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THE BUILDING OF MINNESOTA'S STATE HIGHWAYS

By

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It is an important occasion when representatives from all parts of the State of Minnesota gather to review the progress made in the building of a system of highways undertaken by the State itself. It is an occasion to awaken State pride when so many of its citizens find satisfaction, not so much in the statistical fact or spoken word but in the accomplishment which they in common possess. It is an occasion which expresses in no uncertain way the fine type of the people in this north country when they desire to show, through such a gathering, their appreciation and commendation of those who have been in charge of, and responsible for, the highway program.

It is indeed a pleasure to be present at this time. I welcome the opportunity to add to the other expressions, something of what I have learned through the years of intimate association with the highway building of the State and to congratulate Minnesota, her people and her highway department upon a record that is most favorably known in highway circles, not only nationally but internationally.

Transportation has always been intimately linked with the development of this land for its homes, its farms, and its industries. Just now much uncertainty exists. Our whole nation is going through a long, difficult period. Transportation conflicts between the various forms available are given wide publicity. Fortunately these conflicts do not enter this discussion. The use of our highways by public carriers to which objection is raised by some of the railroads is such a small part of the total traffic that it constitutes only a by-product and does not seriously concern either the desirability of, or necessity for, the extensive building of adequate highways in every State. In Minnesota even the use of highways by public passenger carriers has been to a

Large extent developed through railroad initiative and is closely associated with that interest. Adjustments that are equitable will be worked out for public carrier highway traffic, but the fact remains that any competitive features of highway transport are as yet a very small part of the utility to the public of adequate highway systems except insofar as they insure better service by all forms of transportation and lower the rates for the short hauls.

When I speak of uncertainties, I am thinking rather in terms of taxation and the present reduced ability of everyone to support public expenditures for all purposes on the scale of the immediate past. Even under these present adverse conditions the State highway program of Minnesota occupies an enviable status which holds secure under the most searching analysis. The building of highways for a State may not be placed in the class of doubtful necessity any more than may homes or schools, and while we are rejoicing over the work which has been completed, it is essential that we hold steadily on our course now.

It will be helpful perhaps to look back over the path we have come to determine if the difficulties which we now face call for more courage, a more indomitable spirit, or impose greater hardships than were faced continuously by those pioneers who made this State possible. Troubles now, even though severe, would hardly seem comparable with the Sioux Indian massacres of 1862. Since then only seventy years have passed. The heart-breaking disaster of that time seems remote indeed, yet the real spirit of the State remains constant. If I sense correctly this spirit of Minnesota, the underlying character trait of steadfast purpose to build permanently upon the land traces back beyond our own shores even to the north countries, where from so little of natural vantage the forefathers of those of Scandinavian blood brought into being through the centuries, men and women and institutions the equal of the best to be found anywhere in the world. This same steadfast support which has made possible the progress in road development which we record here today, if continued will insure that adequate highways will reach further and further to serve the most remote farms. True, this will take time, but impatience or reactionary methods will only delay objectives toward which we have been striving for more than a century.

Transportation has always been of tremendous import to this north country. The romance of the fur traders who pushed into the virgin wilderness in pursuit of quick riches is a thread in the historical fabric. Their transportation was largely over the water trails.

LaSalle's and Hennepin's explorations were about 1680 and it was not until the close of the French and Indian war in 1763 that France ceded her claims to the country east of the Mississippi and west of the Alleghenies to England. Between these a period of 83 years had elapsed. Transportation yet depended upon the waterways.

England promptly considered her responsibility to protect colonists who might come west of the eastern mountains and by royal proclamation in the same year forbade the colonists of the Atlantic Seaboard to cross the watershed of the Allegheny Mountains for the purpose of settling upon the land. This proclamation adopted 169 years ago, undoubtedly as a temporary expedient, prohibited settlement upon the lands now the eastern half of the Mississippi Valley. It was decided by Parliament, according to the historian James Truslow Adams, that it would not be possible for the mother country to establish and maintain outposts along a frontier of 1200 miles consisting largely of the length of the Mississippi River which then divided the English and Spanish possessions, or to offer to the settler security against Indian attack or other form of frontier violence.

For this great central valley of what has now become the United States, held on one side of the Mississippi by England and on the other by Spain, the only available method of transportation to the outside world for the raw products of the new country, or entry for the exports of the old, was over this water course.

