

Piney Branch Pedestrian Safety Campaign: Engineering, Education, and Enforcement

Montgomery County DOT
Sharp & Company
Foursquare ITP
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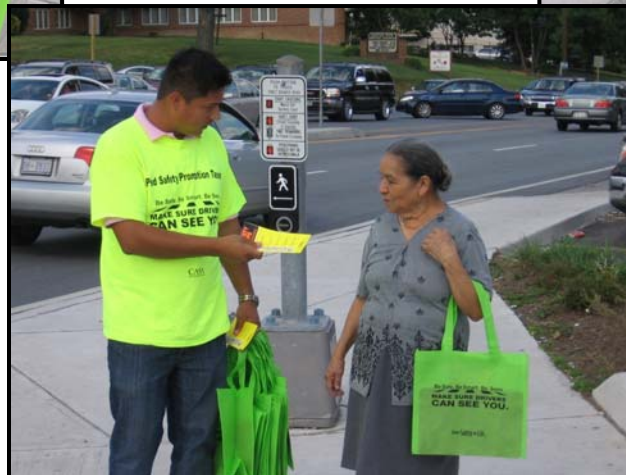
Pedestrian Road Safety Audit

- Pedestrian Road Safety Audit (PRSA) performed October 2008
- Issues identified included:
 - Uncontrolled midblock crossings
 - Narrow sidewalks
 - Limited night time visibility



Education: Phase 1 (2009)

- Pedestrian Survey Research
- CASA Safety Promotion Teams



Engineering Improvements



Countdown Pedestrian Signal Upgrade at Carroll Ave (2011)



Sidewalk Improvement Projects:
Flower Ave. to Greenwood Ave. (2010)
Greenwood Ave. to Arliss St. (2011)



MDSHA Piney Branch Road & University Blvd Intersection Improvements (2009)



Lighting Improvements:
University Boulevard to PGC Line (2011)



Piney Branch Road HIB:
Pedestrian Refuge & Flashing Beacons
[UNDER DESIGN]
(Spring 2012)



Piney Branch Road Education & Outreach Initiative (2009-2011)

In conjunction with education & outreach in 2009, engineering improvements began; several notable projects were completed in 2011.

Phase 2: EEE (2011)

- Second phase of Piney Branch campaign combined the 3 E's:
 - **E**ngineering: Curb Markers
 - **E**ducation: Safety Promotion Teams & Community Outreach
 - **E**nforcement: Targeted Zero-Tolerance Campaign



Engineering: Curb Markers

- Concept developed by education team – designed to mimic police caution tape
- Approved by SHA as “Experimental Traffic Control Device”
- Curb markers installed first week of November
- “Do Not Cross” and “No Cruce” installed every 20-30-feet
- “Cross Here” installed at crosswalks



Engineering: Curb Markers

- Installed by County Sign Crew
- StreetSmart Fall Media Event held November 14 at Piney Branch; focused on curb markers and Safety Promotion Teams
- Problem with markers being removed after 4 weeks; reinstalled markers have remained



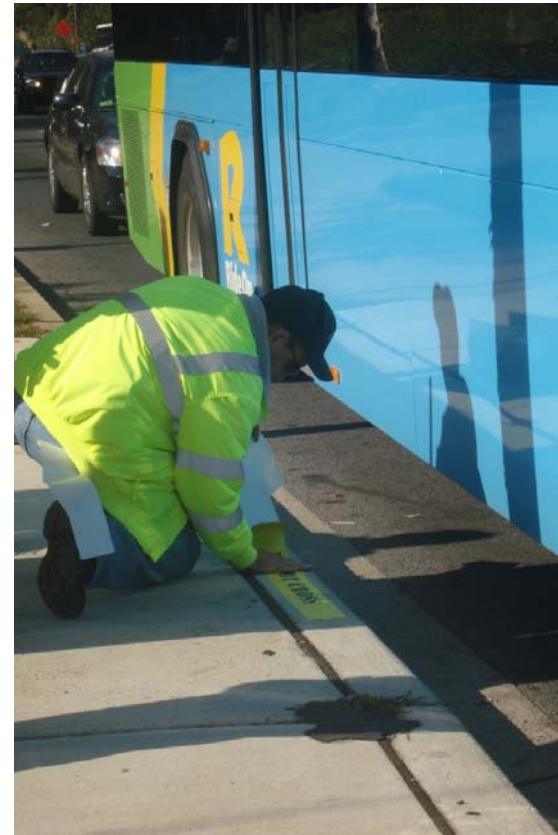
Installation of “Cross Here”



