

Address of Thos. H. MacDonald, Commissioner of Public Roads,
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ACCORD OR DISCORD?

This discussion is dedicated to the spirit of accord, which in the degree of its attainment among the many affected elements, will measure the progress toward the realization of truly adequate highways.

There is no criticism, real or implied, in this review of such current trends as appear out of harmony with a fair, and thus a balanced program. Some may question the introduction of even the thought of discord when there is such universal and such insistent demand for more and more improved roads. But it is right at this point that harmony ends. The chorus remains constant but the verses sung by various groups glorify superhighways, transcontinental routes, farm-to-market roads, city streets, and more lately defense highways. With these, although the words are different, the theme is yet of highways. Other songs, other music by other groups, attempt, often successfully, to charm the ear of the public with the lullaby of taxing the road user for schools, for general governmental expenses or for other purposes.

The restoration of the historic ship Constitution, "Old Ironsides," as she was affectionately called, is a true classic of our cherished lore of patriotic response. When the ship that had

valiantly protected our nation had grown decrepit with age it will be remembered that she was restored to become a lasting shrine to quicken the emotion of gratitude for service well done through the pennies contributed by the children of the land.

That was a national impulse well worth while. Today we have before our eyes a sustained demonstration of magnificent dimensions through the integrated contributions of the public. It does not occur to many that we are now very largely dependent upon the flow in penny collections for the major financial support of our highway system. Statistically there is perhaps no other characteristic that can give so true a conception of the universality of highway use by all our people as the annual total income from that use collected actually in penny amounts.

In this fact lie both strength and weakness. Since there is no bag of gold to be tapped, no Aladdin's lamp to rub for support funds, but very largely this penny by penny collection for service, there results quite naturally the consciousness of the individual that he should have service. This gives public support to road improvement but the tendency of the democratic process in government to form pressure groups, each demanding a particular service first, introduces discord as to the particular program to be carried forward in prior place. These efforts to secure a favorable place in the sun are not to be criticized. They are natural and healthy and in the long run operate toward a roughly equitable program.

To meet fairly these divergent but insistent demands, it is necessary for the highway administrators and the legislators to secure the facts, and upon these formulate programs and policies.

The fact that is not yet sufficiently understood generally is the interdependence of these various interests. They are for the most part mutually sustaining rather than antagonistic, and this relationship needs to be emphasized and unselfishly accepted.

The success of an orderly plan for progressive highway development depends ultimately upon the extent to which future support funds can be estimated and reasonably guaranteed, and the changing highway financial policies over a considerable period of years indicate highly significant trends in both sources and amounts of highway revenue. Recent financial legislation provides further indication of probable future resources and reflects rather clearly the public's attitude.

In the case of State highway support funds trends, figures compiled from 1921 through 1938 reveal that during this 18-year period, the amounts available to the State highway departments increased from 400 million dollars to one billion 100 million. This latter figure, however, was somewhat less than that received in 1930, so that the increase of highway revenue to its present level actually occurred in the 10-year period from 1921 to 1930.

Accompanying this rapid increase in the magnitude of highway funds was a marked change in their sources. For in that period occurred the remarkable growth in motor vehicle revenue, the

extension of Federal aid, and the gradual decline in State property and general fund support. Property taxes declined from 35 million dollars in 1921 to less than half a million in 1938, with closely parallel reductions in general fund appropriations, which dropped from 35 to 5-1/2 millions. Motor vehicle revenue, on the other hand, multiplied from approximately 103 millions in 1921 to 800 millions in 1938, to become the chief source of State highway receipts. This upward trend, moreover, was primarily due to the growth of gasoline tax revenue from 3 to 543 millions, while registration fees were increasing from 100 to 257 millions.

In addition to property, general and motor vehicle contributions, State highway support has been derived from two other sources: Federal aid and borrowing. Federal aid, which averaged about 75 million dollars per year in the period prior to 1930, was sharply increased during the succeeding depression years, averaging approximately 228 millions since 1930 exclusive of appropriations for roads on Federal reservations. The amount of State highway borrowing, on the other hand, has in general been considerably less in recent years than during the '20 to '30 period. In 1921 the proceeds from bond issues totaled 115 million dollars, while the high point reached in 1930 produced 222 million. In contrast, bonds in 1938 accounted for only 57 million dollars of State highway funds.

In the field of local road finance, the motor vehicle receipts returned as aid by the States have more than doubled in the past 12 years, and this has been accompanied by decreased

local property tax support in many States. This has been the case not only in States where centralized State control of highways has been adopted, but wherever it has been financially or politically possible to effect reductions in the real property taxes. To cite three examples, reduction in property support for local roads in Michigan has been from approximately 24 million dollars in 1929 to one million in 1937. In the State of Washington the trend has been from 10 millions in 1922 to 1-1/3 millions in 1936, and in California from 8 to 2-1/2 millions in the period 1931 to 1933. Similar circumstances appear to obtain in the case of city street support, a recent survey revealing that 79 cities in the United States have been partially compensating the loss of special assessment and property tax money with funds from P.W.A., W.P.A. and State allotments of motor vehicle receipts.