The Port of New Orleans controlled the river at its mouth and this port was held by Spain. In 1800 Spain transferred her possessions to France embraced in the territory of Louisiana and the Port of New Orleans. Two years later the French Agent at New Orleans closed that port to American commerce.

In the meantime the Revolutionary War had been fought, a new nation, the United States of America, established, and in

November, 1794, under the Jay Treaty, England agreed to relinquish claim to the western country which was still occupied by the British army. A period of only 31 years had elapsed since settlers had been forbidden to settle in the land between the Mississippi and the Alleghenies because of the inability of one of the most powerful nations to offer protection, but in that time a flood of humanity had poured over the mountains, and together with those already established largely along the rivers, were developing a substantial commerce. When the order from France closed the Port of New Orleans this act bottled up this new American commerce by closing the only line of transportation that could be used as an outlet to world ports for the Mississippi Valley, and prompted the action of President Jefferson which had the most profound bearing upon the destiny not only of the whole of the Mississippi Valley but upon the United States as a nation and particularly upon this State.

President Jefferson, who, above all else did not want war with France, directed our representative in Paris, Robert Livingston, to purchase the Port of New Orleans. These negotiations ended in the purchase of the whole of the territory of Louisiana for \$15,000,000. Thus the "Father of Waters" as an open door to the world and the great valley itself, became a part of this new nation spread out over limitless miles from the eastern coast to the western mountains, but with all of the problems and tremendous obstacles of the pioneer country at a time when our modern methods of transportation were not yet available.

One of the acts of the Continental Congress was the Northwest Ordinance of 1787 which provided for the surveys of the land west of the Alleghenies to the Mississippi into townships six miles square, these to be divided into sections of 640 acres each. This method of land division was carried into the newly acquired territory west of the river after the purchase of 1803, and so was established the township as a unit of government.

As the frontiers of settlement were pushed further and further west new States were formed in the Mississippi River valley each to be received into the union as a sovereign State.

Transportation over the Mississippi River, the building of the Erie Canal, the building of the Cumberland road, and finally the extension of the railroads into this new territory provided for rapid emigration from the east and from the older countries,

attracted by the natural resources and virgin soil of this great valley.

First the fur trade, then the timber, then the wheat and iron ore have contributed to the building of the great cities and industries of this State, and to the commerce of the nation. But these have taken from the natural resources of the State and to a degree exhausted their early richness. As a partial return to the land there has come the establishment of a civilization that is typical of the best of our whole nation.

The township and county governments were responsible for road development, and it was not until 1906 that the State took upon itself any responsibility toward the building of public roads. Incidents which at the moment are seen in close perspective do not take on significance until later years. We need not speculate now what might have become of what is now the State of Minnesota had the Mississippi River remained the dividing line between the new nation and the possessions of France, but it is certain that in such a contingency this great State could not have existed as today.

In like manner, had it not been for the assumption by the State of a certain responsibility in 1906 toward road improvement, it is certain that we would not be here tonight to mark by this meeting a great accomplishment in road building.

Road building has never outstripped the vehicle which operated over it. Always road building has lagged behind the vehicle. Perhaps with land transportation confined to the horse-drawn vehicle, the control of road building by townships and counties would have sufficed, but with the coming of the automobile township and county lines were broken down, and the States for the first time were united into States in the sense of neighborliness, knowledge and interest on the part of one section for all the others.

Up to the time that road building in the States of the Mississippi Valley and further west was undertaken by the States themselves, the States as such had engaged in no major constructive effort. The local communities had directed and financed all of those improvements of the land which have been undertaken as public enterprises.

In 1906 the State of Minnesota established a non-salaried Commission. The first members were Mr. Gustaf Scholle of St. Paul, Mr. J. B. Galarnoeult of Aitkin, and Mr. Charles Halverson of Dawson. The Secretary and Chief Engineer was Mr. George W. Cooley, who deserves to go down in the annals of the State as one of the pioneer road builders who built a spirit of friendliness as well as worthwhile engineering behind the efforts of the first Commission.

Mr. Charles M. Babcock became a member of the Commission in 1909 and is now probably the dean of highway commissioners in the United States.

The three-member Commission was changed in 1917 to a single Commissioner and Mr. Babcock was appointed to this office and thus has served as the responsible head of the State highway work in Minnesota for fifteen consecutive years, a decade and a half.

