





IMPLEMENTING NEW SAFETY TECHNOLOGIES

Ohio's First Pedestrian Hybrid Beacon


DYLAN FOUKES, P.E., PTOE – ODOT DISTRICT 2
ELIZABETH SLIEMERS, P.E., - LJB INC.




EDUTAINMENT





EDUTAINMENT



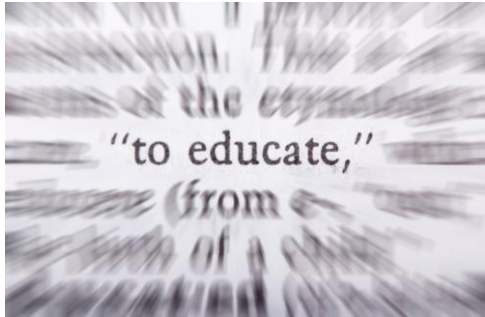
- What was the first city to implement a PHB or HAWK?
- In what edition of the MUTCD did the PHB first appear?
- In 2010, FHWA issued a report on the safety effectiveness of the HAWK. In that report, what was the reduction in pedestrian crashes after installation?



BOTTOM LINE





- Successful implementation of new technology requires coordinated public education
















“to educate,”
(from...)

WHAT IS A PHB?

➤ Pedestrian Hybrid Beacon



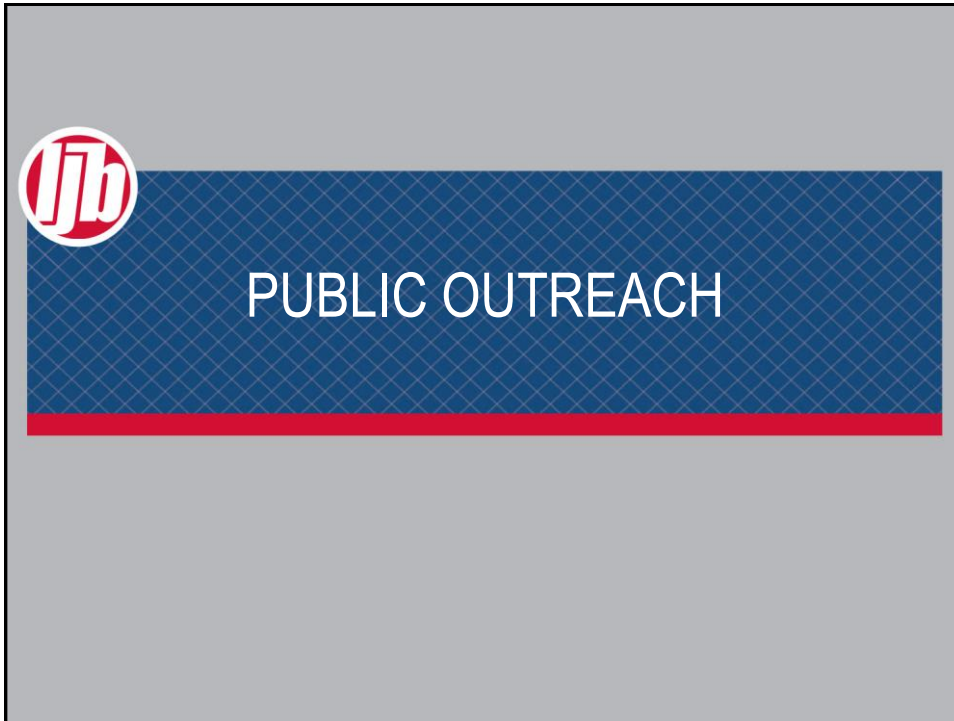
INSTRUCTIONS FOR		
DRIVERS	PEDESTRIANS	
1 Dark until activated 	Proceed with caution	 Push the button to activate the system
2 Flashing yellow 	Slow down A pedestrian has activated the system	 Wait
3 Steady yellow 	Prepare to stop	 Continue to wait
4 Steady red 	STOP A pedestrian is in the crosswalk	 Start crossing when all vehicles have stopped
5 Alternating flashing red 	STOP Proceed with caution if the crosswalk is clear	 Continue crossing, the signal will countdown
6 Dark again until activated 	Proceed if the crosswalk is clear	 Push the button to activate the system

