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CONSOLIDATION OF SCHOOLS AND  
TRANSPORTATION OF PUPILS

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# CONSOLIDATION OF SCHOOLS AND TRANSPORTATION OF PUPILS.

## INTRODUCTION.

*The rural school project.*—The rural school project of the continental United States consists in educating over 18 millions of young people between the ages of 5 and 20 who live in small towns and villages or in the open country. The 300,000 or more schools classified as rural enrolled nearly 12½ millions of pupils in 1920, employed 425,000 teachers, supervisors, and principals, expended \$391,000,000, and have a property investment of not less than \$767,000,000. In number of schools, enrollment, attendance, and teaching corps, the rural project is larger than the urban project; in expenditure and permanent investment it is less.

*The one-room schools.*—Two years ago at least one-fourth of the rural school enrollment and 45 per cent of the rural teaching corps were in 187,951 one-room schools. Nearly all of these schools are in the open country. They are the usual and commonplace response made in the United States to the problem of training country children. For 80 years or more educators have known and have pointed out that the little school, even at its best, is an ineffective instrument and ought to exist only where it is impracticable to provide anything better; but each State, as it established a public-school system, permitted and encouraged the little schools, and until very recently they have continued to increase in number.

It has long been a matter of common opinion that the opportunities for education offered to rural children, especially those living outside of the towns and villages, have been and are much inferior to those offered city children. The truth of that opinion is now fairly well proved. Recent surveys of several State school systems have shown that almost without exception the one and two teacher schools are the weakest in the systems, and usually as the number of pupils and teachers approached that necessary for a graded school the scores made in objective tests have indicated better results. Moreover, the small schools are very expensive, not only in failing to do their work well but in the actual amount of money spent for each pupil.

The State superintendents generally recognize in their reports that the small schools of the one and two room types located in the open country are the ones that need most to be strengthened and bettered. All the statistical data gathered by the State offices that are of such a nature as to permit making comparisons between rural and urban systems bear out the findings of the surveys. Indeed, the schools established by the National Government for the Indians, those maintained in the Philippines and Porto Rico, and the city schools for negroes have often, if not usually, been much better than the rural schools for white children.

*The field for consolidation.*—It is pertinent to indicate at once where the 187,951 one-room schools are. Each of the seven States shown in heavy vertical hatch on the accompanying map has more than 7,500 one-room schools. The exact figures are given in Table No. 1 on page 52. The total number of one-room schools in this group of States is 63,736, or more than one-third the total for the United States.

Each of the eight States shown in the heavy diagonal hatch has somewhere between 5,000 and 7,500 one-room schools. The total for the group is 49,418, or more than one-fourth the total for the United States.

In these two groups, comprising 15 States, are more than three-fifths of all the one-room schools. Here is the field where the major part of the work of improving the small schools is to be done. In general, they are States where natural conditions make it possible to unite the little schools and establish larger ones.

The 12 States shown in the cross hatch have a total of 50,296 one-room schools, or somewhere between 2,500 and 5,000 each. If the number is added to that of the first two groups, we have accounted for 87 per cent numerically of the problem presented by the small school.

The 11 States of the fourth group shown in diagonal light hatch have from 1,000 to 2,500 one-room schools each, or a total of 19,714.

Each of the 10 States in the fifth group, shown in white, has fewer than 1,000 one-room schools, or a total of 4,784.

These data and the map have definite limitations in that they include only the one-room schools. There are great numbers of two and three room schools and even larger ones that can be benefited by uniting with other schools. But data for these schools are not available. The figures for the one-room schools are given as the only ones that can now be had for the entire United States and because these schools constitute by far the largest field for consolidation and the one where it is most needed.

*Nature of the problem.*—This rural school problem is an American problem, developed by the American people in the process of



it was not imposed upon local units by the State, and permissive laws have made it possible to have better schools as fast as a demand for them arose. To whatever extent the schools of this country are modeled after those of other countries, or the schools of any State are like those of other States, the imitation has been almost wholly voluntary, and the restrictions placed upon what the schools might be have been only those imposed by natural physical conditions and the human tendency to follow custom and an established line of thought.

The foreign-born persons in the rural population amount to 6.5 per cent. If the towns and villages could be excluded, it would probably be less. The people who make use of the small school, and among whom it persists, are predominantly of native birth and of native parentage, speaking the English language, accustomed to American thought and life, and presumably imbued with American ideals. It should be easier to bring about results in this field than it is in some of the urban projects where difficulties of language and of differing ideals must be overcome.

There have been many attempts made to raise the level of rural education, most of them to some extent successful. They have taken and are now taking the form of educational surveys and campaigns; efforts to secure more funds and more equitable distribution of funds; special appropriations in State aid for weak schools; more centralized, responsible, and professional administration and supervision; more carefully gathered data to detect weaknesses and determine their causes; laws intended to bring about longer terms, better attendance, better qualified teachers, and more adequate school buildings; setting definite standards and recognizing in a special way the schools that attain those standards; and consolidating smaller schools or districts into larger and stronger educational units.

The inherent weaknesses of the small school are in the difficulty of proper grading, the limited time that can be given each class or grade, the limited social experience, and the lack of incentive in the small groups. These weaknesses can be overcome only by removing the thing itself, by changing the small school to a larger one. Many educators believe that the first logical step in the solution of the rural school problem, just as it has been of the city school problem, is consolidation wherever at all practicable, and that along this line the greatest success can be achieved.

*The scope of the study.*—It is with school consolidation in general, but more particularly as it applies to rural schools, its different forms, the laws governing it, its history and development, the measure of its progress and success, and the things which commend it, that we have here to deal.

## Chapter I.

### THE HISTORY AND DEVELOPMENT OF CONSOLIDATION AND TRANSPORTATION.

The history of the growth of consolidation of schools and transportation of pupils may be divided into four fairly well-defined periods:

1. From about 1840 to 1880, a period in which the principle of centralization of schools was established in urban communities, extended to other independent districts, and began in rural sections.
2. From 1880 to 1894, a period of very slow extension of the consolidation idea.
3. From 1894 to 1910, a period of awakened interest in rural schools, a general rapid enactment and betterment of consolidation and transportation laws, and more extended use of them.
4. From 1910 to 1922, a period of more united effort in bringing about consolidation, determining its value, and working out the best ways to make it most effective.

#### THE PERIOD FROM 1840 TO 1880.

*Consolidation in cities and towns.*—The movement to provide better educational advantages than are offered by the one-room school in which a small number of children are taught by some one untrained for the work began in New-England. Out of it have come our present-day-city school systems, independent and special districts of various kinds, district, union, township, and county high schools, union graded schools, rural and State graded schools, consolidated and centralized schools, and other public schools based on the principle of grouping children of nearly equal attainments in grades—"graduating them," it was called—and providing for an orderly progress from grade to grade or "graduation to graduation."

Consolidation of schools was first effected in the cities and more densely populated towns, usually under special laws or acts of incorporation. After two or three cities in a State had established graded schools and set up fairly strong systems under special enactments, the people of other cities and towns desired similar advantages and secured a general law giving cities, towns, villages,

and often the richer and more populous agricultural sections privileges of various kinds in connection with establishing graded schools, levying taxes, employing superintendents, etc. In this way there has grown up in most of the States a considerable number of local school systems largely independent of State, county, town, or township control. For the most part they are the sections that have consolidated their schools, centralized the administration, and made good progress. They are the systems that educational tests in recent years have shown to be well up among the best in teaching personnel, quality of instruction, and results produced. In so far as they have done these things within their own boundaries, they have local consolidation and centralization. In so far as they are independent of the State, county, township, or town systems in which they may be situated, they have decentralization, a breaking up of the larger unit of control. In one or two States the establishment of independent and special districts went so far that it threatened to disrupt the State system.

*Opposition to the independent district.*—The idea of permitting the stronger, wealthier sections to make more rapid progress with their schools did not meet with favor in some cases. In Indiana and Pennsylvania definite attempts were made to keep all the schools at about the same level and to give none any great degree of independence. A supreme court decision in Indiana prohibited local school taxes from 1854 to 1867 on the ground that if such taxes were levied the school system would not be general and uniform. In the earlier years of the establishment of public schools in Pennsylvania the State laws were such as to discourage the formation of independent districts, and both the governor and the State superintendent officially and publicly opposed such procedure.

*The incorporation one school district in newer States.*—The lesson of consolidation, so far as it applies to cities and towns, was learned soon enough so that a number of the States admitted in more recent years made such sections as the following a part of their early school laws:

Each village, town, or incorporated city in this State shall constitute but one school district, and the public schools therein shall be under the supervision and control of the trustees thereof. (*School Laws of the State of Nevada, 1867.*)

No incorporate city or town shall hereafter be divided into two or more school districts. (*School Law of the State of Colorado, 1886.*)

*Uniting unincorporated and incorporated territory.*—The school districts under laws of this kind became coterminous at least with the city, town, or village. Other enactments in many States permitted the district to extend beyond the city or town boundaries and to include or unite with contiguous unincorporated territory that could best be served by the schools of the corporation. This kind of

uniting of unincorporated with incorporated territory has been one of the important phases of school consolidation.

*Consolidation through unions of districts or schools.*—Coincident with or following shortly after the formation of city school systems came unions of districts or schools in order that a central school might be established for the older pupils. The history of the development of grades in the schools, the gradual extension of the grade system, and the growth of public secondary schools fairly closely parallels the development and adoption of the consolidation idea. The application of the principle of consolidation, i. e., bringing children together in larger groups for the purpose of having better and stronger schools, involves setting up graded schools that in most cases include the high school.

By far the larger part of the earlier laws tending toward consolidation provided for unions of districts or schools, so that a central graded school of higher order might be established. Later the central graded school of higher order came to be known as a high school, and unions were formed for the purpose of establishing and maintaining a high school.

Such union high-school laws are still on the statute books of most of the States. They provide for a form of partial consolidation in order to offer secondary instruction. The uniting districts or schools do not lose their own corporate identities. They played an important part in the development of secondary education and the consolidation idea. No great deal of use is now being made of them, except in California. Consolidation is being effected more through direct laws written for that purpose and under that name.

Massachusetts, Connecticut, Michigan, Indiana, New York, and Kansas in the years from 1838 to 1862 each enacted and made use of union school laws. The Wisconsin free high-school law of 1875 permitted unions of towns or districts, as well as single towns or districts, to establish and maintain high schools. It also provided for State aid to high schools, the first special aid given in Wisconsin.

The California law of 1891 gave permission for any two or more adjoining districts to unite by election and form a union high-school district. Each uniting district maintains its own identity and conducts or may conduct its own elementary school. This form of partial consolidation for secondary school purposes is the one that has made most progress in the State. The union high-school law and that for joint union high-school districts—districts lying in two or more counties—has been kept and changed to advantage from time to time.

*The value of union school laws.*—Missouri, Nebraska, Nevada, Iowa, New Jersey, Oregon, Washington, West Virginia, Maine, Delaware, Colorado, and South Dakota are among the other States

that have used laws for union districts\* or union schools as a means of bringing about centralization and providing for secondary education. No separate study of the effect of these laws or of the work done in the schools established under them is here attempted. They have undoubtedly been of great value, but a stronger form of centralization than can be effected by a union of districts that continue to maintain their own boards and their own corporate identities is felt to be necessary, if all the advantages of centralization are to be obtained. Union high schools and unions for elementary school purposes are not commonly reported as consolidations, though they are unquestionably a kind of consolidation.

*The town or township unit in bringing about consolidation.*—The adoption of the town or the township as the unit of local control has had much to do with school consolidation in at least nine of the States. In New England, centralization outside of the cities was not brought about so much by consolidating districts, or by forming unions of them as by abolishing the districts and placing the schools under the control of the towns. One after another the New England States, first by permissive and later by compulsory legislation, did away with the district system, and by so doing decreased the number of school units from 13,214 to 1,616.

Michigan by a series of special enactments, a law which applied to the upper peninsula, another applying to Gladwin County, and Act No. 176 of 1909 applicable to the whole State, gradually changed in the upper peninsula, and is still changing in the lower peninsula, from a district to a township unit of school administration.

New Jersey by the Olcott law of 1895 made each city, borough, and incorporated town a school district and consolidated all of each township outside the incorporations into one township school district. By so doing the number of districts in the State was reduced from 1,408 to 374.

Indiana adopted the township as the unit of local control in 1852 and still retains it.

The school code of Ohio enacted in 1853 made the township the unit of school administration; districts became subdistricts, and a township board of education made up of representatives of the subdistricts was given control of the schools. Under this form of organization centralization began in the State in 1892, was given special legal authorization\* in 1894, general authorization in 1898, was strengthened by the Workman Law and the Boxwell Act of 1900, and has made steady progress as a means of bettering the rural schools of Ohio.

*The township unit but little help in consolidation.*—In other States attempts to make the township the unit of local school control or to

change from the district to the township system were not so successful or had little effect in bringing about consolidation. Iowa, Nebraska, Missouri, North Dakota, South Dakota, and Pennsylvania have either tried to use or are partly or wholly using the township system in administering their schools, but in none of these States has it resulted in a great decrease in the number of small rural schools that are maintained.

Wisconsin adopted a permissive township law in 1869. Little use was made of it and in 1911 it was repealed. In 1894 and 1896 the State superintendent of Minnesota urged that the township be adopted as the unit of control in that State, but without avail. A recent township unit law in New York was so unpopular that it was repealed in a short time.

*The township in secondary education.*—Illinois early adopted and has kept a district system of schools much like the system that was discarded by Massachusetts. For elementary school purposes the township of Illinois has been a decentralizing agency. For secondary schools it has been the means through which the township and community high schools of the State have been developed to such a degree that the necessity for complete consolidation has to some extent been removed or at least not felt so keenly as in some other States.

The township high school of Illinois is in effect a form of partial consolidation for purposes of offering secondary instruction. It is independent of the elementary school districts within the township and has a separate board of education, with power to levy a high-school tax. The history of these schools, the legislation affecting them, their growth, and their purpose have been well told in another bulletin and need not here be reviewed.<sup>1</sup>

*The effect of limiting districts on consolidation.*—One of the great factors in the decentralization of schools has been the extreme ease with which districts could be created, changed, and readjusted and schools established. "A schoolhouse within easy walking distance of every child" was an almost general policy. In the pioneer days, when new areas were being developed for agriculture, a policy of that kind was probably wise. Several attempts to set up highly centralized State systems of schools failed. Most of the early laws for the establishment of districts were couched in very general terms and gave the creating authority power to establish a school under almost any pretext.

The tendency was to create more small schools than was necessary, and as the States became fairly well settled and means of travel and

<sup>1</sup> Hollister, Horace A. *The Township and Community High School Movement in Illinois.* Bu. of Educ. Bul., 1917, No. 35.

communication were bettered, a certain amount of consolidation was brought about by various legal checks on the establishment of districts or schools.

A fairly typical example is here given. In 1871 the following section was added to the law of New Jersey:

*And be it enacted,* That no school districts shall hereafter be formed which shall contain less than 75 children, between 5 and 18 years of age, and that after the passage of this act each incorporated city or town shall constitute but one school district for all school purposes, and that such consolidated district shall hold all the property and be liable for all the lawful debts of the district so consolidated.

Undoubtedly such laws as this did much good, but decreases in the number of small schools have been brought about more by a wider knowledge of the advantages of larger schools than by any legal prohibitions against small ones.

*Early laws typical of present-day consolidation laws.*—The statutes of Maine for 1854 contained three sections almost typical of present consolidation laws. Two or more districts could unite to constitute one district whenever a majority of the legal voters present and voting at a meeting in each district legally called for the purpose should so determine. After the districts had united, the town had no power to alter or divide the united district without the consent of a majority of the voters of the district.

In 1861 a consolidation law was enacted in Delaware. It gave two or more school districts authority to unite for the purpose of establishing a free school for their common benefit. A two-thirds vote in favor of the union was necessary in each district affected, but an adverse vote in any one district did not defeat the union of other districts voting for it. The districts when united became one district, known as "United School District No. — in — County." In making the apportionment of State school money, each district was given the amount it would have received had there been no union, and the sum of those amounts was then placed to the credit of the school committee of the united district. This law, practically unchanged, was in effect until 1915, when it was repealed, and a very detailed law of 26 sections providing for altering districts was enacted in its place.

*Early attempts at transportation.*—In 1869 towns of Massachusetts were given authority to raise and appropriate money to provide for conveying pupils to and from schools. The town of Greenfield united three small schools that year and began conveying pupils. In 1875 the town of Montague closed a number of district schools and conveyed pupils to a central school. Concord began in 1879 to close its district schools, 12 in number, and by constant effort brought about complete consolidation in eight years.

In 1876 the statutes of Vermont gave the prudential committee of any district power to arrange for the instruction of the pupils in an adjoining district or districts and to provide their transportation to and from the school.

In Maine a committee consisting of the municipal officers and the school committee or supervisor was given authority by enactment of 1880 to close the school in any district in which the number of pupils was considered too few and to expend the money in an adjoining district, using not more than half of it for the conveyance of scholars to and from school.

*Summary of consolidation and transportation in 1880.*—By the close of the year 1880 the principle of centralization as applied to urban schools was rather generally accepted and was being adopted throughout the United States. Massachusetts, Maine, Connecticut, Vermont, and New Hampshire were well along in the process of changing from the district to the township system and had established some consolidated schools that were serving rural sections. Indiana had adopted the township as the unit of local school control, and rural school consolidation had begun in the State. Massachusetts, Vermont, and Maine had given legal sanction for the use of public money in transporting children to and from school.

Wisconsin had begun giving State aid to encourage rural graded and high schools. The township high-school movement of Illinois was well under way.

Georgia, Maryland, Louisiana, and Mississippi had made the county the unit of school control and in so doing had paved the way for some consolidation that came later.

All of the country now occupied by the 10 States—North Dakota, South Dakota, Montana, Wyoming, Idaho, Washington, Utah, Arizona, New Mexico, and Oklahoma—was still under Territorial government. Consolidation and centralization of schools, the unions for the establishment of central graded schools and high schools, and transportation of pupils had made good beginnings in some of the older States, but they were only beginnings. The independent small local unit of school control was the usual one. It was disappearing in urban communities but was increasing in rural sections and was extending as rapidly as new areas were being developed and settled.

#### THE PERIOD FROM 1880 TO 1894.

During the 14 years from 1880 to 1894 consolidation went slowly.

*Growth of the town system.*—In New England, Michigan, and the Dakotas some results of the 40 years of opposition to the district system became manifest. Massachusetts, New Hampshire, Vermont, and Maine passed laws abolishing the district as the unit of control.

Rhode Island enacted a permissive law by which any town could dissolve the districts and take over the administration of the schools. An attempt was made in Connecticut to compel the adoption of the town unit, but it failed. The township unit acts of Michigan have already been noted. Under its Territorial law of 1883 part of Dakota had a township organization and part a district organization. At the time of the admission of North Dakota and South Dakota the controversy between the advocates of township control and those of district control was more or less compromised by effecting a kind of dual system in both States.

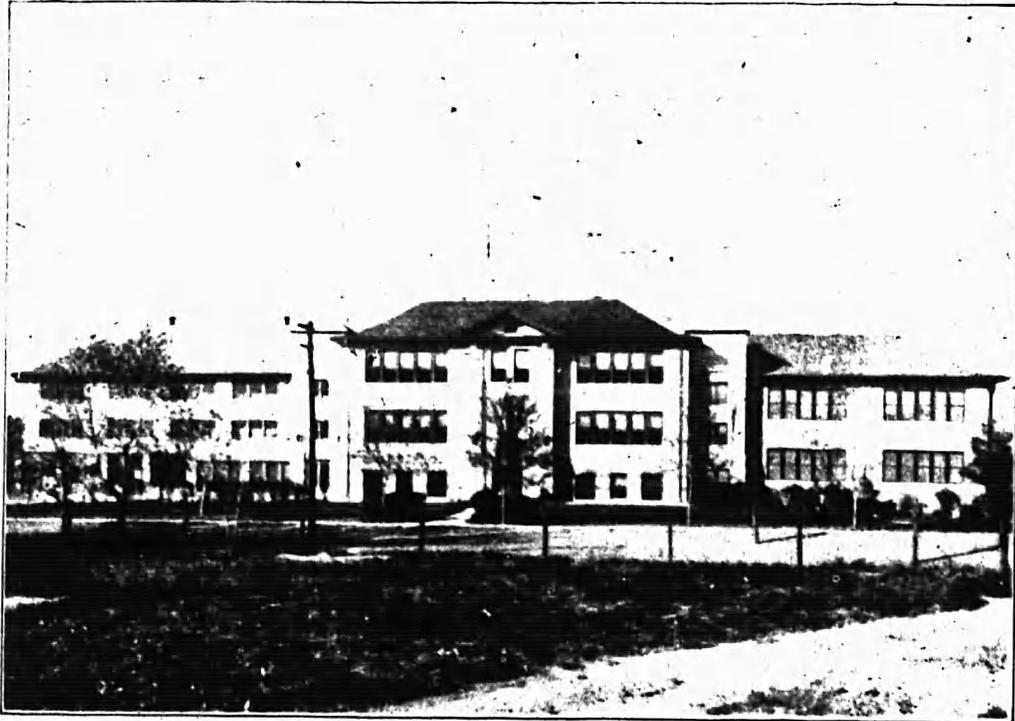
*School laws of new States.*—The six States that entered the Union during this period—North Dakota, South Dakota, Montana, Wyoming, Idaho, and Washington—each established school systems in which the county was divided into districts, in general made each city and incorporated town a single school district, set minimum limitations for the creation or continuance of districts, arranged for high schools, and provided legal ways of uniting districts. They did not, however, enter upon planned programs for the betterment of schools by consolidation.

*Consolidation laws in New Jersey, Nebraska, Florida, and Texas.*—New Jersey, in 1886, and Nebraska, in 1889, enacted laws permitting consolidation of school districts if the districts affected initiated a request for it. The Legislature of Florida in 1889 abolished the districts and gave the county board of public instruction power to locate and maintain schools in the county, a power that included consolidating schools. In 1893, all but 27 counties of Texas changed from an old community system of schools to a district system, and districts were permitted to consolidate.

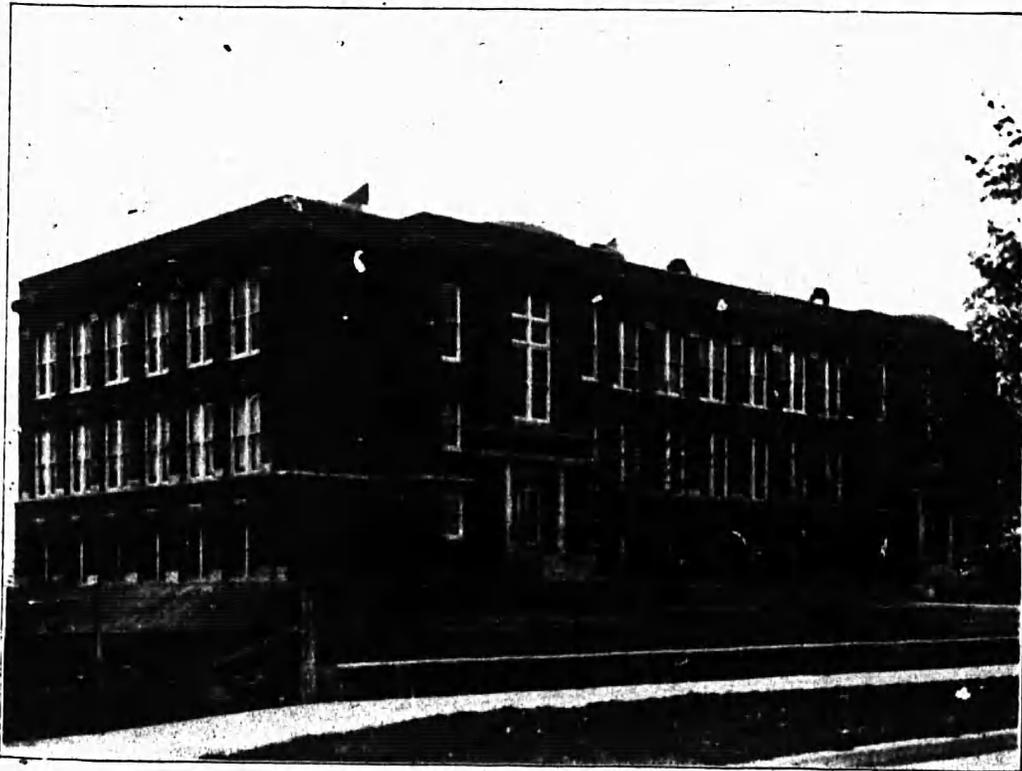
No immediate or extended use of these laws was made in furthering consolidation in any of these four States.

*Central graded schools and unions of districts.*—Laws providing for the establishment of central graded schools or graded common schools—in both cases designed to promote high schools—were enacted or amended in Missouri, Michigan, and North Dakota, and such schools began forming rapidly. District and township graded schools increased steadily in number in Indiana. Central graded schools formed under the statute of 1862 were slowly being established in Kansas. The union high-school law of California was passed in 1891. Extended and immediate use was made of it.

The amount of State aid to high schools given in Wisconsin was increased in order to promote rural high schools, but it failed of its purpose. Minnesota began a policy of encouraging special types of schools and kinds of education with direct State aid in 1882 by giving special appropriations to 38 high schools. The policy has been



A. A consolidated school in Colorado, established by consolidating districts.

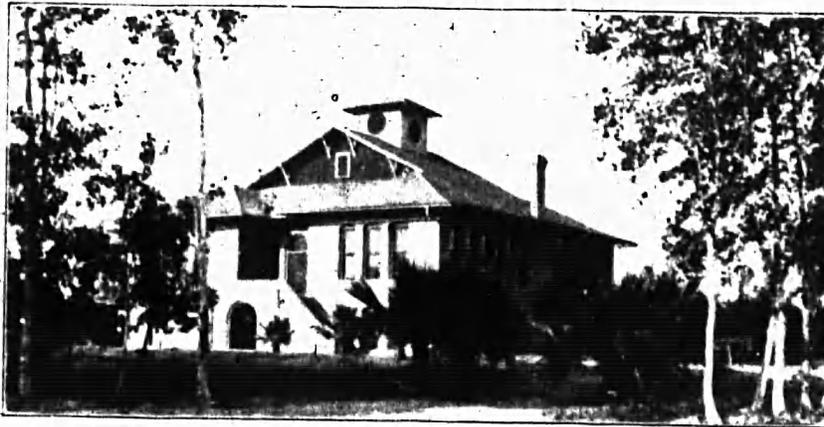


B. A township consolidated grade and high school in Indiana.

TYPES OF LARGE CONSOLIDATED SCHOOLS.



A. San Jon consolidated school, New Mexico.

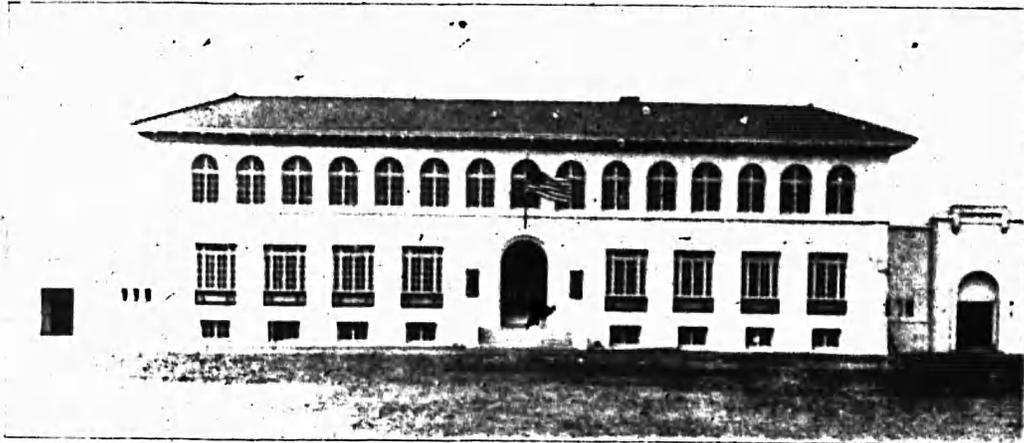


B. Grammar school, Calexico, Calif.



C. Strasburg school, Colorado.

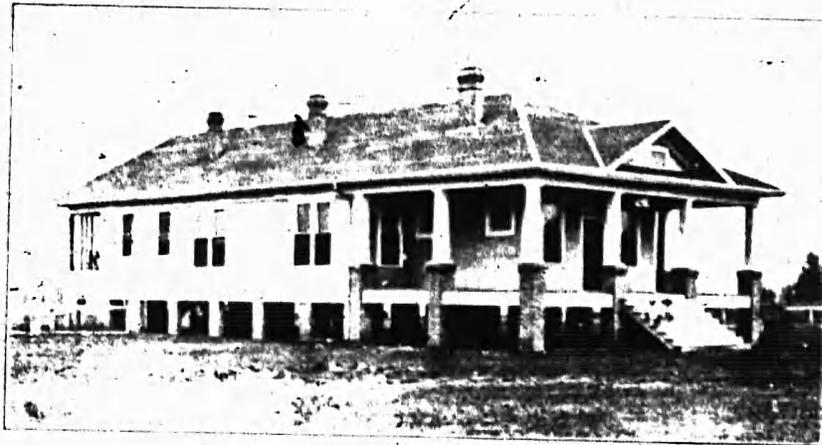
TYPES OF SMALL CONSOLIDATED SCHOOLS.



TYPES OF UNION HIGH SCHOOLS.



I. A private teacher's cottage.



B. A cottage for eight teachers in Louisiana.



C. A teachers' home in Alabama.

TYPES OF PUBLICLY OWNED TEACHERS' HOMES.

continued and extended until in 1920 six different types of schools, numbering 7,289 in all, received special grants to the amount of \$2,933,822.

*Transportation.*—During this period Massachusetts in 1889 and Vermont in 1893 began reporting as separate items the amounts spent for transportation. The general law of New Hampshire in 1885 contained a clause allowing special districts to spend not exceeding 10 per cent of the moneys for public school purposes in conveying pupils living more than a mile and a half from school. In that year transportation without regard to the distance the child lived from the school was made permissible in all towns of the State, and the limit of expenditure was raised to 25 per cent. Transportation to other schools for children of discontinued schools was begun in Connecticut in 1893. Acting under their general authority to provide schools, township trustees in some localities of Indiana began furnishing transportation without specific legal authorization in 1888 or possibly earlier. Transportation in connection with the first rural centralization was begun in Ohio in 1893.

*The Massachusetts report.*—In 1893, in Massachusetts, 135 towns replied to a circular letter of inquiry sent out by Superintendent Eaton, of Concord. One hundred and twenty of those cities and towns reported having closed 250 of 632 outlying schools in the 12 years previous and that they were conveying nearly 2,000 pupils to near-by district or village schools.

This was one of the first, if not the first, of the special official investigations of and reports on consolidation and transportation. Approximately 100 official and semiofficial bulletins on the subject have now been published. They contain much valuable historical and statistical data. Taken together they form a very good small working library on consolidation.<sup>2</sup>

#### THE PERIOD FROM 1894 TO 1910.

About 1894 a much more active interest began to be taken in consolidation and transportation as means of improving schools, especially in rural communities. This interest reached its maximum in the years 1901 and 1903 and continued with but little abatement throughout the period.

*National interest.*—In his report for 1894-95 the United States Commissioner of Education embodied two chapters, one dealing with The Social Unit in the Public School Systems of the United States and the other with The Conveyance of Children to School. Of the first he wrote: "The rapidly growing tendency to modify the

<sup>2</sup> Abel, J. F. An Annotated List of Official Publications on Consolidation of Schools and Transportation of Pupils. U. S. Bu. of Educ., Rural Sch. Leaflet No. 9.

character of the local school community makes of interest a study of the features of the school district as it appears in the several States." The chapter on conveyance was taken up almost wholly with what was then being done in New England. The succeeding four reports of the Commissioner of Education contained information on consolidation and transportation. Both were beginning to be of nation-wide interest.

In 1895 the educational council of the National Education Association appointed a committee of 12 to investigate conditions in rural schools and devise ways and means for their improvement. The report was submitted in 1897. A summary of the recommendations considered by the committee to be of most importance contained the following:

For purposes of organization, maintenance, or supervision nothing should be recognized as the unit smaller than the township or the county; the school district is the most undesirable unit possible.

One of the great hindrances to the improvement of the rural school lies in its isolation and its inability to furnish to the pupil that stimulative influence which comes from contact with others of his own age and advancement. The committee therefore recommends collecting pupils from small schools into larger and paying from the public funds for their transportation, believing that in this way better teachers can be provided, more rational methods of instruction adopted, and at the same time the expense of the schools can be materially lessened.

*Early rural consolidation in the Middle States.*—At about the same time that these reports indicative of a wider national interest were issued a number of advances were made in the movement for consolidation, especially in the Central States. In Ohio and Kansas the first rural consolidations were established and legalized by special enactments. A few years later both States passed general laws on the subject. In Iowa, Illinois, and Nebraska old laws, more or less unused and disregarded, were applied in a new way to rural schools and rural consolidation was begun. State Supts. Henry Sabin, of Iowa, and John R. Kirk, of Missouri, carried on their active campaigns for rural school betterment. Superintendent Kirk's efforts bore fruit in the enactment of several good school laws, among them provision for central high schools and consolidated districts. In Wisconsin, North Dakota, Minnesota, Indiana, and Oklahoma, consolidation laws were enacted or bettered and rural consolidation began making definite advances.

*Early rural consolidation in the Southern States.*—In the later years of this period, especially from 1900 to 1910, consolidation began to develop in the Southern States. The county unit systems of North Carolina and Florida had brought about, by 1902, some decreases in the number of small schools in both States, especially the former.

and in both the State superintendents were urging consolidation. The South Carolina Code of 1896 created county boards of education and gave to them the right to consolidate schools. In the years 1902-1904 Louisiana, Virginia, and Maryland passed laws favoring consolidation, and Tennessee, by taking away from county courts the power to create school districts and requiring that small schools be abolished, closed about 1,000 little schools. In the Texas School Code of 1905 the laws affecting consolidation were strengthened and made wider in scope. When Kentucky changed from the district to the county system in 1908 county boards were given power to consolidate any two or more contiguous subdistricts. The first consolidation law of Mississippi that included transportation was enacted in 1910.

*Early consolidation in the Western States.*—The influences that were bringing about consolidation in the Central and Southern States were also being felt in the Western. During this period from 1894 to 1910 all of the Western States and Territories, with the exceptions of Nevada and Wyoming, took some steps toward furthering consolidation. These States were at that time all organized on the district system, but the school districts were and are yet much larger for the most part than districts in New England and the Middle and Southern States. A western school district often included several townships and possibly large unsurveyed areas of land. The laws generally permitted county boards of commissioners—these are civil not educational boards—to establish or consolidate school districts upon petition from the residents of the areas affected. Consolidation was begun in Montana, Washington, Idaho, California, Oregon, Arizona, New Mexico, and Colorado, in the last-named State as the result of a definite campaign for the improvement of rural schools. Utah took the first steps toward what later became a strongly centralized county system of schools. In Washington and Idaho some large areas that were being rapidly settled organized on the consolidation plan and established central schools with transportation without going through the usual preliminary process of decentralization. Just as the consolidation principle as applied to urban schools had overtaken and supplanted the principle of decentralization, it had now overtaken the decentralization principle as applied to rural schools.

*Early rural consolidation in New York, Pennsylvania, and West Virginia.*—These three States, in some respects similar in physical features, all made more specific their laws on consolidation, and the first of the consolidated schools in the latter two States were established. New York gave school commissioners direct power to consolidate districts and permitted payment for transportation when

one district contracted with another for the education of its children. Centralization was legally defined in Pennsylvania. Transportation was authorized, and the first rural consolidation was effected. The first consolidated school in West Virginia for whites was established in Marion County, and a similar school for negroes in McDowell County.

*Growth of the town system.*—The town or township unit system and consolidation made distinct gains in New Jersey, Michigan, Connecticut, and Rhode Island.

The greatest step in the reduction of units in administration in New Jersey was taken in 1895, in what is known as the Olcott school law. (See page 8.). The main provisions of the Olcott law are still retained. In 1909 a mandatory law was enacted in Connecticut requiring all towns except those which had a city or borough or district organized by special acts of the legislature within their limits to assume and maintain control of all their public schools. On January 1, 1904, the school committee of each town in Rhode Island took control of the schools, and school districts were abandoned in that State, the last of the New England States to give up the district system.

*The extension of school transportation in the period 1894 to 1910.*—In the period from 1894 to 1910 laws were enacted in 25 States providing for the use of public funds for transportation of pupils, and 12 States began reporting the amount spent for transportation as a separate item of school expenditure.

*Transportation in lieu of a local school.*—The duty to provide school facilities has not generally implied the duty to provide transportation to and from school, and school officials have no power to arrange for transportation in the absence of a law permitting or directing it. In this connection it is significant that most of these early transportation laws indicate by their nature something of a trade or exchange. The district, subdistrict, school, or community gave up its little school, often for the sake of economy, and in return received transportation for the children to and from some other school. Usually these laws allowing transportation only in cases of closed schools were followed in a short time by laws permitting it in any schools of the State. New York, Nebraska, Pennsylvania, Wisconsin, Ohio, Rhode Island, Montana, Missouri, and South Dakota all provided for transportation of the children belonging to discontinued schools or schools that voluntarily closed and contracted to send the children to the schools of other districts.

*Transportation as a part of consolidation.*—In other States the first transportation laws were enacted at the same time as the consolidation laws or were a part of them. That of Mississippi has been

noted. North Dakota, California, Minnesota, Washington, Maryland, Oklahoma, Virginia, West Virginia, and Colorado made provision for transportation a part of their consolidation laws.

*Permissive transportation under general terms.*—Transportation of pupils at public expense was specifically legalized in Indiana in 1899, after it had been carried on for 11 years or more. (See page 13.) The list of purposes for which public school funds might be expended, as enumerated in the laws of Texas in 1905, closed with the clause, "other purposes necessary in the conduct of the public schools to be determined by the board of trustees." This clause was held by the State department of education to permit expenditures for transportation. The statutes of Utah that same year gave the county board of education power to do all things needful for the success of the schools. This is interpreted to include furnishing transportation. New Jersey, Iowa, Michigan, and Kansas gave specific authorization for transportation of children, but left the determination of when it should be provided largely in the hands of the local school authorities.

*Summary of consolidation and transportation in 1910.*—By the year 1910 the principle of school consolidation was well established as a sound educational policy for rural as well as urban schools. From New England it had spread over the United States until Alabama, Arkansas, Georgia, Montana, Wyoming, Nevada, and South Dakota were the only States in which little or no effort had been made along the line of establishing consolidated schools for country children.

The urban type of centralized control was being extended too widely, and large numbers of independent or special districts had been created in many of the States, districts that were not strong enough financially to maintain the fine type of school for which their creation was presumably intended.

The tendency to establish small schools and weak districts had lessened to a considerable extent. Laws setting definite minimum limits on the number, size, or resident pupil strength of schools or districts were on the statute books of most of the States.

The town or township as the unit of local school administration was compulsory throughout New England and New Jersey except for special districts, and these were gradually uniting again with the towns from which they had withdrawn. Under optional township unit laws township districts were forming steadily in Michigan, slowly or not at all in Wisconsin. The township unit as a means of furthering consolidation was proving effective in Indiana and Ohio and to some extent in North Dakota, where only five counties retained the district system.

Rather strongly centralized county control of the schools had been brought about in Alabama, Delaware, Florida, Louisiana, Maryland, and North Carolina. In four counties of Georgia the schools were administered under a county-unit plan. County boards of education had been provided for in Tennessee in 1907 and Kentucky in 1908.

In 1905 the Legislature of Utah had given permission for any county in the State having a school population of more than 3,000 to consolidate its schools into a single unit of control, or under certain conditions into two such units. By the close of the year 1910 six counties were operating their schools under that law, and five cities were under a somewhat singular system.

Thirty-four of the States had enacted laws permitting under restrictions that varied widely in the different States the use of public funds in paying for the transportation of children to and from school. Fourteen States were reporting amounts spent for transportation as a separate item of school expenditure. The names of those States and the amounts reported for 1910 are listed below:

Massachusetts	\$310,442	Minnesota	\$63,253
Vermont	92,019	Maryland	5,210
Maine	114,795	New Hampshire	57,903
Connecticut	72,077	North Dakota	104,150
Florida	24,133	Virginia	46,908
New Jersey	145,737	Iowa	25,484
Indiana	155,390	Louisiana	54,000

Only five States were reporting the number of children transported. Connecticut, Massachusetts, New Hampshire, New York, and Vermont were giving State aid in payment of the tuition of nonresident high-school pupils, and by that means were to some extent helping to centralize secondary education. State reimbursement for graded-school tuition had been begun in Delaware in 1899.

North Dakota had begun State aid to high schools as a part of its consolidation policy in 1898. That same year Rhode Island had established its policy of paying an annual bonus to central graded schools. State aid to high schools and to State graded schools for the purpose of promoting both in rural sections was in effect in Wisconsin. Minnesota was giving special aid to high schools. State aid to weak schools in Missouri was so conditioned as to further the creation of larger districts, and the apportionment laws of Washington set a premium on consolidation and the formation of union high schools. In Connecticut and Vermont State aid was being given for transportation.

Consolidation and transportation had become so much a matter of importance that in 1910 a group of educators composed of the State

superintendents of Texas, Georgia, Arkansas, Virginia, Alabama, Florida, Tennessee, North Carolina, Mississippi, and West Virginia; State supervisors from Louisiana, Kentucky, South Carolina, and Virginia; and representatives of the Southern Education Board and the United States Department of Agriculture made a study tour into Indiana, Ohio, Virginia, and Maryland. They visited scores of consolidated schools and inquired carefully into the details of their management and efficiency. Most of these officials after returning to their own States recommended consolidation for their own schools.

#### THE PERIOD FROM 1910 TO 1922.

*Territorial extension of consolidation.*—Territorial extension by States of the principles of school consolidation and transportation of pupils at public expense was completed for continental United States in the decade 1910 to 1920. By 1915, sixty-two years after the first union-school law of New York was enacted, the last seven States to enter upon policies of consolidation had begun it. In 1919, fifty years after transportation was begun in Massachusetts, Delaware, the last of the States to do so, passed a law authorizing transportation and started to put it in practice.

Of the seven States that had done almost no work in rural consolidation by 1910 the most active steps were taken in South Dakota. The first consolidation law of the State was enacted in 1913, avowedly for the purpose of "promoting a better condition in rural schools and to encourage industrial training, including the elements of agriculture, manual training, and home economics." At the same time the transportation laws, not necessarily applying to consolidated schools, were amended and bettered. In the next three years 24 consolidated districts were formed. The Montana school code of 1913 provided for two methods of consolidation.

Mobile County began consolidation in Alabama in 1910. Little was done in the State, however, until after 1915, and even then it made very slow progress until almost the last year of the decade. Arkansas and Georgia enacted consolidation laws in 1911, and the movement to close small rural schools has progressed slowly in those States since that year.