In 1906 a survey by the Commission showed about 6,000 miles of roads which had been surfaced almost altogether with light gravel of a type that could not be ranked as improved roadways according to modern standards. In 1920, 14 years later, 15,000 miles were surfaced almost entirely with gravel of somewhat higher standards than the earlier roads but even yet not up to the present standards. Other than gravel surfaces there were only 468 miles, made up of 180 miles of macadam, 13 miles of bituminous macadam, and 275 miles of pavement.

The significance of policies adopted by a State or nation may not appear until years later. Now, thirteen years after he presented the plan for a trunk line system, we can partially evaluate the truly remarkable conception which he held in 1919 as to the major highways of the future.

The plan, as adopted by the legislature, provided for:

1. The selection of 70 routes, connecting all county seats and other principal towns, to constitute the State system, the State to have sole responsibility for improvement and maintenance.
2. Taxation of motor vehicles "on a more onerous basis" than other property, the tax to go into the trunk highway fund and be in lieu of all other taxes.

3. Authorization to the legislature to issue bonds not exceeding \$10,000,000 in any year, and not more than \$75,000,000 to be outstanding at any one time. (The first issue was 1930 - \$9,000,000 followed by authorization for \$10,000,000 in each of the years 1931 and 1932.)

4. Addition to the system when 75 per cent of the original mileage had been constructed and permanently improved. (No additions were made until 1929, when one route was added to connect the county seat of a new county with that of an adjoining county.)

The plan was adopted and legislation putting it into effect was passed in 1921.

Minnesota had been a State for 61 years when this trunk line highway system plan was adopted by the legislature, and the State committed itself to the building of a definite system of highways.

While the State was moving within toward a more adequate provision for highway improvement, public sentiment was crystallizing into definite support for national legislation along the same lines.

Over a long period there had been agitation for the Federal Government to assist the States in road improvement, and so insistent had the demand become that in 1915 a majority of the State highway departments united upon the plan and Congress passed the first Federal Aid Highway Act. Operations were started, and in 1921 the legislation was rewritten around the conception of a definite system of interstate and intercounty roads. This Federal legislation fitted in exactly with the legislation just passed in the State of Minnesota so that the trunk line system originally designated in 1921, which included about 7,000 miles, was taken practically intact as the Federal aid highway system, and upon this system the State and the Federal Government have concentrated their cooperative efforts. Up to the present time Federal-aid funds have been used upon nearly 4,000 miles of the trunk line system.

One of the characteristics of the Minnesota Highway Department from the first has been prompt action. Within sixty

days after the signing of the law establishing the system, 7,000 miles of routes had been selected and a maintenance patrolman placed on every section. The improvement of this trunk line system began at once under a definite plan that has been consistently followed since. This plan, which has necessarily been resorted to, we have now come to know as stage construction; that is, roads are first graded, the bridges and other drainage structures are built, and a surfacing of some cheap material such as gravel is generally provided, to make usable at the earliest possible moment as large a mileage of roads as possible.

The increase in the number of motor vehicles had been so astoundingly large that some of the roads were already carrying too much traffic for the gravel type, and for a limited mileage paving was built.

Since 1921 it is convenient to divide the operations of the highway department roughly into periods characterized by their major operations.

1921-1926 may be considered as the period of preliminary grading and graveling; 1927-1930 as the period of bituminous treatments and paving, and the two years 1931 and 1932 as largely paving, plus a continuance of the bituminous treatments.

The following indicates in figures the classified mileage of the State trunk line system at the beginning and end of these periods.

Classified Mileage of State Trunk Line System

<u>Year</u>	<u>Unimproved</u>	<u>Graded</u>	<u>Graveled</u>	<u>Bituminous Treated</u>	<u>Paved</u>
1921	1,550	2,589	2,776		183
1926	70	510	5,500	20	833
1930		292	4,014	1,151	1,434
1932			1,753	2,620	2,493

The trunk line system, thus improved, connects directly all but two rural villages of more than 1,000 population. There are

three or four such villages not on the system, but they are suburbs of cities directly connected by the system.

During these three periods the expenditures for construction have been approximately as follows:

1921-26	6 years	\$40,000,000
1927-30	4 years	46,000,000
1931-32	2 years	48,000,000

During the 12-year period a total capital investment of approximately \$134,000,000 has been made.

