P of a house = a + b #bathrooms + c lot size + d sq meters + e age + f distance from the dump

The attributes are no. of bathroom, size of house, etc.
Collect data for lots of houses, estimate the “hedonic” regression.

e.g.
P house = 0 + 9000 #bathroom + 60 lot size (ms) + 600 sq m house – 1000 age (years) + 60 m from dump

House: 2 baths, 180 sq m, 500 sq mt lot, 25 years old, 100m from dump: Estimated price = 137,000
[ 9000*2 + 60*500 + 600*180 -1000(25) + 60(100) ]

House that is the same, but 500 meters from dump. Estimated price will be 161,000.
If dump were cleared away, house would gain $24,000 in value.
Add gains from all houses to get total value of removing the dump.

Other examples:
Value of clean air. Los Angeles: compared value of houses in areas with clean vs. dirty air. Infer value of the clean air.

Cost of airport noise. Vancouver (Canada).

Ln price of house = a + b noise level + other variables
Houses near airport (high noise levels were 10% less valuable than those without airport noise). Able to figure out the value of reducing airport noise.

Water quality.
Clean water costs money to get to consumer. Willing to pay more for a house with access to safe water.
“Willing to pay”. Assumes some ability to pay. When there is too much poverty, market signals likely undervalue the goods or services we are evaluating.
Dump site decision

**Benefits:** expected rise in house prices if dump is removed. Hedonic price method.

**Costs:** If dump is moved, where will the trash go? New dump site; trucks; ....

What entry price?

Problem Set 4 addresses exactly this question!