I am deeply appreciative of the privilege of attending this session of the Kentucky Highway Conference. I understand this is the second year the Conference has been held - since the old Road School Conference was discontinued in 1919. I am advised that it is the intention to make the Conference an annual affair and I am sure that there is pretty general agreement that much good can be derived from meetings of this character and that they should be continued.

Incidently, in thumbing through one of the AASHO reports recently, I noted that Kentucky is credited with having had the first State Highway Department. Senator Carl Hayden commented on this fact in a talk before the Association in 1944. He referred, of course, to the State Board of Internal Improvements established in 1836, which had jurisdiction over the construction of both public and privately constructed roads and was remarkably similar in its organization to the present state agencies. I believe Dwight Bray likewise referred to this in his paper last year. I believe the old Board was abolished in 1869 and no new agency created until 1914.

At the outset I should like to make it abundantly clear that in accepting the invitation to appear here and discuss this subject, I did not do so with any idea that I was an authority on the subject of Toll Roads and their place in the highway program. I doubt very much whether there are any. The subject as we know it today is too new. We have in a number of instances, as have our contemporaries in the Consulting field, had occasion to serve states, counties, and special Toll Authorities on projects of this character. That experience has, of course, been informative and enlightening, but, as a result of this experience, it has become increasingly clear that it is dangerous to generalize on the subject of toll facilities. Each project must be carefully analyzed from a traffic and cost basis before determining whether the toll principle should be used.

But this discussion, as I view it, is not to deal with any individual project, but on the contrary, it should explore the broader aspects of the use of the toll principle and its relationship to the general road construction problem which those, who have had occasion to study the problem at all, agree has reached an extremely critical stage.

Obviously, the problem is too big to be explored in all its phases in
a 20 or 30 minute period, but perhaps we can hit the high spots and in so doing get an idea of the general trend in the various parts of the country.

I would like, at this point, to make clear that I have had occasion from time to time to examine various reports and papers to which I will make reference as I go along — so you will understand that you will have the benefit of opinions and ideas of others who have studied or are studying the problem. Therefore, to borrow a time worn phrase from the motion picture industry — any similarity of statements or opinions of the writer appearing herein are to be considered merely coincidental. I hope to keep the discussion factual and to a large extent impersonal.

It has been my observation that in any discussion relating to Toll Facilities, whether it be Toll Roads, Toll Bridges, or Toll Tunnels — the Discussion never proceeds very far before someone pops the word “Free” into the discussion. Now I believe you will agree that the word “Free” is a very innocent looking little four letter word. It is also a very intriguing and fascinating four letter word, AND by the same token, it can be a very misleading four letter word.

We are accustomed to speaking of this as being a “free country” and yet we all know we didn’t get it for nothing. It was “bought and paid for” by the “blood, sweat and tears” and supreme sacrifice of our ancestors — and it might be well to add that if we expect to retain control of it we must prepare ourselves to continue to pay for these very great and special privileges we enjoy — for to use the vernacular, they don’t come “for free”.

And so, when we speak of “Toll Roads vs. Free Roads” let us not delude ourselves into thinking that one costs the motorist a toll and the other costs nothing. Both have to be paid for — largely from a tax or license or “toll” collected from the motorist — but paid for nevertheless.

Therefore, what we are really talking about when we refer to “Toll Roads vs. Free Roads” is simply different methods of collecting the tax or toll which makes up the construction funds from which the road or bridge project is built.

Now, if we can agree on that point — namely that it is a method of toll or tax collection, we are talking about, then it should not be too difficult to determine which method will most effectively cope with the tremendous nationwide problem with which we are confronted due to the fact that we have become a nation on wheels. Well, that decision was made years ago. We decided to use the motor fuel tax and license method and I question whether anyone would seriously consider any radical change in this established procedure which has
proven its worth since it was inaugurated nearly thirty-five years ago. It seems quite evident that the financing of the bulk of road construction will continue to be by the collection of licenses and motor fuel tax and that it will continue to be expended through the State Highway Departments working in cooperation with the Federal Bureau of Public Roads.

I don't recall that Mr. Taxpayer has even been polled on that question but if a poll were conducted, he doubtless would vote to continue the present system. Perhaps, that conclusion should be qualified to this extent— he will vote to continue the present system just as long as it proves adequate to get him what he wants in the way of highway facilities.

Transportation whether by air, water, rail or motor vehicle is one of the prime factors affecting our daily lives and particularly here in America—Highway Transportation has in the comparatively short space of 30 to 35 years become the medium which most profoundly and intimately affects the economic well being, convenience and happiness of the individual.

Mr. John Q. Public, whether he owns a jalopy, a “hot rod” or the so-called eight cylinder “family hearse” is bent on going places—and whether you like it or not, you are going to have to satisfy him. Likewise, you are going to have to satisfy the motor transport industry—faced as it is with mounting operating costs, a considerable percentage of which are due to “time losses” occasioned by traffic congestion.

