

Speaking directly to the subject of this paper, "Who Should Pay for the Highways?" we find only one answer—that is, those who benefit from the use thereof. This answer is practicable of application in that today we are able to determine, with a reasonable accuracy, the amount of benefit which does accrue to each of the beneficiaries, even to the extent of determining a proper charge which should be made against each class of automotive vehicle.

CO-OPERATION BETWEEN CITY, COUNTY, AND STATE ROAD DEPARTMENTS

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The wording of this subject has caused me to consider carefully exactly what is wanted. If it is to be a discussion on merely co-operation of ideas and technical assistance, the paper would naturally be very short because I would only have to recall to you the statement of Governor McNutt at the annual banquet of the Purdue Road School two years ago when he said, "County and city highway officials may feel free at any time to ask the counsel of the State Highway Department on any problems that they may have, and assistance will be given when it is asked." I could announce this same offer again today and let it stand without speaking further on the subject. However, I imagine that what was really meant was more than helpful co-operation, perhaps some physical co-operation.

I might report that in the three years I have been on the State Highway Commission, some counties, some cities, and quite a few towns or villages have availed themselves of assistance from the State Highway Commission in the way of specifications, testing, engineering reports, and opinions. For the testing, of course, we have had to charge the actual costs. Reports and opinions have been made in many cases and no charge presented. This we are willing to continue and the invitation is still open.

My views on this matter of "co-operation" must be accepted as only personal. I am connected with two organizations making studies along this line, but in neither case have we progressed to the point where we are willing to give out a report. Careful scrutiny of the data which we are now collecting may cause me to change my present opinions.

STATE IMPROVEMENT OF STREETS

Let's start with the city before the first federal grant of relief money in 1934. No city streets had ever been built in Indiana except by assessment against abutting property

—with the possible exception of some built under the Three-Mile Gravel Road Law and the County Unit Road Law, where such roads entered cities from connections with other township and county roads. These represented only a small part of our city streets.

The first federal grant clearly stipulated that the state highway commission could use this money to build streets on the federal-aid system in the cities, and much of this has been done in Indiana. The state highway commission is very proud of the street work completed in about eighty Indiana cities. There has been no legal moratorium against city streets by special assessment, but in the last five years I do not believe that I recall a single city contract paid for by special assessment. No doubt some streets were so built, but they have not come to my attention.

With our motor traffic of today consisting of nearly as much transient traffic as local traffic, few city property owners are willing to pay for new streets by special assessment, especially on through highway routes. They claim, and perhaps rightly, that they did not wear out the street which they formerly paid for, and therefore some other agency should renew it.

The highway commission proposed informally to the last legislature that part of the money which had been sent back to the counties, cities, and towns be turned over to the highway commission so that it could then take over, for construction and maintenance, the routes of state highways through cities. The legislature expressed, through its various committee heads, that it was in no mood to withdraw any of this money from the counties, cities, and towns. The state highway was in no position to take on additional responsibilities without increased revenue, and the matter was dropped.

It is true that those streets which do not have state highways routed over them are worn out to some extent by transient motor traffic; and no property owner will admit that his street was worn out merely by himself and his neighbors who pay the entire bill under the special assessment plan. He must admit, however, that the majority of traffic on this street is local. He uses the street to go to and from his business. He parks his car upon it and it is used in his interests by the coal man, the ice man, the milk man, etc. He still owes the greater portion toward its cost. Perhaps that street could be built on a co-operative basis of 75% charged to the abutting property and 25% paid for by gasoline tax and motor-vehicle tax, through the state highway commission.

Now let us consider the city street over which a state highway is routed. The property owner on this street uses it for his own travel, and it is used for the services which

haul goods to his home. But because the greater portion of that traffic is through, state-highway traffic, why would it not be fair for the abutting property owner in this case to pay 25% of the construction cost, and the state highway commission 75%? In either case, that portion which is not paid by the state should either be paid by the abutting property or by the municipality as a whole.

I could speak at length on the evils of special assessment, whereby the contractor depends for his pay on the collection of special assessment bonds against the individual property. As this law now operates, each property owner can waive his cash payment and enter into a long-term payment basis; and because the contractor anticipates no ready cash on completion of his job, he must bid into this work whatever discount he is offered in selling these bonds. Because of this evil, special assessment work in Indiana has always cost more than it should. If the municipality as a whole could finance this work with at least part of the cash on hand, city streets would cost much less than they have cost in the past.

