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THE CROSSROADS OF HIGHWAY ADMINISTRATION

by

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State Highway Commissioner

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"The Crossroads of Highway Administration"

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State Highway Commissioner of Michigan

In Michigan, as in other parts of the country, changes in the policy of taxation have occurred since the turn in the century which have vitally altered the structure of highway jurisdiction and finance.

Today the Michigan highway system, which only a generation ago was entirely local as to service, support and administration, delivers a regional and even national service, and three strata of government—local, state and federal—participate in its support and jurisdiction.

There is every reason why both administrators and public should want a more exact knowledge of the effects of these changes. Not only have important and destructive maladjustments been created within the highway structure which impair its functional efficiency, but the more serious of them—the shift in responsibility for collecting highway funds and the policy of "aids" and "emergency" contributions—are constantly tending to harden into a permanent tax structure.

It is not the intention here to discuss at length the causes of this shift in tax policy which is evident not merely in highway finances, but in the changed fiscal relationships of all government agencies and activities. However, a few of them deserve mention.

The growth of our population.

The increased complexities of our way of living, induced by an unprecedented expansion of industrial production, the advancement of scientific attainment, and the like.

The relative decline of agriculture and the practical disappearance of industries based on once important resources in some areas of the state.

The inappropriate use of land for agricultural and for suburban development.

The phenomenal growth in the numbers and the use of automobiles and the closely correlated development of our highway and street facilities.

The demand for other governmental services commensurate with these expansions.

In different ways and in varying degrees these social, economic and political phenomena have pinched the highway fiscal and administrative structure. As a result, that structure has been greatly changed and its productiveness has been radically impaired.

It has become increasingly evident that, if the highway system is to meet the heavier demands which changing economic functions and social habits are putting upon it, there must be inter-adjustments in the tax policy as it relates the three strata of government to the highway system and to one another.

Participation in Highway Support

A first step toward such a readjustment is the determination of the participation of each of the government strata in road finance, and a study of the process by which the present situation was brought about. Not only will this procedure establish useful guideposts for highway administration, but it will bring to light indications of what has happened in other fields of public administration and finance.

It is clear that any readjustment in tax policy that affects highway and street financing must be related to revision in general tax policy. However, in a study of taxation policy and in devising needed remedial measures, constant scrutiny will be necessary to detect and guard against tendencies toward unfairness. Particular classes of taxpayers must not be singled out for undue burdens. Excessive rates of taxation which crush the productiveness of legitimate sources of revenue must be avoided. The lessons taught by the development, over-exploitation and collapse of the property tax must not be disregarded.

As to the trends in highway finance during the past thirty-five years, let us see what has happened.

During all but the last five years of this period, the development of the highway system proceeded largely under local and state jurisdiction and was paid for principally out of local property tax levies and automotive taxation. In 1901, one hundred per cent of the funds raised for the support of all roads and streets came from property taxes levied by the cities and villages and the counties and townships.

Property tax state aid began in 1905 with the first State Reward Road Act which appropriated a small sum for the payment of rewards to county highway authorities for roads built to state standards, and for the support of the State Highway Department which was created to administer the provisions of the act.

Motor vehicle taxes, in the form of nominal registration fees, produced only about \$6,000 in 1905 and were insignificant. Until the Weight Tax Law was enacted in 1916, this source of revenue continued to play an inconspicuous part in highway finances. Beginning with 1916, however, there was a substantial annual increase and, with the imposition of the Gasoline Tax in 1925, the productivity of the motor vehicle taxes advanced in step with the enormous growth of automobile ownership, reaching the unprecedented peak of nearly \$46,000,000 in 1936. State appropriations for the highways from state property taxes and general revenues ended in 1919.

Federal Aid became operative in Michigan in 1917. To begin with, federal participation in the state's highway development was modest, the initial allotment amounting to only \$145,000 or 6/10 of one per cent of the total funds available for highways that year. Up to 1931, these federal contributions exhibited a healthy but not robust growth, and attained a normal position of about 2 per cent of the total highway and street moneys provided by all units of government.

The highway financial structure which had been gradually evolved through the process here outlined had its faults, but it also had its virtues. It did provide approximately adequate funds for all parts of the highway system, and it did establish an approximate balance between administrative jurisdiction and financial support. However, of its three bases—the local property tax, the motor vehicle revenues, and Federal Aid,—the first proved to be unstable.

The Depression Shifts Responsibility

When the depression really got under way, this instability became evident and things began to happen. During the first two years after the stock market crash of 1929, the effects of the hard times were not directly reflected in highway finances. But by 1931, lowered incomes among all classes of the population resulted in a wave of tax delinquencies and a panic-stricken demand that the burden on property be lightened.

