



Sunnyslope High School Pedestrian Demonstration Project



Problem

Sunnyslope High School is located adjacent to a 6-lane arterial street where the designation of a 15-mph school zone has little effect in slowing traffic. This avenue had an average of 32 pedestrian collisions per year over the preceding three years before the project began in 2002. Concern about high traffic speeds, obvious lack of pedestrian safety, and excessive congestion at arrival and dismissal times inspired the project.

Background

The Phoenix City Council funded the creation of a School Safety Team to collaborate with schools, parents, and students. Volunteers participated in conducting traffic studies to assess problems and develop solutions.

Solution

Several primary measures were taken to improve safety. First, solar-powered “Stalker” driver feedback speed monitors were installed at each end of the school campus along the avenue. The monitors flashed the driving speed and a bright LED strobe light when a car’s speed exceeded the posted speed of 35 mi/h by at least 5 mi/h. The monitors operated only during the school days between 7a.m. and 5 p.m.



A staggered crosswalk installed for the program.

There was originally one crosswalk at each of the two driveways. One of those was removed, and a median pedestrian safety island was installed at the other. The crosswalk was staggered, narrowed the road crossing, and made a strong visual impression on drivers. The staggered walk forced pedestrians to turn towards oncoming traffic. In addition to the striping at the crosswalk, “SCHOOL” pavement stencils were installed in the lanes as they approach the crossing. The pedestrian warning signs were converted to brighter florescent yellow-green warning signs, and signs were posted at the crosswalk instructing students to “Use Caution When Entering the Street.”

A vehicle and pedestrian access on an adjacent avenue was negotiated in order to reduce congestion at arrival and dismissal times on the condition that the school administration agreed to monitor the gate and lock it during other times of the day. A new walkway at this entrance was installed along with a talking pushbutton that triggered the message “Flasher has been activated. Drivers may not stop.”

The total cost of the project was \$124,600, more than \$71,000 of which went to relocating the driveway to improve driveway and traffic circulation. The driveway relocation was funded by the Glendale Union High School District, while the City of Phoenix provided \$53,100 for the remaining improvements. The entire project took 9 months.

Results

Compliance with the posted speed limit is good, particularly during school hours when the driver feedback monitor is activated. At these times, the 85th percentile speeds are at 29-mi/h, 6 mi/h under the posted limit. Only one

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school-related collision was reported in the six months following the project, and none occurred in the new staggered crosswalk. Crossing at unmarked crosswalks dropped dramatically and pedestrian use of the staggered crosswalk with a safety island dramatically increased. Volunteer observers also noted that students are more cautious when crossing and motorists are more willing to stop for students.

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Image Source

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City of Phoenix Street Transportation Department. <http://www.ite.org/awards/pedproject/ppa071.pdf>*

