

THE FEDERAL-AID ROAD POLICY

FROM

1916 to 1930

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Submitted

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PREFACE

The primary purpose of this thesis is to present as clearly and as comprehensively as possible a study of the federal-aid road program from the date it was established to the beginning of the depression in 1930. The events and elements that led to the establishment of the program have been briefly and chronologically presented.

The federal-aid road program has been somewhat neglected by the pen of the historian. To my knowledge there has not been published as yet a complete, comprehensive study of the program. I do not propose to present such a study in this thesis but I do hope to make a contribution to the literature on the subject.

I wish to thank Dr. O. A. Hilton, who directed this thesis, for his assistance and guidance, and Dr. O. E. Hooley and Professor M. D. Wall for their suggestions as to style and form. Thanks are also due to the librarians of Oklahoma A. and M. College for their assistance in locating materials used in this thesis.

TABLE OF CONTENTS

<u>CHAPTER</u>		<u>Page</u>
I	FEDERAL AID FOR PUBLIC ROADS	1.
II	DEVELOPING A POLICY.	10
III	THE ROAD POLICY OF THE WAR PERIOD.	18
IV	CHANGING THE FEDERAL ROAD PROGRAM.	25
V	THE FEDERAL HIGHWAY PROGRAM.	34
VI	THE ROAD PROGRAM IN THE NATIONAL FOREST.	50
	Bibliography	55

CHAPTER I

FEDERAL AID FOR PUBLIC ROADS

The federal-aid road program came as a result of years of agitation for government aid in road building. This agitation, which began during the last half of the nineteenth century, was carried on by well organized groups by the turn of the century. Among the most important of these groups were the farmers' organizations, chambers of commerce, state highway officials, and the automobilist.

There were two major factors that helped to bring on this popular wave of agitation. One was the method of financing the road program and the other was the introduction of a cheaper and more economical model of automobile. In most of the states road building was largely a local matter supplemented occasionally by state aid. The revenue for financing road work came from the general property tax, the poll tax, and bond issues. In some cases revenue for the construction of roads was raised by a special assessment of the property contiguous to the roads. In other cases it was raised by charging a toll for the use of a road or a bridge. The burden this method of financing the road program placed upon some groups, especially in the rural areas, gave impetus to the agitation for state and federal aid.

The automobile was probably the greatest single factor behind this agitation for good roads. In 1895 there were only 300 registered automobiles in the United States. By 1900, just five years later, the number had increased to 14,000. Fifteen years later the number had grown to 2,500,000. The automobile increased the radius of travel, thereby creating a demand for a series of connecting roads. It also created a rapidly expanding body of motor vehicle owners who demanded smooth firm road

surfaces the year around. The automobile provided a source of revenue but at the same time increased the expense of road maintenance because of its destructive effects on the standard road surfaces.¹

The states began in a small way, as early as 1890, to aid the local communities solve their highway problems. The policy followed by most states was the advancement of aid to the local communities or counties, usually in the form of financial aid, but in some cases in the form of convict labor. In most of the states this aid was administered through a state highway department, but the actual construction was left to the local units. As soon as the state aid policy became assured, agitation for federal aid in road building began.²

Bills providing federal aid for roads were accordingly introduced in Congress as early as 1907, although it was not until 1912 the interest became acute. In that year no less than 62 bills providing some form of federal aid for roads were introduced.

There were two opposing groups in this campaign for federal aid. One was comprised of those who wanted a system of connecting highways, interstate in character. The supporters of this system were chiefly the representatives of the automobile interests and the advocates of a system of military roads. The other consisted of those who wanted a system of roads leading from the rural areas to a market or a transportation center. The supporters of this system were chiefly the representatives of the farming interests.

¹ James E. Pennybacker, "Public Roads in the United States," Proceedings of the Second Pan-American Scientific Congress, (Washington: Government Printing Office, 1917), VI, 20.

² "Report of the Secretary of Agriculture," Yearbook of the Department of Agriculture 1918, 129.

Opinion was also divided on the question as to how the federal aid should be administered. Those who favored a system of interstate highways wanted the federal government to construct and maintain the roads itself. Others, particularly the representatives of the farmers' interest, wanted the government to appropriate money or lend credit to the states or local units, leaving the construction and maintenance of the roads to them.³

The Democratic Party allied itself with the "good road" agitation as early as 1908. In that year and again in 1912 the Party included a plank in its platform advocating federal aid to the states for the construction and maintenance of post roads.⁴ By using the term post roads the Party could point to Article I, Section 8, of the Constitution for legislative authority. This clause gives Congress authority to establish post offices and post roads.

In 1912 some twenty of the Representatives who had introduced federal aid bills agreed to support one introduced in Congress by Representative D. W. Shakleford of Missouri.⁵ The bill provided that all roads upon which rural mail was carried should be divided into three classes according to the type of construction. Where the United States used any such roads for the delivery of rural mail it was to pay the state or the local subdivision whose roads were used \$25 a year for each mile of Class A roads so used, \$20 a year for each mile of Class B roads, and \$15 a year for each mile of Class C roads.⁶

³ Paul H. Douglas, "The Development of a System of Federal Grants-in-Aids," Political Science Quarterly, XXXV, 262.

⁴ LeRoy D. Brandon, comp., Platforms of the Two Great Political Parties from 1856 to 1928, (Washington: Government Printing Office, 1936), 152. This work was published under the direction of South Tremble, Clerk of the House of Representatives.

⁵ Douglas, loc. cit.

⁶ Congressional Record, 62 Cong., 1 Sess., 5357-8.

The House added the bill to the Post Office Appropriation Bill by a vote of 240 to 89, but it was struck from the measure in the Senate. The representatives of the Senate in the Conference Committee remained firm in their opposition and the road bill was thus killed in the Conference Committee. The Conference Committee, however, presented two recommendations to Congress which were adopted by both Houses of Congress. The recommendations were that a joint committee be appointed to investigate the whole problem of federal aid to post roads and that an experimental appropriation of \$500,000 be made for post roads.⁷

The appropriation was to be expended by the Secretary of Agriculture in cooperation with the Postmaster General "in improving the condition of post roads." The measure carried a provision that for every dollar thus expended on the roads the state or local subdivision, on whose roads the money was expended, was to expend two dollars. The appropriation was to be made available until expended.⁸

The joint committee was appointed with Senator Jonathan Bourne, Jr. of Oregon selected as its first chairman. It conducted a more or less extended investigation and submitted a report to Congress in 1915 favoring federal aid. An excerpt from the report follows:

All arguments that have been here presented showing the value of the construction and maintenance of good roads are of equal weight in the support of the plea for Federal Aid in this good cause. Experience has demonstrated that past methods are inadequate to accomplish desired results.⁹

⁷ Congressional Record, 62 Cong., 2 sess., 11554.

⁸ Ibid.

⁹ "Report of the Joint Committee on Federal Aid in the Construction of Post Roads," House Document 1510, 63 Cong., 3 sess.

When Congress assembled in 1914 Representative Shakleford introduced a revised copy of his bill. The measure, after slight amendment, passed the House by a vote of 284 to 42. It provided for an appropriation of \$25,000,000 to be distributed among the states, after a minimum of \$65,000 had been granted to each state, one-half in the ratio that the population of each state bore to the total population of the country, and one-half in the ratio that the mileage of rural post roads in each state bore to the total mileage of rural post roads in the country as a whole. The allotment to each state could be expended for either or both of the following purposes: for the construction and maintenance of post roads under the approval of the Secretary of Agriculture, providing that at least an equal amount was expended by the states or the local units on the roads selected; for road rentals. The same three classes of roads were retained for the rental program but the differential rental between the classes was increased. The annual payment per mile for Class A roads was to be \$60, for Class B \$30, and for Class C \$15. The states or the localities were required to appropriate an equal amount to be expended on these roads.¹⁰

The bill was rejected by the Senate Committee on Post Offices and Post Roads, and an entirely different one was substituted, based upon a plan of ex-Senator Bourne of Oregon.¹¹ This plan provided for federal and state cooperation in road construction. The plan called for an appropriation of \$3,000,000,000 for a period of fifty years. The distribution of the funds to the states was to be based upon area, population, assessed valuation, and road mileage. The states were required to deposit in the United

¹⁰ "Construction and Maintenance of Rural Post Roads," House Report 168, 63 Cong., 2 sess.

¹¹ New York Times, June 22, 1913.

States Treasury fifty year, four per cent bonds for the amount due them. The government would then lend the states par value of the bonds for road construction. By crediting each state every year with the excess one per cent interest paid on states bonds and allowing three per cent interest on the amount compounded annually, a sinking fund was to be established to pay off the bonds and relieve the states of paying the principal. The result of these conflicting views was that no federal aid was granted during that Congress.

Representative Shakleford further revised his bill and introduced it in Congress again on January 6, 1916. The bill provided that "the Secretary of Agriculture, on behalf of the United States, shall in certain cases aid the states in the construction and maintenance of rural post roads."¹² An appropriation of \$25,000,000 annually for five years was to be provided to carry out the provisions of the bill. The Secretary of Agriculture was to apportion the funds to the states, after a minimum of \$65,000 had been granted to each state, one-half in the ratio which the population of each state bore to the total population of all the states, as shown by the latest available census, and one-half in the ratio which the mileage of rural free delivery routes in the state bore to the total mileage of rural free delivery routes in all the states, as shown by the latest report of the Postmaster General.¹³

The debates in the House centered around the method of distributing the funds to the states, the amount of the appropriation, and the question as to who should administer the program. Those who opposed the

¹² Congressional Record, 64 Cong., 1 sess., 1269 ff.

