

# Traffic Control Devices Used at Pedestrian Crossings

TexITE Winter Meeting  
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## Introduction

- Often difficult to cross busy streets
- Engineers desire appropriate treatments
- Variety of treatments exist that can populate an engineer's toolbox
- May be used individually or in combination with other treatments



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# Treatment Categories

- Elements

- Treatments that are used either uniquely or to supplement a device

- Devices

- The primary component of a pedestrian treatment



## Devices

- Crosswalk

- Standard crosswalk markings and crossing signs

- Enhanced

- Improve visibility of location and pedestrians at all times

- Active

- Display warning only when pedestrians present

- Red

- Display circular red indication to motorists

## Traffic Control Device Element: Supplemental Advance Signing

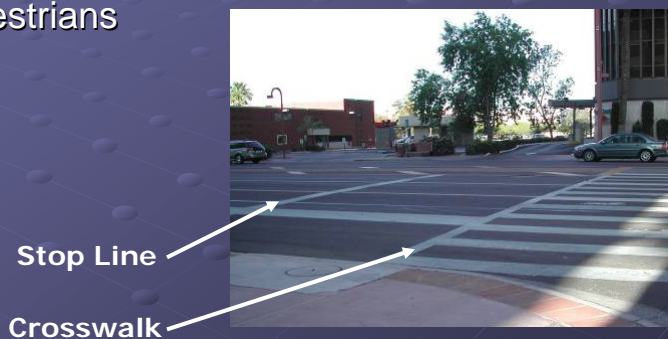
- Provides additional notification to drivers that a crosswalk is near and pedestrians may be crossing the roadway



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## Traffic Control Device Element: Advance Stop Line and Sign

- Vehicle stop line moved back from the crosswalk to improve safety and visibility of pedestrians



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## Traffic Control Device Element: Advance Yield Line



## Geometric Element: Median Refuge Islands

- Provides a refuge for pedestrians; may be landscaped



## Geometric Element: Raised Crosswalks

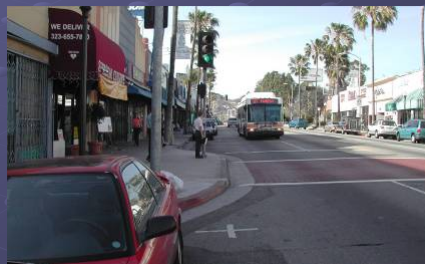
- Crosswalk surface elevated above driving lanes
- Attracts attention; encourages lower speeds



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## Geometric Element: Curb Extensions

- Curb adjacent to crosswalk lengthened up to the width of the parking lane
- Shortens crossing distance and improves sight lines



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## Geometric Element: Roadway Narrowing

- Reduced lane widths and/or number of lanes
- Shortens crossing distance and encourages lower speeds



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## Crosswalk: Markings and Crossing Signs

- Standard crosswalk markings and pedestrian crossing signs



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## Enhanced Device: In-Street Pedestrian Crossing Signs

- Regulatory signs placed in the street (on lane lines, centerlines, or medians)
- May read “YIELD TO” or “STOP FOR”



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## Enhanced Device: Signs and High-Visibility Markings

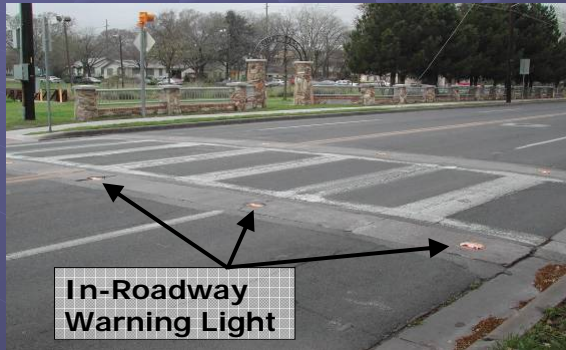
- Warning devices placed at or in advance of the pedestrian crossing



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## Active Device: In-Roadway Warning Lights

- Amber flashing lights mounted flush to the pavement surface at the crossing location



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## Active Device: Pedestrian Crossing Flags

- Square flag on a stick carried by pedestrians
- Stored in sign-mounted holders on both sides of the street



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## Active Device: Overhead Flashing Amber Beacons

- Mounted on mast arms that extend over the roadway or on signposts at the roadside
- Pedestrian-activated (active or passive)



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## Red Device: Pedestrian Crosswalk Signal



Dwells in  
Green Arrow



Upon Activation, Steady  
Yellow for 3 to 6 s



Flashing Red During  
Pedestrian Interval



Los Angeles, CA



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## Red Device: Half Signal



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## Red Device: HAWK Signal



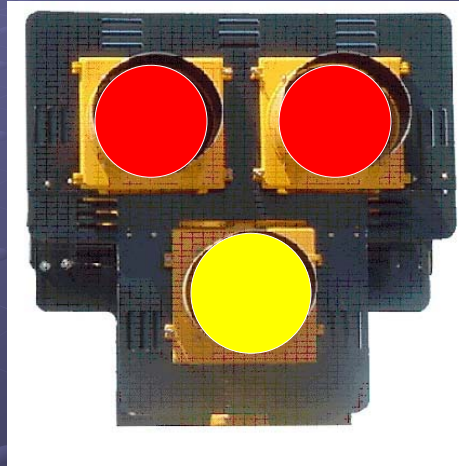
Tucson, AZ

Texas  
Transportation  
Institute

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## Red Device: Pedestrian Beacon

- Based on the HAWK signal
- Experimental; not in the 2003 MUTCD, but approved by the NCUTCD on 1/17/07



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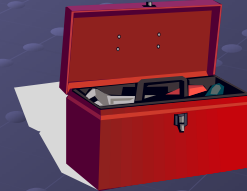
## Red Device: Traffic Control Signal



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# Closing Thoughts

- Wide variety of treatments available to fill the toolbox
  - Geometric vs. TCD
  - Always-on vs. activated
- No “one-fits-all-sizes” solution
- Often requires a system or package of treatments
- Engineering judgment still paramount



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# Questions?

- Marcus Brewer
- m-brewer@tamu.edu
- (979) 845-7321



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