Installation of “Do Not Cross” and “No Cruce”



**Measuring 20 ft.
distance between
markers**



**Installing curb
marker**

Curb Markers



Before



After

Curb Markers



Before



After

Education: Community Outreach

COMING SOON TO A CURB NEAR YOU!



Piney Branch Road within the Long Branch Community has been identified as one of Montgomery County's High Incidence Areas for pedestrian crashes. Soon, this corridor will be participating in a pedestrian safety education project. Special safety messages will be placed along Piney Branch Road to remind pedestrians that it is unsafe to cross in unmarked locations. In addition, community representatives will be reminding pedestrians to follow safe walking rules and police officers will be issuing warnings or tickets to drivers and pedestrians who break the law.

What are some things you can do to be a safe pedestrian?

- Cross the street at marked crosswalks and intersections whenever possible.
- Always stop and look left, right, then left again, and over your shoulder for turning vehicles before crossing a street, even when you have the right-of-way.
- Make eye contact with drivers so they see you. Never assume they do.
- Stay visible after dark and in bad weather with light colored clothing, reflectors, or reflective clothing.



Department
of Transportation

For more information, please visit www.montgomerycountymd.gov/walk

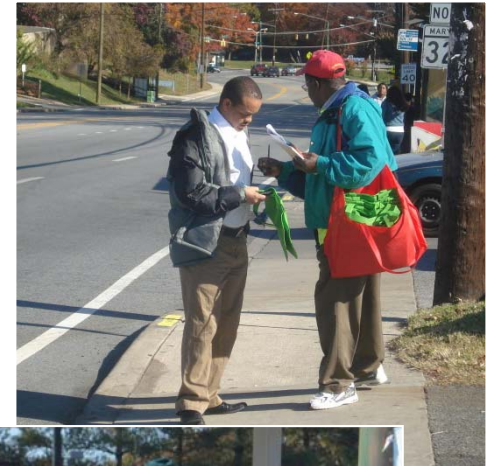
Education: Community Outreach (cont'd)

- Fliers designed to explain campaign to the community
 - Bilingual: English and Spanish
 - Distributed 1,100 fliers to area businesses and residences prior to start of campaign
- Posters designed for placement in bus shelters along the corridor
 - English and Spanish placed in 23 bus shelters
 - Partnered with Ride On staff for poster placement



Education: Bilingual Safety Promotion Teams

- 8 days - weeks of Nov. 7 and 14
- Outreach by CASA de Maryland
- Training conducted prior to first “event” – key in promoters’ understanding the importance of their role and the message they were conveying to the public
- Spoke with pedestrians on the street about pedestrian safety; handed out bright green tote bags and “Safety Tips” brochures



Positive Feedback from Pedestrians

- Appreciative of promoters' presence; encouraged them to continue and expand their efforts (eg. Wheaton, Rockville, Downtown Silver Spring)
- Many pedestrians unaware of their risky behavior and the proper way to cross the street
- Recommended that outreach target drivers as well, who often do not yield to pedestrians



Safety Promotion Teams: Lessons Learned

- Importance of combining education and enforcement efforts
- Focus campaign on young adults (frequent offenders; not as willing to listen to promoters)
- Work closely with area businesses and apartment complexes
- Work with Public Transportation agencies



Enforcement

- 2-week targeted “Zero-Tolerance” Pedestrian Safety Enforcement Campaign
- December 8 – 21; various times and locations along the corridor
- Police worked in teams of 4-8 officers; 3-hour details
- Saw more violations in the afternoon than morning (consistent with data collection)
- Follow-up campaign conducted - 4 days in January and February



