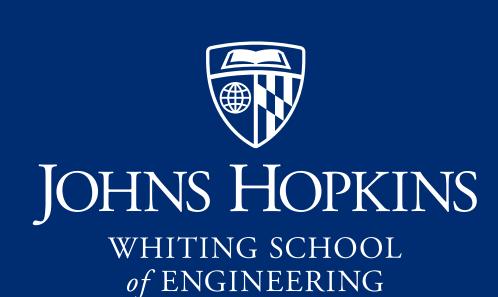
An Analysis of the NFL Kickoff Rule Change

Understanding how recent kickoff rule change is impacting the game, especially focusing on long field goal attempts

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Abstract

In response to declining kickoff return rates and rising injury concerns, the NFL introduced a significant kickoff rule change for the 2024 season. This project explores how that change may be influencing broader game dynamics, specifically, the noticeable uptick in long field goal attempts across the league. While improved kicker performance is part of the conversation, we investigate whether this trend is purely a matter of skill development (or teams making riskier decisions) or if it's also a byproduct of strategic shifts prompted by the new kickoff rules.

Using NFLFastR play-by-play data from the 2023 and 2024 seasons, we provide context for evolving game patterns, analyze field goal trends, and apply logistic regression to examine the factors influencing team decisions around field goal attempts.

Objectives

- Examine the factors driving the rise in long field goal attempts
- Analyze the impacts and strategic implications of the NFL's 2024 kickoff rule change

Materials and Methods

We utilized play-by-play data from the 2023 and 2024 NFL seasons provided by the nflfastR package. This dataset offers detailed information on every play, allowing us to filter and visualize trends based on specific play types across both seasons.

To evaluate fourth down decision-making, we developed a multinomial logistic regression model focused on three possible outcomes: field goal attempts, punts, and conversion attempts (run or pass). The dataset was filtered to include only fourth down plays resulting in one of these three decisions. Key features used as model inputs included:

- Yardline (distance to the end zone)
- Yards to go (for a first down)
- Score differential
- Time remaining (in seconds)
- Expected points
- Offensive team win probability

The data was split into training and testing sets using stratified sampling, with 75% allocated for training and 25% for testing.

Rule Change

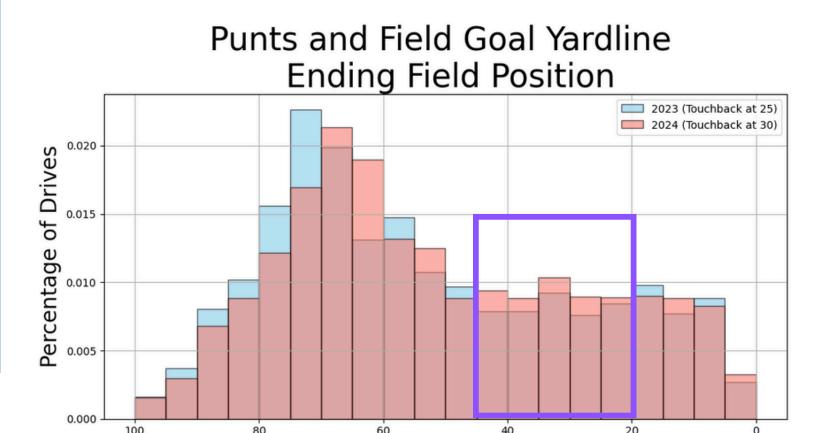
- Landing Zone: Between the 20-yard line and the goal line
- Kicks landing in the Landing Zone Must be returned: no fair catch
- Kicks into the end zone:
 - Return is optional
 - Touchback now to the 30 (previously 25)

Findings

Improved Position

Temptation Zone

Where teams are inclined to kick a field goal more than punt (45-20 yardline) In 2023 1162 fourth downs were in this zone, **1197** in 2024.