¹³ "Report of the House Committee on Good Roads on H.R. 7617," House Report 26, 64 Cong., 1 sess.

measure contended that the condition of the Federal Treasury did not warrant such an appropriation for new purposes. They complained that under the method of apportionment some states would have to help pay for the roads in other states. Some opposed it because it provided for state and federal cooperation. They preferred a bill that would provide for a national program of highway construction financed entirely by the federal government.¹⁴

The proponents of the bill pointed out that it would aid the delivery of the United States mail, that the method of distribution was to be made on a democratic plan. They contended that if the federal government was going to use the public roads it was only fair for it to help pay for them.¹⁵

When the measure reached the Senate Committee on Post Offices and Post Roads it met with considerable opposition. The committee agreed to substitute in its place a bill that had been introduced by Senator Bankhead a few days before the House bill reached the committee. This bill had been prepared by the National Association of Highway Engineers and sent to Senator Bankhead with a request for him to introduce it in Congress. Senator Bankhead had made some changes in the bill before introducing it in Congress.¹⁶ The bill, as reported from the Committee, gave the Secretary of Agriculture authority to approve or disapprove all proposed state road projects requiring federal aid. It required the states to establish a highway department and to maintain the roads after they had been constructed.

¹⁴ Congressional Record, 64 Cong., 1 sess., 1269 ff.

¹⁵ Congressional Record, 64 Cong., 1 sess., 1269 ff.

¹⁶ Ibid., 6428.

All funds appropriated to carry out the provisions of the bill were to be distributed to the states on the basis of population, area, and mileage of post roads. The Secretary of Agriculture was authorized to deduct not more than 5 per cent of each year's appropriation for the administration of the program. The bill carried an appropriation of \$75,000,000 for a five-year program. Five million dollars was to be made available for the first year and the amount was to increase \$5,000,000 annually until expended.¹⁷

The opponents of the measure in the Senate accused it of being unconstitutional, "pork barrel," and an encroachment on the rights of the states. Some questioned the merit of placing the administration of the proposed program under the Secretary of Agriculture. They pointed out that it would be possible for the Secretary of Agriculture to withhold funds from a state because of some friction between him and the state highway officials.¹⁸

The House refused to concur in the Senate amendment and agreed to a conference of the two Houses.¹⁹ The conferees agreed to accept the appropriation and method of apportionment as provided in the Senate amendment but limited the amount deductible for the expense of administration to three per cent of the appropriation. They also added a provision giving the states that were prohibited from raising revenue for road work the

¹⁷ "Report of the Senate Committee on Post Offices and Post Roads on H.R. 7617," Senate Report 250, 64 Cong., 1 sess.

¹⁸ There existed in the Department of Agriculture the Office of Road Inquiry, later changed to the Office of Public Roads and Rural Engineering, that had been carrying on research in road building since its establishment in 1896. This explains why the administration of the program was vested in the Secretary of Agriculture.

¹⁹ Congressional Record, 64 Cong., 1 sess., Senate Debate on H.R. 7617.

right to participate in the program when the counties or local units had raised sufficient funds to meet the provisions of the act. The conferees also agreed to establish a road program in the national forest and authorized an appropriation of \$1,000,000 annually for ten years to carry out the program.²⁰

Both Houses accepted the conference report and on July 11, 1916, the measure was signed by President Wilson.²¹ That President Wilson considered this an important measure is shown by the following excerpt from a letter addressed to Representative A. F. Lever of South Carolina:

This measure will conduce to the establishment of more effective highway machinery in each state, strongly influence the development of good road building along right lines, stimulate larger productions and better marketing, promote a fuller and more attractive rural life, add greatly to the convenience and economic welfare of the people, and strengthen the national foundations.²²

The Federal Aid Road Act of 1916 added another program to the system of federal grant-in-aid. The measure had more than a quarter of a century of organized agitation behind it. This agitation had begun as an agrarian demand for aid in road building but was greatly stimulated by the rapid increase in the number of automobiles after 1900. After two near successful attempts to pass a road rental law and one attempt to establish a road program financed by a federal loan to the states, Congress passed the Federal Aid Road Act which established a road program based upon state and federal cooperation.

²⁰ The House number was retained and the measure was considered as a House bill with a Senate amendment.

²¹ "Conference Report on the Good Road's Bill," Senate Document 474, 64 Cong., 1 sess.

²² Henry S. Commanger, (ed.), Documents of American History, Doc. 411, (New York: F. S. Croft and Company, 1946.)

CHAPTER II

DEVELOPING A POLICY

The Federal Aid Road Act of 1916 authorized the Secretary of Agriculture to cooperate with the states, through their respective highway departments, in the construction of rural post roads. A sum of \$75,000,000 was appropriated to carry out the provisions of the act. Five million dollars was to be made available for the fiscal year ending June 30, 1917, and the amount available for each succeeding fiscal year was to increase at the rate of \$5,000,000 until the appropriation was expended. The amount apportioned to any state in any fiscal year was to remain available until the end of the succeeding fiscal year, except in states not having a highway department it was to remain available until the end of the third succeeding fiscal year following the one in which it was made. Any sum not expended or obligated during the time it was available was to be reapportioned to the states as if it were being apportioned for the first time.¹

The administration of the program was to be under the direction of the Secretary of Agriculture. He was to provide for the proper examinations and inspections of the federal aid roads, to prescribe reports from the highway departments, and to file an annual statement with the Secretary of Treasury and the highway department of each state of the amount deducted for administrative expenses and the amount due to each state. He was to ascertain when the states had met the provisions of the act and if necessary to prescribe rules and regulations for carrying out the provisions of the act. To him was given the authority to approve or disapprove all projects requiring federal aid. He was authorized to deduct a part, not

¹ 39 Stat., 355.

to exceed three per cent, of the appropriation for the expense of the Department of Agriculture in administering the act.²

The disbursement of the funds to the states was to be made in the following manner: one-third in the ratio which the area of each state bore to the total area of all the states; one-third in the ratio which the population of each state bore to the total population of all the states; and one-third in the ratio which the mileage of rural post roads in each state bore to the total mileage on rural post roads in all the states. The figures to be used in determining these ratios were to be taken from the latest available federal census and a certificate from the Postmaster General.³

A rural post road was defined as "any public road over which the United States mails now or may hereafter be transported, excluding every street or 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."⁴

The states were to keep the federal aid roads in the proper condition of repair. If a state failed to keep its federal aid roads in repair the Secretary of Agriculture was to give notice to the state highway department of such fact; if within four months the road or roads had not been put in the proper condition of maintenance the Secretary of Agriculture was to refuse to approve any more projects until the road had been put in the proper condition of maintenance.⁵

² 39 Stat., 355.

³ Ibid.

⁴ Ibid.

⁵ 39 Stat., 355.

The share of the Federal Government on any project was not to exceed fifty per cent of the cost. The federal share was further limited to \$10,000 per mile of road constructed, exclusive of bridges of more than twenty feet clear space. Bridges of less than twenty feet clear space were considered as part of the construction.⁶

The Office of Public Road and Rural Engineering was entrusted with the administration of the federal road program. The Office was divided into two branches, management and engineering. The United States was divided into ten districts with an engineer from the department in charge. The district engineer was the field representative of the Office and was to examine and inspect all proposed projects in his district and make recommendations to the central office at Washington.⁷

The Office of Public Roads and Rural Engineering prepared a draft copy of rules and regulations governing the administration of the road program and called a conference of the highway officials of the states to discuss them. This conference met in Washington, D. C. on August 16, 1916. The recommendations of the conference were used in preparing the final draft which was issued by the Secretary of Agriculture on September 1, 1916.⁸

The procedure for receiving federal aid under the rules and regulations was as follows: The state highway department of each state was to submit a project statement to the Office of Public Roads and Rural Engineering through the district engineer. This statement was to contain information concerning the availability of state funds, the purpose of the project

⁶ Ibid.

⁷ "Report of the Secretary of Agriculture," Annual Report of the Department of Agriculture, 1917, 37.

⁸ "Report of the Office of Public Roads and Rural Engineering," Annual Report of the Department of Agriculture, 1917, 360.

and its relation to the road program of the state, and the amount of federal aid required for the project. A map of the project was to accompany the project statement. If the project statement was approved the states were then to submit, through the same channels, project plans, specifications, surveys, and estimates. These were to be made a part of the contract the state made with the construction company that built the roads. The district engineer was to send his recommendations concerning the project along with the plans. If these were approved, the Secretary of Agriculture would issue a certificate of approval for the project. After the project approval the next step was the execution of a project agreement between the state and the Secretary of Agriculture. The state was to submit definite proof that adequate means were employed to insure economical and practical expenditure of the federal fund. It was required to send copies of its advertisements for bids to the Office of Public Roads, and when bids were made a copy of the tabulated bid prices was to be sent promptly to the Office. These were required because the federal government was to pay only its pro rata share of the lowest responsible bid. When payments were due the state made application for payment on special vouchers furnished by the Department of Agriculture, and payments were made through a previously designated depository.

The states were to bear the expenses of surveys and property damages incurred in connection with right-of-ways. They were to keep separate records on each project and these records were to be open at any time for inspection by the Secretary of Agriculture or his representative.⁹

⁹ "Rules and Regulations of the Secretary of Agriculture for carrying out the Federal Aid Road Act of 1916," Senate Document 548, 64 Cong., 1 sess., (1916).

