## Trends of Highway Taxation With Special Reference to Property Taxes

H. S. FAIRBANK

Deputy Commissioner, Public Roads Administration Washington, D. C.

The trend of highway taxation in the United States since the beginning of the present century has proceeded far along a course from complete support by taxation of land or of people as residents on the land to complete support by users of the highways. It is not a new trend. The same course has been followed repeatedly in this and other countries in earlier times and in each repetition has come eventually to a point of stoppage or reversal.

It is an interesting speculation whether in these modern days we are not once more approaching such a point of stoppage, if not of reversal. Both historical analogy and the fundamental economic relation between the demand for highway improvement and its cost argue that we may be.

One who remembers how highways were administered in this country forty years ago will find a remarkable likeness in the concept of the highway function which prevailed in England in the sixteenth century. Referring to that period, Charles L. Dearing, in a Brookings Institution publication, American Highway Policy, says that "for more than two centuries, the provision of road facilities was governed by a static concept of the highway function." He explains that individual and governmental obligations toward highways were considered to be discharged when the public roads were maintained according to "customary standards" by parish authorities, under whose jurisdiction the highways came. This meant, generally, merely keeping them free of visible obstructions.

With the growth of mercantilism, he adds, such a concept proved untenable in the absence of other means of land transportation, and as a result a "dynamic" concept began to gain favor. Highway traffic increased and travelers began to demand better roads without feeling any obligation to pay for them. This attitude naturally caused resent-

ment on the part of the residents of areas through which the new traffic flowed, and as a result restrictions upon, and prohibitions against it, appeared.

This impossible situation gave rise to an innovation in the field of highway transportation, the turnpike company, the appointed task of which was to make the improvements that travelers demanded with revenues collected from the travelers in toll for their use of the roads. But the new device proved to be far from an unqualified success. It never provided anything approaching an adequate system of highways, for not more than 20 percent of the total road mileage of England was ever included in the turnpike system. The other 80 percent of roads were managed as they had been before and remained still in the same deplorable condition. Moreover, when the tolls for the turnpike roads were made high enough to provide adequate funds for their construction and maintenance, the traveling public rebelled, and in some instances troops had to be called upon to quell the disturbances.

Early American experience repeated the English example. In Colonial days all rural road administration was a local affair. Roads were supported by taxes on property and capitation taxes. These taxes could generally be "worked out", and as a result many local governments responsible for road work seldom received appreciable amounts of cash. Work on the roads was done largely by amateur labor under amateur supervision; and as would be expected, the roads of Colonial days varied only from bad to worse to impassable.

In America as in England, the same conditions produced the same remedy—the turnpike company. But in America the new device was not adopted until the Colonies of England had become the United States of America; the keenly realized necessity of better means of communication between the new sovereign States, in order to form "a more perfect union", was here a powerful incentive to adoption of the turnpike device.

It is clear that the framers of the Constitution foresaw the necessity of better highways joining the States than local means would supply, and they apparently expected that somehow the new Federal Government would supply them; for one of the powers delegated by the States under the Constitution to that government was the power to "build post offices and post roads."

Now, doubtless, for the men who wrote the Constitution the term "post road" had a somewhat different meaning than it has come to have for us. It had not for them in the same degree that it has for us the connotation of a road over which the mail is transported. It meant

rather a road on which there would be "posts" or stations—overnight halting places for travelers making long journeys. There would be no need for such "posts" on the local community roads. They would be provided only on the roads over which long journeys were made. So to the "founding fathers" the term "post road" probably had much the same meaning that the terms "main" or "through" highway have for us. Perhaps the nearest modern counterpart of what they had in mind would be our numbered U. S. highways. Certainly, the "posts" would serve in one of their various functions as places for the delivery and reception of mail, but that would be only one of their functions—to be discharged by a government "post office," and the "posts" did not take their name from their discharge of this function. Instead, the function took its name from the "posts".

