

Remarks by Thos. H. MacDonald before the meeting of the New York Railroad Club on May 15, 1936. New York City, N. Y.

Mr. Chairman and gentlemen: Those of you who have read "Revolt in the Desert" may remember that Colonel Lawrence, to explain why he had abridged his longer work recording his experiences of such an unusual character, rather than recast the work as a history, gave as his reason that his interest in the subject had long since been exhausted by living through these experiences. It is not for lack of interest, however, that I must ask your indulgence tonight. Rather than the experiences of living through the inauguration of the grade crossing improvement program, as well as the enlarged highway program of the last months, have left little time for writing these in a more formal way. So I will attempt only to talk briefly of a few of the points which seem important.

The first of these is to make my acknowledgments to the Association of American Railroads for having given us such a splendid committee with which to work. This committee includes, as Chairman, Mr. R. E. Dougherty, Vice President of the New York Central Lines, and as members, Mr. W. D. Faucette, Chief Engineer of the Seaboard Air Line Railroad, Mr. R. H. Ford, Assistant Chief Engineer of the Rock Island Railroad, Mr. G. W. Harris, Chief Engineer of the Santa Fe Railroad, Mr. R. J. Middleton of the Milwaukee Railroad and Mr. T. J. Skillman, Chief Engineer of the Pennsylvania Lines. Due to the illness of Mr. Skillman, Mr. Wiggins has served in his place. Mr. J. G. Brennan as the

grade crossing engineer for the Association and Secretary of the committee has served in a friendly and most efficient manner as contact engineer between the committee and the Bureau of Public Roads.

This committee and the officials of the individual railroads have cooperated with the State highway departments and the Bureau of Public Roads so effectively that, at the present moment, there have been programmed individual grade crossing improvement projects which are estimated to cost in excess of \$175,000,000 of the total of \$200,000,000 allotted to the States less than one year ago for this purpose. In this very large undertaking there has not yet come to my attention a single important disagreement or controversy and I trust that any such situation will not arise. I consider the record which has been made a remarkable example of the cooperation possible when all parties are working in good faith toward the same objective.

During the period 1916 to 1932 we eliminated through our regular Federal aid highway construction program about 6,000 grade crossings. An additional number were eliminated by the States without Federal funds. But during this period approximately 6,000 grade crossings were eliminated from the State highway system. This figure does not include the grade crossings eliminated on the local highways or in municipalities. The Public Works highway allotment of 1933 permitted the use, for

the first time, of these funds to pay the full cost, except for property and property damages, of grade crossing improvements. In the Public Works program under the 1933 Public Works appropriation, some 677 grade crossings were eliminated. Including the projects which are now programmed and which will be completed from the \$200,000,000 appropriation of 1935, we will have approximately 3,000 grade crossing eliminations. This number includes perhaps 300 projects of a reconstruction character where existing separations are now possibly more dangerous to highway traffic than the grade crossings would be themselves. Thus, in a period of about three years we are making one-half of the progress in doing away with the grade intersections of highways and railways that was made in the previous 16 years. If we take into account also the fact that many of the most important grade crossings in the United States whose improvement has been long deferred, are now in process of construction, I feel that this is a very good record. Measured by the importance of the projects that are under way, there is no doubt as to the merit of this expenditure of public funds.

All of the designs are in accord with the approved standards of the American Railway Engineering Association and the American Association of State Highway Officials. We have

been content to accept the standards developed by the railroads for the structures and improvements which must carry the rail traffic and for the protective devices. We would have been gratified had the railroads agreed upon a single standard for protective devices. Since there was some conflict of opinion between the railroad companies as to these protective devices, we required changes in the design so there would be presented to the traveling public the same general appearance and operation as the flashing light standard design. In passing, I was delighted to hear the talk by Mr. Rudd. He is perhaps the dean of the profession in the matter particularly of protective devices, and I agree with the advice and conclusions he has so well presented here tonight.

The pending highway legislation provides for continuing an allotment of \$50,000,000 for the fiscal years 1938 and 1939 for grade crossing improvements. This legislation has passed both Houses of Congress without dissent and is in conference at the moment. The differences in the measures as they have been passed are not important and do not involve the provision for continuing railroad grade crossing improvements. Thus it appears that we will have a continuation of a somewhat smaller scale, but yet a very reasonable scale, of grade crossing improvements for the two years following the present year. This year we have all the work that we can possibly do.

