

Radio Talk, W.R.C.  
1:00 p.m.  
January 18, 1930  
Washington, D. C.

## FARM TO MARKET ROADS

By Thos. H. MacDonald, Chief of the Bureau of Public Roads

When people speak of Farm to Market Roads I often wonder just what kind of roads they mean, and what other kinds of roads there may be that are not properly to be described as Farm to Market Roads. It puzzles me a little, because I have always thought of all our rural roads as Farm to Market Roads; and the more I study the character of highway traffic, the more am I convinced that that is right.

To be sure there are some roads that serve not much traffic except that which originates on the farms; and some that carry, in addition to the farm traffic, a heavy inter-city movement of vehicles. There are some whose total traffic, without regard to character, is light; and others that carry a tremendous traffic; and, by and large, it has been my observation that the roads that serve the heaviest total traffic - which are the principal inter-city roads - are likely to serve also the heaviest farm traffic, and are, therefore, the most important Farm to Market Roads.

Certainly, it is true that the farmers' markets - for buying as well as selling - are in the cities; and the bigger the city the better the market. So I think the principal distinction to be drawn between roads is one rather of importance than of kind. And,

when my friends tell me that, "really, we shall have to do something about the Farm to Market Roads", I conclude that what they actually mean is that it is time now to be doing something more effective for the improvement of the less important roads, the local or secondary roads as they are called. And so it is.

It is time to extend to the secondary or local roads some more effective improvement; and I am sure the time has arrived when that more effective improvement will be extended. It not only will be done; it is being done, and the process is already well advanced.

There are very definite reasons why progress in the improvement of the secondary roads under the supervision of the local authorities has been slow in the past.

First, there has been a lack of order and plan in the efforts of the local authorities, and their organization and equipment for the work have been seriously deficient. I wonder how many people realize that nearly half of the 3,000-odd counties in the United States are trying to build roads without any engineering direction whatever, and with none but the most primitive road building equipment? That is a fact; and it is also a fact that, of those counties that do have at least the most essential equipment and the basis of an engineering organization, not more than half again are really adequately equipped and organized to handle the difficult task of building roads for modern traffic.

Thus poorly equipped, these counties have been trying, year after year, to improve all of their local roads, spreading their slender revenues over a mileage so great that the slight benefits of each year's work have been lost by the time the next year rolled 'round. That is one of the reasons why progress in the improvement of the local roads has not kept pace with the more orderly improvement of the main roads by the State and Federal Governments.

But, a movement is under way, and already well advanced, the effects of which will soon be evident in a very material improvement of the condition of the local roads. That movement is the steady enlargement of the systems of State and Federal-aid roads, which in recent years has been taking place more rapidly than most people realize.

In the selection of the roads that make up these systems, the Federal and State Governments have wisely avoided the mistake of the county and township authorities. They have limited the extent of the systems to the mileage that could be improved as a whole in a reasonable length of time. The roads chosen have been the most important roads; and together they form a connected network that covers the entire country.

The Federal law limited the size of the Federal-aid system to 7 per cent of the total mileage of roads with the definite

purpose of preventing the wasteful scattering of the national appropriations; but it provided that when this limited mileage had been improved other roads could be added.

In three States the mileage selected under the original 7 per cent limitation has already been improved and the size of the system has been increased by adding other roads; and a similar extension will soon be possible in a number of other States.

In a similar manner and for the same reason, the States have limited the initial mileage of their State systems. But they, also, have found it possible from time to time to add to the extent of these systems. Between 1921 and 1928 they took over from the counties more than a hundred thousand miles, and there is no doubt that they will continue to take over additional mileage as rapidly as that already taken is improved.

This process of gradually increasing the size of the Federal-aid and State highway systems is having two effects. First, it brings under the control of the well equipped Federal and State highway departments mile after mile of the more important county roads and insures that they will be improved as their importance demands.

Second, the roads taken over, being the more heavily traveled of county highways, are those which have required the largest expenditure. Relieved of them, the counties are able, without increase of local taxes, to expend a larger sum per mile on the remaining mileage and so effect a more lasting improvement.