Perhaps it was expected from the beginning that the Federal Government would accomplish the construction of the "post roads" by itself adopting the methods of the turnpike companies. At least we know that the only substantial early undertaking under the State-delegated Federal power was intended to employ precisely those methods. I need not remind you that this was the National Road; but I do want you to observe that this road was in character of the kind that would properly have been regarded as a "post road." It was a long main highway which was intended to stretch from Cumberland in Maryland, where it extended a privately built turnpike from Baltimore to St. Louis. And its popular name—derived from the manner of its intended financing—was the Cumberland Pike.

That the Cumberland Pike was not completed to its intended destination at St. Louis was due to one of the major events of our transportation history—the coming of the railroads. And something of the meaning of this event to the people upon whom it dawned will be understood when it is recalled that they expected that the grade of the National Road from the Indiana line to St. Louis would be completed as a railway. Undoubtedly they thought of the railway—they and their children for years afterward thought of it—as the successor and displacer of the long-distance highway, the "post road" of the new day.

We can compress the history of American roads during the next half-century into very few words. They gradually returned to a state not widely different from that of the sixteenth-century English roads already described. The same static concept prevailed. In their administration they became similarly the sole responsibility of local government; and for their financing they came to depend likewise upon property and poll taxes solely.

It is surprising that the American people, particularly the farmers, put up with the conditions that developed as long as they did. Near the close of the nineteenth century American rural highways and American thinking about highways were far behind the highways and thought of most European countries. The time was ripe for an upheaval, and before the century was ended that upheaval began to make itself felt.

Attention must be directed to the fact that, although this upheaval began about the time that the automobile became commercially practicable, the advent of the automobile had nothing to do with its inception. This is a point often missed by those who attempt to analyze trends in highway administration and finance.

The agitation for better rural roads crystallized in the last decade of the nineteenth century into the "good roads movement," which possessed many of the characteristics of a "cause" such as the American public occasionally adopts with something akin to religious fervor. There was not complete agreement in the thinking of the proponents of good roads. For example, some favored centralization of road administration while others did not. However, there was more or less complete agreement on certain points: First, the administration of the road function should be placed in the hands of technically competent personnel. Second, roads should be classified according to use as a basis for determining how they should be administered and supported. Third, the roads should be toll-free.

First observed results of the new movement were tendencies toward a general requirement that road taxes be paid in cash instead of being worked out. Next came evidences of a tendency to centralize control of at least the more important roads. This permitted more widespread employment of technically trained personnel to supervise road administration. A little later a few of the states began to provide aids of one kind or another to the local units for road construction and maintenance. Finally, the states began the assumption of direct control over the main rural road systems. Along with these last-mentioned innovations came official recognition by state governments of the benefits which a system of highways confers upon society as a whole over and above the benefits conferred upon those whose homes, farms, or places of business are directly served by these roads.

It was during the last decade of the nineteenth century that the motor vehicle made its appearance on the American scene as a potential factor in the Nation's land transportation facilities. However, the number in use prior to 1900 was insignificant. In 1899, for example, fewer than 4,000 vehicles were manufactured. By 1914 "mass production" methods had been brought to such a relatively high stage of per-

tection that it was possible to manufacture over half a million motor vehicles in that year!

However, it did not take state and local governmental officials so long to recognize that the automobile was going to become an important adjunct to American society, nor to realize that it was also going to require regulation and that it might even become a lucrative source of governmental revenue. The first state motor-vehicle registration law became effective in New York in 1901. Other states rapidly followed, and by 1917 all states had enacted state registration laws. In a number of cases the registration fees assessed were purely nominal and were intended to pay only the costs of regulating the use of the motor vehicles. However, in a few states early recognition was given to the possibility of assessing against motor-vehicle owners a part of the cost of building and maintaining the improved systems of roads that were being demanded. The divergence of these viewpoints is indicated by the fact that in 1913 the range of average motor-vehicle-registration fees charged was from somewhat less than 50 cents to more than 22 dollars per vehicle registered.

Definitely, by 1916, the modern American revival of the dynamic concept of highway administration had become established; and its establishment was signalized by a renewal of the two conditions that earlier, both here and abroad, had been its principal distinguishing marks—a renewal of the taxation of road users, and a renewal of the highway interests of the superior governments.

