In regards to our model, traffic is the accumulation of motor vehicles at an intersection due to the suboptimal spacing between them. Our model seeks to demonstrate that these types of accumulations are exacerbated as a result of humans acting in irrational ways—ways that don't necessarily benefit the system or themselves. Our model and reasoning rely on a few crucial assumptions. First, the control data has negligible interference from obstacles. Second, control group driving patterns exemplify those of all regions of the United States that face heavy traffic. We believe that by making a driver adjust his or her speed rationally one can alleviate traffic as previously defined. A rational speed change will keep each car equally spaced between vehicles in front of and behind it. We evaluate the effectiveness of our model by analyzing improvements in both the average speed of the vehicles and the average flow rate of the intersection within a given time interval. Using data from the New York Department of Transportation we are able to derive the average velocity and average flow rate of the intersection for our control group. We hope to prove that our model both improves the average speed and the number of vehicles that pass through the intersection, alleviating traffic.