What's the Right Car for You? A Closer Look at the Average Cost of Driving in Today's Society

Leah S. Lineberry

Dr. John Taylor and Ms. Desiré Taylor

Summer Ventures in Science and Mathematics

The University of North Carolina at Charlotte



Abstract

The cost of a car is greatly underestimated by new buyers. This paper analyzes what a new car would cost for a twenty-five year old female in the Charlotte area. Using the classical approach of hypothesis testing with an alpha level of .05 and a Z-Test with the sample mean of 176,283.9, the standard deviation of 49,947.72011, and an alpha level of .05, the paper proves that a similar person would not be able to buy a new car and maintain it for five years while keeping the cost under \$40,000. The cars used in this study were the top ten most sold cars in the United States from January – June 2012. These cars were the Ford F-150, Toyota Camry, Chevrolet Silverado, Honda Civic, Nissan Altima, Honda Accord, Toyota Corolla, Honda CR-V, Chevrolet Malibu, and the Dodge Ram. Two cars were able to stay under the \$40,000 cap. These cars were the Honda Civic Sedan LX and the Toyota Corolla L Sedan.