

ROADSIDE LITTER -- ITS CLEAN-UP, COST, AND CURE

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AMONG the many highway department problems is that of keeping the roadsides free of debris carelessly, or deliberately, scattered by the public. This litter is not only unsightly and therefore thwarts the efforts of roadside development engineers to provide more attractive roadsides; if left along the highways, it is very damaging to mowing equipment, it accumulates and clogs drainageways, and the sharp edges of broken bottles and cans are likely to cut the tires of passing cars. It is therefore necessary to remove it -- an operation which annually costs highway departments many thousands of dollars.

Recently a survey was made, by questionnaire, of the 48 states in order to discover just how much this roadside clean-up is costing, and what, if anything, can be done to eliminate or at least minimize the problem. In theory, roadside clean-up should be unnecessary; in practice, it is essential as long as an untidy or thoughtless public continues its present habits and thus creates the problem.

Actual Costs

Of the 43 replies to the questionnaire, over one-half cited actual costs of roadside clean-up, ranging from \$500 to \$250,000 a year. The average is over \$70,000. Some states had no accurate cost figures available, but indicated that it is an expensive maintenance item. Two states reported a cost of approximately \$10 per mile of highway; another, \$5,000 for cleaning up 30 miles of dual highway. Eight states spend \$100,000 or more annually for roadside clean-up. Practically all states replying feel that it is an important problem.

All but one of the states replying reported damage to mowing equipment from bottles and cans along the roadsides -- in itself, an item of expense for repairs. It thus becomes evident that the problem is a costly one either way -- if you don't clean up the debris or if you do.

Methods of Clean-Up

Apparently most states carry on this roadside clean-up as a hand-labor operation -- a crew of men, with a truck, work along the roadsides, raking or picking up the litter and depositing it in the truck. At today's labor rates, this is an extremely expensive procedure.

Since the roadside-litter problem is likely to be with us for some time, the first step in its solution appears to be decreased cost through mechanization -- a move which has been successful in other fields such as grading, roadside seeding, and mulching. The questionnaire asked whether or not there is sufficient need for clean-up equipment to justify placing the problem before manufacturers for commercial development. The answer is generally "yes", providing, of course, that the purchase and operating costs of such equipment can be kept reasonable.

Three states reported using a leaf-collector machine, but this type of unit cannot handle bottles and cans without damage to it. California has developed a roadside "vacuum cleaner" based on the Good Roads leaf collector, with modifications to permit bottles and cans to drop directly into the bottom of the unit instead of passing through the fan which, of course, would be damaged by them. Use of this

unit has reduced the amount of man labor required, but the resulting savings are not known. However, California reports that there is still too much hand labor necessary to collect the litter.

It should be a relatively simple task to develop a machine which would gather up all the litter -- papers, boxes, cans, bottles, etc. -- quickly and economically, and it would seem desirable to place this problem before some of the manufacturers of road-maintenance equipment.

Legislation as a "Cure"

The long-range objective is, of course, to eliminate or minimize the problem. This can be tackled in three ways: (1) legislation; (2) public education; and (3) provision of sufficient trash receptacles or disposal areas.

A number of states have "no dumping" laws which make it a misdemeanor, punishable by a fine, to dispose of garbage, junk, etc., along the public ways. Any kind of legislation is effective only if there is effective enforcement. Although this is usually outside the province of the highway department, lack of proper enforcement throws the problem right back to the highway department. Law or no law -- if debris is thrown on the roadside, the highway department has to clean it up.

While legislation is certainly desirable, the reports indicate that enforcement is a big problem, and it has not proved a thoroughly effective "cure". However, one state -- Vermont -- reported that posting on its main roads copies of the law imposing a \$50 fine for throwing trash along the highway seems to have accomplished more than any other one thing in cleaning up its roadsides.

There are two kinds of "litterbugs" (a term coined, we believe, by Professor Ben Petty). There are the people who deliberately take their garbage or trash out to the highway for disposal, and there are the thoughtless or careless bottle or beer-can tossers. Many people who wouldn't think of using the roadside as a garbage or trash dump think nothing of tossing out of the car Junior's empty pop bottle. It is the latter group which is often harder to control; in their minds they are not guilty of breaking the law.

This stresses the importance of providing well defined and accessible places for the disposal of trash. And here the roadside park or picnic area makes a contribution to the solution of this problem. By supplying a place to stop and eat, and receptacles for the picnic debris, much of the litter, which would otherwise be found on the roadside, is collected there.

It was suggested that gas stations, roadside stands, and eating places can help by providing trash cans and encouraging customers to use them. Another suggestion was that an appeal be made to beer, soft-drink, and candy producers to include notices on their containers such as "Keep Our Roadsides Clean -- Please Dispose of This Container in a Trash Receptacle".

The problem, of course, varies on different types of highways. Routes near resorts and communities lacking adequate refuse-disposal facilities are more likely to suffer from large amounts of household garbage and trash being dumped along them than are urban highways, or the very rural routes where the litter is mainly of the "picnic" variety.

Another "Cure"

In the last analysis, the only real cure is public education. Most of the states report some use of newspaper articles, radio announcements, roadside signs, and similar media to remind the public of its responsibilities in keeping the roadsides clean. But the cost of roadside clean-up indicates that these measures need to be intensified and much more widespread before the desired results will be achieved.

It seems to be the consensus that the educational program should be concentrated on the young -- working through the public schools, 4-H clubs, Scouts, Campfire girls, and other youth groups by means of posters in schools and meeting places, talks, films, and educational material. Garden clubs and civic groups can sponsor essay or poster contests, thus arousing the interest not only of the children but also of their parents.

Talks to Parent-Teacher Associations, Rotary, Lions, and other service clubs, garden clubs, church groups, Department of Agriculture Home Demonstration groups, conservationists, can not only "educate" them but also will stimulate sponsorship of contests among the children and encourage "drives" through local newspapers and radio stations.

Such educational programs need not be very costly, and the potential results make such cost as there is, in money, time, and effort, well worth while.

Finally, since most people are more responsive to example than to precept, the cleaner and more attractive our roadsides are, the less likely people will be to litter them with trash.

The problem of roadside litter is fundamentally a human one, and perfection among humans can be reached only in Utopia. But through a persistent and intelligent program of education, enforcement of legislation, provision of adequate disposal areas, and good example, progress can be made toward cleaner, neater roadsides at less cost to the highway departments.