

Investigating NFL Running Back Contract Trends in Correlation with Franchise Output

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Abstract

- ❑ If you are an NFL fan, you probably know that over the past twenty years, the NFL has continually shifted towards passing over rushing.
- ❑ This shift occurred for a multitude of factors, but most notably an evolution in offense creativity and redefinition of what the quarterback position can be.
- ❑ While the analytical community can agree the running back position has become the least valuable position in football, have NFL franchises actually caught on, and what are the consequences when they do not?

Methodology

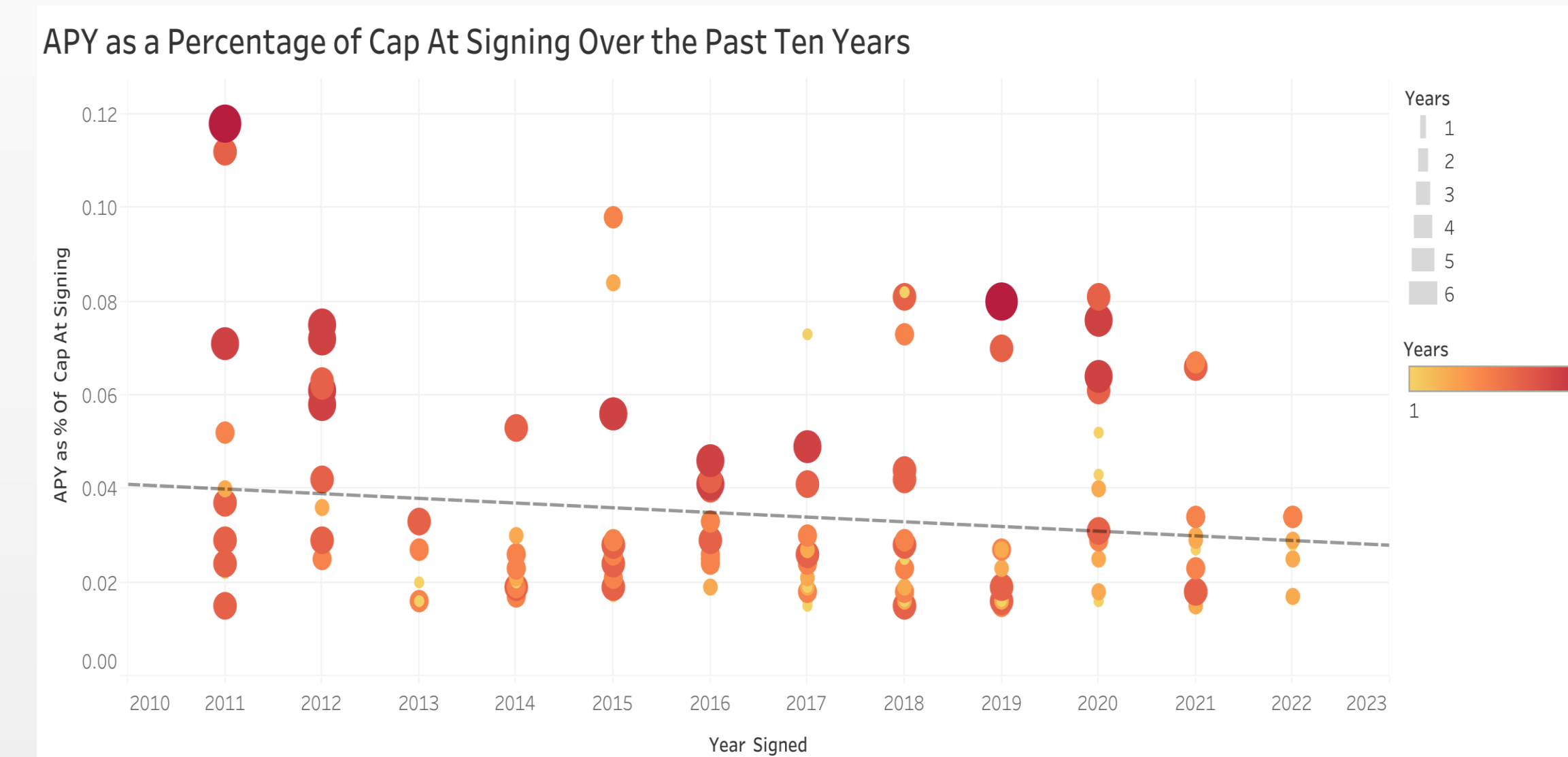
- ❑ Used salary cap and player contract data, team performance data, and advanced individual player metrics, we isolated important variables to reveal contract trends.
- ❑ Filtered data to reduce bias or remove irrelevant data points in certain variables
- ❑ Compared contracts to the team and individual associated with them in order to gain insight on the result of paying up as opposed to forgoing the position entirely.

