Pedestrian Behavior at Signalized Intersections in Izmir, Turkey

Authors: Pelin Onelcin, Yalcin Alver

Abstract : This paper investigates the walking speed and delays of pedestrians at two signalized intersections where the vehicle speed limits are different. Data was collected during afternoon and evening peak hours on November 15, 2013 and on December 6, 2013. Observational surveys were conducted by video recording technique. Pedestrians were categorized according to their gender, group size, stuff carrying condition and age. Results showed that individuals walked fastest when the group size is taken into consideration. The smallest 15th percentile walking speed was seen in the oldest age group (over 60 years old). Pedestrians experienced high delays both at roadsides and at medians. Factors affecting the pedestrian walking speed were analyzed by ANOVA.

Keywords: pedestrian delay, pedestrian walking speed, signalized crosswalk, ANOVA

Conference Title: ICTLE 2014: International Conference on Transportation and Logistics Engineering

Conference Location: Venice, Italy Conference Dates: November 13-14, 2014