BRINGING A PHB TO DELTA, OHIO




- Needed options to improve pedestrian safety
 - > 3 unwarranted signals removed
- PHB = pedestrian activated
 - > Only active when actuated
- First PHB installed on the Ohio highway system



A graphic for public education. It features a red circular logo with 'LJB' and a green circular logo with a white figure on the left. The background is a dark blue grid pattern with a red horizontal bar at the top. The text 'PUBLIC EDUCATION' is written in large, white, sans-serif capital letters in the center. Below the logos, there is a link icon and the text 'Press release'. To the right is a press release document from the Ohio Department of Transportation.

Press release

OHIO DEPARTMENT OF TRANSPORTATION
JOHN KASICH, OHIO GOVERNOR JERRY WRAY, ODOT DIRECTOR
Ohio Department of Transportation • News Release
DIVISION 2 • 2100 M. STREET • P.O. DISTRICT BUILDING
317 East Pine Rd. • Bowling Green, Ohio 43409-1230
www.transportation.ohio.gov/odot

ODOT District 2 Introduces Pedestrian Hybrid Beacon in Delta, Ohio

BOWLING GREEN (September 2, 2014) – The Ohio Department of Transportation (ODOT) in partnership with the Village of Delta is installing new cutting edge technology to make crossing the street safer for pedestrians. A new traffic safety device, called a pedestrian hybrid beacon (PHB), is being installed at the intersection of Main Street (U.S. Route 20A) and Wood Street in downtown Delta. This is the first pedestrian hybrid beacon installed on the Ohio highway system.

Activated by a pedestrian push-button, PHBs provide a red stop light to motorists approaching the intersection. By alerting and controlling drivers with a beacon warning system, pedestrians can more safely and easily cross the street at marked crosswalks.

The recent removal of traffic signals at Monroe Street, Lincoln Street and Wood Street left downtown Delta with no signal controlled location for pedestrians to cross. A PHB was selected for the Wood Street intersection due to its proximity to the Village's public library and downtown business district.



The device remains dark unless a pedestrian activates the system using a push-button. The system then follows the steps below:

1. When the pedestrian presses the button, approaching drivers will see a FLASHING YELLOW light for a few seconds, indicating that motorists should reduce their speed and be prepared to stop for a pedestrian in the crosswalk. Pedestrians should wait.
2. Drivers will see a STEADY YELLOW light, warning that the indication will soon turn to a STEADY RED light. Pedestrians will continue to see the DON'T WALK symbol and should wait.
3. Drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.
4. Drivers will see ALTERNATING FLASHING RED lights, indicating that they need to stop until pedestrians have finished crossing the street. They may proceed with caution if the crosswalk is clear. Pedestrians will see a flashing countdown that indicates how much time they have to cross the street.
5. At the end of the countdown, drivers will see that all indication lights are dark; the pedestrian will see a DON'T WALK symbol. Pedestrians waiting to cross will have to push the button to activate the system.


Additional informational posters and brochures are now available at area libraries, fire stations and government buildings.

For more information contact:
ODOT District 2 Public Information office at (419) 373-4428 or email DO2.PI@dot.state.ohio.gov

PUBLIC EDUCATION

▶ Letters to residents



OHIO DEPARTMENT OF TRANSPORTATION

JOHN KASICH, OHIO GOVERNOR JERRY WRAY, ODOT DIRECTOR

Ohio Department of Transportation

DISTRICT 2 • TODD M. AUBREY, P.E., DEPUTY DIRECTOR
317 East Poe Rd. • Bowling Green, Ohio 43402-5350
www.transportation.ohio.gov/dista

Pedestrian Hybrid Beacon Coming Soon to Delta

The Ohio Department of Transportation (ODOT) and Village of Delta are making crossing the street easier for pedestrians. A new safety device, called a pedestrian hybrid beacon (PHB) is being installed at the intersection of Main Street (U.S. Route 20A) and Wood Street in downtown Delta. This is the first pedestrian hybrid beacon to be installed on the Ohio highway system.