In addition to the current income, during the period 1919-1920 while the trunk highway plan was pending, counties were authorized to issue road bonds and bonds were issued to the extent of \$34,000,000 and assumed by the State. No State bonds were issued until 1930 when there was an issue of \$9,000,000, followed by issues of \$10,000,000 each in 1931 and 1932. All of the principal and interest on the bonds issued by either the counties or the State are being paid from the motor vehicle receipts. The earnings of the public roads themselves, plus Federal aid, are the funds which are being used exclusively for this purpose.

It should be accented here that the trunk line system as it is being financed by Minnesota does not receive taxes levied upon the property of the State, either private or corporation. The complaint that has been frequently made that the railroads are contributing taxes to build the highways, cannot be charged against the trunk line system, which carries the principal commercial traffic of the State. It is also a fact that commercial vehicles pay very high special taxes or license fees in addition to the taxes paid in common with the privately owned motor vehicles.

A number of the States are diverting receipts from the gas tax and from the motor vehicle license fees to other than road improvement purposes. It is the process of killing the goose that lays the golden egg. States which through this diversion have been forced to curtail materially their road improvement program and to neglect the proper maintenance of roads already built are in a remarkably short time showing a decrease in revenues from gas taxes to a greater extent than can be accounted for by the generally decreased use of the highways at the moment. States that have lifted their gas taxes above the average are also showing a greater decrease

than should normally be expected. These are special taxes. They cannot be diverted to other purposes and still produce the calculated income. It cannot be too often reiterated that by far the major part of the income from the gas tax is a purely voluntary imposition by the individual upon himself. He can cut down his tax by the simple expedient of not using his car. Further, the exemptions which have been adopted by many States for tractor use and other purposes are being so seriously abused that the income for road purposes of many of the agricultural States is being curtailed to the point where the maintenance of their roads will be endangered. It is possible for the roads to support a large program of building and maintenance but it is not possible for them to do this and in addition to support other activities, however worthy, such as schools, charities or their own free use through exempted gasoline.

The total income for the State trunk line improvements from 1921 to 1932 inclusive is classified by sources as follows:

<u>Source of Income</u>	<u>Per Cent of total income</u>	<u>Per Cent of total revenue</u>
Motor vehicle license taxes	49.4)	56.7)
) 69.7) 80.1
Gasoline taxes	20.3)	23.4)
Federal aid		
Regular	12.2)	14.0)
) 14.7) 16.9
Emergency	2.5)	2.9)
Miscellaneous	2.6	3.0
State bonds	<u>13.0</u>	<u> </u>
	100.0	100.0

The users of the roads have contributed 80.1 per cent of the revenue, the remainder 16.9 per cent coming from Federal-aid funds.

The expenditures for the State trunk highway system from 1921 to 1932 are classified by purpose as follows:

<u>Purpose of Expenditure</u>	<u>Per Cent of Total</u>
Construction and right of way	60.7
Maintenance	21.1
Principal and Interest on State and County Bonds	17.4
Administration and Miscellaneous	0.8
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Total	100.0

Thus in a factual way is shown the development of the State road system which has grown out of the faith and authority which have been reposed by the public of this State in the State Highway Department and the devoted and vigorous service which has been returned by the Department.

Just what are the remarkable features of the accomplishments of the Minnesota Highway Department? From the record they are not only clear but indisputable. There are only a very few State highway programs that can compare favorably, and certainly none can surpass that of Minnesota for logical sequence, economy and technical soundness. I select the major principles of the administrative scheme as follows:

1. The selection of and adherence to the trunk line plan.
2. The adoption of the stage or progressive types of construction which rapidly extended the usable mileage and increased the revenues from earnings.
3. The efficiency of the maintenance, with credit for pioneer development of snow removal.
4. The competence and high production of the highway organization itself.

5. The sound and successful scheme of financing including the bond issues.
6. The timeliness of the paving program to provide employment when most needed and to secure paved roads at bargain prices. I would roughly estimate a saving of twenty-five per cent.

The adoption of the plan for a State trunk system and the method of financing used left the county and local road funds intact and the counties have thus been able to make considerable progress in the improvement of their roads tributary to the State system.

