

Uniquely Signalized Driveways

Signalized driveways have been around for many years. Some of the aerospace and defense plants of the 1950's and 1960's had signalized driveways. By the 1970's, the number increased significantly with the opening of enclosed regional shopping malls that featured driveways connecting expansive surface parking lots and large parking structures. At many of these locations it was necessary to develop a unique signal operation.

After several of these driveways became signalized, it became apparent that pedestrians were not obeying the signals across the driveways. It was diagnosed that the reason was due to their design. Since the height of conventionally-designed apron driveways quickly rises from the street level to the sidewalk level, pedestrians do not need to step down before crossing. Thus, they lack a physical clue regarding the need to wait at the edge when driveway users are being served. This is contrasted to intersections with full height curbs where the need to wait on the sidewalk is more obvious.

Being concerned with pedestrian safety, staff of the old Traffic Department pioneered a unique signal display. That display showed a flashing red indication instead of a green when motorists were allowed to exit the driveway. A solid red was shown at all other times. The flashing red signal is the equivalent of Stop sign control and driveway motorists are obliged to stop for pedestrians before proceeding. That display reduced conflicts between exiting motorists and pedestrians.

By the late 1980's, pedestrian heads started to be deployed across the driveways, to provide explicit control to pedestrians, while recognizing that some pedestrians would still ignore them. A decade later, the yellow display was added to show the transition from flashing red to solid red. Today, developers are strongly advised to build street-type driveways instead of apron-type driveways whenever signal control is anticipated. With a street-type design, a green can be provided to driveway users. But today there still remain many locations with apron driveway signals that show a flashing red instead of a green indication. Now, you know why.