This description concerns a set of home sale price data obtained from the Ames City Assessor’s Office. Data on sales May 2002 through June 2003 of 1\frac{1}{2} and 2 story homes built 1945 and before, with (above grade) size of 2500 sq ft or less and lot size 20,000 sq ft or less, located in Low- and Medium-Density Residential zoning areas. (The data are in an Excel® spreadsheet on the Stat 342 Web page. These need to be loaded into R for analysis.) \( n = 88 \) different homes fitting this description were sold in Ames during this period. (2 were actually sold twice, but only the second sales prices of these were included in our data set.) For each home, the value of the response variable

\[
Price = \text{recorded sales price of the home}
\]

and the values of 14 potential explanatory variables were obtained. These variables are

\begin{align*}
Size & \quad \text{the floor area of the home above grade in sq ft}, \\
Land & \quad \text{the area of the lot the home occupies in sq ft}, \\
Bedrooms & \quad \text{a count of the number in the home} \\
Central Air & \quad \text{a dummy variable that is 1 if the home has central air conditioning and is 0 if it does not}, \\
Fireplace & \quad \text{a count of the number in the home}, \\
Full Bath & \quad \text{a count of the number of full bathrooms above grade}, \\
Half Bath & \quad \text{a count of the number of half bathrooms above grade}, \\
Basement & \quad \text{the floor area of the home's basement (including both finished and unfinished parts) in sq ft}, \\
Finished Bsmnt & \quad \text{the area of any finished part of the home's basement in sq ft}, \\
Bsmnt Bath & \quad \text{a dummy variable that is 1 if there is a bathroom of any sort (full or half) in the home's basement and is 0 otherwise}, \\
Garage & \quad \text{a dummy variable that is 1 if the home has a garage of any sort and is 0 otherwise}, \\
Multiple Car & \quad \text{a dummy variable that is 1 if the home has a garage that holds more than one vehicle and is 0 otherwise}, \\
Style (2 Story) & \quad \text{a dummy variable that is 1 if the home is a 2 story (or a } 2\frac{1}{2} \text{ story) home and is 0 otherwise, and} \\
Zone (Town Center) & \quad \text{a dummy variable that is 1 if the home is in an area zoned as "Urban Core Medium Density" and 0 otherwise.}
\end{align*}