roads or streets possible with the funds available, and to keep the users of those roads and streets fully informed about your problems and operations.

SELLING THE PUBLIC ON HIGHWAY IMPROVEMENT T. R. Johnston.

Director of Information, Purdue University

The University always is happy to be of service to any group in the state that is working for the common good, and all of us here derive a great deal of satisfaction in working for and with you men who represent such a powerful force in our lives today. I congratulate you on the job you are doing in providing in practically every township of the state roads that are usable almost every day in the year.

As modern missionaries for better roads, we need to tell the public of our roads as well as to know how to build them. Here in Indiana the people are road conscious. They are proud of the excellent highway system of which we boast and for which we boost day in and day out. But in some counties the people know more about their roads than in others, and usually

this interest and knowledge can be traced to publicity.

Men concerned with road construction and maintenance are expending public money. All taxpayers are stockholders in the highways. As stockholders they are entitled to know about their own business, what it costs to build and operate, what use is made of the business, or what it returns. Facts about these matters are all that are needed. If you report to your stockholders through the newspapers and through the radio or by word of mouth, they are going to know what problems you face and what problems their own business is facing. We at the University feel that way about Purdue and our relationships with the people of the state, and your situation is quite comparable to ours.

In preparing something that I might present here today of interest and value to you men, I submitted some questions about roads to a few people to determine what they thought and what they really knew about roads. Here are the questions and some of the answers:

1. How many miles of state and county roads are there in Indiana?

The answers to this ranged all the way from 40 to 100,000 and only three out of 14 persons knew that we had about 10,000 miles in the state highway system; and none of them knew that the county system contained over 66,000 miles. The actual total road mileage is almost 77,000.

What state has the greatest percentage of its road

mileage improved?

Most of them "guessed" that Indiana was at or near the top, although four had no idea of how this state stood.

Actually, we have been at or near the top for many years, but Ohio is slightly ahead of us at this time in total mileage and percentage of its road mileage improved.

How are state roads paid for?

Most of the people "guessed" from gasoline taxes and auto license fees; three knew that the state also used some federal aid money. Three didn't know, and one thought the grossincome-tax money was used for roads.

4. Do we owe anything on our roads?

Most of the answers indicated that they knew the state was prevented by its constitution, adopted in 1851, from issuing state bonds; but only half of the answers indicated that they were sure of this and knew that the state was committed to the "pay as you go" policy.

How are county roads financed?

Most of the 14 persons questioned were hazy about it. although five of them knew that there was no longer a property tax in the county for road construction and maintenance.

What is your estimate on the cost of a mile of pavement?

These answers ranged from \$8,000 to \$100,000 per mile. and only three estimated from \$30,000 to \$45,000 per mile, according to the location, cuts, fills, etc.

Do you object to gasoline tax to pay road costs?

None of the group objected, all appraising the gas tax as one of the fairest in use today. Two of the group thought it was proper to divert gas tax for other purposes of government but the other 12 did not, although two were "on the fence."

The group questioned included two editors, two carpenters. a garage man, three Purdue faculty members, a student, a farmer, a field man for a canning company, one housewife, and two stenographers.

The answers to these questions indicated to me the necessity of informing the public still more about our road plans and programs and letting people know what we are doing for their benefit. This means closer co-operation with our newspapers, actually giving the editors and reporters the news of our work as it develops and then occasionally talking over our problems with the owner, the publisher, or the editor of a paper. They can and will give you sound advice about the handling of your publicity problems. If you have a radio station in your city or town, it would be a good idea to work with the owner or program manager and tell your story to the radio listeners, who are just as much interested in roads as other things, although they don't know much about the mechanics of construction and maintenance and usually aren't interested in those details.

It is important that all of us have a complete picture not only of the road business in our own counties, but also of the state highway network and of the problems the State Highway Commission faces in meeting the demands made upon it.

All of us need to know that the state spends, altogether, from gas tax, federal aid, license fees, etc., about \$33,000,000 a year on both state and county highway systems and state routes through cities and towns. Under a law enacted in 1937, the state receives two-thirds of this amount, or about \$22,000,000 a year for all construction and maintenance; \$1,250,000 goes into the state general fund; \$2,000,000 goes to cities and towns for construction and maintenance of streets; \$966,666 goes to the state police department; and one-third of the remainder, about \$9,300,000, to the counties for road construction and maintenance.

Let us inform ourselves of the relative position of our own state and county in the road building picture, as to miles, cost, bonded indebtedness, etc.

When we get and know all these facts, let's give them to the general public at local city or county meetings—let's tell the story of transportation and how good roads enter into it.

And let us report new work or new projects when they are ready. When Professor Petty visits your county to inspect your roads, make it an event that calls attention to the highway system of the county, of which you and all the other folks are and should be proud.

There are countless opportunities to tell the story of roads, not with the idea of spreading propaganda, but with the notion of telling the people what you are doing for them. If the job is being well done, there will be no question; but if it is not, it is more important to you than anyone else to know about it, although it concerns every stockholder in this great network of highways.

Let us continue to tell the people of the merits of Indiana roads and help arouse and keep alive a new interest and pride in the accomplishments of you men who have given us the best road system of any state.

METHODS INSURING SMOOTHER AND MORE DURABLE BITUMINOUS ROAD SURFACES

Ernest H. Coffin, Wayne County Road Supervisor, Richmond, Indiana

In discussing this subject I shall not enter into the discussion of the different bituminous materials but will confine myself very closely to construction problems only. It seems strange that in counties that construct their own roads, we find such a variety of methods used. The same is true with