Natural conditions in Nevada and Wyoming delayed the beginnings of consolidation in those two States. In the latter a district boundary board consisting of the county superintendent and the board of county commissioners was created in 1913 and given power to lay off the county into convenient school districts and to alter and change such districts from time to time, when petitioned by a ma-

majority of the legal voters of all the districts affected, both organized and proposed. In the former a detailed law providing for consolidation and transportation of pupils was enacted in 1915.

*Territorial extension of transportation.*—In the 10 years the 13 States that had up to that time given no legal authorization of any kind for transportation passed specific laws for it or laws that could be interpreted as permitting it. In Texas and Louisiana where it had been carried on as a part of the powers of trustees and parish boards, it was given definite legal mention. In Alabama, Arkansas, Georgia, and Nevada transportation was provided for in the consolidation laws noted in the preceding section. North Carolina, Illinois, South Carolina, Idaho, Tennessee, New Mexico, and Delaware gave legal recognition in some way to the principle of using public funds to provide transportation for children to and from school.

*Reports of expenditures for transportation.*—By 1910, fourteen States were reporting amounts spent for transportation as a separate item of school expenditure (see p. 18). In the next decade the following listed States, given in chronological order, recognized transportation as being of enough importance to be reported separately and specifically in amount:

1911—Georgia and Mississippi.

1912—Illinois and Wisconsin.

1913—New York, Pennsylvania, and South Dakota.

1914—Idaho, Kentucky, Michigan, Montana, and South Carolina.

1915—Ohio and Tennessee.

1916—Utah.

1917—Texas.

1918—California, New Mexico, Rhode Island, Wyoming, and Alabama.

1920—Delaware, Nebraska, Nevada, Oklahoma, and Oregon.

*Chronological summary of first consolidation and transportation laws.*—For convenience of reference and as a summary of the territorial extension of consolidation and transportation, two tables are given here. The first one lists in chronological order the first consolidated schools or laws for consolidation in each State, with a brief explanation of the character of the law, and, when known, the location and date of the first school. The second table gives the date of enactment of the first transportation laws in each State. A comparison of the two tables shows that in the earlier history of these movements, transportation lagged from 30 to 40 years behind consolidation, while more recently the two have been legalized simultaneously or transportation has even come first.

*Date of first consolidation laws and schools in the States.*

Date of first consolidation laws or school.	State.	Explanation.	Date and location of first consolidation.
1838.....	Massachusetts.....	A union school law.....	Greenfield, 1869; Montague, 1875.
1839.....	Connecticut.....	do.....	Farmington, 1839.
1843.....	Michigan.....	Union schools created by "forming a single district out of any two or more districts."	Fayette Union School, 1844.
1844.....	Vermont.....	Act No. 55 permitted two or more contiguous districts to form a union district.	
1847.....	Ohio.....	The Akron plan; a special law extended and made more general in 1849.	Akron, 1846.
1853.....	New York.....	A union free school law.....	
1854.....	Maine.....	A typical consolidation law.....	
1856.....	Wisconsin.....	A central high school law.....	
1857.....	New Hampshire.....	A union district law.....	New Castle is reported as having consolidated its schools in 1849.
1861.....	Delaware.....	The united school district law.....	
1873.....	Iowa.....	Independent township district law. The Akron plan was adopted in 1857.	Buffalo Center Township, 1895, Winnebago County.
1873.....	Indiana.....	Township trustees authorized to establish graded schools.	Washington Township, Rush County, 1876.
1885.....	North Carolina.....	County boards of education created with power to divide counties into districts.	
1886.....	New Jersey.....	A consolidation law.....	
1889.....	Florida.....	The district and trustee system abolished and the county unit established.	
1889.....	Nebraska.....	A consolidation law.....	In Holt County, 1893.
1890.....	Washington.....	A union district law in the first State code, reenacted in 1897, and amended in 1901.	Wind River in Skamania County and Sunnyside in Yakima County, 1902.
1893.....	Texas.....	A consolidation law.....	
1896.....	Utah.....	Embodied in the laws enacted by the first State legislature.	
1896.....	South Carolina.....	Giving county boards of education power to divide the counties into school districts.	
1897.....	Kansas.....	A special law for Green Garden Township, followed by a general law in 1901.	Green Garden Township, Ellsworth County, 1896.
1898.....	Rhode Island.....	Provided for three methods of consolidation.	
1899.....	North Dakota.....	A consolidation law.....	Trall, Caledonia County, 1901.
1900.....	Idaho.....	do.....	Joint consolidation at Cataldo; district No. 33 at Jerome.
1901.....	California.....	Provides for the consolidation of elementary school districts. The union high school law was enacted in 1891.	There were 36 union high schools in 1892.
1901.....	Missouri.....	A consolidation law. A central graded school law was passed in 1885.	Ruskin High School at Hickman Mills. High schools at La Monte and Bettis.
1901.....	Minnesota.....	Providing for the formation of an independent district by uniting two or more districts.	
1901.....	Pennsylvania.....	"Centralization" defined.....	North Shenango in Crawford County, 1903.
1902.....	Louisiana.....	Parish boards given power to determine the number and location of schools in the parishes.	Scott, 1902.
1903.....	Virginia.....	A consolidation law.....	
1903.....	Tennessee.....	Took away from county courts the power to create school districts.	
1903.....	Oregon.....	A consolidation law.....	Newburg.
1903.....	Oklahoma.....	State admitted 1907. The first State code provided for consolidation.	Quay, 1903.
1904.....	Maryland.....	Giving county boards authority to consolidate schools.	

## SCHOOL CONSOLIDATION AND TRANSPORTATION.

Date of first consolidation laws and schools in the States—Continued.

Date of first consolidation laws or school.	State.	Explanation.	Date and location of first consolidation.
1905.....	Illinois.....	In 1909, three ways were provided by which districts or parts of districts could unite. The township high school law enacted in 1867 (special for Princeton) made general, 1872.	Seward, in Winnebago County, 1905. Princeton, 1866.
1907.....	Arizona.....	A consolidation law. Union high schools provided for in 1901.	
1907.....	New Mexico.....	A consolidation law.	
1908.....	Kentucky.....	Gave county boards power to consolidate subdistricts.	Mays Lick, 1913.
1908.....	West Virginia.....	A consolidation law.	
1909.....	Colorado.....	Defines and legalizes consolidation.	Seven Pines, in Marion County; Keystone, in McDowell County. Fountain, El Paso County, 1903.
1910.....	Alabama.....	County boards given authority to consolidate schools, 1915.	In Mobile County, 1910.
1910.....	Mississippi.....	A consolidation law including transportation.	
1911.....	Arkansas.....	A consolidation law.	Thirteen small consolidated schools are reported in 1910.
1911.....	Georgia.....	Gave county boards authority to consolidate schools.	
1913.....	Montana.....	Two methods of consolidation provided.	Victor, 1908.
1913.....	South Dakota.....	A consolidation law, and making consolidated districts independent districts.	Seven districts had organized as consolidations by 1914.
1913.....	Wyoming.....	District boundary boards created.	
1913.....	Nevada.....	A consolidation law was enacted in 1915.	Metropolis, in Elko County, 1913.

Date of first transportation laws.

Year.	State.	Year.	State.	Year.	State.
1869.....	Massachusetts.	1899.....	South Dakota.	1911.....	Arkansas.
1876.....	Vermont.	1899.....	Indiana. <sup>1</sup>	1911.....	Georgia.
1890.....	Maine.	1901.....	California.	1911.....	Illinois.
1895.....	New Hampshire.	1901.....	Minnesota.	1911.....	North Carolina.
1899.....	Florida. <sup>2</sup>	1901.....	Washington.	1912.....	Kentucky.
1893.....	Connecticut.	1903.....	Michigan.	1912.....	South Carolina.
1894.....	Ohio.	1903.....	Montana.	1912.....	Arizona.
1895.....	New Jersey.	1903.....	Oregon.	1913.....	Idaho.
1896.....	New York.	1903.....	Virginia.	1913.....	Tennessee.
1897.....	Iowa.	1904.....	Maryland.	1915.....	Nevada.
1897.....	Nebraska.	1905.....	Oklahoma.	1915.....	Alabama. <sup>3</sup>
1897.....	Illinois.	1905.....	Utah. <sup>4</sup>	1915.....	Texas. <sup>4</sup>
1897.....	Wisconsin.	1907.....	Missouri.	1916.....	Louisiana. <sup>5</sup>
1898.....	Rhode Island.	1908.....	West Virginia.	1917.....	New Mexico. <sup>6</sup>
1899.....	Kansas.	1909.....	Colorado.	1919.....	Delaware. <sup>7</sup>
1899.....	North Dakota.	1910.....	Mississippi.	1919.....	Wyoming. <sup>7</sup>

<sup>1</sup> Transportation was carried on in Indiana as early as 1888 under general powers of township trustees.

<sup>2</sup> Assumed under powers of county boards.

<sup>3</sup> Transportation was carried on in Mobile County earlier than 1915.

<sup>4</sup> Transportation was carried on before 1915 under general powers granted boards in 1905.

<sup>5</sup> Dates to 1902 without specific legal authorization.

<sup>6</sup> Assumed in powers of county boards.

<sup>7</sup> Carried on under a broad interpretation of the law.

## EDUCATIONAL DEVELOPMENTS HELPING TO STRENGTHEN CONSOLIDATION.

*The State-wide survey.*—While the movement for consolidation and transportation was reaching out into the last of the States, some other developments in education were helping to strengthen it throughout the Nation. One of these was the state-wide educational

survey. Such surveys for the purpose of determining the condition of the schools and offering constructive policies for their betterment were made in Ohio, Vermont, Washington, and Texas in 1914; Maryland and Wyoming in 1916; Illinois and Colorado in 1917; Arizona and South Dakota in 1918; Alabama, Delaware, and Massachusetts in 1919; Virginia, North Carolina, and Hawaii in 1920; Kentucky and Arkansas in 1921; and New York, Oklahoma, and Indiana in 1922. The reports of the surveys were given wide publicity, were studied with interest by educators and laymen, and were generally accepted as correct statements of facts and unbiased opinions given solely for the good of public education.

Without exception it was pointed out in the surveys that the one-room and one-teacher schools were the most ineffective in the United States. Until the time of the Virginia survey of 1919-20 the surveyors, except those that did the work in Ohio, based their findings in regard to the small schools on close personal observation of the schoolroom teaching, the length of the school term, the training and experience of the teachers, and the kinds of school buildings. In the Ohio, Virginia, North Carolina, Kentucky, Arkansas, New York, Oklahoma, and Indiana surveys the results of instruction were much more carefully determined by using standardized educational tests and measurements. The data obtained by these more accurate, objective methods of evaluation merely confirmed the opinion so commonly expressed. The little schools were found to be the weakest in every respect. This is certainly a most convincing argument for larger schools.

Moreover, in 16 of the 20 States that were surveyed, the surveyors outlined a plan for and recommended—or commended where it was already established in good form—the county as the unit of school administration and consolidation of schools, with transportation of pupils wherever practicable.

In Vermont, Massachusetts, and New York the county is of comparatively little importance in the political organization and can not well be made a unit of school control, but it was definitely indicated that there should be a breaking away from the town system in the former two States and the district system in the latter.

The commission for Massachusetts wrote:

After the abolition of the district system, Massachusetts clung with strange pertinacity to the next stage in the evolution—the township system, in which the town is responsible for the financing and control of the schools. \* \* \*

Nothing can be more dangerous to the well-being of the State than adherence to the old idea of local responsibility for the support of education.

It was suggested for Vermont that, in establishing central rural schools, town lines give way to the requirements of topography. The

committee for New York recommends the community as the unit of local control.

*Extension of the county unit plan.*—Not only was the strong county unit plan generally advocated by educators, but it made distinct gains in law and practice for both administrative and supervisory purposes.

The beneficial results of consolidation were so apparent in Utah that by 1910 the entire State became interested in the movement. In 1911 a law was passed providing for State aid to high schools and permitting the organization of each of the counties not yet consolidated into a high school unit for high-school purposes. This law since its enactment has caused to be distributed an average per capita of \$12 per annum for attendance in high school during at least 20 consecutive weeks. It has provided a remarkable stimulus to the organization of high schools. Furthermore, it helped to swell the growing sentiment favorable to consolidation until early in 1915 the legislature found it possible to enact a law requiring the remaining counties of the State to consolidate their schools. The final result was the organization of 35 consolidated rural school units out of the 29 counties in the State, which, together with the 5 cities already established, constituted a total of 40 consolidated school systems.

The rural school code of Ohio based on the findings of the survey commission created, for purposes of supervision, a county district under the control of a county board of education.

County boards of education to have charge of all school property in the county and control of the schools, except those in 8 incorporated cities and 36 incorporated towns, were provided for in New Mexico in 1917.

A law was enacted in Montana in 1919 providing for a union by election in any county of all third-class districts and parts of first and second class districts not contiguous to the main body of such districts into one "rural school district" for purposes of taxation and bond issues, the rural district to be divided into subdistricts for local management, control, and custody of property. For the purposes to which it is limited, the rural district of Montana is in effect a county-wide plan.

Arkansas began the decade with county superintendents in only eight counties. County boards of education and county superintendents were provided for in all counties of the State in 1919.

An attempt in 1911 in Delaware to place control of the schools in the hands of county boards and county superintendents failed. The entire school code of the State was reenacted in 1919, the governing and administrative school boards and committees of every school district in the State were abolished, and the jurisdiction of the free

public schools given to the county board of education, except for 13 special districts named in the code. The county board was given authority to divide the county into appropriate and convenient school-attendance districts, keep a record of the boundaries, and pay the transportation of children that had not completed the sixth grade to a public elementary school if the school was more than 2 miles distant. The county board was required to consolidate schools when, in its judgment, it was practicable to do so and to provide transportation for children living in excess of 2 miles from the school. Children that had completed the sixth grade might be given free transportation if they lived in excess of 3 miles. It was also provided that the county board should not, without the written approval of the State commissioner of education, maintain a school in which the average daily attendance for the preceding three years had been less than 12 pupils.

In 1920 the Legislature of Kentucky made provision for county boards of education of five members each to be chosen by popular election, the county boards to select the county superintendents and appoint the subdistrict trustees. Subdistricts may be consolidated by the board. Graded districts may consolidate with each other or with subdistricts by election.

The Legislature of Maryland in 1922 rounded out an already strong county system in such a way as to greatly increase the amount and quality of the county supervision and to equalize school taxation among the counties. Provision was made for increased salaries for county superintendents, the salaries to be based on the qualifications and number of teachers in the county, and experience as a superintendent. Additional supervisory assistants were allowed to superintendents.

During the decade the county superintendency of Alabama was changed from a part-time position paid on a percentage basis to a full-time salaried position requiring a professionally trained worker and competent assistants. In general, throughout the United States the county superintendency came to be looked upon as one of the very important administrative and supervisory positions to be well paid and filled by men and women of high qualifications and good experience.

An optional county unit law for Oregon was enacted in 1901. A county unit plan was submitted to referendum vote in Missouri in 1922 and defeated. An attempt to pass a county unit law in Indiana in 1923 failed.

*The growth of high schools.*—In some of the preceding pages attention has been called to the fact that most school consolidation has been effected for the purpose of establishing a central school of

higher order, or a graded school, or, in more recent years, of providing high-school facilities where they could not be had without consolidation. In 1890 there were 2,526 public high schools, enrolling 202,963 students; in 1920 there were 14,326, enrolling 2,857,155 students. In 30 years 11,800 new high schools were opened, more than one for each calendar day, and the per cent of total population enrolled in high schools grew from 0.32 in 1890 to 1.76 in 1920. A large part of this growth has been in small towns, villages, and rural communities, partly because several influences have been at work acquainting rural people with the high school and making them feel it to be an integral part of their school system as much to be desired and as much due their children as the elementary school. Among these influences is the growing tendency to bring about a closer correlation between the work of the elementary grades and the high school. The gap between the two has been greatly lessened by such things as departmental teaching in the grades, the 6-3-3 plan of organization, and readjustment of courses. Through this closer correlation communities have been led naturally and easily to provide secondary education. Another influence has been the growing tendency to look upon the high school not so much as a school preparatory to college but as a thing valuable in itself, without regard to later education. The broadening of the high-school curriculum with commercial courses, normal courses, courses in agriculture, domestic science, manual training, and other sciences, together with the establishment of the elective principle in secondary education, and the growing willingness of colleges and universities to accept any well-taught and creditably completed high-school course toward college entrance have done much to popularize the high school and bring rural folk to the point of making unusual effort to secure high-school advantages for their children. Where this seemed impossible of attainment without consolidation, consolidation has often been effected. Just as the little school was an integral part of the daily life, thought, and experience of the average rural American citizen, the high school is now coming to be a commonplace of his daily life, and he will probably give to it the same loyalty and cling to it with the same tenacity that he does to the little red schoolhouse. Thinking in terms of the higher school brings about the organization necessary to provide that school.

*Increases in State aid.*—A tendency to equalize the burden of support for education by making the larger unit responsible manifested itself in several ways, among them in the greater number of States that gave direct aid to some types of schools, the larger amounts given; and closer supervision of the schools that received aid. Aid for consolidation was increased, and for the most part, where given,

helped much in bringing about the establishment of consolidated schools.

*Notable examples of State-aid policy.*—Among the better-known policies of direct State aid were those established in the Holmberg Act of Minnesota and the code of North Dakota, in 1911, the rural graded school act of South Carolina in 1912, the Buford-Colley Act of Missouri in 1913, and the Barrett-Rogers Act of Georgia in 1919.

The Holmberg Act made consolidation much easier in Minnesota, in that only 25 per cent, instead of a majority of the resident freeholders, are required as signers of the petition asking for the election; and the consolidation may be effected by a majority vote at one central meeting of all the territory involved, not a majority in each district. It gave the State superintendent authority to set standards for the buildings and equipment, to establish regulations for transportation, and select by indorsement the principals of consolidated schools. Moreover, a district with the required area of 12 sections, whether the result of a union or not, might qualify for aid as a consolidated school. Generous State aid was provided.

In a little over a year after the passage of the act 60 communities organized under its terms; 30 of them met the requirements for aid in the year 1911-12.

The report for 1916 states that 210 districts had been formed in the six years previous, 108 of them in the biennium 1915-16.

Acting on the report of a commission appointed in 1909 to revise and recodify the school laws, the Legislature of North Dakota in 1911 reenacted the entire school code and embodied a general policy for the improvement of rural schools and their standardization. As a part of this policy, the movement for consolidation was given definite force and direction. The position of State inspector of consolidated, graded, and rural schools was established and appropriations were made amounting to \$6,000 for State graded, \$6,000 for State rural, and \$3,000 for State consolidated schools, with the proviso that only one school of each class in any township could receive aid. Not more than five schools in the State were to receive aid to the amount of \$2,500 each for the establishment of an industrial department. The State superintendent reported in 1912 that a total of 170 consolidated, graded, and rural schools had qualified for State aid. He recommended increased appropriations for State aid, laid special emphasis on the value of consolidation, and asked the removal of the restriction that only one school in a township be given aid.

The State inspector for the year 1912 outlined the legal methods then in existence by which consolidation could be effected. They were: Consolidating schools within districts; consolidating separate districts; forming a partnership of two or more districts in order

to maintain a central high school or graded school; forming an association of schools to extend the teaching of agriculture, home economics, and manual training to rural schools; and closing small schools and transporting the pupils to more distant schools. Under the policy of State aid and inspection, the number of consolidated schools grew from 114 in 1911 to 515 in 1922.

The rural graded school act of South Carolina first carried a total amount of \$15,000 of State aid. The amounts were increased by each succeeding legislature, the law amended in 1917 to include larger rural schools, and the appropriation for 1920 brought to \$275,000. In 1920 there were 935 rural graded schools, with an average enrollment of 103 each.

The Buford-Colley Act is strong in that the vote may be taken any time, and a majority of the voters in the entire area of the proposed consolidation determine its success. The district must have an area of at least 12 square miles and a school enumeration of 200 or more. It may by vote provide transportation. The State gives aid in building to an amount not to exceed \$2,000 if the school site is 5 acres or more, and the building is well heated, well lighted, and contains a large assembly room. Yearly aid to maintain the school may be given to a maximum of \$800. Consolidated schools formed much more rapidly in Missouri after the act was passed. They grew in number from 83 in 1915, with a combined grade and high-school enrollment of 14,259, to 168 in 1920, with an enrollment of 28,368.

The Barrett-Rogers Act of Georgia set aside \$100,000 annually, beginning with the year 1920, to aid in the establishment and maintenance of consolidated schools in every county of the State. In the following year 63 county high schools and 74 consolidated rural schools qualified for aid under its terms.

*State aid in erecting buildings as a part of consolidation policy.*— In Oklahoma, Alabama, North Carolina, Wisconsin, and Tennessee, State aid for buildings, either as a part of consolidation laws or intended to further consolidation, was begun or increased. In 1910 reports from 11 counties of Oklahoma show 25 consolidated schools and one union graded school. The consolidated districts then formed ranged in size from 12 to 40 sections and in assessed valuation from \$42,825 to \$644,807. One of these was a consolidated district for negroes. It contained 20 sections of land, with a taxable valuation of \$42,825, had a tax levy of 12½ mills, a scholastic census of 273, and maintained two district schools.

The legislature of 1911 provided State aid for one-half the cost of erecting buildings in union graded or consolidated school districts. The aid was conditioned on area of district, length of term, and actual attendance, but was in no case to exceed \$2,500. The fund

was to come from rentals and sales of sections 33 and certain indemnity lands in Greer County.

In January 1, 1913, twenty-four schools had qualified for aid but the attorney general rendered an opinion that the appropriation was not a valid one and payment was withheld. The legislature of that year appropriated \$100,000 for aid to consolidated schools and set aside land estimated to be worth approximately \$2,000,000, all to be used for aid to consolidated schools. A year later 61 schools had qualified for aid and received \$92,204. No appropriation was made in 1915 for this purpose. Five more schools received \$6,187.50 from the amount set apart in 1913.

The lack of State aid for the years 1915 and 1916 definitely retarded the consolidation movement, and during the biennium 1914 to 1916 five consolidations were disorganized. In 1917 State aid for consolidated and union graded schools was again appropriated and has since been continued.

The rural school building fund act of Alabama was so amended in 1917 that the amount available was more than doubled, and the distribution so fixed as to favor larger buildings and grounds.

The Legislature of North Carolina in 1921 in order to help enlarge or rebuild altogether the entire school plants in a large majority of the counties directed the State treasurer to issue State bonds for the purpose of borrowing not to exceed five million dollars. The money obtained from the sale of the bonds is set apart as a special building fund to be loaned to county boards of education for building, equipping, and repairing public-school buildings, dormitories, and teacher-ages, and for purchasing suitable school sites. None of the loan may be used for any building of less than five rooms. It must be repaid with interest in 20 equal annual installments. It is of great help in furthering consolidation.

In Tennessee, in 1919, of the general education fund 5 per cent was set apart to encourage supervision in the schools and to pay one-fourth the cost of a school building and one school wagon, the amount given as one-fourth not to exceed \$1,000, conditioned on a county tax levy of 40 cents, with \$2 for each poll, a school site of 5 acres, and a building erected by plans approved at the State department. In 1921, out of the State school fund, \$570,000 was appropriated as an equalization fund; \$100,000 for encouraging and aiding consolidated schools and supervision of teaching; and \$95,000 to assist the counties in paying the salaries of county superintendents.

The first direct consolidation law of Wisconsin was enacted in 1913. It provided that consolidation of any two or more contiguous districts or subdistricts could be brought about by a majority vote of the electors in each of the districts affected. The resulting dis-

district is known as, "Consolidated Rural School District No. ———." The districts or subdistricts from which it is formed lose their corporate existence. The school may qualify for aid as a graded school, and, if it maintains a high school, for the aid given to high schools. The amount of the State apportionment received by the consolidated school is not less than the amount that would have been received by the separate districts forming the consolidation. If the district furnished transportation, it could be reimbursed. In addition State aid to defray one-half the cost of erecting and equipping a building was provided for in gradually increasing amounts from not more than \$500 for a school of one department to \$5,000 for a graded school and high school formed by uniting all the districts and subdistricts of a township.

The legislature of 1917 embodied most of the transportation laws of the State in one chapter. It was made obligatory on the part of school boards of consolidated districts to furnish transportation to all pupils residing more than 2 miles from the schoolhouses. Districts that discontinue their schools must pay the tuition of the children in other schools and furnish transportation to those residing more than 1 mile from the school they are to attend. In other cases furnishing transportation is permissive. The State reimburses the district in amounts depending on the mileage per day per pupil. Board and room may be furnished in lieu of transportation.

In the same year the law relating to the formation of school districts and to changing their boundaries was changed and reenacted. Town, village, and city boards were given power to alter school district boundaries, and to create, consolidate, or dissolve school districts. The maximum of aid for erecting buildings in the smaller consolidated schools was raised from \$500 to \$1,000. If a district maintaining more than one school unite any two or more of them, the resulting school may receive State aid as a consolidation. If all the schools within the district are united, the district is termed consolidated just as it would be if it were the resultant of a union of two or more districts.

*Aid as a bonus for closed schools.*—The laws of Pennsylvania and Maine were changed so that a premium would be set on consolidation. In 1911 the State Legislature of Pennsylvania passed a very brief consolidation act making it the duty of school directors to abandon ungraded schools and establish graded, if in so doing no pupil of an abandoned school would be required to walk more than  $1\frac{1}{2}$  miles to the graded school. A special study made in 1918 indicates that 592 one-room schools had been permanently closed by 1914 and 268 vans were transporting 4,420 pupils to consolidated or joint schools. By 1918 it was reported that 698 one-room schools were closed and

6,251 pupils were being transported. The same study gives incomplete figures of 9,988 one-room schools and 1,345 two-room schools for the State. Five hundred and fifty-seven townships are reported as being of such a nature that complete consolidation of the schools in each one would be feasible. A year later the present consolidation law was passed, \$350,000 set apart to encourage the movement, and a definite policy for furthering it begun by the State department. The State pays annually to the district \$200 for each school closed by consolidation, and will reimburse the district in one-half the amount expended for transportation, not including purchase and repair of vehicles, during the previous year.

By the law of 1909 the consolidated district of Washington is credited, for purposes of apportionment, with the total aggregate days' attendance and, in addition, 2,000 days' attendance for each of the total number of districts less one so consolidated.

Until 1911 the allowance of 2,000 days' attendance amounted to about \$170 annually for each district less one that joined in the consolidation. For a number of years succeeding it was approximately \$300. After the enactment of 1920 providing that the State fund equal \$20 for each child of school age the amount increased to nearly \$600. This bonus has been and is one of the strong factors in furthering consolidation in the State.

In Maine in 1921 it was provided that if a school was closed or suspended, and the pupils conveyed to another school, there may be apportioned to the town the same amount as though the teaching position had been maintained, and such apportionment may continue to the extent of one-half the cost of conveyance as long as the school remains closed.

*Direct aid for consolidation*—In Iowa, Nebraska, South Dakota, West Virginia, Delaware, Tennessee, and Texas, direct aid to consolidated schools was begun.

The General Assembly of Iowa in 1913 authorized State aid in amounts ranging from \$450 to \$1,250 annually for consolidated schools of two or more rooms and giving courses in agriculture, home economics, and other industrial subjects. In the four years following, 226 consolidations were formed.

In 1915 the first consolidation law of Nebraska as such was enacted. The consolidation depended on a majority vote in each of the districts affected. The districts that voted favorably could consolidate, those that voted against it kept out of the consolidation. Transportation was required for all children residing more than 2 miles from the schoolhouse. State aid of from \$100 to \$250 for equipment and \$150 to \$300 annually for maintenance was provided under conditions relating to the size of the school, the courses

offered, the kind of teachers employed, and the transportation furnished. Up to the time of this law, 19 consolidations had been effected. In the two years following it 31 were added to the list.

In 1918 the State superintendent of South Dakota recommended State aid for consolidated schools, and a year later the legislature appropriated \$185,000 for the years 1920 and 1921, to be used for aid to State rural schools and State consolidated schools. A State rural school which meets certain requirements as to length of term, building, playground, and teacher, is given \$150 a year; a first-class consolidated school, \$400; a second-class consolidated school, \$250; a consolidated high school, \$600; and for the erection of a teacher's home, \$500. In 1920, 97 rural schools, 24 second-class consolidated, 7 first-class consolidated, 1 high school, and 9 teachers' cottages were aided, to the amount of \$28,325.

The West Virginia Legislature of 1915 amended the school law so that a county board must close a school that for two successive months had an average attendance of less than 10, and might consolidate subdistricts with the consent of a majority of the voters in the districts. The code of 1919 made consolidation much easier by giving the district board authority to close any schools that may be unnecessary, to consolidate two or more small schools into central graded schools known as consolidated schools, and to provide for transportation of pupils to and from consolidated schools or other schools at public expense. It authorized also the establishment of junior high schools. In 1921 State aid to consolidated schools was begun.

The Delaware law of 1915 that permitted the alteration of school district boundaries also granted aid in an amount not to exceed \$1,000 a year to any altered district that was trying to establish a four-year high school.

Texas began a policy of making lump sum appropriations to aid rural schools in 1915, the first amount being \$500,000. The policy has been continued, and the amounts increased. To some extent this aid has been used in furthering consolidation.

*National cooperation in education.*—The broad development of the national system of cooperative extension work in agriculture and home economics under the Smith-Lever Act of 1914, and the extension of vocational education both with and without the cooperation afforded by the Smith-Hughes Act of 1917, have undoubtedly helped very much in furthering the consolidation movement. The extension work in agriculture has fostered a community spirit among rural folk and given them a knowledge of the value of more varied school curricula, things that are necessary in the

advancement of consolidation. In 1914 there were approximately 900 counties with agricultural agents, and 275 with home demonstration agents. The contributions to the extension work from county sources was \$780,000. In 1920 there were 2,000 agricultural agents, 800 home demonstration agents, 300 county leaders of club work, and county contributions of \$4,780,000.

In general, vocational education calls for a school of more than one teacher because of the specially-trained teacher required, the special kind of equipment needed, and the additional time taken up by the courses. In order to carry on such work in cooperation with the Federal board, schools must be fairly strong and be able to do it effectively. Nearly all of the cooperative vocational work in agriculture is being done in rural high schools, many of them consolidated schools. The need for having a school that can do vocational work effectively and the stimulus provided by State and national aid for such work have turned the thought of rural people toward the centralized school as the type best suited to keep them in contact with the larger agencies that are furthering education.

The State board for vocational education of Mississippi expresses its attitude toward consolidated schools as follows:<sup>3</sup>

In the future it will be a policy of the State vocational board to give preference in general to consolidated schools over other types of high schools in the matter of establishing departments of vocational agriculture. There is good and sufficient reason to justify such a policy. At present there are within the State 700 consolidated schools, and 200 of these own a teacher's home. The number of consolidated schools is being greatly increased each year. For the most part these schools are located in rural farming communities where exists a genuine need for such a department, and they represent the best type of school for successful work in vocational agriculture. The consolidated school district usually represents a single community, and with all its pupils from farm homes coming to school daily, this type of school offers distinct advantages for vocational agriculture over any type of town or boarding school with a larger territory and with wholly different conditions. The teacher's home at such schools adds to the happiness, contentment, and permanency of the teacher, who is employed for 12 months in the year. This feature, together with the reasonably good salary the school is able to offer through receiving State and Federal aid from the State vocational board, makes it possible to secure for teacher the more mature and experienced college-trained man who is capable of serving as school and community leader in its broad sense. No other school offers greater opportunity for real leadership and service than does the consolidated school. In short, by giving preference in establishing departments of vocational agriculture to consolidated schools, it is believed that the State board is discharging its duty of expending State and Federal funds wisely and economically, and that there will be done "the greatest good to the greatest number."

<sup>3</sup> Establishing Departments of Vocational Agriculture in Consolidated Schools. Bul. No. 28, Miss. State Bd. for Voca. Ed., Jackson, Miss., pp. 3-4.

*Growth of teacher-training.*—Increases in the number of teacher-training institutions and a better realization of the professional character of teaching have helped consolidation. The supply of well-trained teachers is always inadequate. The better ones go to the larger schools, where they feel they can accomplish more and the wages will be more commensurate with their skill. Some rural communities have known this and have built the consolidated school that they may be in position to employ the higher type of service. A number of colleges and normal schools are offering courses in school consolidation and transportation, courses designed to meet the growing demand for administrators and teachers trained to work in consolidated schools. As this phase of teacher-training develops, the consolidated school will be a more successful institution and will make its way more readily.

*State divisions of rural education.*—Large cities have set up their independent school systems and the State departments of education, relieved to a great degree of the burden of urban education, have turned their attention to the rural schools. A majority of the State departments have established divisions of rural schools in recent years. This has given recognition to rural education as a problem in many ways distinctive, has focused attention upon it, and led to more careful investigation of it. The divisions of rural schools have been giving consolidation a large measure of attention, generally favorable, and in some instances as leaders in campaigns for it.

#### THE RELATION OF ECONOMIC FORCES TO CONSOLIDATION.

Economic forces have had much to do with starting and increasing consolidation. The growth of the great manufacturing centers in New England and the depopulation of the rural sections brought very large numbers of children together in the cities and more or less forced the setting-up of organized, centralized school plants, the graded school, and the widened curriculum. At the same time the depleted country schools were compelled to unite or go out of existence. Without exception consolidation has made rapid progress in those States where the percentage of the population that is urban is increasing rapidly and the percentage of rural population is decreasing. As industrial centers have grown, the rural sections surrounding them have, by virtue of the closer contact, seen and appreciated the better principles of education and applied them to their own schools.

The economic principle of organized effort has carried over into education fairly easily in the cities; much more slowly in the country. The rural United States has had no wide experience in effective business organization to apply to its schools. Where conditions have

forced rural organizations for production, protection, or marketing, some form of centralized school has developed at the same time or followed shortly after. Given the need or the desire for community solidarity, the consolidated school develops, being strengthened by and in turn strengthening the feeling which brought the school about.

The automobile and the good-roads programs, National and State, have hastened consolidation. In 1914 there were 1,711,000 motor vehicles registered in the United States; 6,147,000 in 1917; 9,232,000 in 1920; and 12,238,375 in 1922. The estimated expenditure for roads in 1910 was \$120,000,000, and in 1921, \$767,000,000. When the area served by any one school had to be measured in terms of the walking strength of children, 3 miles in all directions from the schoolhouse was about the maximum limit. If horse-drawn vehicles were used, the limit could be extended to 6 or 7 miles. Under similar conditions with the same or less expenditure of time and strength on the part of the children, an auto bus can convey pupils from 15 to 20 miles. As a time-limit proposition, the automobile has multiplied by from 36 to 64 the possible area that may be served by one school. The better the roads over which the auto busses must travel, the greater the area that may be served. Good roads make possible and often have a considerable effect in bringing about consolidation. An established consolidated school may serve to call attention to bad roads and lead in a movement for their betterment. Ease of communication makes for education, and education makes for ease of communication.

#### CHARACTERISTICS OF THE HISTORY OF CONSOLIDATION.

Consolidation has grown out of the soil. Education in the United States began as a matter of local responsibility. Each locality clung to the right to administer its own schools, and most of them still cling to it. While the tendency is to recognize in administration, supervision, and financial support the responsibility and authority of the larger political unit, that recognition has come slowly and only so fast as its advantages are more widely known and appreciated.

Laws for changes from district or ward to municipal control, those for changes from district to town, township, or county control, in nearly all cases began as special enactments for certain sections, and when shown to be successful in practice were made permissive for an entire State and later mandatory. The progressive steps have extended over periods of some years, and final change has often been preceded by several unsuccessful attempts. Attempts to force the giving up of local control have met with failure. Sudden and extensive readjustments have usually resulted in severe reactions.

Campaigns for consolidation have been educative and directive in character, and wherever they have been persistently carried on for a considerable period of time have accomplished much. Even without such campaigns a large number of consolidated schools have been formed.

Begun voluntarily in New England by people who were convinced that it was advantageous, rural school consolidation has spread over the United States largely by its own strength. As only one of several ways of decreasing the vast number of small administrative units, it has been made use of more and more each succeeding year in district, township, and county systems of schools. Laws on the subject are still almost entirely permissive. They are mandatory only in so far as they limit the number of schools or districts that may be established and as they require the closing of small schools. A rural section may determine for itself whether or not its schools are to be united.

From its inception consolidation has been and is now mainly a movement to establish larger, better schools within the greater county or State system, and its effect is generally to strengthen and centralize that system as well as to better conditions in the immediate local area. This is in direct contradistinction to many of the special, independent, special tax, municipal, and other districts that are formed for the purpose of having better schools, but in trying to bring that about, break away more or less from the higher authority, in a very definite sense decentralize the greater unit, and often stand in the way of progress for the greater number of schools. Consolidation, especially when well planned in advance for an entire county or a large area, aims for improvement that will be general and fairly equal.

The principle of consolidation has gone from State to State by force of example. In its application to urban schools it overtook and displaced the ungraded school principle before a considerable number of the States had established their systems and built their larger cities. Though moving out more slowly into rural areas, it nevertheless had strength enough to prevent in some sections the decentralization of education characteristic of early settlement in the United States.

Consolidation has made good advances under every type of educational administration that has been used in the Nation. In the district, subdistrict, town, township, county, and State systems alike, wherever there has been the will to improve schools by consolidation, the movement has gone forward. Undoubtedly, the strong county unit system is one of the most favorable to its growth, but all the complications of the strongest district systems have not served to arrest it.

Consolidation and transportation have been and are closely connected with movements for gradation of schools, wider opportunities for secondary education, more diversified curricula, better trained teachers, careful supervision, more adequate school plants, more healthful conditions for school children, an equitable distribution of the burdens of school taxation, and the establishment of larger units of administration. Along with these, consolidation and transportation have been accepted as correct educational policies and have progressed with equal or nearly equal rapidity.

AN EVALUATION OF THE CONSOLIDATION AND TRANSPORTATION MOVEMENT.

From what has just been given of the history of its growth, some determination may be made of the value of the consolidation movement. It has progressed slowly, often under adverse conditions and in spite of bitter opposition. A policy that was not inherently strong could not have continued its existence as consolidation has. It has gained steadily and has uniformly held nearly all of the ground gained. It has now a record of 80 years of achievement to its credit. It is in no sense an educational fad or experiment. It has been responsive alike to economic and to educational changes, and has taken its place among the strong school policies of the United States.

Consolidation of schools and transportation of pupils are instruments wholly, means with which to attain the purposes of education. It is to be hoped that consolidation as a special term may be lost to the educational language because the purpose for which it is given special meaning will have been accomplished, that in so far as it is possible to decrease the number of administrative school units and thereby better the schools, the work will have been completed, the instrument no longer useful. In many of the older cities this has already come about. The consolidations effected in building the systems are almost entirely forgotten. No one thinks of the schools as consolidated.

Some errors have been made in connection with consolidation of schools because it has been looked upon as an end rather than a way of establishing media through which other educational activities may more readily function. In some respects it has been a matter for regret that the name of a process is applied to the result of the process. Occasionally it has led school patrons to expect too much of the consolidated school. At times it has also led to lack of recognition for equally good results when accomplished through other processes.

The advantages of the consolidated school over the one-room or one-teacher school as an instrument for rural education have been

set forth by many writers and speakers on the subject. A list of all the claims made would be very long. Too often it has been assumed that those advantages followed as a matter of fact after schools were united, that the mere uniting was per se enough to bring them about. As a process, consolidation makes certain desirable things easier of attainment. Whether or not they are attained depends upon how the school is managed.

In the matter of school finances these are some of the things that should be taken into consideration:

1. Consolidation serves to concentrate the school revenues of a given area at one or a few points. That concentration is in accord with sound business principles. The investment in the large, well-placed building, substantial and permanent, has fewer risks than investments in small isolated buildings scattered here and there. The one-room school is a disappearing institution. It is not a thing into which large amounts of public money for construction should be placed.

The investment in the larger building having been made, the property is more easily kept from deterioration, may be better safeguarded by insurance, suffers less from depreciation, and is much more apt to be so located that it is salable, if the necessity for a sale ever arises.

Consolidation offers simpler, less complicated, and more accurate ways of keeping account of school funds, determining how they are spent, the values obtained in return, the points of waste, and the effectiveness of the expenditures. So long as school moneys are spent by many small boards and accounting is done in a haphazard way by people untrained to do it, there will be little possibility of getting the accurate data necessary to correlate the use of the school dollar with the result obtained:

2. Consolidation helps to distribute the burden of school taxation more equitably over the larger area. Throughout the history of education in the United States numberless instances have been cited by writers and speakers of the fact that the distribution of taxable wealth and the distribution of children to be educated are not uniform. Where the one is the other may not be, often is not. Schools with large enrollments frequently have but little taxable wealth to support them, while other schools backed by great wealth have but few children to educate. The only solution is to unite weak areas with strong in such a way as to apply the proceeds of the wealth at the place where the children to be educated are.

3. Consolidation offers the possibility of arranging better units for the apportionment of school funds. School moneys should be distributed according to needs, in such a way as to stimulate effort,

and to set a premium on proper use. The larger schools more frequently than the small ones know their needs in a business-like way, and have carefully prepared budgets. The community effort necessary to effect consolidation directs more attention to school funds and brings about a better understanding of the essentials of school fund distribution. There is less apt to be detailed inelastic laws for distribution that allow no latitude to meet changing conditions.

4. State and Federal aid for education can better be focused through the media of the larger schools. Much of such aid is given for special purposes. The small school can not meet the requirements necessary for receiving it. A community that has united its small schools may build an institution strong enough to deal with the broader agencies that are furthering education.

5. In some cases it costs less to maintain the consolidated school than the one-room schools that were united to form it. In very small schools, those having fewer than 15 to 20 pupils, the instructional costs per attendance child are very high. Four or five schools may be united, the number of teachers reduced, and the cost lessened. Occasionally it is cheaper to transport the children of a small school than to employ a teacher for them. The advocates of consolidation, however, do not in general claim or desire lessened expenditure for education. Effective consolidation is usually accompanied or followed by a better building, better teachers, longer terms, wider curricula, and other things that make the actual amount of money spent much greater than that in the small schools. It is believed and fairly well proved that the advantages gained by consolidation are far more than commensurate with the increased expenditure.

In matters of organization, administration, and supervision the better class of consolidated schools have all the advantages of the larger schools. In organization there is the division into grades, with the larger classes, better gradation of pupils, teachers devoting their time to one or two grades or special subjects, the possibility of more thorough work, of offering more subjects, and of providing for secondary education. There may be less duplication of effort and of apparatus. There is better opportunity for measurement and comparison with other schools and systems.

In administering consolidated schools there is greater concentration of effort, fewer lay boards with which to deal, and the need for employing professional administrators and teachers is bringing about such employment. Longer school terms are made possible and better equipment may be provided.

From the point of view of the supervisor the central school is better in that there is time saved in reaching the schools and in

meeting teachers, as well as the better trained teachers with which to work.

From the community and social viewpoint the consolidated school may offer better opportunities for both children and grown folk. To the child there are undoubted advantages in the stimulus of the greater group, the wider play activities, and the extended circle of acquaintance. He is more apt to attend regularly and to stay in school for a greater number of years. For the adults of the community a good consolidated school may rouse public interest, provide a social and intellectual center, create a wholesome pride, and overcome many of the petty jealousies that are harmful in the small school.

