

Stephen Skasko

STAT 1341

10-16-23

Dr.Nelson

Project Proposal

Is there an ideal yardage to throw downfield before it becomes detrimental, or is throwing further better?

1. The research question do you hope to answer?
 - a. The main goal is to gain a comprehensive understanding of the effectiveness and consequences of downfield passing in NFL games. To achieve this, I will examine various factors, such as yardage distances, player performance, weather conditions, and the number of downs, using play-by-play data. The study aims to reveal the strategic importance of downfield passing and its potential impact on game outcomes, covering both positive and negative effects.
2. A description of why you believe your research question is relevant/important.
 - a. Analyzing the effectiveness of downfield passing can offer valuable strategic insights into the outcomes of NFL games. By studying various factors such as player performance, yardage distances, weather conditions, and the number of downs using play-by-play data, this study aims to gain a deeper understanding of the important dynamics of downfield passing. The results of this analysis could provide valuable information for coaches to develop effective strategies, identify player trends, and improve overall team performance.
3. Where you are going to obtain your data from?
 - a. I will use various data packages, including nflfastR, gsisdecoder, nflscrapR, weatherData, and sportsdataverse, which will help analyze the effectiveness and consequences of downfield passing.