It was in 1916 that the Federal-Aid Road Act was passed. By its passage the federal government recognized that certain rural highways conferred benefits that were more than local in character, even more than state-wide in character, and that such benefits should be paid for, in part at least, by others than those whose land was directly served by these roads. The Act also provided an impetus for the states to set up state highway departments with authority to build and maintain rural highways in addition to the research and advisory functions that many states had theretofore assumed. A final important feature of the Act was that no tolls were to be charged for the use of any highway built with Federal-aid funds.

Federal legislation which broadened and strengthened the provisions of the Federal-Aid Act followed within a few years. Most important of the early acts was the Federal Highway Act of 1921, because it provided for the designation within each State of a specific system of highways of primary importance upon which all regular Federal-Aid funds were to be spent.

Since 1916 federal aids have played an important role in statehighway finance. In the regular form, they totaled about 75 million dollars in 1921, were about 155 million dollars in 1931, and nearly 150 million dollars in 1941. In addition, advances of Federal-Aid funds received by the states in 1931 amounted to over 60 million dollars, and in 1941 about 10 million dollars was received directly by the states from federal agencies other than the Public Roads Administration.

The new highway legislation enacted by the states in the early years of this period strengthened the state highway departments, many of which had advisory powers only in 1917. Motor-vehicle-license fees and taxes were increased and became thereafter a principal source of current revenue funds to the highway departments of all states. They accounted for 25 percent of the funds used for state highways in 1921, about 23 percent in 1931, and about 21 percent in 1941. Although the cash received from this source was greater in 1931 than in 1921, and greater in 1941 than in 1931, the percentage which this type of income represented to the total decreased because of the rapid increase of the income from motor-fuel taxes.

The first tax on motor fuels was assessed in Oregon in 1919. By 1929 all states were assessing taxes against the highway use of gasoline, and the motor-fuel tax was well on its way to becoming one of the most important single sources of State revenues. Gasoline taxes constituted only one percent of the funds used for state highways in 1921 but had risen to 35 percent of the corresponding total in 1931, and to 46 percent in 1941.

Motor-vehicle registrations in 1910 totaled about 500,000 vehicles. In 1916 over 3,500,000 vehicles were registered, but in 1921 the total was about 10,500,000 vehicles. The period of depression which began in 1929 seemed to have little effect on motor-vehicle registrations, which hit a new high of over 26,500,000 vehicles in 1930. The greatest effect of the depression on motor-vehicle registration was felt in 1933 when total registrations declined to a little under 24,000,000 vehicles. By 1941, however, they had risen to another record of 34,400,000 vehicles. The increases in registrations were also accompanied by general increases in the rates of both registration fees and motor-fuel taxes. The states found in motor-vehicle owners a group of taxpayers who appeared willing to contribute whatever was asked of them in the way of taxes, provided they received better road facilities from the funds they contributed. Another factor that contributed to the huge success of motor-user imposts as money raisers was the continually increasing rate at which the vehicles were used. This situation resulted in a more rapid rate of increases in motor-fuel consumption than in registrations.

When the states discovered that the taxation of motor vehicles was such a lucrative and, apparently, painless method of raising revenue, they began to depend more and more upon that source and less and less upon property taxes and general revenue for highway purposes.

In 1921 property taxes made up 20 percent of the revenues used for state highway purposes. By 1926 this percentage had dropped to nine, and by 1931 it was down to five. It declined quite steadily from that date until 1941, when it represented only one percent of the total revenues so used.

Another important source of income to the states during the state-highway construction period of the twenties was borrowing. In most instances the loans were made by counties or local units, which turned the proceeds over to the state highway department for its use. Borrowings directly by the states, and borrowings by local units assumed by the states, represented 28 percent of the funds used for state highways in 1921, but only 12 percent in 1931. In 1941 borrowings amounted to more than 16 percent of the incomes used for state highways; but only 16 percent of these borrowings were used for construction, while the remaining 84 percent went for debt service, including the refunding of old state issues.

During the period from 1916 through 1941 the states received sizeable amounts from their subordinate governmental units in the form of advances, aids, and other types of transfers. A large proportion of these aids and transfers came from property-tax revenues, although it is known that some of these funds came from borrowings by the local units. Transfers from counties and local units represented eight percent of the revenues used for state highways in 1921, somewhat more than four percent in 1931, but only about one-half of one percent in 1941.