At the time of the passage of the Federal Aid Road Act only a few states had the necessary machinery to participate in the federal aid program. Most of the states had to reorganize their highway departments while Indiana, South Carolina, Georgia, Mississippi, Texas, and Kansas had to create one. Three states were prohibited by their constitution from participating in internal improvement programs. By the end of the fiscal year, however, every state in the Union was able to negotiate for federal aid.¹⁰

Soon after the passage of the act questions began to arise as to the meaning of the term "rural post roads." The act had defined it as one over which mail was carried or might be carried. The three popular interpretations of the term were: that it was one on which mail was actually carried; that it was one on which it was physically possible to carry mail over; and one over which mail was carried or there were prospects that it soon would be. A list of the classes of roads that had been submitted by the states was referred by the Office of Public Roads to the Attorney General for advice as to their eligibility, and the following classes were declared eligible: where mail was actually carried; where there existed a reasonable prospect that mail would be carried within a reasonable length of time after completion; where the proposed road was an entirely new location, but there existed a reasonable prospect that mail would be carried over it within a reasonable time after completion; where part of a project had no prospects of ever being used as a post road but the part constituted an unsubstantial portion of the whole and it would be uneconomical to construct part of the road.¹¹

¹⁰ "Report of the Secretary of Agriculture," Annual Report of the Department of Agriculture, 1917, 38.

¹¹ Logan W. Page, "One Year Experience with the Federal Aid Law," American City (Town & County ed.), XVIII, 360. The author was director of the Office of Public Roads and Rural Engineering.

The relative terms used in describing the classes of roads that were declared eligible only added to the difficulties in interpreting the definition. Those concerned wanted to know what constituted a "reasonable prospect," a "reasonable time," or "an unsubstantial portion of the whole." In order to clarify the matter to the district engineer, the Office of Public Roads issued the following detailed instructions to be used in choosing projects to recommend for approval:

1. Where the unused portion of a project was comprised in a number of short sections concerning which no prospects of their use by mail routes existed, the project might be worthy of approval if these short sections did not aggregate more than approximately 30 per cent of the project. 2. When the entire project was inconsiderable as to mileage, the part not used and concerning which no prospects could be shown, the unused part might aggregate as much as 30 per cent of the mileage of the project. 3. Where the unused portion consisted of one or two parts not on the end of the project, they might aggregate as much as 20 per cent of the entire project. 4. Where the unused portion consisted of one part at each end of the project and connected with a small city or town, an improved road, or another post road, such portion might comprise approximately 20 per cent of the entire project. 5. Where the unused portion concerning which existed no prospects for its use by mail routes comprised a stretch at one end and connected with a large city, the unused portion might comprise 20 per cent of the project.¹²

The above instructions not only show the policy of the Department of Agriculture in regard to the classes of roads it would consider eligible for federal aid but also show how a bureau can expand a law it has been given to administer. Here we have the expansion of the term "rural post road" to include a road as such when as much as 30 per cent of it had no prospects of ever being used for the delivery of mail.

During the time the administrative machinery of the road program was being put into operation, many of the local road officials received the impression that the Department of Agriculture would favor certain types

¹² Page, op. cit., 360.

of surfaces, or would more readily approve the more costly types of roads. By February, 1917, these impressions were so widespread that Secretary Houston made the following public statement concerning the policy of the Department in regard to the various types of roads:

This Department, which is charged with the administration of the Federal Aid Road Act, has placed absolutely no restrictions, either direct or implied, upon the kind of highways to be constructed. States may submit for approval any kind of road, even an earth road, and approval will be given if the construction is substantial in character, suitable for traffic needs, and meets the terms of the Federal Act. To give State legislators and highway officials the impression that this Department favors only costly types of roads or discriminates in favor of any particular material results, not only in spreading misinformation, but in placing barriers in the way of States which wish to avail themselves of Federal aid in road construction.¹³

That this was actually the policy is borne out by the fact that of the projects approved during 1917, 2.62 per cent called for brick surfaces, 2.92 per cent for waterbound macadam, 5.63 per cent for bituminous macadam, 8.9 per cent for cement, 15.6 per cent for sand and clay, 32.1 per cent for earth, and 32.1 per cent for gravel.¹⁴

Very little was accomplished on the federal road program the first year beyond the establishment of the necessary machinery and organized procedures for carrying out the program. There were only twenty-three project statements approved by the Secretary of Agriculture. Of these only six had reached the point of project agreement. One federal aid project, located in California, was completed by June 30, 1917, at an estimated cost of \$53,939 of which \$24,245 was federal aid.¹⁵

¹³ James E. Pennybacker, "Federal Aid to Highways," Agriculture Year-book, 1917, 133. The author was Chief of Management of the Office of Public Roads and Rural Engineering.

¹⁴ Ibid.

¹⁵ Report of the Chief of the Bureau of Public Roads, 1921, 7-8.

The pre-war policy of the federal aid road program was one of state and federal cooperation. The states selected the projects, made the surveys and estimates, prepared the plans and specifications, and supervised the construction. The Federal Government retained the right to approve all federal aid projects and to interpret the terms of the federal act. The Secretary of Agriculture had been given authority to prescribe rules and regulations to carry out the program but he had consulted the state highway officials in formulation of them.

CHAPTER III

THE ROAD POLICY OF THE WAR PERIOD

The entrance of the United States in World War I brought a demand for changes in the road programs of the country. There were some who regarded the construction of roads as a luxury and advocated the suspension of construction until the end of the war. Others considered the construction of roads a necessity for national defense, some going so far as to advocate the construction of a highway along the Atlantic coast as a defensive measure.¹ Most of the government officials, however, took a more liberal view and advocated limited construction during the war period. Among those who advocated limited construction were William G. McAdoo, Secretary of the Treasury; Newton F. Baker, Secretary of War; and Herbert Hoover, Director of the Food Administration.²

By the spring of 1918 it became necessary for the Department of Agriculture to formulate a definite road policy for the war period. Early in the year the American Association of State Highway Officials in their annual national meeting had passed a resolution requesting the federal government to formulate a definite road policy for the period.³ Within the next few months almost every organization interested in road building had passed similar resolutions.⁴

The Office of Public Roads and Rural Engineering requested each state to submit a program of road construction requiring federal aid which

¹ Arthur H. Blanchard, "Construction and Maintenance of Highways Under War Conditions," American City (Town & County ed.), XVIII, 193.

² "Government Officials Favor Road Construction," American City (Town & County ed.), XVIII, 300.

³ American City (Town & County ed.), XVIII, 97.

⁴ Ibid., passim.

involved only those projects necessary for the transportation facilities of the country. The states were also expected to limit road construction regardless of whether federal aid was used or not. The road construction, however, was affected by the work of so many bureaus and departments that it was necessary to coordinate the activities of them in order to formulate a definite road policy for the nation. To achieve this coordination Secretary Houston requested the departments and administrations interested to name a representative to serve on a council to deal with highways during the war. The result was the formation of the United States Highway Council consisting of a representative from the Department of Agriculture, the War Department, the Railroad Administration, the War Industries Board, and the Fuel Administration.⁵ The Council held its first meeting in June and selected Logan W. Page, Director of the Bureau of Public Roads, as president of the Council.⁶

Beginning September 10, 1918, the Council required all road projects that involved the issuance of bonds, the use of rail or water transportation, the use of coal or oil as fuel, and the use of bricks, cement, asphalt, oil, tar, crushed stone, or steel as highway material to have its approval. No business concern was to sell highway material for a project until the project had been approved by the Council. The Council announced that it would consider only projects involving the most essential construction. Of the four classes it considered worthy of approval, those of military value would be considered first, those of economic value second, those involving unfinished contracts third, and those of extreme local importance last.⁷

⁵ "Report of the Secretary of Agriculture," Agriculture Yearbook, 1918.

⁶ Public Roads, June, 1918, 2.

⁷ Ibid., August, 1918, 1.

The Council, however, had no legal authority to carry out its requirements but the departments and administrations represented in the Council did have authority to regulate the use of the materials that were used in construction, the transportation of such materials, and the authority to approve or disapprove projects requiring federal aid. It was therefore evident that if the Council did not approve such projects the administrations represented would not.

The policy of the Council in regard to the construction of bridges was based upon the following principles: keep existing structures in service by all available means; provide detours around weak bridges; change plans only when it was absolutely necessary; and apply for federal aid only in cases of extreme necessity. In approving projects of bridge construction the Council considered only projects of military value, projects replacing unsafe bridges as a last resort, and those replacing bridges that had been destroyed but were essential to the war effort.⁸

The Council considered the use of bituminous materials for dust laying as its least important use. It did not issue any rules or regulations regarding its use because the availability of such materials varied with the locality. All applications for its use, except those projects under the direction of the War Department, were required to first have the approval of the state highway department. Those under the direction of the War Department, however, were to have the approval of the United States Highway Council.⁹

⁸ "Federal Policy Regarding Street and Highway Bridges," American City, (Town & County ed.), XIX, 300.

⁹ "Policy Defined on the Use of Bituminous Materials," Engineering News-Record, LXXXI, 468.

The policy of the Council was, briefly, the conservation of money, materials, transportation, and labor by restricting highway and street work to the most essential needs. New construction was considered justifiable only where the highways or streets were vitally important toward the winning of the war or for the movement of essential commodities. All projects requiring federal aid had to meet the requirements of the federal act, the rules and regulations of the Secretary of Agriculture, and the requirements of the Council.