Project Timeline

| Piney Branch HIA Pedestrian Safety Education Implementation Schedule | | 10-Oct | 17-Oct | 24-Oct | 31-Oct | 7-Nov | 14-Nov | 21-Nov | 28-Nov | 5-Dec | 12-Dec | 19-Dec | 26-Dec | 2-Jan | 9-Jan | 16-Jan | 23-Jan | 30-Jan | 6-Feb | 13-Feb | 20-Feb |
|--|--|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|-------|--------|--------|--------|-------|--------|--------|
| | TASK | | | | | | | | | | | | | | | | | | | | |
| Curb Markers | Installation instructions | █ | | | | | | | | | | | | | | | | | | | |
| | Installation site survey | | | █ | | | | | | | | | | | | | | | | | |
| | Installation by County staff or contractor | | | | █ | | | | | | | | | | | | | | | | |
| | Installation oversight | | | | | █ | | | | | | | | | | | | | | | |
| Performance Measurement | Data collection plan | █ | | | | | | | | | | | | | | | | | | | |
| | Baseline data collection | | | █ | █ | | | | | | | | | | | | | | | | |
| | Performance monitoring data collection | | | | | | | | █ | █ | | | | | | | | | | | █ |
| | Data compilation and analysis | | | | | | █ | █ | | | | █ | █ | | | | | | | | |
| Enforcement | Enforcement plan (days/times/locations) | | | | | █ | | | | | | | | | | | | | | | |
| | Scheduling of enforcement details | | | | | | █ | █ | | | | | | | | | | | | | |
| | Enforcement on street | | | | | | | | | █ | █ | █ | | | | | | | | | |
| Safety Promotion Teams | Finalize training program / presentation | | █ | █ | █ | | | | | | | | | | | | | | | | |
| | Deliver bags/fliers/pamphlets to CASA | | █ | █ | █ | | █ | | | | | | | | | | | | | | |
| | Kick-off/planning meeting with CASA | | | █ | | | | | | | | | | | | | | | | | |
| | Conduct training session | | | | | █ | █ | | | | | | | | | | | | | | |
| | Safety promotion teams on street / oversight | | | | | █ | █ | █ | | | | | | | | | | | | | |
| Community Outreach | Complete revisions to flier | █ | | | | | | | | | | | | | | | | | | | |
| | Print fliers / posters | | █ | | | | | | | | | | | | | | | | | | |
| | Deliver fliers to community locations | | | █ | █ | | | | | | | | | | | | | | | | |
| | Coordinate poster placement in bus shelters | █ | █ | █ | █ | | | | | | | | | | | | | | | | |
| | Coordinate with County community liaisons | █ | █ | █ | █ | █ | █ | █ | █ | █ | | | | | | | | | | | |

Preliminary Results – Enforcement

- Overall effort
 - 295 warnings
 - 488 citations
 - 461 pedestrian
 - 27 vehicle



- Detailed data
 - Available for 237 warnings and 357 citations (pedestrian):
 - Warnings:
 - 110 (46%) for crossing outside of the crosswalk
 - 127 (54%) for crossing during “Do Not Walk” signal phase
 - Citations:
 - 215 (60%) for crossing outside of the crosswalk
 - 142 (40%) for crossing during “Do Not Walk” signal phase

Preliminary Results – Enforcement (cont'd)

- Lessons Learned:

- Good community support
- Issue more citations, less warnings
- Witnessed citizens educating each other
- Need more translators (not just Spanish)
- Need quick response to signals out of order
- Should hand out safety tips brochure with tickets and warnings
- MCPD observed fewer violations per hour in follow-up events



Preliminary Results – Engineering / Education

- Safety Promotion Teams
 - Reached approximately 4,325 pedestrians
 - Distributed 2,200 bags and 3,750 brochures



Preliminary Results – Engineering / Education (cont'd)

- Performance Monitoring Data
 - Data on midblock crossings and signal adherence
 - Baseline data collected 10/25 and 11/1
 - Post-education data collected 11/30 and 12/5
 - Post-enforcement data collected 2/15 and 2/22 (not available yet)
 - Plan to collect 3- and 6-month post-implementation data
 - AM Peak (7:00am–9:30am) and PM Peak (2:30pm–6:30pm)



