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FEDERAL AID AS A PART OF A LONG- TIME AGRICULTURAL POLICY

With Special Reference to the Distribution
of Tax Levies



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SUMMARY

1. Federal aid is a part of the growing influence of the national government, and can be justified only on the ground that it promotes the general welfare.

2. This report covers a general study of federal aid for research and education in agriculture and for rural highways, as a part of the nation's long-time agricultural policy. Special attention is given to the relation of federal aid to the distribution of tax levies throughout the country and particularly in agricultural states such as Kansas.

3. Precedents for federal aid are found in early road construction by the national government and in grants of public land for state and local education and for internal improvements.

4. There are four principal criticisms of federal aid: (1) That it gives the national government supervision and control over local affairs, in violation of the spirit of the Constitution; (2) that it tends to destroy state and local incentive and initiative; (3) that it draws state and local funds from uses which may have greater local importance; and (4) that it distributes taxes unfairly.

5. The Supreme Court of the United States has declared that the legal basis of federal aid is not judiciable, which means that the will of Congress is final in appropriating funds for these purposes and in levying taxes to meet such appropriations.

6. The acts of Congress providing federal aid for research and education in agriculture and for road construction give broad scope for state and local initiative. The actual workings of federal aid stimulate initiative and afford opportunity in many ways for cooperative self-help in local communities.

7. The amount of money which states and local communities put into federal-aid work greatly exceeds the amount necessary to match the federal funds. This shows that the people want this work in preference to other forms of public service, and even in preference to lower state and local taxes.

8. The opinion that federal aid results in an unfair distribution of taxes among the states overlooks three important considerations: (1) That states as such pay no federal taxes; (2) that taxes are not always paid where collected; and (3) that the benefits of federal aid are not confined to the state in which the money is expended.

9. Small taxing units within large economic units probably result in an unfair distribution of tax levies, especially in states such as Kansas where tangible property is the main source of revenue.

10. Federal aid partly offsets the disadvantages of small taxing units. In the future, public functions that are general in character may receive relatively more support from larger taxing units than in the past.

11. Several causes have contributed to the growth of federal authority. As economic life becomes more complex and as the several parts of the Nation become more interdependent, the larger unit of government will grow more rapidly in authority and influence than the smaller unit.

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FEDERAL AID AS A PART OF A LONG-TIME AGRICULTURAL POLICY¹

With Special Reference to the Distribution of Tax Levies

ERIC ENGLUND

I. INTRODUCTION

Federal aid is a part of the growing participation of the national government in the affairs of the people of the United States. The authors of the Constitution devised a system of dual government, each state constituting a part of the larger whole. By this means they sought to gain the advantages of national unity and to preserve the benefits of state sovereignty and of local self-government.

The Constitution Established to Promote the General Welfare.—The Federal Constitution, while creating a system of dual political control, was established for certain general purposes of which the preservation of liberty and the promotion of the general welfare are fundamental. Since the original thirteen states banded themselves together “to form a more perfect union,” the national government has extended its influence and authority over the states. This increase in federal power has been achieved by Constitutional amendment and by court decisions based on the interstate commerce clause, the power of taxation, the postal power, and the treaty power. These extensions of authority have been made by the people expressing themselves by direct vote or through the state legislatures, by congressional acts and by court decisions.

Federal Aid Justifiable Only on the Ground of General Welfare.—It would scarcely be rational to suppose that an expansion in federal authority and activities is in *itself* desirable or undesirable. On the contrary, every form of expansion, whether it be federal aid or government regulation, should be judged on its merits. Does it serve the general welfare? Can a given project, whether in education, research, or internal improvements, be better promoted in the interest of the whole people by federal participation than if the work were left exclusively to state and local initiative and support? Granting that federal aid is beneficial to a specific project, are its

1. Contribution No. 26 from the Department of Agricultural Economics, published as a part of the taxation series of the Agricultural Experiment Station. Previous publications of this series: Bulletin 232, “Assessment and Equalization of Farm and City Real Estate in Kansas” (July, 1924); 234, “Tax Revision in Kansas” (December, 1924); and 235, “The Trend of Real Estate Taxation in Kansas from 1910 to 1923” (September, 1925).

advantages offset by undesirable consequences resulting from state and national coöperation? Does it result in a *net* advantage to the people?

Opposition to any proposal for federal aid, or support of it, should be based on rational answers to the above questions and should not rest on abstract doctrines of governmental aloofness or of traditional states' rights. As society grows more complex and as communities become increasingly interdependent, these doctrines must be modified in the interest of the general welfare. But they should not be set aside lightly or changed without due consideration for their merits.

Two Classes of Federal Aid.—For the purpose of this report, federal aid is divided into two classes:

First: Federal aid which is not conditioned upon a like contribution by the states. This includes federal support for agricultural experiment stations under the Hatch, Adams, and Purnell acts, and support for the land-grant colleges under the Second Morrill Act (1890) and the Nelson Amendment (1908).²

Second: Federal aid which is conditioned upon the contribution of a like amount by each participating state. This is commonly called the "fifty-fifty system." The principal parts of this system are: Cooperative agricultural extension work (Smith-Lever Act), vocational education (Smith-Hughes Act), and highway construction (Federal Aid for Roads Act).³ Federal aid under these three laws amounted to 98 per cent of the total federal expenditures under the fifty-fifty system, in the year ending June 30, 1924.

Purpose of This Study.—This report is the result of a general study of the present policy of federal aid for research in agriculture, and for agricultural extension, vocational education, and rural highway construction. The purpose is to indicate the relation of this policy (1) to the general public welfare and (2) to the distribution of the taxes necessary on account of these activities. The principal arguments against federal aid are stated and analyzed because such

2. Each land-grant college receives \$50,000 annually from the federal government under the Second Morrill Act and the Nelson Amendment. For these and other acts pertaining to federal support for agricultural work in the states, see United States Department of Agriculture circular No. 251, "Federal Legislation, Regulations, and Rulings Affecting Land-Grant Colleges and Experiment Stations." (Revised, April, 1925.)

3. The fifty-fifty system includes three additional acts: Industrial rehabilitation (Act of June 2, 1920), maternity and infant hygiene (Sheppard-Towner Act), and prevention and control of venereal diseases (Chamberlain-Kahn Act). These are of minor importance from the standpoint of the amount of federal funds involved, receiving only two per cent of the total federal expenditures under the fifty-fifty system in the fiscal year ending June 30, 1924. In most respects the legal grounds for these are necessarily the same as for the major "fifty-fifty acts."

a procedure is thought to afford a more concrete basis for a general study of federal aid as a part of our long-time agricultural policy than could be afforded by a more abstract approach to the subject.

It is not the purpose *per se* to refute the arguments against federal aid, although the discussion is in several instances presented in the form of a refutation,

II. PRECEDENTS FOR FEDERAL AID

Some form of federal support for internal improvements and state and local education is a long-established policy, supported by precedents extending over a century and a quarter.

Early Federal Road Construction.— Congress authorized the construction of a national highway in 1803. It was the Cumberland pike, from Cumberland, Md., to Wheeling, W. Va. At that time, the government alone built and paid for the road. Now it helps build roads on a partnership basis with the states. Had it not been for the rapid development of rail transportation beginning some twenty-five years later, a national system of highways would probably have been established several decades ago. But railroads soon provided interstate, long distance transportation. Road construction and maintenance were left largely to counties and townships, until motor transportation revolutionized road problems and compelled the adoption of a new highway policy.

National Land-Grants for State and Local Education.— States admitted to the Union prior to 1848 were granted section 16 of each township for common school purposes. Beginning with 1848, sections 16 and 36 were granted for this purpose; and certain states were given additional grants. For universities and seminaries, two townships of land or their equivalent were set aside for each state or territory having public lands. Under the Land-Grant College Act of 1862, every state was granted 30,000 acres for each senator and representative in Congress, for the land-grant college. Under these acts, the federal government has given 99 million acres of land for state and local education⁴ an acreage almost equal to the total land area of Kansas and Nebraska.

National Land-Grants for Internal Improvements.— State and local education was not the only purpose for which the federal government donated land in the early days. The government also gave

4. Hibbard, B. H., *A History of the Public Land Policies*, page 570.

land for internal improvements; 137 million acres have been granted for railroads, wagon roads and canals.⁵

Thus the federal government has granted 236 million acres of public land for state and local education and for internal improvements, an area equal to the land surface of North Dakota, South Dakota, Nebraska, Kansas and seven eighths of Oklahoma. (Fig. 1.) Using another comparison, these grants equal the land area of fourteen eastern and southeastern states—New Hampshire, Massachusetts, Rhode Island, Connecticut, Pennsylvania, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia and Florida.

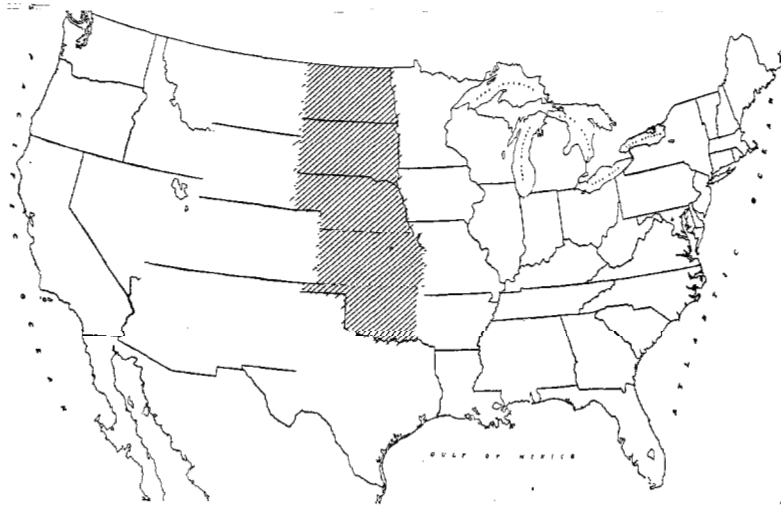


FIG. 1.—If all public land granted by the federal government for state and local education and internal improvements were in one area it would cover the land surface of the two Dakotas, Nebraska, Kansas, and seven-eighths of Oklahoma. In the early days the government supported these purposes out of its abundance—the public domain. Now it supports them with its present resources—the wealth and taxable capacity of the people.

Federal Aid a Long-Established Policy.—The above precedents show that state and local education, and improvement in the means of transportation, have long been recognized as matters of proper national concern. In accordance with its constitutional duty to promote the general welfare, the federal government in the early days gave out of the abundance of its resources—the public domain—for education and internal improvements. For the present purpose, it is

6. Ibid, page 570.

not for us to sit in judgment of the early policies in disposing of the public domain. One thing is certain, namely, that these grants of public lands were made, on the whole, as the national government saw the demands of the general welfare.

The public domain having largely disappeared, the government now gives out of the abundance of its present resources—the wealth and taxable capacity of the people. But the states have reached a relatively high degree of economic maturity since the days of land grants, and they are now agreeing to match the government funds as a condition of receiving federal aid for certain types of education and improvements. The term “federal aid” may be a misnomer. But the substance, which is far more important than the name itself, is that these cooperative endeavors are a recognition of the fact that the federal government and the states with their subdivisions have a common responsibility for those phases of education and internal improvements that have both national and local importance.

A Federal-Aid Policy Suggested by Early Leaders.—The following quotations attributed to Henry Clay, John Calhoun and Daniel Webster indicate that the above precedents for federal aid were probably in accord with the opinions of these early national leaders: ⁶

Henry Clay, in an address made in Congress in 1818, said:

Of all the modes in which a government can employ its surplus revenue, none is more permanently beneficial than that of internal improvement. Fixed to the soil, it becomes a durable part of the land itself, diffusing comfort and animation on all sides. The first direct effect is on the agricultural community, into whose pocket comes the difference in the expense of transportation between good and bad ways.

John Calhoun, defending federal responsibility in road improvements in the House of Representatives in 1817, said:

Let it not be said that internal improvements may be wholly left to the enterprise of the States and of individuals. I know that much may be justly expected to be done by them; but in a country so new and so extensive as ours there is room enough for all the general and state governments and individuals to exert their resources . . . Let us, then, bind the Republic together with a perfect system of roads and canals.

Daniel Webster, speaking in the United States Senate in 1830, said:

Two considerations at once presented themselves, in looking at this state of things, with great force. One was that that great branch of im-

6. These quotations were obtained for this report from “Federal Responsibility for Our Highways,” *American Highways*, October, 1925, published by the American Association of Highway Officials.

provement which consisted in furnishing new facilities of intercourse necessarily ran into different states in every leading instance and would benefit the citizens of all such states. No one state, therefore, in such cases would assume the whole expense, nor was the cooperation of several states to be expected . . . , Under this view of things I thought it necessary to settle, at least for myself, some definite notions with respect to the powers of the Government in regard to internal affairs, and I arrived at the conclusion that Government had power to accomplish sundry objects or aid in their accomplishment, which are now commonly spoken of as internal improvements.

III. PRINCIPAL CRITICISMS OF FEDERAL AID⁷

The wisdom of federal aid, especially of the fifty-fifty system, is being questioned by a number of thoughtful and influential persons. Numerous criticisms have been advanced, but the important ones seem to fall logically under four heads:

A. It is alleged that federal aid gives the national government power of supervision and control over local affairs, in violation of the spirit of the Constitution.—It is charged that federal aid enables Congress to use the power of appropriating money “to purchase from the several states such statutes as it believes to be conducive to the public good. By this method it has dictated the policies of the states in matters of education, industrial rehabilitation, hygiene and health. A more seductive and insidious device to evade the Constitution and to emasculate the states could hardly have been contrived.”⁸ This quotation is typical of many sharp charges against federal aid.

