Nicholas Wilk Project Proposal

My Project proposal is to explore the revolutionary car company Tesla Motors. Things I would like to examine are the growth of car sales since inception in the US, along with the development of the Supercharger network across the country. My plan is to see how things like average distance to a super charger, rate of supercharger network growth, along with federal and state tax benefits for electric vehicles effect both the sales and stock price of Tesla. I am interested in this company because not only am I an investor, but I also plan to one day own a Tesla vehicle and this project would be a great way to discover how feasible it is to do so.

The data sets I will use and was already able to locate are the monthly Tesla sales since inception, the stock price of Tesla motors over the same period, and the construction date and coordinates of every Tesla supercharger in the US. I am thinking of calculating correlations among these 3 data sets, plotting the locations of the chargers across a map of the US and then making a Voroni diagram to show the nearest chargers to a person in every location. I believe this will allow me to see if average distance to a charger effects sales in that area. Also, if possible, I would like to incorporate the Tesla Model S 300 mile range to plot the various routes a person can take from charger to charger to travel across the country. These are my ideas so far and I feel they are possible with the knowledge and tools we have learned to use in class.