ten days prior to the time of the annual school meetings.

In the last two cases, requests or petitions shall be submitted not later than thirty days prior to the time of the annual school meetings, and shall state the school

district or districts with which cooperation is requested. Upon receipt of such request or petition the county superintendent shall call a joint meeting of the school boards or boards of education of such school districts, and shall notify them of the time, place and purpose of the meeting, which shall be at some convenient place within the districts named. The county superintendent of public instruction shall act as temporary chairman or shall designate a member of one of the school boards attending the meeting as temporary chairman of such joint meetings.

Section 4. If at such joint meeting the school boards or boards of education agree upon a cooperative program, such program shall be submitted by the school board to the annual school meeting in all districts having an annual school meeting for the ratification or rejection thereof.

Section 5. Whenever such cooperative program is ratified by the annual school meeting or by the board of education of each district by the adoption of a motion to approve such cooperative program, such approval shall be entered in the minutes of the meeting. The action of each school district in ratifying or rejecting the cooperative program shall be certified to and filed in the office of the county superintendent of public instruction.

Section 6. If any one of the school districts shall not ratify the cooperative school program submitted or shall suggest amendments thereto it may request further consideration of another joint meeting of the school boards or boards of education and may authorize the calling of a special school district meeting to consider their report.

Section 7. Nothing in this act shall be construed as terminating the separate corporate existence of any cooperating district or as altering existing law governing school district finance except to authorize and require each cooperating district to include in its budget for the next following fiscal year the proportion of the cost of such cooperative program in the amount and for such items as have been agreed upon in accordance with the provisions of this act.

Section 8. That section 72-818 of the Revised Statutes Supplement of 1933 is hereby repealed.

Section 9. This act shall take effect and be in force from and after its publication in the official state paper (7).

Table 8. One Teacher Schools in Kansas in 1935-36.*

Salary	Number of Teachers	Hours of College Credit	Number of Teachers	Total Years of Experience	Number of Teachers	Years Experience in Present School	Number of Teachers
\$25 or less	4		2195		1308		3446
26-30	42	0-5	115	1	1026	1	1801
31-35	186	6-10	772	2	898	2	815
36-40	648	11-15	131	3	689	3	351
41-45	687	16-20	379	4	583	4	179
46-50	1358	21-25	181	5	458	5	97
51-55	747	26-30	327	7	306	6	54
56-60	1087	31-35	318	8	218	7	22
61-65	677	36-40	180	9	205	8	19
66-70	556	41-45	131	10	164	9	9
71-75	112	46-50	92	11	113	10	5
76-80	185	51-55	71	12	75	11	6
81-85	111	56-60	417	13	64	12	3
86-90	71	61-65	423	14	64	13	3
91-95	27	66-70	283	15	52	14	1
96-100	29	71-75	142	16	31	15	2
101-105	2	76-80	96	17	26	16	3
106-110	6	81-85	62	18	16	17	0
111-115	1	86-90	78	19	19	18	1
116-120	1	91-95	39	20	21	19	0
121-125	3	96-100	40	21	13	20	0
126-130	0	101-105	23	22	6	over 20	
131-135	1	106-110	11	23	8		
		111-115	8	24	13		
*From W. E. Sheffer		116-120	89	25	7		
Manhattan, Kansas,		120-125	52	26	7		
Unpublished.		126-130	61	27	8		
		over 130	90	28	4		
				over 29	18		