

Report of Committee on Highway Capacity

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●AT THE January 10, 1960 meeting of the Highway Capacity Committee it was generally agreed that the 1950 edition of the Manual should be rewritten as quickly as possible and published to include more current information now available even though admittedly there are many areas where further research is necessary. The subcommittees were reorganized and each will attempt to prepare a rough draft of the various chapters by June 1960.

It was agreed that no wholesale rewriting of definitions was necessary. This work will be coordinated with the work of other committees on definitions, and in general, will be in agreement with the AASHO definitions where applicable.

The capacities of rural highways and facilities with uninterrupted flow need some refinements, but in general, it is apparent that there will be no major changes. The refinements will include more reliable data regarding the effect of trucks, particularly on grades, and the effect of marginal friction conditions. It is also evident that rural highway speeds have increased during the past ten years but that this fact will probably not change practical capacities appreciably since higher speeds are now desired for rural conditions. A new table showing maximum observed volumes on existing facilities will be included in the revision.

The principal need in connection with the capacities of weaving sections is to properly present the results of studies so that they will not be misused. This is especially true for compound weaving sections where more than two basic weaving movements occur. The need for information and its application to compound weaving sections is one of the more pressing problems in connection with freeway design.

During the past several years many studies have been made to determine the capacities of "on" and "off" ramps. Most of these studies have been in great detail but include a very limited number of locations. To supplement these data with less detailed but adequate information covering a large number of ramp locations throughout the country, the committee will soon initiate a nationwide study which will relate traffic volumes on ramps that are approaching their capacities to the traffic volumes on the freeway and to the geometric features at the ramp terminals. This information will supplement the more detailed studies which it has been possible to conduct at relatively few locations and the work that has been done in simulating traffic conditions at ramps for capacity and design purposes. This chapter of the Manual cannot be completed until the fall of 1960 since most of the field data must be obtained during the summer months.

Intersection capacities have increased during the past ten years, especially for the wider streets. The extent to which improved vehicle and driver performance have contributed cannot be determined but it is believed that most of the increase is the result of better use of improved traffic-control equipment. The analysis of the data obtained by the nationwide study of traffic volumes handled by intersections operating at or near their possible capacities has been a major undertaking and will not be completed before mid-1960.

It is expected that the content and format of the revised manual will be much the same as the present manual.

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