When properly managed the consolidated school is an effective instrument for extending better educational advantages over ever-increasing areas and to greater numbers of children.

## Chapter II.

### THE PRESENT STATUS OF CONSOLIDATION.

#### FORMS OF CONSOLIDATION.

In the long effort to better the rural schools by concentrating the school work in fewer places, centralizing the control, and distributing the tax responsibility more equitably over larger units, several kinds of consolidated schools have developed.

*The typical complete consolidation.*—In its best form the consolidated school has now come to be a school located at or near the center of a natural community, the resultant of a combination of a number of smaller schools each of which has given up its identity as an administrative school unit, maintaining full-grade and high-school courses, organized on the 7-4, 8-4, or 6-3-3 plan, offering a diversified curriculum, housed in a modern plant equipped for giving effectively the courses offered, transporting to and from school by safe and sanitary methods the pupils that live too far from the school building to walk, and functioning as a center for community activities. This is sometimes known as a complete consolidation and is the type generally advocated wherever there are enough children and taxable wealth to make it possible.

It is a complete consolidation, *by grades*, for all the grades requisite in the elementary and secondary school are maintained. The county unit of administration for all rural schools within the county has its greatest strength in that under the county organization the rural children may be trained in a few such completely consolidated schools.

*The consolidation not a result of a uniting.*—In some of the areas under process of settlement in recent years this fine type of school has been developed without going through the usual preliminary stage of decentralization. Central schools with transportation were maintained from the time the first school was necessary in the area. This has been especially true of some sections of Idaho, Washington, Wisconsin, Minnesota, and Oklahoma. The trend now is to include within the term "consolidated" those rural schools, without regard to whether they are the resultant of a union, that have the characteristics of the higher type of

consolidated school. In Idaho, Louisiana, Missouri, North Dakota, and Minnesota the determination of the consolidation depends more on the size of the district or school than on the manner of its formation.

*Partial consolidation by grades.*—Another form of consolidation is partial consolidation, using the term to apply to grades. A central school is established to serve some given area and to this school come the children of the upper grades, while some or all of those of the lower grades are taught in small outlying schools. The area served by the central school may be a community, a township, a district, parts of any of these, or unions of them, and in some cases even a county. There are a number of examples of this rather effective way of dealing with situations where complete consolidation is not practicable or perhaps not possible.

In Louisiana it is spoken of as "grade limitation" and is reported as follows:

It frequently happens that the closing of all the small schools around a center is not desirable—too many pupils in the lower grades to transport, distance too great for small children, or other equally good reasons that apply to particular situations. In such instances it is now customary to retain such schools with the provision that attendance be limited to three or four or possibly five grades, the pupils in grades above being required to attend the central school. Where the number of pupils requires two teachers, the grades are limited to five or six or seven at the most. There are a few instances of schools having three and four teachers that limit their work to the elementary grades and require the advanced pupils to attend a near-by consolidated high school. This variation eliminates the inconvenience and expense of transporting large numbers of small children, partially satisfies local pride, and still permits the concentration of a sufficient number of pupils in the upper grades to justify employing several teachers and the growth of full high-school departments. "Grade limitation" is now a factor that is given consideration whenever a program for consolidation is proposed.

In 1919 the State board of Delaware began a policy of "delimitation of grades" by arranging as far as possible that the one-room schools should be limited to the first six grades and the older children transported to central schools for junior and senior high-school instruction.

The wing plan of Oklahoma differs from the transportation plan in the State, in that the children are not hauled to school, and the remote districts are furnished with small buildings, which serve as wings to one large central building. This plan is most popular in districts where roads and bridges have not been constructed and where the children can not be hauled to school conveniently in the public vans. The wing schools have courses up to the fifth grade. The superintendent of the central school at regular intervals is

supposed to visit the wings and to have general supervision over them. The plan has the effect of giving the county superintendent several assistant superintendents as well qualified as he. The average tax levy for this plan is  $7\frac{1}{2}$  mills.

*Complete and partial consolidation by territory.*—The words “complete” and “partial” as applied to consolidation are frequently used with reference to territory as well as grades. A county or township is spoken of as being completely consolidated when all of the children are attending consolidated schools; as partially consolidated when it has some consolidated schools and some small schools not serving as “wing” schools to any consolidation.

*Forms of centralized schools not commonly considered consolidations.*—There are several types of centralized schools, mostly rural, that are not commonly listed as consolidations but probably may be considered such.

The State superintendent of Wisconsin classes the State graded schools with the consolidations.

Nearly all of the consolidation that has been effected in Wisconsin has been done in connection with the State graded schools. Every State graded school is the expression of a public attitude that is in favor of centralized school facilities and that is opposed to the decentralization which is expressed in the one-room rural school.

This favorable attitude toward consolidation is represented in two different ways among the 623 graded school districts in the State. The first, and the one most frequently found, is the district school whose school population has become too great for a one-room school and one teacher to accommodate it. The people realize that 30 to 40 children are as many as a teacher should be expected to manage successfully. The question thus arises, would it be better to divide the district, create two schools, and duplicate the bad conditions of a crowded program, or would the better course be to have two teachers, each with half the number of grades of pupils to manage, and receive the special State aid for a graded school. The question is usually answered by organizing a State graded school, which, if not a technical consolidation, is a refusal to decentralize. Many of these schools have grown to three and four departments and finally into high schools.

A second and direct method of consolidation is found when people see the great advantage there is in the large graded school over either the large or the small one-room school, and two or more districts are consolidated.

The rural graded school of South Carolina, often formed by combining smaller schools, receiving State aid, and being required to meet some of the standards characteristic of consolidated schools, may be considered a kind of consolidation. The rural school supervisor reports that in the years from 1914 to 1920 the number of white one-teacher schools was reduced from 1,701 to 1,008 by the administration of the rural graded school law.

*Union high schools.*—How far one may be justified in classing as consolidations some of the different kinds of high schools in the

United States is something of a question. Certainly the union high schools of California may properly be considered partial consolidations for secondary-school purposes. The township and community high schools of Illinois are unquestionably consolidations for secondary education.

*County secondary schools.*—The county high schools authorized by law and maintained in 27 States are not consolidations in the sense that they have been formed by uniting districts or schools, and they do not as a rule give any elementary instruction. They are consolidations, inasmuch as they represent the taxable wealth and educational effort of a large area concentrated on one or two secondary schools that draw their pupils from the entire area and are under the administration of one board. Closely akin to these are the county agricultural schools of Michigan, Mississippi, North Dakota, and Wisconsin, and the farm-life schools of North Carolina.

None, or very few, of these county secondary schools furnish any transportation. In some 15 of the States, however, mostly in the West and South, there are secondary schools under county control that have dormitories for pupils that live at a distance and furnish board and room at low rates. In Wyoming the county high school with a dormitory is looked upon as consolidation or at least a forerunner of the type of consolidated school that may be developed in sparsely settled areas. The high-school district of the State is not a union of elementary-school districts for high-school purposes, but a body corporate embracing all territory that has by majority vote decided to join in the organization to maintain a secondary school; is governed by an elective board of three trustees; may be bonded for the erection of buildings; and may be taxed not to exceed 10 mills on the dollar of assessed valuation for current expense. It may include an entire county.

Statistical data for these county secondary schools are not included in those given in this bulletin.

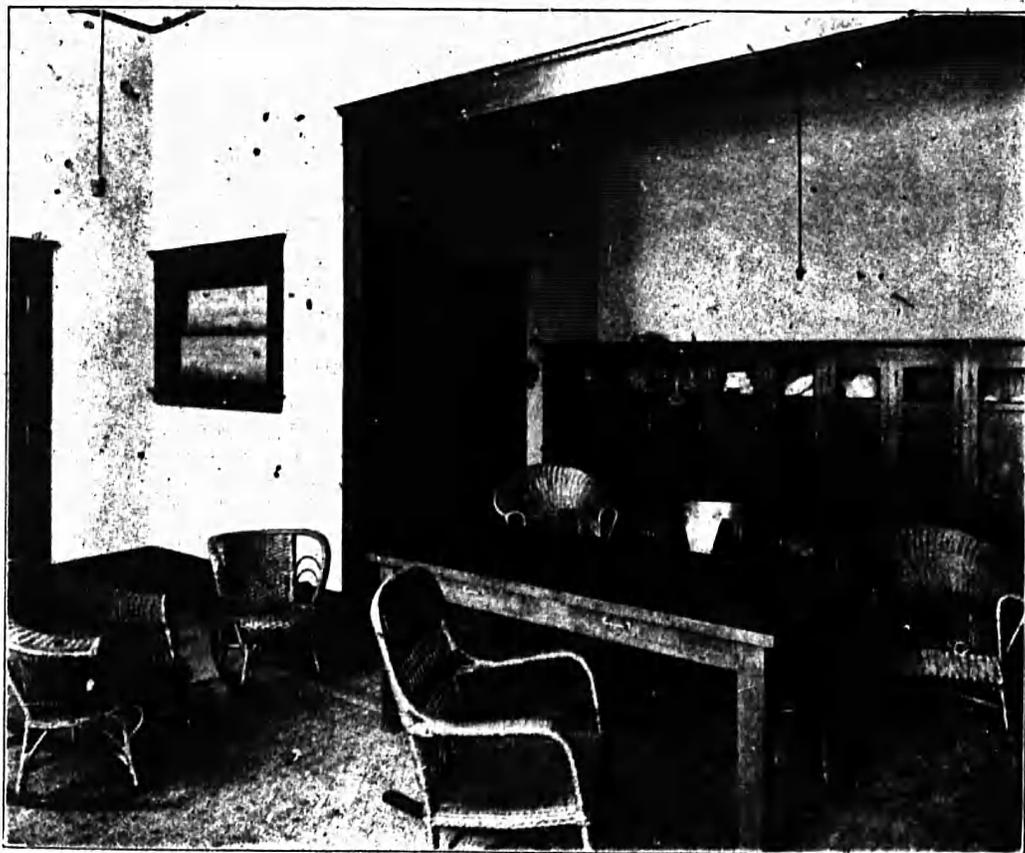
*Unusual forms of centralization.*—There are three rather unusual attempts at kinds of centralization to which attention needs to be called. They are the community use of the school plant in Washington, the method of administering unorganized territory in Maine, and the redistricting law of Nebraska.

In 1913 a law was enacted in Washington providing for a wider use of the school plant. The two important sections of the act read:

That school boards in each district of the second class and third class may provide for the free, comfortable, and convenient use of the school property to promote and facilitate frequent meetings and associations of the people in discussion, study, improvement, recreation and other community purposes, and



A. A teachers' cottage in Kansas.



B. A teachers' rest room in a consolidated school.

HOME COMFORTS FOR TEACHERS.

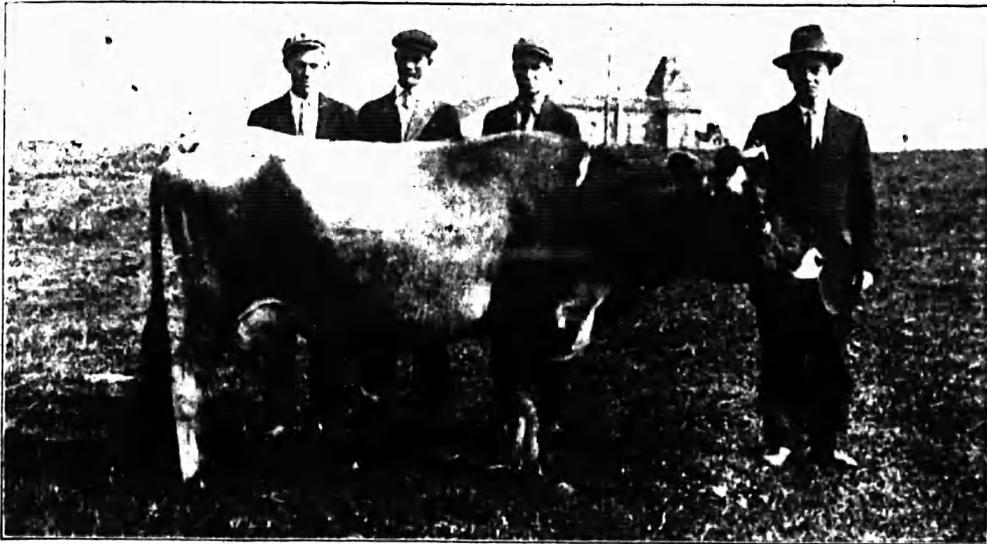


A. School gardening.



B. Learning to judge poultry.

STUDYING SCIENCE IN NATURE'S LABORATORIES.

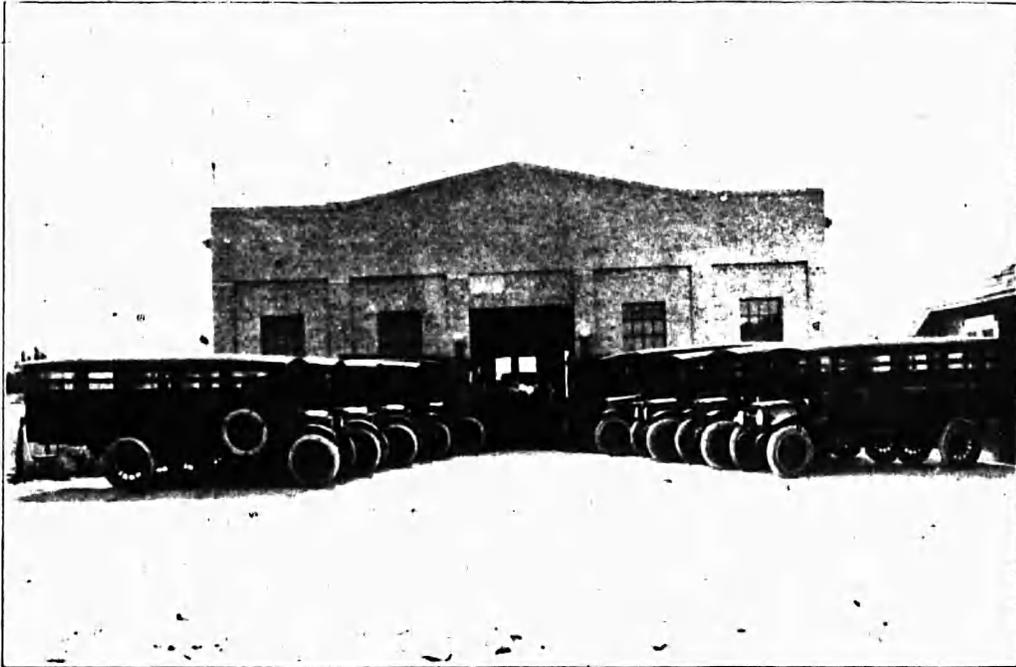


A. Learning to judge stock.

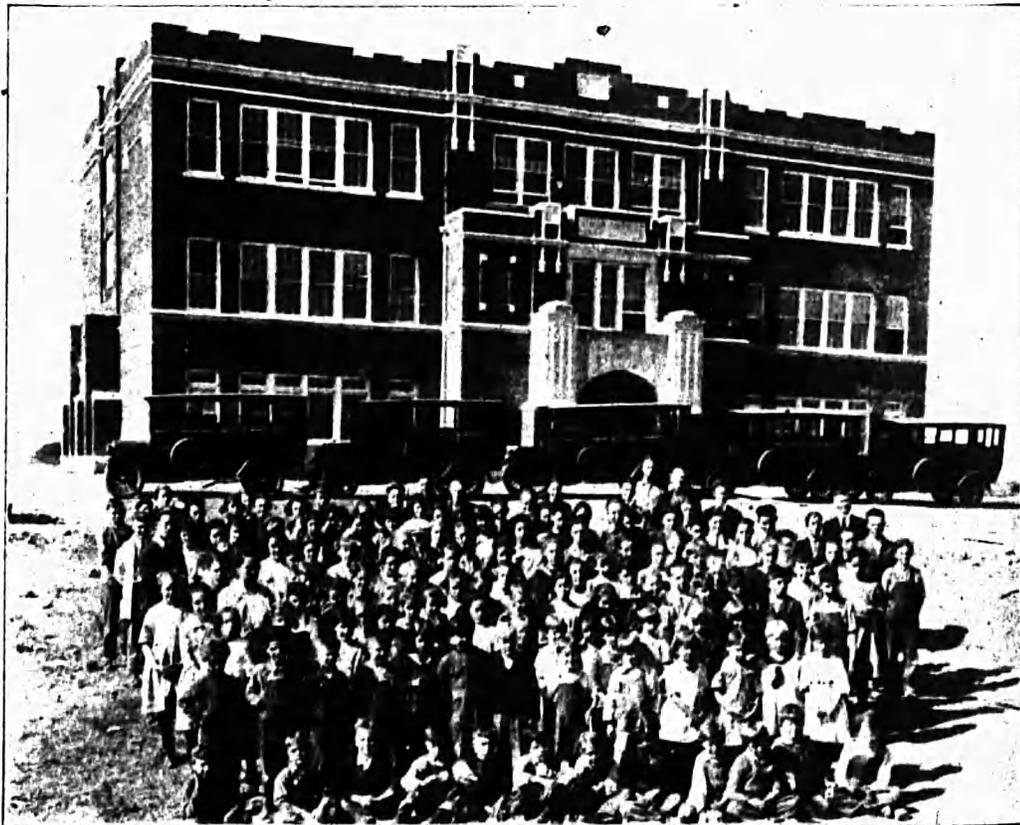


B. Cultivating a school farm.

ANIMAL HUSBANDRY AND AGRICULTURE IN CONSOLIDATED SCHOOLS.



A. GARAGE AND FLEET OF TRANSPORTATION BUSES AT A CONSOLIDATED SCHOOL IN UTAH.



B. AN OPEN-COUNTRY CONSOLIDATION IN KANSAS; 125 CHILDREN ARE TRANSPORTED DAILY FROM AN AREA OF 54 SQUARE MILES.

may acquire, assemble and house material for the dissemination of information of use and interest to the farm, the home, and the community, and facilities for experiment and study, especially in matters pertaining to the growing of crops, the improvement and handling of livestock, the marketing of farm products, the planning and construction of farm buildings, the subjects of household economics, home industries, good roads, and community vocations and industries; and may call meetings for the consideration and discussion of any such matters, employ a special supervisor or leader, if need be, and provide suitable dwellings and accommodations for teachers, supervisors, and necessary assistants.

That each school district of the second or third class, by itself or in combination with any other district or districts, shall have power, when in the judgment of the school board it shall be deemed expedient, to reconstruct, remodel, or build schoolhouses, and to erect, purchase, lease, or otherwise acquire other improvements and real and personal property, and establish a communal assembly place and appurtenances, and supply the same with suitable and convenient furnishings and facilities for the uses mentioned in section 1 of this act.

A commission of seven members, including the State superintendent, passes on the plans of any district or combination of districts. If the district has a large school plant or extends over a large area, little effort is made to include outside districts, and the center is known as an "independent center." By 1920 there were 608 community centers; 140 independent; 171 rural district group centers with no town included; 275 centers including a town and adjacent districts; and 22 districts not included in other center organizations.

About 48 per cent of the area of Maine is unorganized for purposes of local government. The first law passed for providing schools for this territory was in 1897. For purposes of school administration the entire area was placed under the direct control of the State superintendent. He was given authority to appoint agents for the unorganized townships, who attended to all necessary details in relation to providing schools for the children. The law was amended and changed in 1919 in such a way as to further centralize these schools in the hands of the State superintendent and to give him power to provide both elementary and secondary education for all children living in unorganized territory.

A redistricting law was passed in Nebraska in 1919. It provides in effect for a mapping of every county in the State into districts of approximately 25 sections each. An appeal from the decision of the county redistricting committee may be taken to the State superintendent and his judgment may be subject to the outcome of a local election. The law is unique in that it arranges a way for trying to determine an equitable adjustment of district boundaries in an entire State. It is being carried out very slowly.

### A STATISTICAL MEASURE OF CONSOLIDATION AND TRANSPORTATION.

*An indirect and relative measure.*—It is obvious that from the number of kinds of consolidation, the varying conceptions of it, and the differing definitions, an attempt to give accurate statistical data as to the absolute amount of consolidation in the United States, its relative amount as compared with totals for elementary and secondary education, and definite measurements of its progress in the entire country, must meet with only partial success. Much of the data are not comparable: Questionnaires made to fit conditions in one section do not meet those of another. Records of consolidations have not been kept at all in some States, only spasmodically in other States, and consistently year by year in very few States. In the reports published annually or biennially by departments of education, data for consolidated schools have not, as a rule, been segregated. Moreover, there has been no careful determination of the special kinds of information that are necessary and valuable as bases for comparing consolidated schools with other schools.

It has been customary in making a statement of consolidation or centralization in any State to give the number of schools that the author has chosen to classify as consolidated, the number of schools discontinued to form them, descriptions of some typical consolidations, and facts of various kinds regarding enrollment, attendance, costs of transportation, courses offered, etc. These are absolute measures of the actual amount of consolidation in any given instance, but are in no sense relative and are perhaps of limited value in that they express little or nothing of the comparative extent to which this type of school is playing its part in any system, large or small, and its worth in educational effectiveness. The table on page 77, showing the progress of consolidation in Indiana, and the map of Pennsylvania, indicating the number of consolidations effected and projects under way, are measures of this kind. They may, and perhaps often do, convey an impression that the consolidated school has made greater progress than it actually has or is a more common kind of educational factory than it really is.

More nearly correct measures of the consolidation and centralization and its growth in any State or the United States can be made to some extent in relative and indirect terms.

Note the first six columns of Table 1, on page 52. Columns 2 and 3 give the enrollment by States for the year 1919-20 and the per cent of increase or decrease for the decade 1910-1920. Only three States—Maine, Mississippi, and Missouri—report decreases. Col-

umns 4, 5, and 6 give the number of schoolhouses in 1910 and 1920 and the per cent of decrease or increase for the decade.

In these five columns there is a rather broad indication of the degree to which the schools of any State are centralized, at least in so far as grouping children is concerned, and whether the centralization is increasing.

For example, Michigan and North Carolina were almost equal in school enrollment in 1920, the figures being 691,674 and 691,249. In the former State there were 8,941 schoolhouses; in the latter 7,994, or 947 less. In the one there was a gain of 27.7 per cent in enrollment and of 3.9 per cent in number of school buildings; in the other 32.8 per cent in enrollment and 5.06 per cent in buildings. The ratio between per cent of enrollment gain and building gain was approximately equal in the two States. The schools of North Carolina are, from this statistical evidence, more centralized than those of Michigan. In the decade 1910 to 1920 the two States were trending toward centralization at about the same rate.

For another comparison, New York and Pennsylvania are the two largest school systems of the United States. New York enrolled 1,719,841 children and used 11,824 school buildings. Pennsylvania enrolled 1,610,459 children and used 15,303 buildings, almost 3,500 more buildings for an enrollment 109,000 less. Pennsylvania has a land area some 2,822 square miles smaller than that of New York. Obviously its school children are much less closely grouped than those of New York. Neither State effected much centralization in the decade 1910 to 1920.

In a similar way comparisons may be made between any two States or groups of States and a rough estimate made of the degree to which the school children are assembled in large groups. It is worthy of note that, while the enrollment for the United States increased by 21.1 per cent for the decade, the number of buildings increased by only 2 per cent. In part this must be interpreted to mean that, owing to the cessation of building during war time, there is a great shortage of buildings, especially in the cities. But it is also partly due to the fact that increases in enrollment are being cared for by administrative units already established rather than by creating new units and erecting new and separate buildings.

Like estimates may be made by using the number of schools given in columns 7, 8, and 9 as a factor, rather than the number of school buildings. This is less satisfactory because the word school varies greatly in meaning, and there is danger of making comparisons with figures that are not comparable. Care should certainly be exercised in using the figures of Pennsylvania, Virginia, New Hampshire, and

Rhode Island—States that report a schoolroom as a school—with other States that report a building under the charge of a principal as a school.

The number of one-room or one-teacher schools—the terms are here used interchangeably for convenience—the rate at which they are increasing or decreasing, and the relation which the attendance and teaching corps in them bears to the totals of attendance and teachers for the State as given in columns 10, 11, 12, 13, and 14 are in a sense negative measures of the progress and amount of consolidation and positive measures of the work yet to be done along that line. Unfortunately the attendance in one-room schools can not be obtained for many of the States.

North Carolina, with 4,174 one-room schools out of 7,994 school buildings, a State enrollment of 691,249, and 24.7 per cent of its teaching force engaged in teaching one-room schools, has increased its enrollment in a decade by 32.8 per cent and the number of buildings by 5 per cent, and at the same time has decreased the number of one-room schools by 30 per cent and the number of teachers employed in those schools in even greater ratio. These figures are certainly indicative of a strong tendency toward centralization and consolidation.

Kansas, with 9,509 school buildings for an enrollment of 406,880, and 7,624 one-room schools, has increased its enrollment only 2 per cent and at the same time increased the number of buildings by 6.7 per cent. Forty-three per cent of the average daily attendance is at one-room schools, and 58 per cent of the teaching corps is necessary to supply them. Here is an indication of a great many small groups of children and of the amount of consolidating necessary to be done.

Massachusetts, with 2,956 school buildings for 623,586 enrolled pupils, and less than 4 per cent of the daily attendance or the teaching corps in one-room schools, is certainly highly centralized.

New Jersey reports few consolidated schools, but the State uses 2,106 school buildings for an enrollment of 594,780, has increased its enrollment by 38.3 per cent in a decade, at the same time increased the number of buildings by over 1 per cent, and decreased the one-room schools by 28 per cent. There is now only 3.2 per cent of the daily attendance in one-room schools and 2.8 per cent of the teaching force engaged in them. This argues much centralization and a continued tendency along that line. The map of the State on page 76 is a graphic representation by counties of this condition.

Note in columns 10, 11, and 12 that decade comparisons for the number of one-room schools may be made for 32 States. These 32 States reported 151,645 one-room schools in 1910 and 134,010 in 1920, a decrease of 17,635, or 11.6 per cent in the decade.

Six of the thirty-two States—Colorado, Idaho, New York, South Dakota, Tennessee, and Wisconsin—show a total increase of 1,505 one-room schools. Idaho, Wisconsin, and South Dakota are still in process of settlement and new schools have been established for new communities. The first two of these are not actively furthering consolidation. In South Dakota, laws and policies definitely favorable to consolidation came about late in the decade. The increase in Colorado is in part due to new settlement and in part to the fact that the consolidation campaign in the State has been carried on by the College of Agriculture. Some counties have adopted it. Others have not. The State department has not furthered it. There has been no concerted policy for consolidation in New York. The work in Tennessee began about the close of the decade.

The other 26 States for which comparative data are available effected a decrease in one-room schools amounting to 19,140. Some of this is due to a natural growth, and consequent change of classification. Small schools have added to their enrollment until it became necessary to employ two or three teachers, and such schools have moved out of the one-room or one-teacher class. The greater part of it was brought about by consolidation. Alabama, Indiana, Kentucky, Louisiana, Mississippi, North Carolina, Ohio, South Carolina, Texas, Virginia, and West Virginia, 11 States that have been conducting extended consolidation campaigns or have definite policies favoring it, account for 15,449, or four-fifths of the decrease. Missouri, North Dakota, Kansas, New Jersey, and Pennsylvania add 1,705 more to the list of decreases, and here also the lessening number of one-room schools is unquestionably almost wholly due to consolidation. In the other States that show reductions a considerable amount is known to have been brought by consolidation.

Of the 16 States for which decade comparisons in number of one-room schools can not be made, Iowa and New Hampshire used fewer school buildings by 1,185 and 561, respectively, in 1920 than were used for approximately the same enrollment in 1910. Neither State made material enrollment gain in the 10 years. In Massachusetts for the same period an enrollment increase of 87,717, or 16.3 per cent, was met by a reduction of buildings of 1,370, or 31.6 per cent, while in Utah the enrollment increase, 25,795, or 28 per cent, called for a building decrease of 9, or 1.3 per cent. Iowa and Utah are actively consolidating schools. In New Hampshire and Massachusetts centralization has been going on for a long period of years. If the figures could be had, they would certainly show that the one-room school is disappearing in Massachusetts, Iowa, and Utah, and probably in New Hampshire.

There remain 12 States to be considered in connection with the one-room school. Six of these, Arizona, California, Montana, New Mexico, Oregon, and Wyoming, have been developing new areas and report enrollment increases ranging from 27 per cent in Oregon to 144 per cent in Arizona. They have also increased the number of school buildings in percentages ranging from 25 to 203. Undoubtedly the number of little schools in these States increased in the decade 1910 to 1920, not because of decentralization but in response to a definite need for schools in areas that could not be served by existing schools. In Oklahoma a definite campaign for consolidation has been carried on, and it has lessened the number of school buildings that would otherwise have been built in the process of the States' growth.

Arkansas, Michigan, Minnesota, Nebraska, and Nevada made enrollment gains ranging from 10.8 per cent in Nebraska to 38.3 per cent in Nevada, and these were met by gains in the number of buildings from 3.9 per cent in Michigan to 7.4 per cent in Arkansas, a fair indication that the number of one-room schools in these States increased very little or not at all during the decade.

The statistical data regarding one-room schools may be summarized as follows:

1. Decade comparisons may be made for 32 of the 48 States.

(a) Twenty-six of those for which comparisons may be made report a decrease of 19,140 one-room schools, or 15 per cent. Most of this decrease is due to consolidation.

(b) Six States report an increase of 1,505 one-room schools, or 5.6 per cent. This is due partly to new settlement and partly because consolidation has not been a definite policy.

2. Of the 16 States for which decade comparisons may not be made—

(a) Four have lessened the number of school buildings, although school enrollment increased at the same time. In all four, consolidation or centralization are definite policies.

(b) Five States report enrollment gains of from 10.8 per cent to 38.3 per cent, with building gains of 3.9 per cent to 7.4 per cent, a fair indication that the number of one-room schools made little if any increase during the decade.

(c) Seven States in process of developing new areas report enrollment increases of from 27 per cent to 144 per cent and gains in number of buildings from 20 per cent to 203. The number of one-room schools in these States probably increased during the decade but not because of a tendency toward decentralization.

3. It is regrettable that there are not complete data for column 13. The per cent of average daily attendance of the State that is in the very small schools is one of the valuable items in determining school centralization.

SCHOOL CONSOLIDATION AND TRANSPORTATION.

TABLE 1.—School buildings and schools.

States.	Pupils enrolled, 1919-20.1	Per cent of increase or decrease (-) in decade 1910-1920.	Number of school-houses.		Per cent of increase or decrease (-).	Number of schools taught.		Per cent of increase or decrease (-).	Number of one-room schools.		Per cent of increase or decrease (-).	Per cent of total State attendance in one-room schools.	Per cent of State teaching corps in one-room schools.2
			1910	1920		1910	1920		1910	1920			
Continental United States.....	21,578,316	21.1	265,798	271,147	2.0	8	8	9	10	11	12	13	14
Alabama.....	561,940	31.2	9,257	6,386	2.06	6,389	8,172	27.8	5,184	3,839	28.9	.....	28.4
Arizona.....	76,505	144.3	5,310	5,599	93.2	765	1,541	101.4	.....	265	28.9	.....	30.5
Arkansas.....	483,172	22.2	6,182	6,642	7.4	8,130	6,640	18.8	.....	5,215	.....	9.0	13.5
California.....	696,238	88.9	3,897	6,372	63.5	.....	6,904	.....	.....	2,395	.....	.....	49.7
Colorado.....	220,232	30.4	2,356	3,413	44.8	.....	.....	.....	1,861	2,222	17.5	20.1	12.2
Connecticut.....	263,463	37.3	1,550	1,491	-3.8	1,475	1,673	13.3	900	715	-20.5	.....	9.5
Delaware.....	38,483	7.0	406	448	10.3	406	472	16.2	326	296	-9.2	.....	20.1
Dist. Columbia.....	65,298	17.1	144	153	6.1	243	243	.....	7	3	-57.1	.....	28.6
Florida.....	226,160	52.1	2,433	2,532	3.2	2,562	2,609	1.8	1,978	1,770	-10.5	.....	28.6
Georgia.....	690,918	24.3	6,479	7,838	20.9	7,946	8,350	5.1	5,004	4,867	-2.8	.....	30.5
Idaho.....	115,192	51.2	1,242	1,771	42.5	.....	1,794	.....	853	702	20.2	.....	27.6
Illinois.....	1,127,560	12.4	13,123	13,872	5.7	13,123	13,872	5.7	10,615	10,615	-4.4	.....	27.7
Indiana.....	566,288	6.5	9,281	7,981	-14.3	9,420	7,223	-23.3	16,737	11,860	-27.5	.....	28.3
Iowa.....	514,521	7.5	13,901	12,716	-8.5	8,904	13,019	.....	.....	11,340	-3.0	.....	46.3
Kansas.....	406,880	2.0	8,904	9,509	6.7	8,904	9,509	6.7	7,859	7,624	-3.0	43.0	58.0
Kentucky.....	535,332	8.1	8,177	8,820	7.8	8,820	10,820	.....	7,263	6,500	-10.8	.....	48.0
Louisiana.....	354,079	34.2	3,365	3,402	1.2	3,427	3,663	6.8	2,744	1,837	-39.5	.....	20.4
Maine.....	137,681	-4.5	3,822	3,050	-20.1	4,785	4,814	7.7	2,520	2,369	-8.3	.....	41.5
Maryland.....	241,618	1.3	2,474	2,532	3.1	2,444	2,423	-2.0	1,676	1,902	18.1	.....	24.0
Massachusetts.....	623,586	16.3	4,326	2,956	-31.6	.....	3,477	.....	.....	787	-4.4	4.0	4.1
Michigan.....	601,674	27.7	8,598	8,941	3.9	8,598	8,941	3.9	.....	7,004	.....	.....	20.5
Minnesota.....	503,597	14.4	8,609	9,077	5.4	7,262	9,435	-1.05	13,579	7,668	-24.5	.....	39.1
Mississippi.....	412,670	-13.6	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.5
Missouri.....	672,483	-4.8	10,824	9,621	-11.1	.....	10,373	.....	13,138,568	13,871	-3.8	.....	33.1
Montana.....	120,576	91.3	1,188	3,610	203.8	.....	3,797	.....	.....	3,075	.....	.....	49.5
Nebraska.....	311,821	10.8	7,157	7,655	6.9	7,071	7,294	2.7	.....	6,284	.....	.....	44.0
Nevada.....	14,114	38.3	7,342	3,325	-5.2	.....	.....	.....	.....	.....	.....	.....	27.0

PRESENT STATUS OF CONSOLIDATION.

New Hampshire.....	64,205	1,742	1,181	-32.2	14,206	2,035	-2.9	90%	403	-28.0	3.2	20.9
New Jersey.....	584,780	2,084	2,106	1.0	1,430	1,430			634			2.8
New Mexico.....	81,309	1,000	1,430	43.0					748			27.1
New York.....	1,719,841	12,067	11,824	-2.0	11,751	12,988	10.5	8,430	8,639	2.5		15.9
North Carolina.....	691,249	7,609	7,994	5.1	7,645	7,684	.6	6,003	4,174	-30.4		24.7
North Dakota.....	168,283	4,800	5,139	7.0	4,834	5,125	6.0	4,732	4,372	-7.6	40.3	54.2
Ohio.....	1,020,963	12,779	10,327	-19.1	28,048	15,075		9,408	6,904	-26.6		22.3
Oklahoma.....	589,282	7,846	7,004	-19.8	6,334	7,780	22.8		4,426			23.8
Oregon.....	151,028	2,247	2,812	25.1	2,286	2,543	12.2		2,280			29.3
Pennsylvania.....	1,610,459	15,325	15,303	-.1	38,610	44,092	14.2	10,606	10,254	-3.3		23.2
Rhode Island.....	93,501	532	507	-4.6	1,839	2,306	20.2		1,129	-29.1		4.6
South Carolina.....	478,045	4,906	4,834	-1.4	5,068	4,834		4,182	3,152	-24.6		32.4
South Dakota.....	146,955	4,701	5,484	16.6		5,830		4,142	4,584	10.6		58.5
Tennessee.....	619,852	6,937	6,726	-3.1	7,243	7,264	.5	4,605	4,766	3.4		35.8
Texas.....	1,035,648	12,481	11,122	-10.8	11,668	11,070	-5.1	7,196	5,490	-23.7		18.8
Utah.....	117,046	2,142	683	-1.3					137		2.1	4.6
Vermont.....	61,785	6,889	1,700	-20.6	2,499	2,349	-5.6	1,446	1,190	+17.7		3.6
Virginia.....	505,190	6,889	6,617	-3.9				5,208	3,786	-28.6		44.0
Washington.....	291,053	3,118	3,201	2.6		3,557		2,107	1,747	-17.0		18.1
West Virginia.....	346,256	6,674	6,694	.3	7,813	6,816	-6.8	6,131	5,415	-11.6		49.1
Wisconsin.....	465,243	7,769	8,233	5.9	7,970	8,951	12.3	6,483	6,606	1.7		40.7
Wyoming.....	43,112	640	1,477	130.7	1,004	1,575	56.9		1,289			58.1

1 Excluding duplicates within States.  
 2 Computed on a basis of the number of teaching positions reported in 1920.  
 3 Computed on data from 33 States.  
 4 Data for 1912.  
 5 Data for 1915.  
 6 Decrease due to change in classification.  
 7 Data for 1909.  
 8 Data for 1918.  
 9 Number of districts.  
 10 Estimated.  
 11 Data for 1919.  
 12 Data for 1911.  
 13 Schools with an average attendance of less than 40.  
 14 Schoolrooms.  
 15 Rural schools only.  
 16 Data for 1921.  
 17 Data for 1914.  
 18 Ungraded schools.

*The direct measure.*—On page 56 there is an attempt to give an absolute, direct measure of the amount of school consolidation by States for the United States. Column 2 is of historical interest and may be used in connection with the historical sketch. Moreover, it indicates the number of years that consolidation has been going on in any State.

Column 3 gives the total number of consolidated schools as 11,890, using the number 126 for Massachusetts. While this is the best figure obtainable for all the States at present, it is a very inadequate one, and some of its limitations and inaccuracies should be well understood.

For some States it includes considerable numbers of weak two and three teacher schools that, although formed by uniting smaller schools, are not the strong graded schools expected as a result of consolidation. This is true of the data for Georgia. In the figures for Alabama there are 102 two-room schools; those for Arkansas include 60 two-teacher and 58 three-teacher schools. From Louisiana 293 of the consolidations reported are two-teacher schools. Mississippi, Nevada, New Mexico, Tennessee, Texas, Virginia, Washington, and West Virginia include small two-teacher schools in their reports. Massachusetts reports 2,169 consolidated schools, counting all those of two or more rooms as consolidations.

In other States the interpretation is less liberal and the showing in number of consolidated schools comparatively smaller. The data given by the State Agricultural College of Colorado include only those schools that come within a rather exacting definition of consolidation and exclude a large number of two or more teacher schools of the kind reported by Massachusetts. Data from Mississippi are for only those consolidated schools that furnish transportation. This restriction, applied in no other State, lessens the number reported from Mississippi. The total of 258 consolidated schools in Kentucky leaves out of consideration 401 union two-teacher schools such as would be counted in many other States.

Figures are given for only two of the New England States—Massachusetts and Maine. In the former there are 126 towns or less than 10,000 inhabitants that have most of the schools in the town consolidated. To accept this number is to leave out most of the centralization that has taken place in the densely populated sections of the State. In the latter only 28 of the 117 schools reported are complete consolidations both as to grades and territory. The other 94 are partial. The total does not include 53 urban communities in which there are schools serving rural sections and representing consolidation to a greater or less extent.

Of the other four New England States, Connecticut has 6 towns in which all of the schools have been centralized in one district, 58 towns that transport pupils from small one-room schools that have

been closed to larger one and two room schools, and 68 towns in which there is some form of partial consolidation. Besides having formed its city systems by consolidation, Rhode Island has been consolidating small schools since 1898, and furthering the movement by State aid, but the number of consolidations effected is not available. Neither New Hampshire nor Vermont reports consolidated schools, though in both States there are central schools serving much or all of the town, and large amounts are spent for transportation.

The figure of 92 for New Jersey is no proper indication of the highly centralized school system of the State. For all of New England, New Jersey, and Michigan, consolidation is more adequately expressed in terms of towns rather than schools.

Florida and North Carolina are not reported. The records for consolidation have not been kept. In both States schools have been uniting for many years, and there are consolidated schools of the finer types in both. Utah has adopted a county district system, and for purposes of administration the schools are grouped in 40 units of control.

Other factors make the figures of column 3 incomparable and the total unreliable. Of the 14 schools reported for Delaware, 13 are special districts named in the law of 1919. They are more or less independent of the general State system and are, in a sense, developing city systems. Similar districts in Connecticut are not returned as consolidations. Minnesota reports include only those schools that receive State aid, among them districts of 12 sections or more not the result of a union. The figures for Missouri are for those schools, governed by six directors, that are outside of incorporated cities, towns, and villages. Data for Ohio are estimated and are for centralized and consolidated schools, as the words are applied with special meanings in that State. In the 262 schools credited to Oklahoma there are 54 union graded districts and 24 centralized districts not furnishing transportation. The number for Pennsylvania applies only to those schools formed in very recent years. The union high schools of California and other States and the township high schools of Illinois are not included.

Three other items in the positive estimate of consolidation are given in Table 2. They are the number of pupils enrolled in consolidated schools, the number of teachers employed in them, and the value of the school property. In each case the percentage relation to the total for the State is shown. It is regrettable that these data can not be secured for more of the States. The total of nearly 390,000 pupils enrolled in the consolidated schools of 11 States, approximately one-tenth of their total enrollment, is somewhat indicative of the strength of this kind of school. The teachers in the consolidated schools of the 11 States reporting number 11,115 or 7.3 per cent of total teaching corps in those States.

SCHOOL CONSOLIDATION AND TRANSPORTATION.

TABLE 2.—Consolidated schools.

