



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Roxanne S. Beltran	Project Number J0305
Project Title Hang Up and Drive: The Effect of Cell Phone Use on Full Stops at Stop Signs	
Objectives/Goals The purpose of the study was to find out whether people talking on their cell phones while driving tend to stop more or less than people without cell phones. I chose this topic because I always thought that people talking on cell phones seemed distracted when driving, and I also noticed that a very small percentage of the population actually make a full stop at stop signs. So I decided to combine the two topics into one. My hypothesis is that people using cell phones while driving will stop less than people who are not using cell phones.	
Abstract Methods/Materials This was an observational study where I collected data from 1200 cars at different stop signs in the area around where I live. The materials included a clip board and pencil, and data observation sheets. The procedure was as follows: 1) Look at one car. 2) Check ONE of the following boxes for stops: full stop, stop and go, OR rolling. 3) Check ONE of the following boxes for phones: yes OR no. 4) Check ONE of the following boxes for estimated age of driver: under 50 OR over 50. 5) observe and analyze results	
Results Of the 1200 cars I observed, 689 people, or 57% stopped and 511 people, or 43% made rolling stops. Cell phones were used by 182 people, or 15% of the drivers. Of these 182 people, 71, or 39% made stops and 111 people, or 61% did not make a full stop. Of those without cell phones, 618 or 61% stopped, while 400 or 39% did not stop. When analyzed by chi square, these results were statistically significant at $p < .000$	
Conclusions/Discussion The results of my study support my hypothesis that drivers using cell phones stop less than drivers not using cell phones. I actually had to cut out the "full stop" category during data collection because only 4 of 1200 people made a full stop! Since 43% of people did not stop, these results also show that there is not good compliance with traffic laws at stop signs. I believe that my results show that cell phone use interferes with safe driving. There should be more of an effort made to reinforce laws against using cell phones while driving and to educate people about how dangerous cell phones can be.	
Summary Statement I observed 1200 cars to see if people using cell phones while driving stopped at stop signs at the same rate as people not using cell phones.	
Help Received none	