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## HIGHWAY BONDS FOR IOWA

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The phases of this subject which I have been requested to discuss may, perhaps, be stated rather better in the form of questions. There are two:

Is it a sound policy from the combined viewpoint of the technique of road building and road financing for Iowa now to issue bonds for the improvement of her major highway system? And—

Is it advisable to finance the cost of adequate roadways for the state highway system by an issue of state bonds, rather than by a large number of issues of county bonds?

Is it a sound policy from the combined viewpoint of the technique of road building and road financing for Iowa now to issue bonds for the improvement of her major highway system?

Highway engineering and administration have made very rapid advances. The decision as to the types of road improvement that will prove adequate is not problematic in the degree of a few years since. When the conditions are known the answer is fixed within rather narrow limits. In Iowa, the soils, climate and materials available, present an adverse condition for the building of durable roads, and when taken in combination with the amount and character of the traffic, fix severe limitations upon the highway engineer. For the primary roads of the state no type of construction except one of the standard pavements, or very heavy macadam which is out of the question generally, would meet the conditions of durability, serviceability and reasonable annual maintenance cost. Because of the combination of adverse factors, I regard the corn belt as perhaps the most difficult section from the road builder's standpoint in which to build and maintain adequate highways.

Highway transport surveys in a number of states have settled beyond doubt the fact that every state possesses a certain mileage of highways which can be economically improved with nothing less than the most durable types of roadways which have yet been produced. These surveys have been made from Vermont to California and all have upheld the same principle. Once accepted, as it must be, that Iowa needs a large mileage of paved highways, then it is apparent that to supply this mileage as rapidly as economy of construction indicates, the state must spend more each year than the annual income for road purposes until this mileage is completed. The only answer is the issuance of bonds. This fact is apparent, but it may not be so apparent why the issuance of bonds now is timely. There are two very definite proofs. The first is that the state has completed, on its major highway system, to such a large extent, the fundamental work of grading, draining, and bridging, that no longer can any real progress be made in this direction. Neither do the cheaper types of sur-

facing such as gravel on the major traffic roads, mean progress. The second proof is that the majority of the counties in the state, tired of waiting for the state to proceed, have voted bonds for the next essential step, that is, paved road construction.

Just at this point it is important to call attention to what has been termed the "pay as you go" policy. This would be much more truthfully expressed if stated "pay and don't go." The impression thrown out by those who advocate the "pay as you go" policy is that the state is building an adequate system of roads from its current income. Nothing could be further from the truth. There is not a single state in the union that has any considerable mileage of paved roads which has paid for these roads on the "pay as you go" policy. Each one has made use of bonds to supply funds. Some states have dodged the issue of state bonds by depending upon the counties to issue bonds to be used by the state, but it is not fair or truthful to claim that any system of paved roads has been built on the "pay as you go" policy. The nearest approach that we have to such a situation now is in the states which were progressive enough to issue bonds years ago for the building of highways and which have found it possible since, particularly through the tremendous income now received from the automobile users, to maintain and to rebuild their earlier roads to higher standards. This condition prevails, however, only in those states where a very large percentage of the population live in cities and in towns and the mileage of state roads is relatively small. Such a condition is not true in any of the larger agricultural states. Thus, having developed her primary roads as far as possible without the issuance of bonds, having a combination of conditions such as soils, climate, traffic and available materials which make paved roads necessary to carry the traffic with economy and with a reasonable degree of year around satisfaction, and having the necessity for building these roads at a rate more rapidly than the current funds will supply, the only answer is a bond issue. When once the existing facts are faced squarely they seem to answer the questions with simplicity.

There is one other point that may be touched upon in connection with bond issues for roads. It is an old, old argument that bonds should not be issued for a period longer than the expected life of the roads. This is a false premise in every respect. Economically there is no relation between the life of the bonds and the improvement. The one most important condition is that the road shall render the service desired at the minimum cost. Any type of transportation may be rebuilt, added to, or developed beyond its earlier stage, with great profit, because transportation builds values and these values are a clear gain. A transportation service once it begins operating, earns not only its own maintenance but the funds with which to renew, remodel and rebuild, or at least earns the interest to support the loan, that is, to perpetuate itself, when it is efficiently administered. This is exactly what is happening on all the roads of all the states that have built roads which at the time were adequate for the transportation needs of the community.

Therefore, in answer to the first question, the inevitable conclusion is that not only is it a sound policy for Iowa to build roads with a bond issue because of all existing conditions, but it is now the only sound policy. Iowa will pay more if she does not have roads than if she does. There is an added valuable result that would accrue to the state. Iowa needs the value of the favorable notice that would be

attracted to the state in advertising the issuance of \$100,000,000 in bonds for building roads, in view of her reputation as a mud road state. This would be worth to the state a very large part of this sum if no other tangible results were effected. Improved highways have become an essential to too many people in the United States for them to be attracted to a state as a place to live or to place their investments where adequate improved roads are not provided.

Is it advisable to finance the cost of state highway systems of adequate types of improvement by an issue of state bonds or by a large number of issues of county bonds?

Experience in the United States has disclosed many defects in county bonds, and the utilization of their proceeds, but these defects are not involved in this question. The most important attribute of a state road system is continuity of highway routes. There ever has been and there is now no possibility of securing in any reasonable period of time a state system in Iowa having the desired continuity if resort must be had to county bond issues. The splendid improvements which have been made in a number of counties, while serving well local needs, do not attain their full measure of utility because they are unconnected with like improvements through the other counties. To obtain the greatest benefit from the investment already made in paved highways in Iowa, it is necessary to connect these improvements to the primary roads throughout the state.

Iowa has another duty. That is, to her neighboring states, to connect with the paved highways they have already built or have under way, that the interstate utility of these roads may be realized. Iowa has this obligation as a neighbor and a sister state.

Iowa has another obligation. Since 1916 the federal government has been co-operating with the state in the building of improved roads. This is the method adopted by the federal government to secure a national system of highways. At the present time it is possible to drive from the Atlantic seaboard well into Iowa before leaving a paved road. It is possible to do this on more than one route which comes into Iowa. To carry these important transcontinental routes with paved roadways across the state is important from the national viewpoint. That it will be possible to accomplish this within any reasonable time through county bond issues is remote. But the time has now come when these roads must be continuously improved.

Of all the supporting arguments for a state bond issue in preference to a multitude of county bond issues, the one which is of most importance to the people of the state is the absolute unsoundness of the use of county bond issues to build a state highway system. The use of county credit for building state roads cannot be justified upon any premise. The exhaustion of county credit and county revenues to carry a financial burden which ought to be borne by the state itself is perhaps the most serious situation with which any of the states are now confronted.

The federal highway system comprises not more than 7 per cent of the highway mileage in any state. The state road systems will extend considerably beyond this percentage. But even upon the basis of double or treble this percentage being included in the state system, there still remains more than 80 per cent of the total public road mileage under county or local jurisdiction. It is true that most of this mileage will act as feeder or tributary roads to the primary state system, and will not have to be im-