States	Date of first consolidation law or school.	Consolidated schools	Per cent of total number of schools.	Districts (D) or schools (S) discontinued by consolidation.	Pupils enrolled in consolidated schools.	Per cent of State enrollment.	Teachers employed in consolidated schools.	Per cent of State teaching corps.	Value of consolidated school property.	Per cent of State school property.
1	2	3	4	5	6	7	8	9	10	11
Continental United States.....		11,800			389,783	19.3	111,106	17.3		
Alabama.....	1910	328	4.0		37,000	6.5				
Arizona.....	1907	29	1.8							
Arkansas.....	1911	170	2.5				600	5.7	\$1,151,200	7.4
California.....	1901	59	.8							
Colorado.....	1909	146	4.2	8 425	29,000	13.1	1,073	15.4	6,003,671	24.9
Connecticut.....	1839									
Delaware.....	1861	14	2.9	8 26	6,387	19.1	263	21.2	1,050,000	
Florida.....	1889									
Georgia.....	1911	315	3.7		18,122	2.6	631	3.9		
Idaho.....	1900	41	2.2							
Illinois.....	1905	78	.5							
Indiana.....	1873	1,040	14.4							
Iowa.....	1873	288	2.2		68,619	13.3				
Kansas.....	1896	118	1.2	D 270	11,839	2.9	590	3.5		
Kentucky.....	1908	258	3.1							
Louisiana.....	1902	808	22.0		107,781	30.4	3,538	38.1		
Maine.....	1854	117	2.4							
Maryland.....	1904	180	7.4							
Massachusetts.....	1838	126								
Michigan.....	1843	102,169 211	62.3 2.3							
Minnesota.....	1901	255	2.7							
Mississippi.....	1910	470	6.5		61,821	10.9	2,049	17.0		
Missouri.....	1901	168	1.6		28,368	4.2	905	4.2		
Montana.....	1913	69	1.8		12,127	9.5	491	7.9		
Nebraska.....	1889	101	1.3							
Nevada.....	1913	15	4.4							
New Hampshire.....	1870									
New Jersey.....	1886	92	3.7							
New Mexico.....	1907	129	9.0							
New York.....	1853	354	2.7	D 830						
North Carolina.....	1885			D 157						
North Dakota.....	1899	457	8.9							
Ohio.....	1846	800	5.3							
Oklahoma.....	1903	262	3.3							
Oregon.....	1903	61	2.4							
Pennsylvania.....	1901	137	.8	8 503			682	1.5		
Rhode Island.....	1898									
South Carolina.....	1898	300	6.2	D 288 S 323						
South Dakota.....	1913	139	2.3		8,778	5.9	288	3.6	1,685,896	9.6
Tennessee.....	1903	309	4.2							
Texas.....	1893	635	5.7							
Utah.....	1896									
Ver. Mont.....	1872									
Virginia.....	1903	258	3.8							
Washington.....	1890	274	7.7							
West Virginia.....	1908	145	2.1							
Wisconsin.....	1856	80	.9						2,450,000	5.8
Wyoming.....	1913	11	.7							

<sup>1</sup> Based on returns from 11 States.

<sup>2</sup> Estimated.

<sup>3</sup> Data for 1921.

<sup>4</sup> Giving county boards power to locate schools.

<sup>5</sup> In State-aided schools only.

<sup>6</sup> Number of districts affected.

<sup>7</sup> Data for 1922.

<sup>8</sup> Data for 1918.

<sup>9</sup> Towns of less than 10,000 population having most of the schools consolidated.

<sup>10</sup> Buildings of two or more rooms.

<sup>11</sup> Permissive adoption of town system. Note p. 11.

*Costs of transportation.*—In Table 3, on page 58, are given data on transportation of pupils. It must be understood at once that the figures given are inclusive, as far as they could be obtained, of all transportation of children to and from school if paid for from public funds. No attempt has been made to limit them to the schools classed as consolidated.

Columns 2, 3, and 4 are of historical interest. It is significant that by 1910 only 14 States were reporting amounts spent for transportation as a separate item of expenditure and that in 1920 eight States had not as yet made that segregation in their financial statements.

In column 5 are given the amounts spent for transportation by 40 States in 1920. If the total for all the States could be given, it would undoubtedly amount to nearly fifteen millions of dollars. Indiana is spending nearly two millions annually; Ohio and Iowa each much more than one million; and Minnesota, Massachusetts, North Dakota, and New Jersey, in the order named, are reaching well up toward the one million mark.

The per cent that the amount spent for transportation is of the current expense of the schools is shown in column 6. For the 40 States reporting, it is 1.8 per cent. For the individual States it ranges from 0.02 of 1 per cent in Oregon to 7 per cent in North Dakota. It would seem that expenditures for transportation that amount to more than 7 or 8 per cent of the total running expense of the schools should be analyzed very carefully by school officers. It is possible for this comparatively new school facility to assume an undue importance and absorb too great a part of the school funds.

In columns 7 and 8 are given the numbers of children transported in each of 31 States and the relation they bear to the average daily attendance in the State. The total of 356,401 is certainly far short of the actual figure, if it were known. Probably an estimate of half a million children transported in 1919-20 is not far wrong.

Columns 9 and 10 are lines of statistical data that would be very valuable, especially the latter. Figures for the cost of transportation in segregated schools, districts, and counties are now being kept rather widely and are rapidly being made public. Data for entire States are few and probably rather unreliable. Unfortunately, much of the data on the cost of transportation does not include one factor, that of distance, which is absolutely necessary for correct computation. Some unit which involves the three factors, number of children, time, and distance, such as cost per child per mile per day, must be adopted if accurate estimates are to be made.

TABLE 3.—Transportation of pupils.

States.	Date of first transportation law.	Date of first available data on amount spent for transportation.	First reported amount spent for transportation.	Amount spent for transportation in 1920.	Per cent of total current expense of the schools.	Number of children transported, 1920.	Per cent of the average daily attendance of the State.	Per cent of total enrollment in consolidated schools.	Cost of transportation per pupil per year.
1	2	3	4	5	6	7	8	9	10
Continental United States.				\$14,514,544	11.8	356,401	5.6		
Alabama.....	<sup>1</sup> 1915	<sup>1</sup> 1918	\$9,770	171,925	2.2	7,058	1.9	19	<sup>6</sup> \$3.33
Arizona.....	1912								
Arkansas.....	1911					1,032	.3		
California.....	1901	1918	272,782	630,797	1.6				
Colorado.....	1909					<sup>5</sup> 11,400	7.5	39.3	
Connecticut.....	1893	1898	11,416	314,340	2.2	6,030	2.9		
Delaware.....	1919	1920	68,401	71,444	4.6				
Florida.....	<sup>1</sup> 1889	1901	3,225	216,691	3.6	7,966	4.8		27.20
Georgia.....	1911	1911	19,339	69,477	.8	9,499	2.03	52.4	12.40
Idaho.....	1913	1914	35,000	301,345	4.5	1,526	1.8		
Illinois.....	1911	1912	16,987	163,254	.2				
Indiana.....	<sup>1</sup> 1899	1904	<sup>16</sup> 590	1,921,035	6.6	60,142	13.1		
Iowa.....	1897	1907	25,758	1,354,051	4.1	<sup>7</sup> 34,743	8.5	50.6	
Kansas.....	1899					<sup>8</sup> 4,000	1.3	33.7	<sup>10</sup> 16-0.23
Kentucky.....	1912	1914	15,222	95,785	1.3				<sup>10</sup> 10-.19
Louisiana.....	<sup>11</sup> 1916	1909	45,808	471,059	5.1	18,229	7.1	16.9	26.00
Maine.....	1880	1896	47,739	296,651	4.9	8,889	7.6		33.37
Maryland.....	1904	1905	<sup>14</sup> 508	64,734	.8				
Massachusetts.....	1869	1889	22,118	858,840	2.1	<sup>18</sup> 25,935	5.0		<sup>10</sup> 20-.24
Michigan.....	1903	1914	49,497	155,116	.4				
Minnesota.....	1901	1904	4,258	976,475	3.4	<sup>7</sup> 20,450	5.1		
Mississippi.....	1910	1911	<sup>5</sup> 345	246,078	5.5	30,772	11.8	49.7	<sup>8</sup> 3.18
Missouri.....	1907								
Montana.....	1903	1914	26,636	297,790	2.9	3,293	3.5	27.1	<sup>10</sup> 33
Nebraska.....	1897	1920		<sup>9</sup> 127,500	.7	<sup>7</sup> 3,517	1.5		
Nevada.....	1915	1920		34,115	2.8				
New Hampshire.....	1885	1906	38,527	193,127	5.3				
New Jersey.....	1895	1901	4,421	749,895	2.1	21,727	4.5		
New Mexico.....	<sup>14</sup> 1917	1918	20,855	136,881	3.8	5,119	8.6		
New York.....	1896	1913	65,445	470,485	.4				
North Carolina.....	1911					7,936	1.6		
North Dakota.....	1899	1906	28,896	876,876	7.0	21,153	16.4		
Ohio.....	1894	1915	473,470	1,651,157	2.9				
Oklahoma.....	1905	1920		<sup>14</sup> 228,397	1.2	8,420	2.3		
Oregon.....	1903	1920		2,286	.02	<sup>7</sup> 2,020 <sup>15</sup>	1.4		<sup>10</sup> 35
Pennsylvania.....	1897	1913	425	83,962	.1	<sup>7</sup> 4,520	.35		
Rhode Island.....	1918	1918	21,633	32,490	.7				
South Carolina.....	<sup>16</sup> 1912	1914	11,927	<sup>17</sup> 25,121	.4	<sup>17</sup> 1,723	.51		<sup>17</sup> 13.20
South Dakota.....	1899	1913	54,399	211,947	2.3	2,388	2.4	27	
Tennessee.....	1913	1915	18,920	88,883	1.4	5,870	1.2		<sup>10</sup> 1.00-9.00
Texas.....	<sup>18</sup> 1915	1917	29,631	70,088	.2	2,683	.3		
Utah.....	<sup>19</sup> 1905	1916	93,091	170,286	2.7	5,000	5.1		
Vermont.....	1876	1893	9,133	228,532	6.5	4,487	8.8		
Virginia.....	1903	1906	2,102	153,796	1.5	<sup>7</sup> 8,885	2.5		
Washington.....	1901	<sup>20</sup> 1911	<sup>20</sup> 44,523						
West Virginia.....	1908								
Wisconsin.....	1897	1912	36,468	225,699	.9				
Wyoming.....	<sup>21</sup> 1919	1918	29,255	71,128	2.3				

<sup>1</sup> Computed on returns of 40 States.<sup>2</sup> Computed on returns from 31 States.<sup>3</sup> Permitted in Mobile County at an earlier date.<sup>4</sup> Mobile County only.<sup>5</sup> Per month.<sup>6</sup> Estimated.<sup>7</sup> Data for 1921.<sup>8</sup> Assumed in powers of county boards.<sup>9</sup> Transportation was carried on under general powers of township boards as early as 1888.<sup>10</sup> Per day.<sup>11</sup> Transportation also dates to 1902 under general powers of parish boards.<sup>12</sup> Baltimore County.<sup>13</sup> Data for 1919.<sup>14</sup> Not a specific authorization. County board created.<sup>15</sup> Special report for 98 schools.<sup>16</sup> Permitting State aid for transportation.<sup>17</sup> Data for 1918.<sup>18</sup> A law of 1905 was also construed as permitting transportation.<sup>19</sup> In powers of county district board.<sup>20</sup> Special report.<sup>21</sup> Not specific; assumed in powers of district board.

### Chapter III.

#### A STATEMENT OF CONSOLIDATION AND TRANSPORTATION IN EACH STATE.

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*A statement by States.*—There follows a statement of consolidation in each of the States. They are divided into groups as follows:

1. Those in which the town or township unit has been a considerable factor in consolidation. These include New England, Michigan, New Jersey, Indiana, Ohio, and North Dakota.

2. Those in which the county as a unit is a considerable factor in bringing about consolidation. They are Utah, Louisiana, Alabama, North Carolina, Mississippi, Tennessee, Kentucky, Maryland, Georgia, Florida, Virginia, and New Mexico.

3. Those States in which consolidation is being effected through a district system. They are Colorado, Iowa, Kansas, Nebraska, Minnesota, Missouri, South Dakota, Wisconsin, South Carolina, Oklahoma, Arkansas, Montana, Wyoming, Idaho, Oregon, Washington, and West Virginia.

4. States that have relatively little consolidation. They are New York, Pennsylvania, Texas, Arizona, and Nevada.

5. States that have so provided for secondary education as to make the need for consolidation of elementary schools less keenly felt. They are Illinois and California.

6. Consolidation under the State system of Delaware.

#### STATES IN WHICH THE TOWN OR TOWNSHIP SYSTEM HAS BEEN A CONSIDERABLE FACTOR IN CONSOLIDATION.

*New England.*—The schools of the southern portion of New England are rather highly centralized, but the large rural consolidated school of the kind found in the Middle and Western States is not common here. Consolidation in New England has come through the growth of city systems, the change from the district to the town system, the merging of special districts with towns, the wider use of free conveyance of pupils, the establishment of central high schools, State aid in payment of tuition for nonresident high-school pupils, and professional supervision for towns or unions of towns. For this section of the United States consolidation can not be expressed in terms of the number of consolidated schools.

*Maine.*—There are 109 towns in the State in which there are no urban communities and in which rural schools are located which may be properly termed consolidated schools. Some of these have no more facilities or equipment than the ordinary village school. Many are housed in buildings not adequate to serve a thoroughly modern type of consolidated school, but undoubtedly all provide facilities and a type of education superior to those of the one-teacher schools which they have absorbed.

In many cases the children from the outlying sections are in a minority, but in all cases such children are transported to the schools represented on the list. Wherever secondary school privileges are offered the high school serves the entire town.

In some instances the elementary and secondary schools are not housed in the same building, but clearly represent a single organization. While the consolidation has been accomplished, the single plant has not been constructed or may not be necessary.

The schools may be divided into five groups as follows:

1. Two or three teacher elementary schools serving a part of the town. In this group there are 17 schools.
2. Elementary schools of three teachers and more serving a large part of the entire town, of which there are 15.
3. Schools offering both elementary and secondary instruction serving part of the town for the former and all of the town for the latter. Of these there are 62.
4. Elementary schools serving the entire town—representing complete consolidation of elementary schools. Of these there are 10.
5. Schools offering both elementary and secondary instruction serving the entire town—representing complete consolidation, both elementary and secondary. Of these there are 13.

There are also 53 urban communities, in practically all of which there are schools which also are serving rural sections and represent consolidation to a greater or less extent.

The number of one-room schools decreased in the 10-year period, 1912-1922, from 2,468 to 2,200. The number of pupils transported was increased from 7,373, at a cost of \$149,732, to 9,688, at a cost of \$359,556. It is estimated that in Maine more than 500 one-teacher rural schools might be abandoned without causing inconvenience or hardship to their patrons, and with good conveyance the children could be given greatly improved school facilities.

*New Hampshire.*—New Hampshire reports no consolidated schools, and there is no law on its statute books providing for such schools under that definite name, but the State in common with the rest of New England has made marked progress in the past 50 years toward fewer and larger school units. The amount spent for transportation of pupils increased from \$38,527 in 1906 to \$195,127 in 1920.

*Vermont.*—Vermont is in the unusual condition, at least in the United States, of being a State that has increased in population very little in the past 70 years. The figures for population and school enrollment by decades are:

<sup>1</sup> "Consolidation of Schools in Maine and Connecticut." U. S. Bu. of Educ., Rural School Leaflet No. 4, pp. 5-6.

Year.	Population.	School enrollment.
1850	314, 120	-----
1860	315, 098	73, 591
1870	330, 551	66, 310
1880	332, 286	75, 238
1890	332, 422	65, 608
1900	343, 641	65, 964
1910	355, 956	66, 615
1920	352, 428	61, 785

If there had been any marked tendency to bring the children together in larger groups for educational purposes, it would be shown in the data for number of schools and school buildings maintained during the period. The decrease in schools has been 415 in 60 years, with an almost corresponding reduction in the number of children enrolled. Transportation of pupils has increased rapidly since 1893, as shown by the following table, but it has been largely to existing schools and is only a slight measure of consolidation:

Year.	Pupils conveyed.	Amount spent for transportation.
1893	853	\$9, 133
1895	921	12, 041
1900	2, 062	26, 492
1905	2, 829	45, 361
1910	4, 218	92, 019
1915	4, 623	128, 335
1920	4, 467	228, 532

In 1921 the State commissioner reported:

Vermont geographically does not lend itself to the matter of consolidation of schools; a mountain surface, widely scattered farms, difficult roads, and severe winter climate make it for the most part really obligatory to have single rural schools.

The past summer only one town, Essex Center, so far as I know, has taken any steps to extend its plan of consolidation. It had done so by closing three rural schools and providing transportation, so that at present all children in the town with the exception of those in one small remote district are being transported to a central village school. In addition to Essex Center, the following towns have consolidated their schools either entirely or to a very large degree: Middletown Springs, Johnson, Fairfax, and Montpeller.

*Massachusetts.*—A special study was made to determine the extent of consolidation in the State as of January, 1919. There are 354 towns and cities. Thirty-eight towns had only one-teacher schools. One hundred and fifty-two other towns with less than 5,000 population had one or more one-room buildings. In all, there were 785 one-teacher schools, enrolling about 15,600 pupils. About 96 per cent of

the teachers and 97 per cent of the pupils were in schools of two or more rooms. The study reports:

*Consolidation of schools in towns of less than 10,000 population, and having high schools.<sup>1</sup>*

	Number.	Per cent.
1. Towns having all pupils assembled in the center or the principal village of the town. . . . .	45	28.3
Towns having all pupils both high and elementary assembled in—		
(a) One school building . . . . .	8	
(b) Two school buildings, a high and an elementary school building . . . . .	11	
(c) Three or more buildings . . . . .	26	
2. Towns resembling 1 (above), but having from one to three outlying one-teacher schools . . . . .	31	20.0
3. Towns having schools located in various parts of the town, but having all elementary school pupils attending schools of two or more rooms . . . . .	29	18.2
4. Towns like 3 (above), but having one outlying one-teacher school . . . . .	8	4.0
5. Towns having schools located in various parts of the town, but having a portion of the pupils attending schools of two or more rooms . . . . .	16	9.0

<sup>1</sup> Returns from special inquiry, Jan. 1, 1919; 159 towns reporting.

Out of the 159 towns reporting in the above groups, 65 towns, or 40.9 per cent, have one or more of the upper elementary grades centralized in one building, as follows:

Number of towns having centralized—

Four upper grades . . . . .	22
Three upper grades . . . . .	13
Two upper grades . . . . .	26
One upper grade . . . . .	4

*Consolidation of schools in towns of less than 10,000 population and not having high schools.<sup>1</sup>*

	Number.	Per cent.
1. Towns having all elementary school pupils assembled in the center or the principal village of the town . . . . .	26	22.0
Towns having all pupils assembled in—		
(a) One building of one room . . . . .	6	
(b) One building of two or more rooms . . . . .	19	
(c) Two or more buildings . . . . .	1	
2. Towns like 1 (above), but having one to three outlying 1-teacher schools . . . . .	25	21.1
3. Towns having schools located in various parts of the town, but having all elementary school pupils attending schools of two or more rooms . . . . .	7	5.9
4. Towns having schools located in various parts of the town, but having a portion of the pupils attending schools of two or more rooms . . . . .	24	20.3
5. Towns in addition to 1 (a) (above), having all elementary school pupils attending one-teacher schools . . . . .	36	30.5

<sup>1</sup> Returns from special inquiry, Jan. 1, 1919, 118 towns reporting.

Out of the 118 towns reporting in the above groups, 28 towns, or 23.7 per cent, have one or more of the upper elementary grades centralized in one building, as follows:

Number of towns having centralized—

Four upper grades . . . . .	22
Three upper grades . . . . .	5
Two upper grades . . . . .	—
One upper grade . . . . .	1

From the tables above it appears that 71, or about one-fourth of all towns reporting, have all the schools consolidated at the center, or in the principal village. If to this number are added the 56 towns having all schools consolidated in the central village, with the exception of from one to three outlying one-teacher schools, it appears that approximately one-half the Massachusetts towns of less than 10,000 population have consolidated all, or nearly all, schools at the center, or in the principal village.

All the schools of 36 other towns are of two or more rooms, but located in various parts of the town rather than in the principal village. Eight others resemble this type of town but have from one to three outlying one-teacher schools in buildings of two or more rooms.

It appears that in Massachusetts towns of less than 10,000 population a substantial proportion of the consolidated schools are located in villages and that comparatively few are in the open country. Consolidation in the village is for a great many towns the only practicable plan. The best roads lead to the village. Trolley lines lead there. The post office, banks, stores, churches, halls of fraternal orders are there. In short, the village is the capital of the town, and a larger proportion of the inhabitants of most towns live in the village than in the outlying areas. In view of these conditions the village becomes the logical place for the high school, junior high school, central grammar school, and central elementary school, if such grades are consolidated.

It seems very doubtful whether under the county or any other system of school control the number of open-country consolidated schools would be greatly increased in this State. The population in the farming areas outside the villages is usually very sparse. These adjoining areas are not often connected by good roads, except by way of the village, and to assemble enough pupils in such localities to form strong open-country consolidated schools would be found in most cases too expensive and otherwise impracticable.<sup>1</sup>

*Growth of transportation in Massachusetts by decades.*

	1880	1900	1910	1914	1917	1920
Number of towns transporting pupils.....	1 104	252	317	.....	.....	335
Total amount spent for transportation....	1 \$22, 118	\$141, 754	\$310, 422	.....	.....	\$857, 064
Amount spent for transportation of high-school pupils by towns that do not maintain high schools.....	.....	.....	.....	.....	1 \$56, 066	\$87, 141
Reimbursement from the State for such transportation.....	.....	.....	.....	1 \$19, 188	.....	\$50, 396
Number of towns receiving reimbursement.....	.....	.....	.....	1 59	.....	85
Number of pupils transported for which State reimbursed towns.....	.....	.....	.....	1 937	.....	2, 054

<sup>1</sup> Date first reported.

Of the total amount spent for transportation, about three-fourths is used to pay for the conveyance of elementary pupils within the towns, one-eighth for high-school pupils within the towns, a little more than one-tenth for conveying pupils to high schools in other towns, and the remainder for conveying elementary pupils to schools in other towns.

<sup>1</sup> Consolidation of Schools and Transportation of Pupils at Public Expense in Massachusetts, State Dept. of Educ., Bul. No. 6, pp. 13-15.

*Connecticut.*—Consolidation in Connecticut has developed through the growth of closely built cities and towns from scattered communities, the bringing together of scattered open-country schools, and the grouping of the seventh and eighth grades in central districts.

The number of one-room schools in 1860 was 1,486; in 1886, 1,150; in 1920, 715, a steady decrease, totaling 52 per cent. This measures the tendency toward elimination of (a) weak one-room schools to form larger and better ones and (b) to group one-room schools to form two and three room schools.

The amount spent for transportation in Connecticut in 1899 was \$8,668.28; in 1920, \$290,719.46. This will measure the progress of these towns in the centralization of schools, particularly in view of the fact that these figures exclude high-school transportation and that the State has at no time given direct financial aid toward the transportation of pupils in elementary schools.

The number of pupils transported in 1899 was 533; in 1920, 6,030, an increase of 1,031 per cent, whereas the school registration in that time increased but 73 per cent.

These figures will show that the increase in pupils transported is far ahead of the natural increase in the district and again indicates the progress of these towns toward centralization of schools.

Of the 80 towns in the State with a population of 2,000 or less, only 7 neither transport any pupils nor have reduced the number of schools since 1860.

It can be seen from the foregoing that centralization has been continuous and is constantly increasing, accelerated by excellent facilities for transportation, which steadily are being extended. The total steam railway mileage is 1,004; trolley, 828; State roads, 1,481; automobiles, one car for each 11 persons, according to 1921 registration.

Towns which have consolidation may be classified as follows:

1. Complete consolidation. Towns in which all of the schools have been centralized in one district. (6 towns.)
2. Consolidation of one and two room schools. Towns having at the present time only one and two room schools and which transport pupils from districts where smaller one-room schools have been closed. (58 towns.)
3. Grade consolidation in which pupils from the two upper grades are brought together into one or at the most two districts of the town. (25 towns.)
4. Towns having partial or mixed consolidation in which a central residential or business district has absorbed the small schools of the vicinity and the upper grades of the remote sections. Such towns usually have a local high school to which pupils from some near-by towns are transported. (38 towns.)

Transportation facilities:

1. The most common vehicles for transportation are the horse-drawn wagon and the trolley. Automobile busses are used in many districts. Their use is increasing.
2. Trolley companies, according to established custom, carry children to and from school for one-half regular fare.
3. Vehicles are not generally owned by the towns but by private individuals.
4. Transportation routes are usually planned to take children at specified points instead of collecting and leaving them at each home.
5. The average distance each pupil is carried is a little over 4 miles for the round trip.
6. Difficulty in securing suitable persons to transport pupils makes choice by competitive bidding impossible in most cases. Arrangements are made by the committee on the best practical terms for a school year.

7. Drivers are not generally under bond.

8. Drivers are not generally under written contract.

There has for a long time been a strong tendency toward centralization of secondary-school instruction. This has been encouraged by a State grant for transportation to approved nonlocal high schools of \$20 per student, also by a grant reimbursing towns to the amount of \$30 toward payment of tuition in high schools. The legislature of 1921 has increased the tuition grant to \$50 and transportation allowance to \$35. Transportation within the town to local high schools is not aided by the State, neither are there grants for towns maintaining their own high schools.

In 1890, the total high-school registration for the State as a whole was 7,807; in 1920, 27,426, an increase of 248 per cent. Students attending nonlocal high schools in 1890 numbered 214; in 1920, 2,655, or more than 10 times increased. Disbursements of State aid for high-school transportation in 1890 amounted to \$3,584.09; in 1920 to \$36,091.76, an increase of 907 per cent.

The success attending the centralization of upper grades in the 25 towns where this is done will, it is believed, create a demand for the development of local schools for higher education; something midway between the sixth year of the elementary school and the high school. Such an organization would suggest the junior high-school plan, but the desire to make these "schools of higher grade" of greatest possible benefit to the home town will probably result in a certain amount of specialization. Absolute standardization of such schools, as commonly attempted for the traditional high school, will not be acceptable. In the next few years, then, a decrease may be expected in the attendance at nonlocal high schools.<sup>2</sup>

*Rhode Island.*—There are three types of consolidation in the State: uniting three or more schools to form a graded school of two or more departments; uniting an ungraded with a graded school; and uniting schools with an average of less than 12 pupils to establish a graded school. Under the law of 1898 aid to consolidation has been given as follows:

1899.....	\$666	1914.....	\$2,380	1918.....	\$2,700
1900.....	500	1915.....	2,400	1919.....	3,530
1910.....	1,880	1916.....	2,500	1920.....	3,775
1913.....	2,200	1917.....	2,600	1921.....	3,940

More towns receive aid for the second type of consolidation than for the first.

The State office reports:

There are a few consolidations of the first type. In the town of Charlestown, Pawcatuck school at Carolina was formed from three mixed schools, has three departments and an average number belonging of 97 pupils.

Town of Gloucester, formed from three mixed schools, two departments, average belonging, 37. This school has the grammar department in one building and the primary in another. Besides this school, Gloucester draws aid on three mixed schools consolidated at different times with the Chepachet graded school.

<sup>2</sup> Consolidation of Schools in Maine and Connecticut. U. S. Bu. of Educ., Rural School Leaflet No. 4, pp. 10-11.

Town of South Kensington, at Matunuck, from three mixed schools, two departments, average belonging, 31. At time of this consolidation a new building was provided. Since the formation of the graded school one other mixed school has been closed and pupils taken to this school, drawing aid under the other provision, under which aid is also given for five other schools consolidated with already established schools.

*Summary of consolidation in New England.*—Fairly reliable figures for the number of administrative school units in all New England are not obtainable for the years before 1848. The number in that year as compared with 1920 is as follows:

	1848	1920
Maine.....	3,580	519
New Hampshire.....	1,888	256
Vermont.....	2,276	175
Massachusetts.....	3,475	354
Connecticut.....	1,663	173
Rhode Island.....	332	39
Total.....	13,214	1,616

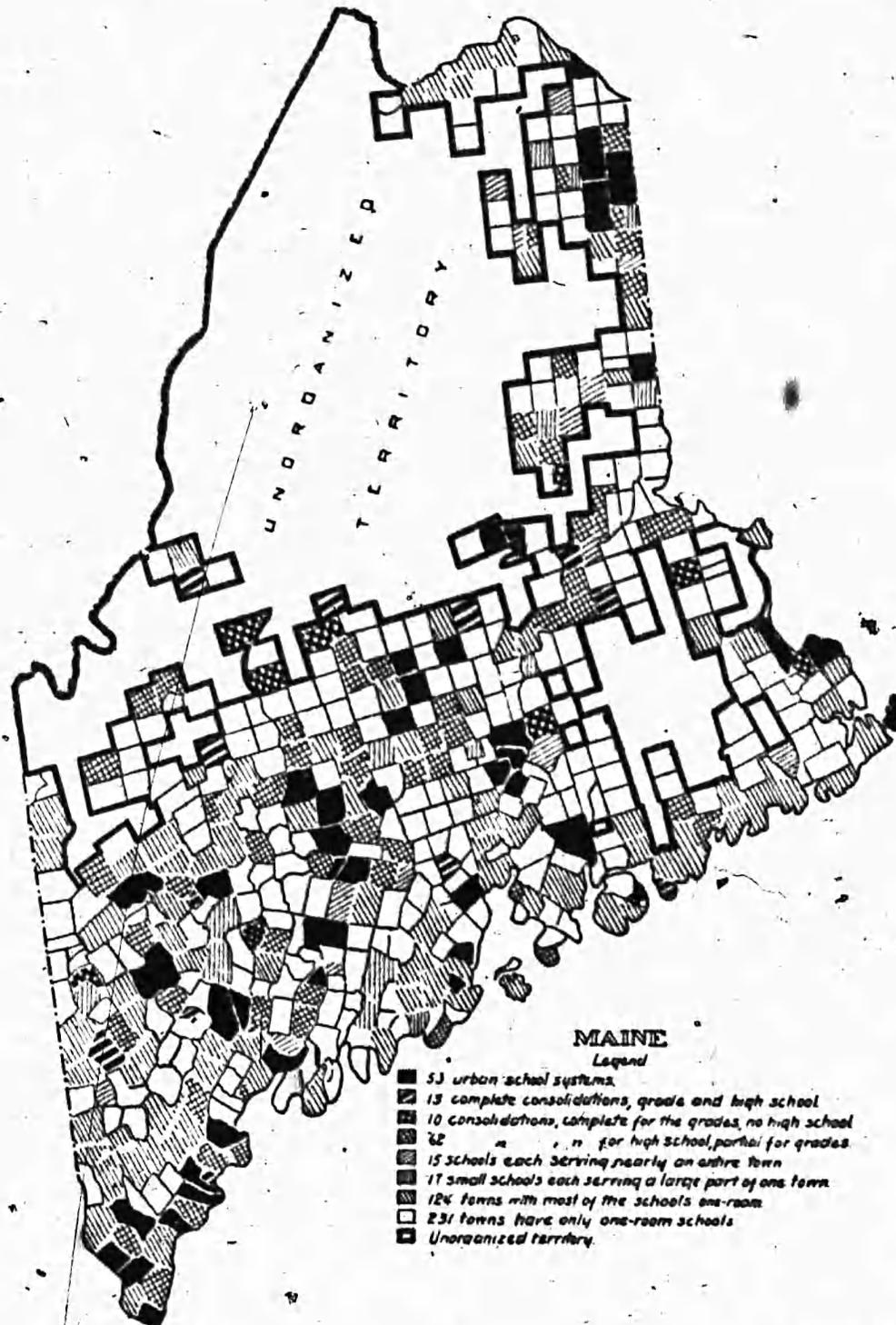
The reduction in units was a little more than seven-eighths. There was probably a reduction in the number of school buildings also and, taking into consideration the fact that New Hampshire and Rhode Island report schoolrooms as schools, a decrease in the number of schools as well. Between the dates 1848 and 1920 the enrollment increased from 464,000 to 1,242,221. These figures indicate the centralization of educational effort and consolidation of schools that has taken place in New England in 72 years, most of it through the change from the district to the town unit and the return of independent districts to the systems of the towns in which they were located.

The accompanying maps of the six New England States, with the explanations of the conventional signs used, show by classes of towns the degree of centralization in this section. Such graphic representations are necessarily somewhat more general than exactly accurate in detail. The 1,616 administrative units are roughly divided into six groups:

1. One hundred and seventy-six urban communities with highly centralized school systems. These are shown in solid black on the maps and are distributed among the States as follows: Maine, 53 urban school systems; New Hampshire, 12 city systems and 21 special districts; Vermont, 3 city districts and 30 independent districts; Massachusetts, 38 city systems; Connecticut, 18 city systems; Rhode Island, 6 city systems.

2. Eighty-two units somewhat less centralized than the urban systems but very similar to them. These are shown in the heavy black diagonal hatch. Their distribution among the States is:

Maine, 13 complete consolidations for both grades and high school; New Hampshire, 19 towns with no one-room schools; Massachusetts,



MAP 2.—Showing the territory unorganized locally for school purposes, and the degree of school centralization in each town of Maine.

12 towns of over 5,000 population each with no one or two room schools; Connecticut, 14 centralized systems; and Rhode Island, 24 centralized systems.

## NEW HAMPSHIRE

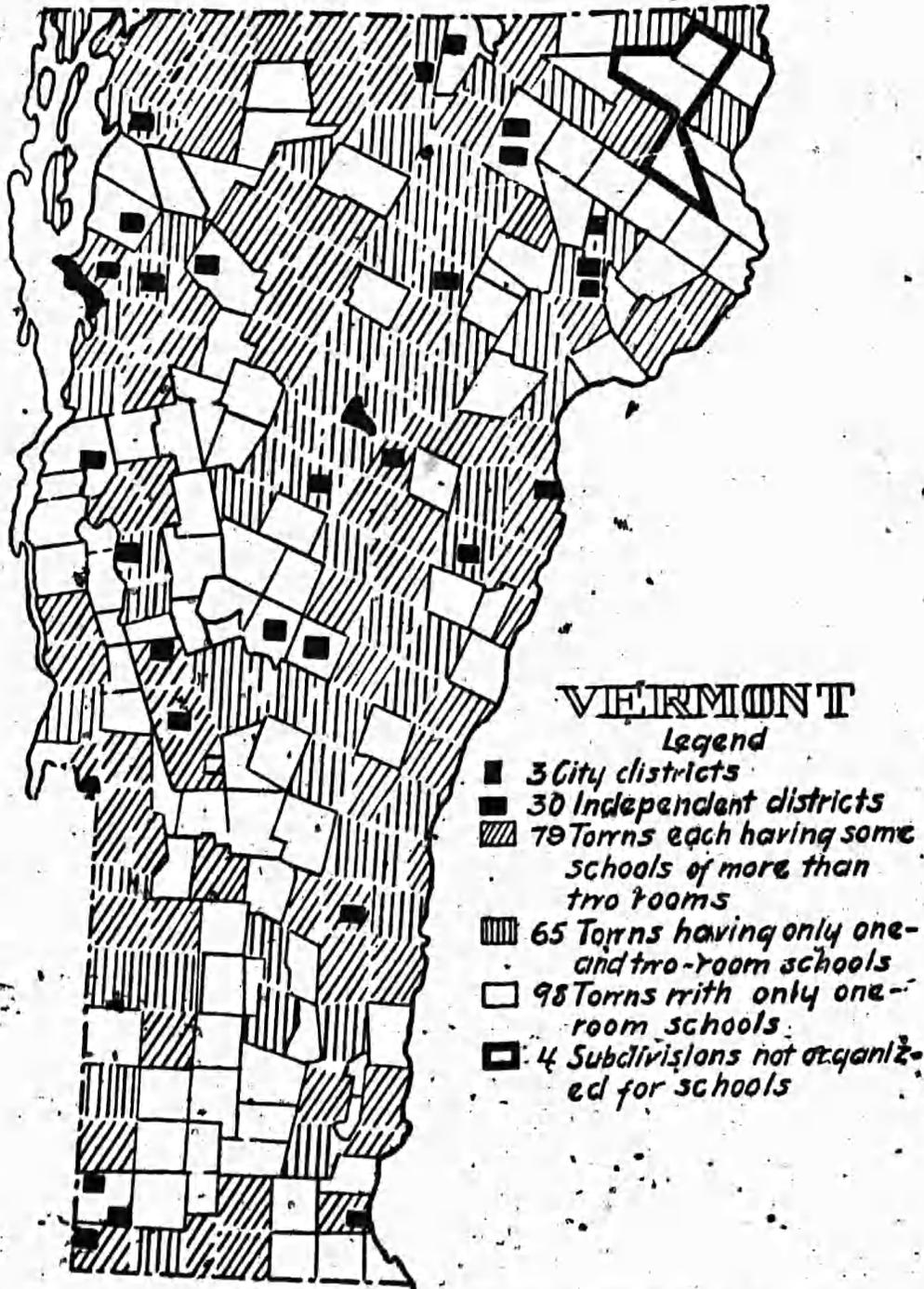
## Legend

- 12 City systems
- 21 Special districts
- ▨ 19 Towns with no one-room schools
- ▧ 103 Towns with classified and semi-classified schools and also one-room schools
- 101 Towns have only one-room schools
- ◻ 17 Subdivisions not organized for schools



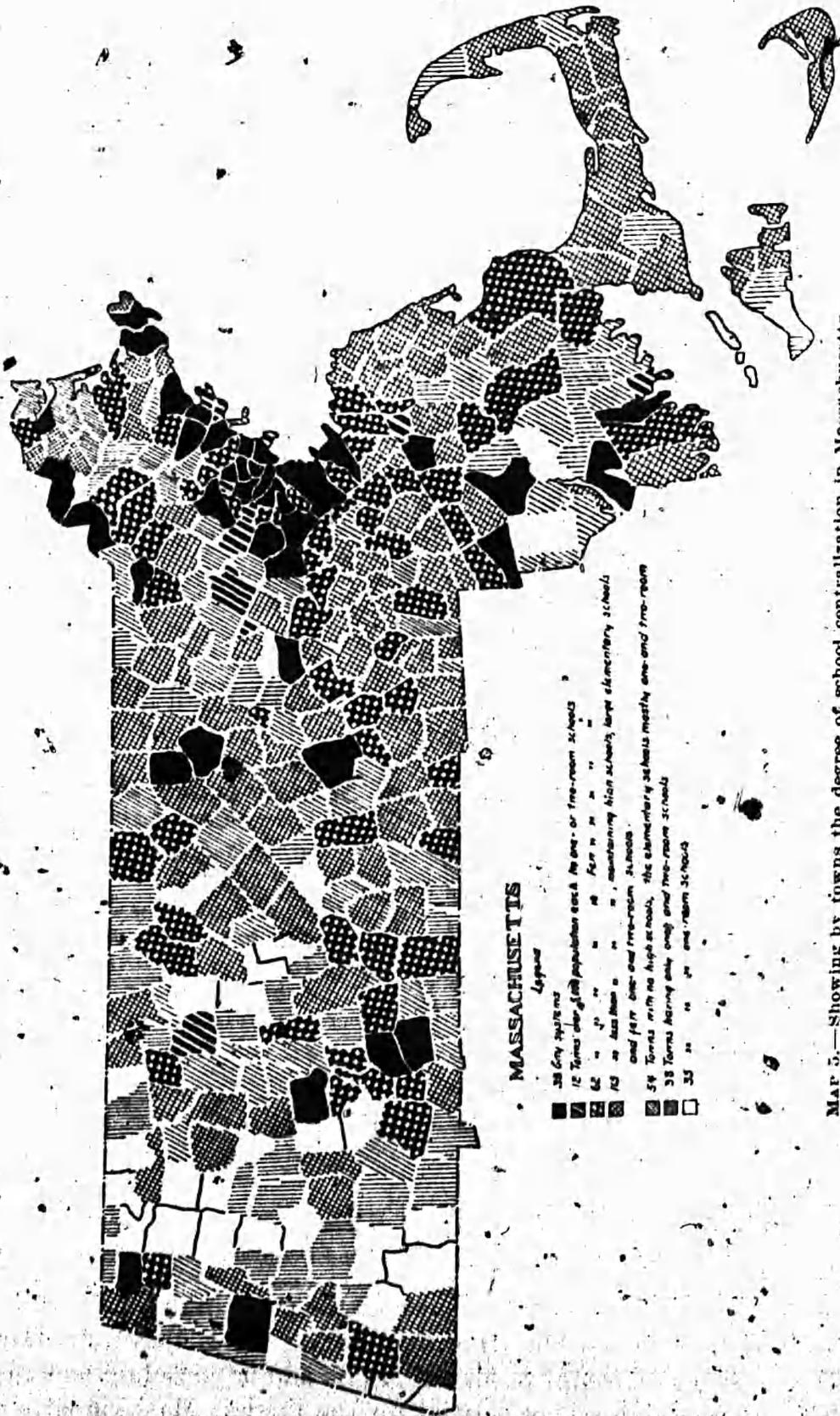
MAP 8.—Showing by towns the degree of school centralization, in New Hampshire and the few subdivisions of the State not organized locally for school purposes.

3. Three hundred and ten towns having large schools that serve all or most of the town. The secondary instruction for these towns is well centralized; most of the elementary schools are large; there are



MAP 4.—Showing by towns the degree of school centralization in Vermont.

few small schools. They are shown on the maps in the checkerboard hatch and the cross hatch. For the separate States, they are: Maine, 10 consolidations complete for the grades and 62 consolidations complete for the high school, partial for the grades; Massachusetts, 62



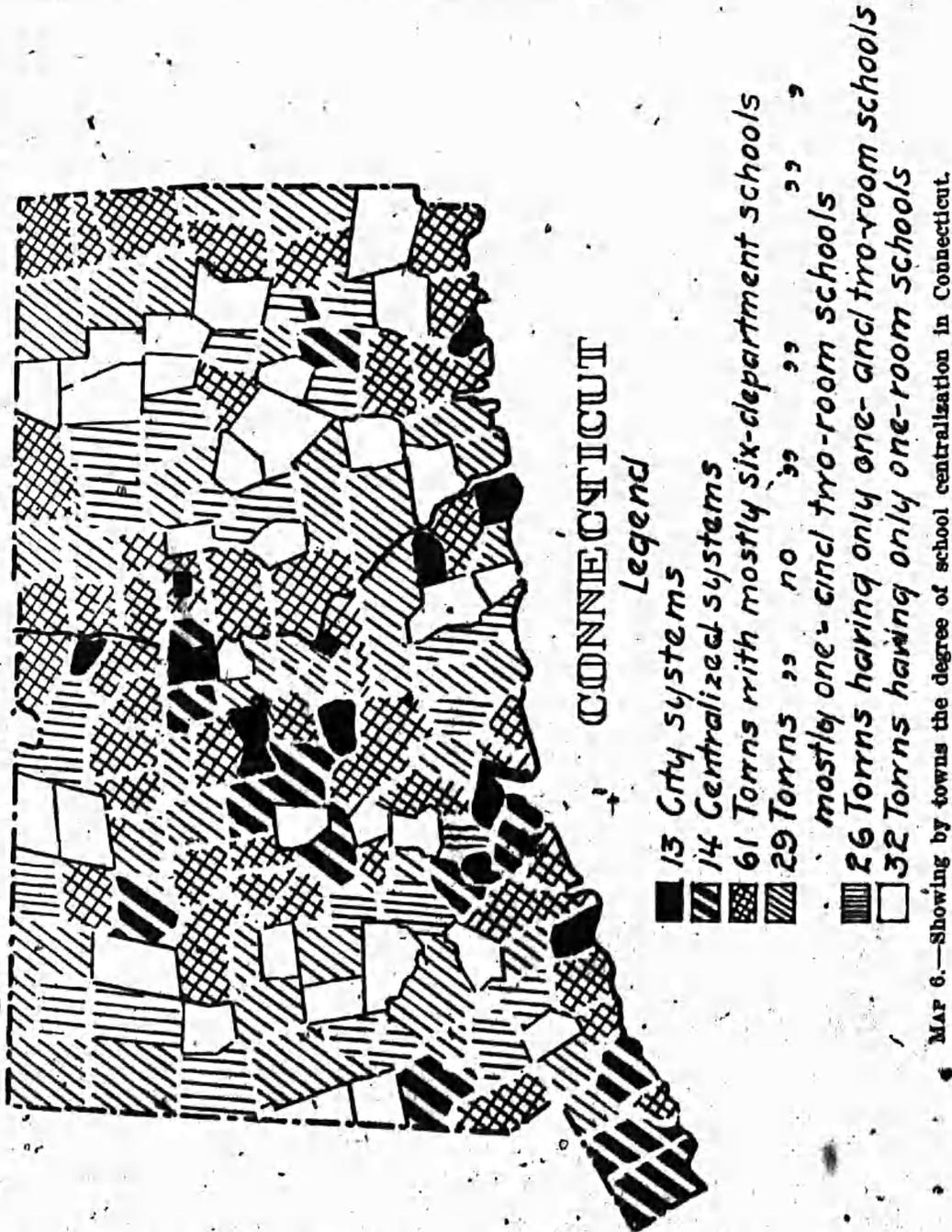
MASSACHUSETTS

Legend

- 38 Towns with no school
- 12 Towns with 1-100 population each, no one- or two-room schools
- 62 Towns with 1-100 population each, no one- or two-room schools
- 13 Towns with 1-100 population each, maintaining high schools, large elementary schools, and one- or two-room schools
- 54 Towns with no high schools, the elementary schools mostly one- and two-room schools
- 38 Towns having only one- and two-room schools
- 33 Towns with one- and two-room schools

MAP 5.—Showing by towns the degree of school centralization in Massachusetts.

towns of over 5,000 population each with large schools and few one and two room schools, and 115 towns with less than 5,000 population each maintaining high schools and large elementary schools with few one and two room schools; Connecticut, 61 towns in which nearly all the schools are of the six-department type.