B. It is charged that federal aid tends to destroy state and local initiative and incentive.—This criticism apparently is based on the supposition that the power to initiate projects in agricultural research and education and in road construction lies wholly with the national government and not with state and local authority. This charge clearly implies the assumption that the national government dictates to the states the specific kind of work that shall be promoted with federal-aid money and how the work shall be done. It assumes that state officials serve as subordinate functionaries for the national government in federal-aid work, and that they and the local

7. A more complete presentation of the arguments against federal aid than can be included in this publication may be found in addresses by Hon. Albert C. Ritchie, Governor of Maryland, “The Fifty-Fifty System of Federal Aid—Why it Should be Stopped,” delivered at the Seventh Annual Conference of Governors, Poland, Maine, June 30, 1925, and “Federal Subsidies to the States,” before the Pennsylvania State Chamber of Commerce, Harrisburg, October 15, 1925. Also see “Let’s Stop this Fifty-Fifty Business,” by Senator James W. Wadsworth of New York, in *Nation’s Business*, March, 1926; and “Abolishing the Fifty-Fifty System,” in *The World’s Work*, August, 1925.

8. Hull, George R., “The Rights of the People of the States,” *American Law Review*, November-December, 1925, pages 814-15.

communities are deprived of incentive and opportunity for originality and independent action.

C. It is argued that federal aid diverts funds from purposes for which there is greater local need to purposes of lesser local importance.—In other words, it is alleged that federal aid promotes educational programs and internal improvements which the people want less than something else. It is assumed that if it were not for federal aid, state and local money would be spent for other purposes for which there is felt a greater need. This criticism is directed mainly at the fifty-fifty system.

D. It is asserted that the amount of federal aid returned to each state bears no relation to the state's contribution to the federal revenues.—This appears to be the most serious charge against federal aid, judging by the prevailing tone of the critics. The substance of this argument is that the western or agricultural states are being subsidized at the expense of the eastern states or the industrial, commercial and financial centers.

IV. AN ANALYSIS OF NATIONAL AND STATE RELATIONS IN FEDERAL AID

A. THE CONSTITUTIONALITY OF FEDERAL AID

The first of the major arguments against federal aid, stated in Section III, is that it gives the national government power of supervision and control over local affairs, in violation of the spirit of the Constitution.

The Supreme Court on the Constitutionality of Federal Aid,—For the present purpose, the question of constitutionality needs only a brief mention. It has already been settled by the Supreme Court of the United States in two cases pertaining to the constitutionality of the Sheppard-Towner Act which provides federal aid to the states for the promotion of the welfare and hygiene of maternity and infancy. Space does not permit a detailed discussion of these cases.⁹ Suffice it here to refer to the decision of the Supreme Court, on June 4, 1923, disposing of these cases for want of jurisdiction.¹⁰ There was no dissenting opinion. Speaking for the Court,

9. More complete information on these cases may be found in "The Massachusetts attack on Federal Aid," by C. A. Prosser, *Vocational Education Magazine*, February, 1923; a brief in defense of the Sheppard-Towner Act filed with the Supreme Court by ten states (Arkansas, Arizona, Colorado, Delaware, Indiana, Kentucky, Minnesota, Oregon, Pennsylvania, and Virginia) and the Association of Land-Grant Colleges; Appendix B of publication No. 137 of the Children's Bureau, United States Department of Labor; and Massachusetts House Document No. 1660, 1922.

10. *Massachusetts versus Mellon et al.*, and *Frothingham versus Mellon, et al.*, 43 Supreme Court Reporter, 597.

Mr. Justice Sutherland said:

What, then, is the nature of the right of the state here asserted and how is it affected by this statute? Reduced to its simplest terms, it is alleged that the statute constitutes an attempt to legislate outside the powers granted to Congress by the Constitution and within the field of local powers exclusively reserved to the States. Nothing is added to the force or effect of this assertion by the further incidental allegations that the ulterior purpose of Congress thereby was to induce the States to yield a portion of their sovereign rights; that the burden of the appropriations falls unequally upon the several States; and that there is imposed upon the States an illegal and unconstitutional option either to yield to the Federal Government a part of their reserved rights or lose their share of the moneys appropriated. But what burden is imposed upon the States, unequally or otherwise? Certainly there is none, unless it be the burden of taxation, and that falls upon their inhabitants, who are within the taxing power of Congress as well as that of the States where they reside. Nor does the statute require the States to do or to yield anything. If Congress enacted it with the ulterior purpose of tempting them to yield, that purpose may be effectively frustrated by the simple expedient of not yielding.

In the last analysis, the complaint of the plaintiff State is brought to the naked contention that Congress has usurped the reserved powers of the several States by the mere enactment of the statute, though nothing has been done and nothing is to be done without their consent; and it is plain that that question, as it is thus presented, is political and not judicial in character, and therefore is not a matter which admits of the exercise of the judicial power.

The administration of any statute likely to produce additional taxation to be imposed upon a vast number of taxpayers, the extent of whose several liability is indefinite and constantly changing, is essentially a matter of public and not of individual concern. If one taxpayer may champion and litigate such a cause, then every other taxpayer may do the same, not only in respect of the statute here under review but also in respect of every other appropriation act and statute whose administration requires the outlay of public money, and whose validity may be questioned.

Thus the constitutionality of federal aid is settled on the ground that the question presented is not justiciable. A question of constitutionality is not involved. In short, the Supreme Court has indicated that the opinion of Congress is final in the matter of federal support for research, education, public health, etc.

The above case involving the constitutionality of the Sheppard-Towner Act is cited because had this act been declared unconstitutional other acts providing for federal aid would in all probability have fallen. It would probably have meant the end of federal support for agricultural extension, vocational education, road construc-

tion, and perhaps for agricultural colleges and experiment stations. Such a decision would have thrown into chaos our long-established policy of research and education in agriculture.¹¹

Federal Aid and Individual Political Liberty.—Critics seem to assume that federal-aid work is exclusively local in character and that federal participation is destructive of individual liberty. From this premise, the validity of which will be examined later, it is but a short step to the conclusion that federal influence in these fields of work is in itself undesirable. In support of this contention it is argued that the power of individual opinion is inversely proportional to the size of the political unit of which the individual forms a part; that local self-government is an antidote for the necessary evils of majority rule; and that the more local self-government we have the better both for our personal political liberty and for our individual interest in government.¹²

There is much truth in the above point of view, and there would be strength in the argument supporting it, if the premise that federal-aid work is exclusively local in character were correct. An individual's opinion counts for relatively more in a local unit of 16,000 people than in a national unit of 116 million. It takes stronger leadership to make itself felt in a large community than in a small one.

The appeal to individual political liberty as an argument against federal aid leaves untouched two main phases of the problem of national *versus* local authority in this field: First, the amount of state and local initiative and control in federal-aid work; and second, the national importance of this work. These phases will be examined later in this report.

Individual Liberty Has an Economic Side.—The appeal to individual political liberty in this connection also overlooks the fact that liberty has an economic as well as a political side. Limited space permits only two brief suggestion on this point: First, political restriction is often necessary to the enhancement of economic liberty,¹³ second, it appears safe to venture the opinion that no single

11. When the constitutionality of the Sheppard-Towner Act was challenged, the Association of Land-Grant Colleges and a number of individual states were keenly aware of the danger to our policy of research and education in agriculture. Hence they filed briefs in defense of the Sheppard-Towner Law.

12. Hull, George R., *American Law Review*, November-December, 1925, page 824.

13. Ely, R. T., *Property and Contract in Their Relation to the Distribution of Wealth*, Book I, Part I, Chapter V—"But a certain class of writers fastening their attention merely upon political action say, when they observe that a political act or law restricts freedom, that freedom has been impaired or lessened; yet they do not go further and ask what effect it has had upon economic freedom. We have to consider the two together, and it is a matter of fact, as anyone can find out by inquiry, that political restriction often means economic freedom."—Page 134.

public policy has done or is doing more to promote economic liberty than our policy of research leading to better use and conservation of our natural resources, and our policy of universal education to fit men and women better for their economic tasks and their social responsibilities.

B. STATE AND LOCAL INITIATIVE UNDER FEDERAL AID

In determining the extent of the influence of state and local authority in federal-aid work, it is necessary to examine (1) the limitations placed by Congress on the use of federal-aid funds, and (2) the extent of the state's administrative authority in initiating and conducting the cooperative work for which state and federal funds are appropriated. These phases of the problem will be examined in relation to each type of federal aid under consideration in this report.

1. Comparison of Federal and State Authority in Agricultural Experiment Stations

Congress has always laid down certain general requirements governing the use of federal appropriations to the states for education and research. This was true of the First Morrill Act, 1862, the Second Morrill Act, 1890, and the Nelson Amendment, 1908. These acts set aside land and appropriated money specifically for instruction in agriculture and the mechanic arts. It was also required that military training should be given in the land-grant colleges. Aside from these general provisions, the federal government made no attempt to control the affairs of these colleges. The states have the power to select the administrative officers and the faculties, to determine the curricula, and to control all other affairs of these institutions.¹⁴ In short, the personnel of these colleges is answerable to the state and not to the federal government.

The agricultural experiment stations, like the colleges, are under the control of state authorities. Acts of Congress¹⁵ providing federal support for state experiment stations give wide latitude to the states in using federal funds.

State Needs and Conditions Recognized by Law.—The Hatch Act of 1887, establishing the Agricultural Experiment Stations, provided for an annual appropriation to each state or territory of \$15,000, "To be applied to paying the necessary expenses of conducting original research or experiments bearing directly on the agricultural industry of the United States, having due regard to the

14. See United States Department of Agriculture Circular 251, "Federal Legislation, Regulation, and Rulings Affecting Land-Grant Colleges and Experiment Stations" (April, 1925), pages 1 to 18.

15. The Hatch Act of 1887, the Adams Act of 1906, and the Purnell Act of 1925.

varying conditions and needs of the respective states or territories." This act further provides that no part of the funds in excess of five per cent of the amount appropriated shall be used to erect buildings or to acquire land. The important fact is that here, as under the Morrill Act, the states have the principal administrative control over experiment station work, including the authority to employ and to discharge directors and staff members of the experiment stations.

The Purnell Act, which provides for an increase of \$60,000 in federal funds for each state experiment station by 1929, also gives wide latitude to the state authorities in formulating and directing agricultural research. The broad provisions of this law are best indicated by the following quotation from the act itself:

The funds appropriated pursuant to this Act shall be applied only to paying the necessary expenses of conducting investigations or making experiments bearing directly on the production, manufacture, preparation, use, distribution, and marketing of agricultural products and including such scientific researches as have for their purpose the establishment and maintenance of a permanent and efficient agricultural industry, and such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life, and for printing and disseminating the results of said researches.

Federal Officials Mindful of State Needs.— That the states enjoy ample scope and authority in agricultural experiment station work receiving federal funds is further shown by the following statement by Director L. E. Call of the Kansas Agricultural Experiment Station:

The Acts of Congress authorizing appropriations for the support of the state agricultural experiment stations have placed certain limitations upon the use to which these funds may be devoted. For example, funds appropriated under the Adams Act must be devoted to original research and only a small portion of these funds may be used for the erection of buildings, land rental, or administrative expenses. In general, however, federal money may be used almost as freely as state funds for the support of legitimate projects.

We have always found federal administrative officials cooperative in their attitude and anxious to support from federal funds projects which will contribute to the solution of those problems urgently in need of solution for the best interest of the agriculture of the state.¹⁶

2. Comparison of Federal and State Authority in Agricultural Extension¹⁷

Basis for Distributing Extension Funds Among States.—Co-operative extension work in agriculture is carried on under the Smith-

16. Letter to the writer, March 31, 1926.

17. The author is indebted to Director H. Umberger, Division of College Extension, Kansas State Agricultural College, for helpful suggestions on this section.

Lever Act which is a part of the fifty-fifty system. Under this law, the federal government allows \$10,000 per annum to each state assenting to the provisions of the federal law, without requiring the state to appropriate a like amount as a condition of receiving federal aid.

The law further provides that the remainder of the annual appropriation, \$4,100,000, shall be divided among the states on the fifty-fifty basis "in the proportion which the rural population of each state bears to the total rural population of all the states. . . ." Thus each state gets \$10,000 whether or not it matches any federal funds. But the state's share of the additional funds becomes available only if matched by funds from any public or private source within the state.¹⁸

Basis for Determining Extent of Federal and State Authority.—The question is: "Does the federal government exercise supervision and control over agricultural extension work to the extent of impairing state and local initiative and incentive?" The answer is found in the Smith-Lever law itself and in the terms of agreement between the states and the United States Department of Agriculture for the conduct of extension work. Three documents, based on the Smith-Lever law, define the relative authority of the states and of the national government. They are: The General Memorandum of Understanding, the Project Agreement, and the Plan of Work.

Principal Administrative Provisions in the Smith-Lever Act.—The Smith-Lever law is the basis for the cooperative extension work in agriculture by the states and the federal government. The purpose of this act is "to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same. . . ." The spirit of this act is clearly the same as that of the Morrill Act creating the land-grant colleges and the Hatch, Adams and Purnell Acts granting federal support for agricultural research in the states. The purpose of extension work is to make the results of research public property in the widest sense.

18. ". . . No payment out of the additional appropriations herein provided shall be made in any year to any State until an equal sum has been appropriated for that year by the legislature of such State, or provided by State, county, college, local authority, or individual contributions from within the State, for the maintenance of the cooperative agricultural extension work provided for in this act."—United States Department of Agriculture Circular 251, section 3, page 38.

Scope of Agricultural Extension Defined—For the present purpose, namely to determine the scope for state authority and initiative in extension work, suffice it to quote pertinent parts of the act. Co-operative extension work is defined as follows in Section 2 of the law:

That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agricultural and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise.

Purposes for which Smith-Lever Money May Not be Used—In addition to this broad definition of the scope of extension work in agriculture, the Smith-Lever law specifies in a general manner certain purposes for which money made available by this act may not be used. It is clear that the purpose of this limitation is to insure the use of these funds in the broad field of extension as defined above. The limitation reads:

No portion of said moneys shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building or buildings, or the purchase or rental of land, or in college-course teaching, lectures in colleges, promoting agricultural trains, or any other purpose not specified in this act, and not more than five percentum of each annual appropriation shall be applied to the printing and distribution of publications.

