Over the past two decades rent in urban areas has sky-rocketed. In the U.S. median rents have increased 70% since 1995 when adjusted for inflation. During the same period real wages have hardly shifted and still have the same purchasing power as 25 years ago. As the proportion of renters in major cities increases the issues of inflated prices and evictions are compounded. Traditional economic models of rent, based on aggregate supply and demand curves, fall short of meaningfully addressing the problem. The purpose of this project is to develop an agent based model of a rental market using statistical software R to explore market dynamics. The model was built in three parts: a musical chairs process, a lottery allocation process, and a price setting mechanism.

The musical chairs process is the first and simplest stage of the model. For one run the model is

there a several ways of altering this lottery and allocation process. Some methods explored when building the model include using a biased hypergeometric to sample from new and original tenants, using a biased hypergeometric to discriminate based on incomeateeeeenants, using