The policy of approving only essential projects greatly limited road construction under the federal program during the war. Of the \$30,000,000 available for federal aid in road construction only a little over half of it had been allotted to the states. Of the amount allotted only a very small sum had actually been expended. During 1918 only a little over four hundred thousand dollars was actually expended.¹⁰

In the fall of 1918, with the end of the war in sight, most of the states began to make preparations for an extensive program of road building. Many of the states held elections on bond issues for road building. The boosters of these bond issues stressed the fact that the road work would provide jobs during the period of readjustment following the war. For example, a poster reprinted in the American City, boosting the Illinois bond issue, contained this statement: "President Wilson has directed the Council of National Defense to make plans for the readjustment of industry, including the EMPLOYMENT OF LABOR After We Win The War. You can help by voting 'YES' on the \$60,000,000 State Hard Road Bond Issue."¹¹

¹⁰ "Report of the Secretary of Agriculture, 1918," House Document 359, 66 Cong., 2 sess.

¹¹ "The People Demand Permanent Roads," American City (Town & County ed.), XIX, 349.

Most of the federal officials looked with favor upon this expansion of road construction in the states, not only because of the need for good roads, but also because it would furnish projects of public work in the post war period of readjustment. In December, 1918, Secretary Houston made the following public statement regarding the expansion of the road program:

We should take a further step--take this step not only because of the importance of good roads, but also because of the desirability of furnishing worthy projects on which unemployed labor during the period of readjustment may be employed.¹²

President Wilson was also among those who favored the expansion of the road programs following the end of the war. In a letter dated December 19, 1918, and addressed to Secretary Houston, he made the following statement in regard to the expansion of the road programs:

I heartily agree with you that it would be in the public interest to resume full measure the highway construction under the Federal-aid road act, and to do so as speedily as possible. . . I believe that it would be highly desirable to have an additional appropriation made available to the Department of Agriculture, to be used in conjunction, if possible, with any surplus state or community funds, in order that these operations may be extended. It is important not only to develop good highways throughout the country as quickly as possible, but it is also at this time advisable to resume and extend all such essential public works, with the view to furnishing employment for laborers who may be seeking new tasks during the period of adjustment.¹³

In February, 1919, Congress passed the annual post office appropriation bill which contained a section amending the Federal Aid Road Act.¹⁴ This measure provided for an additional appropriation of \$200,000,000 to be made available for road construction under the federal aid road program during the next three years. Fifty million dollars was to be made available

¹² "Secretary Houston Wishes to Push Road Work," American City (Town & County ed.), XIX, 349.

¹³ "The President Favors Early Resumption of Highway Construction," Engineering News-Record, LXXXI, 1151.

¹⁴ 42 Stat. 660.

immediately after the passage of the act and \$75,000,000 was to be made available for each of the next two fiscal years. This appropriation was in addition to the sums available under the Federal Aid Road Act of 1916. Thus \$65,000,000 was available for the fiscal year ending June 30, 1919, \$95,000,000 for the fiscal year ending June 30, 1920, and \$100,000,000 for the year ending June 30, 1921.¹⁵

The amendment re-defined the term "rural post road" so as to include "any public road a major portion of which is now used, or can be used, or forms a connecting length not to exceed ten miles length of any road or roads now or hereafter used for the transportation of the United States mail." This act excluded every street or road in a place having a population, as shown by the latest federal census, of 2,500 or more, except that portion of any street along which the houses averaged more than 200 feet apart. The limitation of the federal participation of \$10,000 per mile was raised to \$20,000.¹⁶

The measure also made it possible for the states to share in the surplus road equipment of the War Department. The Secretary of War was directed to transfer to the Secretary of Agriculture all material, equipment, and supplies not needed for the purpose of the War Department but suitable for use in improving highways. The distribution of these to the states was to be made in the same manner that the federal aid funds were made under the federal program.¹⁷

The next three years saw a road building program such as had never before been witnessed in this country. It was comparable to the railroad

¹⁵ 42 Stat. 660.

¹⁶ Ibid.

¹⁷ Ibid.

building boom of an earlier day. There was more money expended for roads during this period than was expended in building the Panama Canal. More than \$500,000,000 was expended under the federal aid program besides the enormous sums expended by the states and local communities which involved no federal aid funds. The number of road projects approved by the Secretary of Agriculture under the federal aid program grew from six at the end of the fiscal year 1917 to 4,305 by June 30, 1921. The number of miles of roads completed under the program grew from less than 100 in 1918 to almost 25,000 by June 30, 1921.¹⁸

¹⁸ Report of the Bureau of Public Roads for the Fiscal Year ending June 30, 1921.

CHAPTER IV

CHANGING THE FEDERAL ROAD PROGRAM

In the election of 1920, both the major political parties advocated federal aid to the states in road building. At their national convention, which met in Chicago from June 8 to 12, 1920, the Republican Party adopted the following road plank in their platform:

We favor liberal appropriations in cooperation with the states for the construction of highways, which shall bring about a reduction in transportation cost, better marketing of farm products, and the improvement in the postal delivery, as well as meet the needs of military defense. In determining the proportion of Federal aid for road construction among the States, the sums lost in taxation to the respective States by setting apart large portions of their area as forest reservations should be considered as a controlling factor.¹

The road plank of the Democratic Party read as follows:

We favor a continuance of the present Federal aid plan under the existing Federal and State Agencies, amended so as to include as one of the elements in determining the ratio in which the several States shall be entitled to share in the fund, the area of any public lands therein.²

The advocacy of an amendment making the public lands a factor in determining the proportion of federal aid for road construction among the states by both parties was not only to catch the votes of the public land states but was also the recognition of a just demand of those states. In their annual convention in December 1919, the American Association of State Highway Officials had adopted a resolution advocating that an amendment to the Federal Aid Road Act be adopted whereby the federal government might contribute more than 50 per cent of the cost of federal-aid projects in

¹ New York Times, June 11, 1920.

² Leroy D. Brandon (comp.), Platforms of the Two Great Political Parties, 1856-1928, (Washington: Government Printing Office, 1936).

the public land state.³ Following this convention Governor Olcott of Oregon asked the western public land states to send delegates to Washington to urge the adoption of legislation along the line of the resolution of the American Association of State Highway Officials. Thirty delegates were sent from the states and were in session in Washington on February 10, 11, and 12, 1920. The delegation appeared before the Senate Committee on Post Offices and Post Roads on February 14, 1920, and urged Congress to adopt the public land amendment and to appropriate \$300,000,000 for the road program.⁴

There was another popular question that had been brought before Congress during the last two years but it was not indorsed by either party. This was the so-called "National Highway Plan" or "Townsend Bill" sponsored by Senator Charles E. Townsend, chairman of the Senate Committee on Post Offices and Post Roads. This bill called for the creation of a federal highway commission and the establishment of a national system of highways constructed and maintained by the federal government. The bill was before the Senate Committee on Post Offices and Post Roads at the time the parties were holding their national conventions.⁵ Although the bill was popular in many circles of the country, Senator Townsend had been unable to muster enough support for the measure to report it out of the Senate Committee.⁶

³ Public Roads, December 1919, 5.

⁴ Congressional Record, 66 Cong., 2 sess., 8946.

⁵ Ibid., 65 Cong., 3 sess., 3635.

⁶ Ibid., 66 Cong., 2 sess., 807. The bill was before Congress for the third time. Senator Townsend had introduced his bill first on February 18, 1919, and then again on June 2, 1919. He had introduced it the third time in the second session of the 66th Congress.

When the short session of Congress convened in December that year members of Congress were faced with the problem of providing an appropriation for the road program if it was to continue uninterrupted during the next year because all authorizations under the program expired on June 30, 1921.⁷ On December 22 the Republican leaders of the House announced, after an executive meeting of the House Road Committee, that they had agreed on an appropriation of \$100,000,000 for the road program for the fiscal year ending June 30, 1922. There was a bill before the House Road Committee at the time the announcement was made which provided for an appropriation of \$400,000,000 for the next four years, but the Republican steering committee decided that in the interest of economy the appropriation should be limited to \$100,000,000 and should not cover more than two years. The committee also announced that a sub-committee of the Roads Committee, headed by Representative Sam R. Sells, would hold hearings on the road question after the holidays.⁸

As a result of the hearings Representative Sells introduced a bill on January 24 providing for an appropriation of \$100,000,000 for the road program for the fiscal year 1922, for the extension of time of availability from one to two years after allotment, and the adoption of the public land amendment.⁹ Five days after it had been referred to the Road Committee it was reported back to the House, and on February 7, the House passed the measure by a vote of 278 yeas to 58 nays.¹⁰

⁷ 40 Stat. 1200.

⁸ Engineering News-Record, LXXXVI, 44.

⁹ Congressional Record, 66 Cong., 3 sess., 1990, 2741.

¹⁰ Ibid., 2284, 2746.

