

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s) Emily M. Berg Project Title Do Unofficial Street Signs Affect the Speed of Drivers? Objectives/Goals 'Children at Play' signs and many other signs with the same intent have been bed

Project Number J1703

'Children at Play' signs and many other signs with the same intent have been becoming more and more common among residents in our community. Although the signs are being posted by many citizens, it is unknown if the signs actually work for their intended purposes. The purpose of this experiment is to see if unofficial street signs actually affect the speed of drivers.

Methods/Materials

After selecting the locations in which my testing would take place, I used a radar gun to measure the speeds of the passing vehicles. During each experiment in each location, I surveyed a 40 car sample with the 'Children at Play' signs present, and then a 40 car sample with no signs posted. There were 320 vehicles tested in all.

Results

The data collected from the four sites in which the testing took place, totaling 8 samples, was entered into a spreadsheet to allow graphing and analysis. At the Scripps Lake Drive location, both studies recorded 85th percentile (the speed that 85% of all cars are going at or below) speeds of 31 miles per hour with and without signs present, which is consistent with the City's study (32 miles per hour). Little or no effect of 'slow' signs was measured. At the Farmingdale Street site, which was the other testing location, the results were similar. The signs had no measurable effect on driver behavior. The average speeds and 85th percentile speeds were almost identical with and without signs present.

Conclusions/Discussion

In conclusion, 'Children at Play' signs had little or no affect on the speed of drivers/motorists. The only noticeable change in speeds was when a police officer was in view, at which time the speeds of the vehicles noticeably decreased. Although many citizens may believe that these signs can prevent children from getting injured, 'Children at Play' signs may actually provide a false sense of security for parents and children, letting them believe that with the sign(s) posted, children are safe playing in the street.

Summary Statement

The purpose of this experiment was to determine whether or not unofficial street signs actually affect the speed of drivers.

Help Received

Councilmember Brian Maienchein referred me to Officer Zeigler of the San Diego Police Department Traffic Division; Officer Zeigler provided radar gun; parents supervised testing and assisted with creating Excel spreadsheets.