



Agenda Report

21-1330

Agenda Date: 1/25/2021

REPORT TO BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

SUBJECT

Striping Unmarked Crosswalks (Yee)

BACKGROUND

On October 28, 2019, Bicycle and Pedestrian Advisory Committee (BPAC) Member Harrison requested an annual work plan topic (Attachment 1) to have the BPAC discuss striping of crosswalks whenever a roadway is re-paved.

DISCUSSION

The California Vehicle Code (CVC) 275 defines a crosswalk as the connection of sidewalks at intersections or any portion of a roadway distinctly indicated by lines or markings. Based on this definition, there are thousands of legal crosswalks (marked and unmarked) within the City.

The City currently marks crosswalks only when justified by an engineering study. This procedure is based on past research, including the reports detailed below.

In 2005, the University of North Carolina and Federal Highway Administration (FHWA) published "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations." This report studied crosswalks at uncontrolled locations and found marked crosswalks did not have lower pedestrian crash rates. The report also found higher pedestrian crash rates at marked crosswalks on multilane roads carrying 12,000 or more vehicles per day. This report concluded that adding marked crosswalks alone did not reduce pedestrian crashes.

In 2006, the Texas Transportation Institute and Transportation Research Board published National Cooperative Highway Research Program Report 562 (NCHRP 562), "Improving Pedestrian Safety at Unsignalized Crossings." This report studied various pedestrian characteristics and crosswalk treatments. The report recommended marking a crosswalk based on the pedestrian and vehicular volumes, crosswalk length, and roadway speed limit. This report did not recommend marking crosswalks without an engineering study.

In 2018, the University of North Carolina and FHWA published a "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations." This guide recommended marking crosswalks based on crash data, a Pedestrian Master Plan, and walkability audits. The guide did not recommend marking crosswalks without data analyses.

In summary, the City currently marks crosswalks to enhance safety when justified by an engineering study.

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Approved by: Michael Liw, Assistant Director/City Engineer, Public Works

ATTACHMENTS

1. Annual Work Plan Topic Request Form
2. FHWA "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations" excerpts
3. NCHRP 562 "Improving Pedestrian Safety at Unsignalized Crossings" excerpts
4. FHWA "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations" excerpts