

ABSTRACT

BICYCLE TRANSPORTATION SAFETY: RELATIONSHIPS INVOLVED IN BICYCLE COLLISIONS FOR THE FRESNO CLOVIS METROPOLITAN AREA OF CALIFORNIA

This study analyzed bicycle collision data to investigate the existence of bike lanes and the severity of injury in relation to four sets of collision data variables. The study focused on reported traffic collisions involving bicyclists in the Fresno Clovis Metropolitan Area of California from 1995 through 2000. Bicycle collision data were obtained from the California Highway Patrol, and local data were gathered on street design factors. Chi-square tests were performed, followed by univariate and multivariate testing. Results showed that bicyclists riding in a bike lane were less likely to be involved in a collision if they were riding in the city of Fresno, in the winter, on a local street, and away from an intersection. Bicyclists also reduced their risk of severity of injury in a collision if they were riding in the city of Clovis, on a weekday, were female, sober, and crossing collector streets.

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