Division of Administrative Responsibility.—The division of administrative responsibility between the federal government and the states is indicated in the following quotation from Section 2 of the law: “. . . this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.”

The following statement in the law is indicative of the intent to lodge responsibility, and consequently room for initiative, with the states:

It shall be the duty of each of said colleges annually, on or before the first day of January, to make to the governor of the State in which it is located a full and detailed report of its operations in the direction of extension work as defined in this act, including a detailed statement of receipts and expenditures from all sources for this purpose, a copy of which report shall be sent to the Secretary of Agriculture and to the Secretary of the Treasury of the United States.

States May Appeal to Congress over the Secretary of Agriculture.—If the Secretary of Agriculture should withhold, from any state,

funds made available under the Smith-Lever law, the state has the right of appeal to Congress, as provided in Section 6:

If the Secretary of Agriculture shall withhold a certificate from any state of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the expiration of the Congress next succeeding a session of the legislature of any State from which a certificate has been withheld, in order that the State may, if it should so desire, appeal to Congress from the determination of the Secretary of Agriculture.

*Principal Provisions in the General Memorandum of Understanding.*¹⁹—The purpose of this memorandum is to define more specifically the nature of the coöperative arrangement between the federal government and the states.

Administrative Authority Centered in State Extension Division. — Under the memorandum of understanding the state college agrees:

1. To organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, with a responsible leader selected by the College and satisfactory to the Department of Agriculture.
2. To administer through such Extension Division thus organized any and all funds it has or may hereafter receive for such work from appropriations made by Congress or the State Legislature, by allotment from its Board of Trustees, or from any other source.

“The United States Department of Agriculture and the College mutually agree to cooperate in any form of extension work in agriculture and home economics which the Department is authorized by Congress to conduct in the state.” This means that the Department of Agriculture has in fact turned over to the state the major control of any extension work in agriculture which Congress may authorize the Department to do within the state even outside the provisions of the Smith-Lever law.

Power to Initiate and to Execute Extension Work Lies With the States. —It is of first importance to note that the power to initiate and to execute the extension work involving the exclusive use of Smith-Lever funds lies with the extension division of the college and not with the federal government.²⁰ This being the case it is difficult to see how the Smith-Lever law could possibly destroy any state initiative or incentive.

19. The quotations and other material presented under this head are obtained from the Memorandum of Understanding between the Kansas State Agricultural College and the United States Department of Agriculture, July 1, 1914.

20. “That the plans for the use of the Smith-Lever fund. . . shall be made by the Extension Division of the College but shall be subject to approval of the Secretary of Agriculture in accordance with the terms of the Smith-Lever Act, and when so approved shall be executed by the Extension Division of said College.”—III (3), Memorandum of Understanding.

Project Agreement Gives Broad Powers to State Extension Director.—The project agreement is even more specific than the memorandum of understanding in delegating to the Director of Extension the administrative power over extension work. He is hired and may be discharged by state authority and is therefore not subject to federal authority. He also selects the entire personnel of the extension service. He has more power than any other individual in the whole organization of cooperative extension work. This fact is illustrated by the following quotations from the Administrative Project:²¹

The Extension Service is subject to the authority of the President of the Kansas State Agricultural College and is under the immediate direction of the Director of Extension, who under the terms of the General Memorandum of Understanding is the designated administrator of all cooperative extension work of the Agricultural College and the United States Department of Agriculture carried on within the State of Kansas.

All extension agents will be administratively responsible to the Extension Director for their field activities, method of procedure, and for the results secured in their work, and to the subject matter departments for the subject matter taught.

State Colleges Control Subject Matter Taught by Extension Workers.—It does not appear reasonable to suppose that cooperative extension work under the Smith-Lever law destroys state initiative when the extension agents are responsible to a state official, the Director of College Extension, in all administrative matters, and through him to the subject matter departments of the college (Agronomy, Animal Husbandry, etc.) for subject matter taught. These departments are not responsible to the federal government. Surely, then, the state has enough power over both the administration and the subject matter to give ample ground for state initiative.

Extension Funds Available for Projects not Allowed on Smith-Lever Funds.—It will be noted in figure 5 that the states, the counties and the local communities put about twice as much money into extension work as is necessary to match the federal Smith-Lever funds. This surplus of state and local money gives ample opportunity for extension directors to do extension work beyond that now allowed on Smith-Lever funds, if they should find need for such work. Furthermore, this surplus enables them to pay any extension worker in any month out of any one of three classes of funds—federal Smith-Lever, state Smith-Lever, and other state

²¹. Signed by the Director of College Extension, Kansas State Agricultural College, and the Director of Extension Service, United States Department of Agriculture, effective July 1, 1924.

funds. This elasticity of the extension pay roll gives to the state authorities ample opportunity to prevent any extension worker from considering himself under the "influence" of any one source of his salary.

Association of Land-Grant Colleges Instrumental in Determining Federal Extension Policies.—The Association of Land-Grant Colleges is a nation-wide organization of the state agricultural colleges. The Committee on Extension Organization and Policy of this association consists of state extension directors. This committee makes proposals from time to time to the association for modifications or change in the federal extension policy. Federal officials almost always meet with this committee in frank discussion of extension problems based on actual field experience in the several states. Through this committee, the state officials are actually instrumental in determining federal policies in extension.

Extension Work Organized on County and Community Basis.—The federal administration of the Smith-Lever law has adopted the policy of leaving the initiative in extension work almost exclusively to the states. This is indicated in the following extract from the administration project agreement:

Extension work in the field will be organized primarily on a county and community basis with one or more extension agents in each agricultural county of the state with their necessary state and district supervisory officers. These county agents will organize farmers, their wives, and rural young people for extension work and through their assistance put on demonstrations to teach improved agricultural and home economics practices.

Local Organizations Provide Opportunity for Initiative and Self-Help.—The advantages of individual initiative are carried into the local communities. Farmers, their wives and rural young people find in their local organizations opportunity and incentive to work together to improve farm conditions and rural home life. It is a matter of common observation that these organizations are a means of creating, not of destroying, local initiative and leadership in agricultural extension. On this point an experienced extension director says:

The basic plan which has been followed in developing cooperative extension work has been that of the local committee, which is recognized as sound rural social science. County extension committees of men and women have practically the entire direction of cooperative extension work in their respective counties. County project committees meet and decide what the program of work shall be. Community committees are

formed and determine community programs. As a result of this plan, thousands of leaders in rural affairs have been developed in the last ten years. And these leaders have given evidence, on many occasions, that their initiative has been developed and not destroyed. I have dealt with hundreds of the county and community committees in the last ten years, and never once have I heard the expression, "Let Washington do it," come from such a committee or from any man or woman who lives in the country. I believe that cooperative extension work has done more to develop initiative and local interest among rural people in studying their own problems, than has any other agency that has operated in the last ten years.²²

Summary Statement.— The charge that federal aid under the Smith-Lever law destroys state and local initiative is not borne out by the facts, because (1) the field of work as defined by the law is broad enough to include practically every legitimate extension project in agriculture and home economics proposed in any state, county or community; (2) the major share of the administrative authority is vested in the director of extension who is chosen by and responsible to state authority and not to the federal government; (3) initiative in planning extension work under the Smith-Lever law rests with the states and not with the federal government; and (4) extension work is done principally through local organizations of farmers, home makers, and rural young people.

3. Comparison of Federal and State Authority in Vocational Education²⁸

Federal money becomes available for state vocational education when the state accepts the provisions of the Smith-Hughes Act. One of the provisions is that for every dollar of federal money which this law makes available, the state or the local communities, or both, shall expend an equal amount for this work.

The federal government undoubtedly has a considerable amount of authority over vocational education in states that have accepted the terms of this act.²⁴ But the question is: Does federal participation in vocational education destroy state and local initiative in this

22. Baker, H. J., Director of Agricultural Extension, New Jersey, by letter to the editor of *The World's Work*, August 6, 1925.

23. Credit is due Prof. A. P. Davidson of the Department of Education, Kansas State Agricultural College, for reading this section and giving helpful suggestions.

24. A full discussion of federal authority and of state responsibility in this field is found in Bulletin No. 1 of the Federal Board for Vocational Education, "Statement of Policies," May, 1922. The Board believes that the following principles should govern national appropriations for vocational education:

"1. To stimulate the states to undertake a new and needed form of service—that for vocational education—which the National Government believes necessary to the public welfare.

"2. To equalize, in part at least, the inequalities of burden among the states in carrying on this service.

"3. To purchase for the National Government a reasonable degree of participation in the carrying on of this work in which the National Government is so deeply concerned.

"4. To establish standards of efficiency in vocational education and to set up minimums below which work in vocational education for which reimbursement from federal moneys is desired cannot be allowed to fall."—Page 7.

field? This can be answered only by referring to the pertinent parts of the law, to interpretations of the law by the Federal Board for Vocational Education, and to the experience of state officials in charge of vocational education.

The Federal Board Has Authority to Require Minimum Standards.— "Authority to disapprove state plans involving reimbursements out of federal money rests with the federal board, but this authority does not imply authority to dictate or initiate state plans in any particular. It implies only authority to determine conditions of reimbursement under the federal act. Disapproval does not mean that a state may not adopt a plan, but only that it may not use federal funds for reimbursement under the plan disapproved."²⁵ The federal board has the power to require of the state certain minimum standards of instruction and teacher training as a condition of granting federal funds to the state.

Power to Initiate Plan of Instruction Vested in State Board.—The state's authority is centered in a state board for vocational education which the state is required to designate under this law. Any state board of education may be so designated.²⁶ This body has the administrative authority of the vocational education work, within the limits of the federal law.

It is important to note that the state board, and not the federal board, has the power to initiate plans of teacher training and of vocational instruction. The plan of cooperation in carrying out this program is in every case prepared by the state board and passed upon by the federal board.

Federal Law Provides Broad Scope for State Board.—The power to initiate a program of work enables the state board to fit vocational education to the specific needs of the state, and leaves room for state and local initiative. But the effectiveness of this power would be largely theoretical if it were not for the broad provisions of the law itself, together with a liberal interpretation of it by the federal board. The wide scope of the law is best stated for agriculture in Section 10, and for trade, industry and home economics in Section 11 of the Smith-Hughes Act.

That in order to receive the benefits of such appropriation for the salaries of teachers, supervisors, or directors of agricultural subjects the state board of any state shall provide in its plan for agricultural education that such education shall be that which is under public supervision

²⁵. Bulletin No. 1, "Statement of Policies," Federal Board for Vocational Education, page 11.

²⁶. Section 5, Smith-Hughes Act.

or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and be designed to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home. (From section 10.)

That in order to receive the benefits of the appropriation for the salaries of teachers of trade, home economics, and industrial subjects the state board of any state shall provide in its plan for trade, home economics, and industrial education that such education shall be given in schools or classes under public supervision or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and shall be designed to meet the needs of persons over fourteen years of age who are preparing for a trade or industrial pursuit or who have entered upon the work of a trade or industrial pursuit. (From section 11.)²⁷

The Federal Board Liberal in Interpreting Smith-Hughes Law.—The federal board has been and is liberal in its interpretation of the Smith-Hughes Act and has not attempted to dictate state policies. This is well expressed in the following statement by Mr. C. M. Miller, director of vocational education for Kansas:

In my four years' experience as state director I have come to feel that the federal board, through its supervision of the state work, is concerned with two things. First, with making sure that the state board is faithfully executing the contract and, second, with bringing to the state any constructive criticism which may help to strengthen the program of vocational education. No federal agent has made any attempt to dictate the state's policy on any occasion. On the contrary, they have always come with the attitude of helping in the development of a sane program. They have shown an interest in promoting as much vocational education for the money expended as possible.²⁸

4. Comparison of Federal and State Authority in Highway Construction²⁹

The contention that federal aid for roads tends to destroy local initiative does not call for long and detailed analysis in this report. Suffice it to show briefly (1) that initiative in planning federal-aid highways lies with the state authorities; (2) that a connected system of highways is a national problem and therefore a proper concern of the federal government; (3) that road construction has been recognized as a necessary and proper activity of the federal government since the adoption of the Constitution and (4) that state and local authorities have broad scope for independent initiative in road con-

27. The remainder of Section 11 relates to minimum requirements of equipment, expenditures, age of students in evening schools, etc.

28. Letter to Prof. A. P. Davidson, Kansas State Agricultural College, April 5, 1926.

29. Prof. L. E. Conrad, Department of Civil and Highway Engineering, Kansas State Agricultural College, has read this section of the manuscript, and credit is due him for helpful suggestions.