A PHB is activated by a pedestrian push button. It is installed at marked crosswalks to warn and control traffic so that pedestrians can safely cross the street.

We invite you to attend a ribbon cutting ceremony on **Wednesday October 9, 2013** to see first-hand how the PHB works. The event will begin at 11:30 AM at the village administrative offices, 401 Main Street. Refreshments will be provided.


More information on the PHB and the event will be coming soon.

For more information contact:
ODOT District 2 Public Information office at (419) 373-4428 or email DO2.PHO@dot.state.oh.us


PUBLIC EDUCATION

▶ Educational poster



OHIO DEPARTMENT OF TRANSPORTATION



PEDESTRIAN HYBRID BEACON - coming to Delta, Ohio

The Ohio Department of Transportation (ODOT) is partnering with the Village of Delta in installing new cutting edge technology to make crossing the street safer for pedestrians. A new traffic safety device, called a pedestrian hybrid beacon (PHB), is being installed at the intersection of Main Street (U.S. Route 20A) and Wood Street in downtown Delta. Activated by a pedestrian push-button, PHB provides a red stop light to motorists approaching the intersection. By alerting and controlling drivers with a pedestrian-activated beacon warning system, pedestrians can more safely and easily cross the street at marked crosswalks.

Why is ODOT installing a PHB?

The recent removal of conventional traffic signals at Monroe Street, Lincoln Street and Wood Street left downtown Delta with no signal controlled location for pedestrians to cross. A PHB was selected for the Wood Street intersection due to its proximity to the Village's public library and downtown business district. This is the first PHB installed on the Ohio highway system.

RIBBON CUTTING CEREMONY



Wednesday
October 9
11:30 AM
Village Administrative Offices
401 Main Street
Refreshments will be provided

INSTRUCTIONS FOR PEDESTRIANS	PEDESTRIAN ACTIONS	DRIVER ACTIONS	PHB ACTIONS	DRIVER ACTIONS
1. Pedestrian waiting to cross	Push the red push-button	When there is no pedestrian waiting to cross, drivers will see that all indicator lights are dark. A pedestrian who wants to cross the street will need to push the button to activate the system.	When the pedestrian pushes the button, approaching drivers will see a FLUORESCENT YELLOW light for a few seconds, indicating that they should reduce speed and be prepared to stop for a pedestrian in the crosswalk. Pedestrians should wait.	1. When there is no pedestrian waiting to cross, drivers will see that all indicator lights are dark. A pedestrian who wants to cross the street will need to push the button to activate the system.
2. Pedestrian crossing the street	Walk	When the pedestrian pushes the button, approaching drivers will see a FLUORESCENT YELLOW light for a few seconds, indicating that they should reduce speed and be prepared to stop for a pedestrian in the crosswalk. Pedestrians should wait.	When the pedestrian pushes the button, approaching drivers will see a FLUORESCENT YELLOW light, warning that this indication will soon turn to a STEADY RED light. Pedestrians will continue to wait for the DON'T WALK symbol and should wait.	2. When the pedestrian pushes the button, approaching drivers will see a FLUORESCENT YELLOW light for a few seconds, indicating that they should reduce speed and be prepared to stop for a pedestrian in the crosswalk. Pedestrians should wait.
3. Pedestrian waiting to cross	Wait	When the pedestrian pushes the button, approaching drivers will see a FLUORESCENT YELLOW light, warning that this indication will soon turn to a STEADY RED light. Pedestrians will continue to wait for the DON'T WALK symbol and should wait.	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	3. Drivers will see a STEADY RED light, warning that this indication will soon turn to a STEADY RED light. Pedestrians will continue to wait for the DON'T WALK symbol and should wait.
4. Pedestrian crossing the street	Walk	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	4. Drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.
5. Pedestrian waiting to cross	Wait	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	5. Drivers will see ALTERNATING FLASHING RED lights, indicating that they need to stop and pedestrians have finished crossing the street. They may proceed with caution if the crosswalk is clear. Pedestrians will see a flashing countdown that indicates how much time they have to cross the street.
6. Pedestrian waiting to cross	Push the red push-button	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	When the pedestrian pushes the button, approaching drivers will see a STEADY RED light, which requires them to STOP at the stop line. Then, the pedestrian receives a STEADY WALK symbol to cross.	6. At the end of the countdown, drivers will see that all indicator lights are dark. The pedestrian will see a STEADY DON'T WALK symbol. Pedestrians waiting to cross will push the button to reactivate the system.