Now, then, let's see if the present program is adequate—or whether it can be expected to prove adequate in the foreseeable future. I doubt whether anyone will contend that our highway facilities are adequate. Every community, from a few thousand inhabitants to the most populous metropolitan center, is clamoring for relief. As to relief in the foreseeable future, let's see what the Joint Committee Report to Congress says. This report, by the way, many of you no doubt helped prepare, for it was prepared in cooperation with the Bureau of Public Roads and the various State Highway Departments. This report says and I quote “The total cost of correcting present deficiencies on the highway roads and streets of the nation is estimated at $41,144,630,000” end quote. The report also calls attention to the fact that an additional 35% over and above current needs will be required to correct other deficiencies which will develop in the next ten years. Reducing these box car figures so as to get a comparison between the present program and that which the authorities say we require, we find that in 1950 the forecast for total highway construction is 1 billion, 800 million. Now
that is a lot of money and it is a tremendous construction program BUT it is totally inadequate when compared with the need which is set at 4 billion a year.

To bring the matter closer home, it should be remembered that survey of Kentucky highway needs completed two years ago indicated it would require over 367 million to modernize the primary system and over 167 million to bring the rural system up to acceptable standards.

Faced with this nationwide discrepancy between the revenues produced by the motor fuel tax and the minimum needs of the country — the question arises as to how this gap is to be closed.

I believe Commissioner Thos. H. MacDonald of the Bureau of Public Roads is credited with the statement that, quote “We are paying for an adequate system of highways whether we have them or not,” and convincing figures are presented to bear out this assertion. The point is made that if the highway system is not adequate the motorist spends an equivalent or greater amount in increased operating costs. A study by Wilfred Owen, Highway Economist for the Brookings Institute, shows in a convincing manner that too high a percentage of the motorist’s dollar goes into operation and not enough into highway construction.

It seems imperative, therefore, that we investigate carefully sources from which additional construction revenues might be derived.

I believe there is pretty general agreement that the public has lost interest in obligation bonds and special assessment bonds as a means of financing needed road improvements. The taxing limit has been reached in most communities with respect to general obligation bonds and the benefits to the abutting property owner on special assessment is open to serious doubt.

Increases in the motor fuel tax would seem to be the obvious solution and this method will doubtless be used to obtain some of the additional revenues required. However, the motoring public has shown an increasing apathetic attitude toward further increases in the motor fuel tax. Diversion of the motor fuel tax has contributed toward this feeling but also it appears the motorist has become “fed up” on the claim that the fuel tax is a “pay as you go system” and therefore, economically sound. He has after long experience come to regard it as a “pay before you go system”.

Others have no doubt pointed this out — but none more effectively than did Mr. Roy E. Jorgensen, Deputy commissioner and Chief Engineer of the Connecticut Highway Department at a meeting of the Association of Highway Officials of the North Atlantic States. He said,
in part, quote “the so-called ‘pay as you go’ but actually ‘pay before you go’ system is unrealistic in relation to much of our modern highway construction — the indirect relationship between payment of road-user taxes and the construction of a particular highway is not helpful. Contrasted to this is the direct relationship on toll projects between tolls and the facility.” end quote. In other words, the motorist is demanding that he be shown a closer relationship between what he PAYS and what he GETS.

That, gentlemen, seems to be a pretty accurate statement of the situation. Mr. John Q. Public is bent on going places in his old jalopy and is showing an increasing willingness to pay for the privilege, providing he can see a direct relationship between the toll he pays and the facility he uses.

Perhaps, that is not the way it should be — but certainly that is the way it is. Let's look at the record —

The following summary I have received through the courtesy of G. Donald Kennedy, V. P. of Portland Cement Association and Mr. A. A. Anderson, Mgr., Highway and Municipal Bureau.

13 states have legislation providing for the construction of Toll Roads. They are —

Colorado
Florida
Illinois
Maine
Maryland
New Hampshire
New Jersey
New York
North Carolina
Ohio
Oklahoma
Pennsylvania
West Virginia

Illinois was not included in the list furnished by Messrs. Kennedy and Anderson but I have a copy of the Act under which the Super Highway Commission was set up, the terms of which provide for Toll Highways and my firm was a member of the Consulting Group which prepared a state-wide survey to determine the feasibility of Toll Highways — both rural and urban.

It is expected that Toll Legislation will be brought before the state legislatures of Massachusetts and Virginia this year.
Even in the great “Free Range” State of Texas, plans for Toll Highways are rapidly being formulated. That is startling news. One would think it would be easier for “a camel to pass through the eye of a needle” than to get a Texan to pass through a toll gate — especially when one recalls the tenacity with which he has resisted having his cattle pass through a FREE GATE.