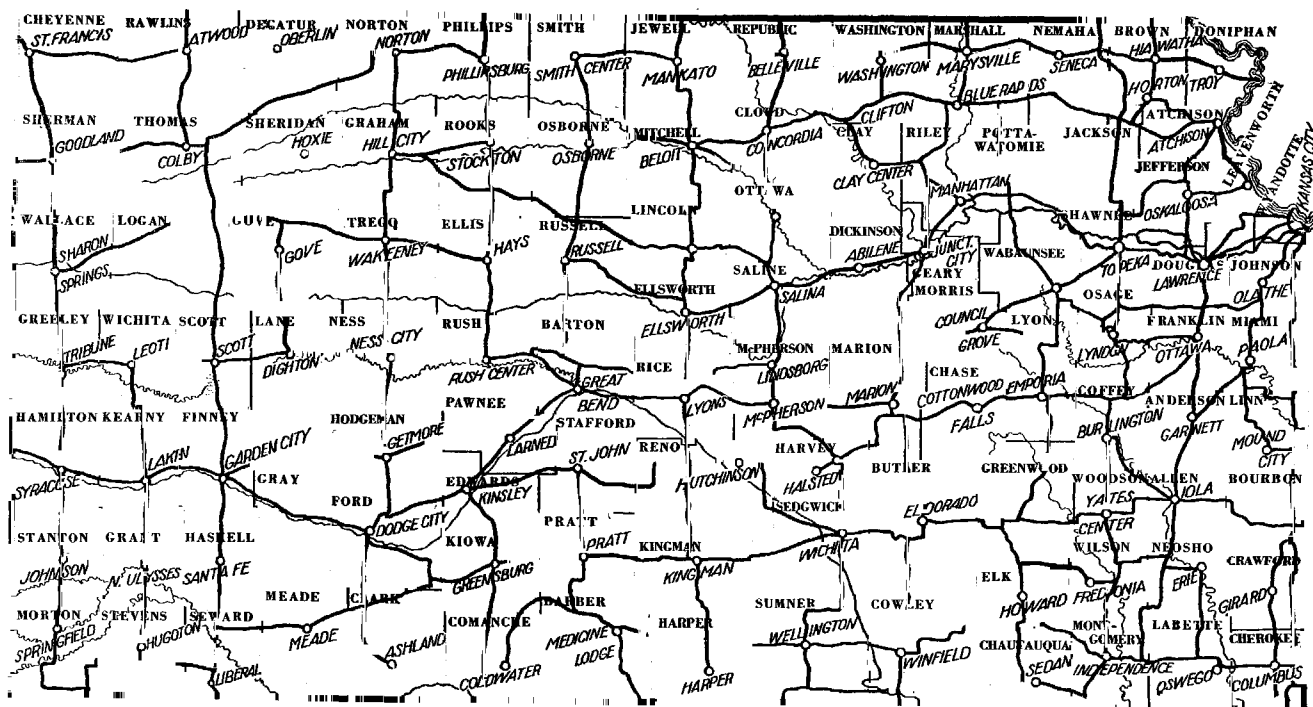


FIG. 2.—Map of Kansas showing the proposed state highway system, approved for federal aid by the Secretary of Agriculture. A study of this map should be instructive to those who oppose a state system of roads on the ground that "We should build roads from county seat to county seat, and not from New York to Los Angeles."

struction, outside the federal-aid system. Each of these four points will be discussed separately.

Initiative in Planning Federal-Aid Roads Rests with the States.

-This point can be established best by quoting from the federal-aid roads law:

That any state desiring to avail itself of the benefits of this act shall, by its state highway department, submit to the Secretary of Agriculture project statements setting forth proposed construction of any rural post road or roads therein. If the Secretary of Agriculture approve a project, the state highway department shall furnish to him such surveys, plans, specifications, and estimates therefor as he may require: Provided, however, That the Secretary of Agriculture shall approve only such projects as may be substantial in character and the expenditure of funds hereby authorized shall be applied only to such improvements.³⁰

More than 90 Per Cent of Total Population Within Ten Miles of Federal-Aid Roads.—Under the power to initiate road plans, the state highway departments, in cooperation with federal authorities, have laid out a system of federal-aid highways that touches practically every city and town of 5,000 population or more in the United States. “If a zone ten miles wide were laid out on each side of the roads included in the system these zones would include more than 90 per cent of the population of the country.”³¹ What more could local initiative have done to provide the people with roads?

Projected System in Kansas Connects All County Seats.

-The Kansas Highway commission exercised initiative in planning the system of roads shown in figure 2. This system has been approved by the Secretary of Agriculture for federal aid, and it connects all county seats.

National Importance of Highways Justifies Present Federal Control.

-Federal participation in the construction of a connected system of roads is justified by the interstate character of the federal-aid highways.

In this connection Thomas H. MacDonald, Chief of the Bureau of Public Roads, says:

The increasing range of travel by automobile and of commercial operations by truck and motor bus has practically obliterated State lines from a highway transportation point of view and there is no question of the interstate character of the principal highways such as those which are included in the Federal-aid system. The necessity for an interconnected and well developed interstate system from the point of view of

30. From section 6 of the Federal Aid for Roads Act. See Miscellaneous Circular 60, United States Department of Agriculture.

31. MacDonald, Thos. H., Chief, Bureau of Public Roads, United States Department of Agriculture, by a letter to the writer, March 30, 1926.

military requirements alone is sufficient justification for the interest taken by the Federal Government in the improvement of these roads. The affairs in which the Federal Government participates in this case are distinctly not local affairs but are as fully interstate in character as the operations of the railroads which come under the jurisdiction of the Interstate Commerce Commission.³²

Mail Carriers Use Nearly Seven Times the Mileage of Federal-Aid Roads.—The Constitution gives Congress the power to construct post roads.³⁸ Uncle Sam's mail carriers are using 1,205,500 miles of road every day in delivering rural mail.³⁴ Up to March 30, 1926, 179,771 miles had been designated as federal-aid roads. The maximum that can be so designated under the Highway Act of 1921 is 200,353 miles, or seven per cent of the total mileage of all public roads in all states at the date of this act. Thus the United States post office is using 6.7 times the mileage of the present federal-aid system or six times the mileage of the maximum system authorized by law. From this point of view, the projected federal highway system is a modest undertaking by the national government under the constitutional authorization to establish post roads.

The rural mail carrier is in need of good roads more than ever, because rural delivery has become motorized. "Five years ago 43 per cent of the rural carriers used horse-drawn vehicles. Today there are but 15 per cent using horses. The time involved in delivery of rural mail has been reduced one-half."³⁵

Military Importance of Connected Highways.—A connected system of highways is also of national importance for military reasons. Speaking before the Senate Committee on Post Offices and Post Roads in 1921, General Pershing said: "The country road will be of tremendous value in time of war; . . . the roads must be relied upon to obtain the needed food supplies."

Federal Road Construction Authorized by the Constitution.—The Constitution provides that "The Congress shall have the power to establish post offices and post roads," as mentioned above. The authors of the Constitution recognized road construction as a function of the national government 139 years ago, in the days of the turn-pike and the stage coach. How much more is it a national

32. Letter to the writer, March 30, 1926.

33. The term "Rural post roads" shall be construed to mean any public road over which the United States mails now are or may hereafter be transported, excluding every street and road in a place having a population, as shown by the latest available Federal census, of two thousand five hundred or more, except that portion of any such street or road along which the houses average more than two hundred feet apart.—United States Department of Agriculture, Miscellaneous Circular No. 60.

34. *American Highways*, April, 1926, page 5.

35. *American Highways*, April, 1926, page 5.

function to-day when motor transportation has revolutionized road problems.

Room for Local Initiative Outside the Federal System. — Under the Highway Act of 1921, the federal system can not include more than seven per cent of all the roads. Local initiative has free play on 93 per cent. Furthermore, federal funds spent for roads in 1924 were only 5.36 per cent of all money spent for rural highways in that year, as shown in figure 9. In matching the federal money, the states brought the total of national and state cooperative participation up to about 11 per cent of the grand total expended for highways in 1924. This left 89 per cent of the expenditures outside the "fifty-fifty partnership."

It has been shown above that the states have extensive authority within the present system of federal coöperation on the fifty-fifty basis. This authority within the federal system, together with the additional scope of 93 per cent of the total road mileage and 89 per cent of all the money spent for roads, should afford ample room for state and local initiative.

C. THE ASSERTION THAT FEDERAL AID DIVERTS STATE AND LOCAL FUNDS INTO PURPOSES OF SUBORDINATE LOCAL IMPORTANCE

The following analysis of the charge that federal aid diverts state and local funds from purposes of greater local need to purposes of lesser local importance is based on the assumption that the people express their desire for a given type of service or improvement by their willingness to support it financially. If liberal support from state and local sources is given to a service, such as research or agricultural extension, and to an improvement such as good roads, it is assumed that the people want these activities.

People Indicate What They Want by the Way They Spend Their Money. — It is charged that Congress, through the fifty-fifty system, tempts the states to accept a program of education or of road construction against their better judgment and to spend their money for purposes of subordinate local importance, thus withholding it from purposes of greater importance to the state and the community.³⁶ If this charge were true, it stands to reason that the states and the local communities would put into federal-aid work only enough to match the federal money. A state would surely not yield more than enough to get its share of the congressional appro-

36. *The World's Work*, August, 1925, page 351, "The system tends to draw state funds which may be more needed for other local purposes."

priation. No one will knowingly pay more for a temptation than enough to get all that it promises.

If the states and their subdivisions are putting more money into federal-aid work than is necessary to get the government money, that fact is here taken as evidence that the states and the communities want that work in preference to some other work and even in preference to lower taxes. Each type of federal aid will be examined from this point of view.

1. The Agricultural Experiment Stations

The charge that federal aid diverts state funds from purposes of greater local need to purposes of lesser local importance, is generally made against the fifty-fifty system rather than against the agricultural experiment stations. Nevertheless, the place which agricultural research occupies in the whole system of federal aid warrants its consideration in this analysis. Federal support for agricultural research must be considered in any general study of federal aid as a part of a long-time policy in agriculture.

States Furnished 17.7 Per Cent of Total in 1889 and 86.4 Per Cent in 1925.—From the enactment of the Hatch Act in 1887, to June 30, 1925, the total revenue of the agricultural experiment stations from all sources was \$134,287,448.44. Of this amount, the federal government contributed \$39,604,131, or 29.5 per cent, intra-state sources contributing 70.5 per cent of the total.³⁷

In the 37 years of federal aid for agricultural research, the states have contributed a rapidly increasing proportion to the total, which shows that the people of the states want the services of the agricultural experiment stations. Furthermore, every observing station worker, and all others seriously concerned with fundamental improvements in farming, are aware of the growing public appreciation of scientific research in agriculture.

While the federal government increased its support from \$585,000 in 1889 to \$1,440,000 in 1925, state and local support advanced from \$125,400 to \$9,141,976 in the same period. State and local support was 17.7 per cent of the total in 1889 and 86.4 per cent in 1925. Agricultural experiment station revenues from these sources are shown more fully in figures 3 and 4.

³⁷. Data furnished by the Office of Experiment Stations, United States Department of Agriculture.

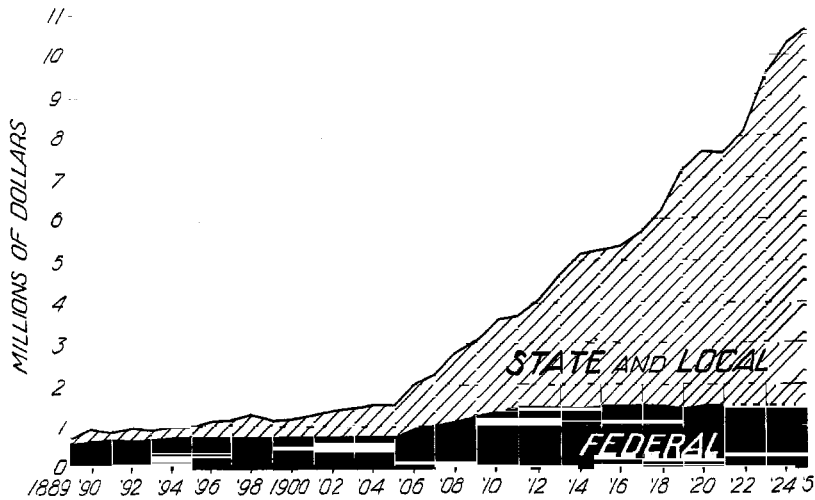


Fig. 3.—Total revenues for agricultural experiment stations from federal and from state and local sources, expressed in millions of dollars: 1889 to 1925. The rapid increase in state and local support shows that the people want research in agriculture. (In the fiscal year 1925-'26, each state received \$20,000 additional under the Purnell Law. Under the terms of that law, this amount will be increased by \$10,000 annually until it reaches the maximum of \$60,000. In 1929 each state will receive a total of \$90,000 of federal money under the three experiment station laws, the Hatch, Adams, and Purnell Acts.)

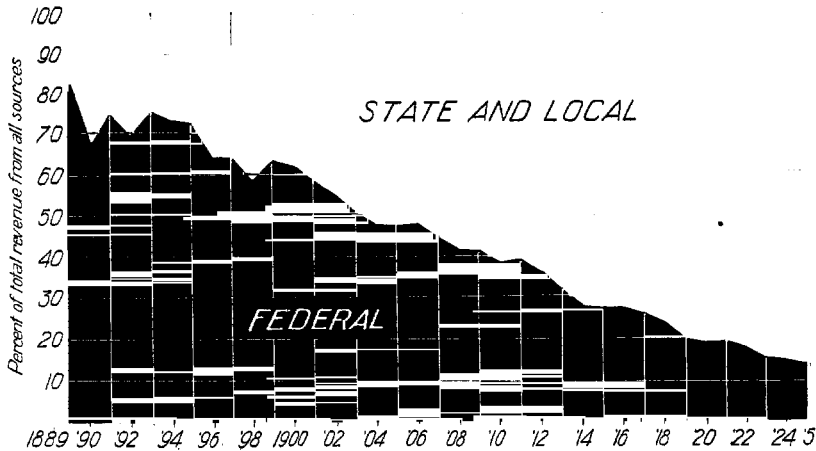


Fig. 4.—Revenues for agricultural experiment stations from federal and from state and local sources, in per cent of total: 1889 to 1925. The rapidly increasing proportion of station funds from state and local sources is indicative of state and local demand for research in agriculture.

2. Agricultural Extension

The fifty-fifty system bears the brunt of the charge that federal aid diverts state funds into purposes of subordinate local importance. Therefore, it would be well to examine the principal parts of this system to determine whether or not the people want agricultural extension, vocational education, and road construction.

