Steelers Offensive Analysis: A Unified View of Efficiency and Performance

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Main Figure:

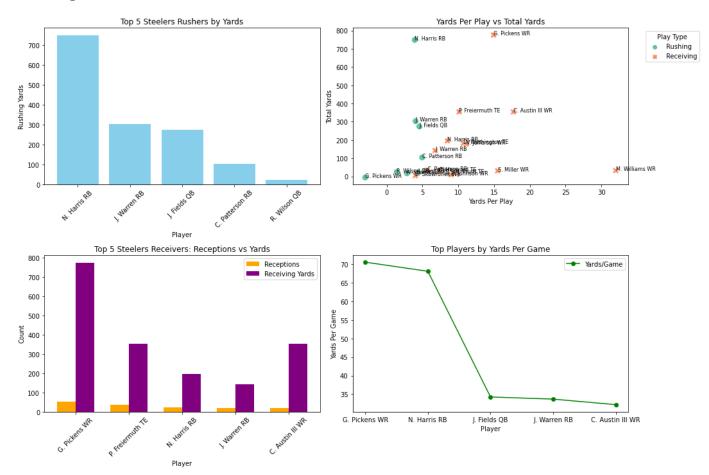


Figure 1 (Bar Chart):

• Bars represent total rushing yards for the top 5 rushers on the team

Figure 2 (Scatter Plot):

- X-axis: yards per play (Rushing/Receiving efficiency)
- Y-axis: Total yards
- Green: Rushing, Orange: Receiving

Figure 3 (Grouped Bar Chart):

- Orange bars: Receptions
- Purple bars: Receiving yards

Figure 4 (Line Plot):

• Greenline: Total yards per game.

Findings

- 1. Najee Harris, being the top rusher on the team, dominates in total rushing yards and maintains high efficiency in running plays.
- 2. George Pickens is the best wide receiver on the team, leading in receptions and receiving yards. He's also the most consistent player with the highest yards per game, he's able to maintain his yards per play although he has the most receptions.
- **3.** Based on the second graph, we can tell that the team relies mainly on the receiving efficiency to gain yardage.
- **4.** Players with higher Yards Per Play (e.g., Harris, Pickens) also tend to have higher total yardage, showcasing their ability to maximize opportunities.

Data and Method

The data is from espn and I created two CSV files for receiving yards and rushing yards. I filtered out team totals to focus on individual performances, and calculated yards per play.

For the visualization, I used a combination of bar charts, scatter plots, grouped bar charts, and line plots to provide diverse perspectives.

Significance Statement

The analysis provides a comprehensive view of individual players' contributions to the Steelers' offense. By combining rushing and receiving metrics, it highlights efficiency and overall productivity which are critical for evaluating player performance, informing game strategies and play designs and identifying high-impact players who maximize opportunities.