

# Independent Evaluation

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For several decades, from 1964 to 1996, I served as a Traffic & Highway Engineer with the City of Los Angeles. In 1996, I retired as a Principal Transportation Engineer for the Department of Transportation. During this time, I conducted countless traffic studies of various types of traffic signs and other devices, including flashing beacon lights, designed to attract the attention of drivers and promote improved driver awareness leading to better highway safety.

I have had the opportunity to independently review and test the conspicuity, or visibility, of the BlinkerStop® sign. During this evaluation, the BlinkerStop® sign was installed on a roadway, which allowed 500 feet of visibility so the sign could be viewed from various approach angles. My review disclosed that the BlinkerStop® sign significantly increased the conspicuity of the stop sign without affecting the shape, color, or layout of the sign. The BlinkerStop® sign simply utilizes LED technology to illuminate the border of a standard traffic sign in a flashing mode.

The usual method of calling attention to traffic signs is through the use of beacons. A beacon is an 8-inch or 12-inch single section traffic signal head, located above or on a traffic sign. Unfortunately, beacons frequently have not proven highly effective since they are just another flashing light source. Also, beacons require 120-volt electric power supply. The BlinkerStop® sign, unlike a beacon, draws attention directly to the traffic sign and conveys not only the color, but also the physical size and geometric shape of the sign. Also, LED technology in the BlinkerStop® sign does not require an outside power supply.

The flashing LEDs can operate continuously or only at night, depending on preference. The BlinkerStop® sign has also been highway tested in California against a stop sign installed with a beacon. In both day and night tests, the results disclosed better driver reaction to the BlinkerStop® than to a beacon as an attention getting device.

It is well known that LED's in clusters have now become sufficiently bright to be installed in traffic signal heads. However, the use of very bright, non-clustered LED's, individually mounted on traffic signs to draw attention to the size and shape of the standard warning sign or highway construction sign to provide the benefit of this attention getting method. For example, a curve warning sign on a rural road without any electric power available could utilize this technology at any desired location.

It is concluded that the Blinkerstop® sign and its LED technology can be used to enhance the visibility of standard traffic signs and improve highway safety at problem locations without an electric power supply and without requiring installation of special or signal poles with traffic signal head systems.