Do People Want Extension Work?—Agricultural extension is the oldest part of the fifty-fifty system. It came into being with

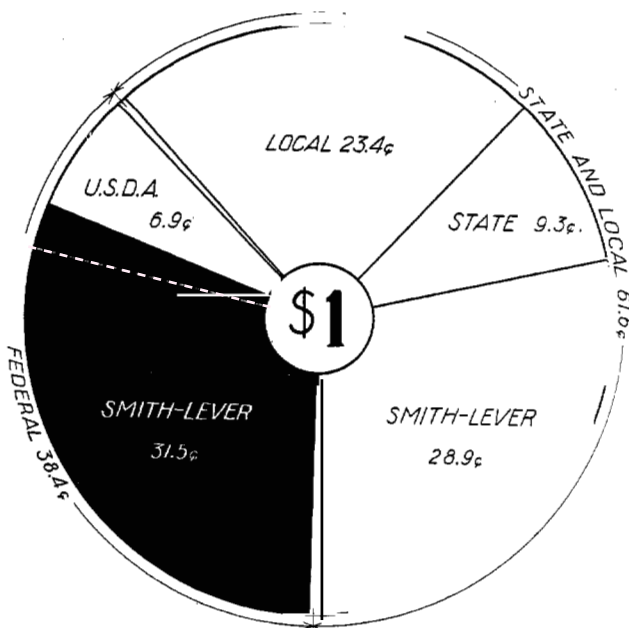


FIG. 5.—The agricultural extension dollar in 1923. The cooperating states must match the federal Smith-Lever funds, less \$10,000 for each state. They need not match the Smith-Lever funds above the dotted line in white to the left of the chart. (The expenditures represented by this figure do not include costs of maintaining the federal office at Washington, D. C. That cost was 1.6 per cent of the grand total of all expenditures for extension work in 1923.)

the Smith-Lever Act in 1914. But it is not the most important from the standpoint of the amount of funds involved, as it received only 6.2 per cent of the total federal funds expended under the fifty-fifty plan in 1925. Here, if anywhere, it should be possible to find statistical support for the charge that federal aid tempts the states to put their money into something they do not want. If that charge is true, it should have had time to prove itself in Smith-Lever work.

If extension work is not what the people want in preference to something else, they would certainly put into it only enough to get the federal money. It stands to reason that they would barely match the federal Smith-Lever funds and let that determine the amount of extension work. The states and the local communities would put their available money, above the amount necessary to match the government funds, into something else. They would not put it into work which federal money "tempts" them to support against their better judgment.

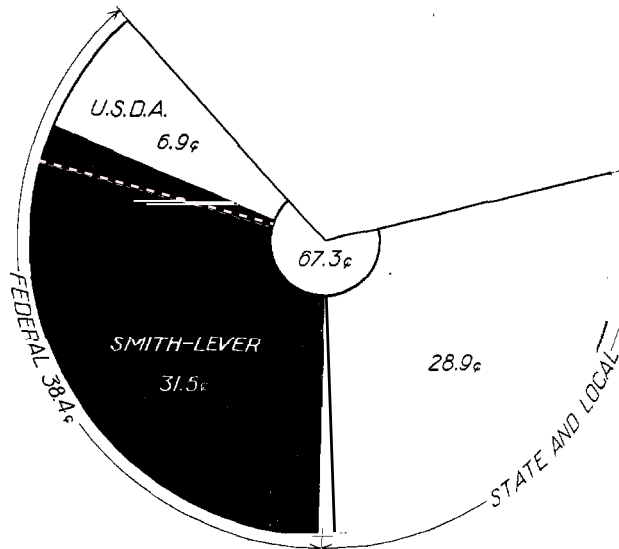


FIG. 6.—What the "extension dollar" would have been in 1923 if the states and the local communities had contributed only enough to match the federal Smith-Lever funds. The difference indicates that they want the agricultural extension work.

State and Local Money \$2.13 for Each Federal Dollar.—In 1923, the last year for which the official report is at hand, the states and the local communities put \$2.13 into agricultural extension work for every dollar of federal Smith-Lever money that was available to the states only when matched, as shown in figure 5. In other words, the states and the local communities contributed 113 per cent more than enough (fig. 6) to get the alleged "temptation money" appropriated by Congress. Here, as in the case of agricultural research, the people indicate their approval of and their desire for agricultural extension work by contributing far more

toward its support than is necessary to get the federal "fifty-fifty" funds.

State and Local Support Increased Faster than Federal Funds.—In addition to federal Smith-Lever money, the United States Department of Agriculture is putting funds into agricultural extension work in the states. These funds need not be matched by state or local funds. A comparison of total federal funds with total state and local support for this work by years from 1915 to 1923 is given in Table I. Note in this table the proportionate gain of funds from state and local sources over the amount contributed by the federal government.

TABLE I.—Total funds from federal and from state and local sources for agricultural extension in the United States: 1915 to 1923. (a)

YEAR.	Grand total.	Federal sources (b).	State and local.	Per cent of total.	
				Federal.	State and local.
	<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>		
1915.....	\$3,597	\$1,486	\$2,111	41.3	58.7
1916.....	4,864	2,143	2,721	44.1	55.9
1917.....	6,149	2,719	3,430	44.2	55.8
1918.....	8,354	3,527	4,827	42.3	57.7
1919.....	10,064	4,441	5,623	44.1	55.9
1920.....	14,658	5,891	8,767	40.2	59.8
1921.....	16,792	6,434	10,358	38.3	61.7
1922.....	17,182	6,727	10,455	39.2	60.8
1923.....	18,485	7,101	11,384	38.4	61.6

(a) Adapted from Table 20 of the annual report of Coöperative Extension Work, 1923, United States Department of Agriculture.

(b) It should be noted that the states are required to match only a part of the federal funds given in this table. Only Smith-Lever funds, less \$10,000 a state, must be matched to become available to the state extension service.

Evidence That the People of Kansas Want Extension Work.

—Similar evidence in favor of agricultural extension work is found in Kansas. For every dollar of federal Smith-Lever funds which Kansas was required to match in 1923 the state and the local communities supplied \$2.64 in support of extension work. Of this amount the counties and the local communities contributed \$1.23 in taxes and membership dues. The average county appropriation in Kansas increased 24.3 per cent from 1922 to 1925, while the average amount raised by membership dues per county increased 43.6 per cent. This indicates that the rate of increase in the finan-

cial support for this work in this state is greatest within the counties where the work is done, and especially among the farm bureau members who help support it with voluntary dues.

3. Vocational Education³⁸

If the states and the local communities wanted some other service more than vocational education they would in all probability put only enough money into vocational work to get the federal money. As a matter of fact they are putting into it nearly three times this amount, as shown in figure 7.

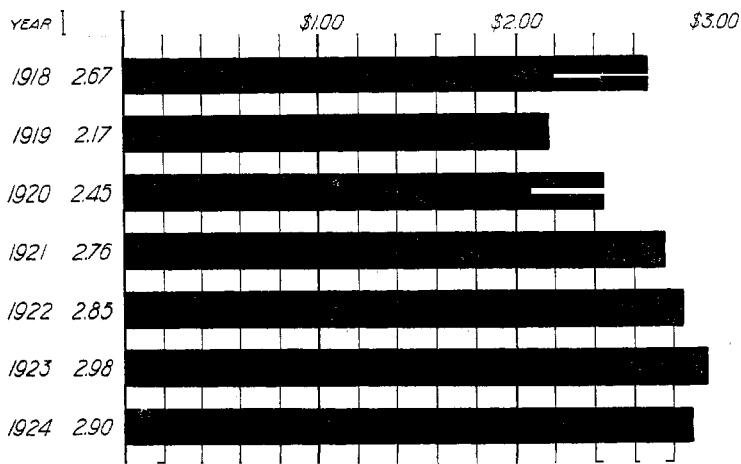


FIG. 7.—Matching the federal dollar for vocational education. This graph shows expenditures of state and local money per dollar of federal money expended under the Vocational Education Act, for fiscal years ending June 30: 1918 to 1924. (Based on data in Table II.) The states and the local communities are expressing their approval of vocational education to the extent of putting into it nearly three times as much money as is necessary to match the federal money.

The year 1918 may not have been a normal year in the expenditure of state and local funds for vocational education. It was the first year of the Smith-Hughes law. This may account for the marked difference between the relation of state and local contribution to federal funds for vocational education in 1918 and 1919. It is important to note that state and local contributions increased from \$2.17 in 1919 to \$2.90 in 1924 per dollar of federal money.

³⁸. The expenditure of federal funds for vocational education in 1925 was 5.62 per cent of all federal funds expended under the fifty-fifty system.

Rapid Increase in State and Local Support.—Table II shows that local support for vocational education per dollar of federal funds increased more rapidly than state contributions. This indicates local interest in and approval of vocational education. It is evident, therefore, that federal aid for vocational education does not divert state and local funds from the more important to the less important local purposes.

TABLE II.—Federal, state, and local money expended under the vocational education act, for fiscal years ending June 30: 1918 to 1924. (a)

YEAR.	Federal.	State.	Local.	State and local funds per dollar of federal funds.		
				Total (b).	State.	Local.
	<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>			
1918.....	\$823	\$1,015	\$1,182	\$2.67	\$1.23	\$1.44
1919.....	1,560	1,567	1,825	2.17	1.00	1.17
1920.....	2,477	2,670	3,388	2.45	1.08	1.37
1921.....	3,357	4,075	5,186	2.76	1.21	1.55
1922.....	3,850	4,524	6,439	2.85	1.18	1.67
1923.....	4,309	4,875	7,949	2.98	1.13	1.85
1924.....	4,832	5,175	8,836	2.90	1.07	1.83

(a) Adapted from the eighth annual report of the Federal Board for Vocational Education, 1924, Table 5, pages 14 and 15.

(b) This column is the basis for figure 7.

4. Highway Construction

It is unnecessary to argue that people want roads. The proof is too obvious to leave any room for controversy. Figure 8 shows that the state contributed 28.49 per cent and local government 64.61 per cent of all rural highway funds in 1921. Federal-aid and forest road funds amounted to only 6.9 per cent of the total. In 1924, state and local government supplied 94.64 per cent of the total funds for rural highways as shown in figure 9.

Federal-Aid Roads Built According to Traffic Needs.—Those who are of the opinion that federal aid diverts state funds from purposes for which there is greater local need to purposes of lesser importance, may hold that the states are induced to build roads where they do not want them. There are three principal answers to this contention:

First; it is the policy of the Bureau of Public Roads to aid in building roads only where the traffic is. This policy surely coincides with the purpose of any other road-building authority. On this

point, Thos. H. MacDonald, Chief of the Bureau of Public Roads, says:

. . . the state highway system designated by law or by the action of the state highway departments of each of the states are practically coincident with the federal aid highway system, so that whether federal aid is available or not the state expenditures will be made upon practically the same roads.³⁹

THE RURAL HIGHWAY DOLLAR

1921

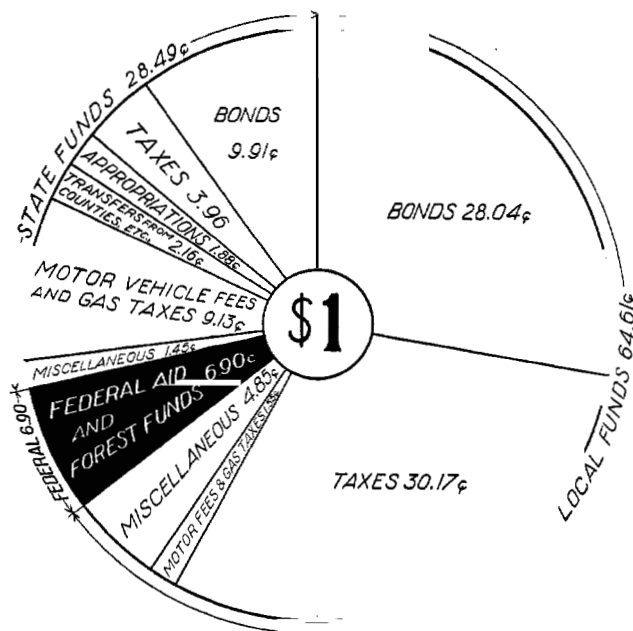


FIG. 8.—The federal government supplied 6.9 cents per dollar of rural highway funds in 1921. The states and the local communities expressed their desire for road construction and maintenance by supplying 93.1 cents per dollar. —Adapted from figure 26, page 142, *The Yearbook of 1924*, United States Department of Agriculture. (The government appropriated or authorized \$503,500,000 for federal-aid and forest roads from 1916 to 1924, inclusive, while only \$353,080,098 was expended. The federal tax on the sale price of motor vehicles from 1918 to 1924, amounted to \$749,040,569. Under this tax, the road users have put into the national treasury more than \$200,000,000 in excess of the authorized federal road funds.—1924 *Yearbook*, p. 143.)

Secondly; the Bureau of Public Roads follows a liberal policy in cases of difference of opinion between federal and state or local engineers in the routing of highways. In instances of two or more possibilities of routing highways, the state or local authorities often

39. Letter to the writer, March 30, 1926.

get their choice, although another route may be recommended by the federal engineers. Under such a liberal policy it is difficult to conceive how the states could be compelled to put their road money into roads they do not want in preference to other roads.