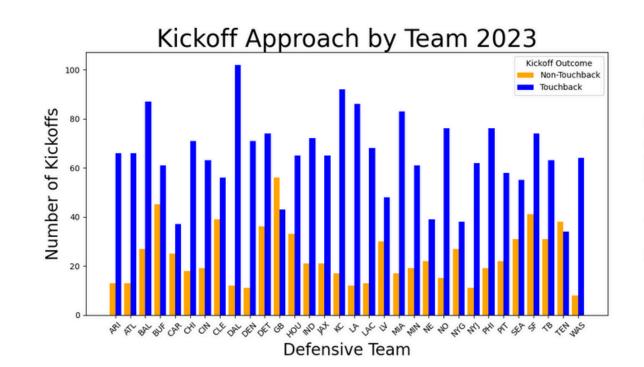
3% increase in fourth downs in Temptation Zone

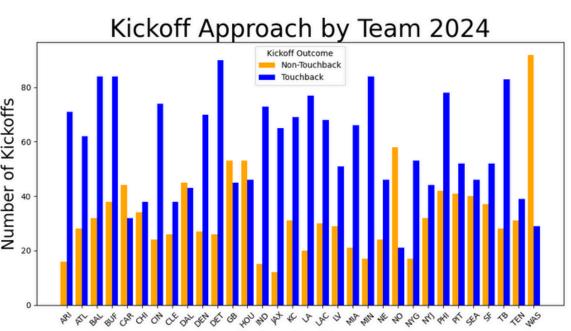
Yardline

5.8% increase in drives ending in field goal or punt in Temptation Zone

On average drives are ending 2 yards farther down field

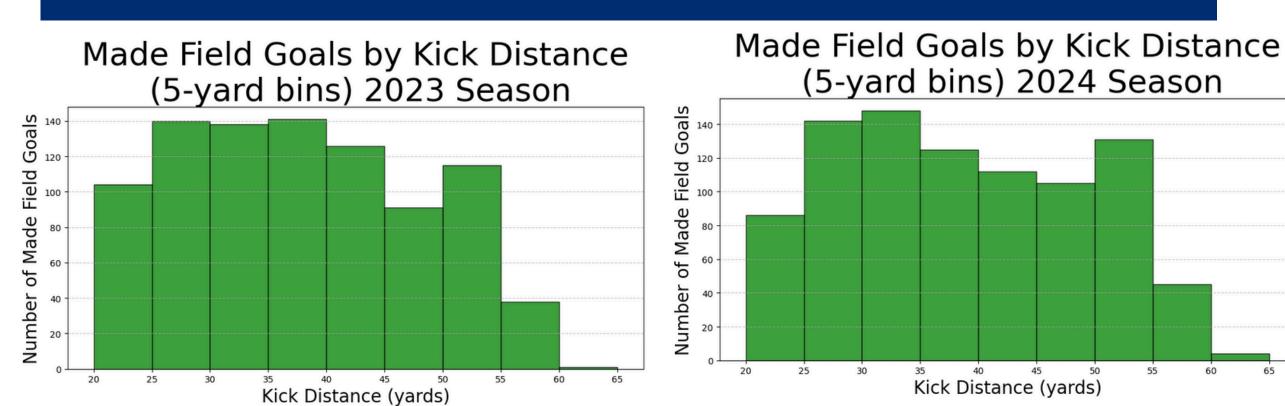
Kickoff Decisions





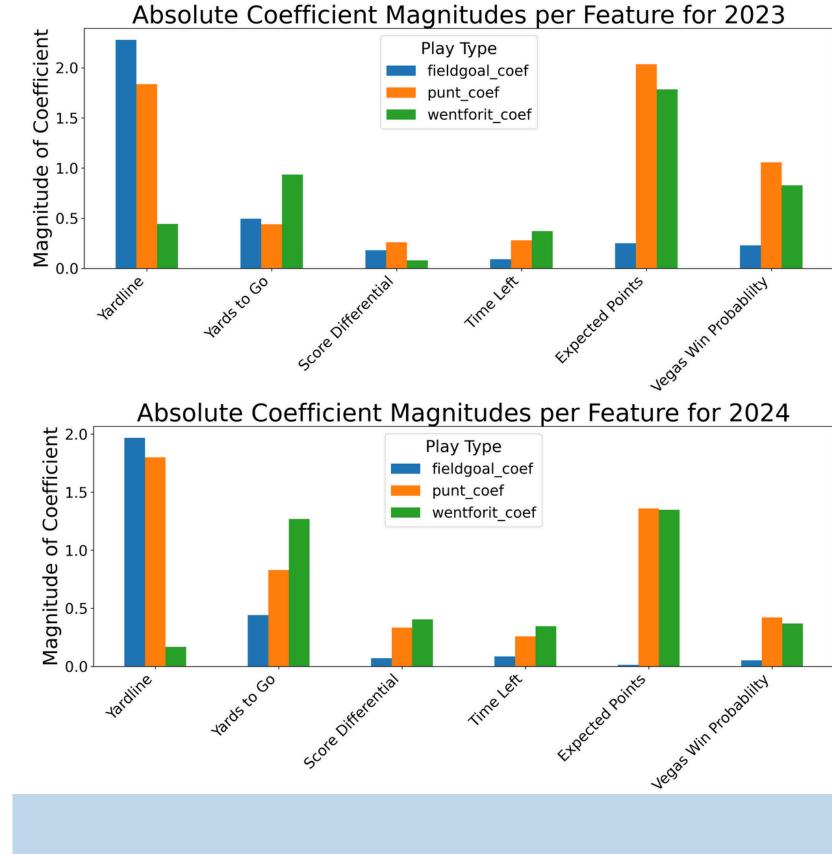
Teams are more frequently kicking into landing zone, causing more returns which has contributed to a better starting field position

