SHAT KENT!

a Consideration of Value's Present Highway Problems.

A talk before the Fortland, Maine, Automobile Association,

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decidedly inconvenient time to hold a state-wide meeting of isportance, is a very desirable time for a glance back over the accomplishments of the old year and even those of the years before, and a better time for a real look shead. It is the season of the year that we associate with good resolutions, most of which we put aside, or at least temper to our individual exigencies. The individual may do this and yet succeed. A state or a nation may not. Progress and growth in a state or nation come through right policies consistently followed. Even inadequate policies consistently followed make for greater progress than brilliant policies constantly superseded by other brilliant policies.

Just at this season of the year there comes a flood of ennual statements of the business enterprises. The management reports to the etockholders the present state of the enterprises. detailing the profits and losses, comparing the results with

those of previous years, and perhaps forecasting the future.
Fortunately it is possible for us now to view the highway
situation in Maine as a business enterprise, to scrutinize
the facts as to the progress made in providing improved highmays, to examine the policies which have produced the existing
results, and then, with this background, to determine what is
best for the future.

The name which I like best to designate a state is "commonwealth." It signifies community of interest -- a business concern which provides for those things which make for the welfare of its citizens, among which improved highways are of atmost importance. It has become possible through the determinetion of principles of highway administration to place the business of building and maintaining adequate highways within a state upon exactly the same kind of foundation that is required. for any successful business. In fact it is now more possible to fix sound policies of highway administration than it is to fix sound policies for many business enterprises. Through painstaking and extensive research, and more, through a tremendous actual experience, there is much information in this field. It is a comparable situation to the very large business enterprises which have made a major activity of collecting information through widespread investigation and extensive research and which have devoted to this purpose a very material Dercentage of their administrative expenses.

All worthwhile results in the production of adequate high-ways have materialized from intelligent cooperation between town and country, between state and local governments, between the federal and state governments, between the highway officials and the motor vehicle producers and operators, and between the public and its highway officials. Taken as a whole, the problem is so large, both in the state and in the nation, that cooperation, and emphatically intelligent cooperation, is the very foundation of progress.

Frequently there is a hostility between town and country over road policies. Suspicion arises in the rural communities that the towns or cities favor a policy of road building inimicable to the rural interests. There such an attitude exists, or where there is even a suspicion of its existing, the facts ought to be faced squarely. The interests of town and country are not opposed. An adequate highway system for the state must serve equally well both town and country. Once this is accepted the situation can be met on the basis of the facts.

A big drawback to progressive legislation has been the reluctance of the counties to turn over to the state the authority to build and maintain the state road system. Yet progress has only been made toward a real state road system in those states which have taken over this responsibility and are administering and financing the building of major roads.

Under the Federal Sighway Act the state and the federal government are partners, with the national government contributing to the cost of certain reads which are of national importance. The policy of Federal aid has been criticized. In Maine, 20 ner cent of the traffic on the main highways originates outside the In New Hampshire the proportion reaches 50 per cent. Transportation by motor vehicle is as mational in its aspect as is transportation by rail or by water. Passing over the thousand and one arguments that justify the existence of federal participation in highway building, this nation will grow in its cohesive strength as the people of the various communities come into contact and extend their knowledge and understanding of each other. These ends are being realized in a greater degree since the advent of motor transportation them in all the past history of the Republic, and this single fact is in itself ample reason for the partnership of the federal government in this enterprise.

There must be cooperation between the highway officials and motor vehicle producers and the road users. There are many phases, but a single one will illustrate. Bighway officials have been striving to meet the demands of the heavier motor vehicles in the improved types of road construction. Sow changes are imminent in the design of commercial motor vehicles that will make possible the movement of heavy loads both of commodities and passengers upon the highways with less destroying effect upon the

highways themselves. This will mark a step forward in the Sevelopment of highway transportation that will solve problems of highway building and maintenance and will provide better service for the public.

And most important is the cooperation between the public and the highway officials. It is a tramendously discounaging situation if a state bighway department finds a lack of cooperation on the part of the public or its representative, the state legislature. It is necessary for the highway departments of the states to recommend highway legislation and appropriations. If the opinion of the highway department and that of the legislature conflict, that of the legislature prevails because it has the sole authority to make laws and appropriations. Today many of the state highway departments are being held responsible for a failure to produce satisfactory results where the responsibility for these failures actually rests entirely upon the legislature and back of it upon the people themselves for failing to provide the necessary laws and financial support. This does not mean that there is not a wide difference between good and bad administration by the state highway department. But the state highway department in order to produce results must have the support of both legislation and a sufficient income, which with economy and good administration can produce the necessary new highways and maintain those existing.

From the results of the Highway Transport Survey of 1924 which was carried on by the Meine State Highway Department and the Sureau of Public Roads, it is possible to place before the people of the State and before the legislature adequate facts upon which to base sound policies for the future.

