My analysis will be based on a database of home sales, where an individual home sale is the unit of analysis. There variables in the dataset include the home sales price in dollars, the number of rooms in each home, the distance in miles from each home to the city, the quality rating of the school that serves each home, and the type of building the home is in.

I anticipate the home sales prices will range from $10,000 to $1,000,000, with an average sales price of about $100,000. The homes in this data set are likely to have between two and ten rooms, with an average of five rooms. They are all less than 20 miles from the city, with an average distance of 2 miles from the city. School are generally rated as having between zero and five stars, and the average rating is likely to be about three stars. Homes may be in one of three building types: single-family homes (probably about 50 percent of all homes), duplexes (probably about 30 percent of all homes), and buildings with three or more units (about 20 percent of all homes).

I expect sales prices to be higher for single-family homes than either of the other building types. Higher school ratings, shorter distances to the city, and more rooms are probably also associated with higher sales prices.