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▶ Pamphlet handout

OHIO DEPARTMENT OF TRANSPORTATION

PEDESTRIAN HYBRID BEACON
Coming to Delta, Ohio

ONE CROSSING
West for North

ONE CROSSING
East for South

ONE CROSSING
West for South

ONE CROSSING
East for North

The Ohio Department of Transportation (ODOT) in partnership with the Village of Delta is installing new cutting edge technology to make crossing the street safer for pedestrians. A new traffic safety device, called a pedestrian hybrid beacon (PHB), is being installed at the intersection of Main Street (U.S. Route 204) and Wood Street in downtown Delta. This is the first pedestrian hybrid beacon installed on the Ohio highway system.

How will a PHB improve pedestrian safety?
Activated by a pedestrian push-button, PHBs provide a red stop light to motorists approaching the intersection. By alerting and controlling drivers with a pedestrian-activated beacon warning system, pedestrians can move safely and easily cross the street at marked crosswalks.

Why is ODOT installing a PHB?
The recent removal of unwarranted traffic signals at Monroe Street, Lincoln Street and Wood Street left downtown Delta with no signal controlled location for pedestrians to cross. A PHB was selected for the Wood Street intersection due to its proximity to the Village's public library and downtown business district.

When will the PHB be operational?
Plan to attend a ribbon-cutting ceremony on **Wednesday October 9, 2013** to see first-hand how the PHB works. The event will begin at 11:30 AM at the Village Administrative Offices on 404 Main Street. Refreshments will be provided.

For more information, contact ODOT District 2 Public Information Office at (419) 373-4428 or email D2a.FIO@dot.state.oh.us

INSTRUCTIONS FOR DRIVERS PEDESTRIANS

DRIVERS	PEDESTRIANS		
1. See red light	2. Push the button to activate the system	1. Proceed with caution	2. Push the button to activate the system
2. Slow down	3. A pedestrian has activated the system	3. Proceed with caution	3. Wait
3. Prepare to stop	4. Pedestrian is in the crosswalk	4. STOP	4. Continue to walk
4. A pedestrian is in the crosswalk	5. Pedestrian has cleared the crosswalk	5. Proceed with caution if the crosswalk is clear	5. Start crossing when all vehicles have stopped
5. Proceed with caution if the crosswalk is clear	6. Push the button to activate the system	6. Proceed if the crosswalk is clear	6. Continue crossing the signal and countdown
6. Proceed if the crosswalk is clear	7. Push the button to activate the system	7. Push the button to activate the system	7. Push the button to activate the system



PUBLIC EDUCATION






▶ Signage





PUBLIC EDUCATION



- Public event
- Ribbon cutting



RESULTS



- “I am seeing a much higher usage of the PHB than I had anticipated. It is being used and I have seen excellent compliance by motorists. The motorists that I have seen understand the process. I am very happy with the project and how it turned out.”*

- Village of Delta Administrator

