



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Tyler Hansen	Project Number J0110
Project Title A Further Cut	
Abstract Objectives/Goals Objective: The objective of my project is to determine which model car will travel the furthest when released from a ramp, based on its aerodynamic design. My hypothesis was that the teardrop shaped car, due to its highly streamlined design, would be the most aerodynamic model and travel the furthest. Methods/Materials Materials and Methods: Four Styrofoam blocks, all the same size, were cut and shaped into four different body styles: a block (the control), a wedge, a standard sedan, and a futuristic teardrop designed car. Each model was weighed on a postal scale and washers added to the lighter models in order for them to weigh the same. They were then sent down a ramp, ten times each. Their distances were then charted. Results Results: The wedge car went further on average than the other models, while the unshaped block traveled the shortest average distance. Conclusions/Discussion Conclusion: My conclusion is that aerodynamics is an important factor in the distance a model car can travel and that compromises between downforce and drag must be met to design an efficient chassis.	
Summary Statement My project involves seeing what effects aerodynamic shaping has on the travel distance of a model car.	
Help Received My dad helped me when using the table saw to cut, and my mom helped me glue my board.	