



# CMF / CRF Details

CMF ID: 10608

Install a pedestrian hybrid beacon (PHB or HAWK)

**Description:**

**Prior Condition:** *No Prior Condition(s)*

**Category:** Pedestrians

**Study:** [Evaluation of Pedestrian Hybrid Beacons on Arizona Highways, Fitzpatrick et al., 2019](#)

Star Quality Rating:	
8 Stars	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	0.55
Adjusted Standard Error:	
Unadjusted Standard Error:	0.137

Crash Reduction Factor (CRF)	
Value:	45 (This value indicates a <b>decrease</b> in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	13.7

## Applicability

**Crash Type:** Vehicle/pedestrian

**Crash Severity:** K (fatal),A (serious injury),B (minor injury),C (possible injury)

**Roadway Types:** All

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:** Urban and suburban

**Traffic Volume:**

**Time of Day:** All

### *If countermeasure is intersection-based*

**Intersection Type:** Roadway/roadway (not interchange related)

**Intersection Geometry:** 3-leg,4-leg,Not specified

**Traffic Control:** Not specified

**Major Road Traffic Volume:** 5400 to 47627 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:**

## Development Details

**Date Range of Data Used:** 2007 to 2017

**Municipality:**

**State:** AZ

**Country:**

**Type of Methodology Used:** 2

<b>Sample Size Used:</b>	
--------------------------	--

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Dec-17-2020
<b>Comments:</b>	The reference group consisted of 101 unsignalized and 56 signalized intersections.

---

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

*The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.*