



# CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

<b>Name(s)</b> Kyle J. Moscaret	<b>Project Number</b> <b>J0316</b>
<b>Project Title</b> <b>Influences on the Speed of Cars</b>	
<b>Objectives/Goals</b> The purpose of my project is to see if a cars speed would be affected by the presence of a childs bike in the street. My hypothesis is, I believe that the presence of a childs bike in the street would affect the speed of cars and make them slow down.	
<b>Abstract</b> A neighborhood street with good traffic flow and no stop signs was identified. A spot on the street was chosen to record each cars speed with a radar gun at the same place on the street every time. With the radar gun, a position was secured about 50-75 yards from the recording spot to track the speeds of the cars coming down the street. Without anything in the street the radar gun was used to record the speed of 40 consecutive cars traveling down the street. A childs bike was then placed on the side of the street about 25-50 yards in front of the recording spot. With the radar gun, the speeds of the next 40 consecutive cars with the bike in the street were recorded. The speeds of the cars from both groups (bike, no bike) were then averaged. The results were compared to determine if the presence of the bike had any influence on the drivers speed. For additional information, it was recorded whether the driver was male or female. These speeds were averaged out and compared as well.	
<b>Methods/Materials</b> A neighborhood street with good traffic flow and no stop signs was identified. A spot on the street was chosen to record each cars speed with a radar gun at the same place on the street every time. With the radar gun, a position was secured about 50-75 yards from the recording spot to track the speeds of the cars coming down the street. Without anything in the street the radar gun was used to record the speed of 40 consecutive cars traveling down the street. A childs bike was then placed on the side of the street about 25-50 yards in front of the recording spot. With the radar gun, the speeds of the next 40 consecutive cars with the bike in the street were recorded. The speeds of the cars from both groups (bike, no bike) were then averaged. The results were compared to determine if the presence of the bike had any influence on the drivers speed. For additional information, it was recorded whether the driver was male or female. These speeds were averaged out and compared as well.	
<b>Results</b> The average speed of 40 cars without the childs bike in the street was 28.5 mph. The male drivers average speed without the bike was 28.6 mph. The female drivers average speed without the bike was 28.4 mph. The average speed of 40 cars with the childs bike in the street was reduced to 24.8 mph. This represented a 13% reduction of speed when compared to the drivers without the bike in the street. The males total average speed with the bike was 24.6 mph. The females total average speed with the bike was 25.1 mph.	
<b>Conclusions/Discussion</b> In conclusion, when the childs bike was in the street, the average speed of the cars was reduced by 13% as compared to the average speed of the cars when the child#s bike was not in the street. It is my belief that the speed of the cars went down because when the drivers saw the bike they compared it to a child in the street and they did not want to hit it. When the bike was not in the street, the cars speed went up. I believe that this is a result of the drivers not seeing any thing in the street that would influence them to slow down.	
<b>Summary Statement</b> Observing how the presence of a childs bike influences the speed of cars on a neighborhood street.	
<b>Help Received</b> Dad helped with teaching me how to make the charts in powerpoint. Mom helped with cutting out the title on the display board	