



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Nicole E. Veloskey	Project Number J0731
Project Title Impact of Flashing vs. Continuous Lights on Reaction Time	
Abstract Objectives/Goals This year my family was involved in an automobile accident. The purpose of my project was to show if flashing brake lights were added to cars, would this decrease the number of car accidents significantly. I believe that this is relevant because 80% of car accidents are fender-benders, probably because the driver couldn't see the person braking in front of them. Methods/Materials To conduct my experiments, I decided that I would create a computer program to test the reaction time of the test subject with flashing and still lights. Overall, I tested about 50 people and then averaged the data to find my final results. Results After analyzing my test data, it unfortunately did not support my hypothesis. The average reaction time of all the test subjects were within 5% of each other, which didn't show any difference between the flashing and still lights. The participants probably reacted to the light immediately in my test whether it was flashing or not. Conclusions/Discussion I believe that my results turned out the way they did because unlike other people that have researched this topic, I used a computer program instead of actual cars. Had the test been more like a real-world situation, perhaps the results would have been different. Interestingly, I found that the participants over the age of 40 in my experiment had significantly faster average reaction times than the participants under age 40.	
Summary Statement I created a simulation test to see if flashing lights might make drivers more attentive to brake lights.	
Help Received Father helped with learning Scratch programming; test volunteers	