



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY**

Name(s) Eleanor Mullen	Project Number J0413
Project Title Stop, You're on Camera! The Effects of Emotional and Consequential Messaging on Driving Behaviors	
<p style="text-align: center;">Abstract</p> <p>Objectives The objective of this project is to measure whether drivers' behavior changes when presented with emotional or consequential messages related to their driving habits.</p> <p>Methods Stopwatch, 4 emotional message signs, 4 consequential message signs, 4 faux security cameras. Measured stopping behavior at a 4-way stop and then re-measured after hanging the emotional or consequential signs/cameras.</p> <p>Results Vehicle intersection stops were recorded and organized into four categories; full, rolling, no (stops), and forced (when the driver was forced to stop because of a car or pedestrian). For the control group, stopping behavior was recorded using standard stop signs. Next, family-oriented, emotionally driven signs reading <i>Stop Like Your Children Cross Here</i> were posted. For the final data set, consequence oriented signs with the message <i>Traffic Laws Are Photo Enforced</i> and fake security cameras were posted.</p> <p>Conclusions A total of 560 cars were monitored for this experiment. Forced stops, which skewed the data, were later extracted from the data set because it is impossible to know how they would have acted without an obstacle. The hypothesis was that people would come to a complete stop more often when the camera sign was hung. Indeed, only 10% of cars stopped fully with no messaging, 35% stopped with emotional messaging and 45% stopped when the consequential sign was used.</p>	
Summary Statement Based on my observations, drivers are more likely to obey traffic laws (stopping at stop signs) when confronted with potential consequences.	
Help Received I performed all observations by myself. A parent sat with me to make sure we concurred on the action and helped to order the signs.	