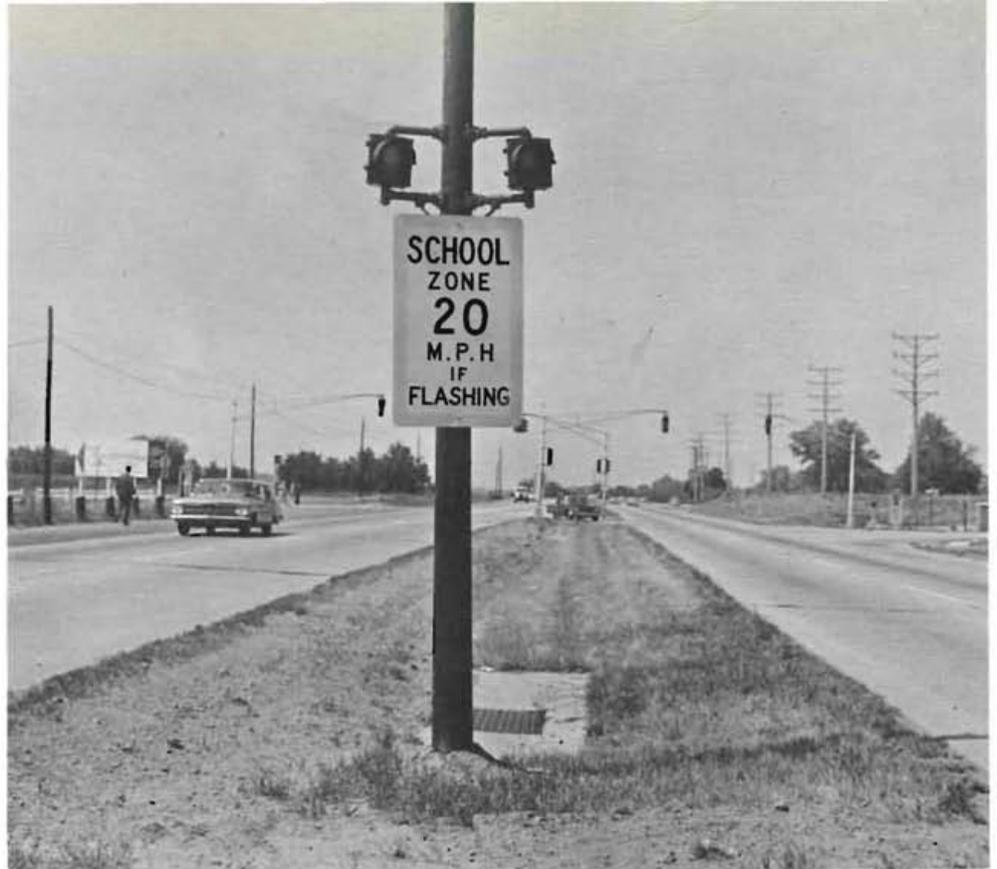


TRAFFIC CONTROL



Another pedestrian safety feature of our highways — the school zone signals.

Despite the fact that the majority of the work of the Traffic Section is routine, the changing pattern of social development, as well as the advances in the state of the arts, keep constant pressure on the traffic engineering staff to probe new problems and advance possible solutions. This situation is made necessary since the division is charged with the design, installation and maintenance of all signs, signals and markings of the state highways.

A current instance is the introduction this year of a flashing amber arrow as an additional tool of intersection traffic control. Although there are only a few other installations of this type on the east coast, it was immediately accepted by the division and used properly. In another instance the section adopted the use of the double yellow edge lines where traffic is to be diverted from previously used lanes. Better compliance has resulted than with the former single white line.

In this connection engineering studies were made at 173 locations for speed, parking, signals and intersection improvements with eighty-six forwarded to the Department for action and all approved. A change in signing standards on a considerable range of signs was effected with the adoption of the manual on UNIFORM TRAFFIC CONTROL DEVICES.

A complete survey of "signing" along the major north-south highways has been completed in deference to the standards set by the new State manual and because many of the present intersections were over signed by present standards. The study resulted in a new comprehensive "signing" plan developed for these routes. This will be implemented using green and white signs of design and text as required in the manual.

