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## 640 PEDESTRIAN HYBRID BEACON

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A pedestrian hybrid beacon (PHB) is a special type of hybrid beacon used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk.

**If used, PHBs shall be used in conjunction with signs and pavement markings to warn and control traffic at locations where pedestrians enter or cross a street or highway. A PHB shall only be installed at a marked crosswalk.**

The design and operation of pedestrian hybrid beacons should follow the guidelines set forth in the MUTCD.

### PHB Evaluation Guidelines

To improve pedestrian crossings there are many possible treatments. These treatments include, but are not limited to, marked crosswalks, high visibility crosswalks, two-stage crosswalks, median refuges, street lighting, in-pavement lights, rectangular rapid flash beacons, PHBs, and pedestrian signals. A comprehensive evaluation of pedestrian crossing safety should be conducted in order to identify the most effective treatment.

PHBs should not be installed on roadways with speed limits greater than 45 mph.

The evaluation form shown in Exhibit 640-A should be used in determining whether or not a Pedestrian Hybrid Beacon should be utilized. A minimum score of 35 points merits Pedestrian Hybrid beacon consideration.

Additional factors that should be considered when a crossing merits PHB consideration:

- Is the location within a coordinated signal network?
- Does the roadway environment support the installation of the PHB? Does the street have adjoining sidewalks and/or pathways that will result in a logical utilization of the PHB?
- Is right-of-way needed?
- Are there utility conflicts?
- Is there significant potential for environmental or cultural issues?
- Is funding of the PHB available?
- Is 120/240 single phase power available at a reasonable cost?
- Does the local jurisdiction support the installation of a PHB? Is the local jurisdiction willing to pay for the power for the PHB? Is the local jurisdiction willing and capable of accepting the maintenance and operation of the PHB? Will the local jurisdiction pay for the power in order to light the crosswalk?

## Exhibit 640-A. PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

### PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

Location: \_\_\_\_\_ Date: \_\_\_\_\_

1. Motor vehicle crashes correctable by installation of PHB – Award 5 points for each crash (for the most recent 5 years of data) involving pedestrians, bicyclists, wheel chairs, skateboards, motorized scooters, or golf carts crossing within 500 feet on either side of the proposed PHB locations, or half the distance to the nearest signal (whichever is less): \_\_\_\_\_
2. Peak hour pedestrian crossing volume – Award points if the average peak hour pedestrian crossing volume within 500 feet on either side of the proposed PHB location, or half the distance to the nearest traffic signal (whichever is less): \_\_\_\_\_
  - 0 points → 0 – 10 pedestrians per peak hour (average)
  - 2 points → 11 – 20 pedestrians per peak hour (average)
  - 4 points → 21 – 39 pedestrians per peak hour (average)
  - 6 points → 40<sup>+</sup> pedestrians per peak hour (average)
3. Location of nearest existing traffic signal or existing PHB – Award points: \_\_\_\_\_
  - 5 points → Less than 500 feet
  - 0 points → 500 – 1,000 feet
  - 5 points → Over 1,000 feet
4. Posted speed limit – Award points: \_\_\_\_\_
  - 0 points → Under 30 mph
  - 2 points → 30 – 35 mph
  - 4 points → 40 – 45 mph
5. Roadway traffic volume (AADT) – Award points: \_\_\_\_\_
  - 0 points → Less than 5,000
  - 2 points → 5,000 – 9,999
  - 4 points → 10,000 – 14,999
  - 6 points → 15,000<sup>+</sup>
6. Raised median – Award 5 points if the roadway does not have a raised median with a minimum width of 6 feet. \_\_\_\_\_
7. Shared-use path or walkway – Award 5 points if a designated, maintained, and permitted shared-use path or walkway crosses the road at the proposed PHB location. \_\_\_\_\_
8. Pedestrian activity generator – Award 5 points if the proposed PHB location is within 500 feet of a senior center, medical facility, community center, school, or other pedestrian activity generator. \_\_\_\_\_
9. Roadway illumination – Award 5 points if the proposed PHB location does not have roadway illumination. \_\_\_\_\_
10. Crossing distance – Award 5 points if the crossing distance is greater than 36 feet. (If a raised median with a minimum width of 6 feet is present, the crossing distance is measured to the median). \_\_\_\_\_

**GRAND TOTAL** \_\_\_\_\_