In the next four years, a series of tax-relief measures was enacted. They ended state participation in revenues from the property tax; they strictly limited local access to this source of revenue; and they virtually withdrew the property tax from the support of rural portions of the highway system.

Almost immediately federal funds were made available to fill the great gaps in highway finances which this tax-relief program made. Federal Aid allotments were increased and, when highway construction was adopted as a valuable means to promote re-employment and recovery, these were supplemented by generous emergency relief appropriations. As a result, contributions from the national government trebled in 1931, jumped to \$29,000,000 in 1934 and reached the astounding total of \$48,000,000 in 1936.

In considering this total of \$48,000,000 from federal sources, a clear distinction must be drawn between the normal Federal Aid and grants administered by the U. S. Bureau of Public Roads and the much larger emergency and relief allotments. The former, amounting to 35 per cent of the total federal funds available in 1936, consisted of 3.78 millions of Federal Aid which had to be matched dollar for dollar with state funds, and 13.0 millions of outright grants.

No instrumentality was more effective in adding to the mainline systems than the policy of Federal Aid as administered by the Bureau of Public Roads. This type of federal assistance has contributed immeasurably to the modernization of the state's and the nation's mainline mileage. Not only are these amounts doubled through the state's matching them dollar for dollar from its own funds, but noted highway authorities are agreed that their stimu-

lative effect is further multiplied in the highway business, automobile and many other industries.

Every dollar of this Federal Aid has been spent in accordance with the national highway plan. Its object was to produce main-line highways, and it produced them.

On the other hand, the emergency relief allotments contributed in 1936 through the W. P. A., the E. R. A. and C. W. A. in former years, were contributed for the purpose of providing man-hours of relief employment for the unemployed. The highway projects on which these man-hours were expended were by-products of that relief objective. Their location and character were largely dictated by the exigencies of the unemployment problem, and the funds expended made possible the withdrawal of local revenues ordinarily devoted to street and road support.

Thus, on the mainlines, the State Highway Department was able to continue its construction and maintenance work, and in the local units work has gone forward over the temporary way provided by emergency funds. Meanwhile highway administrators have been studying the wreckage of the former tax structure with some misgivings.

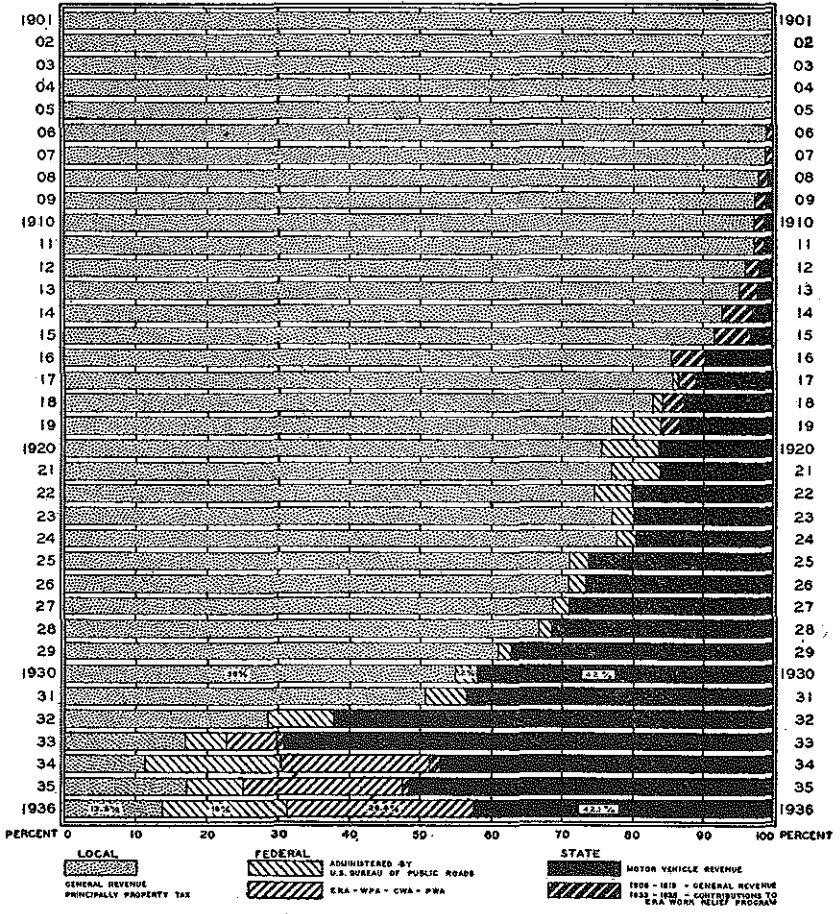
Today's Financial Structure

The results of this study are as startling as they are revealing. Take the downward tailspin of local contributions to highways, for instance, which at the beginning of the century paid the whole highway bill. Figures representing the percentages of the local property tax to the total highway funds in a succession of years give a graphic picture of the progressive drying up of this once fruitful source of revenue.