When the Sells Bill reached the Senate Committee on Post Offices and Post Roads it was strongly opposed by Senator Townsend, chairman of the Committee. Even though his measure had called for an appropriation of \$425,000,000 for a five-year period he called the Sells Bill a "pork barrel." Needless to say, the bill was never reported out of the Committee on Post Offices and Post Roads.¹¹

A few days later when the annual post office appropriation bill was before the Senate, Senator Claude Swanson of Virginia proposed to add the Sells Bill to it as an amendment. Swanson asked the Senate to suspend the rules and add the amendment to the post office appropriation measure. The question was debated and a vote taken. Although the question received a majority of 42 votes for to 33 against the amendment, it failed because of the two-third majority required to suspend the rules.¹²

Another attempt was made to add the Sells Bill as a rider to an appropriation in the Senate. A proposal was made to add it to the appropriation bill for the Department of Agriculture but Senator Charles Thomas, who had led the opposition to the attempt to add it to the post office appropriation measure, opposed the suspension of rules. The objection was sustained and the appropriation for the road program was carried over to the next Congress.¹³ Senator Thomas, in concluding his opposition to the Sells Bill, made the following statement:

I think the country will get along and road building will continue under existing appropriations if the measure goes over to the next Congress, where a Republican Senate and a Republican House may pass it, and not only get all the prestige out of it, if there be any, but may also refer to the fact that it would have passed the Senate but for the opposition of a Democrat.¹⁴

¹¹ New York Times, February 18, 1921.

¹² Congressional Record, 66 Cong., 3 sess., 3304.

¹³ Ibid., 3688.

¹⁴ Ibid.

There was one other road bill favorably reported during that session of Congress. On January 22, Senator Lawerance C. Phipps of Colorado introduced a bill in the Senate amending the Federal Aid Road Act along the lines suggested by both parties.¹⁵ This bill provided "that in case states contained unappropriated public lands exceeding five per cent of the total area of all the lands in the state the Federal Government would pay 50 per cent of the cost plus an amount equal to one-half of the percentage the unappropriated land area bore to the total land area of the state." It also provided for the extension of the time that the allotment to the states was to be available from one to two years.¹⁶ The Senate Committee had reported the measure to the Senate on January 29, but it was never brought to a vote during that session.¹⁷ Thus the 66th Congress ended without having passed a single federal-aid road measure. It had not made any provisions for the continuance of the program beyond the end of the fiscal year ending June 30, 1921, but had left it for the next Congress.

President Harding devoted considerable space to highways in his message to Congress on April 12, 1921. Although he had conferred with Senator Townsend earlier it was difficult to tell from his message just what his position was on a Federal-aid versus a "national highway" plan. After advising Congress against "wasted effort and unjustifiable expenditures" in the road program he went on to say:

The Federal Government can place no inhibitions on the expenditures of the several States; but, since Congress has embarked upon a policy of assisting the States in highway improvement, wisely, I believe, it can exert a wholly becoming influence in shaping policy.

¹⁵ Ibid., 1856.

¹⁶ "Report on Rural Post Roads," Senate Report 726, 66 Cong., 3 sess.

¹⁷ Ibid.

With the principle of Federal participation acceptably established, probably never to be abandoned, it is important to exert Federal influence in developing comprehensive plans looking to the promotion of commerce, and apply our expenditures in the surest way to guarantee a public return for money expended.

Large Federal outlays demand a Federal voice in the program of expenditures. Congress cannot justify a mere gift from the Federal purse to the several States, to be prorated among the counties for road betterment. Such a course will invite abuses which it were better to guard against in the beginning.

The laws governing Federal aid should be amended and strengthened. The Federal Agency of administration should be elevated to the importance and vested with the authority comparable to the work before it. And Congress ought to prescribe conditions to Federal appropriations which will necessitate a consistent program of uniformity which will justify the Federal outlay.

I know of nothing more shocking than the millions of public funds wasted in improved highways, wasted because there is no policy of maintenance. The neglect is not universal, but it is very near it. There is nothing the Congress can do more effectively to end this shocking waste than condition all Federal aid on provisions for maintenance. Highways, no matter how generous the outlay for construction, can not be maintained without patrol and constant repair. Such conditions insisted upon in the grant of Federal aid will safeguard the public which pays, and guard the Federal Government against political abuses, which tend to defeat the very purpose for which we authorize Federal expenditures.¹⁸

Senator Phipps introduced his bill in Congress again on April 21, 1921. This bill was the public land amendment and the same bill that the preceding Senate Committee on Post Offices and Post Roads had reported favorable to the Senate. The bill was again favorably reported from the committee and on May 16 passed the Senate without opposition.¹⁹

Eight days after Senator Phipps had introduced his measure in Congress Senator Townsend introduced a revised copy of his measure in Congress.²⁰ The Committee on Post Offices and Post Roads agreed to hold hearings

¹⁸ Foreign Relations and Messages of the Presidents, 1921, I (Washington: Government Printing Office, 1936).

¹⁹ Congressional Record, 67 Cong., 1 sess., 372, 1309, 1470.

²⁰ Ibid., 782.

on the bill. These hearings began on May 13 and continued until June 2. Thirty-seven witnesses appeared before the Committee and among this number were representatives of the National Granges, American Farm Bureau Federation, The Chamber of Commerce of the United States, American Association of State Highway Officials, Federal Bureau of Public Roads, National Forest Service, National Park Service, National Automobile Chamber of Commerce, and the American Automobile Association.²¹ The bill was indorsed by the National Granges, the Chamber of Commerce of the United States, the Automobile Chamber of Commerce, and the American Automobile Association.²²

The best witness for the Townsend Bill was George M. Graham, representative of the National Automobile Chamber of Commerce. He maintained that a commission was more efficient than a bureau and that it could also secure better qualified men because it could pay a higher wage. The most critical witness to appear was Gray Silver, Washington representative of the American Farm Bureau. He was definitely opposed to such a system.²³

A majority of the members of the Committee on Post Offices and Post Roads finally reached an agreement and, with a minority report, reported the measure back to the Senate. When the bill was finally brought before the Senate for action Congress had already passed a road measure and at the request of Senator Townsend it was indefinitely postponed.²⁴

When the Phipps Bill was referred to the House Committee on Roads that Committee was then acting on a measure that had been drafted by the

²¹ Ibid.

²² Pyke Johnson (Secretary of the American Automobile Chamber of Commerce), "National Highway Bill," Outlook, CXXIV, 567.

²³ Engineering News-Record, LXXXVI, 873, 912.

²⁴ Congressional Record, 67 Cong., 1 sess., 2742, 7563.

executive committee of the American Association of State Highway Officials and introduced by Cassius Dowell, Representative from Iowa. The Dowell Bill, as this measure was called, was somewhat of a compromise measure. It provided that the states designate a system of roads not to exceed seven per cent of the total road mileage and to classify this system into two groups, primary or interstate, and secondary or inter-county. All federal-aid road funds were to be expended on this system with 60 per cent being expended on the primary roads. The administration was to be under the direction of the Secretary of Agriculture who was given additional authority to withhold federal funds from a state to repair a federal-aid road in the state, after due notice, if the state had failed to maintain such roads.²⁵

The House Road Committee, seeing a chance for some legislative strategy, combined the Dowell Bill and the Phipps Bill, making the Phipps Bill a section of the Dowell Bill but retaining the Senate number, and reported it as a Senate bill with an amendment. The measure was reported to the House on June 10, and on June 27, after a short debate, passed the House by a vote of 266 to 77.²⁶

Most of the opposition to the measure in the House came from the representatives from New York and Texas. The representatives of New York opposed it, as in the past, on the grounds that she would have to help pay for the roads in other states. The representatives from Texas opposed it

²⁵ Congressional Record, 67 Cong., 1 sess., 1000, 3086. The provisions of the bill as originally introduced may be found in the Engineering News-Record, LXXXVI, 738.

²⁶ "Report of the Committee on Roads on S.1072," House Report 162, 67 Cong., 1 sess. Also Congressional Record, 67 Cong., 1 sess., 3081, 3094.

because the measure would make it necessary for Texas to amend her constitution in order to participate in the program. The measure provided that the states raise the revenue to meet the federal appropriation and to place these at the disposal of the state highway department. The Texas constitution prohibited the state from raising revenue for internal improvements.²⁷

When the combined Phipps and Dowell Bill reached the Senate, instead of following the usual procedure, it was again referred, at the request of Senator Townsend, to the Committee on Post Offices and Post Roads. The Committee amended the House amendment to provide for the creation of a federal highway commission to administer the program and to provide for an appropriation of \$100,000,000 for the road program for the fiscal year ending June 30, 1922. The Senate agreed to amend the Bill to provide for an appropriation of \$75,000,000 for the current fiscal year but voted down the attempt to establish a federal highway commission. The Senate insisted upon retaining its amendment to the House amendment and called for a conference of the two Houses.²⁸

The conferees agreed to accept the appropriation of the Senate and a few days later the conference report was accepted by both Houses of Congress. On November 15, 1921 the measure was approved by President Harding.²⁹

²⁷ Congressional Record, 67 Cong., 1 sess., 3088, 3089.

²⁸ Congressional Record, 67 Cong., 1 sess., 5270.

²⁹ Ibid., 7692.

CHAPTER V

THE FEDERAL HIGHWAY PROGRAM

The Federal Highway Act of 1921 provided that the federal aid road funds were to be expended on a system of interstate highways selected or designated by the states through their highway departments and approved by the Secretary of Agriculture. The system in each state was not to exceed seven per cent of the total highway mileage in the state, and was to be divided into two groups, primary and secondary. The primary or interstate highways of each state were to consist of not more than three-sevenths of the total mileage of the system and were to receive no more than sixty per cent of the allotment to the state, except by the approval of the highway department of the state. The secondary or intercounty highways were to connect or correlate the primary highways and were to consist of the remaining mileage of the system and receive the rest of the federal allotment to the state.¹

In states containing unappropriated public lands exceeding five per cent of the total area of the state the share of the Federal Government was not to exceed fifty per cent of the cost of any project plus a percentage of the estimated cost equal to one-half of the percentage which the area of the unappropriated public lands in the state bore to the total area of the state. The limitation of the share of the Federal Government to \$20,000 per mile was also increased in these states in the same proportion.²

Each state was required to make provisions each year for its share

¹ 42 Stat. 212.

