

EDITORIAL **COMMENT**

Crossing Protection for a Town

As towns have developed along the railroads, they have normally built on both sides of the tracks, with the result that streets were opened across the tracks at almost every block. In many instances, one or perhaps two of these streets developed as business thoroughfares or as through highways, and as traffic increased, automatically-controlled bells or manually-operated gates have frequently been installed at these main crossings, to give warning of the approach of trains, while the remainder of the crossings were protected by standard cross-buck signs marking the location of the tracks to warn pedestrians or drivers of horse-drawn vehicles traveling at slow speeds to look each way for approaching trains and be governed accordingly. With the introduction of highway motor vehicles, and the development of a trend towards high speeds in recent years, too many drivers have failed to "stop, look and listen," as indicated by the fixed signs protecting the minor street crossings, and accidents have resulted. To correct this condition, city councils have in some instances passed ordinances limiting the speeds of trains through their towns, thus introducing delays in the operation of through trains.

In the meantime, perhaps five or six, of possibly twelve of the streets in the town were paved across the tracks, with the result that the vast majority of the traffic is now being handled on the paved streets. In many instances, even for those trips that would be shorter via an unpaved street, drivers detour over a longer route in order to use a paved street. Nevertheless, a few moves continue to be made over the crossings on the unpaved streets. In too many instances, these drivers are even more careless than they would be when crossing tracks at a paved highway and as a result accidents continue to occur in spite of the fact that train speeds are limited in accordance with the ordinances in effect. Under such circumstances, a logical procedure is to develop cooperative action between city officials, state highway commission and railroad representatives, the objective being to close the crossings which are used infrequently, and to install automatically-controlled protection at the remainder of the crossings. At crossings where pedestrian traffic is a factor, walk-way crossings can be left in place, and automatically-controlled bells can be provided.

Studies made in towns where such changes have been made, as well as investigations of proposed projects of this character, prove that the inconvenience caused to drivers is of such small consequence as to arouse very little criticism. On the other hand, the public derives a great benefit, not only by expediting traffic over the crossings, but also by materially improving safety. With controlled protection in service at all crossings to give warnings of the approach of trains, the railroads quite logically can be authorized to in-

crease the speed of their trains when passing through the municipality. In some instances, the replacement of manually-controlled gates by automatically-controlled protection, or centralized part-time manual control, effects economies in operating expenses sufficient to offset part of the cost of the installation as well as the increased maintenance and operating charges. Furthermore, in many instances such projects can be included in the programs of the states, financed by federal funds which are appropriated for the improvement of safety on highways.

What To Provide

In consideration of the benefits to be derived by the public, as well as the railroads, provision for modern types of protection and complete control arrangements is justified in the majority of instances. A well organized proposal on this basis is more likely to be accepted by city officials, and to receive, also, the approval and backing of the state highway commission. One of the important factors in winning the approval of the public for a wholesale crossing protection project is to provide control arrangements which will reduce to a minimum the unnecessary operation, and attendant needless delay to street traffic, when train movements over the crossings are not imminent. If drivers realize that they are being delayed needlessly, they may disregard the aspects displayed by the protection, proceed on the tracks at the wrong time and be hit by trains. Accidents or even serious criticism on the part of the public will be brought to the attention of representatives of other towns who may be making investigations for similar projects in their municipalities.

The Problem of Medium Speed

A CHANGE from two-block to three-block signaling is usually made to provide greater braking distance for higher speed trains or to increase track capacity. However, it is interesting to note, in this connection, that the proper assignment of medium speed is a very important factor. The Standard Code leaves the definition of medium speed entirely to the individual railroad. On some roads, it is the practice to designate one-half authorized speed; on other roads, an arbitrary speed is assigned, such as 30 m.p.h. But where 30 m.p.h. is defined as medium speed, or even where one-half of maximum speed is used, present-day increases in the maximum authorized speeds of trains introduce major problems for signal and operating officers with regard to track capacity and the possible necessity of additional aspects or different indications. In the section "Railroad Operation and Railway Signaling," on page 458 of this issue, consideration is given to a few of the questions raised.