

MICHIGAN'S ROADSIDE PROGRAM

By

Murray D. Van Wagoner, Commissioner,
Michigan State Highway Department

In a field which is a relatively new development, we have done some new things in Michigan, and we are glad to say that these new roadside facilities are among the most popular highway services ever offered in the State.

It is only in recent years that the public has given highway engineers a chance to think about the problem of roadside beautification. With the development of automobiles there came a pressing demand for more and better roads. The automotive engineer did his part and produced a machine that made former speeds seem like a snail's pace. He was closely followed by the highway engineer who directed his efforts toward improving highways so that motorists could travel faster and farther. Transportation was the goal. The appearance of the roadside or the country through which the highway passed was then a minor consideration. Roads, roads, and more roads was the cry on all sides.

With ribbons of concrete and other types of highways stretching for miles in all directions, the novelty of driving over them began to wear off. It was not enough merely to provide an automobile with a road which would carry it from one town to another. Only so far as commercial traffic was concerned did those first highways serve the purpose.

But then, as now, a large proportion of the traffic on our roads was composed of tourists and pleasure motorists. We no longer have to guess at this fact. The Michigan Highway Planning Survey has shown that 60 per cent of Michigan's traffic, which exceeds 10 billion vehicle miles annually, is social and recreational. Motorists today are demanding something more than a roadbed, and I believe that modern highway engineers are obligated to provide it. Modern highways must have an aesthetic appeal if they are to measure up to their full requirements.

Roadside improvement is not merely a covering-up process. It is true that many roads have been built in such a way that they are scars across a once beautiful landscape. While strenuous efforts should be made to cover these scars and restore nature's own handiwork, we must start our work much earlier.

To develop a highway system that has an aesthetic as well as a use value, early planning of the roadway itself is necessary. In other words, instead of waiting until the finishing touches have been put on

a new highway before giving thought to its aesthetic qualities, we should start our work with the location engineer, and then follow through with each successive step of development.

The location engineer and right-of-way buyer probably have more to do with the ultimate beauty of a highway than any other persons in a highway department. This does not mean, of course, that proper design and construction can be neglected.

Location of the highway should take advantage of the natural beauty of the country. Without sacrificing distance or economy it is often possible to bring a new highway into view of an inland lake, a rock formation, a woods or river. And with proper study, unsightly or uninteresting country can be avoided.

Michigan has 2,200 miles of shoreline on four of the Great Lakes. Already extensive stretches of this coast line are connected with shoreline highways. Our standard for the construction of a coastal highway is that motorists may view the water at least fifty per cent of the time. This does not mean that a highway must follow the beach all of that distance. A panorama of the lake from a high hill several miles back from the water often has more charm and appeal than a closeup view.

One of the outstanding examples in Michigan of this type of highway is the shore road, US-2, northwest from St. Ignace to Brevort in the Upper Peninsula. This stretch of highway skirting Lake Michigan is a relocation of old US-2 which is far inland. The relocated scenic highway has cut the driving distance nearly in half from St. Ignace to Brevort, saving 17 miles as compared with the old route.

Good practice in design and construction must not be overlooked. If the highway traverses rugged country a great deal can be accomplished in designing graceful curves. Safety requirements have ruled out the sharp, flat curves of the past. The long, sweeping curves of modern road construction, insuring clear vision ahead at all times, have done much to improve the appearance of the road. Rounded back slopes and shoulders which blend with the landscape, and the avoidance of sharp ditch lines all help in attaining symmetry and balance in the finished highway.

Having mentioned some of the important factors in new highway construction let us turn briefly to the vast mileage of highways that were built from 10 to 30 years ago, when less attention was given to aesthetic qualities. Far greater mileage is involved in these roads than in newly constructed highways. What can be done to improve the appearance of these older highways?

Effective selection, arrangement and planting of shrubs, evergreens and deciduous trees will in time help immeasurably to improve the appearance of highways leading through barren country. One of the first and most elementary operations is the sodding of backslopes. Along with this work comes planting on steep backs or along highways not protected by natural growth.

In the preservation of the natural attractiveness of Michigan roadsides we have made some very definite progress in recent years. For example, the ravages of insect pests which annually attack certain trees along the roadsides are controlled by spraying. More than 55,000 shade trees were treated last summer in 42 counties of the State. Four power sprayers manned by crews of four and five men were kept busy touring the highways, spraying infected trees. More than a half million gallons of lead arsenate solution were used in this work.

Trees along the trunklines are inspected at least once every three years. Dead limbs are removed and if the tree is of questionable value or nearly dead, it is removed. In this connection we have a strict control over the activities of public utilities using the State right-of-way for pole lines. No work can be done without first securing a permit from our office. Any tree trimming necessitated by the erection of pole lines is done on the side of the trees farthest from the traveled portion of the road.

In Michigan the planting of long stretches of roadsides through uninteresting country has given way in the last three or four years to the concentration of work in the roadside parking developments which now dot the highway system. These developments give the highways an atmosphere of restfulness and welcome. With a relatively small amount of money to spend for roadside improvement, a much better total effect can be obtained by doing a complete job in a small area than by spreading the work thinly over longer distances.

