

While the elimination of small bridges and cross drains is more costly, these have now been encased below grade on the Proving Ground for a distance of 100 feet on each side of the road to eliminate dangerous headwalls and bridge abutments wherever possible. And, where it was not possible to eliminate the hazard, carefully constructed guardrails have been installed, built to the exacting specifications derived from the Proving Ground's guardrail test program.

Today a vehicle leaving the road is an incident; six years ago this could have been a serious accident.

Today if a driver loses control he knows that he has room to bring the vehicle under control—without fear of hitting an obstacle or turning over.

And today, statistics prove more vividly than demonstrations that obstacles removed are accidents prevented!

In the six years that the Proving Ground's roadsides have been improved, not a single vehicle has traveled beyond the 100 foot clearance, even though incident speeds ranged as high as 80 mph.

In fact, a large percentage of the vehicles stopped within 25 feet of the roadside!

This leads to the conclusion that any increase in roadside clearance will produce a substantial increase in safety on roads handling 30 to 45 mile-per-hour traffic, 25 foot side clearances would be reasonable safe, but on super highways and other roads where speeds approach 80 miles per hour, a full 100-foot side clearance is needed. Side clearance should be related to speed, but the wider, the better!

However, the most convincing proof that clear roadsides increase safety is provided by a comparison of injury accident statistics, before and after improvement.

Before roadside clearance and improvements, in the six years between 1952 and 1958, the Proving Ground experienced damage accidents at the rate of one every 240,000 miles, and 80% of these occurred off-road. Sixty-four days of injury time were sustained in those accidents.

Between 1958 and 1964, the six years following roadside clearance, the number of off-road accidents was approximately the same—75% of the Proving Ground's total—and the frequency remained about the same—one accident every 258,000 miles!

The important improvement occurred in the area of driver safety. Where 64 days of driver injury had resulted before roadside improvement, in the six years after improvement, there was not a single lost time injury accident on improved roads! Despite 153 off-road incidents, not one day of lost time in the entire six year period! As the record shows, it was still not possible to prevent drivers from leaving the road, but when the roadside is clear the injury possibility is practically eliminated.

These statistics are working proof that roadsides need not be deadly—that roads like these with wide, clear rights-of-way are a practical, effective means of reducing injuries and saving lives—a means of accident prevention that can be applied today—not only on the Proving Ground—but on all roads throughout the Nation.

Mr. CONSTANDY. That film was revised in 1964, was it not?

Mr. LUNDSTROM. This is the 1964 version and we have not had a major revision since that time.

Mr. CONSTANDY. I was curious as to when you made the first film of this type.

Mr. LUNDSTROM. 1958 was the first time we had a film very much similar to it.

Mr. CONSTANDY. This film then, has been made available to the public, to highway officials, since 1958?

Mr. LUNDSTROM. Correct. We did show early versions of this film in 1958 and improvements have been made and modifications put into the film as conditions made it possible to do so.

In 1964, we had occasion to produce three films, as indicated in the title to this particular film, one on "Safer Roadsides," one on "Guardrail," and one on safety tests of vehicles themselves. These three films