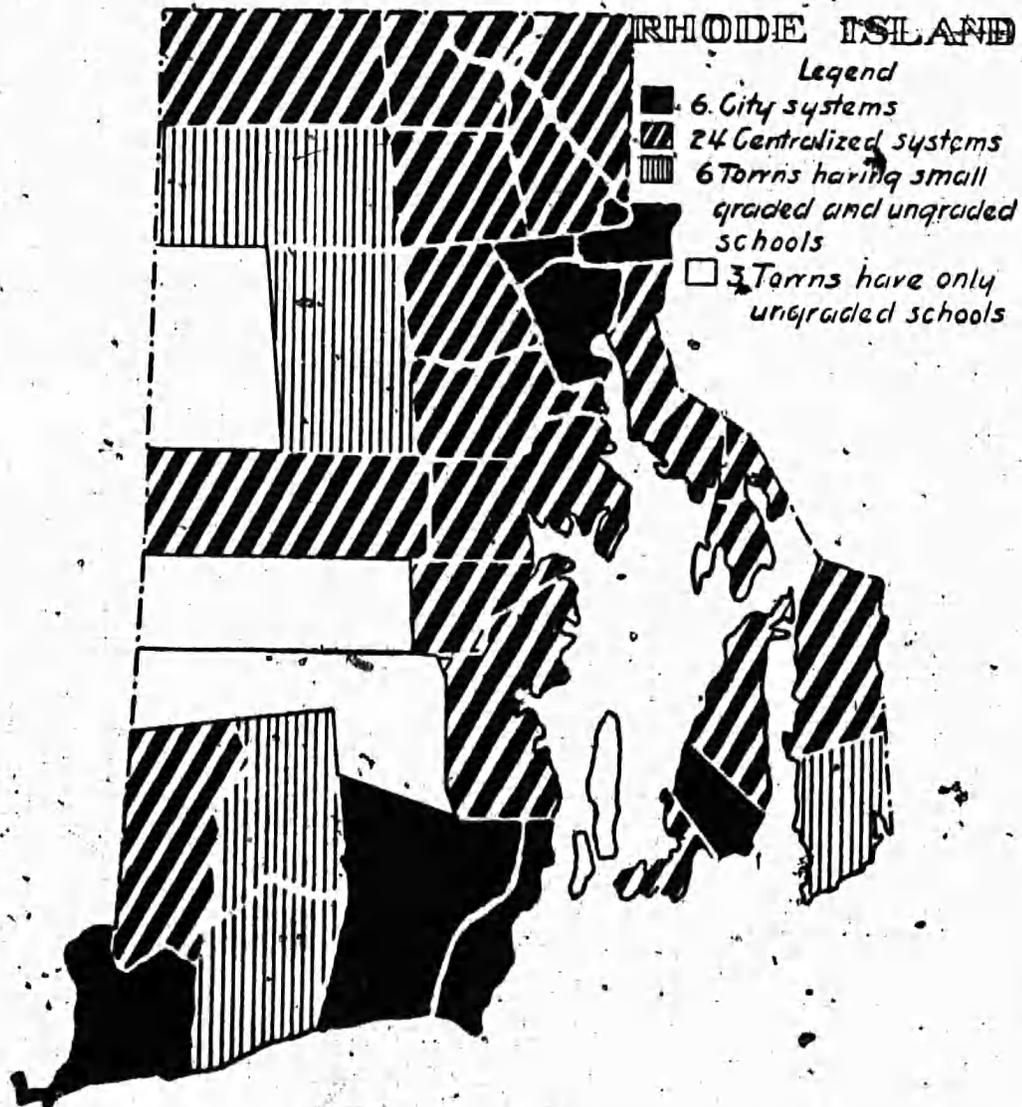


MAP 6.—Showing by towns the degree of school centralization in Connecticut.

4. Four hundred and four towns in which centralization has been brought about only to a slight degree. These are shown in light diagonal hatch. They are distributed as follows: Maine, 15 schools of three or more teachers serving most of a town, and 124 towns with most of the schools of the one-room type; New Hampshire, 103 towns with classified and semiclassified schools in addition to one-room

schools; Vermont, 79 towns, each having some schools of more than two rooms; Massachusetts, 54 towns with no high schools and the elementary schools mostly one and two room; and Connecticut, 29 towns with no six-department schools.

5. One hundred and fifty-two towns having only small schools. These towns are shown on the maps in light vertical hatch. There



MAP 7.—Showing by towns the degree of school centralization in Rhode Island.

are 17 in Maine, 65 in Vermont, 38 in Massachusetts, 26 in Connecticut, and 6 in Rhode Island.

6. Five hundred towns that have only one-room schools. They are shown on the maps in white. Maine has 231, New Hampshire 101, Vermont 98, Massachusetts 35, Connecticut 32, and Rhode Island has 3 towns with only ungraded schools.

There are 17 subdivisions in New Hampshire and 4 in Vermont that are not organized locally for school purposes. These and the

very large unorganized territory of Maine are shown on the maps in white with the heavy black border line.

Of the 1,616 administrative units, including cities, towns, special and independent districts, plantations, gores, and grants, 568 have school systems that are centralized in degrees ranging from the town which provides a central secondary school to the large city system. One thousand forty-eight towns have only small schools, and of these 500 have only one-teacher schools. It is evident that large areas of New England are still served by the comparatively weak, ineffective one-room schools.

*Michigan.*—In Michigan centralization has been going on, first, through the establishment of graded schools in the cities and towns; second, the extension of the graded school plan to villages and unions of districts; third, the formation of township districts by special enactments and the township law applying to the upper peninsula; fourth, the general permissive township district act for the State; fifth, enactments for partial consolidation by grades in the form of rural high schools and county agricultural schools; sixth, provision for consolidation of districts by the township board, with the consent of the districts affected; and seventh, consolidation of districts for the purpose of forming rural agricultural schools encouraged by State aid.

The accompanying Map 8 shows the per cent of the townships that are under a township unit organization or have consolidated schools in each county.

In the upper peninsula most of the schools are under the township district system. Iron County, an area of 29 surveyed and 8 partially surveyed townships, is organized into 7 townships for school and governmental purposes. The board of education of each township district has arranged a central school and maintains one or more smaller schools at necessary places. The township superintendent supervises not only the central school but the rural schools as well.

Berrien County has made good use of the graded-school law. It is educating 12,842 children in schools of more than one room. Excluding the three cities of the county 6,485 children are in attendance at schools of more than one room as against 3,879 in one-room schools. The per capita cost, both total and for instruction, is below the average for the State.

The effect of these efforts toward centralization is shown in some of the statistics for the schools. The number of townships and cities reporting has increased only from 1,241 to 1,342 since 1890. The number of graded districts first reported as 94 in 1860 was 679 in 1919. The number of township districts reported first as 8 in 1891 was 171 in 1919. In the years 1910 to 1919, inclusive, the enrollment



in graded schools has increased by 46 per cent, while in the ungraded schools it has fallen off by 10 per cent. From July 1, 1919, to July 1, 1920, 28 consolidated schools were formed in the lower peninsula. They take the place of 175 one-room schools.

## COUNTIES HAVING:



GRADED SCHOOLS HAVING ADVANTAGES OF CONSOLIDATION.



75 TO 100% OF TOWNSHIPS ARE TOWNSHIP UNIT OR CONSOLIDATED DISTRICT.



50 TO 75% OF TOWNSHIPS ARE TOWNSHIP UNIT OR CONSOLIDATED DISTRICT.



25 TO 50% OF TOWNSHIPS ARE TOWNSHIP UNIT OR CONSOLIDATED DISTRICT.



25% OR LESS OF TOWNSHIPS EITHER TOWNSHIP UNIT OR CONSOLIDATED DISTRICTS.



NO TOWNSHIP UNIT OR CONSOLIDATED DISTRICTS.

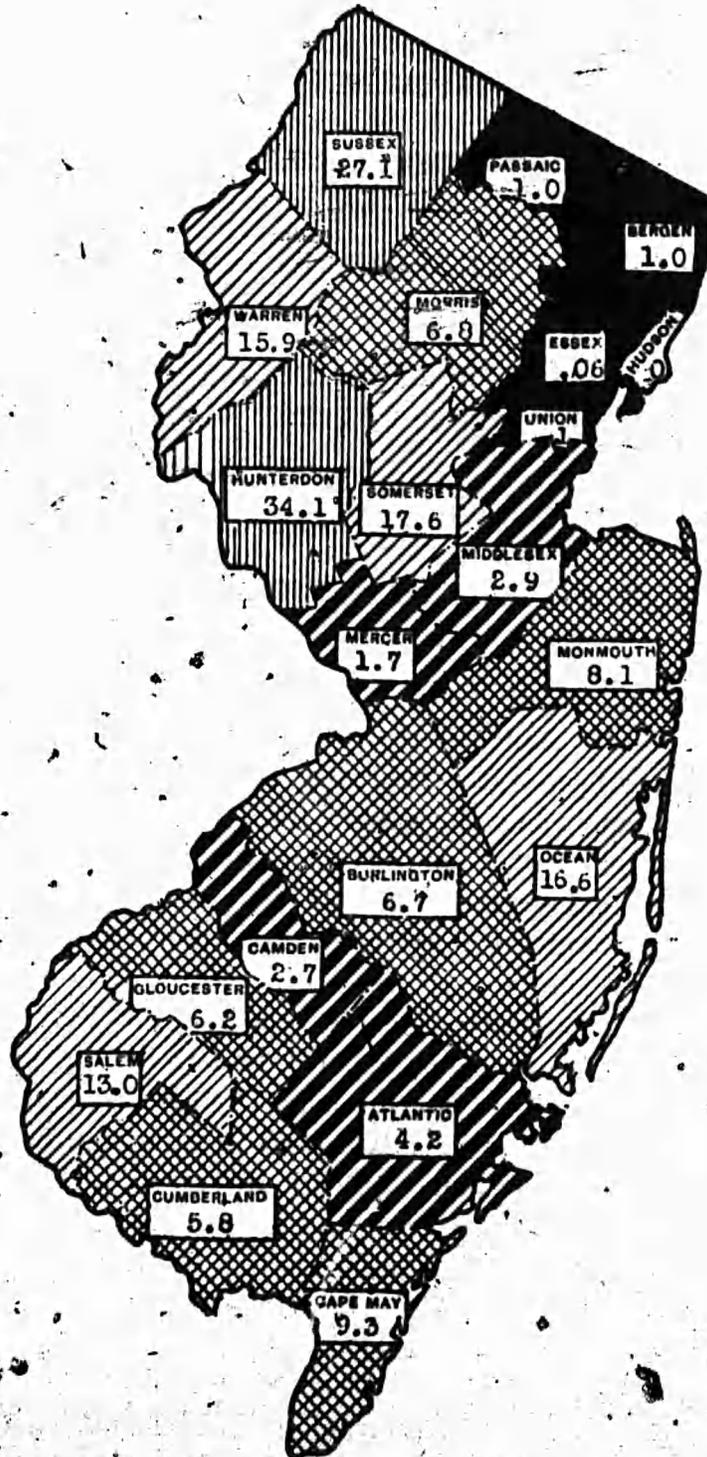
*New Jersey.*—The school system of New Jersey is in many ways one of the most highly centralized in the United States. Its educational progress has been rather steadily in that direction. When the Olcott bill became a law there were 1,408 school districts, 791 of which enrolled fewer than 25 pupils each. The following year the number of districts had been reduced to 374. Of these a number were weak districts that maintained their separate identities because they were boroughs.

The number of consolidated schools reported for New Jersey is 92, but it is necessary to use some general data to determine the full extent of consolidation. The table on page 77 shows the trend toward consolidation in the State as it is expressed in nine significant items for the decade 1910-1920. The increase in school districts is due to the formation of new boroughs and municipalities. A law of 1921 permits any newly created municipality to continue as a part of the township school district for educational purposes. It is probable that the number of school districts will in the future increase very little, if at all.

The percentages of pupils and teachers in one-room schools are lower than in any other State except possibly Massachusetts.

THE PERCENTAGE OF PUPILS ENROLLED IN ONE-ROOM SCHOOLS.

NEW JERSEY



MAP 9.—Showing by counties the degree of school centralization in New Jersey as expressed by per cent of pupils enrolled in one-room schools.

Statistics of consolidation in New Jersey.

	1910	1920	Per cent of increase.
Districts.....	458	493	7.6
Buildings.....	2,084	2,106	1.05
One-room buildings.....	1,908	654	27.9
Enrollment in one-room buildings.....	26,836	18,995	29.2
Per cent of day school enrollment.....	5.3	3.2	
Enrollment in two-room buildings.....	15,238	15,434	1.2
Per cent of day school enrollment.....	3.1	2.6	
Teachers in one-room school.....	826	529	35.9
Per cent of State teaching corps.....	6.5	2.8	
Class rooms.....	10,301	14,994	45.5
Pupils transported.....	12,778	21,727	70.1
Spent for transportation.....	\$145,737	\$781,259	436
Per cent of total expense.....	1.6	2.2	

† Data for 1911    † Decrease    † Data for 1913.    † Data for 1912.    † Data for 1915.

The accompanying Map 9 shows by counties the percentage of pupils enrolled in one-room schools. It is significant that for a State in which the total enrollment in one-room schools is only 3.2 per cent of the day-school enrollment the percentages by counties range from 0 to 27.1 per cent. If like data could be had for all the States the exact field for consolidation could be much more accurately determined.

Indiana.—Indiana has probably effected more rural-school consolidation than any other State. The following table shows something of the growth of consolidated schools:

Consolidation in Indiana.

Year.	Consolidated schools.	Abandoned schools.	Wagons used.	Children transported.	Total cost of transportation.
1902.....			181	2,599	
1904.....		679	374	5,356	\$590
1906.....	361	830	561	9,424	1,034
1907.....		1,261			
1908.....	386	1,611	1,116	19,109	1,204
1909.....	420		1,241	19,293	155,390
1912.....	550		1,446	23,884	447,109
1914.....	665	1,963		26,403	664,807
1916.....	706	2,164	2,046	37,456	1,164,726
1918.....	897	2,363	4,193	57,069	1,250,469
1919.....	1,002	2,558	4,311	62,463	1,495,517
1920.....	1,040	2,920	4,107	62,480	1,917,711
1921.....				67,824	2,372,578

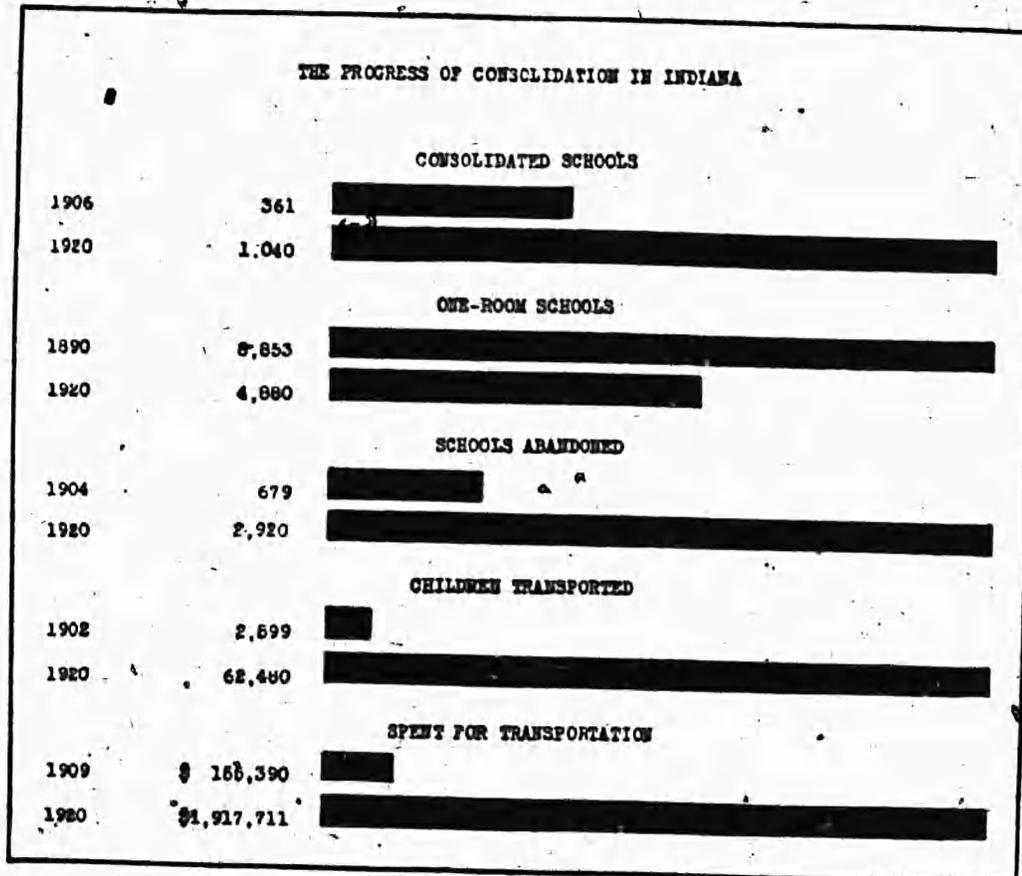
† Cost per day.

The progress of consolidation in Indiana, as shown by increases in number of consolidated schools, schools abandoned, children transported, and amounts spent for transportation, and by the decrease in number of one-room schools, is shown in the graph on page 78:

In his report for 1920 the State superintendent gives a ranking of the 92 counties for the percentage of one-room schools abandoned. Randolph County is first, having at that time closed 92 per cent of its little schools. Only three counties had no consolidated schools.

The Indiana education commission recently reported:

No county is fully consolidated; fairly complete consolidation has occurred in only a few counties; less than 40 per cent of the counties have consolidated as many as half their one-teacher schools, and three counties have done nothing at all. Obviously, the extent to which the elimination of one-teacher schools can be carried depends somewhat on topographical conditions, distribution of population, etc. Thus certain counties will always have some small schools. Nevertheless, in probably three-fourths of the counties, practically complete consolidation is feasible. To achieve this result, every effort should be made:



for rural education can not be efficiently conducted unless children are brought together in considerable numbers. \* \* \*

A satisfactory system would provide elementary schools within easy reach of all children, a number of junior high schools properly located, and a smaller number of senior high schools so situated as to cover a still larger area. The elementary schools would thus be so coordinated and articulated with junior and senior high schools that, with a minimum of difficulty, a pupil, having passed through the neighborhood elementary school, could without interruption continue his education in good high schools.<sup>4</sup>

The commission also advises that the "township is too small a unit to serve as an adequate and efficient basis of rural school organization" and recommends a county system for all schools except those of the larger cities.

<sup>4</sup> Public Education in Indiana. A report of the Indiana Educational Commission, pp. 215, 216.

*Ohio.*—In Ohio the word “centralization” is used with practically the same meaning as the word “consolidation” in most of the other States. If all the schools of a district, whether township or part of a township, are combined into one by process of petition and election, they are said to be centralized. Consolidation, in Ohio, is applied only to the temporary or permanent suspension of schools because of an average daily attendance of less than 10, disadvantageous location, or other cause, and may be effected by the board of education without an election.

The growth in number of centralized and consolidated schools in the State since 1909 is shown in the following table:

Number of schools.		Number of schools.	
1909.....	131	1916.....	539
1910.....	171	1917.....	611
1911.....	186	1918.....	656
1912.....	192	1919.....	722
1913.....	296	1920.....	(estimated) 800
1914.....	358	1922.....	1,010
1915.....	468		

The amount spent for transportation increased from \$473,470 in 1915 to \$2,329,937 in 1921.

The greater part of centralization in Ohio has taken place since the enactment of the rural-school code at a special session of the assembly called for the purpose in 1914.

The rural-school supervisor states that there are about 2,900 fewer one-room schools than there were in 1914, and some 6,600 still remaining. He lists the 13 counties leading in centralization on January 1, 1922, as follows:

Counties.	Number of one-room, one-teacher buildings in the county in—		Consolidated and centralized schools in the county in 1922.		Counties.	Number of one-room, one-teacher buildings in the county in—		Consolidated and centralized schools in the county in 1922.	
	1914	1922	Consolidated.	Centralized.		1914	1922	Consolidated.	Centralized.
Butler.....	90	27	6	3	Medina.....	85	15	10	7
Champaign.....	70	8	3	12	Pickaway.....	87	22	5	10
Clark.....	65	5	19	7	Portage.....	80	13	3	18
Cuyahoga.....	96	18	20	18	Preble.....	94	23	7	4
Fayette.....	84	26	2	2	Trumbull.....	85	8	1	21
Lake.....	58	20	11	1	Union.....	40	21	1	17
Lucas.....	97	30	22	1					

*North Dakota.*—The essential facts of the statistics contained in the report of the inspector of rural, graded, and consolidated schools for 1912 summarize somewhat as follows:

Rural schools reporting.....	4,100
(a) With average daily attendance less than 12.....	2,214
(b) With average daily attendance 13 to 20.....	1,253
(c) With average daily attendance more than 20.....	418

Schools legally consolidated.....	108
(a) Located in villages.....	55
(b) Located in the open country.....	53
Schools having pupils living over 2½ miles from the schoolhouse.....	683
Number of these, exclusive of consolidations, that furnish transportation.....	203
Number of these spoken of as consolidated schools.....	53
Pupils transported.....	2,519
Towns with less than four schoolhouses.....	947

Since 1912 the policy of consolidation and standardization has been steadily followed, the State inspectors of consolidated, graded, and rural schools increased from one to three, and the amounts spent in aid for these schools was raised from \$15,000 to \$215,444 in 1921. Progress by years is shown in the following table:

*Number of schools standardized.*

Year.	Consolidated.	Graded.	One-room rural.	Total.	Amount appropriated for State aid.
1911-12.....	42	33	125	170	\$15,000
1912-13.....	31	53	239	323	15,000
1913-14.....	62	51	197	310	35,000
1914-15.....	80	53	238	371	35,000
1915-16.....	124	57	258	439	60,000
1916-17.....	164	52	384	600	112,500
1917-18.....	224	42	489	755	112,500
1918-19.....	285	47	543	875	211,111
1919-20.....	299	29	617	945	209,589
1920-21.....	312	31	662	1,005	215,443

State aid, standardization, and State inspection applied throughout the period and still apply to high schools also.

It must be understood that the number of consolidated schools that have met the standard requirements and received State aid does not represent all the consolidated schools of the State. The data showing the progress in consolidation for all schools are as follows:

Number of consolidated schools.		Number of consolidated schools.	
1910.....	88	1916.....	( <sup>1</sup> )
1911.....	114	1917.....	401
1912.....	126	1918.....	( <sup>1</sup> )
1913.....	( <sup>1</sup> )	1919.....	449
1914.....	181	1920.....	457
1915.....	243	1922.....	515

<sup>1</sup> No report.

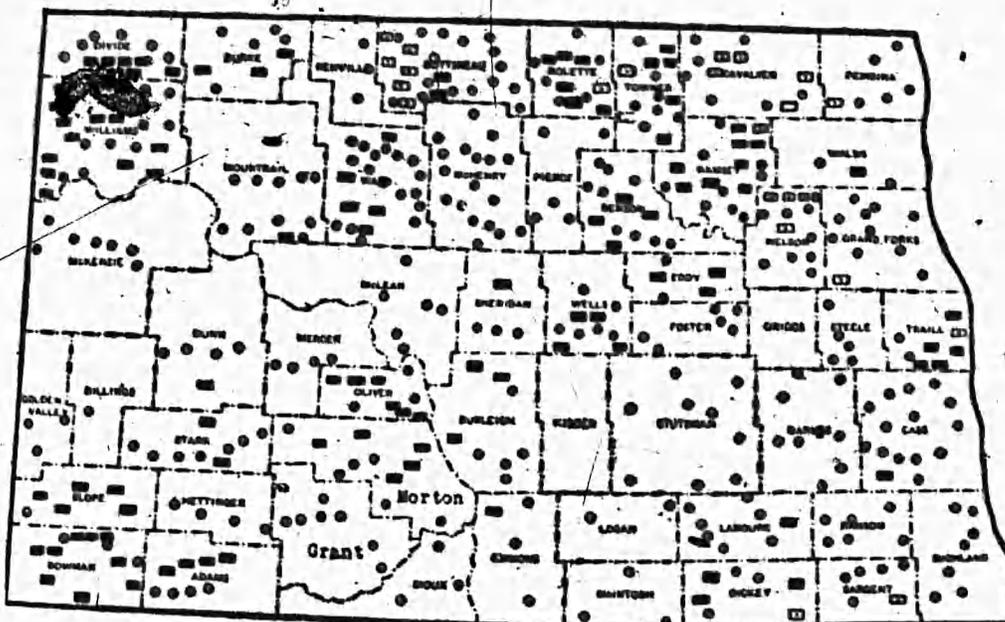
In 1917 the legislature defined a consolidated school as "one where at least two teachers are employed and at least 18 contiguous sections are served, without regard to the manner of its formation." The considerable increase in the number reported in 1917 over that of 1915 is partly accounted for by that law.

A summary of a report on consolidation in the State in 1922 is:

1. Number of one-room schools.....	4,751
2. Consolidated schools.....	515
Open country schools.....	177
Village and town schools.....	338
3. Average size of grounds.....	acres 2 to 5
4. Largest grounds.....	acres 20
5. Cost of buildings and equipment.....	\$7,000-\$80,000
6. Teacherages.....	350

Very few of the schools have farms in addition to the grounds. None hires the principal by the year. Most of them have auditoria

NORTH DAKOTA



LEGEND:

- Town Consolidation   ●
- Open Country       ■
- With High School   ●
- With High School   ■

MAP 10.—Showing the location and the kinds of consolidated schools in North Dakota.

and laboratories for agriculture, home economics, and manual training. One has live stock; none has farm machinery.

The data for transportation are:

1. Conveyances used.....	608
Owned by district.....	479
Hired by district.....	124
2. Number of pupils conveyed.....	16,509
3. Average cost per pupil per year.....	\$45.51
4. Average monthly salary of drivers.....	\$60-\$125

The children ride from 2½ to 8 miles one way and are from 30 minutes to 1½ hours on the road. No bond is required of the drivers.

The schools are organized on the 8-4 plan. In the elementary grades of the consolidated schools, 51,300 children are enrolled. The per cent of daily attendance is over 90. In the high-school grades there are 7,871 pupils. No data in regard to the relative efficiency of the schools before and after consolidation are available.

The appropriation for State aid to consolidated, graded, and rural schools of \$430,000 for the school years of 1920-21 and 1921-22 was insufficient, and the part of it given to the consolidated schools was divided pro rata, as shown in the following table:

*Apportionment of State aid to the consolidated schools. (Standardized.)*

Class of school.	Tax rate, in mills.	Number of schools.	Amount of aid for each school.	Total amount of aid.	Pro rata share of aid for each school.	Total amount pro rata aid for each school.
First.....	0-4	2	\$400	\$800	\$232	\$464
	4-7	12	800	9,600	464	5,568
	7+	129	1,200	154,800	698	89,784
Second.....	0-4	1	350	350	203	203
	4-7	20	700	14,000	406	8,120
	7+	58	1,050	60,495	809	35,322
Third.....	0-4	4	300	1,200	174	692
	4-7	12	600	7,200	348	4,178
	7+	74	900	66,600	522	38,622
Total.....		312		314,400		182,961

#### STATES IN WHICH THE COUNTY AS A UNIT IS A CONSIDERABLE FACTOR IN BRINGING ABOUT CONSOLIDATION.

*Utah.*—The entire State is divided into 40 consolidated school units. Five of these are city systems. Outside of the cities the 29 counties each form one county-district with the following exceptions:

1. Summit, three districts: North Summit, South Summit, and Park.
2. Salt Lake, two districts: Granite and Jordan.
3. Utah, two districts: Alpine and Nebo.
4. Juab, two districts: Tintic and Juab.
5. Sanpete, two districts: North and South Sanpete.

A special report on consolidation in Utah says:

The actual operation of the county-district plan was found to be far less difficult and met with much less opposition than was anticipated. Almost without exception, the patrons of the schools accepted the new order of affairs as the right thing, and obstacles which at first seemed formidable quickly vanished under the touch of reality. It soon became evident that consolidation promised unlooked for advantages. It not only substituted a business organization for a system of chaos and decay, but the new movement carried a spirit of progress and a stimulus to achievement never before suspected.

Besides offering a business organization and supplying expert supervision through which better qualified teachers are secured, consolidation tends to equalize school advantages. This is done largely through providing a uniform school year, equalizing tax burdens, and encouraging the transportation of children living more than 2½ or 3 miles from convenient school centers.

Utah soon discovered, however, that while consolidation equalized school burdens and advantages within each school unit, it was powerless to equalize advantages among the various units themselves. For example, a 5-mill tax on the property valuation of a certain district unit yields only \$8.90 per capita of the school population while the same levy in another district gives \$57.10 per capita, almost sufficient for elementary and high school purposes without financial help from the outside. This difference is due to the fact that the latter district possesses a large amount of corporate property, while the former has practically none.

The disparity in the taxing power behind each child among the various districts led the State in 1919 to propose a constitutional amendment providing for a State school fund equaling \$25 per capita of the school population to be raised and apportioned annually. This amendment carried in 1920, and the legislature of 1921 put it into effect. This means that the wealth of the entire State will help materially to educate all the children of the State.

To provide additional revenue, each school unit through its school board is empowered to levy a local school tax ranging up to 7 or 10 mills and to provide for such special taxes for maintenance or bonds for building purposes as the taxpayers by vote may authorize.

The transporting of pupils to convenient centers has aided greatly in the promotion of well-graded schools and in the establishment of efficient high schools. At first the movement met with considerable opposition, largely because it was an innovation, but as soon as its superior results were apparent, opposition weakened and at length practically disappeared. In 1920 all but 6 of the 40 school units in the State employed transportation for grade pupils, and 22 of the districts used it to promote attendance in high schools. During the year, \$93,193.97 was expended for transportation in the grades, and in the high schools \$77,092.40. The average distance covered one way is about 5 miles, or 10 miles for the round trip. The average cost per pupil is approximately 2 cents per mile in the larger districts reported. Box Elder, Jordan, and Granite spend large amounts for this purpose. The city schools, on the other hand, have slight occasion to employ this expedient. Auto busses, trucks, street cars, interurban roads, and railroads are used in transportation as convenience warrants. In several instances high-school students drive the conveyances and are taught in the auto repairing departments of the schools to care for the machines.

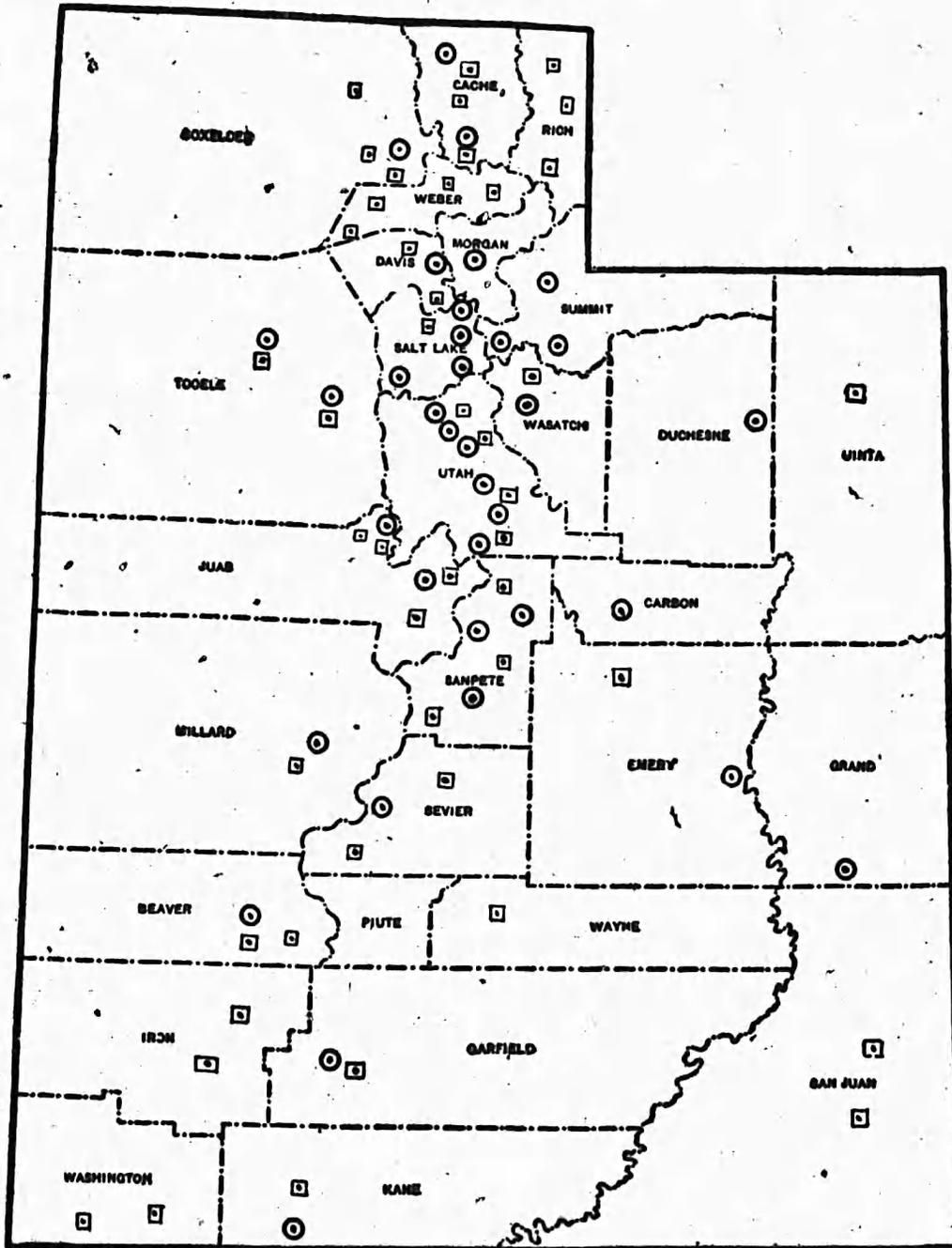
An evidence of the rapid achievement of results under consolidation is the fact that during a single year the number of one-teacher schools was reduced 18 per cent. At present there are but few over 100 such schools, a number which may not be reduced greatly owing to the sparsely settled condition of many parts of the State.

Probably the most striking result of consolidation, however, is the phenomenal growth of high schools. In all but two of the small units in the State, a high-school education is made possible and in most instances convenient for the young people in each district. Altogether, there are 45 schools, each giving four years of high-school work, and on the whole splendidly equipped for the courses offered.

As a requisite for participation in the State high-school fund, the State board of education wisely decreed that each school be maintained for nine months, that a balanced curriculum including vocational subjects be offered, that the school be well equipped for the courses offered, and that the teachers hold certificates issued by the State. High-school inspection was likewise required.

Forty high-school buildings have been erected, at an average expenditure of approximately \$100,000. The East Side High cost \$750,000 and the West Side

# UTAH



**LEGEND**  
 Consolidated Rural Districts-----  
 With High Schools----- ○  
 With Junior Schools----- □

MAP 11.—Showing the consolidated schools of Utah.

High, about to be constructed, is estimated at \$1,000,000. The campuses of these new schools average 10 acres each. Most of the buildings include a gymnasium and an auditorium, and, where a water system is available, swimming pools and showers.

A part-time law passed by the legislature of 1919 requires attendance for 30 weeks in high school up to 18 years of age unless the minor is excused to go to work, and when so excused such person is required to take at least 144 hours a year in part-time schools or classes. This law in its actual operation is proving to be a full-time measure, particularly in the rural districts where part-time classes are not feasible. In several districts practically the entire high-school population is enrolled in public and private schools. This has given rise to an unprecedented situation; namely, in Utah the per cent of high-school enrollment to the high-school population, counting attendance in private schools and part-time classes, is larger than the per cent of enrollment in the elementary grades. It is doubtful that this unique condition is duplicated by any other State in the Union.

*Louisiana.*—In the biennial report of the State superintendent of public education of Louisiana for the years 1920 and 1921, the following statement is made as to consolidation of schools:

There has been great improvement in the country schools throughout the State. Consolidation has gone forward rapidly; the number of one-teacher schools is small—a majority of the country children are taught in consolidated schools—and many of them are on the high-school approved list, where pupils are receiving excellent instruction under the direction of competent teachers.

The State has just adopted a good roads system which will soon provide graveled or hard surfaced roads in practically all communities throughout the State. There has never been any one accomplishment in Louisiana which resulted in so much educational advancement as will be realized from the good roads program. Consolidation will keep pace with the building of good roads, and it is not too much to believe that within a few years it can be said with perfect truth that the country children of the State are being as well educated as the children in the cities.

*Data for the year 1920-21 in Louisiana.*

Number of consolidated schools.....	1,201
Number effected this year.....	52
Number of transfers in use.....	786
Transfer drivers employed.....	775
Average number of days transfers were used.....	159
Number of children transported.....	19,804
Consolidated schools using transportation.....	318
Average annual cost of operating each transfer.....	\$784.91
Average number of children transported by each transfer.....	25
Average cost per annum per child for transportation.....	\$31.15
Average annual salary paid drivers.....	\$758.09
Total amount spent for drivers' salaries.....	\$587,520
Operating and repairing transfers.....	\$29,418
Expenditure for transportation.....	\$616,939

In January, 1923, the State superintendent stated:

"I wish to bring to the notice of the board the fact that the good-roads program is already showing its beneficial effects upon the public schools. Our

people are committed to the consolidated school for country children. The progress in this field has been remarkable when viewed in the light of the bad roads over which school transfers have been required to operate. Already the great majority of the small, country schools have been eliminated, and the children have been brought together in large schools, where they are housed in good buildings and taught by much more competent teachers than could be secured in the smaller schools. As the good roads are constructed more of the small schools disappear and the children are transported in motor trucks to the town schools or to consolidated country schools.

I think it is reasonable to predict that within 5 or 10 years practically all of the small schools, with their numerous classes and inefficient teachers, will disappear, and that the country children will receive educational advantages in all respects equal to those enjoyed by children living in the larger centers. We are justified, I believe, in feeling much pride in the truth that probably no other rural State in the Nation has done more effective work in the wise development of its country schools than Louisiana.<sup>6</sup>

*Alabama.*—Consolidated schools are now being established in the State at the rate of about 100 a year, not including small two and three room schools.

Data for the year 1920-21 are as follows:

Number of consolidated school buildings in State.....	245
Cost of all consolidated buildings.....	\$2,308,584
Number of children attending consolidated schools.....	32,728
Number of consolidated schools erected in 1920-21.....	52
Number of new buildings located in open country.....	41
New buildings located in villages of less than 100 population.....	11
Average number of acres in school grounds.....	7½
Number of above new schools teaching manual training.....	17
Number of above new schools teaching domestic science.....	18
Approximate cost of new buildings.....	\$662,800
Estimated cost of small buildings displaced.....	\$57,075
Amount donated toward cost of buildings by county boards of education.....	\$109,945
Amount donated toward cost of buildings by State.....	\$162,265
Estimated cost of equipment in new consolidated buildings.....	\$92,950
Value of equipment in small schools displaced.....	\$9,180
Number of small buildings displaced.....	122
Number of teachers in new consolidated schools.....	243
Number of teachers in small schools displaced.....	164
Teachers with less than full high-school training in new consolidated schools.....	26
Teachers with less than full high-school training in small schools displaced.....	79
Teachers with two years or more college training in new consolidated schools.....	111
Teachers with two years or more college training in small schools displaced.....	33
Teachers with two or more years professional training in new consolidated schools.....	134
Teachers with two or more years professional training in small schools displaced.....	40

<sup>6</sup> Minutes of meeting of Louisiana State Bd. of Educ., Jan. 8, 1923.

A STATEMENT BY STATES.

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Length of service (in months) of teachers in consolidated schools	12½
Length of service (in months) of teachers in small schools displaced	8½
Average number of recitations per teacher in consolidated schools	11
Average number of recitations per teacher in small schools displaced	
by consolidated schools	26
Average salary per month in consolidated schools	\$87
Average salary per month in small schools displaced	\$68
Enrollment in new consolidated schools	8,119
Enrollment in small schools displaced	4,136
Per cent of enrollment in daily attendance in consolidated schools	83
Per cent of enrollment in daily attendance in small schools displaced	64
Average length of term (months) in consolidated schools	7½
Average length of term (months) in small schools displaced	6
Pupils enrolled in high-school grades in consolidated schools	1,678
Pupils enrolled in high-school grades in small schools displaced	98
Cost per term per pupil in consolidated schools	\$22
Cost per pupil per term in small schools displaced	\$17

TRANSPORTATION.

Transportation vehicles maintained at public expense	257
Motor-driven vehicles owned by county board	285
Horse-driven vehicles owned by county board	21
Busses and wagons purchased by county board prior to October 1, 1921	76
Busses and wagons purchased by county board from October 1, 1920, to October 1, 1921	23
Total number pupils conveyed to consolidated schools at public expense (boys, 4,456; girls, 4,698)	9,154
Average number minutes pupils are on the road	46
Average distance (in miles) each pupil rides	49
Average cost per month per pupil for transportation	\$3.15
Number of drivers (under contract, 254; under bond, 178)	432
Average monthly salary of drivers	\$61.80
Average yearly salary of drivers	\$471
Per cent of enrollment in average daily attendance of children transported	87
Per cent of enrollment in average daily attendance of children not transported	78
Total amount spent by county board for transportation during past scholastic year	\$221,284

DISTRICT TAX.

