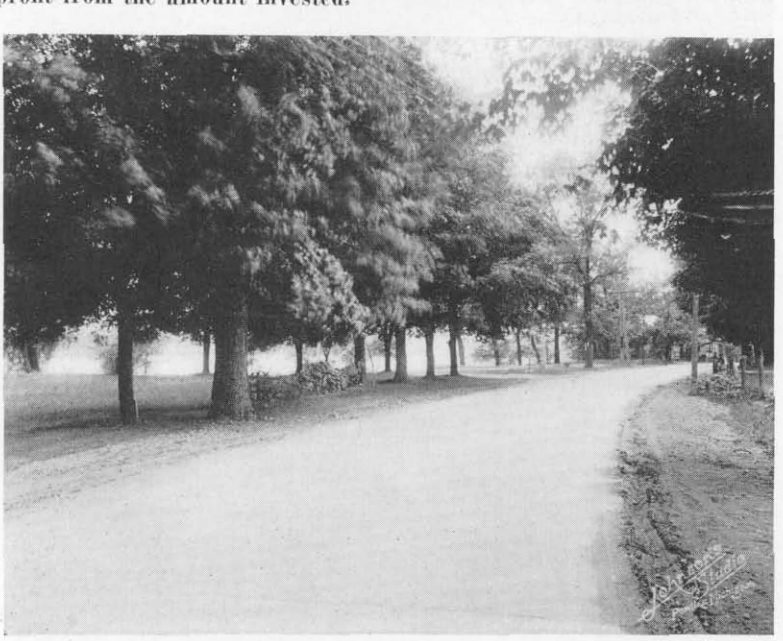
Permanent Roads

W. S. GILBREATH

Permanent Roads! What are permanent roads? What is meant by the word "permanent" as applied to roads? In these days of increased county traffic, due to a very radical change in the means of locomotion, our ideas have changed very materially on this question. The dictionary defines the word permanent as "abiding, fixed, stable," and as we travel over our old so-called permanent roads of yesterday, and see the clouds of movements "back to the farm," in the form of dust, we are satisfied that our roads are everything but fixed and stable.

The advent of the automobile has brought the farmer and the business man closer together, brought them to within reasoning distance of each other, and both have come to realize that the whole road business must be put on a sound business basis. Now, business men do not always figure from the angle of least resistance; they go into a problem with the thought of returns in profit which result from their activities, and sometimes the lines of least resistance are the most expensive. Therefore, my definition of a permanent road would be: **A road that would render the greatest amount of profit from the amount invested.**



Build the Maintenance into the road.

Can a road render profit? Our experience is that it can. As an example, it is conservatively estimated that the average cost of hauling per ton mile in the United States is 23 cents, and in Europe nine cents. The difference between these two figures, 14 cents, would be a handsome profit to some one, especially as it is estimated by the government on this basis: that we are paying annually as a tribute to bad roads $263,000,000. Quite some little profit.

The Minneapolis and St. Paul chamber of commerce and other civic

bodies conducted an investigation ranging over a period of months and at the same time communicated with 4,000 farmers in their vicinity, with the result that the replies from the farmers clearly indicated a loss to them in that period of $747,149.80, due solely to the lack of permanent highways which could be travelled all the year round. These business man reckoned their loss at $210,000, making a total loss of $1,657,149.80.

On the other hand, New England has been working to permanence and a careful checking of travel over an 800 mile good roads loan during the touring season showed expenditure of $60,000,000. If twenty-five per cent of this were profit, a neat little sum of $15,000,000 was the result.

In considering the question of permanence we must take into consideration the various types of construction, their cost, their durability, and their upkeep. And there is the big thing.

It is not the first cost which counts. It is the upkeep.

A gravel surface well maintained provides a good road for light traffic. West Rochester Road, Avon Township.