The registration of motor vehicles in the state doubled in the period 1916-1920, and doubled again between 1920-1924.

From a careful study of many factors it is reasonable to believe that the registration will double again in the period 1924-1930.

Fighway traffic has followed along almost parallel lines.

while the traffic counts and analyses of previous years are not as accurate as the 1924 survey made, the available data showed that the highway traffic doubled between 1916 and 1919, doubled again between 1919 and 1927, and probably will again double by 1930. This increase in the utilisation of motor vehicles and the consequent increased demands upon the highways indicate the necessity for a very greatly changed business policy of highway administration.

The present state system totals 1.750 miles. The improved state roads total 1.300 miles, leaving to be built 450 miles. Petitions are pending before the State Righway Department for an additional 350 miles which if granted would leave a total of 800 miles of roads to be built. This would be an addition of nearly 60 per cent of the mileage that has been improved for which construction funds would have to be provided.

In the state aid system there are 4,250 miles, of which 2,500 miles have been improved through state aid, leaving 1,750 miles to be improved.

Based on the present revenues, it appears that when the allotments from the gas tax for state aid and for third class highways are made, the amounts set aside to retire road bonds and for other necessary expenses, plus the maintenance of the state and state aid roads, that only a very small sum will remain for the construction of new roads on the state system and for the reconstruction of those roads which are not able to carry the increesingly heavy traffic with economy.

Out of the 1,300 miles of improved roads on the state system, more than 70 per cent are of gravel construction, either plain or surface treated. On the state aid roads practically all of the surfacing is of the gravel type.

From these facts there certainly can be no difference of opinion that Waine has reached the point where she must decide between two policies.

First: That of adding new roads to the state aystem and improving these with cheaper types of construction which will result in a constantly growing maintenance cost, or

Second: She must defer the extension of the state system and begin the reconstruction of those sections of the present state system which are no longer adequate to carry the traffic.

Unless the latter policy is adopted, not only will the cost of maintenance be increased by the addition of more miles, but the maintenance cost per mile for a certain portion of the state system will increase beyond a reasonable figure and even with much larger maintenance expenditures the reads will deteriorate.

Here are two policies which Naine can folice. The described to a constructive and permanent plan of highway improvement; the other toward a policy which will prove wasteful and sooner or later must be abandoned because of its cost.

There is, of course, the temptation to spen new areas and to extend new roads to attract the tourists. The growth in tourist traffic has been perhaps the most metable development in these New England States, but from the state's stand-point, highway policies should be based upon a consideration of the needs of the whole state for highway transportation.

Enine in its very efficient publicity is making its claims to tourists' recognition well known. It has said to those who are interested: Maine has far sale the use of 2,500 miles of Sea Coast, 25,000 miles of shore line bertering 5,000 lakes and streams, and 15,000,000 acres of forest. In fact, recreational facilities unsurpassed for both summer and winter. All of these have their appeal to the tourists and will result in a constantly increasing tide of summer travel.

but this travel is in the summer, end Maine lives on a twelve-month basis. It has large manufacturing enterprises. particularly of wood products. Its farm area is being more and more devoted to the production of potatons, fruits and the products which are demanded by a tremendous industrial population within easy reach. Its fisheries are extensive. Highway transportation is essential to the marketing of the food products and other commodities produced, and as an incidental necessity to these industries.

Among its most important agricultural products are potatoes, sweet corn, green peas, blue berries, milk and cream, cheese, whole wheat flour, corn meal, apples, eggs, poultry and butter. These are commodities which require quick transportation either to the reilroad stations for express delivery to the city markets, or direct delivery to the markets over the highways.

Weine has eveilable within relatively short transportation distance the largest city markets, and the earning capacity of the consumers in these industrial centers is such that they are able to afford in large quantities the products which wains produces.

Many similar facts might be added to the to indicate that the highway problem in Maine is a tremendous problem now and is constantly growing.

To fill the highway transportation needs of the State, there are certain major changes which must be made in the highway policies for the immediate future. These may be summed up as follows:

- 1 The system of state bighways as now constituted needs minor revemping by the elimination and else the addition of certain highways to serve the traffic best.
- 2 Recognition must be given the use now made of the different systems. Based upon the survey the following facts are apparent:

The state system constituting only 7.1 per cent of the total mileage carries 53.4 per cent of the traffic

The state eid system constituting 17.5 per cent of the total mileage carries 30.9 per cent of the total traffic.

Third class or town highways 75.4 per cent of the total mileage and 15.7 per cent of the total treffic.

