Short Report #2
Weight: 3% of your final grade
Dawit Zerom, Instructor

**Case Study: Texas Wages**

Texas is home to more than one million undocumented immigrants and most of them are stuck in low-paying jobs. Meanwhile, the state also suffers from a lack of skilled workers. The Texas Workforce Commission estimates that 133,000 jobs are currently unfilled, mainly because employers cannot find qualified applicants (The Boston Globe, September 29, 2011). Texas was the first state to pass a law that allows children of undocumented immigrants to pay in-state college tuition rates if they have lived in Texas for three years and plan to become permanent residents. The law passed easily back in 2001 because most legislators believed that producing college graduates and keeping them in Texas benefits the business community. In addition, since college graduates earn more money, they also provide the state with more revenue.

Carol Capaldo wishes to estimate the mean hourly wages of workers with various levels of education. She collects a sample of the hourly wages of 30 Texas workers with a bachelor's degree or higher, 30 Texas workers with only a high school diploma, and 30 Texas workers who did not finish high school. The data is available in Titanium.

Using the sample information and using appropriate statistics, Capaldo would like to prepare a brief report (at most 1.5 pages – including tables) that summarizes her statistical findings. Her report will be limited to the following statistical analysis.

1. A descriptive statistics to compare the hourly wages of the three educational levels. In particular, she will report and discuss the appropriate statistical information such as mean, median, standard deviation, coefficient of variation, etc.

2. A 95% confidence intervals of the mean hourly wage at each education level. Capaldo recalls her statistics professor repeatedly saying that whenever the population standard deviation is not known, the confidence interval uses the student-t distribution. Capaldo will use the three confidence intervals to conclude whether or not more education increases one's earning.