Apparent review rate Total # reviews / Total # bookings = Review rate (1)

Review rate \* Average # nights for a listing = Estimated # nights booked for a listing (3)

We divided the number of reviews visible on the site by the review rate to get the estimated number of bookings (see公式 (1)), and multiplied this by the average number of nights per stay of 5.1 as reported by SF Travel. This gives us an estimate of the number of nights the Airbnb listing is occupied.

Utilization rate over lifetime of listing Estimated # nights booked for a listing / # Days listing active = Utilization rate over lifetime of listing 公式(4)

We divide the estimated number of nights booked for a listing 公式(3) by the dates a listing is active (2), to determine the utilization rate over the lifetime of a listing.

Utilization rate model Utilization rate over lifetime of listing \* 365 days = # Days a listing is booked out of the year (5a) We multiple the utilization rate in 公式(4) by 365 days in a year to obtain an estimate of the number of days a listing is booked out of the year. This is our utilization rate.

To put it all together, our model to estimate utilization rate (days per year) is as follows: **( [ (# Reviews for a listing / Review rate) \* Average # of nights for a listing ] / # Days listing active ) \* 365 days = # Days a listing is booked out of the year**