1901	100%
1930	56%
1933	17%
1935	17%
1936	13%

Those percentages tell the story of a trend which has some of the ear-marks of a catastrophe. To be sure, they indicate that the rate

HIGHWAY FINANCE



TRENDS IN HIGHWAY SUPPORT 1901-1936

Startling shifts of responsibility for collection of highway revenues have occurred since 1901. The swing has been from locally collected property tax to state collected motor vehicle revenues and federal aids. Since 1930 normal federal aids have been greatly increased by emergency grants. Local support for Michigan highways and streets has almost entirely disappeared.

of the decline has slackened, but at the same time they prove that the trend continues downward.

When a stratum makes a shift of such proportions, it is bound to cause a deformation in the structure of which it is a part. Cross-sections of highway finances in the years just before and just after this change disclose how great that deformation is.

	1930	1936
Local Contributions	56%	13.5%
State Contributions (Motor Vehicle Tax)	42%	42.1%
Federal Contributions	2.0%	44.4%

Federal Contributions include normal Federal Aid, emergency grants and Works Progress Administration funds.

The Municipalities, the Counties and the Townships lean heavily on the Federal Government and the State for the financial support of their highways.

The revolution, which this presentation of the whole highway finance structure reveals, appears even more complete when the Federal Aid and the federal emergency relief contributions are deleted from the picture. To so exclude them, is not mere statistical theorizing, as is proved by the discussions of federal policy relative to highway support which have taken place in the last few months. The figures for 1935, excluding all relief appropriations, are exhibited:

LOCAL UNITS	STATE
Cities', Counties'	Motor Vehicle
and Townships'	Owners'
Contribution	Contribution
22%	78%

It is worthy of note that in 1935 the municipalities of the state contributed out of their own revenues a total of only \$9,000,000 for the operation, maintenance and construction of their streets. The most reliable sources of information permit us to estimate for comparison that in 1928 their outlay for similar purposes was somewhere between 50 and 60 million dollars.

MICHIGAN
STATE HIGHWAY DEPARTMENT
MURRAY D. VAN WAGONER
STATE HIGHWAY COMMISSIONER

HIGHWAY PLANNING SURVEY
CONDUCTED IN COOPERATION WITH
U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF PUBLIC ROADS

HIGHWAY FINANCE

LOCAL CONTRIBUTIONS

24.99%

STATE CONTRIBUTIONS

75.01%

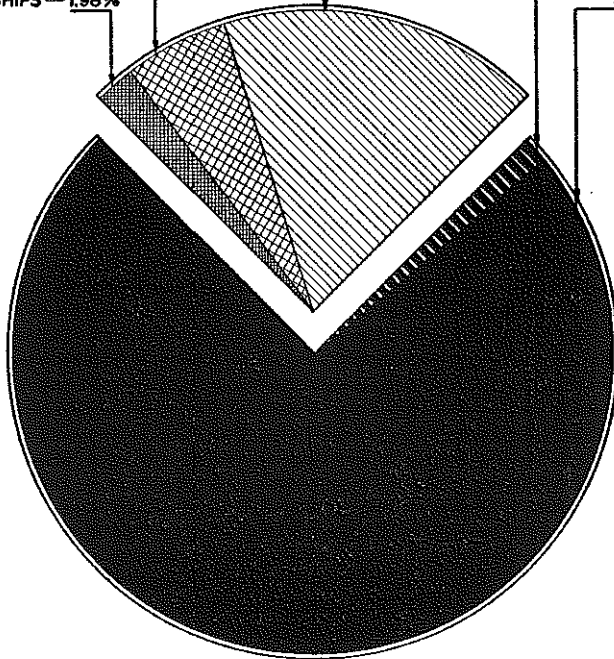
CITIES AND VILLAGES — 17.39%

COUNTIES — 5.62%

TOWNSHIPS — 1.98%

1.38% RELIEF
CONTRIBUTION

MOTOR
VEHICLE
REVENUE
73.63%



TOTAL AMOUNT FOR 1935 = \$ 55,354,499

HIGHWAY SUPPORT IN MICHIGAN—1935
From the State And Its Local Governments

Excluding all contributions from the federal government, the per cent of participation by all units to highways is graphically demonstrated. This distribution includes all funds made available through general revenues and motor vehicle taxation.

