

Flashing Beacons

Flashing beacons can supplement other traffic control devices where additional emphasis and warning for drivers is desired. It is commonly concluded that flashing beacons will result in a reduction of vehicle speeds, but some studies have found that this assumption is not always true. Appropriate investigation of each location should be undertaken prior to installation to avoid overuse and loss of effectiveness. Type, design, and use of these devices are fully described in Chapter 4K of the *MUTCD*.

Common uses of flashing beacons include the following:

- hazard identification, such as obstructions in or near the roadway, midblock crosswalks, intersections where additional warning is needed, and as a supplement to certain warning and regulatory signs
- speed limit, either fixed or variable
- intersection control
- Stop sign supplement

Hazard Identification Beacon

Beacons used for hazard identification should only be used as a supplement to other appropriate warning or regulatory signs and devices. Except for school speed limit signs, beacons should not be included within the border of the sign or device.

When used at intersections, beacons should not face conflicting vehicle movements.

Warning beacons are yellow in color, with a minimum 8-inch diameter visible face. If a single warning beacon is used to identify a roadway hazard, it should be mounted between 8 and 12 feet above the ground. If the beacon is suspended over the roadway, mounting height should be between 15 and 19 feet. Two beacons, each a minimum of 8 inches, aligned either horizontally or vertically and flashing alternately, can be used for added emphasis.

Speed Limit Sign Beacon

Flashing beacons used with speed limit signs can consist of two yellow lenses, each with a single yellow lens with a minimum 8-inch visible diameter. When two lenses are used, they would normally be mounted with a vertical alignment and flashed alternately. When used to emphasize a variable speed limit, the beacon should only be flashing when a reduced speed limit is in effect. Except for school speed limit signs, flashing beacons should not be mounted within the border of the signs.



Example school speed limit sign

Intersection Control Beacon

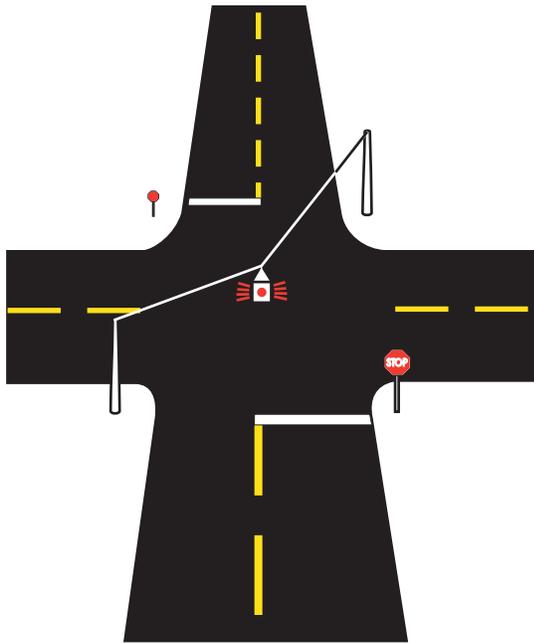
Flashing beacons for intersection control may be used at locations where traffic volumes or physical conditions do not warrant traffic signals but crash history indicates a possible hazard. These beacons consist of one or more circular yellow or red lenses, each with a minimum of 8 inches of visible diameter. They should be used only at intersections to control two or more

directions of travel. Application of intersection control beacons should be limited to the following:

- yellow on one route (normally the major) and red for the remaining approaches
- red for all approaches, if a multiway stop is warranted

A Stop sign should be used on any approach with a red flashing beacon.

Intersection control beacons are generally suspended over the roadway, but pedestal mounting is acceptable under appropriate conditions (refer to recommended mounting heights described previously under the heading “Hazard Identification Beacon”). When a pedestal mount is used, the pedestal should not be located in the roadway unless within the confines of a traffic or pedestrian island. An example of an intersection control beacon is shown below.



Typical intersection control beacon installation

Stop Sign Beacon

Beacons emphasizing Stop signs consist of one or more sections of a standard traffic signal face with a circular flashing red lens. Flashing beacons should be mounted 12 to 24 inches above the top of a Stop sign. When a single lens is used, it should have an 8-inch or 12-inch diameter lens. If two lenses are used, each should have a minimum 8-inch diameter. If aligned vertically, the two beacons should be flashed alternately, but if mounted horizontally, flashing should be simultaneous to avoid confusion with railroad signals.

Flashing beacons and mountings should generally comply with design requirements for traffic signals, including the following:

- Have a minimum visible diameter of 8 inches.
- Be visible for a minimum distance of 1/4 mile when flashing under normal weather conditions.
- Ensure that red and yellow lens colors comply with ITE vehicle traffic control signal head requirements.

Beacons should be flashed at a rate of 50 to 60 times per minute, with the illumination time between one-half and two-thirds of the total cycle length. Flashing beacons should be monitored for excessive glare at night and an automatic dimming device used if needed.