Number districts which have voted the district tax	767
Funds raised by district tax during past scholastic year	\$762,421
Per cent of all county taxable property included in local tax districts	37½
Average number of square miles in each local tax district	25.9
Average number of schools in each local tax district	2.3
Number local tax districts voting tax for first time during past scholastic year	189
Amount of funds available from district voting tax for first time during past scholastic year	\$339,873
Per cent of district tax used for erection, repair or equipment of school buildings	52

Per cent of district tax used for lengthening term of school.....	48
Average length of term (in months) of schools in local tax districts.....	7.2
Average length of term (in months) of schools not in local tax districts.....	6.3
Average monthly salary of teachers in local tax districts.....	\$86
Average monthly salary of teachers not in local tax districts.....	\$76

## TEACHERS' HOMES.

Number teachers' homes in State.....	43
Average number of rooms in each home.....	5
Average cost of each home.....	\$2,100
Number homes occupied by principal and family.....	35
Number of homes in which teachers board.....	29
Average length of service (in months) of principals living in teachers' homes.....	21
Average length of service (in months) of teachers boarding in teachers' homes.....	11
Average length of service (in months) of teachers not living in teachers' homes.....	10
Number teachers' homes built prior to Oct. 1, 1921.....	19
Average cost of board to teachers in teachers' homes.....	\$17
Are teachers' homes proving satisfactory to teachers? Yes, 21; no, 2.	
Are teachers' homes proving satisfactory to county boards? Don't know, 2; yes, 21; no, 2; doubtful, 2; no answer, 2. <sup>1</sup>	

*North Carolina.*—The State superintendent of public instruction, E. C. Brooks, in his biennial report for 1920-1922, in discussing a State system of public schools, pages 17-22, makes the following statement:

The counties for the first time in our history are in a fair way to erect suitable school buildings for all the children. The cities and towns have a fine enthusiasm for providing better buildings, and they have voted bond issues amounting to nearly \$15,000,000 during the past two years. The counties are providing large brick buildings with auditoriums for the rural consolidated schools. This has been made possible through the aid of the special building fund authorized by the last general assembly. This fund amounts to \$5,000,000, and is loaned to the counties for a period of 20 years, the counties repaying one-twentieth of the principal and the accrued interest annually. The entire building program under construction at this time is estimated to cost, when completed, about \$25,000,000.

By June, 1921, applications had been received for the entire \$5,000,000. But the constitutionality of the act was questioned and the State board of education was stopped from making the loans until the courts could pass on its constitutionality. The decision of the supreme court was favorable to the State and very far-reaching in its effects. The court made it very clear that the constitution demands a State system of schools with the county, not the district, as the local unit of administration.

At the present time \$3,300,000 has been loaned and the remainder will be as soon as the bonds are sold. The cost of the buildings aided by these loans amounts to \$9,024,635. The applications far exceeded \$5,000,000. Over

<sup>1</sup> An. Rep. Dept. of Educ., Ala., 1921, pp. 77-79.

\$3,000,000 of the amount already loaned has gone into small towns, villages, and rural districts that could not have secured the necessary funds otherwise for the erection of suitable buildings. The larger towns were already financing their own building programs.

The growth of the large type of community school having adequate buildings and grounds has been remarkable within the past three years. It is giving our country districts as good high-school advantages as our towns and cities possess.

But the high school is merely an extension of the elementary school. We should look upon the two as one school unit. Other States call this unit a "union school," and I think we shall have to adopt the same term, because many people look upon our high-school program as something separate from the elementary school.

This union school can be secured in our rural communities only through consolidation, but this does not necessarily mean the abolition at once of all the elementary schools in a consolidated area. The small schools in many districts should not be abolished after the consolidation is made, provided the buildings are suitable for classroom instruction. Here the first three or four grades may be well taught. But eventually the people will demand that their children be sent to the central school, when they have had full time to see the results. This has been the history of consolidation in North Carolina.

It is necessary for the State to give substantial aid to this union school in order that both elementary and high-school instruction may be equal to the same class of instruction in our city schools.

The growth of the high schools within the last few years, owing to consolidation, has been unprecedented. As a result of the State appropriation, the number increased in one year from 166 in 1921 to 223 in 1922. With State appropriation and careful supervision we added 57 standard high schools to the State, and this means also that we strengthened the elementary schools at the same time. By a continuation of this same appropriation to the schools aided last year, 25 other high schools will be added to the standard list, because the number of pupils passing up into the high-school grades will be sufficient to give the necessary enrollment for three teachers and a four-year curriculum. In other words, we aided about 25 schools last year that will require two years' growth to reach the standard class.

Moreover, the attendance in the high schools has increased just as the number of union schools has increased. The enrollment in the standard schools in 1921 was 21,000, but in 1922 it was 31,000, or an increase of about 50 per cent. The total enrollment in all schools giving high-school instruction, including both the standard and the nonstandard schools, increased from 30,000 in 1921 to about 45,000 in 1922, again an increase of about 50 per cent. The number of graduates of the standard schools increased from 4,239 in 1921 to 6,000 in 1922, again almost 50 per cent. But it should be remembered that this increased enrollment in the high-school departments of our union and city schools would have been impossible if the elementary school departments had not been greatly improved at the same time.

*Mississippi.*—The following quotations are taken from the biennial report and recommendations of the State superintendent of public instruction, 1919-20, pp. 12-15:

The backbone of the educational system of the State is the rural school, where 75 per cent of our children get all the schooling they will ever get. The equalizing fund and the compulsory school law have done more for the rural

child, by way of encouraging the establishment of better schools, than any other legislation we have ever had. During the last five years 1,500 small weak schools have been abolished, and 430 strong central schools established in their stead. Last session 1,800 trucks and wagons were busy every day transporting 35,000 children to consolidated schools that have taken the places of 2,000 one and two teacher schools. This process of elimination of the weak inefficient schools is going on just as rapidly as road conditions will permit. I think it is safe to say that within the next five years practically every child in the country will have as good educational advantages through at least 10 grades of work as the children of our cities and towns.

During the last year the supervisor of high schools has been advising the county superintendents and principals of rural schools for the purpose of bringing all rural high-school work up to such a standard that it will be accepted at any school or college in the State. Five hundred and seventy-five rural high schools going from one to three years of high-school work are now on the approved list. Two hundred and twenty-five consolidated schools have as much as 10 acres of land each, and 125 a home for the teachers. Twenty-seven consolidated schools have been approved by the Federal Government and are receiving financial help under the provisions of the Smith-Hughes law.

Two years ago I reported to you that 67 counties had some consolidated schools; now I am glad to report that in every county in Mississippi, except one, we find these schools. At that time I reported 353 consolidated schools; now there are more than 625. Two years ago there were 1,256 teachers in the consolidated schools; now there are 2,000. The number of pupils transported has increased from 15,829 to 35,000. In the consolidated schools at this time there are about 60,000 pupils, and in all of the schools high-school work is being done, one year of high-school work in the smallest and four in the largest.

The cost of transportation for the last session was too much, but reports from the county superintendents indicate that for the present session there is a reduction in many cases from 25 to 50 per cent.

It gives me pleasure to report that there are now 135 teachers' homes in use in the State, nearly all of which are in the rural districts. This adds a great deal to the pleasure and profit of the teachers and to the welfare of the community.

*Tennessee.*—Data were gathered on consolidation in the State in March of 1922. Of the 95 counties, 14 gave no report. Sixteen others reported no consolidated schools within their borders. The returns from the 65 counties were incomplete in some details. They summarize as follows:

Number of consolidated schools.....	266
(a) Open country.....	167
(b) Rural village.....	85
(c) Town.....	20
Number of schools abandoned:	
(a) One-teacher.....	510
(b) Two-teacher.....	112
(c) Three or more teachers.....	22
Number of teachers in abandoned schools.....	807
Number of teachers in consolidated schools.....	2,055

\* Incomplete.

A STATEMENT BY STATES.

91

Number of pupils in abandoned schools.....	24,704
Number of pupils in consolidated schools.....	42,859
Organized on 8-4 plan.....	All.
Size of grounds:	
(a) Number of 1 acre.....	16
(b) Number of 1 to 5 acres.....	206
(c) Number of more than 5 acres.....	40
Teachers' homes:	
(a) On school grounds.....	17
(b) Off school grounds.....	1
Schools equipped with—	
(a) Auditoria.....	195
(b) Agricultural laboratories.....	152
(c) Home economics laboratories.....	90

TRANSPORTATION.

Children transported.....	6,677
Wagons used.....	171
Truck used.....	68
Ownership of conveyance:	
(a) Public.....	94
(b) Private.....	143
Method of securing drivers:	
(a) Competitive bids.....	84
(b) Selection by board.....	139
Bond of drivers.....	\$250-\$500
Salaries of drivers.....	\$27.50-\$92.50
Cost of transportation.....	\$91,621
Average time on route..... minutes.....	45-120
Average distance transported..... miles.....	1½-5½
Average salary of janitor.....	\$7.50-\$78
Cost of buildings and equipment.....	\$2,707,046

Data for the school year 1921-22 are:

Consolidated schools at beginning of year.....	416
Consolidated schools formed during year.....	66
Consolidated schools at close of year.....	482
Vehicles used in transporting pupils.....	354
a. Wagons.....	228
b. Trucks.....	126
Average number of pupils transported daily.....	8,366
Average cost of transportation per pupil per month.....	\$2.64
Amount spent for transportation.....	103,206
Spent for new wagons (not included above).....	\$14,605

The State superintendent reports:<sup>6</sup>

Under provisions of the public school laws of the State, the department of public instruction has cooperated with county authorities in erecting 86 consolidated school buildings during the biennial period ending June 30, 1922. These buildings range in type from 3 to 10 teachers, and represent, according to inspection reports, a total cost of \$795,672, of which \$85,818 was paid by the

<sup>6</sup> Blen. Rep. State Supt. Pub. Instruc. of Tenn., 1921-22, pp. 269-270.

State. By reason of the erection of these 86 buildings, 215 old dilapidated buildings have been abandoned, and the children that formerly occupied them are now comfortably housed in new, attractive buildings, adequately lighted, properly ventilated, conveniently arranged and heated.

So popular is the movement to abandon the little isolated one-teacher school that a number of well-arranged and attractive consolidated buildings have been built on State plans independently of State aid. Under the regulations, the funds do not apply to more than one school in a county, until all applications have been considered. This being true, the county that puts on a real building program frequently builds from three to five splendidly arranged and equipped consolidated schoolhouses, two or more of which are paid for independently of State funds. This being true, it is very evident that more State funds must be made available, if the necessary building requirements are met.

*Kentucky.*—The superintendent of public instruction of Kentucky, in his biennial report of 1921, makes the following statement:

Notwithstanding the conservatism of our people, consolidation has made steady progress in Kentucky. Not only have many rural schools been consolidated but a number of "graded common schools" have voluntarily returned to the county, united with other districts and established larger and better institutions. This progressive movement, already tried by every one of the 48 States, must eventually bring to most of our counties a satisfactory solution of the rural life problem.

There are places where, because of rocks, hills, stumps, and rough fields, men can not use a binder and must employ less modern machinery or even cut their wheat with a cradle. So with school work, there are many communities, and even counties, where the one-room school is still a necessity. In such a place it should be in charge of the best teacher available and made the best school possible under the circumstances.

In compiling statistics for a report of July 21, 1921, we obtained from 114 out of the 120 counties in Kentucky the data upon which the following statement is based:

*Consolidation in Kentucky.*

	Open country.	Towns and villages.	Total.
Graded common schools (independent).....	56	258	314
Under control of county:			
2-teacher schools (union).....	280	121	401
3-teacher schools (consolidated)—			
With high school.....	32	38	115
Without high school.....	30	15	
4 or more teacher school—			
With high school.....	28	102	143
Without high school.....	6	7	
<b>Total.....</b>			<b>973</b>
Established 1920-21 (union and consolidated).....			79
Schools with free transportation (24 in open country; 23 in towns and villages).....			47
Counties with free transportation.....			16
Motor busses now used in transportation.....			62
Horse-drawn vehicles (large).....			33
Horse-drawn vehicles (small). (No accurate data.)			

Number of districts levying local tax	-----	120
July 1, 1919, there were 17 of these schools furnishing free transportation; gain since that time	-----	30
Schools with free transportation: 1 in 1911; 6 in 1915; 19 in 1919; 47 in 1921.		
White schools with two or more teachers (including graded common schools) (631 in open country; 868 in towns and villages in 1916)	-----	973
Average cost of transportation per child per day—estimated on 10 counties with no absolute assurance of accuracy:		
Horse-drawn	-----cents	19
Motor	-----do	11

Among the leading consolidation counties may be mentioned Mason, with 6 consolidated schools, 35 teachers, 14 motor busses, and 7 horse-drawn vehicles; Fayette, with 7 consolidated schools, 33 teachers, 12 motor busses, 2 horse-drawn vehicles, and extensive interurban service; Warren, with 3 consolidation schools, 20 teachers, 7 motor busses, and 6 wagons; Grant, Franklin, Garrard, and Hart, using from 5 to 8 busses each; Jefferson and Shelby, with busses and interurban service.

In the following counties, schools requiring free transportation have been established within the past biennial period: Ballard, Boyle, Bracken, Carroll, Fayette, Franklin, Fulton, Grant, Har., Henderson, Jefferson, Kenton, Lincoln, Ohio, Butler, and Shelby.

Consolidation has been authorized in Daviess, Campbell, Owen, Shelby, and other counties where buildings are not yet completed.

*Maryland.*—Seventeen of the twenty-three counties were transporting some pupils in 1921 and expended \$84,870, an increase for that purpose of approximately \$20,000 over the amount spent in 1920. The fifty-fifth annual report of the State Board of Education of Maryland for 1921 (pp. 21 and 72) says:

That Maryland, outside of Baltimore City, has largely a rural school problem is shown by the fact that 70 per cent of the white and 80 per cent of the colored elementary schools have only one teacher. Progress toward consolidation varies considerably, however, from a minimum of 36 per cent one-teacher white schools in Baltimore County to 91 per cent in Calvert County; and for the colored schools, from no one-teacher schools in Allegany County to 97 per cent in Charles County. The difficulty of obtaining well-qualified teachers willing to go into the rural districts and to attempt to teach all subjects of all grades to pupils of all ages makes the problem of the one-teacher school most difficult. When the cost of transportation is not prohibitive, the consolidated school makes possible a better classification of pupils and better supervision, and usually brings a financial saving because of the elimination of very small classes.

There has been a slow, yet steady, progress in consolidation of rural schools. The topography of Maryland, conditions of weather and roads, and other obstacles, are such that it may not ever be possible or desirable to eliminate entirely the one-room school. Our immediate objective is to improve existing schools as much as possible and to work for a sane program of consolidation.

A careful study of the conditions in this State impels to the belief that consolidation is generally practicable as well as desirable, but that its consummation on any large scale awaits the formation of an intelligent public sentiment. It is idle to expect consolidation projects to succeed if left wholly to the de-

cision of school officials. The people must be reliably informed, wisely led, and considerately consulted. This requires a clearness of vision and a firmness of purpose on the part of the county superintendents on whom, mainly, must rest the burden of formulating a forward-looking program of consolidation. Happily, most of them are conscious of their opportunities and their responsibilities in this direction, and the outlook for the future is most promising.

*Georgia.*—The forty-ninth annual report of the department of education of Georgia, for the school year ending December 31, 1920, says:

More than three-fourths of our people live in rural communities. As a natural consequence we have a number of small schools. In this State we have 4,867 one-room schools, out of a total of 8,359.

For years the State department of education has encouraged consolidation of small schools, and we have some excellent instances in many counties. The difficulties in the way are so great, however, that the superintendents and boards are inclined to go to the other extreme and to permit almost every hard-headed man who wants a school near his back door to have his way. As an inducement to counteract this, the State department of education for some years past has urged the inducement of financial aid and secured last year the passage of what is known as the Barrett-Rogers law. It was divided into two parts—elementary and high schools. Rules and regulations were prepared at once after securing the law, and each county was offered the right to secure \$500 of State aid, provided consolidation to the amount of at least four rooms and four teachers was effected. Proper sanitary facilities were required, and transportation wherever necessary. In the first year of its operation, we were able to qualify for this aid 74 schools.

A special report to the Bureau of Education gives the following data for these schools:

There are 76 automobile trucks and 3 wagons used to transport children to these schools. In addition to this, many children are transported by private conveyance, the cost being defrayed in part by a per diem of 25 cents allowed by the county board of education. There are instances where this has proven less expensive than maintaining a truck, on account of the small number to be transported.

The total attendance was 14,409; 7,319 of these were girls, and 7,090 were boys; the average enrollment per school was 195.

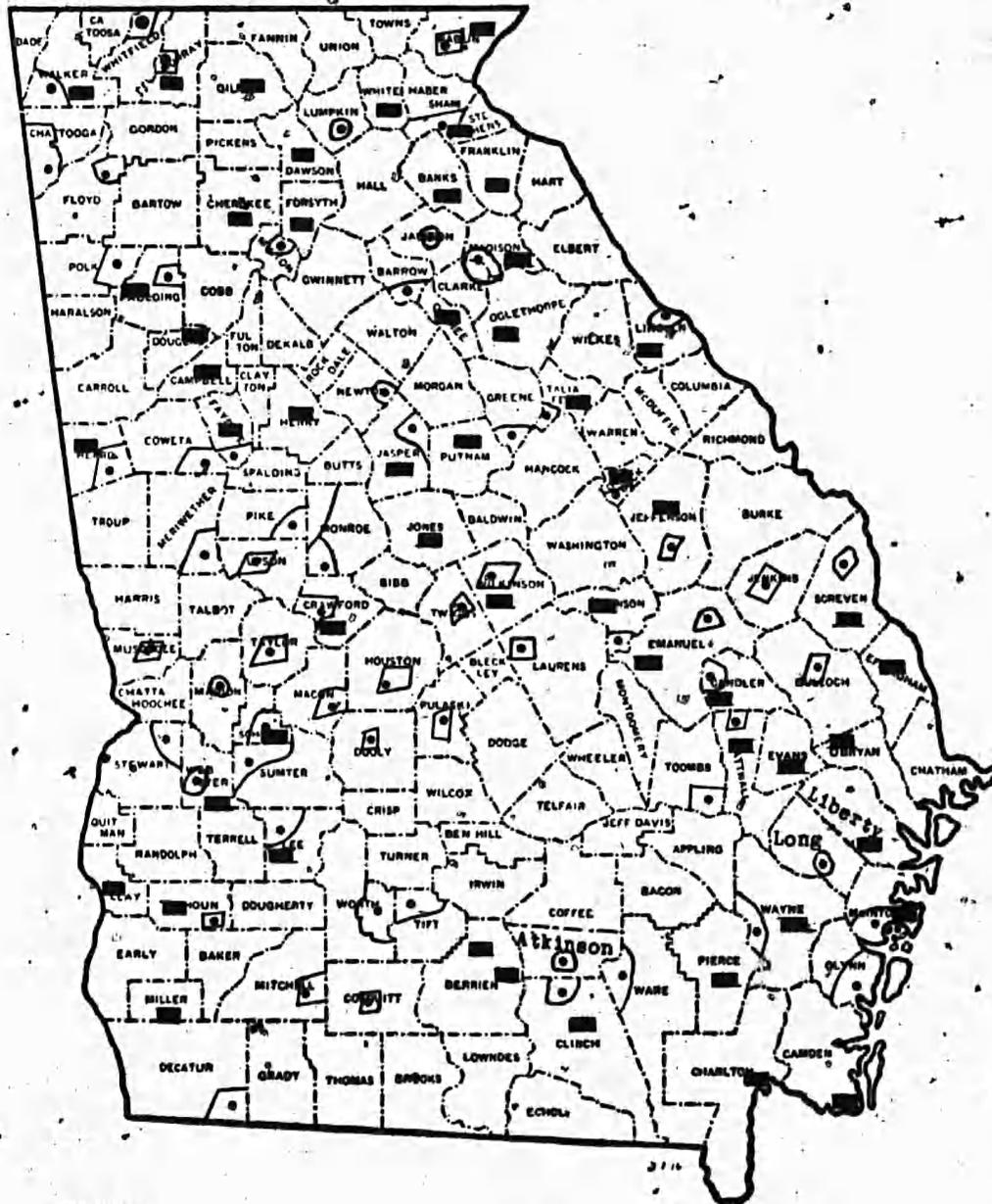
The State superintendent's comments on the application of the Bassett-Rogers law to high schools and consolidation are:

High-school work and consolidation is even more difficult, and the reward was greater. One thousand dollars was offered to those of our weaker counties now without a standard A grade high school, that would consolidate their high-school work at the best and most accessible place in the county and give the instruction there free of charge to the boys and girls of the county. Note that it was given for these boys and girls from the rural regions and not as a contribution to any local system. In fact, the rules and regulations required to qualify for this work made it rather an expensive undertaking for any high school securing the prize. Most of them paid from 3 to 10 times as much as \$1,000 in order to qualify for the State aid. They were glad to do this, how-

\* Report on School Consolidation in Georgia, by Walter B. Hill, Special Supervisor.

ever, in order to increase their own school facilities. It was of especial worth in showing the value of cooperation between the towns and counties. Naturally, we had some few instances of selfish attempts to divert this fund toward the

GEORGIA



LEGEND:

- State-aided Consolidated High Schools.
- State-aided Consolidated School and Districts.

MAP 12.—Showing the consolidated schools that received aid under the terms of the Barrett-Rogers Act.

upbuilding of some particular school, but as a rule all over the State the aid was accepted in the spirit in which it was given—for the purpose of giving the remotest country boy and girl as good a chance for a high-school education as

those living in the towns and cities. Through this law for consolidation, 63 schools were given this aid.

These 63 schools, in order to qualify for this aid, spent for buildings, equipment, libraries, and laboratories, \$471,045 during the year. Thus it will be seen that this Barrett-Rogers act, through the gift of \$100,000, induced the expenditure of 10 times as much money in local communities. It was of immense value, too, in securing cooperation between town and county people and dozens of places that had before been antagonistic. More even than the value of the money aid, boards frequently testify, was the fact that they were shown exactly what to do in order to qualify for better schools.

In these schools 3,713 pupils are now being trained; 1,371 are rural boys and girls; 659 were transported, and 311 are boarding pupils. Virtually all are rural, as none live in towns with a population of more than 2,600. The census define such as rural.<sup>8</sup>

*Florida.*—In 1912 the State superintendent reported that 12 counties in the State had made fair progress in consolidation of schools. In 1920, of the 54 counties, 50 were transporting pupils and had schools representing some form of consolidation. Accurate data on the consolidations in the State are not available. Approximately 1,900 of the 2,532 school buildings are one-room.

In 1919 the superintendent of Dade County reported that the 37 white schools of that county had been consolidated into 18 schools, with an enrollment of 4,000 pupils. Eleven of the 18 are consolidations of from two to seven schools each. There are four senior high schools in the county and three junior high schools, making secondary education possible for every boy and girl in the county.

Two other counties have reported somewhat in detail on their consolidated schools. The reports show eight of such schools, all in towns or villages, with grounds averaging  $1\frac{1}{2}$  acres, the largest being 5, and the buildings ranging in price from \$1,500 to \$90,000. Six of the buildings have auditoriums. No teacherages or school farms are reported; nor does there seem to be any provision made for adding to the curriculum, such studies as agriculture, home economics, or manual training. Two of the eight schools offer a four-year high-school course; one offers a two-year course. In the elementary grades 1,386 pupils are enrolled; 276 in the high school. Sixteen autos are used to convey 364 pupils an average distance of 4 miles each, at a cost of 20 cents a pupil a day. Only one of the schools reports changes in costs due to consolidation, and that is a 20 per cent increase in per capita cost based on daily attendance.

The State superintendent reports for 1920:<sup>10</sup>

Consolidation in some measure has been effected in a number of counties during the past two years. Many county boards of education, after thoroughly

<sup>8</sup> Forty-ninth An. Rep. Dept. of Educ. of Ga. for school year ending Dec. 31, 1920, pp. 21, 22, 23.

<sup>10</sup> Bien, Rep. Supt. Pub. Instruc., Florida, for the two years ending June 30, 1920, p. 172.

studying the problem, have deemed it wise not to undertake consolidation on too large a scale, where a great deal of transportation would be necessary, but have rather confined their efforts to uniting two or three one-teacher schools into a three or four teacher school. While this policy is followed most of the children are in walking distance and very little, if any, extra expense is incurred. Many of the counties have made some very extravagant and failing efforts at consolidation. The counties that have made greatest progress and success in consolidation are: Broward, Brevard, Dade, DeSoto, Escambia, Osceola, and Volusia.

Personally I believe the time has now come when a definite building and consolidation program can be projected throughout the State, but the State must grant "State aid" for consolidated rural schools. This should be done by appropriating \$2,000 annually to each county, under State board of education regulations, supervised by the State inspectors.

Some major benefits of consolidated rural schools might be mentioned, but space forbids. However, one of the most urgent problems in rural education is to provide the people with easily accessible rural high schools. The percentage of country people educated in high schools of rural type is amazingly small in contrast with the percentage of town people, who have advantages of city or town high schools. City schools are organized for city children; rural high schools should be organized for rural children.

*Virginia.*—In the decade 1910–1920 the number of one-room schools grew less year by year and the amount spent for transportation larger. In 1915 the State superintendent reported:<sup>11</sup>

The department of public instruction began to gather statistics in reference to one-room schools in 1909–10. That year there were 5,308 one-room schools in Virginia, and by 1912 the number had decreased to 5,014; during the next two years the number fell to 4,863, and during the past year to 4,666. This shows that the number of one-room schools is decreasing much more rapidly than the number of houses is decreasing. In other words, one-room houses are being enlarged or are being replaced by two-room houses, just as the two-room house in turn is giving place to the house having three rooms or more.

The one-room school that must remain is making itself a "standard" school, while the one which is destined to grow is adding additional rooms, and the third type, which may aspire to all of the benefits of a large school by consolidation and transportation, is not losing the opportunity to do so.

Detailed statistics for consolidation were published for the years 1915, 1916, and 1917, and then discontinued. For 1921 there are reported 258 consolidated schools, transporting 8,885 pupils, at a cost of \$207,262.

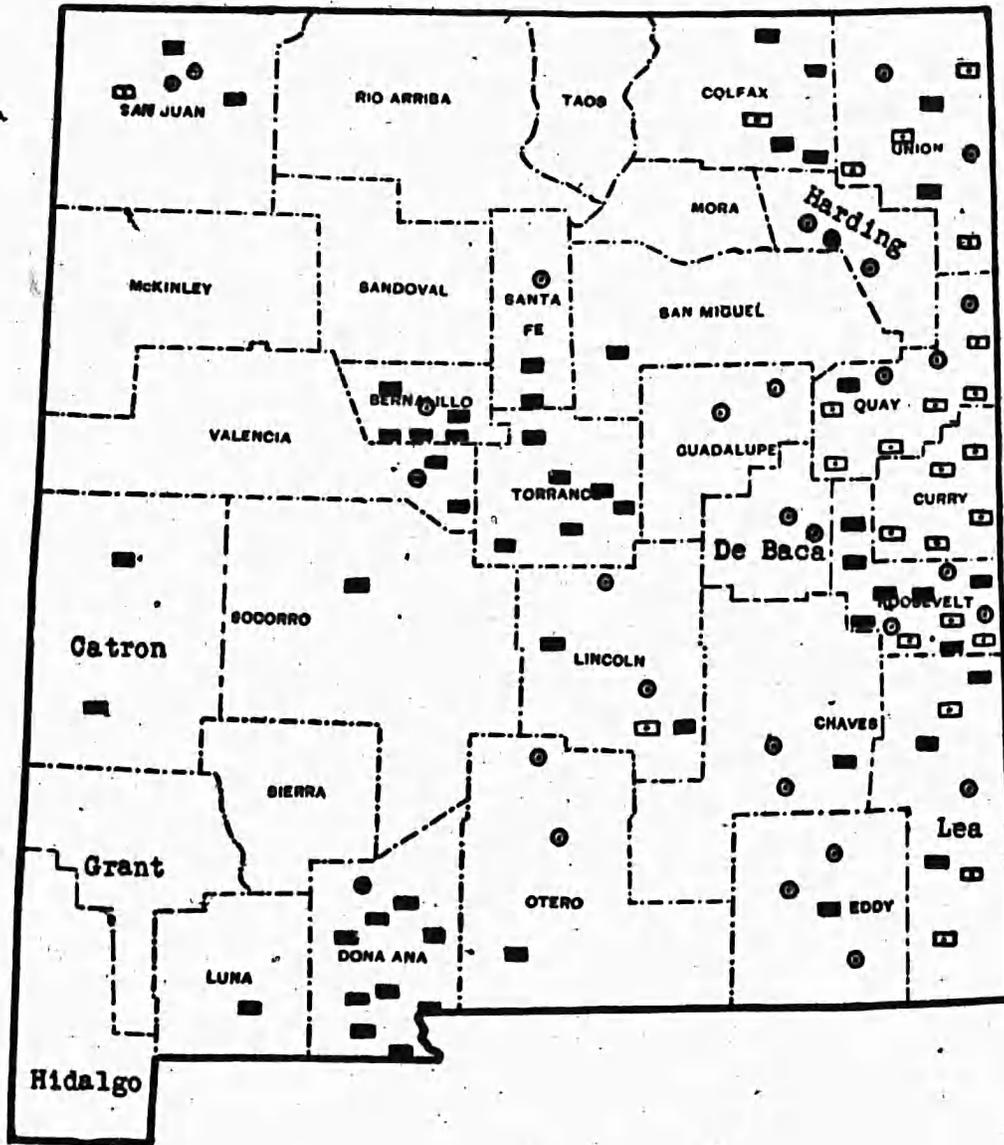
While the State has made considerable progress in the last 20 years in reducing the number of schools and of one-room schools and in providing transportation of pupils, it still has as its most difficult problem the small rural schools. The survey commission stated (1920):

Virginia is at present a State primarily of small one-room and two-room schools. Of approximately 6,500 noncity schools more than two-thirds are one-room schools, more than one-sixth are two-room schools, and less than one-

<sup>11</sup> An. Rep. Supt. Pub. Instruc., Virginia, school year 1914–15, pp. 20, 21.

sixth have three or more rooms each. Of all schools in the State (including those in cities) more than four-fifths are one-room or two-room rural schools, enrolling 44 per cent of all white pupils, more than two-thirds of all colored

## NEW MEXICO



### LEGEND:

- |                    |   |                  |   |
|--------------------|---|------------------|---|
| Town Consolidation | ● | With High School | ● |
| Open Country       | ■ | With High School | ■ |

MAP 13.—Showing the consolidated schools of New Mexico.

pupils, and over one-half of all pupils of both races in the State. It is obvious that one of the greatest problems for education in Virginia is that created by the large number of one-room or two-room schools.<sup>17</sup>

<sup>17</sup> Virginia Public Schools, The Virginia Education Commission. Part 1, p. 217.

*New Mexico.*—The 129 consolidated schools use 248 school wagons and auto busses. Of these, 93 are publicly owned, 155 in private ownership. In a few cases children are on the road as much as two hours one way and travel a distance of 29 miles. In 1920-21, 5,119 children were transported at a total cost of \$210,336. The accompanying map shows the location of the consolidated schools.

**STATES IN WHICH CONSOLIDATION IS BEING EFFECTED  
THROUGH A DISTRICT SYSTEM.**

*Colorado.*—Since 1914 consolidation has been constantly urged in the State. It has made steady and rapid progress. Almost no changes have been made in the original consolidation law, and no State aid has been given such schools. A summary of the data relating to consolidation for 1918 and 1921 is as follows:

*Consolidation in Colorado.*

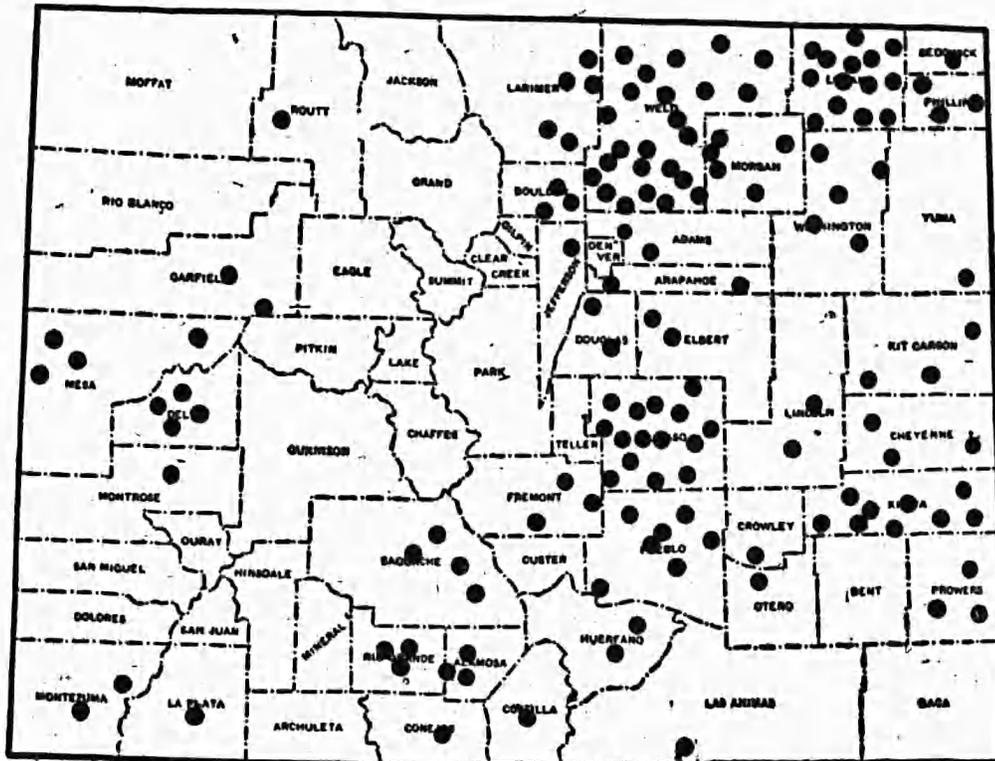
	1918	1921
Consolidated districts.....	68	146
Old schoolhouses abandoned.....	171	425
Value of consolidation property.....	\$810,000	\$6,003,671
Vehicles used in transportation.....	134	448
Auto busses.....	102	400
Horse drawn.....	32	48
Children transported.....	2,570	11,400
Cost per pupil, per day (cents).....		10-14
Consolidated districts with high schools.....		146
Teachers employed.....	349	1,078
High school.....		343
Elementary.....		735
Enrollment.....	9,864	29,000
High school.....	1,091	5,000
Elementary.....	8,773	24,000
Per cent of attendance.....		9)

The general policy is to form a good consolidation or centralization or none at all. Unions of small schools for the purpose of establishing other small schools are not encouraged. In 1919 eighty-one consolidated and centralized schools reported assessed valuations totaling \$100,803,954, or an arithmetical mean of \$1,244,493, and ranging from \$193,465, the lowest, to \$3,745,130, the highest. The distribution was as follows:

Valuation in millions or fractions of one million.	Number of districts.
Less than one-fourth.....	3
One-fourth to one-half.....	6
One-half to three-fourths.....	11
Three-fourths to one.....	16
One to one and one-fourth.....	13
One and one-fourth to one and one-half.....	10
One and one-half to one and three-fourths.....	7
Two to three.....	9
More than three.....	4

In these districts the arithmetical mean of the local tax levy was 9.7 mills on each \$100. The lowest rate was 2.79 mills, the highest 23.72.

## COLORADO



● CONSOLIDATED SCHOOLS.

MAP 14.—Showing the location of the consolidated schools of Colorado.

*Iowa.*—By 1917 there were 238 consolidated schools. For the two years following little was done because of ambiguities in the law. This was largely corrected by the assemblies of 1919 and 1921.

In 1920 the number of consolidated schools—288—was 2.3 per cent of the total for the State. The number of children transported was 8.5 per cent of the average daily attendance, and the amount spent for transportation 4.1 per cent of the current expense of maintaining the schools.

During the past three years an intensive campaign for consolidation has been going on in the State, a campaign that is bringing about the establishment of consolidated schools more rapidly than in any other section of the United States. In 1919 the State educational association adopted the following plans for improving rural schools;

Major program: Bring full educational opportunity, encouragement, and enthusiasm to all rural children by means of well-organized, well-administered, and well-taught consolidated schools as rapidly as conditions will permit.

Minor program: Do everything possible for rural children who can not have the benefits of the consolidated school at once through such means as better-trained teachers for the rural schools, better supervision, better sanitary conditions, better equipment, standardization, health campaigns, play leadership, etc.

The State Teachers College at Cedar Falls is giving four courses in consolidated school education and practice teaching under critic supervision in affiliated consolidated schools. Students are permitted to major in consolidated school education. The college, through its department of rural education, is taking an active interest in the consolidation campaign, issuing bulletins on the subject, and advising in the formation of consolidated districts. One of the recent bulletins states:

In Iowa the geographic and social conditions are more generally favorable to consolidation of schools than in any other State. There are approximately 1,100 natural centers suitable for consolidated schools in Iowa. The territory tributary to these covers practically all the farm land of the State. One-third of these consolidations have already been organized.

Experience has shown that the large consolidated districts are stronger than the small ones and are better able to solve their financial and educational problems. The larger district includes more taxable valuation, hence the cost of the school is usually less on each acre of farm land in the district.

The larger consolidated school districts bring together children enough to make possible the most modern school organization with junior and senior high schools; a more diversified course of study; a trained superintendent; special teachers in vocational subjects; and home projects; musical and athletic organizations among the pupils.

Most important of all, the larger districts provide the financial, professional, and social opportunities which attract the very best class of teachers.

In many instances the larger districts find their transportation problem more simple than do the smaller districts. They use more conveyances. Each conveyance comes more directly in from the outskirts of the districts, reducing the amount of circuit driving and hack driving to be done. Motor transportation is helping greatly to solve the problem of the long route. When increasing the size of a consolidated school district or when organizing a new district, it is well to keep in mind the fact that roads and vehicles are being improved a little each year. A little sacrifice now on the part of those living on the outer margins of large districts will contribute to the general welfare of all in the future.<sup>13</sup>

A bulletin<sup>14</sup> issued by the State department in 1922 gives the following facts about consolidation:

*Consolidated school facts.*

Number of consolidated school districts authorized by vote up to	
Sept. 1, 1921.....	439
Consolidated schools maintained for school year 1920-21.....	368

<sup>13</sup> A Brief History of Consolidation in Iowa. Cedar Falls, Iowa. Iowa State Teachers College, 1921.

<sup>14</sup> "Iowa's Consolidated Schools," by George A. Brown, Consolidated School Inspector.

*Consolidation school facts—Continued.*

Number of pupils enrolled June, 1921.....	68,619
Number of pupils transported.....	34,743
Number of pupils transported by motor busses.....	8,147
Number of motor busses used.....	441
Total cost of transportation.....	\$1,641,008
Average cost of transportation per pupil.....	\$47.23
Cost of new buildings since January, 1920.....	\$10,000,000
Number of buildings built since January, 1920.....	93

*Growth and development of consolidation.*

Number of consolidated school districts in Iowa at various periods from 1896 to 1921:

1896.....	1	1916.....	187
1913.....	12	1918.....	238
1914.....	80	1922.....	439

*Kansas.*—The numerous methods by which consolidation for both elementary and secondary school purposes may be brought about in Kansas are illustrative of the legal difficulties in the way of consolidation where there is a system of schools in which the district has strong control and is a body corporate.

The following ways of effecting consolidation in the State are recognized:

1. The legal electors residing in a territory of not less than 16 square miles and comprising one or more townships or parts thereof may by election form a rural high-school district. The rural high-school district makes no provision for the grades and builds up a school administrative system entirely separate from the rural elementary system. It can not be changed to any other form of organization without being entirely disorganized. It may transport pupils that live 3 or more miles from the schoolhouse, or pay parents for furnishing transportation at a rate not to exceed 5 cents per mile per pupil per day one way, if a majority of the electors of the rural high-school district vote for such transportation or payment to parents.

2. A district may consolidate with one or more other districts if a majority of the votes cast at a regular or special election is in favor of consolidation. If the consolidation is brought about, each of the uniting districts gives up its corporate identity, and one board is elected for the consolidated district, which is thereafter legally known as Union school district No. —; County of —, State of Kansas, and is a body corporate.

3. A common-school district may be annexed to a graded-school district by a majority vote of its own electors and the consent of the school board of the graded district. This is also known legally as a union-school district; the board of the graded school becomes the

union-district-board, and the enlarged district is considered a consolidation.

4. A district lying between or contiguous to two consolidated districts may by election divide, and a part be annexed to each of the consolidated districts.

5. A district adjacent or contiguous to a consolidated district may be annexed to the consolidated district if a petition signed by at least 51 per cent of the legal electors of the district to be annexed is accepted by the board of the consolidated district and the annexation is approved by a majority vote of the qualified electors in the consolidated district.

6. A district may be annexed to a second-class city district by process of petition signed by at least 51 per cent of the legal voters of the district to be annexed and acceptance by the city board.

7. Adjacent territory may be annexed to a city district for school purposes on application of a majority of the electors of such adjacent territory and acceptance by the city board of education.

8. In any county operating under the provisions of the Barnes law of 1905—a law that permits a county, by election, to levy a tax for a general high-school fund to maintain high schools in districts or cities of less than 16,000 inhabitants—51 per cent of the legal electors in each of two or more districts may present petitions to their respective school boards. The boards receiving the petitions shall meet, declare the districts consolidated, and notify the county superintendent. The superintendent records the boundary changes and calls an election for the purpose of electing a school board for the consolidated district. The same kind of consolidation organization may be perfected by vote as well as petition.

9. A district that has failed to maintain a school for two succeeding years must be attached to an adjacent one-room district or graded school or city district.

10. If there is no bonded indebtedness, transfers of territory between adjacent districts of equal school ranking are easily made. If there is bonded indebtedness, only a limited amount of territory may be set from one district to another, and neither district may be left with less than 15 children.

11. Under certain conditions county superintendents may make changes in school districts.

The number of consolidated schools in Kansas grew from 20 in 1905, employing 42 teachers and enrolling 1,422 pupils, to 109 in 1918, employing 466 teachers and enrolling 10,988 pupils.

The movement has gained prominence in the last two years. Those who are promoting it interpret consolidation to mean—

the joining of a number of school districts, sufficient to give a valuation of at least \$2,000,000, thus assuring the maintenance of a good school without an

excessive taxation; a school system for 12 grades, with adequate means of transportation for all children who walked the country roads, and a good school organization.

A recent report entitled "What People Say About Consolidation" was recently published by the Department of School Consolidation, Kansas State Normal School, Emporia, Kans.

For convenience in summarizing the report the consolidated schools are divided into three groups:

Group I, 15 schools, each having an assessed valuation of \$2,000,000 or more, at least four grade and three high-school teachers, and transportation.

Group II, 12 schools, each with an assessed valuation of between \$1,500,000 and \$2,000,000, four grade and three high-school teachers, and transportation.

Group III, 52 schools not meeting in all particulars the above qualifications.