In speculating as to future sources of highway revenue, however, reliance cannot be placed exclusively on what has happened in the past. Considerations of expediency in legislative decision play so important a role in the direction of public revenue trends, that financial evolution follows no fixed pattern and only indications may be secured from recent State laws as to probable future financial trends.

For example, the indications that automobile registrations and highway use have entered a period of comparative stability lead to the conclusion that any important upward changes other than normal growth in motor fuel tax receipts, might be expected to

occur chiefly through an increase in rates of tax. However, analysis of gasoline tax laws demonstrates that the earlier tendency to impose progressively higher rates has given way to a more stationary tax level. Of the 124 rate increases passed since the adoption of the fuel tax in 1919, the years prior to 1933 account for 110. Moreover, in the 1939 State legislatures at least 25 bills to change the fuel tax were voted down, while only one temporary rate increase was passed. This resistance to change has not been so pronounced in the case of the registration fee for the tendency in recent legislation has been toward reductions in passenger car fees and increases in truck and bus rates.

Trends in highway borrowing reveal that while there will be less resort to general obligation bonds in the future, the use of public revenue bonds secured solely by the earnings of the particular project financed will undoubtedly continue to increase as a means of financing high-cost super-service facilities. Accordingly there is reason to believe that the recent trend toward direct tolls may continue where needed extra facilities are not possible of attainment except on at least partially self-liquidating terms. Whether or not the toll is accepted as a proper method of highway finance, the quantity of recent toll legislation renders it an inevitable factor in future financial policy.

The trend of Federal support for the road program relative to the past several years will certainly be downward. The success of Federal aid for major roads has led to the inauguration of a

secondary program which is receiving increasing attention particularly since the excellent channel which highways provide for work relief is also a consideration because of the recent reorganization to coordinate the various public works agencies. It is certainly desirable that the elimination of dangers at railroad grade crossings shall continue on an adequate scale as an essential element of the highway program since there is also a fundamental contribution to the efficiency and safety of railway transportation.

From this brief review it is apparent that trends in future sources of highway revenue are essentially of a complex and to an extent uncertain nature. On the other hand, the physical requirements and financial obligations of the highway plant are relatively definite and inevitable. The mounting impact of new items, or old items grown larger, is more and more apparent in the highway budget. State highway maintenance requirements have shown an uninterrupted increase from 1921 through 1938, registering a 357 percent gain in that period. The demands for public safety, convenience and travel comfort require new types of expenditure for highway service which have recently attained considerable magnitude and will grow. The trend in amount of debt service payable by the State highway departments is steadily upward, from 17 millions in 1921 to 150 millions in 1938. This sizeable obligation would have been more than covered in 1938 by the 158 million dollars of road user revenues diverted to nonhighway purposes.

Legislation in several States during 1939 continued to effect an upward trend sometimes skillfully disguised in amounts of highway revenue used for other purposes of government. Sentiment against diversion, however, has been expressed by the fact that 7 States have passed anti-diversion amendments, 5 additional States took preliminary steps toward that end in 1939, and actual diversions were defeated in 3 States.

Misled by the mounting total revenues from road-user taxes there is a popular but erroneous belief that these provide an inexhaustible treasure chest, ample to cover all needs. This fallacy is very seriously illustrated by the fact that, in 1938, the State highway departments had available from their total receipts of over one billion dollars only about 40 percent to cover maintenance, reconstruction and new construction. This amount is far less, relative to the needs, than the amount that was available ten years ago. In the actuality of these two important conclusions, first, that no great increase in annual revenue is to be expected, and second, that the funds available for current and new undertakings are less relatively than at any time during the previous ten-year period, the necessity for accord by all groups affected, upon the most necessary program, is self apparent. Fortunately it is now possible as never before with the information from the highway planning surveys, to select the course of action best suited to meet the traffic needs in the order of their importance.

Summarizing the results of the surveys, produced through the active cooperation of the State highway departments and the Public Roads Administration, and transmitted in 1938 by the President for consideration by the Congress, the report "Toll Roads and Free Roads" pointed to the desirability of a comprehensive long term program that will provide for:

1. A system of interregional highways including adequate extensions into and through the metropolitan areas.
2. The modernization of the present Federal aid system.
3. The continuance of the railroad grade crossing improvement program.
4. The selection and improvement of secondary or feeder road systems carefully correlated with the needs of the agricultural population and the long term land use conception.

It should be accented that this pattern for a balanced national program evolved from first, the ascertained traffic flow upon the highways, and second, the needs for highway facilities to serve our national economy in its major aspects. This pattern may be tested by the conception of any major group advocating the development of any particular class of highways, and that class will be found to fit securely to the general scheme, in its own place. The programming depends upon the time element and the relative traffic service must establish priorities. For example, the interregional system tentatively includes about 29,300 miles.