A number of the speakers have referred to the matter of cost distribution. Without going into this discussion in detail, I have regarded the pronouncement of the Supreme Court of the United States in the Tennessee case as rendering obsolete all of the legislation that fixes a definite percentage of the cost of grade crossing improvements upon the railroads. I have made this statement before and have written many of the States that, in my judgment, their laws should be so modified that any cost distribution to the railroads should be fixed in accordance with the benefits received for the particular project involved. I think that in a general way this would agree with the position stated by your Chairman, - that the contribution by the railroads should be equal to the savings in their operating costs.

The railroads have made a wonderful record in safety. In fixing the cost for the improvements made to promote safety, there should be a distinction made between a traffic hazard and a cause of major traffic fatalities. The highway - railway grade crossing is always a traffic hazard. It is not relatively a major cause of traffic fatalities. This may in a measure explain our philosophy in having advocated as a part of the important public works undertaking to supply employment, the inclusion of grade crossing improvements, and the taking over of the whole cost of construction from the Federal funds. Under existing conditions, I do not find

any reason for dissatisfaction with this position which we first took in 1933 and have followed since, of bearing the construction costs from the Federal funds. The cost of the necessary property and the damages to property are being paid by the States and by the railroads. These costs will represent an important item and in some cases, at least, will reach the dimensions of a very reasonable contribution by the railroads.

Referring to this matter of distinction between traffic hazards and major causes of traffic fatalities, the records for 1934 show some 36,000 fatalities on our highways. Of this total the grade crossing fatalities were about 1550 and it is tremendously important that these 1550 fatalities be reduced. Even though the grade crossing does not account in a major way for highway fatalities, the highway user is constantly faced with this traffic hazard. If we remove from the highway user the nervous tension or fear with which he approaches the railroad grade crossing and the hazard to his life and property, this is a distinct and valuable service. Although personally we may never have a grade crossing accident, all of us fear grade crossings and agree that their presence takes away from the pleasure of recreational driving and are willing to contribute reasonably to the removal of these hazards. Something of the same reasoning may be applied to the railways. With the higher speeds of the new trains, there is an increased hazard in the grade crossing to the operation of these trains. Any

accident to one of these lighter, faster trains, it seems to me, will have something of the same reaction as in the case of an accident to an air-ship. It creates a question in the minds of the public that will be reflected in the loss of travel. Also, there must be a very serious mental reaction in the minds of the engineers who operate the trains with the constant uncertainty of whether motor vehicles approaching the crossings will stop or will not. This whole matter of the mental hazards, in addition to the actual physical hazards of grade crossings, seems to me highly important to all of those using and operating our transportation facilities. In addition, from grade crossing improvements there is a resulting benefit in the greater efficiency of both highway and railway transportation. Whatever improves the efficiency of our transportation systems benefits the public at large. Thus, in analyzing the benefits of grade crossing improvements in the most searching manner, we must conclude that the major results are an economic gain to the public as a whole, whether it is in the removal of existing hazards, mental or physical, or of increasing the efficiency of our transportation systems. I think, therefore, we should not stumble over our own feet in attempting to assess with too infinite care the cost of such improvements among the various parties. In the end it is only an assessment against the

transportation services which must be paid for by the public, and such improvements bring economic benefits to the public many times greater than their cost.

In this very brief way I have tried to place before you a little of the progress that is being made and something of the results which have been secured through cooperation between the States, the Federal Government and the railroads, to express my appreciation of the committee representing the Association of American Railroads, and to express the hope that the very definite results that are being secured in this field will extend into other fields to remove possible conflicts between railway and highway transportation and develop a mutual helpfulness.

In closing, it may be of interest for you to know that although the present program of highway and grade crossing improvements is requiring large expenditures of Federal funds, that actually since the Public Works program was started in 1933, the income to the Federal Treasury collected from the gas taxes and other special taxes on motor vehicles has amounted to more than \$100,000,000 above the amounts which have been paid out for highways and grade crossing improvements by the Bureau of Public Roads.

It has been a pleasure to be with you this evening to hear the interesting discussions and I appreciate this opportunity to meet with you.