² Ibid.

of the cost of construction and maintenance of the federal highways, and to place these funds under the direct control of the highway department of the state. The Secretary of Agriculture was given authority, however, to approve projects for three years in those states that had met all the other provisions of the act but were prohibited by their existing constitution or laws from raising revenue for road work.³

The states were required to maintain the roads after they had been constructed. If any state failed to maintain its federal-aid roads the Secretary of Agriculture was to serve notice of the fact upon the highway department of that state. The state was then given ninety days to put them in the proper condition of maintenance. If they were not in repair by that time the Secretary of Agriculture was to proceed immediately to make the necessary repairs and to charge the cost against the federal funds allotted to the State. He was also to refuse to approve any more projects in the state until the amount expended by him on the maintenance of such roads had been repaid.⁴

The Secretary of Agriculture was required to establish in his department an accounting division to keep accounts for the program. He was to prepare, publish, and distribute a map, within two years after the passage of the act, showing the highway system that had been selected, and at least annually thereafter he was to publish supplementary maps showing the progress on the program. He was also to submit a detailed report of the progress on the program to Congress on or before the first Monday in December of each year.⁵

³ 42 Stat. 212.

⁴ Ibid.

⁵ Ibid.

The act carried an appropriation of \$75,000,000 for the fiscal year ending June 30, 1922. Twenty-five million dollars was to be made available immediately upon the passage of the act and the remainder on January 1, 1922. The method of apportionment was amended so that no state would receive less than one-half of one per cent of the appropriation due to the states each year. The amount deductible for the expense of administration was reduced from three per cent to two and one-half per cent of the appropriation each year.⁶

This law was more specific as to the types of roads to be constructed. Only durable material was to be used in the construction of roads. The type of surfacing to be used was to be such as would meet the traffic needs of the locality. The roads were to have a wearing surface of at least eighteen feet unless rendered impractical by physical conditions, excessive costs, probable traffic requirements, or legal obstacles.⁷

The Bureau of Public Roads in carrying out the provision for the establishment of a system of highways issued a request in December, 1921, for the submission of maps showing the tentative systems proposed in each state.⁸ Among the instructions for preparing these maps were the following: the primary system shall be shown by two black parallel lines one-eighth inch apart; the secondary system shall be shown by two parallel dash lines one-eighth inch apart; on a table on the maps give the mileage of each of the systems, the total of both systems, and the total highway mileage of the state; the whole system and each of the primary and secondary

⁶ 42 Stat. 212.

⁷ Ibid.

⁸ "Report of the Bureau of Public Roads," Annual Report of the Department of Agriculture for the fiscal year ending June 30, 1922, 464.

divisions shall be respectively continuous and correlating; and large scale supplementary maps should accompany the federal-aid system maps showing terminals in cities.⁹

The Bureau of Public Roads insisted that in selecting the federal-aid system the states include the most important routes in the system. This was to prevent the designation of less important roads as federal-aid highways in those states where the road construction was already well advanced.¹⁰ "There can be no doubt," said Thomas H. MacDonald, Director of the Bureau, "as to the clear intent of the law to provide for a system of roads which shall include those which are now and which after improvement are to become major traffic lanes."¹¹

The limitation of the interstate highway mileage to three-sevenths of the whole system in some states of large area and limited total mileage precluded a sufficient length of interstate highways to make connections with the systems of adjoining states. Acting under the authority given to the Secretary of Agriculture to "give preference to such projects as will expedite the completion of an adequate and connected system of highways interstate in character," the Bureau requested that a portion of the secondary mileage be used to complete the primary system.¹²

As soon as a sufficient number of the tentative plans had been submitted, the Bureau arranged for conferences between the highway officials

⁹ Engineering News-Record, LXXXVIII, 35.

¹⁰ "Report of the Chief of the Bureau of Public Roads," Annual Report of the Department of Agriculture, 1922, 462.

¹¹ Engineering News-Record, LXXXVIII, 156.

¹² "Report of the Chief of the Bureau of Public Roads," Annual Report of the Department of Agriculture, 1922, 463.

of adjacent states in order to correlate the systems of these states. These conferences were followed by general conferences in each of the federal-aid districts in order to bring the entire system into harmony with the requirements of the law.¹³

The work of selecting the systems continued on into the second year after the passage of the act. By June 30, 1923, tentative systems had been submitted by the state highway departments or proposed by the Bureau of Public roads for all the states.¹⁴ The entire system was selected by November 1, 1923, and a map of the entire system had been published by the Department of Agriculture. Many of the states had been able to establish a system without including all the mileage allowed by the law and were therefore able to establish a reserve mileage to be added later on. The total length of the system as approved by the Secretary of Agriculture was 168,881 miles. This was some 31,289 miles less than the amount permissible for the system.¹⁵

The approved system connected almost every city in the United States with a population of 5,000 or more, and was not more than ten miles distant from 90 per cent of the population of the United States. A road of the approved system also crossed the western mountains at practically every important pass. The Rockies were crossed at Berthoud, Lookout, Gibson, Targhee, Pleasant Valley, and Reynolds Passes in Montana and Idaho; La Veta, Wolf Creek, and Red Mountain Passes in Colorado and Raton Pass on the Colorado-New Mexico line. The Cascade Range was crossed at Stephens and

¹³ Ibid.

¹⁴ "Report of the Chief of the Bureau of Public Roads," Annual Report of the Department of Agriculture, 1923, 465.

¹⁵ Report of the Secretary of Agriculture, 1924, 56.

Snoqualmie Passes in Washington and Grants Pass in Oregon, and the Sierra Nevadas were crossed at Truckee and Walker Passes in California.¹⁶

Another matter that required, or rather was given, a considerable amount of attention by the Department of Agriculture was the question as to which states had laws which enabled them to meet the provisions of the Federal Highway Act. The duty of examining the laws of the states was entrusted to the Solicitors of the Department. By the end of the fiscal year 1922, the Secretary of Agriculture had certified to the Secretary of Treasury that the laws of all the states, except Nebraska and Wisconsin, met the provisions of the act or were exempted under section 24 of the Federal Highway Act. The status of the laws of the other two were under consideration at that time and were certified shortly after the beginning of the new year.¹⁷

In order that the road program would not be interrupted during the time the systems were being selected and coordinated, the Secretary of Agriculture approved projects submitted by the states that he thought had a reasonable chance of being part of the selected system. This procedure was authorized by law, and the Bureau of Public Roads carried it out with such efficiency that every project approved under this provision became a part of the approved system.¹⁸

The requirement of the 18 feet surfacing was construed by the Bureau of Public Roads to mean that it was fixed as a minimum of the two-way roads. "This requirement," said Director MacDonald, "will not preclude the building of narrower pavement in those districts where traffic does not yet

¹⁶ "Report of the Chief of the Bureau of Public Roads," op. cit.

¹⁷ "Report of the Secretary of Agriculture to Congress, 1923," Senate Document 286, 67 Cong., 4 sess.

¹⁸ "Report of the Bureau of Public Roads, 1923," op. cit., 465.

justify the two-way width. I am yet to be convinced that we may not properly build now in many sparsely populated districts one-half of the final width of pavement in order to complete the mileage between points, if all the other work is done to provide for full width construction later."¹⁹

The Bureau later adopted the policy of approving what was termed "stage construction." This meant that they would first do the grading and other fundamental work such as the building of culverts and bridges, and put on the surface a covering of gravels or sand-clay covering to be used until funds became available and the traffic had reached a point where such a surface could no longer be economically maintained. This plan, of course, was used very little east of the Mississippi but extensively in the western states where the traffic was not so dense.²⁰

Director MacDonald expressed the hope that the Bureau would never have to invoke the provision of the maintenance clause of the act. He indicated, though, that the Bureau would carry out the law to the letter. He suggested that the states establish an organized patrol to carry on the maintenance. The Bureau did not consider that the states were living up to the requirements until they had established such a system.²¹

The Secretary of Agriculture did not issue any new rules or regulations during the first year of the new program but carried on the work under the procedures of those previously issued. The states submitted project statements followed by plans and specifications then approved. If the

¹⁹ Engineering News-Record, LXXXVIII, 156.

²⁰ "Letter from Thomas H. MacDonald, Chief of the Bureau of Public Roads," Congressional Record, 68 Cong, 2 sess., 3121.

²¹ Engineering News-Record, LXXXVIII, 156

plans and specifications were accepted a project agreement was executed.²²

When Congress assembled in December, 1921, it was again faced with the problem of providing additional funds to carry on the road program. Several bills were introduced providing for authorizations for appropriations for the road program, but the House Committee on Roads decided to use one introduced by Representative Woodruff of Michigan as a basis of study for legislation. This bill authorized an appropriation of \$100,000,000 annually for a five-year period. Later, members of the Committee called at the executive offices to discuss road legislation authorizing appropriations with the President. President Harding expressed a wish at this conference that the appropriation be limited to \$75,000,000 annually and indicated that he would not be displeased if it were found that an appropriation of \$50,000,000 would be adequate.²³

On April 3, 1922, Representative Dunn of New York, Chairman of the Committee on Roads, introduced a bill in Congress authorizing appropriations of \$65,000,000 for the year ending June 30, 1923, and \$75,000,000 for the fiscal 1924.²⁴ In addition to the authorization the bill proposed to amend the road laws so as to include underpasses in the federal-aid program, to allow the states to recover federal funds that had been allotted to a project that was later abandoned, and to reduce the limitation of \$20,000 per mile to \$12,500. The bill also carried a penalty clause for the falsification of statements or facts in connection with the federal-aid road program.²⁵ Without serious opposition the bill passed the House on May 1,

²² "Report of the Secretary of Agriculture to Congress, 1922," Senate Document 286, 67 Cong., 2 sess.