The State legislation and also the Federal-aid legislation provide that when a major portion of the system has been improved to adequate standards, additional roads may be added. This provides a continuous system of improvement extending from the more important to the lesser important roads as fast as the finances available from year to year will permit.

The progress has been so splendid that I doubt if the people of the State generally appreciate how extremely fortunate they have been in the personnel of the Department in charge of this work. If there is one failing which exists among the people of the United States, it is their great enthusiasm to undertake works of gigantic size, and after a period had elapsed, and before the plan as a whole could possibly be brought into actuality, to divert energies and finances toward some other new idea. On the other hand, probably many times the abandonment of plans comes about through the loss of interest or the slow accomplishments of those who are placed in charge. Unnecessary delays or lack of responsiveness have never been present in the Minnesota Highway Department. This Department has been known for some years in the Bureau as one among the two or three State highway departments which first claim every cent of Federal aid made available for the year, and this record has been kept up constantly.

The Minnesota Highway Department is known for the excellence of its engineering and administrative practices. In the Mississippi Valley Association of State Highway Departments and the American Association of State Highway Officials Mr. Babcock as Commissioner and his Associates have secured through their technical competence

and through their actual accomplishments the respect and recognition of the highway engineering profession of the whole of the United States.

In 1924 a large delegation of engineers and others interested in highways of all the nations of this Continent visited Minnesota. The State was one of those selected for the tour because of the desire of these visitors to see roads of the pioneer type being built through a vast agricultural domain to give service to the people scattered throughout such a large area.

One group of the delegates to the Sixth International Road Congress in 1930, which was made up of representatives of 64 of the countries of the world, made an extensive trip through Minnesota for the purpose of seeing the roads and the methods in use by the Commission for the construction and maintenance of highways to serve both the agricultural and industrial needs of the State.

Commissioner Babcock was named as a delegate from the United States to the Pan American Road Congress in the Argentine at Buenos Aires in 1925. He again was invited to become a member of a delegation from this country to the Pan American Road Congress held in Brazil at Rio de Janeiro in 1930. Such was his feeling of responsibility in the carrying out of the large paving program that he declined to leave the State on this expedition.

It may thus be fairly said that the influence of the highway work and of her highway department in Minnesota has not only extended into the sister States of this Republic but into many of the other countries of the world.

Commissioner Babcock's outstanding accomplishment is the highway organization he has brought together and welded into a highly efficient human machine. Such an organization cannot be brought together rapidly. When a man placed in a position of responsibility is able to show for his efforts such a group of competent individuals working together through the years in the friendly and effective cooperation that has characterized the Minnesota Highway Department, that man has at the same time uncovered his own great capacity for his chosen work and his equally great qualities of loyalty, friendliness and integrity of character. Such is my conception of your Commissioner Babcock.

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1931 this diversion was only about \$20,000,000, it is now that in 1932 it will be five times that amount or nearly \$100,000,000. Since the Federal Government deducts at least \$150,000,000 more from the new taxes on gasoline, oil, automobile sales, parts, accessories, tubes, it is clear that the automobile owner is now being taxed \$250,000,000 for other than road purposes. The gasoline tax was created as a road toll and as such met the approval of a majority of the motorists; for such a tax, if levied, is deemed equitable and fair. It is not fair, however, to divert these funds for other purposes or for "unemployment relief" if you do you are then taxing only a certain class; that is, automobile owners, to pay for things for which it was never intended they should be taxed. These funds should be left intact for the construction and maintenance of roads. By so doing the money is being accomplished for unemployment relief as in other ways. Approximately 90 per cent of the money so spent goes directly to labor as revealed by a recent report of the Federal Bureau of Public Roads.

The large increase of mileage on the State road systems as shown in the Executive Secretary's report is proof that the States are increasing their system of State roads by a well thought out plan. Where they are obliged to take over all the roads or turn them over to the counties and towns a large part of the road funds available by registration fees and the gasoline tax. The continual attempt to create new highways by name and in some States, purely for local advantage and to the detriment of the U. S. numbered system already established, is not condoned by this Association. Several requests for changes of

numbers in the U. S. numbered system and for the numbering of new routes have been referred to the Executive Committee. Since the primary object in creating the U. S. numbered system was to care for interstate travel with the least number of routes, it has been deemed advisable to hold to the present numbering system unless changes in new construction warrant a change of route numbers by a more direct alignment.