Here is the way the Michigan Highway Department goes about building a roadside parking area. At many points throughout the State, the Department owns more right-of-way than is required for the road itself. Those points which have outstanding scenic possibilities are carefully selected and examined for further development, and in many cases new sites are purchased specifically for parks. Undesirable underbrush is removed. Sometimes trees are removed and transplanted to give a more pleasing appearance or to open an especially scenic view. At other points additional trees native to that section of the State are planted to improve the appearance of the area.

In the roadside area, a rustic theme is followed throughout. Any buildings such as shelter pagodas, well shelters, or comfort stations are built of logs and with rustic design. Rock work is also frequently applied -- especially around springs or streams where pools

or small cascades can be constructed. Adequate parking places are provided adjacent to the highway, and paths lead to various points throughout the development. Rustic picnic tables are also provided, and pure drinking water is near at hand. More than 100 of these roadside parks are spread over the Michigan highway system.

These roadside parks should not be confused with the general policy of placing picnic tables along the roadsides. For the past few years the Department has made it a policy to place roadside tables at frequent points along the highways. These tables are set out singly or in groups of two or three according to shade area and other features of the place. Approximately 2,500 of these tables were placed along the roadsides in Michigan last summer. It was largely due to the success of this policy that the more extensive roadside developments were attempted.

As I stated earlier, such a program of roadside improvement is relatively new in the field of highway engineering. At first we proceeded rather cautiously. Many persons looked askance at any extensive program for roadside development. Today, however, Michigan is going ahead with confidence knowing that this program is for the best interests of the highway system.

In carrying out a continuous and extensive policy of landscaping and roadside improvement, we have also been hardheaded businessmen. It pays to beautify our highways. It has been definitely proved that roadside development reduces maintenance costs. For example, out in Gogebic County in the Upper Peninsula, the average cost per mile of snow plowing varied between \$78 on roads bordered by thick forests and \$350 on roads completely exposed to the wind.

Consider this too. Comparison of year-around maintenance costs on two gravel roads in the Lower Peninsula -- one through forest land and the other through comparatively open country -- shows that per-mile costs were about 42 per cent lower on the protected road. Not only were snow removal costs reduced, but dragging and dust treatment costs were also much less, due to the protection afforded by roadside trees.

Erosion is one of the worst enemies of the highway builder. Wind and rain are constantly at work to tear down and wash away slopes unprotected by sodding or shrubbery. Thousands of dollars are saved annually by adequate sodding and other erosion control work.

Economy in road maintenance is not the only justification for roadside development and improvement. Much can be done to promote highway safety through an intelligent roadside program. I have mentioned our practice of preserving and developing stands of road-

side timber. The next time you have occasion to drive at night, in a fog, or even in a snow storm, notice how much you are aided where trees outline the road.

That is not all. Maintenance workers are constantly on the watch for dead limbs or dead trees, and when these are discovered they are immediately removed. This means that the motorist can proceed secure in the knowledge that his path will not be obstructed by limbs or trees blown across the highway. Trees throughout the trunkline system are carefully trimmed to provide better sight distance. This is especially true at railroad crossings and intersections.

There is one other safety factor in roadside improvement. Concentrated roadside developments are provided with driveways and parking areas. It has been found that truck drivers and tourists who have been behind the wheel for long periods of time are using these convenient places to stop for a few minutes of relaxation. Frequently they pause for a short nap. Just how many accidents have thus been prevented it would be hard to say, but it is logical to assume that without a convenient place to stop for a rest, many motorists, though drowsy, would continue their driving.

Scenic turnouts or simply additional parking space beyond the shoulder limits also have great safety value, in addition to furnishing real pleasure for motorists. These turnouts are constructed at vantage points along the highways, where there are unusually pleasing scenic views. The motorist drives onto the turnout and pauses as long as he wishes, without danger from other traffic.

The battle to beautify our highways is not without its discouraging aspect. It has been our experience in Michigan, and no doubt yours, that no sooner do we build a beautiful highway along a lake or stream than along come those who seek to commercialize on this beauty. Transient, fly-by-night vendors encroach upon the right-of-way with wierd signs advertising their wares. As soon as one of our roadside parks was completed, a hot dog stand was erected next to it. Scores of transient worm vendors descended upon one of our main highways near a lake and not only ruined the beauty of the right-of-way but also created a serious traffic hazard. With the cooperation of the State police and county authorities, however, we were able to evict the vendors under a law that permits the State highway and police commissioners to create special zones along the highway system.

Michigan, like most States, has no effective law to control billboard advertising. Unquestionably such regulation is bound to come, not only in our State but throughout the country. How rapidly it will arrive will depend a great deal upon how sensible we are in approaching the problem.

The dollar and cents value of roadside development goes far beyond maintenance and safety considerations in Michigan. It is hard to estimate the importance of these facilities to our tourist business -- the second largest industry that we have in Michigan. Some idea of this importance, however, is indicated by the thousands of letters received from tourists from every State in the Union expressing their appreciation for these services. We believe that a good share of the return from our tourist industry can be credited to the development of a beautified, friendly highway system.

The roadside table, roadside parking areas, and graceful shade trees are an expression of friendliness. They remove some of the hardness which formerly was typical of the modern highway. Slowly but surely, and in spite of our high-speed habits, Michigan highways are regaining some of that friendly, human atmosphere which characterized the earlier wagon trails.