Field Goal Trends

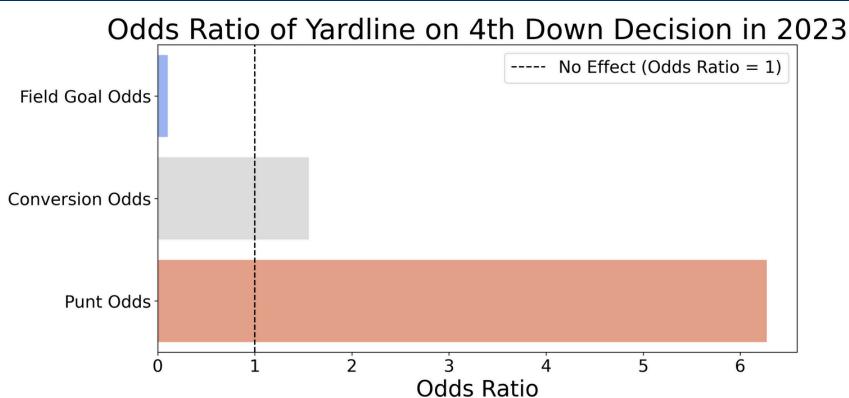


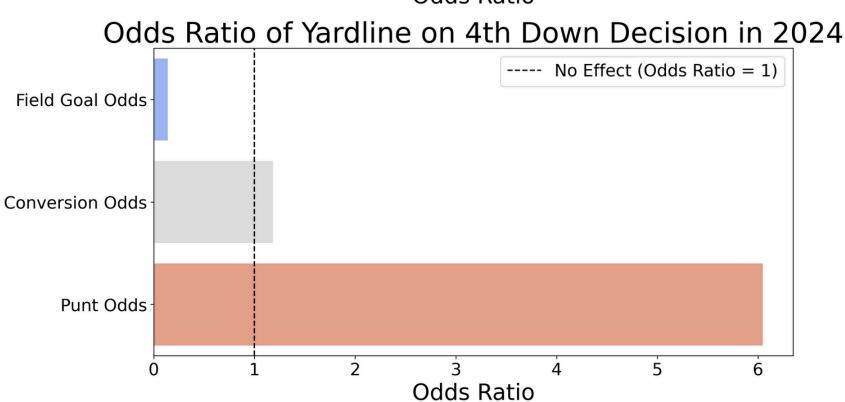
Field goals in 2024 were not only attempted from farther distances than in 2023, but long-distance attempts also became more frequent.

Logistic Regression



Field position (represented by yardline) is the most impactful feature on team's decision to kick a field goal or punt





The odds of attempting a field goal from farther out (per 1-yard increase in distance) were about 36.4% higher in 2024 than in 2023.

Conclusion

- The 2024 kickoff rule change has resulted in drives ending closer to the opponent's end zone. Our model identified field position as the most influential factor in teams' fourth down decisions—whether to punt, go for it, or attempt a field goal.
- While field position continued to play a major role, our analysis suggests that in 2024, being farther from the end zone had a slightly reduced negative impact on the likelihood of attempting a field goal. In other words, teams were marginally more willing to kick from longer distances.
- The rise in long field goal attempts appears to be primarily driven by this shift in average field position. However, a portion of the increase also reflects a strategic change, with teams more frequently opting to kick from farther out.
- Looking ahead to 2025, with the touchback being moved even further upfield to the 35 yardline, we anticipate a continued increase in long field goal attempts.



Explore more impacts of the 2024 NFL Rule Change!