ADOT Pedestrian Hybrid Beacon (PHB) Evaluation Guidelines

The following were used in developing this scoring evaluation: City of Tucson HAWK Priority Evaluation form, City of Phoenix HAWK Beacon Priority Evaluation form, and the Pedestrian Safety Deficiency Index (from ADOT’s Pedestrian Safety Action Plan). **A minimum total score of 35 points merits Pedestrian Hybrid Beacon consideration.**

There are many possible treatments to improve pedestrian crossings, including, but not limited to, marked crosswalk, high visibility crosswalk, two-stage crosswalk, median refuge, street lighting, in-pavement lights, rectangular rapid flash beacon, PHB, and pedestrian signal. A comprehensive evaluation of pedestrian crossing safety should be conducted in order to identify the most effective treatment.

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

1. Motor vehicle crashes correctable by installation of PHB (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 location, or half the distance to the nearest signal (whichever is less):

   5 points per crash

2. 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):

   - 0-10: 0 points
   - 11-20: 2 points
   - 21-39: 4 points
   - 40+: 6 points

3. Location of nearest existing traffic signal or existing PHB:

   - Less than 500 feet: -5 points
   - 500-1,000 feet: 0 points
   - Over 1,000 feet: 5 points

4. Posted speed limit:

   - Under 30: 0 points
   - 30 and 35: 2 points
   - 40 and 45: 4 points
5. Roadway traffic volume (AADT):

   - Less than 5,000: 0 points
   - 5,000-9,999: 2 points
   - 10,000-14,999: 4 points
   - 15,000+: 6 points

6. If the roadway does not have a raised median with a minimum width of 6 feet: 5 points

7. If a designated, maintained, and permitted shared-use path or walkway crosses the road at the proposed PHB location: 5 points

8. If the proposed PHB location is within 500 feet of a senior center, medical facility, community center, school or other pedestrian activity generator: 5 points

9. If the proposed PHB location does not have roadway illumination: 5 points

10. If the crossing distance is greater than 36 feet: 5 points. If a raised median with a minimum width of 6 feet is present, the crossing distance is measured to the median.

Additional factors to 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 the power for lighting the crosswalk?