Its conception comprises both urban and rural sections. The urban sections include both express highways into and through the metropolitan areas, and bypasses of limited access. Since traffic congestion is most acute within these areas, and since the origins and destinations of the major part of the traffic are in these areas, it is self-evident that the regional system should start within the cities and be carried outward. But again the conception does not call for wholly new routes for the rural sections. Many miles of existing main highways can be brought to adequate standards by supplementary construction. The one great obstacle in both cases is the obtaining of the necessary land.

Highways for the national defense requirements fall into two major categories. First the strategic network, comprising about 80,000 miles and second, access roads serving defense mobilization areas, estimated to include around 2,000 miles. Of these latter a portion of the total mileage lies within the military reservations themselves.

All but a small percentage of the indicated interregional mileage is included in the strategic network. Approximately, then 35 percent of the roads most important to the national defense are identical with the routes now carrying the heaviest average traffic and most in need under any conditions of rebuilding and modernization. All but a small percentage of the remaining 55,000 miles of the strategic network is identical with the present Federal aid system and the numbered U. S. highway system.

The access roads are limited in mileage, and outside military reservations are coincident with public roads of some class.

The Interstate Commerce Commission reports a close relationship between highway accidents at grade crossings and volume of combined traffic, - train and motor vehicle. The changing aspects of railway operation, that make even more imperative the elimination of grade crossings, are the step-up in speed of both freight and passenger trains, particularly the super-speed, lighter designed but heavily powered passenger trains. The most important grade crossing projects are those, many within the cities and towns, which lie upon the projected interregional and the more extensive strategic network. Thus it becomes apparent how the grade crossing program, with its safety insurance and important economic time saving qualities, integrates with the program honestly designed to meet highway traffic priorities.

There is remaining the secondary or feeder road program. Actually there is much loose thinking on this subject, which places what can only be termed third and fourth class roads ahead of the real secondary roads. Do not misunderstand. Each of these is very important to a very few persons. Some means must be found to keep these in serviceable condition. But let him who would criticize the highway officials answer this question: Shall the roads of the third or fourth class be improved before the real secondary, farm to market roads which are of far greater community service? To illustrate, the State highway departments

and the Public Roads Administration are now engaged in the selection of a Federal aid secondary system which is so extensive that a mileage equal to 10 percent of the public roads within each State may be included. Take one of the large agricultural States of the Mississippi Valley. This State will have around 10,000 miles of road in this system selected carefully by their traffic importance to the communities. These roads plus the State road system will carry nearly 70 percent of all farm-to-market traffic within the State. No other plan of selection is more reasonable or will better serve the agricultural interests. There are also questions as to standards of design. On secondary roads in general these standards with reasonable regard for safety are designed for durability and low annual maintenance costs rather than to provide for large traffic volumes. Take the example just quoted. With the funds now available for construction each mile built must remain serviceable for at least 20 years to make possible the completion of the whole system to minimum requirements. Rapid progress is being made in the improvement of low cost construction through soil stabilization, more efficient equipment and the application of intensive research to materials and processes. But all of these only accent the plain common sense of building secondary roads to standards that provide assets over a term of years and not expensive liabilities.

Perhaps enough has been said to indicate that so long as the fundamental of traffic service governs the order of the year to year programming of projects that may be carried by the budget,

all the different classes of roads are included. Of course down-right selfishness of groups who reject a program based upon fairness and the greatest service to the largest number will not be satisfied.

The key to a successful program lies in the State highway departments. The constructive work which has been done over the last quarter century by these departments is not matched by any other organizations within either the State or Federal governments. Much of this solid accomplishment has been effected under adverse conditions of political manipulations, destructive changes in personnel, and adverse legislation. The situation has become particularly acute now that the professional organizers of municipal groups, chambers of commerce and other severely localized interests are demanding further division of the already seriously depleted income available for the State highway departments. The only possibility of building a reasonable future program without a serious increase of taxes in some form is to concentrate the program and the jurisdiction of funds under these State highway departments. The proper program cannot emanate from Washington. It has been possible, through the consolidation of the data that have been secured cooperatively by the highway departments and the Public Roads Administration, to evolve the general pattern for a program such as has been indicated herein. But this has not been done without full consultation with the State highway departments. The approach to the goal of handling our highway problems within

the present revenues and without greatly increased taxes lies in recognizing that the State highway departments must be accredited with and actually given general supervision over the year to year expenditures of the funds. Such a procedure does not deny either to municipal streets or to secondary roads a fair participation in the annual revenues. There can be in many States a reasonable meeting of the problems that give the only strength to the demands for further dividing of the funds, through the more equitable use of the funds by the State highway departments.

The studies now going forward indicate a real emergency in respect to a considerable percentage of the roads important to the national defense. In the programming of the funds for the immediate years ahead, to concentrate on the weak spots in the national defense highways means a test of patriotism over political demands. The way to accord lies very largely in a recognition of the super value of the State highway departments and a willingness of all groups to lend their best cooperative efforts to the State highway departments in the development of fair and honestly balanced programs in the use of the highway revenues.

Roads for National Defense

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