Thirdly; the states are more than matching federal funds in the construction of federal-aid roads. This indicates that the states

THE RURAL HIGHWAY DOLLAR

1924

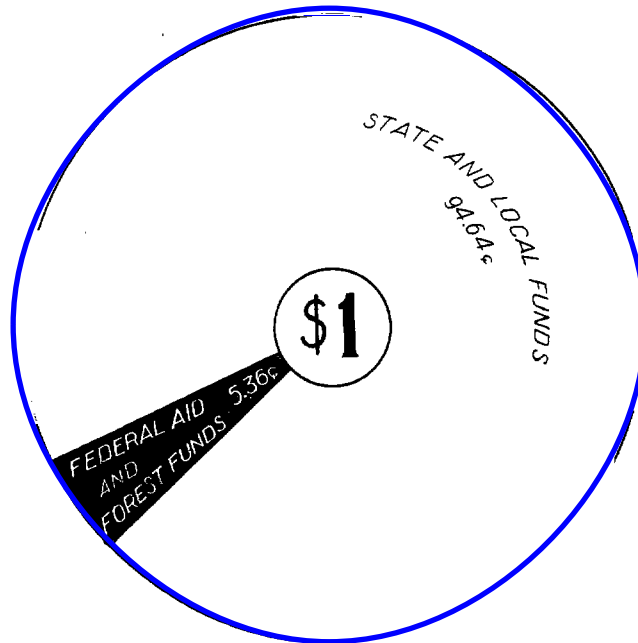


FIG. 9.—In 1924, state and local support for rural highways was 18.6 times the federal road funds. The total expenditures for that year were \$1,181,521,115, of which \$63,375,000 was federal aid.

want these roads. Under the federal highway act, the maximum participation by the federal government is 50 per cent of the cost of construction, but not exceeding \$15,000 per mile exclusive of the cost of bridges more than 20 feet in span. The following figures, supplied by the Bureau of Public Roads, are significant in this connection:

The total cost of the Federal-aid roads completed up to February 28 (1926) was \$881,982,424.45, of which the federal portion was \$390,105,258.34, the state portion being the difference of \$491,877,166.11. On the

basis of these figures you will see that the federal participation amounts to 44.2 per cent of the total cost of the roads completed up to February 28, and this percentage has applied fairly uniformly to the entire program since its inauguration in 1916.⁴⁰

Summary Statement.— For the above reasons it is unlikely that federal aid for roads induces the states to expend their money for purposes which to them are of subordinate importance because: (1) the states and the local communities spend more than eighteen times as much money for all roads as the national government puts into federal-aid highways; (2) the routing of federal-aid roads is practically coincident with state roads; and (3) the states and their subdivisions put into federal-aid roads more than enough money to match the federal funds.

5. State and Local Expenditures Compared with Federal Funds, by States

The above comparison of state and local expenditures with federal funds for each type of federal aid is based on averages for all states. But a question may properly be raised as to the adequacy of these averages. It would be possible for a number of states to put only enough funds into agricultural extension, vocational education and road construction to match the federal funds, while other states might expend several times the amount of the federal allotment. The average state and local expenditure for each federal dollar would still be high, for the country as a whole. This possible uncertainty in the use of averages can be overcome by comparing state and local expenditures with federal contributions, by states. This comparison is found in Table III.

It is shown in Table III that a few states spent less for agricultural research than the federal government appropriated to those states. But these are on the whole relatively small agricultural states. The agricultural experiment stations are not a part of the "fifty-fifty system," and federal funds are appropriated equally to all states irrespective of their size. It is quite logical, then, that some of the smaller states should deem it inadvisable to appropriate large sums for agricultural research. However, this does not necessarily mean that the smaller agricultural states have an advantage at the expense of other states, for the results of experiment station work in any state are available to other states.

All states spent more for agricultural extension in 1923 than required to match the federal appropriation except, the state of Dela-

40. Letter to the writer, March 30, 1926.

TABLE III.—State and local expenditures per dollar of federal funds for Agricultural Experiment Stations and for each federal dollar that had to be matched in Agricultural Extension, Vocational Education, and Road Construction, by states in years indicated.

STATE.	Agricultural Experiment Stations, 1924 (a).	Principal parts of "50-50 system."		
		Agricultural Extension 1923 (b).	Vocational Education 1924 (c).	Road Construction 1925 (d).
United States.....	\$6.11	\$2.13	\$2.90	\$13.79
Alabama.....	1.91	1.04	1.72	9.50
Arizona.....	3.21	2.42	2.62	3.61
Arkansas.....	2.21	1.38	1.44	15.09
California.....	19.65	3.93	6.45	14.93
Colorado.....	5.99	2.33	4.96	3.78
Connecticut.....	5.28	3.59	3.22	25.63
Delaware.....	1.05	1.00	2.53	10.62
Florida.....	4.31	2.30	1.76	26.23
Georgia.....	1.21	1.20	1.00	8.95
Idaho.....	.95	3.98	1.13	3.42
Illinois.....	15.23	2.94	3.40	22.53
Indiana.....	18.47	1.95	3.56	23.63
Iowa.....	10.64	4.65	1.77	18.95
Kansas.....	5.73	2.64	2.87	6.29
Kentucky.....	8.62	1.10	1.19	13.59
Louisiana.....	3.05	1.48	1.77	15.08
Maine.....	1.74	1.14	1.22	12.65
Maryland.....	3.84	2.48	1.29	15.10
Massachusetts.....	5.84	15.41	9.43	19.66
Michigan.....	5.79	1.72	2.97	24.02
Minnesota.....	14.34	2.17	1.89	11.32
Mississippi.....	3.32	1.51	1.52	11.24
Missouri.....	6.29	1.15	2.29	16.10
Montana.....	4.50	5.16	1.62	2.44
Nebraska.....	6.23	2.20	2.93	6.50
Nevada.....	.13	9.26	1.44	2.38
New Hampshire.....	.83	4.68	2.22	13.66
New Jersey.....	8.13	2.49	2.19	26.10
New Mexico.....	1.34	2.30	1.55	1.98
New York.....	17.48	5.54	3.73	17.47
North Carolina.....	6.66	1.35	1.03	12.67
North Dakota.....	13.75	2.81	1.45	3.99
Ohio.....	22.25	1.63	2.68	28.25
Oklahoma.....	.64	1.68	1.82	11.41
Oregon.....	6.23	4.83	1.82	9.35
Pennsylvania.....	2.70	1.05	3.25	21.69
Rhode Island.....	.45	8.63	1.24	10.52
South Carolina.....	3.62	1.49	1.39	9.58
South Dakota.....	1.78	4.49	3.26	8.54
Tennessee.....	1.85	1.05	1.71	13.01
Texas.....	12.83	1.50	1.99	9.30
Utah.....	1.93	2.80	3.78	4.11
Vermont.....	.53	3.10	1.01	9.25
Virginia.....	2.85	1.74	2.29	10.61
Washington.....	5.88	3.18	1.17	17.52
West Virginia.....	4.06	1.32	1.35	23.81
Wisconsin.....	10.71	1.43	5.19	8.58
Wyoming.....	.55	5.90	2.25	3.64

(a) Adapted from "Work and Expenditures of the Agricultural Experiment Stations," United States Department of Agriculture, 1924, pages 108 and 109.

(b) Adapted from Table 20, "Coöperative Extension Work," United States Department of Agriculture, 1923.

(c) Adapted from Tables VII to XI, inclusive, Eighth Annual Report (1924), Federal Board for Vocational Education.

(d) Data on federal aid for roads obtained from Table 765 of the 1924 Yearbook, United States Department of Agriculture. Data on state and local expenditures published in the *Congressional Record*, May 21, 1923, pages 9768-9. (State and local expenditures for all rural roads are here compared with federal-aid funds for roads.)

ware, which spent only enough for this work to meet the federal funds. But, as explained above, each state gets \$10,000 annually from the federal government for extension work without matching any part of it. This sum is a relatively large item in a small state with a comparatively low percentage of rural population. The inducement to appropriate state and local funds for extension work in excess of the amount needed to match the federal money is probably less in a small agricultural state than in a large one.

Every state but one spent more money for vocational education in 1924 than was required to match the federal funds. A few states spent little more than enough, while a large majority of the states greatly exceeded the requirements of the vocational education law. This indicates that vocational training is received with general favor throughout the country.

The relation of state and local expenditures for all rural roads to the federal-aid funds for highways has necessarily varied from year to year. But the relative amount of state and local expenditures has increased in recent years as shown in figures 8 and 9. The important fact is that the states spend several times as much for roads as the federal government appropriates for this purpose, as shown in the last column of Table III.

D. FEDERAL AID AND FAIRNESS IN THE DISTRIBUTION OF TAXES AMONG THE STATES

The contention that the amount of federal aid returned to each state bears no relation to the state's contribution to the federal revenues is probably considered by many critics as the most serious charge against federal aid. Table IV, which is the basis for this argument, shows that no correlation exists between federal aid returned to each state and the taxes collected by the federal government within the state. From this fact the critics conclude that the cost of federal aid is unfairly distributed, some states receiving benefits at the expense of other states. It will be seen in Table IV that the western or agricultural states receive on the whole a greater per cent of their taxes as federal aid than the eastern or industrial states. It is small wonder, then, that the critics who do not look beneath the surface of these figures conclude that federal aid discriminates against the eastern, in favor of the western states.

This charge is not as convincing as might be supposed from a hasty examination of Table IV, for three principal reasons: (1) States as such pay no taxes to the federal government; (2) taxes are

not always *paid* where collected; and (3) the benefits of federal aid are not confined to individual states. Each of these points will be treated separately.

1. States as Such Pay No Federal Taxes

It is a well-known fact that no state as such pays taxes to the federal government because Congress has not the power to tax the states.⁴¹ Therefore, it is technically incorrect and often misleading to speak of "a state's contribution to the federal revenues." The misunderstanding based on such a statement together with the data found in Table IV would lead naturally to the conclusion that the cost of federal aid is unfairly distributed among the states.

Individuals and Corporations Within the Taxing Power of Congress.—Confusion of thought on the alleged contribution by states to the federal treasury arises from the failure to realize that individual citizens and corporations are within the taxing power of Congress as well as within that of the separate states. On this point it is pertinent to quote the Supreme Court of the United States on the charge that federal aid imposes an unequal burden on the states. The Court said in part.:

But what burden is imposed upon the states, unequally or otherwise? Certainly there is none, unless it be the burden of taxation, and that falls upon their inhabitants, who are within the taxing power of Congress as well as that of the states where they reside.⁴²

While the erroneous opinion that states pay federal taxes can be corrected merely by citing the contrary fact, it may still be contended that "the amount of federal-aid funds spent within the state bears no relation to the contribution made by the citizens of the state to the federal revenues." With the aid of Table IV this argument may appear quite formidable, until it is realized that taxes are not always paid by the persons who turn over the money to the tax collector.

41. In the celebrated case of *McCulloch versus Maryland* (1819; 4 Wheaton, 316), and in other cases, the Supreme Court of the United States has determined that the federal government cannot tax the states. The following points are basic in these court decisions and pertinent to the point under discussion: (1) that the federal government and state governments are separate and distinct sovereignties within their respective spheres, (2) that the power to tax is the power to destroy, (3) that taxation of one government by the other is inconsistent with the two parallels of government. The inability of the federal government to tax state instrumentalities (bonds) and of the states to tax federal instrumentalities rests on the points of law involved in these cases.

42. *Massachusetts versus Mellon*, June 4, 1923, 43 Supreme Court Reporter, 597.

TABLE IV.—Total federal tax payments and federal aid received under the fifty-fifty system, fiscal year ending June 30, 1925. (a)

STATE.	Amount paid in federal taxes.	Federal aid received from government.	Federal aid in per cent of federal taxes.
New Mexico	\$854,513	\$3,022,313	353.69
Nevada	617,669	1,971,260	319.15
South Dakota	1,199,147	2,008,465	167.49
North Dakota	924,836	1,088,887	117.73
Wyoming	1,690,549	1,806,128	106.84
Mississippi	4,009,777	2,523,354	62.93
Idaho	1,749,557	995,068	56.88
Montana	2,449,568	1,274,492	52.03
Arizona	1,707,513	852,216	49.91
Arkansas	5,342,266	2,145,658	40.16
Utah	4,147,237	1,653,649	39.87
Alabama	9,440,086	2,782,422	29.47
Oklahoma	11,621,795	3,189,392	27.44
Nebraska	7,485,086	1,747,488	23.35
South Carolina	6,823,391	1,525,638	23.03
Tennessee	16,946,671	3,477,484	20.51
Georgia	15,200,727	2,972,374	19.55
Vermont	3,340,639	653,195	19.55
Kansas	17,379,524	3,165,541	18.21
Texas	34,673,543	5,839,818	16.84
Iowa	13,554,244	2,206,056	16.84
Oregon	8,223,841	1,247,357	15.17
New Hampshire	4,458,380	644,929	14.47
Colorado	14,215,164	1,821,865	12.82
Minnesota	27,983,916	3,581,122	12.80
Indiana	38,446,429	4,564,662	11.87
Louisiana	17,232,562	1,546,932	8.98
Washington	14,940,627	1,281,990	8.58
Kentucky	28,214,321	2,245,176	7.96
Missouri	61,461,178	4,652,784	7.57
Maine	8,926,207	641,528	7.19
Florida	20,823,731	1,370,268	6.58
Delaware	8,316,988	455,383	5.48
West Virginia	16,475,115	880,003	5.34
Wisconsin	36,160,435	1,691,386	4.68
Virginia	48,628,277	2,263,751	4.66
California	121,777,522	3,722,711	3.06
Connecticut	36,951,449	1,050,937	2.84
Rhode Island	16,363,923	441,310	2.70
Maryland	31,059,415	811,895	2.61
Ohio	142,497,084	3,309,471	2.32
Illinois	201,831,920	4,265,019	2.11
Michigan	195,726,495	4,044,225	2.07
New Jersey	110,199,707	2,223,390	2.02
Pennsylvania	246,592,156	4,631,319	1.88
North Carolina	166,962,875	2,536,732	1.52
Massachusetts	118,909,084	1,649,915	1.39
New York	658,585,982	5,736,346	.87
Total	\$2,582,922,421	\$110,213,763	4.30

(a) Adapted from the Congressional Record, January 6, 1926, page 1,250. In the table published in the Record, the amounts of taxes and of federal aid are given in dollars and cents. Here they are expressed in dollars only, to save space.

2. Taxes Are Not Always Paid Where Collected.

The question of the shifting and the incidence of federal taxes is too complicated for a detailed discussion here. Even a bird's-eye view of the subject is clearly beyond the scope of this study. Therefore, only a few illustrations will be cited to indicate the error of the assumption that federal taxes are necessarily paid in the states where they are collected.⁴³

43. These illustrations are taken principally from a study, "Who Pays Uncle Sam's Bills?" by The American Association of Highway Officials, published as a part of the hearings before The Committee on Roads, House of Representatives, February 15, 1926.