Relief contributions are included for all units. These contributions are those amounts ultimately reaching highways through the work program of the state emergency relief administration.

Motor vehicle revenues are the bulwark of highway support in Michigan.

January, 1938

While the appalling shrinkage in locally collected streets funds which this urban situation illustrates, was replaced by federal and state allotments, the individual taxpayer's situation was not altered one iota by the change of source. His total contribution estimated at \$108,000,000 in 1936, stands close to the amount contributed by him in previous years when economic conditions were at their peak. He merely dropped his tax contribution into another slot in the tax collecting machinery. It can only be hoped that he received equal benefits.

The Present and Future Highway Job

Now let us turn to another side of the picture, the side which shows the outlines of the job which highway administration is attempting to do with the fiscal resources which we have been studying.

While the figures are not final, the latest estimate of the Highway Planning Survey reveals that we have about 92,000 miles of state, county and local rural roads. In the past year, the county road systems absorbed the streets and alleys in about 7,500 recorded rural plats. The adoption of these roads, which have hitherto been considered orphans, will enlarge our highway system by about 15,000 miles. Add to these figures some 13,000 miles of streets in municipalities, and we have a grand total for the entire highway system of the state of approximately 120,000 miles of roads and streets.

Every mile of this immense system is the direct responsibility of one of the 556 administrative agencies among which jurisdiction of the system is divided, and every mile is demanding and will continue to demand attention to a greater or less degree. Moreover, every one of these 556 highway agencies claims, under existing statutes, some part of the motor vehicle revenues for the maintenance or improvement of the mileage under its control.

Looking at the cross-section of our present highway fiscal structure, does anyone believe that these motor vehicle revenues can carry this highway financing load?

And now a word about the future. What will highway administration's job be from this point on, and what resources will it be able to command?

The magnitude of the job will be measured in terms of the demand for highway service, and of this the probable number of automobiles in operation will furnish an index. At present there are 1,500,000 motor vehicles registered in the state. The Highway Planning Survey points out that it seems likely that some time between 1950 and 1960 the number will increase to 2,100,000 or more. This expansion will be due to an increase both in population and in density of car ownership.

More important, however, from the administrator's viewpoint, will be the number of vehicle-miles which these cars will produce. It is conservatively estimated that in this period, when the number of motor-vehicles will increase by one-third, the volume of traffic on Michigan roads and streets will double.

This is a picture of future traffic that only the most vivid imagination can grasp, but it is not a dream vision evoked by wishful planners. It is the sober estimate of careful highway engineers and economists, and it checks with the findings of the most forward-looking branch of the automotive industry—the research engineers.

Two types of factors will cause this multiplication of the use of highway facilities. The first are those growth-generating forces which are inherent in the components of traffic itself, such as lower operating costs through improvement of design, a continued growth of the driving habit, higher average economic standards and more leisure time. The second type comprises those improvements to highway facilities which create new traffic, such as betterments to the principal trunk-lines and a gradual extension of these improvements to the secondary highways.

It is well known that when a major improvement is made, new traffic springs up without any noticeable decrease on other arteries. It is also an important fact, for it is by this promotion of increased automobile travel that opportunities for employment are enlarged in the automotive and allied industries and in the growing industry which is based on the state's enormous recreational resources. And

it should not be forgotten that an increase in the already important business will still further enlarge its contribution to highway support.

Operating the Highways

To meet the requirements of these changed conditions and demands, authorities are agreed that in the future the functions of highway administration will be somewhat altered.

The future functions of the highway administrators are four in number and, in the order of their importance and priority, they are:

I. *Building and Rebuilding.* It is absolutely essential that funds be provided to reconstruct our mainlines connecting the major cities of the state and important centers beyond the state's borders. These mainlines must be designed and built to provide adequately and generously for the concentrations of traffic, particularly in and about urban areas. The facilities which they must include are:

1. Terminal facilities
2. Main superhighways
3. Main trunk-lines
4. Intermediate highways
5. By-passes and belt-lines
6. Arterial streets

The meager mileage of multi-lane highways in Michigan is woefully inadequate for existing volumes of traffic and will be utterly unable to handle the doubled volumes which are forecast for the future. Competent authorities estimate that provision of such basic facilities and the accessories which contribute to their safe use, would create an additional 5,000,000 automobile owners in the nation, and of these Michigan would have its full share.

