



CITY OF
TUCSON

DEPARTMENT OF
TRANSPORTATION

May 21, 2014

Sky Jacobs
Dunbar/Springs Neighborhood
P.O. Box 508
Tucson, AZ 85705

RE: PEDESTRIAN/BIKE CROSSING AT SIXTH STREET AND MAIN AVENUE

Dear Mr. Jacobs,

The intersection of Sixth Street and Main Avenue has generated a lot of interest from the Dunbar Springs Neighborhood and the Downtown Links Citizens Advisory Committee. Specifically, both groups have asked for additional pedestrian crossing treatments at this location.

The Sixth Street cross section includes a raised median that has been designed as a pedestrian refuge that explicitly accommodates pedestrian and bicycle crossings. During the design process, it was decided to NOT provide a striped crosswalk at Main Avenue in keeping with guidance in the Federal Highway Administration report, "Safety Effects of Marked vs Unmarked Crosswalks at Uncontrolled Locations." This report finds that under certain conditions (multiple lanes of travel, higher vehicle volumes and faster travel speeds), pedestrians experience an increased risk of being involved in a crash when the crosswalk is marked. You can find this report at <http://www.fhwa.dot.gov/publications/research/safety/04100/>.

Given the conditions at Main Avenue and 6th Street, the report indicates that "Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians."

The intersection was not considered a candidate for a HAWK crossing due to its proximity to the signalized intersection of Granada (less than 400 feet). However, because of the level of interest, we have added the intersection of Main Avenue and Sixth Street to the list of locations where a HAWK beacon have been requested. The demand for HAWK beacons is very high, and the list is long. The list is being evaluated and ranked based on a criteria that include traffic volume, number of lanes, traffic speed, crash experience, and proximity to another crossing opportunity. Please be aware that with the completion of the Downtown links segment to the east, there will be a pedestrian crossing opportunity at the signalized intersection of Church Avenue and 6th Street.

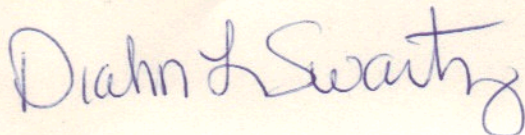
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The level of interest in crossing Sixth Street at Main Avenue was not anticipated, therefore Traffic Engineering recently conducted a count to quantify the crossing activity. Between 7:30 a.m. and 8:30 a.m., 8 pedestrians and 3 bicycles were observed crossing 6th Street and Main Avenue. Between 4 p.m. and 5 p.m., 6 pedestrians and 6 bicycles were observed. The observer who conducted the counts volunteered that the pedestrians and cyclists using the median refuge may have waited several seconds at the most before finding a gap to complete the crossing.

As illustrated by these users, the median refuge incorporated in the design provides a recognizable benefit for pedestrians and cyclists. The wide median refuge allows bicyclists and pedestrians to comfortably cross Sixth Street in two stages, and the two cut-throughs offer convenience, since users need not deviate from their path nor engage in any wrong-way bicycle riding. We believe that the safety, comfort and convenience of median refuges are amenities we would like to extend to other crossing locations in the city. In particular, I feel that the use of median refuges may be well-suited for locations where a HAWK is not warranted or is unlikely to be constructed.

I share your concern for pedestrian and bicycle safety, and I hope that this letter sufficiently explains the rationale for the crossing treatment we used at Sixth Street and Main Avenue. If you have any questions, please feel free to contact me.

Sincerely

A handwritten signature in blue ink that reads "Diahn L. Swartz". The signature is written in a cursive, flowing style.

Diahn L. Swartz, PE, PTOE

Cc: Mayor Rothschild
Daryl Cole, TDOT Director
Sam Credio, TDOT
Tom Fisher, TDOT
Ann Chanecka, TDOT Bike/Pedestrian Program