The Federal Automobile Tax.—In 1923, 73 per cent of the federal automobile excise tax was collected in the state of Michigan, and this was 43 per cent of the contribution to the federal treasury credited to Michigan. In citing these figures, or similar figures for other states, it is not the intention to infer that Michigan or any other state has complained of being over-taxed in relation to the federal aid received. These figures are cited to show the error of assuming that the automobile taxes collected by the federal government in Michigan are actually paid by the people of that state.

In 1925, the federal government collected \$143,430,709 as excise taxes on automobiles, parts and accessories.⁴⁴ It is obvious on a moment's reflection that these taxes were paid by purchasers of automobiles throughout the country. The public was well impressed with this fact while the Revenue Act of 1926 was pending in Congress. Manufacturers of automobiles promised a reduction in the price of cars commensurate with the reduction in federal automobile taxes.

The Federal Corporation Income Tax.—It has long been recognized as one of the fundamental characteristics of a satisfactory tax that it shall be collected as cheaply as possible.⁴⁵ Aiming to apply this principle to federal taxation, Congress has provided for the collection of the corporation income tax at the principal headquarters of the corporation and the personal income tax at the legal residence of the individual, irrespective of the fact that these incomes may be earned in many parts of the country.

A large corporation may be doing business in every state. Obviously, it would be absurd to attempt to collect federal income taxes from such a corporation in each of the several states. It is to avoid such an expensive method of collection that federal corporation taxes are collected at the corporation's principal place of business. The result is that certain states in which large businesses have their central offices appear to be paying tremendous sums into the federal treasury compared with other states. Not only may the income be earned in many parts of the country, but the tax is in fact paid by the consuming public in so far as it is shifted through the price of goods or services. A few examples will illustrate these points.

44. This revenue was about \$44,000,000 in excess of the amount expended by the national government in federal aid to roads.

45. "Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."—Adam Smith, *The Wealth of Nations* (1776) Vol. II, Book V, Chapter II, Part II.

In 1923 the Union Pacific railroad paid a federal income tax of \$4,500,000 in New York; but it does not operate east of Kansas City. In the same year the Southern Pacific paid a federal tax of \$5,000,000 in New York; and this road does not extend east of New Orleans. It is surely erroneous to assume that these taxes were actually paid by the people of New York state.

The United States Steel Corporation paid a federal income tax of \$16,000,000 in New York in 1923. Only two of that corporation's 145 plants and warehouses were located in New York, and only 21 per cent of its 153,350 stockholders lived in that state. But a superficial conclusion drawn from Table IV would credit all of these taxes to the people of New York.

The Federal Tobacco Tax.—This tax is one of Uncle Sam's most important revenue producers, yielding nearly 326 million dollars in 1924. It is important to note that 85.3 per cent of this tax was collected in seven states: North Carolina (42.03%), New York (13.0%), New Jersey (8.3%), Virginia (7.9%), Pennsylvania (7.0%), Ohio (3.6%), and Missouri (3.4%).⁴⁶ Obviously, these taxes were paid by consumers of tobacco.

In some states the federal tobacco tax was the major part contributed to the federal revenues by states. For example, it was 86.6 per cent of all internal revenues collected in North Carolina in 1924. In Virginia it was 56.1 per cent of the total. The above figures illustrate the error of the assumption that the taxes given in Table IV represent correctly the amount which the people of a state contribute to the federal revenues.

The Treasury Department on the Distribution of Taxes.— Many additional facts could be given to illustrate the error of assuming that the taxes given in Table IV represent correctly the amount which the people of a state contribute to the federal revenues. Suffice it to quote the official opinion of the United States Treasury Department on the distribution of taxes paid on personal and corporation income:

The amounts do not represent, however, what may be called the geographical distribution of income. The figures are compiled from the returns filed in each state. An individual files his income tax return in the collection district in which his legal residence or principal place of business is located, and a corporation files its income tax return in the collection district in which its principal place of business or the principal office or

46. In the fiscal year ending June 30, 1924, the receipts from federal tobacco taxes amounted to \$325,638,981.14, or 11.65 per cent of the total internal revenue receipts from all sources.—Annual report of the Commissioner of Internal Revenue (1924), page 18.

agency is located. Consequently, income reported by an individual or corporation in one state may have been derived from sources in other states. From the foregoing it will be clear that there is no way of ascertaining from the income tax returns the amount of income earned in the respective states or the amount of tax paid on that basis.⁴⁷

Two Conflicting Doctrines of Taxation.— Extensive effort has been made in recent years to bring the public to the point of view that high federal taxes are not necessarily paid by the corporations and the individuals from whom they are collected. While the revenue measures were pending in Congress providing for tax reduction, special effort was made to convince the public that high surtaxes and high corporation taxes had an unfavorable effect on business and were in fact shifted to the consumers through the price paid for goods and services. Thus the support of the rank and file of the people in all parts of the country was enlisted in support of tax reduction. The people were given to understand that they were in fact paying these taxes whether or not they made any direct payment to the national treasury.⁴⁸

Those who oppose federal aid on the ground that “the amount returned to each state bears no relation to the state’s contribution to the federal revenues” and who find grounds for their opposition in Table IV, are obviously of the opinion that federal taxes are paid by the people of the separate states where the taxes are collected. They must believe that these taxes are not shifted; otherwise Table IV would be useless to them in their argument.

If the above conflicting views on the shifting of federal taxes are held by the same individuals, they could well be credited with having discovered a pragmatic elasticity in the principles of taxation.

3. Benefits of Federal Aid Not Confined to Individual States

The benefits of research and education in agriculture and the advantages of road construction extend beyond state and local boundaries. They are national in scope. The 48 states are not separate economic entities. This was recognized by the authors of the Constitution when the states were forbidden to levy duties on imports or exports and to coin money.

The fundamental economic interdependence of the various parts of the country has greatly increased since the adoption of the Con-

47. Statistics of Income (1922), United States Treasury Department, page 30.

48. The writer shares the opinion that the reduction in the surtaxes and inheritance taxes was in the public interest. As a member of the Committee on Taxation of the Chamber of Commerce of the United States he urged a substantial reduction in the corporation levies, believing that corporations should be permitted to share in the downward tax revision. See the report of that committee on Federal Taxation (1925).

stitution. The growth of industry and commerce, of science and invention, has woven communities, states and sections into a closer interdependence than ever before. It is therefore erroneous to assume that the people of one state have no basis for an interest in the economic development of other states.

It goes without saying that many of our activities are local in character. But the federal-aid activities included in this study are of national importance and are therefore of proper concern to the federal government. The national importance of each of these activities will be reviewed briefly.

Universal Benefits of Agricultural Research.—Agricultural experiment stations throughout the country are at work on the problem of making Mother Earth yield and continue to yield more and better products for the support of a growing population. This task is organized in 5,484 experimental and research projects.⁴⁹ There is no geographical boundary to the benefits of agricultural research.

No person, whether he lives in Kansas, New Mexico, New York, Wisconsin, or in any other state, can say with reason that he has derived no benefit from the discovery of the Babcock test which revolutionized the dairy industry, or from the perfection of hog cholera vaccine and the black leg vaccine which have greatly reduced losses to the animal industry, or from improvements in crop and livestock production. All of these discoveries and countless others have provided and are providing the people with cheaper and better food and fiber and are beneficial both to producers and consumers.

Entomologists and plant pathologists are constantly at work defending our food supply against destruction by insects and plant diseases. Were these apparently innocent but very dangerous enemies allowed to go on with their campaign of destruction the whole nation would suffer. The teeming millions of our industrial and commercial centers, whom the superficial observer considers remote from agricultural research, would feel the pinch of higher food prices and face the necessity of a lower standard of living. "The fruit industry in many portions of the United States would have been practically destroyed by insect pests and fungus diseases had it not been for the remedial measures developed by the agricultural experiment stations. The citrus crop of this country is dependent upon efficient fumigation and spraying." The cost to the urban population of the

49. Classified List of Projects carried on by the Agricultural Experiment Stations, 1924-'25, p. 1, Office of Experiment Stations, United States Department of Agriculture.

agricultural experiment stations is unquestionably returned manyfold in the form of more and better food at lower prices.⁵⁰ The benefits of research accrue to the producer in the form of lower cost of production.

General Values of Agricultural Extension and Vocational Education.—Extension work and vocational education in agriculture may well be discussed together from the standpoint of their general public importance. Both are organized efforts for the practical application of the results of research in agriculture and home economics. They are nation-wide projects to make the fruits of research public property in the widest sense. Through these and other means of education, the truths discovered in the laboratory, in feed lots and on experiment station fields become convincing and are gradually made vital principles of action in agriculture and rural life.

The 1923 report of Cooperative Extension Work deserves careful study. It is impressive to note that county extension organizations and adult clubs in 1923 had a membership of 1,034,000, and that the enrollment in boys' and girls' clubs was 459,000. Throughout the United States, 5,463,000 farms and homes adopted better practices of one kind or another in 1923 as a result of cooperative extension work. In Kansas the extension service made 1,089,000 contacts in 1925. The farm bureau membership was 23,452 and the boys' and girls' club membership, 8,339.

Self-help with guidance is the basic principle of instruction on which the whole plan of agricultural extension is based. This principle is applied through an extensive system of community organizations. Aside from the benefits of better farming and better home making, these activities teach people to work together and make them more neighborly and better social beings. Because of the vital relation of agriculture to national prosperity and the place of the rural population in our social structure, these activities are a rising force in our national life and progress.

In vocational education under the Smith-Hughes law, the federal government takes the position that a well-trained citizen is a national as well as a state and local asset. This was the principle behind the Morrill Act signed by President Lincoln in 1862, establishing the colleges of agriculture and mechanic arts, and the World War gave it new emphasis. On this principle is based the opinion that

50. A selected list of illustrations of the value of agricultural experiment station work is found in a brief in favor of the Purnell Bill, prepared by a special committee of the Experiment Station section of the Association of Land-Grant Colleges.

the national government has a valid reason for helping to provide educational opportunities for its citizens regardless of occupation.

Vocational training is reaching an increasing number of persons. The total enrollment in federally aided vocational schools increased from 164,186 in 1918 to 652,994 in 1924. Of the latter figure 193,674 were enrolled in evening classes, which shows that this system is reaching many who must earn while acquiring their vocational training. The total enrollment in Kansas in 1924 was 5,629, of whom 3,648 attended evening school.⁵¹

The flux of population also helps to make education more than merely a local matter. Many persons are given elementary education in the communities where they were born and become citizens in other communities or states. This and numerous other social, cultural, and economic ties are broadening the field of common interest in education.

General Importance of Federal-Aid Roads.—The national importance of federal-aid roads was emphasized sufficiently in Section B, subdivision 4. It calls for only a passing comment at this point. Highways make distant markets more accessible for manufactured goods and bring remote sources of food and raw material closer to the centers of consumption. This is a distinct advantage to the urban communities, especially in the quick and uninterrupted delivery of fresh milk, vegetables and other perishable products from the country districts to the larger centers of population.

Interstate Character of Principal Highways.—Motor transportation over long distances adds to the interstate character of highways. Therefore, federal money spent on the principal roads is not spent exclusively for the people in whose territory the roads are built.

Table III shows that New Mexico, Nevada, and Arizona are among the states that received more federal aid in 1925 than they "paid" in federal taxes. But 96 per cent of the federal-aid money returned to these states was spent for roads. The map of the federal highway system shows that these states have comparatively few routes of federal highways and that these are to a large extent transcontinental in character.

In an upper corner of Arizona is a little stretch of road which is on the federal 7 per cent system. It probably runs about 25 or 30 miles across a desert with no inhabitants. . . . But transcontinental traffic, and in fact, heavy interstate traffic from Salt Lake City to Los Angeles,

51. Eighth Annual Report (1924) Federal Board for Vocational Education, pages 4 and 5.

finds it the only route between these two points. . . . Then there's the famous Wendover cut-off, built by Utah and the Federal government across the Great Salt Desert. No local people are served. Why should Utah build a road there? Yet we find them whole-heartedly cooperating to build a shorter route from New York and Washington to San Francisco.⁵²

The roads built across these states are of interstate importance to automobile traffic. It is surely justifiable that a portion of the federal taxes paid by automobile owners should be used to build these highways as connecting links between the Pacific coast and other parts of the country.

Public Importance of Highway Research.—Benefits of federal participation in road construction are not confined to the mere building of roads. The Bureau of Public Roads encourages and conducts highway research to discover possibilities of more economical use of road building material, better construction of road beds, more efficient operation in road construction, more durable surfacing for roads, etc. The possibilities of large savings of public money through research is evident in view of the vast expenditures for roads and motor vehicles.

One example will suffice to illustrate the value of highway research. It has been found that the use of the thickened edge in the design of concrete roads has resulted in a saving of about 390 cubic yards of concrete per mile. At \$10 a cubic yard, this would mean a saving of \$3,900 a mile in the construction of concrete roads.⁵³

V. PROBLEMS OF THE SMALL TAXING UNIT

Changes in our economic life, from the local and almost self-sufficing communities to the complex interdependence of all parts in a national economy, present an important problem in taxation. The major share of all taxes in the United States is levied by local taxing units—counties, townships, school districts, etc. While the size of these units has remained the same, the economic unit has grown with our industrial and commercial development.⁵⁴ Should

52. Brosseau, A. J., Director, National Automobile Chamber of Commerce, in *Nation's Business*, January, 1926, p. 60.

53. See "Financial Value of Highway Research," an address by Thos. H. MacDonald, Chief, United States Bureau of Public Roads, before the fourth annual meeting of the Highway Research Board, Washington, D. C., December 4-5, 1924. Also see pages 129 to 138, United States Department of Agriculture *Yearbook*, 1924.

