



# Install an Intersection Control Beacon

Installation of traffic signal faces for each approach of a stop-controlled intersection in which only flashing circular red or circular yellow signal indications are used. The flashing red indications supplement STOP (R1-1) signs and face the stop-controlled approaches; if the intersection does not operate under all-way stop control, then flashing yellow indications are installed to face the uncontrolled approaches. An Intersection Control Beacon is usually mounted over the center of an intersection; however, the beacons may be used at other suitable locations.



Source: VHB  
The Intersection Control Beacon flashes red from the stop-controlled approach.



Source: UNC HSRC  
The Intersection Control Beacon flashes yellow from the uncontrolled approach.



Source: VHB  
This Intersection Control Beacon is used at an intersection adjacent to a crest vertical curve.

## Targeted Crash Types

- Right-angle
- Opposing left turn
- Rear-end (major road)
- Rear-end (minor road)
- Pedestrian
- Bicyclist

## Problems Addressed

- Non-compliance with intersection traffic control devices
- Inadequate visibility of intersection or intersection traffic control devices
- Speeding

## Conditions Addressed

- Crash history or observed conflicts related to lack of driver awareness of the intersection or of the traffic control device.
- Citation history or observed non-compliance with traffic control.
- Intersections with poor nighttime visibility.
- Isolated rural intersections.
- Intersections characterized by high approach speeds.
- From the first FHWA Report listed below: *"There is anecdotal evidence that suggests that the overhead beacons have been interpreted as indicating a four-way stop at locations that were in fact only a two-way stop. This has caused motorists to pull out in front of the approaching vehicles because they assumed the approaching vehicle would be stopping."* These observations suggest that overhead beacons might be limited to all-way stop-controlled intersections.

## Considerations

- A beacon must be visible from every approach.
- Flashing yellow signal indications shall not face conflicting vehicular approaches.
- A flashing circular red indication supplements—and does not replace—a STOP sign.
- Public outreach may be needed to address motorists who may be confused by the intersection control beacon operation. Some motorists approaching a red flasher on the minor street may assume that the major street also receives a red flasher.
- The intersection control beacon will require a power source.

## Industry Standard

MUTCD  
[Section 4L.02: Flashing Beacons](#)

## Select Examples

[US 258 & NC 42/43, Pinetops, NC](#)  
[NH 11 & Depot Rd., New Durham, NH](#)

## Other Resources

[NCHRP 500 Volume 5: A Guide for Addressing Unsignalized Intersections](#)  
[Safety Evaluation of Flashing Beacons at STOP-Controlled Intersections, FHWA](#)  
[Low-Cost Safety Enhancements for Stop-Controlled and Signalized Intersections, FHWA](#)  
[Intersection Safety: A Manual for Local Rural Road Owners, FHWA](#)  
[Strategies to Address Nighttime Crashes at Rural, Unsignalized Intersections, Iowa DOT](#)

