Austin Supports the Pedestrian Hybrid Beacon

City of Austin Transportation Department

KEY ELEMENTS:

Public support

Increase in yielding

City officials in Austin, Texas want to improve pedestrian safety across roadways with high traffic volumes and speeds. The City's Traffic and Pedestrian Signal Request Dashboard allows the public to submit requests for Pedestrian Hybrid Beacons (PHBs).

IMPLEMENTATION

Austin installed its first PHB in 2009 at N. Lamar Boulevard and W. 47th Street. A PHB is a special type of overhead flashing signal that is used to warn and control traffic at unsignalized marked crosswalks. Since then, the City has installed over 55 PHBs and evaluates up to 10 locations each year for the possible installation of a PHB. By 2014, the City was receiving so many requests for PHBs that staff developed criteria to evaluate and score new requests.

Many requests are made by the public, but the City also enters requests into the system when a master plan or small area plan identifies specific locations for pedestrian crossing improvements. The public can track the status of PHB requests using the City's Signal Request Dashboard.

The City ranks all PHB requests and forwards the top 10 scoring locations on for further study. The scoring criteria are summarized in the following callout:

PHB RANKING FOR STUDY CRITERIA:*

- Distance to nearest signalized or stop-controlled crossing.
- Speed limit of roadway being crossed.
- Total number of motor vehicle lanes to cross.
- Type of median space (if available).
- Pedestrian crash history.
- Special need pedestrian generators.
- Number and type of pedestrian generators within 300 ft.
- Recommended as part of small area plan.
- Facilitate a school route plan.
- Within an Environmental Justice area.

*The ten criteria have potential points and a weighting factor.[3]

U.S. Department of Transportation
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Austin Transportation Department, 512.974.1150,
https://www.austintexas.gov/department/transportation

The City does not normally have an operations budget line item for PHBs, so once a study recommends installation of a PHB, the City installs the PHB as funding becomes available. The City typically installs PHBs with bond funds or through some other type of funding agreement.

RESULTS

Researchers from the Texas A&M Transportation Institute studied eight PHB sites in Austin (along with 12 sites in Tucson, Arizona) and published their findings in a Federal Highway Administration Tech Brief.[2] The Austin study sites were on streets with average daily traffic between 14,000 and 28,000 vehicles. Four sites were midblock, four sites were at intersections, and all eight sites were on four-lane roads with various median types (raised, two-way left turn lanes, or no median). Video data collected in November 2014 showed that drivers yielded between 87 and 98 percent of the time. The average for all 20 sites included in the study was 96 percent.

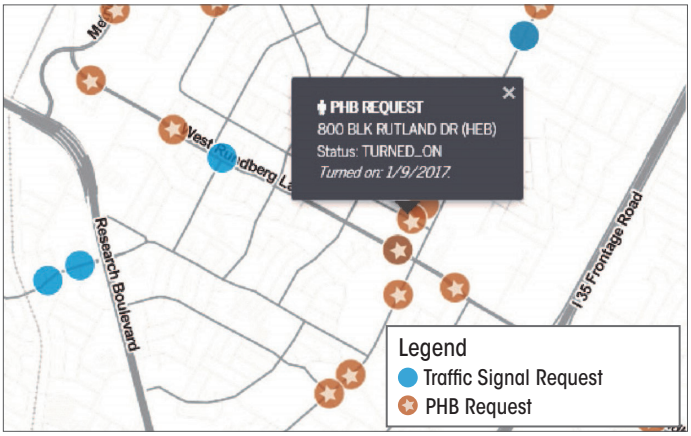

Figure 1. City of Austin Signal Request Dashboard.[1]

> "As the demand for safe and walkable streets continues to grow, Austin Transportation Department seeks to use PHBs, along with other lower-cost treatments such as refuge islands, to improve pedestrian safety and comfort across the city."
>
> –Joel Meyer, Austin Pedestrian Coordinator

Figure 2. PHB in Austin, TX.[3]

References

1. City of Austin, Signal Request Dashboard. http://transportation.austintexas.io/signal-requests/

2. Federal Highway Administration, Tech Brief: Road User Behaviors at Pedestrian Hybrid Beacons, FHWA-HRT-16-039. https://ntl.bts.gov/lib/61000/61400/61456/16039.pdf

3. City of Austin. http://www.austintexas.gov/sites/default/files/files/Transportation/PHB_Ranking_for_Study_Evaluation_and_Descriptions.pdf