54. The term "economic unit," as used here, refers to the territorial unit in which there is substantial economic interdependence. The boundaries are not easily discernible. The degree of unity as directly proportional to the amount of interdependence. The dependence of agriculture on urban demand for farm products, and the dependence of the cities on rural communities as sources of food and raw material and as markets for manufactured goods, are examples of economic interdependence. Other examples are found in the effect of strikes and other industrial disturbance in one part of the country on business in other parts.

the taxing unit be enlarged with the enlargement of the economic unit? An adequate answer would require a thorough study of our whole tax structure, national, state, and local.

Possible Relation of the Small Taxing Unit to Distribution of the Tax Burden.—The failure of the taxing unit to coincide with the larger economic unit may have important consequences from the standpoint of justice in the distribution of the cost of government and may affect adversely the economic development of the country as a whole.

If our taxing units were enlarged, what would be the effect on public scrutiny of expenditures? It is by no means certain that effective scrutiny would diminish, and it might be increased if the new tax structure were such as to render a larger per cent of the population conscious of contributing something individually, however small, directly to the support of government. The present system does not appear to be effective in controlling the cost of local government. In recent years taxes have increased most rapidly in the local units where the taxpayer probably had the best opportunity for direct scrutiny of expenditures.

General Welfare Calls for High Standard of Public Service.—Public welfare demands uninterrupted public service. Schools and other institutions must carry on, which demands a constant or increasing flow of revenue into the public treasury. But when the major share of this revenue is collected in small taxing units it results in financial strain and even hardship in localities suffering from economic depression. This was the situation in many agricultural communities during the depression after 1920. Agriculture has not fully recovered in this respect.

Taxation of Farm Property in Small Taxing Units.— In Kansas and in the majority of the states, taxes are collected mainly from general property, which in fact means tangible property and particularly real estate. Farm property is tangible and therefore unable to escape taxation. In most instances it is the only form of property owned by farmers. Therefore, the demand for an uninterrupted public service, including state-determined minimum standards, has placed and is placing a heavy burden on the rural population in Kansas and in other states.

State and Local Tax Levies on Farm Real Estate in Kansas.⁵⁵

—Figure 10 shows the amount of taxes levied on farm real estate in Kansas by years from 1910 to 1923. The small taxing units—counties, townships, and school districts—levied from 85 to 89 per cent of the total in this period. These levies were spent mainly for education and roads and bridges, as shown in figure 11. Expenditures for these purposes in 1923 were nearly 70 per cent of all levies on farm real estate.

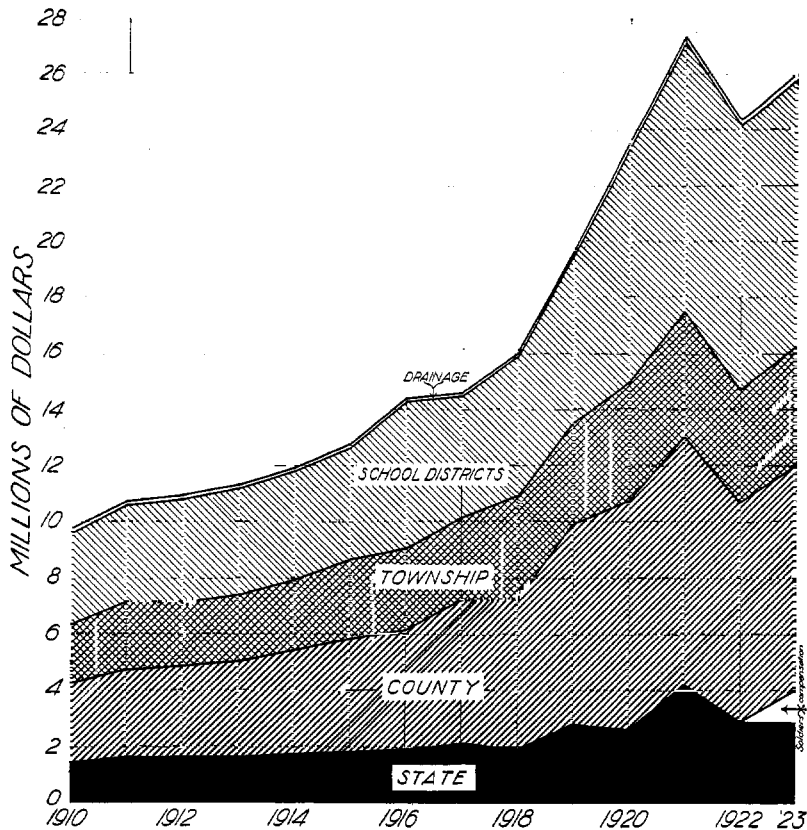


FIG. 10.—Taxes levied on farm real estate in Kansas for the state and for the subdivisions having power to levy taxes: 1910 to 1923. Levies by the local subdivisions were from 85 to 89 per cent of all levies. Such extensive levies by these small taxing units within the larger economic unit, may cause an unfair distribution of the cost of government and of the specific public services, such as schools, roads, etc.

55. This subject is treated in greater detail in Kansas Agricultural Experiment Station bulletin 235, "The Trend of Real Estate Taxation in Kansas from 1910 to 1923" (97 pages, 28 illustrations, 48 tables). Both farm and city real estate taxes are considered.

The relation of taxes levied by small political units to a proper distribution of tax burdens is a subject deserving careful investigation. Such a study must necessarily be made from a theoretical as well as a practical standpoint, for the terms "proper" and "fair" are elusive when applied to the distribution of taxes. The present

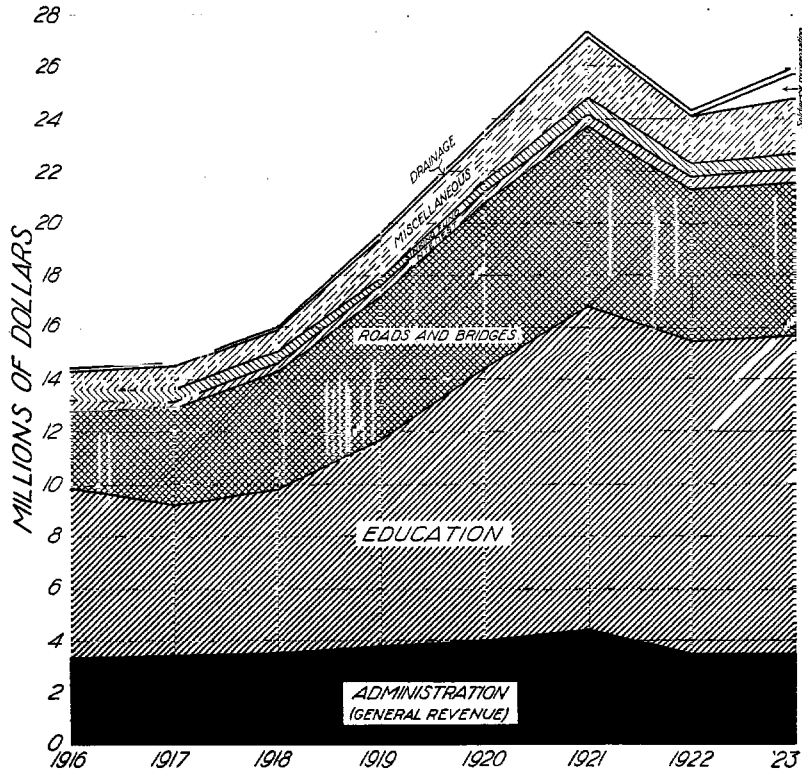


FIG. 11.—Taxes levied on farm real estate in Kansas for specified public purposes: 1910 to 1923. (To the extent that education and roads and bridges confer distinct general benefits, they might be financed, to a greater degree than at present, by larger political units levying taxes on a wider base than tangible property alone.)

status of state and local taxation in Kansas presents an important problem to the agriculture of the state, as suggested by figure 12, which shows the increase in taxes compared with the increase in land values from 1910 to 1923.

Should States Relieve Part of Local Levies? — Should the principal items of local expenditures, such as the support of schools and roads, be met to a larger extent than at present by state taxation?

Facts now available suggest an affirmative answer—tempered with caution pending the availability of more adequate data. As already noted, the states are prone to specify more and more minimum requirements in education and in certain other matters. This being true, why should not the state give financial aid to the maintenance of these standards? This is an important question in a state such as Kansas where local levies are about 89 per cent of the total prop-

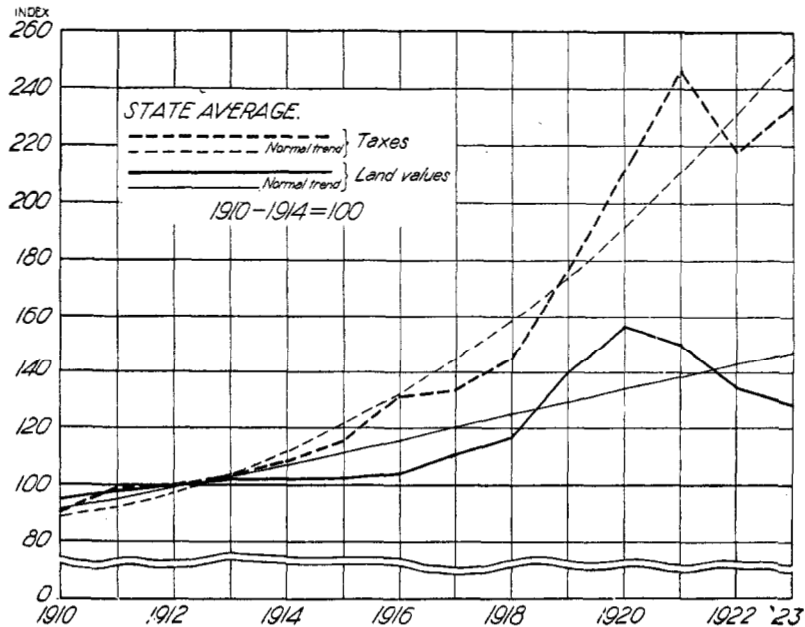


FIG. 12.—Trends of taxes and of selling value per acre of all taxable land and improvements outside of cities in Kansas, in per cent of 1910 to 1914 average.

erty tax, and where the property tax is about 85 per cent of all revenues for state and local purposes.⁵⁶

Federal Aid Partly Offsets Disadvantages of Small Taxing Units.—In view of the fact that the general welfare demands a reasonably high standard of educational facilities and public service, federal aid has in fact stepped into the breach to help compensate for some of the most obvious defects of small taxing units within the larger economic units.

Public Functions of General Importance May Receive More Support from Larger Taxing Units in the Future.—It is prob-

56. See Kansas Agricultural Experiment Station bulletins 282, 284, and 285 for a more complete analysis of taxation problems in this state.

able that future developments relative to the size of the taxing units will take the form of increasing support by the larger units of those functions and public services that are general in character and therefore of proper concern to the larger political unit.

The larger political unit coincides more closely with the economic unit. If a public function, whether it be road construction, some phase of education or any other activity, is clearly of state and of national importance, it follows that the larger unit should help support it. Fairness in the distribution of the tax burden seems to call for cooperative support for public functions that are both of local and general importance. Furthermore, it appears to be in the public interest that the larger unit of government should give some measure of guidance to public functions that are of general importance. On the basis of these general principles, Congress has granted aid for agricultural research, certain phases of education, and road construction and has thereby acquired a limited degree of control over these activities.

VI. CONCLUSION

In the introduction to this report, federal aid was characterized as a part of the growing participation of the national government in the affairs of the people of the United States. This growth in federal authority may be attributed to a number of causes.⁵⁷

Organization of New States.—Since the original thirteen states adopted the Constitution, 35 states have been created out of territories once under the direct control of Congress.⁵⁸ These states—exclusive of Texas, Tennessee, Kentucky, and West Virginia, which were not “public land states”—were not only organized from territories subject to the political control of Congress, but were carved out of the public domain—land belonging to the national government. The history of each of the 35 states began with an act of Congress. It was therefore natural that the people of these states were inclined to look to the central government rather than to their state governments.

Immigration.—Immigration is another contributing cause of the growth of federal influence. The millions of immigrants to this country first came in contact with federal authority. National laws and regulations were impressed upon them, while the states were little more than names indicating their approximate destinations.

57. For a more detailed review of this subject, see “The Rights of the People of the States,” by Geo. R. Hull, in the *American Law Review*, November-December, 1925.

58. This is not strictly true in the case of Texas which applied for admission to the Union after her brief period as a republic following her liberation from Mexico.

Greater Economic Interdependence of States and Sections.—

While the new states, immigration, and other causes played their part in shaping a public opinion conducive to the growth of federal power, the principal cause is undoubtedly found in changes in our national economic life. The various states and sections of the country are more closely connected economically than ever before. Sectional rivalries and conflicting interests are a proof rather than a negation of economic interdependence. Corporate business is increasingly interstate and national in character; agriculture has become commercialized, that is, the farmer produces mainly for the market rather than for home consumption; more than one-half of our population live in cities; the centers of consumption and of production of our staple products are far apart, necessitating great systems of long-distance transportation; and credit is organized on a national scale under the Federal Reserve system and governed by federal authority. In an economic sense, no state or section liveth unto itself alone.

On the basis of the essential economic unity of the nation, a helpful generalization may be drawn relative to federal and state authority: *As economic life becomes more complex and as the several parts of the nation become more interdependent, the larger unit of government will grow more rapidly in authority and influence than the smaller unit.* This suggests the fundamental reason for the growth of federal regulation of industry and commerce and for federal aid in research, education and internal improvements.

Criticism of Federal Aid May Be Beneficial Even When Ill-Founded.—

While the main arguments against the present system of federal aid as a part of our agricultural policy are ill-founded, they nevertheless serve a useful purpose. Opposition tends to retard new ventures in this field until the public demand is more crystallized. Every thinking friend of the present system would deplore undue haste in the expansion of it. Criticism, even when largely ill-founded, will stimulate more careful study of the workings of federal aid, and should result in better understanding and greater appreciation of the nation's gradually evolving policies to improve agriculture and rural life and to promote the general welfare.