Toll Roads have been constructed and are now in operation in Pennsylvania, Connecticut, Maine, New Hampshire, New York and one will be in operation in Florida before the end of the year. So it appears that we must admit there is a strong Toll Wind blowing and it is blowing from the North, the East, the South and getting well started in the South-West.

Now before we leave the question of Toll facilities, I would like to point out that the Toll Revenue Bond principle has been used successfully in several instances without erecting a single toll gate and without collecting a single direct toll fare from the motorist. Tat may appear to be a strange paradox — but it is nevertheless true. It has been our privilege to have been consultants on 5 or 6 of these projects and the system apparently has worked very satisfactorily — and I might add with the full approval and cooperation of the State Road Department.

I refer to the system used in Florida where badly needed facilities have been constructed without requiring large initial outlay of construction funds from the Road Department’s annual budget. The procedure adopted is as follows:

A Special Road and Bridge District is formed pursuant to a Special Act of the Legislature with power to issue bonds up to a specified amount for the purpose of constructing the facility — and with the authority to charge a toll sufficient to liquidate the bonds. An election is necessary to ratify the bond issue, in which only property owners are permitted to vote. If passed, a “lease-purchase” agreement is entered into with the State Road Department and the bonds retired from gas tax funds. The method has proved to be a convenient expedient for getting the badly needed improvement under way without placing an undue burden on current revenues.

It has the added advantage of retaining control by the State Road Department which will assure that the project will be carefully integrated with the remainder of the State system — and it also retains an element of “local-option” which is desirable. In other words, if the Toll idea is not popular locally, the local property owners won’t initiate the action necessary to set up the Special Road and Bridge District.
The above procedure is obviously a convenient device for utilizing gas tax funds to liquidate a bond issue without resorting to a State bond issue which in some cases is prohibited by the State Constitutions.

The State of Mississippi in 1938 pledged motor fuel revenue in connection with a 60 million dollar program and I understand the method has been used elsewhere. Advocates of the method point out that it will produce the needed revenues on a time payment plan. Financial Houses originally were critical of the procedure claiming there was nothing to prevent a repeal of the gas tax by a subsequent Legislature. Such Action would leave the bonds without any visible means of support but that threat seems to have passed. The Gas Tax is now so firmly established that Financial Houses regard Bonds which are to be retired by the Motor Fuel Tax as exceptionally good risks. Mississippi has issued a total of 91 million in motor fuel tax bonds — 64 million are outstanding. Interest rates range from 1.25 to 3.75 — average 2.86.

Summarizing the foregoing, we find —

1. Within the limits of the funds available the present system of financing by collection of the motor fuel tax and by administration through the Bureau of Public Roads and the State Highway Department has done an outstanding job and will be retained for the bulk of road construction.

2. Conclusive evidence is at hand that the highway demands of the Nation have far exceeded the revenues which can be collected on present motor fuel tax base.

3. Growing congestion of traffic has created “traffic Barriers” and caused or contributed toward dissatisfaction on the part of the motorist which has or will make it “politically inexpedient” to increase the gas tax sufficiently to produce the needed facilities. Diversion and dispersion has accentuated this hostility.

4. The motorist is demanding procedures which will enable him to see a more direct relationship between his motor tax dollar and the facility he uses.

5. This will doubtless result in
   (a) Accelerating the present trend toward “Toll Facilities” to augment the present system of Highway.
   (b) The use of bond issues backed by motor fuel tax.

While objections can be found to either or both of the above procedures, they should not constitute cause for alarm — providing we are intelligent enough and resourceful enough to set up the safe guards which will be necessary to assure an efficient and carefully integrated system of highways.
I believe certain safe guards and controls relating to route selection will have to be set up, and will be set up, through the State Highway Department working in cooperation with the Federal Bureau of Public Roads.

Acknowledgements:

In assembling certain information which has been used in this paper— I have sought data from many sources and I want to express my gratitude to those who responded so generously.

In addition to Messrs. Kennedy and Anderson of the Portland Cement Assn., I received also certain data from M. Chas. Lovell.

Mr. J. M. Boyd, County Engineer, Palm Beach County, Florida, furnished certain details pertaining to the procedure used in Florida.

Mr. Farely Gannett of the firm, Gannett, Fleming, Cordry, and Carpenter, who are prominently identified with the Pennsylvania Turnpike, furnished information relating to the Eastern and Western Extensions.

Walter E. Jessup, Editor of Civil Engineering, was likewise helpful in obtaining data relative to the situation in New York, New Jersey and Pennsylvania.

My friend, Lawrence Waterbury, of the firm, Parsons, Brinckerhoff, Hall and MacDonald, who are likewise identified with the Pennsylvania and New Jersey Projects, responded generously.

Mr. G. Walton Thompson, Statistical Engr.—Economist, Highway Planning Division of the Mississippi State Highway Department, furnished interesting information on the motor fuel bond financing used by that State.