II. *Tourist Extensions.* Michigan must encourage the development of its recreational industry which offers the double advantage of fully utilizing the state's scenic and climatic resources and of providing one of the most promising methods of relieving its unemployment situation. An extended and improved highway system

is the proved means of affording such encouragement; and Michigan people must not be blind to that fact. A vigorous program in this direction would at the same time create vastly improved farm-to-market transportation.

III. *Safety.* Ample funds and vigorous action must be concentrated on the task of wiping down accidents on Michigan streets and highways. Action must take the form of:

1. **Uniform and recodified traffic laws**
2. **Uniform and modernized traffic signs and controls**
3. **Skilled accident investigation**
4. **Improved highway patrol and vehicle inspection**
5. **Complete and final authority over the issuance and revocation of drivers' licenses**
6. **The long-time highway building and rebuilding job**
7. **Emergency types of improvement to meet interim needs—the elimination of hazards.**
8. **A vigorously prosecuted educational program such as has not yet been seen.**

IV. *Maintenance.* The maintenance and repair of the system which, with the progressive deterioration of existing facilities, will become an operation of increasing magnitude and importance. In addition, it is certain that the requirements of traffic in regard to surface condition, dust control, and winter service will tend to be greater rather than less.

Matching Income to Needs

Having sketched the future responsibilities of highway administration, it only remains to consider briefly the Highway Planning Survey's estimate of the revenues we may expect the motor vehicle taxes to produce. In this consideration it is necessary to keep two things in mind: first, that these taxes are almost the sole source of highway revenue; and second, that there will be greater need in the future than now for certainty and stability of income.

Since the motor vehicle taxes were initiated in 1915, they have produced \$565,000,000 of which \$500,000,000 were collected in the last thirteen years. Enormous as these bulk sums appear, they

are by no means so formidable when reduced to terms of annual income, and in no year has this income been sufficient to adequately support 120,000 miles of highways, roads and streets.

Taking this present inadequacy as a starting point, the Survey estimates that within the next twenty years, when traffic volume will double, average annual revenues from the motor vehicle taxes will increase possibly one-third.

But there is a factor which enters into this estimate whose future variations cannot be projected as certainly as can those of dollars and vehicle-miles. That factor is the continued willingness of motor vehicle owners to pay the shot. During the next two decades, this willingness will depend, as it has in the last two, on the car owner's belief that he is getting his money's worth, and that he is not victimized.

By definition and by law, the revenues he contributed are dedicated to the benefit and service of automobile traffic. With the example of the property tax before us, it can be prophesied with confidence that any attempt to make the motor vehicle revenues serve purposes for which they were not intended and tendencies toward excessiveness will result in a similar collapse. This warning does not arise from a baseless fear.

If this trend in the shift in fiscal responsibility from one strata of government to another is to continue, or if the status quo is to persist, new machinery for revenue collection will have to be devised for the state and possibly for the national government. In other words, we will have to undertake a fundamental revision of our whole tax system, and in that revision there will have to be some redefining of the terms used in tax matters.

As far as highway financing is concerned, a distinction will have to be made between that revenue which is the earned income of a vast self-supporting utility, and the revenue with which government provides broad and general benefits to all the people. STATE AIDS TO LOCAL UNITS FOR THE PURPOSE OF TAX RELIEF MUST RECOGNIZE THIS DISTINCTION. THIS IS TRUE WHETHER THAT AID BE GIVEN FOR EDUCATION, FOR WELFARE, OR FOR AND OTHER GOVERNMENTAL SER-

VICE, INCLUDING THE FUNDS NECESSARY TO FINANCE THOSE ROADS AND STREETS SERVING A PUBLIC PURPOSE, BUT NOT SELF-SUPPORTING FROM AUTOMOBILE REVENUES.

Ignoring the principle implicit in that distinction, will result in serious fiscal derangement and, in the case of the Highway system, in an impairment of service which will not be accepted by the public of this state.

Recognizing the impending necessity of readjustments in tax matters, the Highway Planning Survey has made a broad investigation of public finances a major part of its study so that a full-length and inclusive view could be taken not only of highway finances, but of the fiscal operations of the state and of all the local governments as well.

As highway administration looks back at its accomplishments in the past and as it views the difficulties which handicap its advance against the tasks of the future, it is evident that it has reached the crossroads.

If highway administration is to surmount its difficulties and to shake off its handicaps, the most careful and competent statesmanship will be required. Its most powerful aids in this task will be a full knowledge of the facts and the courage to use them.

Fortunately the crossroads we have reached is not without signs. If we have the sense to read and understand them, highway administration can get back on the road of its logical development and accomplishment.