*Statistics of consolidated schools in Kansas.*

	Group I.	Group II.	Group III.
Range of area, in sq. miles.....	184-132	131-164	6-140
Average area, in sq. miles.....	66.5	50.8	40
Total area in square miles.....	930.5	457.75	1,994
Range of assessed valuation.....	\$2,000,000-	\$1,500,000-	\$575,800-
Average assessed valuation.....	\$3,500,000	\$1,810,000	\$2,946,000
Total assessed valuation.....	\$3,182,740	\$1,469,934	\$1,335,461
Number of one-room schools abandoned.....	\$44,558,345	\$19,639,208	\$68,923,693
Range of tax levy, in mills.....	49	31	91
Average tax levy, in mills.....	5.5-13.5	7-15	3-19
Range of superintendent's salaries.....	8.6	10.7	9.9
Average superintendent's salary.....	\$2,100-\$3,000	\$2,000-\$2,760	\$1,200-\$2,700
Number of high-school teachers.....	\$2,380	\$2,243	\$1,945
Average of high-school teachers' salaries.....	80	50	130
Number of grade-school teachers.....	\$1,483	\$1,402	\$1,315
Average of grade-school teachers' salaries.....	95	56	179
Number of high-school pupils.....	\$1,079	\$1,063	\$958
Number of grade-school pupils.....	1,165	1,66	1,960
	3,045	1,762	5,591

*Nebraska.*—In 1920 there were 100 consolidated schools, 66 formed under the consolidation law of 1915, and 34 formed under the redistricting act of 1919. One hundred five consolidations are reported in 1921. While the movement is firmly established in the State, it has only made a good start. One-half the consolidated schools are in the more thickly settled eastern one-third of the State. The standard size of the district is 25 square miles. The assessed valuation ranges from \$50,000 to \$200,000, and that is approximately one-fifth of the true valuation. The school grounds range from 1 to 20 acres in size, the average being 3½ acres. The cost of the buildings ranges from \$400 to \$200,000, with an arithmetical mean of \$27,378. All the schools are organized on the 8-4 plan. Only 15 of them offer nothing higher than the elementary course. Forty have a full four-year high-school course.

Fifty-five of the consolidations provide transportation for pupils in numbers ranging from 7 to 200. The average number of pupils to a conveyance is 19, the maximum is 48. The longest route is 18 miles, the average, 9 miles. The range in cost of transportation is from 10 cents per pupil per day to \$1.02, with a mean of approximately 30 cents. In general, the daily attendance at the consolidated schools has been much better than in the other rural schools.

For 72 of the 105 consolidated schools reported, seven important items were given in full. Disregarding the schools that did not give complete reports, a summary of the items for those that did is as follows:

Area of districts sq. miles..	1,741	Value of plant—Continued.	
Minimum.....do....	6	Arithmetical mean.....	\$31,745
Maximum.....do....	64	Median.....	12,500
Arithmetical mean		Years in operation:	
.....sq. miles..	24.5	Minimum.....	1
Median.....do....	23	Maximum.....	23
District valuation.....	\$22,940,558	Arithmetical mean.....	3.7
Minimum.....	34,626	Median.....	2
Maximum.....	1,941,673	Tax levy:	
Arithmetical mean.....	318,202	Minimum.....	\$0.03
Median.....	263,000	Maximum.....	1.00
Area of grounds.....acres..	274	Arithmetical mean.....	.37
Minimum.....do....	1	Median.....	.35
Maximum.....do....	20	Organization:	
Arithmetical mean		Grades—	
.....acres..	3.8	8.....schools..	4
Median.....do....	2.8	9.....do....	4
Value of plant.....	\$2,285,695	10.....do....	19
Minimum.....	400	11.....do....	11
Maximum.....	200,000	12.....do....	34

The Nebraska law requires that the area of districts should, in most cases, approximate 25 square miles. Thirty-three of these districts have an area of less than 20 square miles, seven have more than 40.

The range of taxable property valuation is great, but 34 of the districts are rated at less than \$250,000. The arithmetical mean of the valuations is high because of 11 districts, a comparatively small number, that are rated at more than \$500,000.

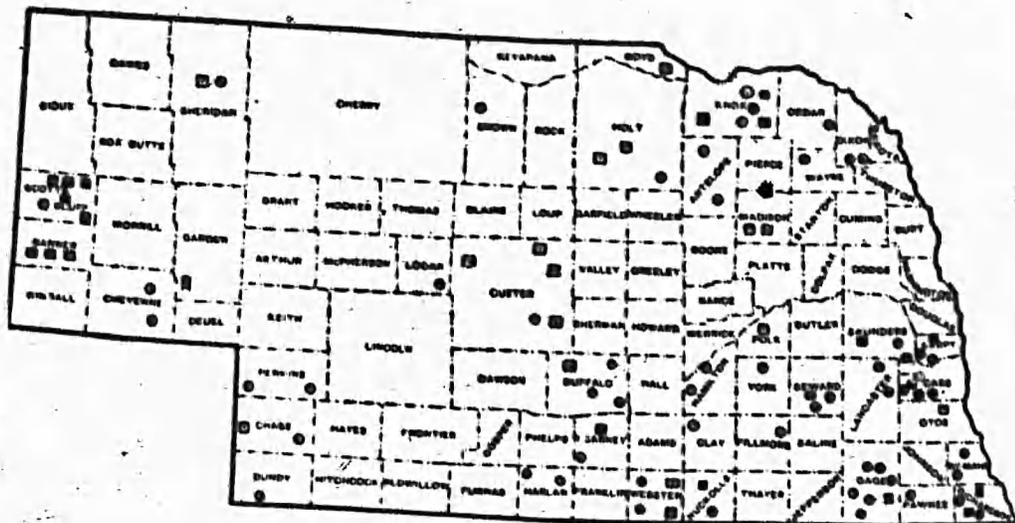
There is great lack of uniformity also in the area of the grounds and the value of the school plants. Twenty-two of the schools have grounds of 2 acres. Eleven have more than 5 acres. Twenty-two of the school plants are worth \$5,000 or less; 34 are worth \$10,000 or less. Six are valued at more than \$100,000.

The tax levies range from 3 to 100 mills. In 49 districts the levy is for 20 to 40 mills. Thirty-five mills is the most common rate.

Of the same list of 105 schools 49 reported on transportation of pupils. Forty-two of these gave complete data for 10 items. The data are here summarized:

Amount spent yearly for drivers' salaries.....	\$34,298
Minimum.....	60
Maximum.....	2,058
Arithmetical mean per district.....	816
Number of grade pupils transported.....	2,452
Minimum.....	7
Maximum.....	200
Arithmetical mean.....	58
Median.....	42

## NEBRASKA



## Legend:

- Town Consolidation. ● With high school. ○  
 Open Country      ■ With high school. □

MAP 15.—Showing the location and kinds of consolidated schools in Nebraska.

Number of high-school pupils transported (39 schools).....	533
Minimum.....	1
Maximum.....	46
Arithmetical mean.....	19
Number of transportation routes.....	157
Minimum.....	1
Maximum.....	8
Median.....	3½
Average length of route:	
Minimum.....	miles 3
Maximum.....	miles 18
Arithmetical mean.....	miles 9
Median.....	miles 8½

Average distance pupils ride one way:			
Minimum.....	miles.....		24
Maximum.....	miles.....		9
Arithmetical mean.....	miles.....		4.3
Number of children per conveyance:			
Minimum.....			6
Maximum.....			48
Arithmetical mean.....			19
Average number of minutes pupils are on road:			
Minimum.....			20
Maximum.....			60
Arithmetical mean.....			34
Average cost per pupil per day:			
Minimum.....		\$0.15	
Maximum.....		1.02	
Arithmetical mean.....		.33	
Median.....		.32	

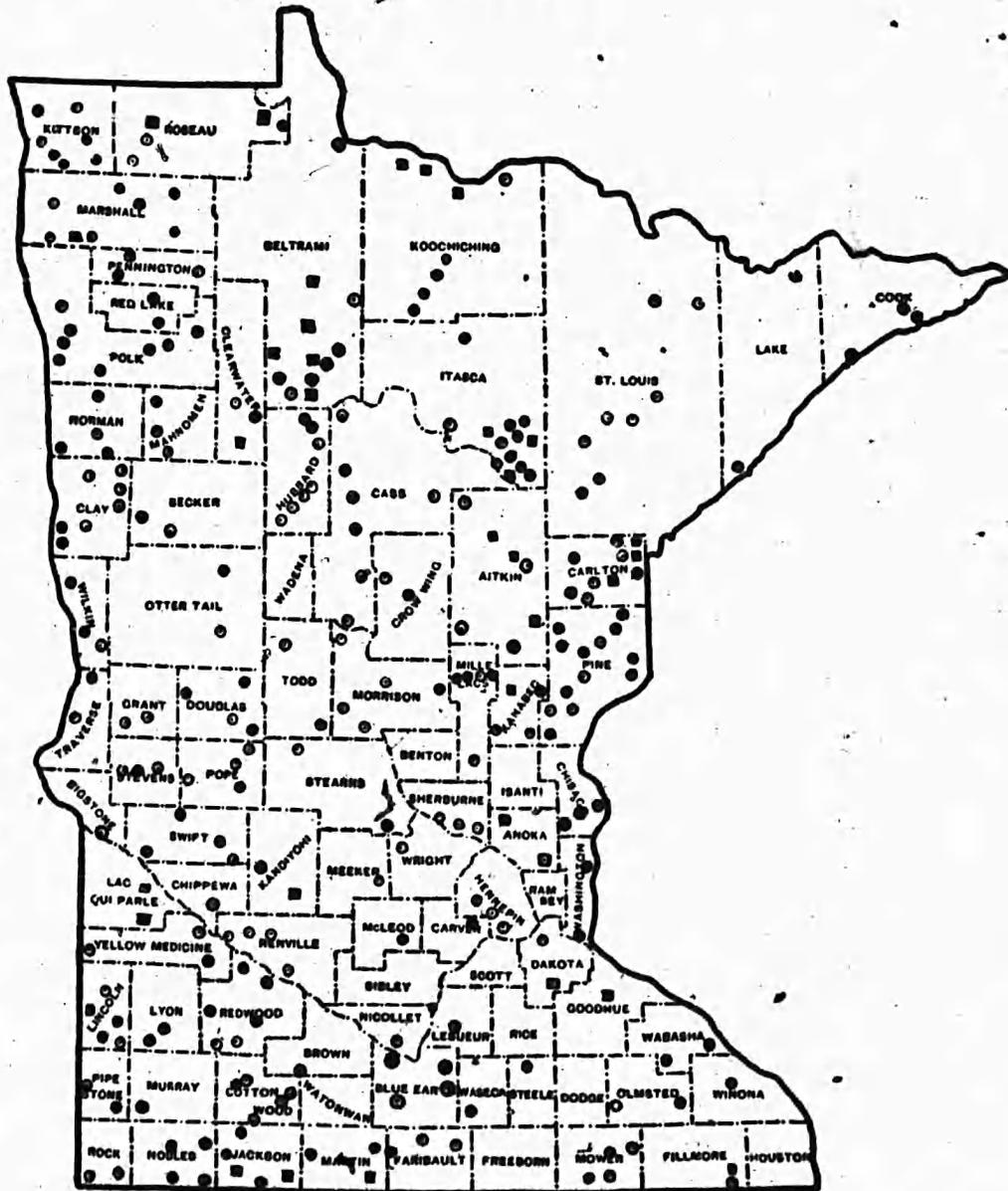
The tenth item is in regard to the hour the children leave home in order to be at school. In no case is it earlier than 7.45 a. m. In most of the districts it is from 8 to 8.15.

*Minnesota.*—At the close of the 1919-20 school year there were 255 consolidated schools; in 1920-21 the number reached 290, and during the year 1922 nineteen more schools early made application for listing. In 1920-21 over 20,500 pupils were transported to consolidated schools, an increase of over 5,000 for the preceding year. The cost to the school districts was \$905,036. Eleven hundred and fifty-three busses, of which 126 were motor driven, were maintained. Eleven hundred children were transported more than 5 miles to school.

Most of the consolidations effected consist of rural territory with a village as a nucleus, although there are many splendid open country schools. Moreover, many of the villages are so small that a majority of the pupils enrolled come from farm homes and need to be transported. Minnesota is still in the process of settlement. In the northern part of the State many districts have the area required by law for consolidation and qualify when the country becomes settled by erecting the better type of building and providing transportation. This condition is of decided advantage to the consolidation movement. It is much easier to hold these large districts together as population increases by establishing in them strong and effective high or graded schools.

In the more settled areas consolidation will be brought about only as a majority of people are convinced that the better school is worth more than the increased cost. The economic depression of 1921 undoubtedly tended to retard the movement somewhat.

MINNESOTA



Legend:

- Town Consolidation ● With high school. ⊙
- Open Country ■ With high school. □

MAP 16.—Showing the location and kinds of consolidated schools in Minnesota.



A. A chemistry laboratory.



B. A class in sewing.

INDOOR LABORATORIES IN CONSOLIDATED SCHOOLS.



A. A class in woodworking.

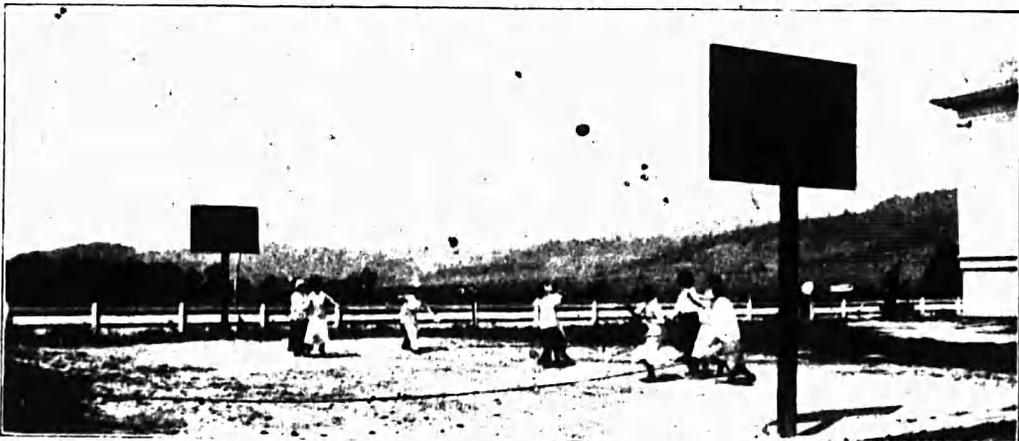


B. A class in cooking.

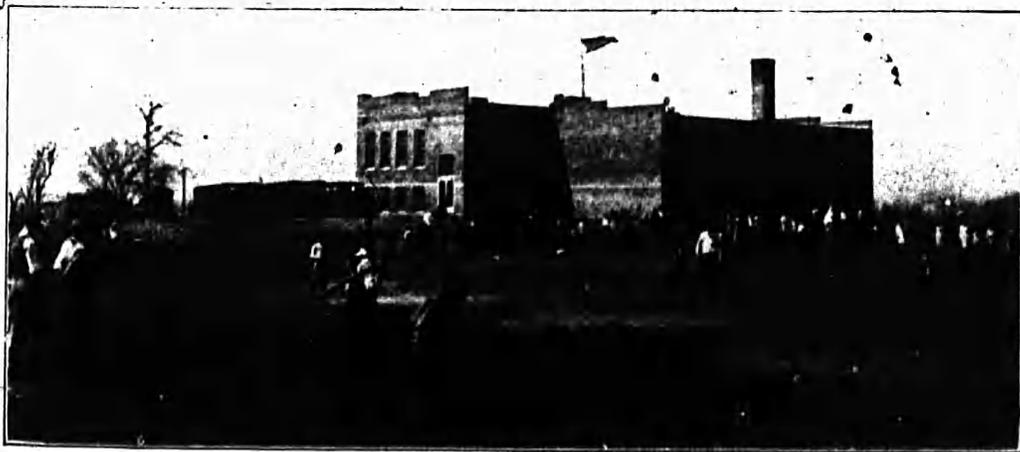
THE CONSOLIDATED SCHOOL CAN OFFER A BROADENED CURRICULUM.



A. Taking part in the annual pageant.



B. Girls' basket ball at a consolidated school.

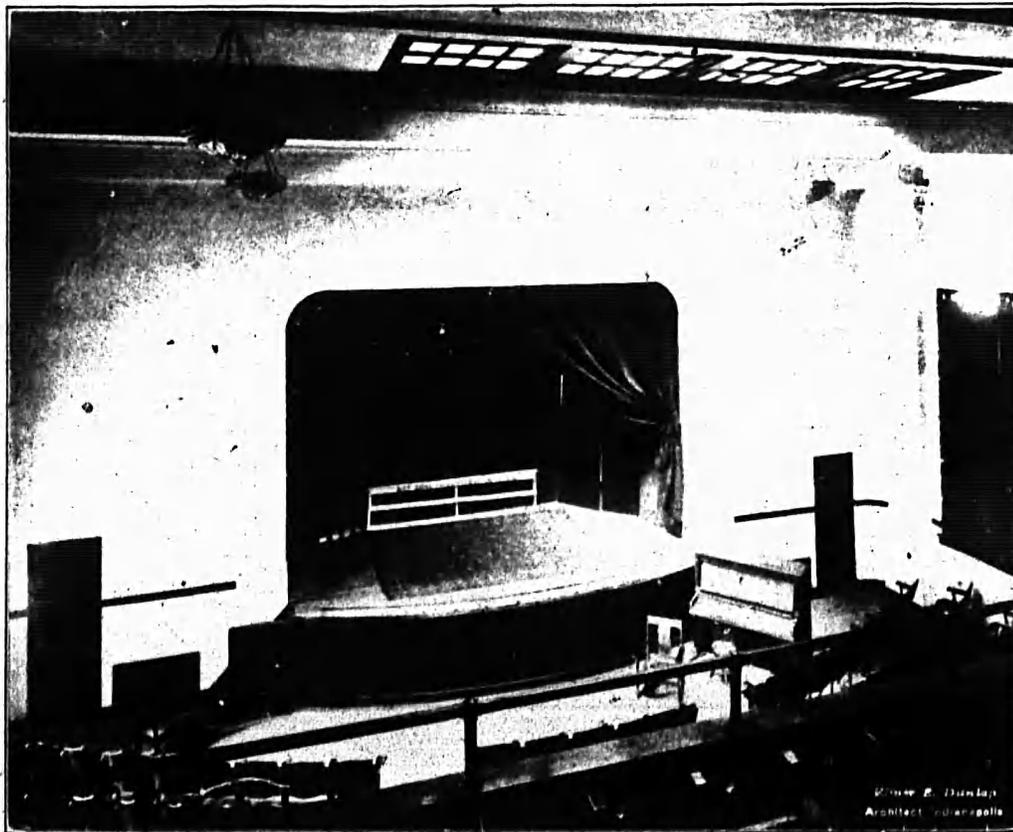


C. Ample grounds for all play activities.

PLAYGROUND SCENES AT CONSOLIDATED SCHOOLS.



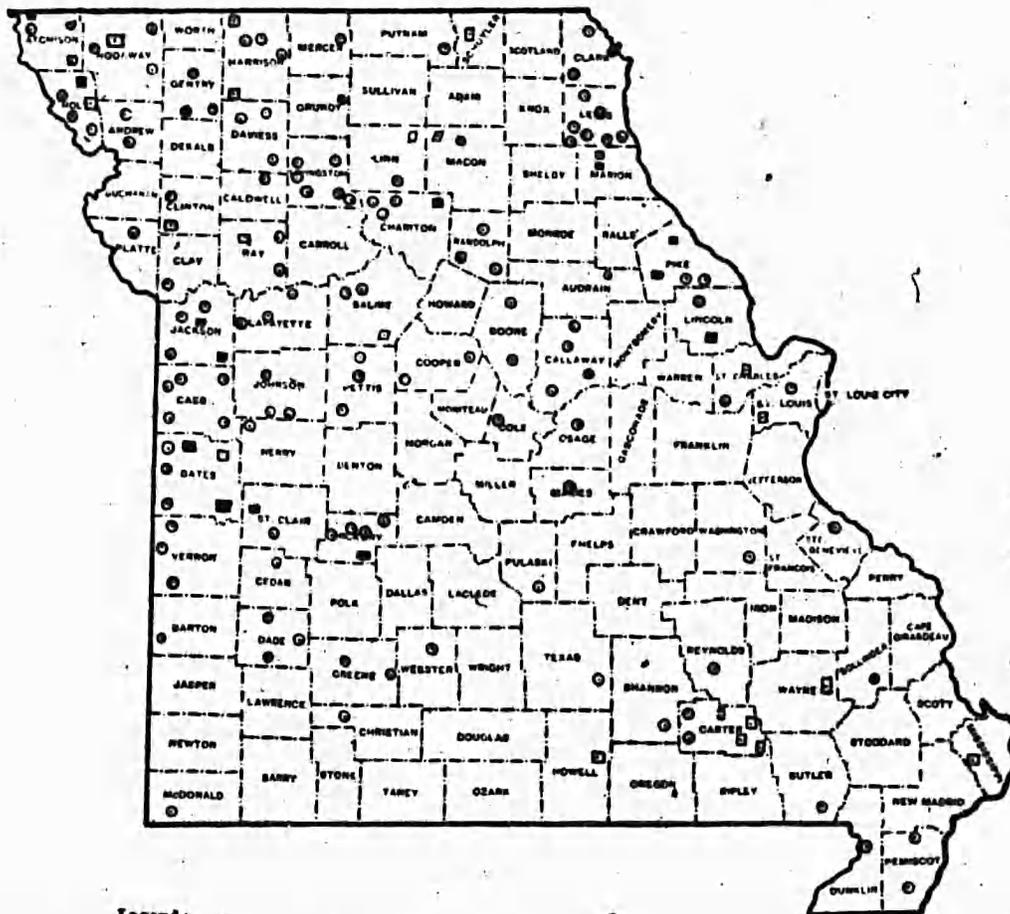
A. A school orchestra.



B. The stage in a consolidated school auditorium.  
OPPORTUNITIES FOR COMMUNITY ACTIVITIES.

*Missouri.*—Since the passage of the Buford-Colley Act in 1913 consolidated schools have been forming at a fairly steady rate. For the years 1915 to 1920 the State department published special statistics for consolidation. They are as follows:

MISSOURI



Legend:

- Town Consolidation ● with high school. ⊙
- Open Country ■ with high school. ⊠

MAP 17.—Showing the location and kinds of consolidated schools in Missouri.

*Statistics of consolidated schools of Missouri.*

	1915	1916	1917	1918	1919	1920
Number of consolidated schools...	83	121	139	145	162	168
Number reporting.....		106	135			
Number maintaining high schools.....	66	96	116	124	139	160
Maintaining 4-year high schools.....	9	21	27	37		
Maintaining 3-year high schools.....	18	19	26	40		
Maintaining 2-year high schools.....	39	56	63	47		
Average monthly salary of principal or superintendent.....	\$88.45	\$91.79	\$100.10	\$111.00		
Average term, in months.....	8.2	8.3	8.6	8.5		
Total area of districts, in square miles.....	2,811	2,004	3,104	3,770	4,158	
Average area of districts, in square miles.....	28.2	26.1	26.4	26.0	25.8	

*Statistics of consolidated schools of Missouri—Continued.*

	1915	1916	1917	1918	1919	1920
Total assessed valuation.....	\$24,256,403	\$35,989,143	\$42,628,368	\$49,198,083	\$62,761,319	.....
Average assessed valuation.....	\$319,163	\$342,753	\$386,255	\$364,430	\$394,725	\$501,428
Average tax levy, in mills, in districts maintaining high schools.....	.....	6.95	7.49	7.3	.....	.....
Average tax levy, in mills for building.....	2.99	3.17	3.18	3.3	.....	.....
Number of districts voting building tax.....	43	62	71	.....	.....	.....
Average levy in mills for maintaining building.....	8.52	8.97	9.09	9.8	.....	.....
Number of high-school teachers.....	100	156	206	245	.....	255
High-school enrollment.....	1,814	2,428	3,335	3,315	.....	7,425
Number of grade teachers.....	375	506	507	637	.....	.....
Grade enrollment.....	12,445	15,807	19,048	20,480	.....	20,943
Districts including incorporated towns.....	42	53	74	66	.....	.....
Districts not including incorporated towns.....	36	50	52	71	.....	.....
Districts reporting one or more schools abandoned.....	.....	20	47	36	.....	.....
Total cost of buildings.....	.....	\$531,411	\$640,120	\$909,740	\$984,350	.....
Average cost of buildings.....	.....	\$7,000	\$7,000	\$8,750	\$8,342	.....
Total number of rooms.....	.....	517	550	624	.....	.....

The statistics indicate a wholesome, rather slow, growth in consolidation.

No data are available for the number of children transported or the amount spent for transportation. The State report of 1919 is to the effect that three consolidated schools are transporting children to a central building, and transportation has been furnished in a few cases where elementary schools were discontinued.

For the year 1921 the State superintendent reports:<sup>15</sup>

Despite the fact that our county unit law is held up by referendum, larger school units are being made by consolidation and union of smaller districts. The following table will show what has been done in one year, even though rural population is decreasing:

*Districts having average attendance.*

Year. <sup>1</sup>	Under 10.	10-15	15-25	25-40	Over 40.
1920.....	862	1,035	3,370	1,999	1,420
1921.....	756	1,343	3,450	2,073	1,510
Increase or decrease.....	Dec. 106	308	80	In. 74	In. 90

*South Dakota.*—The State report for 1917 contains separate statistics for three classes of schools—rural, independent, and consolidated. The following table is a compilation of the data for consolidated schools for the four years, 1917 to 1920, inclusive. A considerable increase is shown in the year following the adoption of the favorable laws of 1919.

<sup>15</sup> Seventy-second Rep. Pub. Schools of Missouri, 1921, p. 105.

Consolidated schools of South Dakota.

	1917	1918	1919	1920
Number of consolidated schools.....	30	41	52	139
Average salary of superintendent.....	\$844.38	\$950.86	\$1,273.82	.....
Number of schoolhouses.....	50	56	79	193
Seating capacity.....	3,814	5,114	7,219	.....
Value of school property.....	\$369,823	\$661,305	\$771,116	\$1,085,896
Number of teachers.....	136	195	227	288 164
Average annual salary of teachers:				
Male.....	\$103.20	\$109.30	\$146.44	\$1,076 1,550
Female.....	\$65.06	\$71.68	\$92.14	\$900 \$1,147
School census.....	4,087	5,234	7,522	11,320
Enrollment:				
Grades.....	2,949	3,632	4,667	7,418
High school.....	541	782	949	1,360
Average daily attendance.....	2,336	2,831	4,194	.....
Number of graduates:				
Ninth grade.....	187	217	291	519
Fourth-year high school.....	52	59	78	75
Total expenditure.....	\$291,840	\$451,374	\$774,077	\$1,447,177
Number of pupils transported.....				2,388
Number of vehicles used.....				142
Average salary of drivers.....				\$101.34
Number of one-room schools.....				22
Number of two-room schools.....				15
Number with more than two rooms.....				54
Teachers' cottages.....				9
Amount spent for transportation.....				\$120,089

<sup>1</sup> 87 districts.

<sup>2</sup> Grade schools.

<sup>3</sup> High schools.

Summary of statistics of consolidated schools, 1922.

Total number of consolidated schools.....	186
Number in open country.....	42
Number in town or village.....	92
Number with two-year high school or less.....	48
Number with three-year high school.....	21
Number with four-year high school.....	50
Districts receiving State aid for consolidated high schools.....	12
Districts receiving State aid for first-class consolidated schools.....	11
Districts receiving State aid for second-class consolidated schools.....	30
Counties having consolidations.....	58
Total enrollment.....	16,113
Average enrollment.....	118.47
Enrollment of—	
50 or less.....	38
51 to 100.....	42
101 to 150.....	22
151 to 200.....	9
201 to 250.....	10
251 and over.....	15
Total number of teachers.....	764
Total area of districts, in square miles.....	6,558
Districts having areas of—	
16 square miles or less.....	10
17 to 25 square miles.....	21
26 to 36 square miles.....	63
37 to 49 square miles.....	10
50 to 64 square miles.....	6
65 to 81 square miles.....	8
81 or more square miles.....	7
Total value of buildings.....	\$4,401,141

*Wisconsin.*—The State school code of 1919 retains all of the methods of centralization, with the exception of the township unit, that have gradually formed in the law and custom of the State. They are: The determination of district boundaries by town, village, or city boards; uniting of schools within districts by district boards; the establishment of State graded schools; consolidation of two or more districts into one by vote of the electors; temporary suspension of a school and the attendance of its pupils at some other school; the establishment of union free high schools and junior high schools; and the transfer of pupils with payment of tuition from districts not furnishing opportunity for secondary education to those maintaining high schools.

The State gives aid to help erect and equip buildings for consolidated schools, to maintain State graded schools, to district free high schools and union and consolidated high schools, for vocational and teacher-training courses, for winter terms in high schools, to rural schools, to small districts, to rural-school teachers who stay in the same rural school more than one year, and for transportation of pupils.

In 1920 Wisconsin maintained 8,951 schools in 8,233 school buildings for an enrollment of 465,243. There were 6,306 one-room schools. In the last 20 years there has been a definite decrease in the average number of pupils for a one-room school. In 1900, 894 such schools enrolled over 60 pupils each; in 1910 the number of schools with so high an enrollment was reduced to 170, and in 1920 to 79. The number of schools enrolling fewer than 5 increased from 21 in 1900 to 104 in 1920. By 1921 there were 310 district high schools, 13 high schools operating under city charters, 70 union high schools, and 4 formed in consolidated schools.

The State superintendent, in his report for that year, characterized the consolidation laws as inadequate, stated that consolidation was going on in a haphazard way that was causing injury to some areas, and recommended that the "majority vote in each district" clause of the law be changed. He suggested that "A consolidation survey of an entire county by competent persons, such as a county board of education, would permit a unified plan. The entire State could thus be districted into areas suited to consolidation and those not adapted for it." He reported that 28,119 pupils live more than 2 miles from the schools, and advises an extension of the transportation laws.

A partial report in 1922 for 34 of the 80 consolidated schools shows 18 in the open country, 10 in rural villages, and 2 in larger towns. The average size of the grounds is 1.3 acres, the average cost of buildings \$5,945. Nine have separate auditoria; eight have manual training, domestic science, and agriculture laboratories.

There are 41 conveyances used to carry 722 pupils over an average distance one way of 3 miles at a cost of 25 cents per day. The total enrollment is 2,469 pupils.

*South Carolina.*—By constitutional provision a school district may not be less than 9 square miles nor more than 49, except in cities of 10,000 population and over. The district schools are administered by a county board of education, of which the county superintendent, chosen by popular election, is a member. Local school trustees may consolidate the schools within a district. Districts may be consolidated upon petitions of one-third the qualified voters of each district. For the years 1912–1920, inclusive, the State reports show 288 districts consolidated into 112, and 548 schools united to form 185, with 323 schools discontinued because of consolidation. Data for transportation of pupils are not given after 1918. The number of white one-room schools decreased from 1,985 in 1911 to 1,915 in 1921. Then, through the influence of the rural graded-school act, an act that is considered as the real basis of the consolidation movement in South Carolina, rural graded schools increased from 58 in 1912 to 935 in 1920. In the latter year they enrolled 96,294 pupils. In 1910, 835 districts levied local taxes for school purposes and raised \$494,266; in 1920, 1,770 districts levied such taxes, with a resulting income of \$2,669,604. Much of the increase in local taxation is due to meeting the requirements of the rural graded-school act.

*Oklahoma.*—Centralization in Oklahoma has been carried on along three lines, and the term is used in the State to include three types of school districts:

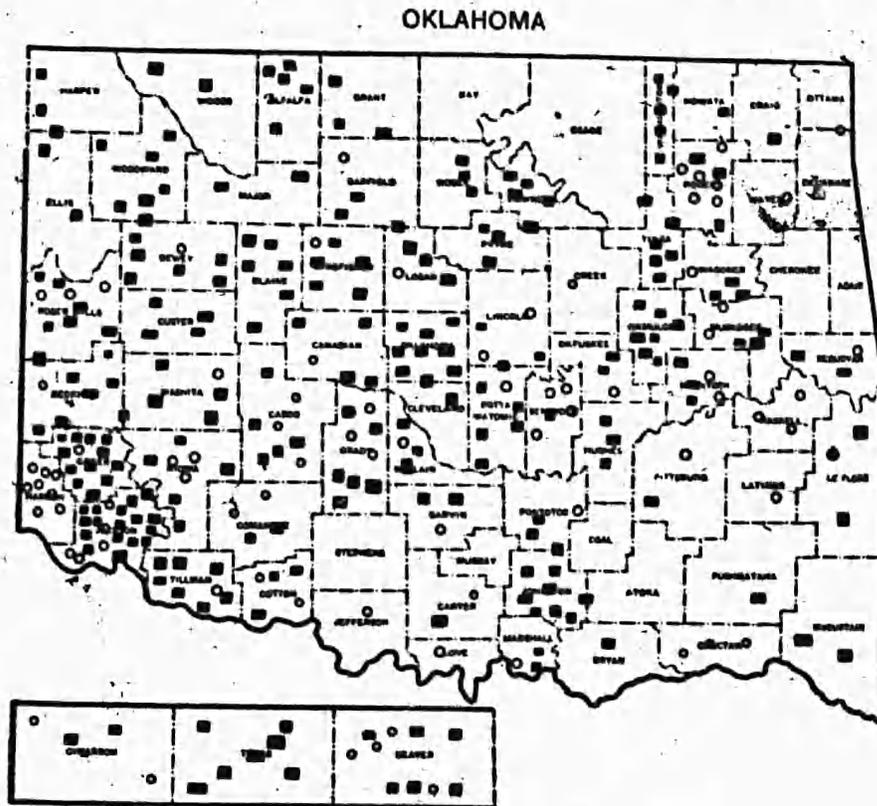
1. Union graded districts, a partial consolidation for the upper grades, formed by a union of districts each of which maintains its own corporate existence and may continue its primary school.
2. Consolidated school districts, formed by uniting two or more adjacent school districts into one by a process of election and a majority vote in each of the uniting districts.
3. Independent districts. Each city of the first class and each incorporated town maintaining a four-year high school accredited by the State university constitutes an independent school district.

The tendency is for union graded districts to become consolidated districts and for consolidated districts to become independent as soon as they can meet the necessary conditions. In the years 1919, 1921, and 1922, respectively, 50, 70, and 88 union graded and consolidated districts reported as independent districts.

On October 1, 1922, there were reported 87 union graded districts, 287 consolidated districts, 14 independent and large common-school districts that transport pupils to school, making a total of 388 centralized districts.

The educational survey commission of 1922 reports:<sup>16</sup>

The people of Oklahoma are to be commended for the progress they have made in the consolidation of schools in the face of serious financial obstacles. The movement has been advanced in a marked degree and quite general throughout the State. The State department of education and county superintendents have apparently cooperated with unusual success both in the number of schools centralized and in their distribution throughout the State. All but five counties have either consolidated or union graded schools, or independent districts which transport children from rural communities. Several counties—Jackson, Tulsa, Greer, for example—seem to have pushed the move-



LEGEND:

- Consolidated School Districts.
- Union Graded School Districts.

MAP 18.—Showing centralization in Oklahoma by consolidated districts and union graded districts.

ment or to have completed plans for doing so to as great a degree as is practicable under present conditions.

Assistance from the State has been effective both in spreading propaganda in favor of the centralization idea and in making plans for the distribution of consolidated districts within the counties.

Fewer errors have been made in the way of leaving out from the boundaries of such districts isolated strips of territory than in many States because of

<sup>16</sup> "Public Education in Oklahoma." A report of a survey of public education in the State of Oklahoma, made at the request of the Oklahoma State Educational Survey Commission, under the direction of the United States Commissioner of Education, 1922, pp. 242-243.

this careful planning of the county superintendents and the State rural supervisors in most of the counties in which consolidation has proceeded to an appreciable degree. These officials have cooperated in arranging for sane county-wide plans before any centralizations were consummated.

The survey committee found that in some cases consolidation had been stimulated too much; assessed valuations in many districts were too low to support good graded and high schools; small high schools were attempting to offer too many subjects and were often maintained at the expense of the grades; principalships and superintendencies were being established unnecessarily; and the cost of transportation was in some districts too high a percentage of the total maintenance charge.

The committee recommends the formation of larger consolidated districts with higher assessed valuations, that the elementary schools be the first consideration, that there be better organization of high schools with concentration on fewer subjects, that State aid, especially for transportation, be increased, that regular and summer courses for training administrators for consolidated schools be given in the university and agricultural college, and that the State adopt the county unit plan of administration.

Teachers' homes have been provided by a large number of the centralized districts, 159 centralized districts having reported on this item in 1921-22. Of these, 52 have teacher homes and 94 have auditoriums in connection with, or as part of, the school building.

There are 347 teachers' homes in the State owned or rented by the districts and occupied by superintendents, principals, teachers, or janitors. Five of these homes are occupied by negro teachers and maintained in connection with schools for colored children."

*Arkansas.*—The following statement is taken from the Arkansas Survey Report, Bureau of Education, Washington, D. C., 1922:

Arkansas has made a small beginning toward consolidating small schools in rural communities. The "consolidated" school, as it is coming to be interpreted in the minds of students of the subject and in the States which are now making the greatest progress in this direction, is one in which not only all elementary grades but an approved four-year high school is maintained. An adequate taxing unit and a sufficient number of children to make such a high school possible are also requisites of a standard consolidated school.

There are in the State 170 schools reported which are called "consolidated." Of these, however, the majority are very small schools and can scarcely be considered as living up to the real meaning of a consolidated school. Thirty-two of the total number have four or more teachers; and 14 include in their educational program a four-year high school. There are at present no data to show how many of these are approved high schools. Unfortunately there is a tendency in Arkansas to call a group of ninth, tenth, and eleventh grade children in charge of one or two teachers in a school with no adequate equipment a high school. It is apparent that this does not constitute a real high school. Usually a school of this sort offers few advantages to the children enrolled in the

high-school subjects and is continued at a serious cost in the efficiency of the work done in the grades.

Arkansas is a State in which progress in consolidation is practicable and inexpensive. The rural population is reasonably concentrated, especially in the delta section. In fact, there are few counties, and those mostly in the northern mountain district, in which consolidation is not practicable. In all of the counties visited by the committee, country schools in charge of one or two teachers were found with very large enrollments; many one-teacher schools enrolled 60 to 100 children and were located within a mile or two of each other. The most cursory observation discloses numerous possibilities of centralizing schools which apparently have so far received little or no consideration.

The committee is convinced that the lack of progress in this particular is one of several indications of the need of strong educational leadership. Unless people understand the deficiencies of the one and two teacher schools, progress toward consolidation on any adequate scale can scarcely be expected. The rural people themselves, as well as superintendents and teachers, must have clearly in mind educational ideals and standards to guide them in knowing good from poor schools.

Probably the best method to promote consolidation in Arkansas, as soon as the people understand its advantage, is through the redistricting of the counties by county boards of education. More and more progressive people are beginning to understand that education is not solely a local matter, especially as concerned with large administrative problems. The real interests of the children can not be best served while it is so considered. Consolidation by agreement among districts is very good so far as it goes, but it does not go far enough. Some small sections or some isolated families are almost sure to be left outside of the boundaries of a consolidated district formed in this way. A better distribution of taxing valuation and of children, and more just and equitable, as well as more economical, arrangements for location of buildings, maintenance of schools, transportation, and the like will be secured if the county as a whole, rather than the individual district, is considered when plans for centralizing schools are made.

A summary of data for the consolidated schools of the State in 1921 is as follows:

1. Consolidated schools -----	170
a. In towns -----	21
b. In villages -----	56
c. In open country -----	93
a. With two teachers -----	60
b. With three teachers -----	58
c. With four teachers -----	15
d. With five or more teachers -----	37
2. Consolidated schools giving high-school courses (included in 1 above) -----	113
a. One year -----	50
b. Two years -----	37
c. Three years -----	32
d. Four years -----	14
3. Average area of school grounds ----- acres	3.7
4. Average cost of school buildings -----	\$7,060
5. Number of teachers' cottages -----	32
6. Value of teachers' cottages -----	\$82,100
7. Number of pupils transported -----	1,032



160 conveyances used, making an average of 20.6 pupils per conveyance. Drivers receive an average salary of \$93.30 a month. The average cost of transportation is 33 cents per pupil per day.

A few more than one-half (88) of the conveyances are district owned. Less than one-half (73) of the drivers are selected by the board rather than chosen by competitive bids.

\$99.31 is the yearly per capita cost for pupils enrolled in consolidated schools.

*Teachers:*

491 teachers, 324 in elementary schools and 167 in high schools. There is an average of 32 pupils per grade teacher and 10.5 pupils per high-school teacher. There is an average of 3.76 teachers for each grade school and 2.93 teachers for each high school.

134 teachers are college graduates; 147 are normal graduates.

130 have one year of preparation beyond high school and 39 are graduates of high-school training departments. Only 93 teachers, or less than 20 per cent, have taught at least three years in consolidated schools. Teachers remain an average of only 1.76 years in the same school.

\$1,361.28 is the average salary of teachers, more than half (56 per cent) receiving from \$1,000 to \$1,500. In one-teacher schools the average salaries of teachers in 1919-20 was \$803.19.

*Success:*

A majority of the 31 county superintendents (22) in whose counties the consolidated schools are located report that transportation has proven satisfactory to teachers, to pupils, to patrons, and to themselves.

Consolidation without transportation, or by means of a dormitory, has been started in a few schools, with varying success.

*Wyoming.*—The general situation in the State is described in the biennial report of the State department for 1920:

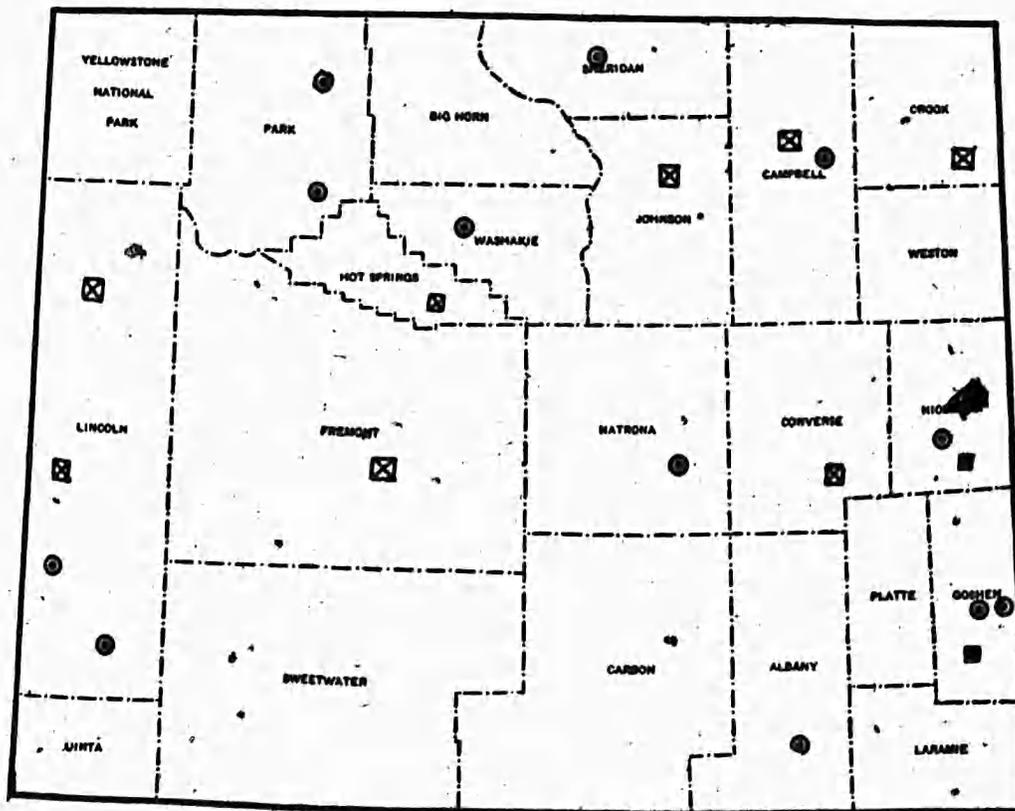
Wyoming is largely a rural State, and the rural problem is the most difficult one. Distances are great and the population much scattered. Great areas of the State are served by one-room rural schools, often having but a few pupils. In a number of instances a ranch family is so far removed from neighbors that no community school is possible, and the teacher becomes a resident and instructs the children in their own home. In still other instances, a woman living near enough to one or two ranch families receives the children into her home for their schooling. In the mountainous districts schools are inaccessible in the winter, and summer schools are the rule. The effort to bring instruction suited to his needs to the country child thus meets unusual difficulties, but they are not insurmountable.

