

CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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Project Number

J0425

Project Title

What Will Get a Driver to Come to Stop at a Stop Sign?

Objectives/Goals Abstract

The objective of this study is to determine which variable (signage, people crossing the street and kids playing or a police car parked on the corner) will make more drivers come to a complete stop at a stop sign.

Methods/Materials

I calculated the number of drivers stopping, rolling through and speeding through a stop sign when different variables were introduced and compared these numbers with the data I collected during the week-long observational study.

Equipment included:

Signage that says drive carefully, look-alike police car, basketball, notepad and pencil, watch and cars Non-Equipment included:

Kids playing, adults walking their pets, drivers, an older person with a walker, parent with a stroller crossing the street and a four-way corner that has stop signs.

Results

The observational study and variable data showed that of the 32 drivers observed each day (how many went through the stop sign in one hour of observation) only 7 (17%) stopped at the stop sign. With the introduction of variables (one at a time) the number of people that stopped went up to 31%.

The total numbers showed that in the eight days of data collecting, there were 352 drivers observed. Only 75 of these drivers actually stopped at the stop sign, that is only 21%. In other words, the total number of drivers that did not stop was 277 or 79%. More importantly, of the 277 drivers that did not stop 49 drivers sped through (did not change speed) the stop sign. Fourteen percent (14%) of the drivers in my neighborhood did not even slow down at a stop sign.

Conclusions/Discussion

In conclusion, the results of the study, when adding each variable independently, were disappointing because drivers still went through stop signs without slowing down. On a positive note less drivers went through stop signs with the introduction of each variable. The number of drivers that stopped increased from 17% to 31% and the number of drivers speeding through went down from 17% to 6%. I presented my findings to California Office of Traffic Safety and our local city council in hopes that there could be more discussion on making the streets safer.

Summary Statement

I introduce variables to encourage drivers to come to a complete stop at a stop sign

Help Received

None. I designed and introduced the variables myself.