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Statements below are limited to the traffic signal section of the new Indiana Manual on Uniform Traffic Control Devices, and primarily the changes which have been made with respect to the traffic signal and flashing beacon installation warrants. There are changes with respect to the 1975 Indiana manual and the current federal manual.

In the gathering of field data, the federal manual suggests a 16-hour count. The new Indiana manual will continue the 12-hour period from our 1975 manual. The Indiana manual will also continue with one-hour count intervals where the federal manual suggests 15-minute intervals at peak hours. For the speed observation for the study, the Indiana manual will permit use of the posted speed limit.

After the field data is collected for the intersection, it is compared to the warrants to determine the needs at the intersection. At this point the new Indiana manual goes beyond the 1975 manual and the federal manual in several ways.

In grouping the warrants, the new manual separates them into two groups: one the primary warrants (1, 2, 3) and the supplemental warrants (4-10).

The primary warrants deal with moving volumes of traffic either vehicular or pedestrian and have experienced only one modification. The new manual will allow consideration of right-turns-on-red and protected turns behind islands. The text of the new section reads:

"For the purpose of comparing actual volumes versus the required volumes of this warrant, when a right turn movement behind an island or special channelization is controlled by a STOP or a YIELD sign, or when RIGHT TURN ON RED would be warranted and feasible, the actual volumes for that approach may be decreased by the number of right turning vehicles on that approach. Engineering judgment must be used to determine the feasibility of the reduction of the actual volume by the number of right turning vehicles."

In other words, a preliminary no-turn-on-red investigation will need to be made a part of the signal investigation. It would appear that
this could be made a part of the data collection for the condition diagram.

The supplemental warrants include the previously numbered warrants 4 thru 8 plus the New Facility Warrant which was Eratum VI to the 1975 Indiana manual and the Special Access Warrant which was unnumbered in the 1975 manual. For the new Indiana manual, these “warrants should be considered as an advisory condition, and do not mandate the installation of a traffic signal”.

For Warrant 4, School Crossing, the vehicular volume/pedestrian volume/street width chart is continued from the 1975 manual although it is not in the federal manual. The minimum pedestrian demand of 150 persons before considering a school signal has been reduced to 50 in the new manual.

In Warrant 5, Progressive Movement, the 1000 ft. resultant spacing has been relaxed somewhat from the 1975 and the federal manual. The new wording uses the term “normally in excess of 1000 ft.”, where the federal manual uses “Should not be considered”.

Warrant 6, Accident Experience, has had a wording change which allows it to flex with the statutory requirement to report accidents. The new manual is written as “reportable property damage” instead of a fixed dollar amount on property damage. The previously mentioned turn-on-red provisions are included in this warrant. The new manual also contains a provision to remove a signal installed by the accident warrant if the signal does not improve conditions at the intersection.

The System Warrant 7 has had the streets “defined” as major routes on a study removed as one of the warranting conditions. The section which allows a street which “serves” to be considered is continued.

The provisions for turn-on-red have also been added to Warrant 8, Combination of Warrants.

Warrant 9, Traffic Signals on New Facilities, is continued from the 1975 Eratum. It should be noted that this is not a “final warrant” and that the manual requires follow-up on any signal installed by this warrant.

Warrant 10, Special Access Signalization, is included to allow signalization of the locations where the inflow and outflow of traffic can not be handled with any measure less than signalization. The turn-on-red provisions are also applied to this warrant.

After the signal is installed, the new manual continues with two additional considerations. The first is left turn indications. This is basically unchanged from the 1975 manual although new wording does allow considerations of factors such as accidents to be made separately from volume and delay. Offpeak flashing operation is also addressed in the new manual. The possible need to flash a traffic actuated control is
stated.

The other warrants in the signal section deal with flashing beacons at an intersection. In the new manual, accidents alone no longer constitute a beacon warrant. Any two of the five conditions will now constitute a warrant. Namely accidents, special need, volumes, excessive speed or school children or busses. The school bus warrant has been revised to exclude thru busses on the major road.

In revising the warrants for the new manual, an attempt was made to provide criteria which are more responsive to the needs of motorists and pedestrians and less responsive as it states in the manual to the belief of many laymen “that traffic signals provide the solution to all traffic problems at intersections.”