²³ Engineering News-Record, LXXXVIII, 207, 298.

²⁴ Congressional Record, 67 Cong., 2 sess., 4954.

²⁵ House Report 878, 67 Cong., 2 sess.

and was sent to the Senate.

Meanwhile the Senate had agreed to amend the Post Office Appropriation Bill so as to include an appropriation of \$50,000,000 for the road program for the fiscal year ending June 30, 1923. The amendment also authorized appropriations of \$65,000,000 for the fiscal year 1924 and \$75,000,000 for the fiscal 1925. The House had refused to concur in the Senate amendments and had agreed to a conference of both Houses. This conference was in session when the Dunn Bill was sent to the Senate.²⁶

The conferees were unable to reach an agreement on several of the Senate amendments to the Post Office Appropriation Bill, of which the road amendment was one. Accordingly, on May 8 they presented a report of the conference to each of the Houses. The Senate agreed to the Conference report but refused to recede from its amendments that were still in disagreement and asked for a new conference. The House agreed to substitute the Dunn Bill for the Senate road amendment and agreed to a new conference.²⁷

The road amendment as reported from the conference committee this time authorized appropriations of \$50,000,000 for the fiscal year ending June 30, 1923, \$65,000,000 for fiscal year 1924, and \$75,000,000 for fiscal year 1925. The limitation of participation was lowered to \$16,500 per mile for the fiscal year 1923 and to \$15,000 per mile thereafter. Underpasses as well as overpasses were to be included in the federal-aid road program, and a penalty for falsification of statements was also included.²⁸ The Senate had agreed to the authorization for an appropriation rather than a direct

²⁶ Congressional Record, 67 Cong., 2 sess., 4138, 6902, et passim.

²⁷ Congressional Record, 67 Cong., 2 sess., 6914, 6922.

²⁸ "Conference Report on Post Office Appropriation Bill," House Report 991, 67 Cong., 2 sess.

appropriation and the House had in turn agreed to increase the limit of the cost per mile. The conference committee included another significant provision in the amendment by authorizing the Secretary of Agriculture to create a deficit by obligating the Federal Government to meet payments on road contracts when the money became available. Under this arrangement the \$50,000,000 authorized for the fiscal year beginning July 1, 1922 would not have to be appropriated until near the end of that year.²⁹

Immediately after the passage of the road amendment in 1922, the Secretary of Agriculture issued rules and regulations governing the administration of the road program. These had been withheld until the passage of the road act in order to include in it anything made necessary by its passage.

Under the rules and regulations the state highway departments, on request, were to furnish information regarding state legislation, organization and equipment of the highway department, funds available and provisions for maintenance before any agreement was reached regarding road construction. Each state was required to file with the Secretary of Agriculture a statement showing the proposed federal-aid system, and indicating the primary and secondary routes. The Secretary was to inform the state highway department of the acceptability of the system and when an agreement was reached on the whole or a part of the system, the state was to make formal request for approval. Pending formal approval only such projects were to be approved as were on the proposed federal-aid systems. After the federal-aid system had been selected or designated and approved no project statements were to be submitted for any route, nor a part of any route, not embraced in the system. No project was placed under con-

²⁹ 42 Stat. 660.

tract until plans, specifications, and estimates had been approved.³⁰

Grade crossings were classified for priority by agreement between the state highway departments and the Bureau of Public Roads. No part of the expense for surveys, plans, specifications, or estimates prior to the beginning of construction work were to be included in the estimate or paid by the federal government. No federal money was to be paid "until it has been shown to the satisfaction of the Secretary of Agriculture that adequate methods, either of advertising or other devices appropriate for the purpose, were employed, prior to the beginning of construction, to insure economy and efficiency in the expenditure of such money." If the contract was awarded to any other than the lowest responsible bidder, the federal government would pay no more than its pro rata share of the lowest responsible bid, unless it was shown that it was advantageous to the work to accept the higher bid.³¹

No part of the money appropriated under the act was to be used directly or indirectly to pay or reimburse a state, county, or local subdivision for the payment of any premium, royalty, or patented or proprietary material, specification, process, or type of construction, unless obtained or purchased on open actual competitive bidding at the same or less cost than the unpatented article or methods, if any, equally suitable for the same purpose.³²

The Secretary of Agriculture, in response to a recommendation of the American Association of State Highway Officials, appointed a joint board

³⁰ "Rules and Regulations of the Secretary of Agriculture for carrying out the Federal Highway Act," United States Department of Agriculture, Office of the Secretary, Circular No. 161, (July 31, 1922).

³¹ Rules and Regulations," op. cit.

³² Ibid.

on interstate highways in February, 1925, selecting as members 24 representatives of the Bureau of Public Roads and state highway officials. The purpose of this board was to designate or select a number of transcontinental routes and to decide on a uniform marking system. The board held its first meeting on April 20, 1925 and a series of cautionary, directional, and informational signs were tentatively decided upon. These were then submitted to regional meetings of the state highway officials for recommendations. At these meetings members of the board also received recommendations with regard to the selection of the transcontinental routes. The board held its second meeting on August 3, 1925, and selected the transcontinental routes and standard signs for use by all the states on designated systems where adopted.³³

Four routes were selected for transcontinental systems. One was from Washington through St. Louis, Texarkana, El Paso, to San Diego. Another was from Atlanta City to Astoria. The third one was from Norfolk through Chicago to Los Angeles, and the fourth from Boston to Seattle by way of the northern tier of states.³⁴

In February 1925, Congress passed a bill authorizing appropriations of \$75,000,000 for the fiscal year ending June 30, 1926, and \$75,000,000 for the fiscal year ending June 30, 1927. This measure amended the road laws to give the Secretary of Agriculture authority to apportion to the states, not later than January 1 of each year, the amount authorized for the succeeding fiscal year. This act also amended the Federal Highway Act of 1921 to include in the unappropriated public lands the "non-taxable Indian lands, individual and tribal." The Secretary was given authority to continue to

³³ Report of the Chief of the Bureau of Public Roads, 1925, 26.

³⁴ Report of the Chief of the Bureau of Public Roads, 1926, 3.

approve projects in those states where the existing constitution or laws did not permit the state to provide revenue for the construction, reconstruction, or maintenance of highways, provided they met the other requirements of the act.³⁵

The next year Congress authorized appropriations for the fiscal years 1928 and 1929. The authorization for each of the fiscal years was \$75,000,000. The Secretary of Agriculture was given authority to continue to approve projects in those states not able to raise revenue through the fiscal year 1929.³⁶ All the states had by this time amended their constitutions when necessary so they could raise revenue for road building but some of the states had not yet passed the necessary legislation to carry into effect the amendments. The time was extended for the benefit of those states.³⁷

In 1928, Congress passed two more measures that were favorable to the road programs in the public land states. One of these measures amended the federal highway act to include the following provision:

That in the case of any State containing unappropriated public lands and nontaxable Indian lands, individual or tribal, exceeding 5 per centum of the total area of all the lands in the State in which the population, as shown by the latest Federal census, does not exceed ten per square mile, the Secretary of Agriculture, upon request from the State highway department of such State, may increase the share payable by the United States to any percentage up to and including the whole cost on projects on the primary system of Federal-aid highways and on projects on the secondary when the latter is a continuation of a route on the primary system or directly connects with a route on the primary system of an adjoining State, but such State shall allocate and expend during the same fiscal year upon other project or projects on the Federal-aid system, under the direction of the Secretary of Agriculture, the amount it would have been required to expend upon such project.³⁸

³⁵ 43 Stat. 899.

³⁶ 44 Stat. 683.

³⁷ Congressional Record, 69 Cong., 1 sess., 10766.

³⁸ 45 Stat. 683.

This act also authorized the expenditures of the federal fund in co-operation with the states on the planting and maintaining of shade trees along the federal-aid roads. It also extended the act to include the construction of roads, excluding bridges, through cities having a population exceeding 2,500 where the houses average more than 200 feet apart.³⁹

This measure, like most of the measures since 1922, passed Congress with scarcely any opposition and was approved by the President on May 21, 1928. By July 1, 1929, however, no state had made application for increased payments provided under this amendment.⁴⁰

The other measure had the distinction of being the first federal-aid road measure passed by Congress to be vetoed by the President. The measure authorized appropriations of \$3,500,000 for each of the fiscal years 1929, 1930, and 1931. These appropriations were to be expended for the construction and maintenance of main roads through "unappropriated or unreserved public lands, nontaxable Indian lands, or other Federal reservations: by the Bureau of Public Roads if on Federal Reservations and by the respective state highway departments, under agreement with the Secretary of Agriculture, if on any other part of Federal-aid highway system or on the United States numbered system of highways." These appropriations were to be in addition to any other sums appropriated or authorized for roads and were to be allotted to the states having more than five per cent of their area in such lands. No contribution was to be required from the states for this program.⁴¹ The bill was reported to the Senate without amendment and on

³⁹ Ibid.

⁴⁰ Report of the Chief of the Bureau of Public Roads, 1929, 12.