In closing, I wish to say that it has been a real pleasure for me to perform such duties as have fallen upon me as president of this Association. We are particularly fortunate in having a man in the office of the Executive Secretary whose whole heart and soul is bound up in his work and who, I find, is continually on the job, so that whoever may serve us as president cannot go wrong under his guidance. I appreciate the help he has been to me during the past year and take this opportunity to thank him for it. "More power to you Bill." I wish also to recognize at this time the assistance and cooperation given me by all officers of this Association and the members of the Executive and standing committees throughout the year and especially to those who gave so generously of their time in attending the hearings before Congress last winter.

While it would have been a great personal pleasure to me to have held the convention in New England this year, it was felt by the Executive Committee that Washington was the logical place to meet; therefore, I wish to express my personal thanks to Mr. MacDonald, his co-workers in the Bureau of Public Roads, and to our good friends in Virginia and Maryland for planning and arranging not only for our convention but also our part in this bicentennial program in honor of George Washington.

Address of Welcome

18th annual
AASHO meeting Nov. 15, 1932

By Thomas H. MacDonald, Chief, Bureau of Public Roads, Washington, D. C.



IT seems to me that in delivering, according to the program, an address of welcome to this Association, extending the welcome of the capital city, of your capital city, I must necessarily be indulged with considerable of what they call poetic license. I have no portfolio. I have no authority to extend to you the ordinary address of welcome with which the keys of the city are ordinarily delivered. It seems to me to be a somewhat incongruous position that I occupy, when after all of these years, the Bureau of Public Roads has the opportunity to meet with you in

and so is the surrounding country, and if you will examine the program as it has been prepared, you will find there is not much entertainment as such. There is the opportunity offered to this group that I think comprises the representatives of the best citizenship of the land, to return or to go perhaps for the first time to those places and to be present in the particular scenes that have been a part of the history of the country.

In these gatherings there is always a touch of sadness to me, because we have lost faces from amongst the group that were here in other meetings. We know that there is always a constant change and there is a touch of philosophy perhaps remaining to me when I think of the great French architect and engineer, L'Enfant, who after a splendid technical education in France came to this country, served in our Colonial armies as engineer and officer, and then established himself in a professional office in New York City and made the first plan for the capital city on the banks of the Potomac which was to be our Washington.

It is a remarkable thing, looking back to 1792, that a Frenchman, a French engineer should have had the conception of what this nation was to be, as expressed through the tangible or physical means of its capital city. His expression was that his plans were prepared on such a scale as to leave room for that aggrandizement and embellishment which the increase of the wealth of the nation will permit it to pursue at any period however remote.

If I could feel that the Bureau of Roads, that the State Highway Departments with the means within their command, with the authority which they possess and with the technical ability that is represented in the organizations could at this time so plan and produce the highways and the physical facilities of this nation that in another hundred years people would look back and give credit for the ability and the far-reaching foresight and ideals that we can now give this French engineer, L'Enfant. I would think it one of the finest tributes that could be paid.

This is the touch of philosophy of which I spoke. L'Enfant

quarters city, to be placed in a position of extending an address of welcome which is about as incongruous as the welcome of a partner who had been absent for a long time or whose principal place of business was in some other city. Washington, however, is a city that in itself is worth while and we are more than delighted that we now have the opportunity to have you here, not at the time when the new city shall be built, but while it is in the process of arising to a splendor and beauty of which I am sure everyone in the nation will be proud. Washington is a city that is most worth while in its traditions,

died as disillusioned—perhaps I should not say embittered, but certainly a man who failed utterly at the time to receive either remuneration or recognition of his accomplishment.

In 1909, it is true, we were far enough away—I believe Washington separated him from the conduct of the work because of an untoward disposition; as far as I know, there were no politics involved, it was apparent that L'Enfant wanted to carry things out and perhaps some politician didn't want him to carry them out right; in any event L'Enfant was separated from the conduct of the work, which in common parlance means he was fired—that Congress, the people of this country at least gave visible expression of their appreciation of what he had done and brought his body to Arlington Cemetery and erected a monument.

What you see of planning, of conception of this city as a capital of a nation now grown strong, wealthy in its own right, we can trace back to a man who through his life suffered all of the disillusion and perhaps even the bitterness that we sometimes see enacted again in the lives of those with whom we are familiar and who are accomplishing things that at sometime in the future will be recognized as great and in the public interest.