There is very little consolidation. It is being effected slowly along three lines. In some of the counties small districts have combined, not so much for the purpose of establishing central schools as to have larger administrative and tax units. The formation of high-school districts under the terms of the law of 1905 constitutes another type. The closing of small schools to form a central graded school to which the children are transported has occurred in very few cases in the State.

A special report for the year 1922 says:

The State department estimates that 25 per cent of the one-room rural schools in the State could be consolidated, and is actively engaged in a consolidation campaign at the present time. Certain sections of the State, such as the Big Horn Basin, Goshen Hole, Sheridan County, the Wheatland Flats, and Laramie County, are ideally situated for the carrying out of the consolidation projects; in all these sections consolidation is either under way or being considered.

## WYOMING



### LEGEND:-

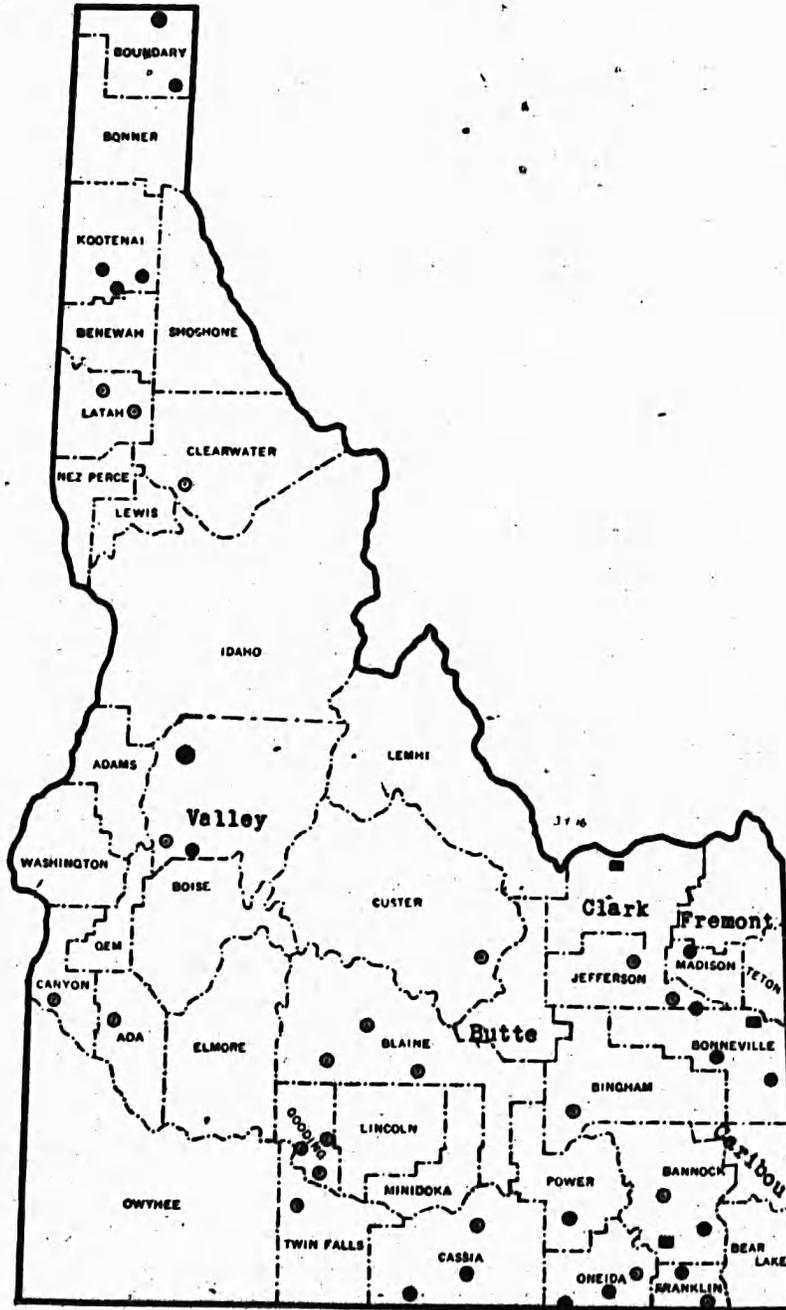
- Town Consolidation ● With High School ○  
 Open Country ■ With High School □  
 Consolidation For High School purposes only ☒

MAP 20.—Showing the complete consolidations and partial consolidations for high-school purposes in Wyoming.

Administrative consolidation is also moving forward with the county unit as a goal. Some legislation is needed to make this goal readily attainable. If present experiments in the operation of dormitories in connection with our so-called "county" high schools are a success, the growth of this type of consolidated school will be much accelerated. On the whole, it may be said that consolidation is a live educational issue in Wyoming and that the next five years will see considerable development along these lines.

In 1920 eleven consolidated schools were reported.

IDAHO



LEGEND:

- Town Consolidation ● With High School ●
- Open Country ■ With High School ■

MAP 21.—Showing the location and kinds of consolidated schools in Idaho.

*Idaho.*—A summary of data given in a special study of 1918 is as follows:

Consolidated schools.....	17
a. In open country.....	8
b. In rural village.....	10
c. In town.....	4
Size of grounds, in acres.....	4-15
Average cost of plant.....	\$21,000
Auditoria.....	6
Agricultural laboratories.....	5
Manual work shops.....	6
Home economics laboratories.....	6

Thirteen of the districts were using 63 conveyances to transport 1,526 children, at an average cost of 19 cents per pupil per day. Drivers were paid an average salary of \$58 a month.

With the exception of one, the schools were organized on the 8-4 plan; 14 of them enrolled 3,227 elementary-school pupils; 12 offered one or more years of high-school work and enrolled 723 high-school pupils; 8 of the 12 were giving full four-year high-school courses. As far as data were available, the cost per student was greater in the consolidated schools than it had been previous to consolidation.

A report for February, 1922, says:

In 1918 in Idaho there were 21 consolidated districts. In January, 1922, there were 42 organizations of this kind. The first consolidated district in the State was a joint consolidated district of Kootenai and Shoshone Counties, located at Cataldo, which was established in 1900. The second consolidated district was established at Malad in 1903. Twenty-two of the 44 counties now have one or more consolidated school districts. As to the expense for transportation I am not able to give you figures at this time. The topography of the State of Idaho is very varied, and for this reason consolidation in certain parts of the northern section is not at all feasible, while in the southern part of the State consolidation is growing very rapidly. It is being carried on at the present time by cooperation between the county superintendent, the citizens, and the local school boards of the districts concerned.

*Oregon.*—In a sketch on consolidation of schools in Oregon<sup>18</sup> the director of the extension division of the State university says:

Consolidation or centralization of schools, most broadly interpreted, already exists in Oregon under several forms, as follows: County high schools, union high schools, the county high-school tuition fund, large undivided school districts, consolidations to prevent "lapsing," one-teacher consolidations, and actual union of districts to secure graded-school advantages with or without high schools.

County high schools now maintained in six counties are high schools located usually at the county seat maintained by county tax and free to all qualified pupils in the county. Every one of them has been established first as the only high school in a sparsely settled county. With the growth in such counties of other centers of population, there has been a tendency toward the establish-

<sup>18</sup> Commonwealth Review of the University of Oregon, Vol. IV, Apr., 1922, pp. 67-70.

ment of local high schools and toward efforts by communities outside the county seat to secure the disestablishment of the county high school or to obtain a share of its support for the smaller local high schools. Under a provision of law passed in 1921 to the effect that the qualified electors of any county may establish and maintain more than one county high school, it is possible, but by no means assured, that some of these counties may develop high-school systems which will bring secondary school advantages within reach of most of the homes of the county. Valuable as are the county high schools, they can hardly be counted as part of the permanent consolidation of the State, as they are on a county rather than a community basis.

Union high schools are consolidations of common-school districts for high-school purposes only. Since the first union at Pleasant Hill in 1908, many unions have been proposed and some have been established. For several years following 1908 there was in force in some counties an optional law, known as the "Lane County plan," which favored the establishment of small high schools through a differential in their favor in the distribution of the proceeds of a county high-school tuition fund levy. Several small union high schools established under the protection of this provision did not survive its repeal, and the tendency of late has been toward the organization of union high schools only where a union of districts with a relatively high valuation can be formed. There are in operation or recently authorized in the State at least 49 union high schools.

Transportation of pupils is not usually a feature of union high-school organization in Oregon, although in most districts many pupils have to come considerable distances by their own means of conveyance. Consolidation of common schools has not usually followed union for high-school purposes.

The county high-school tuition fund provides that in every county in which there is no county high school a special tax must be levied annually by the county court upon all the taxable property in the county not situated in any high-school district. From the proceeds of this tax there is apportioned by the county superintendent to each high-school district having territory in his county, and to each high-school district in any other county educating high-school pupils residing in his county, the total cost to each of such high-school districts of educating high-school pupils who reside in his county outside of any high-school district as shown in his report for the preceding year. The effect of the provisions of this law is to open the high schools to all qualified students, even to those who reside in districts that have not voted to maintain high-school instruction. In one sense, therefore, considering this law and the county high-school law together as covering all the counties, Oregon may be said to have state-wide high school consolidation. Manifestly, these laws do not guarantee accessibility, nor does the tuition fund law promote any particular loyalty to any particular high school on the part of outlying districts. The tuition fund tax has in most counties advanced sharply from year to year and is frequently used as an argument for the organization of union high-school districts.

Large undivided school districts, maintaining central schools with most of the characteristics of good consolidated schools, are few in Oregon, but several such do exist, particularly in Hood River County.

Forced consolidation, or the combination of districts because of the failure of school population, is of course a fairly common phenomenon. This procedure is usually to be preferred to permitting the weak districts to "lapse" and thus become unorganized territory, but it does not result in any change in school facilities which would justify the use of the term "consolidated school."

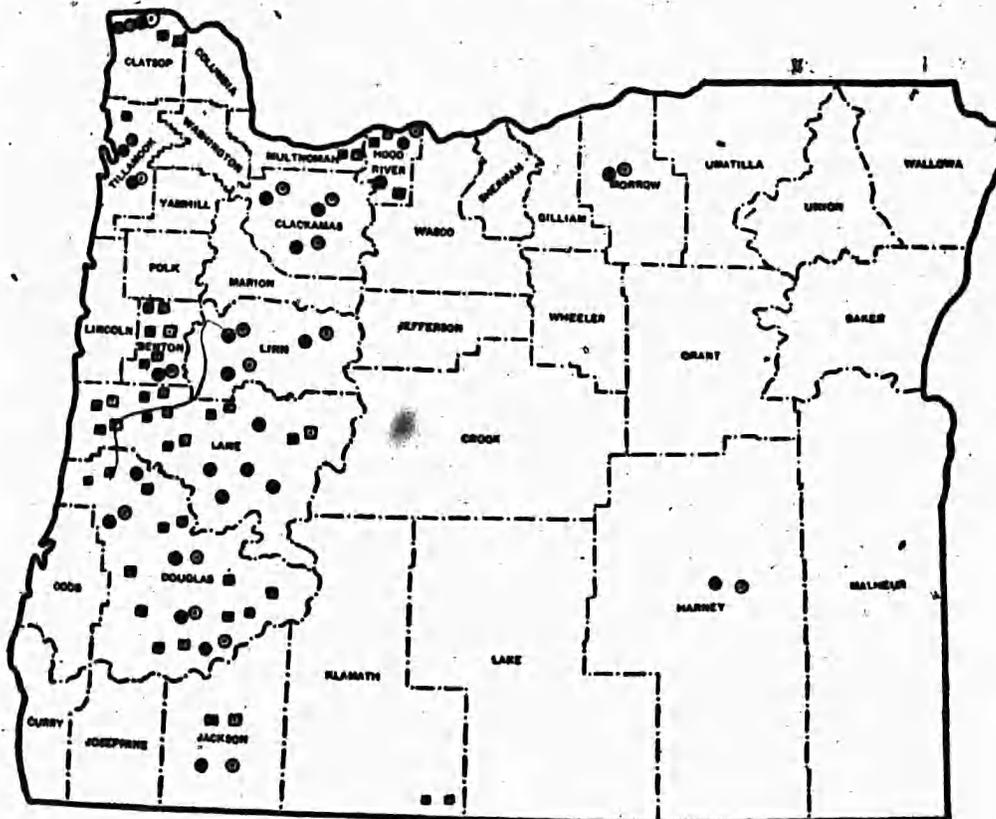
One-room consolidated schools, formed by the union of two or more one-room schools, are not unknown in Oregon. The motive is usually that of economy.

*Graded school union not common in Oregon.*—Union to secure graded-school advantages has not as yet been extensively practiced in Oregon.

The State superintendent writes:

From the report of the county superintendents for the past biennium we learn of much progress in nearly all of the counties for the betterment of the rural school. At the request of this department, each county super-

OREGON



LEGEND:

- Town Consolidation ● With High School ⊙
- Open Country ■ With High School □

MAP 22.—Showing the location and kinds of consolidated schools in Oregon.

intendent has made a survey of his county to determine just how many problems of feasible consolidation he has, and how many of his districts must remain for some time at least the one-room rural-school problem.

Nearly every county in the State now has its problem of consolidation under way and we now have the assurance that consolidation will be an outstanding feature in rural-school progress during the next biennium. The total number of consolidations for elementary schools to date is 77, with an enrollment of 5,585 pupils, employing 348 teachers. Forty of these schools

provide transportation. Within the last year the following consolidations for elementary schools were reported:

*School consolidations for elementary grades in Oregon for the biennium 1921-22.*

County.	Consolidated districts.	Districts in consolidation.	Average assessed valuation.	Average number of teachers.	Average enrollment.	Districts providing transportation.
Clackamas.....	1	2	\$3,401,760	27	900	.....
Clatsop.....	2	4	1,080,333	3	75	1
Coos.....	1	2	277,755	2	35	1
Curry.....	3	7	392,861	2	56	2
Douglas.....	7	20	1,702,185	5	93	5
Gilliam.....	1	3	751,398	2	40	1
Harney.....	2	4	130,412	2	35	2
Jackson.....	4	8	540,592	3	49	2
Josephine.....	2	4	295,782	2	61	2
Lane.....	3	9	480,100	2	37	3
Lincoln.....	1	2	489,450	2	35	.....
Linn.....	1	3	1,832,980	3	114	.....
Malheur.....	1	2	30,330	1	12	.....
Marion.....	1	3	1,912,766	3	69	.....
Morrow.....	2	4	572,098	3	85	1
Tillamook.....	2	4	3,025,500	7	277	2
Union.....	1	3	781,976	2	31	.....
Wasco.....	2	4	783,397	3	19	2

In addition to the above consolidations, 25 districts, acting under the law permitting a district by a majority to suspend its school and transport its pupils, are sending their pupils into districts maintaining more closely graded schools.

The one-room rural school will continue to be a part of Oregon's system, and for the improvement of that school we should devote much time and attention. Every proposed consolidation in Oregon is a problem of its own into which may enter a far larger number of conditions than is found in a problem of consolidation in the prairie States of the Middle West. Many of our already large school districts, sparsely settled, having roads impassable for a part of the year, will not admit of a consolidation that will bring better school conditions. A natural division, such as a mountain valley in which there are a few pupils, can not be joined to another valley several miles away and separated by a winding, precipitous mountain trail or road.<sup>25</sup>

*Washington.*—Consolidation is making steady progress in the State. In 1910 there were reported 120 schools. In 1920 there were 274 consolidated schools and 23 additions to established districts. Forty consolidations were effected during the year.

A special report says:

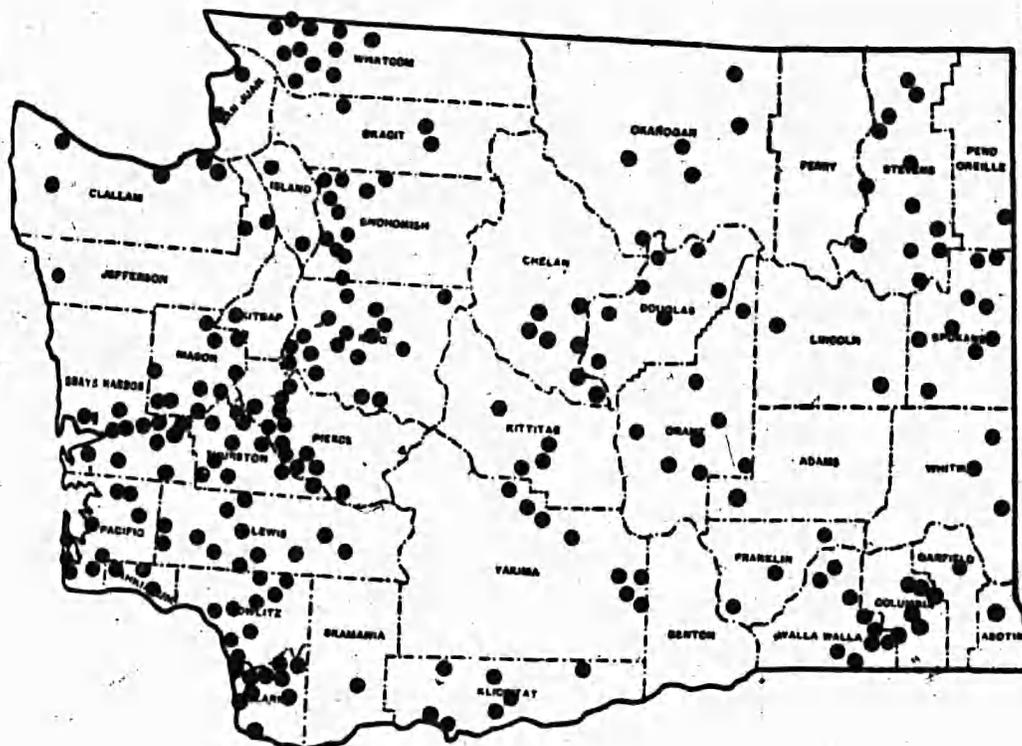
The consolidated districts have attacked the transportation problem energetically, with the result that great improvement has been made in the last few years. Many districts are still transporting pupils to school in school wagons, many more have motor trucks of modern type, a few furnish car fare and inter-urban fare, at least two districts operate gasoline launches, and one hires a rowboat during the summer months. In some districts parents are paid to take their children to school, and others provide barns and stalls for ponies. The majority of districts which have been furnishing transportation for a

<sup>25</sup> Twenty-fifth Bien. Rep. Supt. Pub. Instruc., Oregon, 1923, pp. 11-12.

number of years report satisfactory results. The children, properly cared for and supervised, are taken to school regularly each day in well-ventilated, heated busses. Tardiness and absence evils have almost disappeared. The health of the pupils, especially in the cold and rainy seasons, is better.

In this State consolidation has proven a success. The consolidation of many small districts has resulted in the founding of excellent graded schools, good high schools, has attracted better trained teachers, and promoted greater community interest.

## WASHINGTON



## LEGEND:-

● Consolidated Schools.

MAP 23.—Showing the consolidated schools of Washington.

The consolidation movement is progressing carefully and intelligently. It is not too much to hope that the greatest possible educational advantages will be taken to the rural districts by consolidation as the movement becomes more widespread and its benefits are better known.

Established under the terms of the law providing for wider use of the school plant (see p. 44) there were 608 community centers in 1920, of which 140 were independent, 171 rural-district group centers with no town included, 275 centers including a town and adjacent districts, and 22 districts not included in other center organizations.

*West Virginia.*—An extensive campaign for consolidation was carried on in the years 1918-1920. In 1920 there were 140 schools.

classified as follows: Two-room, 83; three-room, 12; four-room, 26; six-room, 11; eight-room, 8.

A special report says:

There are two distinct types of rural consolidation in West Virginia, namely:

(a) The consolidation of several small schools at a central point, where the children are transported an average distance of 3 miles, the longest haul one way being  $4\frac{1}{2}$  miles. In a few communities children are transported by train or by electric cars, the board of education paying for such transportation at a reduced rate per mile. The largest consolidated schools of this type are at Sherrard, Marshall County, an agricultural community where six schools were consolidated, and at Gary, McDowell County, a mining community, where seven schools were consolidated, part of the pupils being transported by wagon, part by auto bus, and part by railroad. Sherrard is a farm village of 29 families. Gary is a mining town of 1,000 inhabitants. The school in this community is located one-fourth mile from the town. The sole industry, saving gardening, is mining. Both of these schools are also first-class high schools; both have auditoriums; and both teach domestic arts. They are the centers of many community activities. There are several other smaller schools of this type.

(b) The most "typical" type of school consolidation is found in Wayne County. It is the consolidation of three or four rural schools into a graded school of from two to six rooms, where transportation is unnecessary. I say it is the most typical because the topography of the State is such and the roads are such that transportation on a large scale is impracticable. Even where roads shall have been built the mountains of West Virginia will forever bar school consolidation in many communities on a large scale.

In Wayne County within the past seven years 60 one-room schools have been consolidated into 30 small graded schools of from two to four rooms. The only reason why more schools have not been consolidated is that the boards of education have been unable under our old law to raise any more funds for the new buildings. The people want the schools consolidated, and now that additional funds may be raised consolidation will be speeded up.

The children all live within walking distance of these consolidated schools, and therefore no transportation is necessary. However, the children in the two upper grades of schools farther out attend these graded schools, coming in their own conveyances. All of these schools are centers of a great many community activities, so that while the schools are small, as consolidated schools go, yet they provide the essential advantages of the larger type of consolidated school.

For most of the area of West Virginia the latter type of school is the more practicable. However, there are certain counties where all conditions are favorable to consolidation on a larger scale, and with such legal authority as our new school code contains we anticipate a speeding up of consolidation of the former type.

#### STATES HAVING RELATIVELY LITTLE CONSOLIDATION.

New York, Pennsylvania, Texas, Arizona, and Nevada are States that have relatively very little rural-school consolidation. All of them have some form of school districts as the unit of local school control. The first three enroll one-fifth of the public elementary and secondary school enrollment of the United States; the last two about 2 per cent.

New York, Pennsylvania, and Texas have an estimated rural-school enrollment of 1,778,000, or about one-seventh of the rural enrollment of the United States. Nearly all of New York and Pennsylvania and most of east Texas have a rural population of more than 18 to the square mile. These areas are relatively densely populated, and natural conditions are such that school consolidation is practicable; but the three States report 24,380 one-room schools, about 13 per cent of all those in the United States. The small number of centralized schools in them is to be accounted for by the kind of school systems that have been established and the public attitude toward education rather than any natural obstacles.

Arizona, Nevada, and much of west Texas are most sparsely settled. Distances between schools are often very great, and some one-room schools are absolutely necessary. For these areas the claim is made that natural conditions preclude any great amount of consolidation. However, Utah with equally great natural obstacles has its schools highly centralized and is making use of very few one-room schools. In these States also the fact that there are so few consolidations must in some degree be attributed to the kind of school system and to public opinion.

*New York.*—The first consolidation law of New York was enacted in 1853. In 1896 school commissioners were given direct power to consolidate districts without the consent of the local trustees and with no review by the town board. In 1920 there were 354 consolidated schools reported. In some 80 years of legal authorization for consolidation, and at least 27 years of that time with the commissioners holding full power to enforce consolidation, central schools have been organized at an average rate of some three a year, and the State ranks fourth from highest in number of one-room schools. There is a daily attendance of less than 10 in 3,611 of them. The amount spent for transportation is relatively very low, one-half of 1 per cent of the total current expense of maintaining the schools.

The joint committee on rural schools in its recent report<sup>20</sup> says:

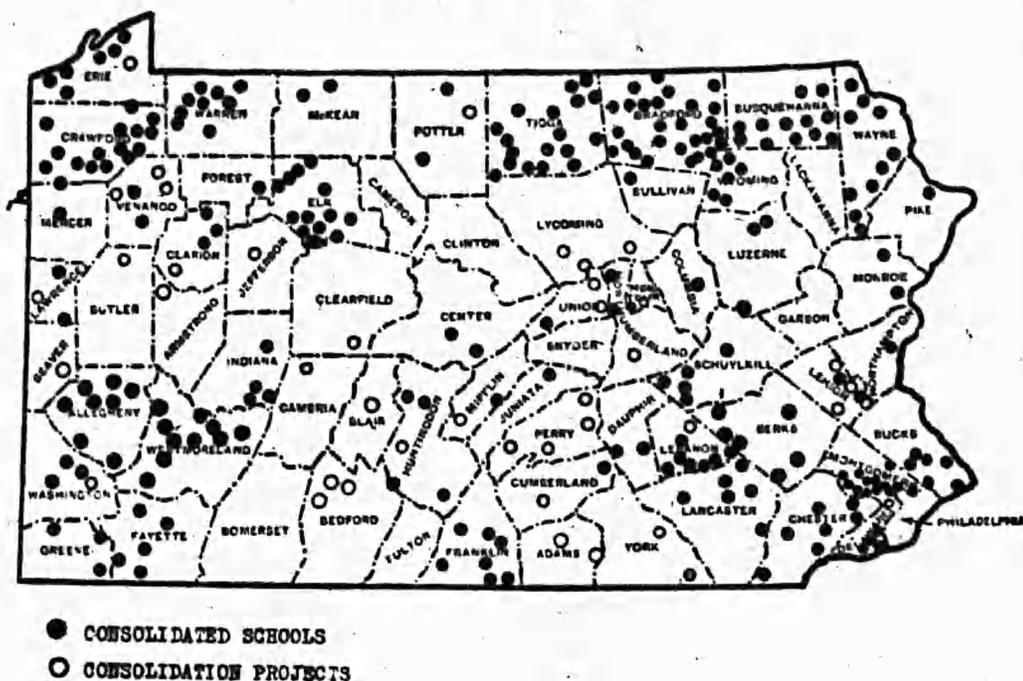
The rural people of New York State are in a great many cases—one might say in the majority of cases—opposed to consolidation of schools, and even to the redefining of district lines. To be sure, the farmer knows that the little school can not carry his child very far on the road to knowledge; it certainly can not give the child a high-school education. He knows that a little school with small attendance is very expensive per pupil. He knows that the equipment is meager and the teacher usually less well qualified for his or her work than the teachers in the schools of the neighboring towns. But the farmer will resist, to the bitter end any movement on the part of the district superintendent or of the State to set up a well-equipped graded school

<sup>20</sup> Rural School Survey of New York State. A report to the rural school patrons, by the Joint Committee on Rural Schools, Geo. A. Works, chairman. Ithaca, N. Y., 1922.

through compulsory consolidation. The replies in the questionnaires sent to rural school patrons showed that they were in the majority of cases very much afraid of "forced consolidation of schools." In most communities people are not in an attitude of mind to consider the question as applied to their community on its merits. In view of this condition and the fact that this is a function over which the laymen should retain control, it would appear wise to repeal that portion of the act which gives to district superintendents of schools the power to redefine district boundaries.

The committee points out the defects of the district system, gives the reasons for a larger unit of school control, and recommends that the community be made the unit of local administration, each dis-

### PENNSYLVANIA



MAP 24.—Showing the consolidated schools and incomplete consolidation projects in Pennsylvania, February 1, 1922.

trict within the community retaining its present boundaries unless changed by a vote of the districts; that the compulsory consolidation law be repealed; that community units be grouped into intermediate units for purposes of supervision; and that the district superintendent be the professional officer of the board of the intermediate unit. The committee hopes that by some such organization lay and professional officers will unite in constructive activities that will bring about better schools.

*Pennsylvania.*—Taking the entire State school system into consideration the percentage of centralization, including cities, is small. If only the rural schools are considered, it is very small. Of 15 States reporting to the Bureau of Education in 1919, Pennsylvania

had the highest percentage of villages around which there were small one-room schools within a radius of  $2\frac{1}{2}$  miles.

A summary of the findings of a special inquiry made into consolidation in Pennsylvania are given on page 30.

At the close of the school year 1920-21, of the 67 counties 38 had some consolidated schools, the highest number in any one county being 23. Nearly all of this has been brought about in the last five years. The accompanying map shows the location of the consolidated schools in the State and the incomplete projects on February 1, 1922. No union districts had been formed. Seven joint consolidations had been approved by the State council. Ten joint high schools had qualified for Smith-Hughes funds. In 1921, \$270,565 was spent for transportation, and the State reimbursed the districts in \$74,442 of that amount.

*Texas.*—The following is from the report of education in Texas, 1919-1921:

The following report as to school consolidation in our State is based upon the best figures obtainable during the last two years. I do not offer these figures as absolutely accurate, because of the fact that some other figures in the same reports have been found to be inaccurate. In addition, there were some counties and independent districts from which I was unable to obtain reports. Reports of consolidated schools up to the session 1919-20 gave 443 consolidated schools in the country districts, 413 being schools for white pupils and 30 for colored pupils.

Reports gave 51 independent districts as consolidated schools formed previously to the session of 1919-20.

Reports for the session of 1919-20 indicate a remarkable progress in consolidation, there having been reported 130 consolidations in country districts and 7 in independent districts, making an increase of about 28 per cent on the number of consolidated schools which we had previously.

Reports for the year 1919-20 show 106 transportation wagons in use for the purpose of carrying children to and from school; 2,685 public-school children are transported at public expense.

The work of school consolidation in Texas is in its infancy and has been carried on in a haphazard way. The effective method would be to have a survey made of each county, and, as a result of this survey, to determine which districts could be consolidated to the advantage of the school children of the county, and carry out such consolidation according to a systematic plan, placing elementary schools so as to provide school advantages for all children of the county, and placing high schools where they can best serve a majority. Plans can then be made for the transportation of children too remote from high schools or elementary schools. The principal obstacles to school consolidation are to be found in local prejudices, local jealousies, and in real estate considerations. Too often each district wants the schoolhouse placed for its own convenience and will not consider the equal claims of other districts. In some cases neighborhood feuds, existing for generations, prevent the people of a community from uniting to establish good schools for their children. The most common cause of the defeat of plans for consolidation is the fact that certain wealthy property owners oppose these plans; first, because they fear

that a stronger school will mean higher taxes; and, second, because they know that the property valuation of the real estate contiguous to a strong consolidated school will be materially increased, and they fear that others will receive this advantage which can not accrue to them. We shall probably never be able to carry out any systematic plans for school consolidation until the absolute power to consolidate schools is placed in the hands of the county school board. The county school board is sufficiently local and sufficiently near to the people of the county to have their best interests at heart, and, in my opinion, the absolute power to settle all school district lines should be granted to the county school boards, leaving, as at present, the power of appeal against any possible unjust decisions to the higher school authorities.

*Arizona.*—The State office reported 29 consolidated schools in 1920, and says concerning consolidation:

County school superintendents have experienced considerable difficulty in bringing about successful consolidations. In the first place, physical conditions are decidedly against it in this State. Very often most insignificant mountain ranges make it necessary to travel far out of one's way in order to arrive at one's destination. Also, our roads are not always good, and during portions of the year they are extremely difficult to travel.

So long as cattle raising is such an important industry, schoolhouses will of necessity be scattered, and transportation impracticable and expensive. One hundred to one hundred and twenty-five dollars is often paid to the driver of a school bus, and in some cases as many as three busses are used to bring the children to a single consolidated school. The transportation charges are so high that the majority of taxpayers prefer to hire a teacher and pay the running expenses of a school rather than to pay a driver to transport the children. Then, too, consolidation is not always popular with the residents of the proposed consolidated districts. They have become so attached to and proud of their small district, with its local trustees and teacher, whom perhaps they have known from childhood, that it is most difficult to present the cause in so attractive a form as to bring about a vote large enough to assure consolidation.

However, in several of the counties, especially Maricopa, consolidated schools have been so superior to the meagerly equipped and poorly attended country schools that the movement is gaining in popularity. The percentage of consolidations, however, will never be large, as the industries and physical condition of the State are not conducive to this class of schools.

*Nevada.*—Three counties of the State report four consolidated districts. The largest of these is a town consolidation maintaining schools that employ a total of 20 teachers or more and serve the children of the greater part of the Newlands reclamation project. The farm units on the project are smaller than the average for the State and the area more densely populated.

The other three consolidations are schools of four teachers or less and are located in small agricultural valleys.

As in some other western highland States there is a trend toward the county unit, and county high schools with dormitories are developing.

Educational district No. 1 of Clark County was established by special enactment in 1919. It embraces about one-third of the county,

is a district of the first class, and is governed by a board of education of five members. The board has charge of all the schools of the district. It maintains two 12-grade schools, two outlying schools of 6 and 7 grades, respectively, and three 1-room schools. For the purpose of taking the school census and of apportioning State and county money, each of the districts that united to form Educational district No. 1 is retained as a subdistrict.

There are 16 county and "county high-school district" high schools. They represent a centralization of the entire secondary educational effort of a county, or a large part of a county, are under an administration entirely separate from that of the elementary schools, and may or may not be coterminous with the boundaries of one or more school districts. Two or three of the larger county high schools are maintaining dormitories for students that live too far from the school to go to and from school daily.

**STATES THAT HAVE SO PROVIDED FOR HIGH SCHOOLS AS TO MAKE THE NEED FOR CONSOLIDATION LESS KEENLY FELT.**

Illinois and California have established so many high schools that there has been less of a demand for the consolidation of elementary schools—the former through township and community high schools, the latter through union high schools. These are kinds of partial consolidation by grades for secondary-school purposes, and the resulting central schools have been developed to a considerable degree of effectiveness in both States. There is little elementary school consolidation in either.

*Illinois.*—The school laws of 1921 contain provisions for the following kinds of high schools:

1. Community consolidated school districts formed by a majority of the votes cast in any compact and contiguous territory bounded by school district lines. These may offer secondary instruction.
2. Township high schools established by a majority vote of the township.
3. High-school districts that include the territory of two or more townships or two or more districts in the same or different townships.
4. High-school districts composed of parts of adjoining townships or of a congressional township and parts of one or more adjoining townships.
5. If part of any township has been included in any high-school district, the remainder of the township constitutes a township for high-school purposes.
6. If a city of not less than 1,000 nor more than 100,000 population is in two or more townships, the township in which a majority

of the inhabitants of the city reside, with the city, is a school township for high-school purposes.

7. If a township contains two political towns divided by an unbridged navigable stream, each town is a township for high-school purposes.

8. A school district having a population of 2,000 or more may establish a township high school.

9. Any contiguous compact territory may by majority vote establish a community high school.

10. In each county of the State all territory not included in any high-school district is organized into a nonhigh-school district for the purpose of levying a tax to pay the tuition of all eighth-grade graduates of the nonhigh-school district at high schools in other districts.

Township high schools have organized rather rapidly under these acts, and to a certain extent their successful operation has removed the feeling of necessity for consolidation of elementary schools. One of the strongest factors in securing the establishment of consolidated schools has been the desire of parents to give their children the advantages of secondary instruction, a factor not present in Illinois because the township high school has largely filled the need. In 1916 there were 265 township high-school districts, and the question of establishing such a school was pending in more than 40 communities. They enrolled an average of 162 pupils each.

The high-school tuition law, first enacted in 1913 and amended in 1917, has also helped to centralize secondary education. In 1920 there were 19,319 tuition students in the high schools, and nonhigh-school districts expended \$1,439,003 for their tuition.

In 1919 the advocates of consolidation succeeded in securing the enactment permitting community consolidated schools and community high schools by a majority vote of the entire territory to be affected. A summary of consolidation in 1921 is:<sup>21</sup>

Consolidations in country, 16; in towns, 62; total, 78.

Districts consolidated, 325; square miles, 1,423.

Number of grade teachers before consolidation, 603; after, 481.

Number of high-school teachers, 127.

Enrollment in grades, 7,442; in high school, 1,337.

High-school courses—two years, 15; three years, 8; four years, 18.

Vocational subjects taught—agriculture, 14; manual training, 5; cooking and sewing, 10.

Number conducting community work, 5; number offering public conveyance, 14; vehicles, 32.

Number of consolidated districts cooperating with community or township high schools, 14.

<sup>21</sup> Information of Consolidated Schools in Illinois and Other States for School Officers. Issued by Francis G. Blair, superintendent of public instruction, p. 57.

*California.*—Following the law of 1891 high schools were established rapidly. In 1892 there were 36 union high schools; 98 in 1895; and in 1900 there were 105 high schools, including city, district, and union. By 1914 there was a total of 214 high schools, and in 1920 there were 320, distributed as follows: County, 14; city, 61; district, 43; union, 183; joint union, 19.

The secondary-school enrollment grew from 39,115 in 1910 to 144,494 in 1920. In 1916 it was stated:<sup>22</sup>

To-day there is scarcely a child that does not have the advantages of high-school education easily within his reach. Ninety per cent of the children of California live within 10 miles of a high school, and, with our good roads, good climate, and automobile transportation, we have now practically provided secondary education for all the children of the State.

This growth of secondary schools is attributed to the basis of taxation, whereby funds automatically increase as the number of children increases, State aid provided for in 1901 and given only to schools that maintain high standards, unusually high qualifications set for teachers, and large freedom given to secondary schools in arranging their courses and planning their work.<sup>23</sup>

Junior colleges and junior high schools were provided for in 1907.

With such a secondary-school development it is easy to understand why consolidation, as the term is most often used, has not made great progress in California. Moreover, in comparative terms, the State has kept its schools fairly well centralized. By 1870 there were 1,239 school districts and enrollment of 91,332. In 1920, half a century later, there were 3,342 districts, enrolling 696,238. No very great increase in number of districts has taken place since 1900, although the school enrollment has more than doubled. The decade 1910 to 1920 shows an increase of only 88 districts, and there has been a definite decrease since 1917, when the maximum for the decade was reached. During the 10 years the school enrollment was augmented by nearly one-third of a million children—exactly, 327,847.

In 1916, 27 union elementary schools formed under the law of 1901 are reported. The number increased slowly until by June 30, 1920, there were 59 union and 71 joint-union districts. A report for September, 1920, is summarized as follows:

Union elementary districts	77
Number consolidated to form union	201
Unions formed since April 1, 1919	32
Number consolidated to form unions	100
Unions under way	85
Districts involved	108

<sup>22</sup> Cubberly, Ellwood P. Some Recent Developments in Secondary Education. In Education, October, 1916.

<sup>23</sup> Ibid.

As means of furthering consolidation the State superintendent recommended in his 1920 report that the method of forming a union district be made easier, that any school district be authorized to contract with another district for the education of its children, and a constitutional amendment making the county unit plan optional be submitted.

#### A SYSTEM OF SCHOOLS ADMINISTERED DIRECTLY BY THE STATE DEPARTMENT OF EDUCATION.

*Delaware.*—The county unit law of 1919 provided for consolidation of schools by the county board of education on recommendation of the county superintendent, and for transportation of pupils when they lived in excess of 2 or 3 miles from a school of the proper grade.

In 1921 the system was changed from county unit to State unit, county boards of education and county superintendents were eliminated, and consolidation provided for by a referendum vote of the districts involved. Transportation was not mentioned, but an appropriation for "transportation and replacement" was made. All the business details of the schools are concentrated at the State office. Branch offices are maintained at each county seat.

The State department reports:<sup>24</sup>

No consolidation of white schools has taken place since the repeal of the school code of 1919. In that year the following consolidations were made:

*New Castle County.*—To Alexis L. Du Pont were added Diamond and Oak Hill districts, while Shellpot school was closed, a part of the pupils going to Du Pont and a part to Mount Pleasant.

To St. Georges was added Franklin.

To Odessa were added McDonough, Dales Corner, and Matthews Corner.

To Middletown were added Brown Cottage, Armstrong, Eight Square, Jamisons Corner, and Mill Lane.

*Kent County.*—To Smyrna were added Clayton, Alley, Brenford, Big Oak, and Severson's districts. This was subsequently dissolved, Clayton and Alley becoming one; while Smyrna, with the other districts, became the other.

To Caesar Rodney, a union of the schools of Wyoming and Camden, were added Rising Sun, Lebanon, Moores, Du Pont, Oak Shade, and Franklin.

To Harrington were added Brown's Neck, Little Masten's, and Powell's districts.

*Sussex County.*—The Lord Baltimore represented a union of the schools of Millville and Ocean View.

Only one school district during the year took advantage of the referendum provisions of the law of 1921 and voted to close school, Lynchs, near Roxana, Sussex County.

None of the above-mentioned consolidations meant the erection of new buildings, though they have meant making available the use of temporary rooms, either by rental, as in the case of Middletown, or by construction by private

<sup>24</sup> Delaware Sch. Rep., 1921-22, Holloway, pp. 31, 32, 33.

parties and rental, as in the case of Clayton, where three such rooms were thus secured.

Consolidations of colored schools, however, were made at Frankford, Millsboro, and Cheswold, which consolidations were made possible by new buildings constructed by the Delaware State Auxillary Association.

Had there been any means provided by the legislature of 1921 for buildings, probably other consolidations would have been made.

When funds for new buildings become available, it is hoped and believed that the movement toward further consolidations will receive a big impetus. Under no circumstances should the State consent to a replacement of the present one-teacher schools by other one-teacher schools to serve the same district. There are a few places in the State where distances and road conditions will probably make advisable the continuation of the one-teacher white school, but they are not many.

Two types of consolidation of schools are to be found in this State: (1) Complete, represented by Middletown and Caesar Rodney, and (2) partial, to be found in practically every section of the State. In the former all pupils in the districts consolidated living beyond a certain distance are transported to school; in the latter case high-school and upper grammar grades only are transported, but retain the old one-room schools for the primary children, who attend school near home. The supposition is that this plan favors the little folks by avoiding the hardship of transportation, but the assumption is misleading and false. Under a properly organized transportation system the hardships of travel exist largely in the imagination of the people who champion this plan. It is a greater hardship for little children to walk to school through snow, slush, rain, and mud for a distance of a mile or more than it is for them to ride to school in a comfortable bus for a distance of 4 or 5 miles. Besides, children lose all the incentive, competition, encouragement, and enthusiasm of large classes at the central school. Add to this handicap the fact that the children are doomed to the monotonous and deadening routine of small classes, in school buildings that lack every convenience and comfort of a modern schoolhouse, and the further fact that their teachers are deprived of the expert supervision of a good principal, and the folly of the system at once becomes apparent.