⁴¹ Congressional Record, 70 Cong., 1 sess., 7072.

April 24 passed the Senate without opposition.⁴²

The House substituted a bill almost identical to the Senate measure and considered it as the Senate bill with an amendment. The House measure limited the expenditure of the appropriation to the construction of main roads through such lands. The roads were to be built by the Bureau of Public Roads in all such cases.⁴³ The measure passed the House without opposition May 5 and a few days later the Senate accepted the House amendment.⁴⁴

President Coolidge sent the bill back to Congress on May 18 with the following veto message:

The bill would provide for the entire construction from Federal funds of main roads through unappropriated or unreserved public lands and nontaxable Indian lands. Such expenditures could not be justified on the basis of protection or development of Federal resources and would constitute a radical departure from the established policy of Federal aid on a cooperative basis in road construction.

Having in mind the increasing ability of the States to finance road construction due to the general adoption of the gasoline tax and the increase in revenue from this source which would accrue to the States from roads constructed through public and Indian lands therein, I see no reason why the states should be relieved from their contribution toward the construction of these roads as required by existing laws. I am constrained therefore to return this bill without my approval.⁴⁵

The Senate passed the bill over the President's veto by a vote of 54 to 22, but the House sustained the veto by a vote of 161 yeas to 182 nays.⁴⁶

Congress passed during that same session a bill authorizing approp-

⁴² Ibid.

⁴³ Ibid., 7926.

⁴⁴ Ibid., 7960.

⁴⁵ "The Veto Message of President Coolidge on S 3674," Senate Document 111, 70 Cong., 1 sess.

⁴⁶ Congressional Record, 70 Cong., 1 sess., 9673, 9992.

riations of \$75,000,000 for each of the fiscal years 1930 and 1931 to carry out the federal-aid highway program during those years.⁴⁷ This measure was the last federal-aid road bill passed by Congress until after the beginning of the depression.

The federal highway program from the passage of the Federal Highway Act of 1921 to January 1, 1930, was one of state and federal cooperation in the construction of a system of highways. The system in each state was selected by the highway department of that state and divided into two classes, interstate and intercounty. The roads in the state system were made to connect or correlate with the system of adjoining states so as to form a continuous system of interstate highways. Projects for construction were selected by the state subject to the approval of the Secretary of Agriculture. The share of the federal government on any project was limited to 50 per cent of the cost except in states containing unappropriated public or Indian lands the share could be increased accordingly to a sum equal to one-half of the percentage that such lands bore to the total area of the state. In 1925, four east-west transcontinental routes were selected from the primary or interstate highways.

⁴⁷ 45 Stat. 750.

CHAPTER VI

THE ROAD PROGRAM IN THE NATIONAL FORESTS

The Federal Aid Road Act of 1916 established a road program in the national forests. It provided for an appropriation of \$10,000,000 to be expended under the supervision of the Secretary of Agriculture, upon request from the proper state or territory authorities, for the "survey, construction, and maintenance of roads or trails within or only partly within the national forest when necessary for the use and development of resources upon which communities within and adjacent to the national forest are dependent." The appropriation was to be made available at the rate of \$1,000,000 annually beginning with the fiscal year ending June 30, 1917 and was to remain available until expended. The state, territory, or county was to enter into an agreement with the Secretary of Agriculture for such construction or maintenance upon a "basis equitable to both the State, Territory, or county and the United States." The aggregate expenditures in any state or territory was not to exceed ten per cent of the value of the timber and forage resources which were available for income upon the forest lands within the respective county or counties wherein the roads or trails were constructed.¹

As soon as an agreement was executed the Secretary of Agriculture was to notify the Secretary of Treasury of the amount to be expended by the United States. Each year the Secretary of Treasury was to apply from any and all revenues from such forest ten per cent thereof to reimburse the United States for the expenditures made under such agreement until the whole amount advanced by the federal government had been reimbursed.²

¹ 39 Stat. 355.

² 39 Stat. 355.

Under the rules and regulations of the Secretary of Agriculture for carrying out the program the Office of Public Roads and Rural Engineering was authorized to withhold 10 per cent of the appropriation each year in order that it might have a reserve to be used in case of necessity to increase the apportionment to a state and for the expense of the Office. The remainder of the fund was to be apportioned to the states having national forest lands one-half in the ratio that the national forest lands of the state bore to the total area of the state and one-half in the ratio that the value of the timber and forage resources of the national forest of each state bore to the resources of the national forest of all the states.³

The proper officials of the states or territories were to make application for aid through the district office of the Forest Service. The application was to contain a statement showing the location, cost, length, and a proposal for cooperation in detail. The Forest Service was to prepare the plans for projects with a map showing a proposed system it considered necessary in the forest area. Following the plans came the execution of the cooperative agreement.⁴

The Post Office Appropriation Act of 1919 provided for an appropriation of \$3,000,000 for each of the fiscal years 1919, 1920, and 1921, for the national forest road program. It also amended the road program in the national forests so that the Secretary of Agriculture could construct such roads and trails necessary for the administration, protection, and improvement of such forests, without the cooperation of the respective states.⁵

³ "Rules and Regulations of the Secretary of Agriculture for Carrying Section 8 of the Federal Aid Road Act of 1916," Senate Document 548, 65 Cong., 3 sess.

⁴ Ibid.

⁵ 40 Stat. 1200.

The Federal Highway Act of 1921 again amended the road program in the national forests. It provided that the appropriations for the forest road program be divided into two funds. Fifty per cent but not to exceed \$3,000,000 for any one fiscal year, was to be expended, under the direct supervision of the Secretary of Agriculture, in the "survey, construction, reconstruction, and maintenance of roads and trails of primary importance for the protection, administration, and utilization of the national forest, or when necessary, for the use and development of the resources upon which the communities within or adjacent to the national forests are dependent." The balance of the appropriation was to be expended for the survey, construction, reconstruction, and maintenance of forest roads of primary importance to the states or communities within or adjacent to the national forests. The first sum was to be apportioned to the states, Alaska, and Porto Rico according to the needs of the various national forests and the second according to the area and value of the land owned by the Government. The cooperation of the states or territories was not required by this act.⁶

Projects to be constructed from the second fund were selected so as to coincide or correlate with the federal-aid highway system. The policy followed by the Bureau of Public Roads was to use this fund to complete and make continuous the important routes of the states through the forest areas.⁷

Under the rules and regulations issued to carry out the program the state highway departments were to submit, through the proper district engineer, a map of the state showing the forest areas within the state, the

⁶ 42 Stat. 212.

⁷ "Report of the Chief of the Bureau of Public Roads," Annual Reports of the Department of Agriculture, 1922, 485.

federal-aid highway system, and the highways recommended by the highway department for construction and national forest highways. The district engineer was to attach his recommendations to a copy of the map and forward it to the district forester. The district forester was to then prepare another map showing the existing roads in and adjacent to the forest areas, indicating the roads proposed for improvement and indicating which of them, in his judgment, should be improved as parts of the forest highway system and forest-development system. This was for the purpose of separating the projects for the two funds provided by the federal act.⁸

Upon the basis of the three recommendations a joint recommendation was prepared by a conference between the representatives of the state highway department, the district engineer of the Bureau of Public Roads, and the district forester. The joint recommendation, which was in the form of a map, was submitted to the Secretary of Agriculture for approval by the Chief of the Bureau of Public Roads. Projects agreements, in cases of cooperation, were to be executed by the same procedure as previously used.⁹

The preparation of these systems extended over a period of several years with the last one being approved in 1925. During that period the program was carried on by agreements between the Chief Forester and the Chief of the Bureau of Public Roads. All projects selected under this arrangement were expected to be a part of the general combined system of federal-aid highways.¹⁰

The systems finally selected for the national forests were divided into three classes. The roads that were sections or extensions of the federal-

⁸ "Report of the Chief of the Bureau of Public Roads," op. cit., 485.

⁹ Ibid.

¹⁰ Report of the Chief of the Bureau of Public Roads, 1925, 27.

aid systems wholly within the national forest were designated as class 1. Roads that were extensions of the federal system partly within or adjacent to and serving the national forest were the second class. The roads of primary importance to the communities within the national forest made up the third class.¹¹

The Federal Highway Act of 1921 had provided for an appropriation of \$5,000,000 for the fiscal year ending June 30, 1922 and \$10,000,000 for the year ending June 30, 1923. The Post Office Appropriation Act of 1922 authorized appropriations of \$6,500,000 for each of the fiscal years 1924 and 1925. By subsequent authorizations the amount available for each of the succeeding years up to and including the fiscal year ending June 30, 1930 was \$7,500,000.¹²

¹¹ Report of the Chief of the Bureau of Public Roads, 1925, 27.

¹² 42 Stat. 212, 42 Stat. 660, 43 Stat. 889, 44 Stat. 760, and 45 Stat. 683.

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The Reports of the Secretary of Agriculture and the Reports of the Chief of the Bureau of Public Roads were the sources most frequently used in showing the policy of the Department of Agriculture in administering the federal-aid road program. These include the Reports of the Secretary of Agriculture to Congress and the "Reports of the Secretary" in the Yearbook of the Department of Agriculture as well as the Annual Reports of the Department of Agriculture. Valuable information regarding the policy was also found in the Rules and Regulations of the Secretary of Agriculture and the specifications issued by the Department of Agriculture. The American City and the Engineering News-Record were also helpful in preparing the chapter on the road policy of the war period.

Since much of the policy was written into the laws that established and amended the program I have made considerable use of the Statutes at Large of the United States.

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