So when we build roads, with our ten and twenty years bond money, and have to rebuild within the next six years or spend enough for repairs to have built other miles of roads, we cannot help but consider such roads as anything but permanent. There are various and sundry arguments for all classes of roads but you cannot get away from the fact that the cheapest to construct is in the end the most expensive. The business man who builds a place of business in which he expects to trade for years, does so with an eye to wear and tear and possible expansion; he gives thought to the question of upkeep, and would not consider for a moment a home for his business which would constantly have to have bad spots taken out and replaced, or patched. While he is doing that he is losing time from his regular, profit-bringing affairs. Therefore, he is losing both ways, in money expended and in loss of trade. Instead he builds him a building where the wear and tear not only in his mind but also on the minds of his customers and clerks, is reduced to a minimum, his anxiety and worry and his expense are cut to a minimum, thereby increasing his range of activity and necessarily his profit.

The farm and the city are indissolubly linked. Their interests in the question are identical. And therefore, they should be equally interested in building for permanence, which means not only for today alone, but for posterity. Old Caesar built roads, some of which are being used today. It would be interesting to start and figure out the profit on some of his roads. It is a certainty that they have rendered some thousands of per cent of profit to the communities. And what benefits one benefits all. There is therefore a community of interest in the thing.

We are all more or less inclined to be selfish. Our self-interest appeals to us first; but in rightly directing this self-interest we become public spirited. In other words, a public spirited man exercises intelligent self-interest.

There is no use building a road which is not travelable all the year and in all kinds of weather. Millions of dollars are lost both to the farmer and the merchant because of inclement weather. We have seen what a lack of transportation facilities has done from the railroad standpoint, and it is too bad to have not some such concrete facts to show the amount of loss by the bad roads burden, by the lack of foresight in construction for permanence.

Permanent roads are an asset, not a liability. They are an investment, not an expenditure. Unfortunately we have been proud to regard our money so expended from the other standpoint. Now we are coming to see the matter in its true light The questions are, How good can we make our assets? How good an investment do you want? A few facts from an article in the Indianapolis News by E. I. Lewis, a much read, much travelled man who has investigated the road situation from a broad, impersonal standpoint, may not be out of place here.

"Marion county taxpayers seem to be very much of the opinion that a road that cost $12,000 or $13,000 a mile to build is the wildest extravagance. Milwaukee and Detroit were both up against the same objections. These counties have shown that these expensive roads are the cheapest roads to build. Marion county has been building roads that cost $4,000 to $6,000 and $8,000 a mile. Half the annual maintenance money that the county is expending is put on the 100 miles of main trunk roads which run in and out of Indianapolis, which means that their annual cost of upkeep is $400 or $500 or more a mile each year.

"Take a road that costs $7,000 and whose maintenance cost is $500 a year and in ten years that road, which is never in perfect condition, will have cost $12,000 and at the end of the ten years it will still be a $500 a year libility. In twenty years if, indeed, it has not been rebuilt at another $5,000 or $6,000 or $7,000 cost—it will have cost $17,000 and will have been at no time a road to compare with the cement highways, which are as smooth as billiard tables. It will at the end of the twenty years either be a wreck, or a constant annual drain.

"The maintenance cost of the roads in Milwaukee county verify the Wayne county statement that they do not cost more than $25 a mile, which is practically nothing.

"Therefore a $12,000 honestly built concrete road would in ten years have a total cost of $14,250 and in twenty years it would be only of $13,000. As the roads here and around Detroit are now holding up, it looks very much as if they would be good roads at the end of twenty years, possibily however, the maintenance may increase slightly, but estimates, made by Kueling and others, place $40 a year maintenance as the outside limit for the heaviest of the trunk lines.

"It is this difference in the cost of maintaining the concrete and dirt roads that brings the heavy constant annual drain on Marion county's burdened taxpayers, while Milwaukee county finds its automobile tax accumulating in the county treasury at the rate of $30,000 a year. This same difference caused the county highway commissioners of Wayne county, Mich., last year to construct and to replace them with concrete. They were finding the annual cost of their finest tar and asphaltic oil-bound macadam running $2,200 to $2,300 a mile a year and it was ecomony to replace them with a pavement that costs only about $15, $20 or $25 to maintain and which is always as constructed now, in good condition."