In place of the former hit or miss plan, the designating of the entire length of a roadway as a unit makes it possible to provide a consistency in destination. Major

cross State routes will be studied in the future so that the entire destination "signing" program is up-graded to standards expected by today's motorists. An unexpected assignment to the Traffic Section this year was the closing of the St. George's bridge for several months by the U. S. Corps of Engineers for necessary repairs taking out of use this major traffic facility and forcing traffic onto alternate routes not designed to accommodate the volume of resulting traffic. The Traffic Section, accordingly, took complete establishment and maintenance of traffic facilities on detours. These detours required the installation of two temporary traffic signals, four highway lighting installations, ninety-nine special signs, 214 traffic guides, including traffic barricades, ten special flashing lights and a total of 750 man hours of labor. The loss of this time, coming as it did in the middle of the summer season, considerably curtailed the Department's normal functioning

*Electromatic Traffic Controller
(Hare's Corner)
Hare's Corner Complex
Hare's Corner looking North
Old and new Stop signs
Speed Control Strips
Latest in highway markers on right*



and created a serious backlog of work. Many route maintenance functions fell so far behind that they became major problems.

The Traffic Section used two truck-mounted paint machines in the 1963-64 fiscal year during the painting season for pavement marking program plus two smaller machines for miscellaneous painting. They used a total of 19,247 gallons of white and yellow traffic paint in applying 1,228 miles of center-lines, 374 miles of barrier-lines and 251 miles of edge-lines. Additionally, stop bars, directional arrows, stop ahead, stop markings and school cross-walks were painted.

Traffic sign maintenance erected a total of 6,253 new signs, replaced 5,080 and repaired 3,254 in the three counties. In the course of this work, 7,418 steel sign posts were used to replace and erect new signs and 7,342 posts were used in repairing existing signs.

Work on the Delaware Turnpike was also done by Traffic Maintenance in repainting the centerlines; since the initial painting was done prior to its opening. The crews maintain existing signs and repair signs damaged in property damage accidents.

The total number of traffic signals for which the Section has maintenance responsibilities rose to 232. Despite the fact that funds for installation of new signals did not become available until the year was half over the following new signals were installed; Route 41 and Route 141, Route 2 and Centerville Road, Route 7 and Route 71, Omar, Route 2 and Meadowood, Commonwealth Avenue and Green Street, Route 273 and Pleasant Place, Limestone Road and Milltown Road and Route 14 and Road 58.

Service men answered a total of 1,382 calls in New Castle County and 264 calls in Kent and Sussex counties combined. These totals include fourteen major accidents

involving signal equipment. The constant changing traffic patterns of signalized intersections with community growth resulted in seventeen signals being rebuilt to better serve the motoring public. To improve the existing facilities, which had deteriorated due to age and wear, a total of eleven other intersections were altered for improvement. Wherever equipment was taken out of service it was replaced with devices representing improvement of the state of the art since the original installations were made.

After considerable study, specifications for a computer-based system of signal coordination were developed for U.S. 13 in the Wilmington Manor area capable of continuously measuring speed and volumes of traffic in each separate direction along U.S. 13 and of computing the density of traffic selecting the best traffic pattern from ninety possible combinations to serve the immediate needs. This system will increase road network efficiency in the area by allotting "green time" only as needed to serve traffic on a second-by-second basis.

Because of high accident rate during the hours of darkness, an accident study was undertaken on a highly commercialized section of Concord Pike between Murphy Road and the northern edge of Talleyville. An analysis of the accidents indicated that the night-accident severity was much greater. Even though the predominate traffic flow (seventy percent) occurred during the daylight hours, there were almost as many injuries along this stretch of road at night as during the day.

The Department approved installation of proper highway lighting to improve safety on this main artery. It is estimated that this improvement will reduce night accidents by close to fifty percent. Although the annual expense for this improvement will be more

than \$8,000, a calculated benefit cost ratio of 4.5 from an accident reduction standpoint should fully justify this highway lighting improvement.

During the past fiscal year, a total of 9,296 signs were fabricated and delivered by the sign shop which also made and delivered thirty-six special license tags for the Motor Vehicle Department. A total of 351 sets of decals for automobiles and trucks were made for vehicles owned by the Department.

The sign shop has acquired a number of new pieces of equipment for the fabrication of new signs and refinishing old ones enabling the shop's personnel to make signs from sheet aluminum rather than from pre-cut blanks. A considerable amount of space is thereby saved, since various sizes of stock are no longer needed. To assist further in the production of highway signs preparations are being made to purchase additional equipment.

A total of \$4,159.92 was collected by the Office of the Comptroller for damage to signs and signals from eighty-seven accidents representing only a small part of the actual billings mailed to various individuals upon receipt of a copy of an accident report from the State Police. Vandalism and unreported accidents damaging signs and signals, is a burden carried by the budget of the Traffic Section.

A total of \$4,024.63 was also collected by the Office of the Comptroller from nineteen individuals for services rendered by the Traffic Section. These included reimbursements for assistance in installing traffic signals in various towns and cities, partial reimbursement for labor and materials concerned with the detour at St. George's bridge and miscellaneous sign work done for various departments within the State of Delaware.