Information concerning the financing of secondary and local rural roads during the period from 1916 through 1941 is neither complete nor in all cases comparable from year to year. However, it is possible to draw a sufficiently accurate picture from the data that are available. In 1921 about 64 percent of the funds used by these units of government for highway purposes came from local property taxes and miscellaneous local revenues, 32 percent came from borrowings, and only four percent came from state aids, which were principally motor-user revenues. In 1931 these units of government obtained 60 percent of their highway funds from local property taxes and miscellaneous local sources, 14 percent from borrowings, and 26 percent from state aids, which derived mainly from motor-user revenues. In an average year between 1936 and 1940, inclusive, the same units obtained only 42

percent of their highway funds from local property taxes and miscellaneous local revenues. 13 percent from borrowings, and 43 percent from state aids similar to those received in 1931. The remaining two percent of the average revenues used by local units in that period came from local motor-vehicle imposts and direct federal aids.

The figures given as the amounts of the several forms of highway income available at 10-year intervals to the state and local governments, manifest the growth of dependence upon road-user imposts as one of the outstanding trends of the period from 1916 to 1941. In reverse they define another trend of the period, which has been described as "the revolt of the property-taxpayers." This revolt has been characterized not only by an increasing effort to relieve property owners of all responsibility for the construction and maintenance of rural roads, but also by an increasing effort to pre-empt a sizeable share of road-user tax revenues to meet all sorts of government costs for purposes other than highways.

Some revenues collected from highway users have always been used for non-highway purposes. It is only since the beginning of the depression, however, that such usage became important. In 1925, so-called "diversions" amounting to about seven million dollars were reported: but this represented less than two percent of the net collections. In 1931 non-highway uses amounted to about 24 million dollars, which was about three percent of the net collections. By 1936 the "diversion" had increased to 169 million dollars, which was 17 percent of the net collections; and in 1941 the comparable figures were 215 million dollars and 15 percent. The chief beneficiaries of these "diversions" have been state and local, general and educational funds. The amounts "diverted" have replaced, in the main, property taxes that would otherwise have been necessary; and since the amounts by which property taxes in total have been thus reduced have latterly increased nearly to the proportions of the property taxes collected for highway purposes, it has almost become possible to say with complete accuracy that, in average net effect, the income of property taxes has completely vanished from the revenue raised for rural road purposes. But this statement, although it would fairly represent the general position in the country as a whole, would not accurately describe the situation in a few states in which substantial sums of highway revenue continue to be raised from property-tax sources.

It has been shown by the figures cited that the rapidity of the decline in property taxation for highways was increased during the depression. This was made possible by several circumstances of the depression period. First of these was the remarkable ability manifested by road users not only to sustain but to increase their pre-depression user-tax payments. Second was the outpouring of federal funds for work relief, which in large amount went to the local governments, and to the extent that they were used for work on the highways, replaced local property taxes that otherwise would have been required to pay for the same work. And third, and this in my opinion is a most significant circumstance, the decided pause that began with the depression and that has continued to this moment, in the program of main highway development.

Recalling these circumstances, it appears that the reduction or abandonment of property taxes for highway purposes in recent years has been made possible in part by the fortuitous substitution of depression aids of the federal government, and only in part by the growth of roaduser revenues; and that it was a reduction or abandonment achieved without serious effect upon the improvement of local roads, but almost wholly at the cost of an essential progress in main-road construction.

In plain words, if we thought we were getting something for nothing, we are now about to find, as we usually do at last when for a time we indulge that fancy, that we were living in a fool's paradise.

For the fact is that the long-deferred substantial improvements of the main highway system cannot be much longer put off. In its present state, serious obsolescence and dangerous and traffic-obstructing inadequacy are widely prevalent. State highway departments have catalogued long lists of the defects of the main state roads. The National Interregional Highway Committee estimates in its report recently sent by the President to Congress, that an expenditure of \$750,000,000 a year will be necessary to provide in from 10 to 20 years the kind of facilities required on an interregional system of less than 40,000 miles. Neither the state departments' catalogues nor the Committee's estimate exaggerate the needs of future expenditure on the main highways. Necessarily such expenditures will be very large.