This, then, is one way in which Federal and State improvement of the principal highways - all of them Farm to Market Roads - is brightening the prospect for more rapid local road improvement. There is another result of this orderly development that works in the same direction. The improvement of the main roads alone has made possible the great increase in the number of motor vehicles in use. The high class of service afforded to these motor vehicles by the improved main roads has made the owners of the vehicles willing and able to pay ever increasing sums for road construction and maintenance.

Between 1921 and 1928 the amount of this payment by the owners of motor vehicles increased from \$164,000,000 to \$627,000,000. The portion of these increasing funds that has gone into the State treasuries has provided the means for taking over from the counties an increasing mileage of the more heavily traveled local roads, that have been the counties' greatest burdens. But while the local governments have thus profited indirectly, they have also shared directly in these increased earnings of the main roads; for the share of the motor vehicle taxes paid directly to the counties has increased from \$22,000,000 in 1921 to \$104,000,000 in 1928.

The fact that the motor vehicle owners, as a class, are the most willing of taxpayers means that they feel that they are more than repaid by the road service they receive in return, and this return and consequent willing tax payment are primarily the result of the improvement of the main roads.

This is the result of the wise policy of selecting for first improvement the most important roads. The improvement of these roads has earned a surplus above their cost of maintenance, which surplus it has been possible to use for the improvement of other roads in the order of their importance. Only by the orderly process that has been followed could this result have been achieved; and it is only by the extension of this same process that the roads of lesser importance can be progressively and adequately improved without laying an increasing tax burden upon real property and particularly upon farm property.

There is one other development of the last three or four years that will speed the improvement of the local Farm to Market Roads. That is the success that has attended the experiments that have been made over that period looking to the development of less expensive types of road surface suitable for the lighter traffic of these roads. That, and the remarkable progress that has been made in the adaptation of labor and time saving machinery for the construction of such roads. By the use of such equipment for the building of the less expensive and yet entirely adequate types of roads that have been developed recently it is going to be possible in the future to make the secondary road dollar go farther and do more in the way of lasting and serviceable improvement.

So, I feel that the improvement of the farmers' market roads will go forward with even more rapid progress. The principal roads have already been improved by the Federal and State Governments. By their taking over of more and more of the important secondary roads which are the heaviest burden upon county finances, the task remaining for the counties will be greatly eased. The increased earnings of the main roads in taxes paid by motor vehicle users will provide increasing revenues for the improvement of county as well as State roads; and by the use of the new methods of low-cost road construction the county revenues thus conserved and augmented will be used more efficiently and productively.

The future of the Farm to Market Road - all of them - has never been brighter. But in order that the results of future expenditures on those which remain under the control of the county and local authorities may be as effective as possible, it is still desirable that there be a marked improvement in the organization and equipment of the local governing bodies.

Particularly is it desirable that all local road work be carried on under engineering supervision. There may still linger in the minds of some people a feeling that roads can be built without technical direction. There was a time not so long ago when that opinion was entertained by many people. But I hope that by this time the demonstration of the effectiveness of such control which has been made in the improvement of the Federal-aid and State highway systems has convinced most of the doubters.

However that may be, I am sure that the building of roads for modern traffic can not be efficiently carried on without the highest type of technical direction obtainable; and that kind of direction the counties must endeavor to provide for the success of their local road programs - that and the necessary equipment and plant which such direction will suggest.

It is probable that efficient technical supervision and adequate equipment will be obtainable in many cases only by the consolidation of several counties into larger administrative districts. This, for the reason that the overhead cost of the necessary supervision and plant would constitute too large a proportion of the total cost unless it were spread over a greater volume of work than many of the existing counties have to do.

By such consolidation of administrative control, and the employment of the efficient supervision and equipment which will thus be made possible; by following, then, the orderly process of improving the roads in the order of their importance, after the example set by the national and State Governments; by these means will the work that must always remain under local control be brought to a high standard of efficiency. And such, in my opinion, are the means by which the local Farm to Market Roads will ultimately be raised to a state of improvement comparable with the present state of the primary roads.