There is just one other thought that I wish to leave with you and that is a thank you, a very sincere thank you on the part of the Bureau of Roads and the national administration. It is a matter of great pride to me to be connected with an organization or a group of cooperative organizations that has the ability to do what has been done twice in the last two years by the Highway Departments acting in cooperation with the Bureau. I refer, of course, to the ability and rapidity with which the Federal appropriations for the relief or for offering employment have been made effective to accomplish their purpose. The first Federal appropriation in 1931 was administered in such a way that in the first three months roads at a total cost of \$170,000,000 were put into construction—\$170,000,000 and 7,800 miles.

I can see that as two lines of highways extending from coast to coast, from the Atlantic to the Pacific, a double line of highways on which men are given employment along every foot of the way. It seems to me a remarkable accomplishment.

We often hear the expression that you can do it once but you can't do it the second time. This is what the Highway Departments did do the second time. The first year we did have some accumulation plans perhaps; because if you recall, that appropria-

tion was made in the winter—December. This year, I am sure we shouldn't criticize openly any delay, but at least it would have been much easier for us if appropriations had been made at the season of the year when the work is usually done. We got started with the appropriation the first of August. During the months of August, September, and October, the Highway Departments have put into construction \$109,000,000 and 7,156 miles. In other words, two successive years, in three months' time, there have been started 7,000 miles of road or equal to a double line of highways extending from the Atlantic to the Pacific with men occupied not only all along the route of these two lines of roads, but with men producing materials, men transporting materials and all the other auxiliary employment that is offered.

I am very proud of the record which the State Highway Departments have made, very appreciative not only for the Bureau as I say, but for the national administration, of the spirit and the efficiency with which generally speaking all of the State Highway Departments have acted and certainly have cooperated with the Bureau and with the administration.

I assume that there are some of the restrictive provisions which some of you would like to have done away with. I only wish to call to your attention, not as an apology, in any sense, so far as the Bureau is concerned or the department is concerned, we did not make this law, neither did you nor we make the conditions which made necessary extending employment to as many people as possible. I have conceived this idea of using the money as a public trust to give employment to as many people as is possible, not regardless but within a reasonable range of cost and efficiency, and it is a public trust on your shoulders, the same as ours. It was given us as a responsibility. I am proud to say that generally speaking the spirit has been to accept that responsibility and to make the money go just as far as it can go in relieving all of the stress of unemployment that it can possibly relieve.

I thank you for coming to Washington to give us the opportunity to meet with you here, and I hope that you will have a pleasant, profitable session and that you will take back with you into all of the communities of the United States a little better feeling toward the capital city of the country. We feel we need that occasionally. Thank you so much.

Agriculture and Highways

By Hon. Arthur M. Hyde, Secretary of United States Department of Agriculture



FOR 16 years the State Highway Departments and the Department of Agriculture have been partners in the work of road building. That work has been coextensive with the farthest reaches of the United States.

It is a pleasure indeed to have this opportunity to meet with you, who have been in direct charge of this partnership enterprise, to voice the appreciation of the Department for the generous cooperative spirit which has universally marked our mutual contacts and which has made possible the success of the largest construction enterprise ever attempted between the governments of the individual

It will be accepted that improved highways have a broad relationship to agriculture. Agriculture needs improved roads and must have them if we are to provide for the every-day business of the farm throughout the year and, more important, if we are to provide facilities for the broad social activities essential to the development of the best and most permanent farm life. As a national policy no less a concept of farm life will provide the strength necessary to our national structure. I do not wish to occupy your time with recounting old arguments to support the value of improved roads to agriculture both as a business and as a mode of life. Rather, I wish to focus your attention as the responsible directors of highway work, upon problems of the moment in the light of conditions which differ greatly from those prevailing during the past decade and a half.

All great businesses, public and private, are under the stress of present conditions undergoing a most searching and critical scrutiny. It is fitting that you, the directors of the major road building enterprises of the nation, should critically examine your policies in the light of the new and divers conditions which affect both the improvement of highways and their use.

During the period since 1916 when the first Federal aid program was inaugurated, there have been three general operations all moving toward the same objectives. These are the Federal aid road program supported by the State and Federal treasury