COUNTY ROADS

Let us consider the county now. In the special session of 1932 the legislature saw fit to abolish the township as a unit of highway maintenance and transferred all township roads to the counties. The legislators also saw fit to take between seven and eight million dollars which had formerly gone to the state highway commission and send it back to the counties, cities, and towns for road maintenance and construction. At the same time they struck from the tax duplicate the gravel-road-repair levy. Today real estate pays nothing towards the construction or maintenance of roads in the counties except for road bond issues which have not expired. This same session of the legislature declared a moratorium on new county and township road bond issues, to be lifted in 1937. We will watch with great interest the developments at that time.

When the legislature turned over to the county all of the township roads, it added a great responsibility to the county officials and gave them in return various pieces of road machinery of questionable value. At this same time the legislature struck from the tax duplicate the gravel-road-repair levy and in lieu thereof gave the county a larger share of the gasoline tax and motor-vehicle license fees to maintain this increased system. Apparently, in no case is this adequate. There are a few counties in the state which receive more money from the state treasurer than they formerly received by taxation. There is another group of counties which receive just about the same amount of money, and then there is a group, including all of the larger counties, which receive

a lesser amount from the state gasoline and motor-vehicle tax than was formerly secured from the property levy. With this additional road mileage they now find themselves faced with a very serious problem of road maintenance and construction.

When the state highway commission presented its views to the legislature, it also offered to take into the state highway system some of the most heavily traveled county roads in return for receiving part of the money now going to counties, cities, and towns. This may be the final solution.

DIFFICULTIES AHEAD

There are about five states in which all the roads in the state have been absorbed into the state highway system. In talking to state highway officials from these various states, I find that they are in serious difficulties. The amount of revenue which they receive is not ample for the entire road system of the state, and they are not able to maintain these roads in a satisfactory manner. The Indiana State Highway Commission, in my opinion, would not be able to maintain the entire road system of Indiana satisfactorily with *all* the gas and motor-vehicle fees.

Let us anticipate what will happen in 1937 when the local road bond issue moratorium is lifted. Will there be an era of active county road building under the County Unit Road Law? I doubt it. Such improvement would have to be financed, of course, by county bond issues paid for by general taxation, and I doubt if the real estate owner and farmer will ever consent to this. It might be that there could be worked out between state and county a joint arrangement similar to the one that now exists between the Bureau of Public Roads and the states, whereby the state highway commission and the county share this construction cost, perhaps on the same 50-50 basis now operating between the Bureau of Roads and the states.

There are many rural highways on which the motoring public travels very little. These highways have as their first importance the making of farms accessible to trading centers, and are used predominately by the farm owner and his services. By his services I mean the milk truck, the gasoline truck, the poultry buyer's truck, the truck the elevator man sends out to haul the farmer's grain, etc. Surely that farm owes a certain responsibility toward the upkeep of that farm-to-market road.

Would this be fair? Let us consider for the moment this co-operative plan as applicable to farm-to-market roads. In this case, the state's contribution would come from the gasoline tax and the motor-vehicle license fee. The county's contribution to that road would come from general taxation, in-

cluding that on farms and real estate. Should not a road, the primary purpose of which is to make the farm accessible to market, receive part of its construction and maintenance costs from the farm, and part from the motoring public for occasional use of that road?

At first, general property tax and abutting property assessments paid for all rural highways and city streets. Now the pendulum has swung to the other extreme, and through gasoline tax and motor-vehicle tax we are attempting to maintain all the roads and streets in Indiana at the expense of the motor-vehicle owner.

Could we not, at this time, create some well-founded plan or formula whereby all roads and streets in Indiana could be built on a co-operative basis by a motor-vehicle tax, a gasoline tax, and some real estate tax, either general or on abutting property? I am not trying to say what proportions these various agencies should pay. That would necessitate more careful study than I have given to it. I merely offer it at a meeting such as this for your consideration.

We in the state highway commission have enjoyed our associations with the other agencies in the highway field. These other agencies have been fair with us, and we have attempted to be fair with them. The problem before us is difficult and the solution must come from co-operation of *all* these various agencies rather than from dictation by one.

OBSERVATIONS ON EUROPEAN ROADS

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(Editor's note: No paper presented. This is a very brief resumé of Professor Crandell's excellent extemporaneous address.)

For a long period after the War the European countries neglected their highway systems. The roads of Germany and Austria suffered particularly because there was little or no maintenance. France maintained her roads but did not add to them or improve them. Italy seemingly was asleep for centuries, and did not awaken until Il Duce, in 1928, said, "Make war on the dust."

Now, however, all Europe is awake to the need for excellent highways, and in many of the countries road building is being pushed to the utmost. Italy has thousands of miles of splendid roads, all completed in the last six years. Germany is building nearly four thousand miles of new roads on new locations, which will make many of our own through routes look rather amateurish by comparison. France has been