

REPORT OF THE COMMITTEE ON THE CAUSES AND PREVENTION OF HIGHWAY ACCIDENTS

KNIGHT DUNLAP, *Chairman*

Professor of Experimental Psychology, Johns Hopkins University

This committee has been delayed in getting under way this fall, by causes which were unavoidable, and which need not be detailed here. There has been criticism of the committee on various grounds, and there has been doubt and confusion concerning the purposes of the committee, not only by those outside, but also on the part of the committee itself. The chairman, therefore, felt it necessary to spend some time in collecting information from members of the committee and from a number of other persons who had been concerned in the original organization of the committee, and from others whose interests are closely allied to those the committee might be presumed to have. A meeting of the committee was then held, on November 16, 1929, in Washington, and the situation was presented to it. The committee considered the situation carefully, and arrived at definite and unanimous decisions on the following points:

1. It seemed clear that there is a field for work for this committee, without overlapping with other agencies engaged in research on problems of traffic and transportation, but in cooperation with them
2. It was agreed that it would be relatively unproductive to separate the engineering problems from the psychological problems
3. It was definitely voted that the committee should be enlarged to include non-representational members skilled in educational and psychological problems.
4. It was agreed that the committee should serve in the main in an advisory and administrative capacity, delegating active work to appropriately constituted sub-committees
5. It was decided to proceed at once with the formation of a research program, adequately detailed as to precise problems and personnel requirements, and including estimates of costs
6. It was the general sense of the meeting that although the committee should aid in every suitable way in the improvement of statistical data concerning accidents, it is unwise for the committee to engage in the work of collecting statistical data of this sort.

7. It was agreed that the program should include problems of whatever type may offer reasonable assurance of results applicable to the increase of safety of motor traffic and transportation, when such research shall be found otherwise not provided for; and that such research should not wait upon the determining of the question of whether the danger factors at the basis of the proposed research are major or minor factors, if they are known to be actual factors conducive or contributory to accidents.
8. After lengthy discussion of various danger factors concerning which facts essential for the improvement or remedy of existing conditions are not fully known, it was decided to form a sub-committee to draft a provisional research program for submission to the general committee. The sub-committee as appointed consists of Mr Eynon, Dr Dickinson, and Mr. Eliot, and is engaged in its duties.

The committee does not expect to make startlingly rapid progress. It does expect to elaborate this winter an adequate research program in which every item will have been well considered and planned from a practical point of view. It has further committed itself to the active carrying out of the research, if and when, adequate funds are obtained. The committee does not expect that its members, will actually do the research. We cannot expect the organizations with which the members are identified to donate more than the time and energy required for the general planning and supervision. The actual research must be carried out by men selected for their specific abilities and experience, and paid for their services, or must be assigned to agencies already so organized or constituted as adequately to conduct the particular investigations so assigned. It is deemed probable that both methods must be employed, each definite problem or group of problems being entrusted to the research personnel best fitted to undertake it, and in the place where it can adequately be solved.

The entire program undertaken, however, should be integratively supervised and fostered by the committee. It is possible such supervision would best be exercised through a director responsible to and advised by the committee and its sub-committees.

No request for, or further suggestion of, financial support will be made until the committee is able to present a plan which shall clearly merit strong support.

I may add that in the opinion of its chairman, the committee is proceeding in exactly the proper direction, and is making progress

with satisfactory rapidity. The problem planning will require a considerable expenditure of time by men upon whom other demands are heavy. It is true that the chairman of the committee ought to give more time and energy to this work than is possible for the present chairman, hence he hopes a more active chairman may be shortly found.

APPENDIX

TO REPORT OF THE COMMITTEE ON CAUSES AND PREVENTION OF
ACCIDENTS*A Partial List of Topics on Which Definite Research is Needed on
One or More Problems Directly Related to Safety in Motor
Traffic and Transportation*

- 1 The design and construction of road beds and other highway features is, of course, a prime factor in safety. It is probable that the Committee on Causes and Prevention of Accidents may be able usefully to cooperate with the other committees of the Highway Research Board on certain problems in this field
2. Motor equipment, including brakes, headlights, horns, etc.
3. Signs and signals for non-urban use; including problems of shape, size, color, and lettering; avoidance or minimizing of reading requirement; and placement to minimize congestion, erratic driving and other menaces due to the consulting of signs. (The present standardization is not final, and important factors have apparently been omitted from consideration in some cases)
- 4 Urban and suburban signs and signals, including stop-go signals, boulevard stops, one-way and other directional signs, and parking regulatory signs (The use of these signs is in a chaotic condition, detrimental to safety; and the types of sign are not optimal. *A priori* reasoning and hasty generalizations have made trouble here)
- 5 Registration plates, including legibility of the numerals, effects of coloration, and the facilitation of memory by adequate and uniform systems (This is an important factor in law enforcement and law observance. Some states have plates which would almost seem to have been designed to prevent accurate reading and retention.)
6. Pedestrian movement and control.

- 7 Smoother utilization of street space, and menaces due to parking.
8. Under and over regulation by law and ordinance, methods of enforcement, and the effect of these on attitudes and habits of drivers (Applied psychology for traffic officers enters here)
- 9 The licensing of drivers and chauffeurs, including the determination of useful and practicable limits of examinations and tests, and the problems of defective, diseased and psychopathic candidates (These problems have been treated in an *a priori* fashion to too great an extent)
10. Habitually unsafe drivers, including their detection, certification, and cure or elimination
- 11 Education of drivers in the art and science of controlling motor cars. (Little systematic attention has been paid to this for the bulk of the driving population, most of whom badly need education)
- 12 Education of pedestrians, especially of children.