- 3 The relative traffic on the different systems of highways must be met by corresponding construction of a larger mileage of the heavy traffic types of reads. For example, on the state system the average traffic per day, as shown by the survey, was 950 vehicles, on the state aid system 221 vehicles, on the third class highways 27 vehicles. But on 300 miles of the state system the average daily traffic was 2,197 vehicles; on 863 miles, 924 vehicles and on 467 miles, 525 vehicles. These figures were for 1924 and a resconable increase would be not less than 10, possibly not more than 20 per cent for the present.
- 4 The time to build a greater mileage of paved highways has been definitely reached.
- 5 The demands on the present available income do not leave funds sufficient to provide for the construction of the uncompleted sections of the state

highways or for the reconstruction of the heaviest traffic highways. If the necessary funds were taken from the present income this would use all of the license fees and the gas tax, even though these funds were considerably increased by higher rates. Any considerable increase in property taxes would be unpopular and of doubtful desirability. The most feasible plan, particularly to finance the reconstruction of the heavy traffic highways with durable types of roads, is through a bond issue.

There has been much talk about the pay-as-you-go policy. This policy is a myth. It does not exist in any state where there has been any considerable mileage of the higher type roadways built. It is true that some states have not issued bonds, but their counties have issued the bonds and have loaned the proceeds to the states, or have built the roads on the state system. There is not a single exception to this rule. In fact there is only one state which has not issued either state or county bonds. Iowa, for example, has issued no state bonds as such, but within the last few months 5 or 6 counties have issued upwards of \$6,000,000 in county bonds which will be expended by the State and amortized from the State's income from the motor vehicle. Thus while the bonds are technically not state bonds, in fact they are state bonds, but county credit in place of state credit has been used to float them: a much less satisfactory and more expensive procedure than to issue state bonds outright. It is true that in recent years the state of Virginia has not issued state bonds, but the figures for 1925 show more than

\$2,500,000 transferred from the counties to the state, much of which was derived from county bond issues and used by the state for state road purposes.

In no state is the income from the motor vehicle licenses and the gas taxes sufficient to maintain the highways of the state system and to provide current funds sufficiently large to make any considerable progress in the building of the higher types of roads on the so-called pay-as-you-go policy.

A brief resume of what has been accomplished in North Carolina in the past five years holds an inspiration for the states which are facing a new chase of their highway development; that:

1s, where the state has come definitely to the time when the policies which have been right and proper of building a considerable wileage of the cheaper types of roads must be abandoned for policies of extensive maintenance and reconstruction of the heavy traffic roads of the more durable types which necessarily involve a larger outlay per sile. The results which have followed in North Carolina the tackling of this big problem on an adequate basis are shown by the following facts.

Since 1921 North Caroline has built 4,500 miles of a state bighesy system of 6,500 miles. The following facts indicate the result of the improvement -

The number of farms has increased by 13,000 during a period when the number of farms in the country as a whole fall off.

Consolidated schools have been built which are valued at \$35,000,000. To these each school day are brought 100,000 pupils in 2,000 school buses operating 40,000 miles - largely on the state system.

Forty cooperative farm marketing associations have been formed which now ship carload after carload of poultry, eggs, hogs, fruits, and vegetables formerly not grown for outside sale.

Roadside and city curb markets have provided an outlet for the ferm surplus merchandised by the farm women, who with the money they receive, are adding modern conveniences to their homes, painting their houses, beautifying their yards, and dressing themselves and their children better.

The lost provinces of the eastern and western portions of the state have been recovered.

The value of property has multiplied eight times since 1900 while property in the country as a whole was increasing but four times.

Largely as a result of the highway improvements, which have brought the farmers in touch with the railroads, poultry shipments increased in the state from 454.285 pounds in 1924 to 1.900.000 pounds in 1926; bog shipments increased from 23 carloads in 1924 to 80 in 1926; and egg shipments increased from 5.681 cases in 1924 to more than 8.000 in 1926.

The larger cities have increased their milk consumption by 250 per cent. Seven of the 12 milk plants in the state have been established since 1930: and 7 of the 15 creameries have been established in the same period.

Car-lot shipments of fruits and vegetables increased from 9.318 in 1921 to 14.685 in 1925.

In conclusion, Neine must face now or at some later time when it will be more difficult, a very material revision of

the policies which have been most proper and justifiable up to the present time. She faces the need for adequate funds to complete and to reconstruct the major highway system. At the present time, January, 1927, there is available from the Federal aid allotments about \$1,400,000. With the present income available to the highway department and the demands upon it Maine will not be able to take up the allotments of Federal funds as rapidly as the state should use them in the building of much needed heavy traffic roads.

The facts herein presented and many more upon which can be based a sound policy are available and are not open to major questioning. The whole matter centers about this one all-important question: Will the people of the state, acting through their Board of Directors, the State Legislature, in cooperation with the Highway Department, take the available facts and viewing all of the state requirements, through enactment of legislation along the indicated lines, make it possible for the State Highway Department to go forward on a highway program adequate for the present and growing needs of the state.