Project Outline:

The “home field advantage”, most popularly used in football and baseball, is a phenomenon in which the home team is observed as having a benefit or advantage over the visiting team during a game. Our project was designed to determine if playing a home game can in fact increase the odds of a team’s victory and if so, can this “home field advantage” be quantified in any statistically significant way? We plan to use either city-level or county-level data to analyze if there are any interactions because city/county statistics (per capita GDP, population size, racial composition, etc.) and sports team performance for any of the major leagues (MLB, NBA, NHL, NFL). We also plan to analyze if different sports appear to be influenced by different factors of the city in which they play.

The potential sources of data that we found to be the most useful for our project include:

· Bureau of Economic Assistance

· Bureau of Labor Statistics

· United States Census Bureau

· ESPN

The questions we aim to answer and possibly quantify are:

1. Do sports teams perform better when certain characteristics, or the economic performance, of the cities they play in improve?

2. Where should sports teams focus their outreach efforts to improve the city in a way which will in turn benefit the team morale, and thus performance?

3. Is there a bidirectional relationship between sports team performance and city success? Meaning, should sports teams and cities work together to mutually benefit one another, as likely when sports teams are better, more people will spend money to see them, which makes the city do better financially. But does this cycle continue cyclically?

4. On average, by what percentage is a sports team’s odds of winning increased simply by playing a game in their home city?

5. Would playing a game in neither of the teams’ home cities result in a ‘fair’ game?