At the same time there will be undoubted desire and actual need for further improvement of the secondary and feeder roads. The total of necessary highway expenditure in the post-war years will probably be much larger than ever before in our history.

How, then are revenues to be found with which to meet these greatly enlarged post-war highway needs?

Perhaps, in part, by enlarged federal government contributions. Well, perhaps.

.Perhaps, in part, by further increase in road-user revenues, the product of more numerous vehicles and higher rates of registration and

gasoline taxes. Again *perhaps*, with considerable uncertainty in most states as to the feasibility of higher rates.

Will it be possible to obtain the extent and character of improvement that will be needed and desired on both the main highways and the secondary and feeder roads without resorting again, or more heavily, to property taxes? In my opinion, it will be possible only if a substantial margin between the cost and the maximum expectation of roaduser tax revenues is spanned by increased federal contributions, an alternative which Americans, properly zealous of their rights of local self-government, may well hesitate to accept.

This last answer, it seems to me, can be given more positively than either of the other two, because it is based upon solid economic fact. It is the fact that has stopped and reversed earlier efforts to recapture the cost of road improvements by collection from road users. It is the fact that the desire for improvement extends beyond the inevitably limited mileage of roads which user revenues at a supportable rate will improve.

There is a definite limit to the amount of such revenue payable as a tax against a mile of travel. The maximum yearly amount that can be collected from the use of any road depends, therefore, upon the annual vehicle-mileage of travel over it. The road system is made up of many sections of road; and the various sections serve a traffic of widely varying volume—some many thousand vehicles a day; many only a hundred, a score, ten, or five vehicles daily. The more heavily-traveled sections can generate road-user revenues, very moderately rated, that will more than meet the cost of their traffic-necessitated improvement. But many of the sections more lightly traveled cannot possibly raise from their use, even with the tax at its highest supportable rate, enough to pay for the improvement desired by their users. The surplus generated on the more heavily-traveled sections can be spread downward to make up the deficit that would be incurred on some of the more lightly-traveled sections, and the improvement cost of these sections can thus be eked out. But even the heaviest acceptable tax rate will probably not anywhere in the long run generate enough in this manner to spread downward and cover the cost of improving all the roads on which improvements are desired and reasonably desirable. The extent of the probable over-all shortage is the measure of the probable need for other tax support.

The possibilities in this respect vary in this country from state to state. Indiana is one of the states in which a virtually complete abandonment of the property tax and substantially total substitution of road-user taxes and Federal aid for road-improvement support have been attempted. I do not know whether your experiment can have a successful outcome. I do know that in the years of its trial thus far there have existed conditions that have possibly encouraged what may yet prove to have been an unwarranted optimism.

If, in the future, you should find it necessary somehow to supplement the yield of your road-user taxes for highway purposes, it is possible that you may turn for the needed supplement to a property tax different in some respects from that which you have abandoned.

In June of last year a special committee, appointed by the Secretary of the Treasury to study intergovernmental fiscal relations in the United States, submitted a report that has already attracted widespread attention. The report suggests some radical changes that might be made in the historic form of the property tax to make it a more fair and more satisfactory method of taxation. It suggests that some of the burden of the tax be shifted from the real estate itself to the current income from the real estate. This might be accomplished, according to the report, by supplementing a basic tax on the land itself with a graduated occupancy tax to be collected from the occupant. The difficulties of setting up such a form of taxation are admitted, but attention is directed to its satisfactory operation in other countries.

Or there may yet be found a way to recover all or part of the large cost of some of the needed future improvements of the main highways by public recovery of the increase in value of lands served by them, perhaps through a constitutionally acceptable adaptation of the principle of excess land taking for purposes of recoupment, perhaps through some new application of the more generally accepted principles of benefit assessment.

To Indianans who may think they have found in Uncle Sam and the motor vehicle the last complete answer to their ultimate need for highway improvement financing, I would recommend a careful study of the possibilities of some of these newer variants of property taxation. I have already said that I do not know that you will need to turn to them. I do not believe it would be overrash were I to say in closing that I think you may.