Preliminary Results – Midblock Crossings

Percent of Pedestrians Midblock Crossing

| Roadway Segment | Baseline | Post-Education | % Change | Post-Enforcement | 3-month Post-Implementation | 6-month Post-Implementation |
|-----------------------------------|-------------|----------------|---------------|------------------|-----------------------------|-----------------------------|
| Piney Branch, North of University | 20.3% | 15.4% | -24.1% | | | |
| Piney Branch, North of Garland | 5.6% | 5.1% | -8.9% | | | |
| Piney Branch, South of Garland | 4.1% | 1.8% | -56.1% | | | |
| TOTAL | 9.2% | 6.7% | -27.2% | | | |

Total Pedestrians Counted Baseline: 2,444

Total Pedestrians Counted Post-Education: 2,321

Note: Data represent percentage of total pedestrians midblock crossing in each segment

Preliminary Results – Use of Midblock Crosswalk (South of Garland)

Percent of Pedestrians Crossing Outside of Crosswalk

| Roadway Segment | Baseline | Post-Education | % Change | Post-Enforcement | 3-month Post-Implementation | 6-month Post-Implementation |
|--------------------------------|----------|----------------|----------|------------------|-----------------------------|-----------------------------|
| Piney Branch, South of Garland | 8.5% | 4.2% | -50.6% | | | |

Total Pedestrians Counted Baseline: 322

Total Pedestrians Counted Post-Education: 307

Note: Data represent percentage of pedestrians crossing the street who did not use a crosswalk.

Preliminary Results – Signal Adherence (1)

Percent of Pedestrians Crossing During “Walk” Phase

| Roadway Segment | Baseline | Post-Education | % Change | Post-Enforcement | 3-month Post-Implementation | 6-month Post-Implementation |
|---------------------------|--------------|----------------|-------------|------------------|-----------------------------|-----------------------------|
| University & Piney Branch | 64.3% | 63.9% | -0.6% | | | |
| Piney Branch & Barron | 45.0% | 51.2% | 13.8% | | | |
| TOTAL | 59.9% | 60.7% | 1.3% | | | |

Total Pedestrians Counted Baseline: 1,772

Total Pedestrians Counted Post-Education: 1,715

Preliminary Results – Signal Adherence (2)

Percent of Pedestrians Crossing During “Flashing Hand” Phase

| Roadway Segment | Baseline | Post-Education | % Change | Post-Enforcement | 3-month Post-Implementation | 6-month Post-Implementation |
|---------------------------|-------------|----------------|--------------|------------------|-----------------------------|-----------------------------|
| University & Piney Branch | 5.5% | 10.3% | 87.3% | | | |
| Piney Branch & Barron | 1.7% | 1.4% | -17.6% | | | |
| TOTAL | 4.6% | 8.0% | 73.9% | | | |

Total Pedestrians Counted Baseline: 1,772

Total Pedestrians Counted Post-Education: 1,715

Preliminary Results – Signal Adherence (3)

Percent of Pedestrians Crossing During “Do Not Walk” Phase

| Roadway Segment | Baseline | Post-Education | % Change | Post-Enforcement | 3-month Post-Implementation | 6-month Post-Implementation |
|---------------------------|--------------|----------------|---------------|------------------|-----------------------------|-----------------------------|
| University & Piney Branch | 29.4% | 25.8% | -12.2% | | | |
| Piney Branch & Barron | 53.3% | 47.4% | -11.1% | | | |
| TOTAL | 34.9% | 31.3% | -10.3% | | | |

Total Pedestrians Counted Baseline: 1,772

Total Pedestrians Counted Post-Education: 1,715

Data Limitations

- Still a work-in-progress
 - Continuing evaluation
 - Post-enforcement data not yet analyzed
 - Plan to do 3- and 6-month post-implementation analysis
- Limited sample size
 - Data on midblock crossings and signal adherence collected for 1 day at each location before/after implementation
 - AM peak and PM peak only (2.5 hour period AM; 4 hour period PM)
 - Only one HIA evaluated to date

The big question:

Can this be replicated successfully in other locations?