Data Obtained From:

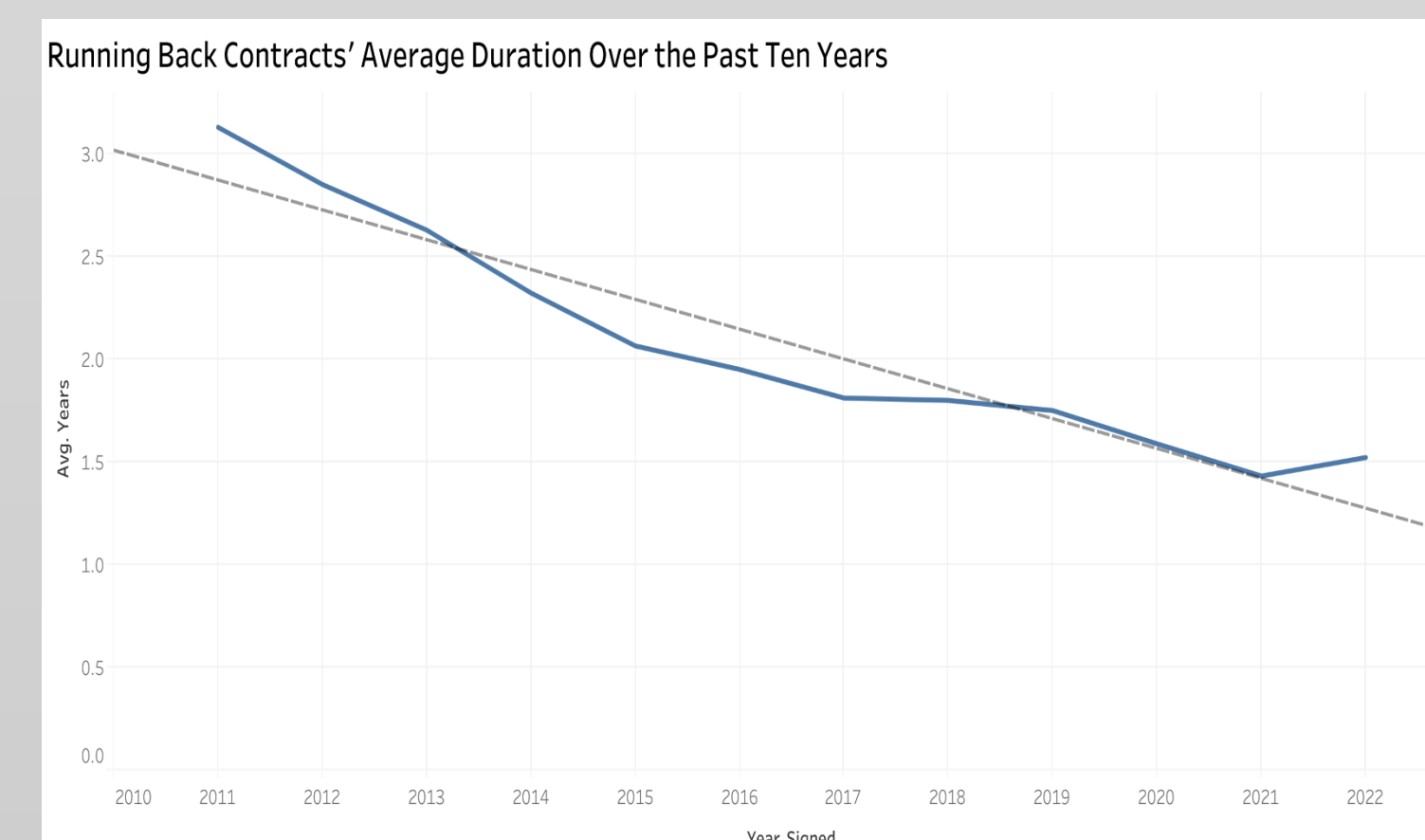
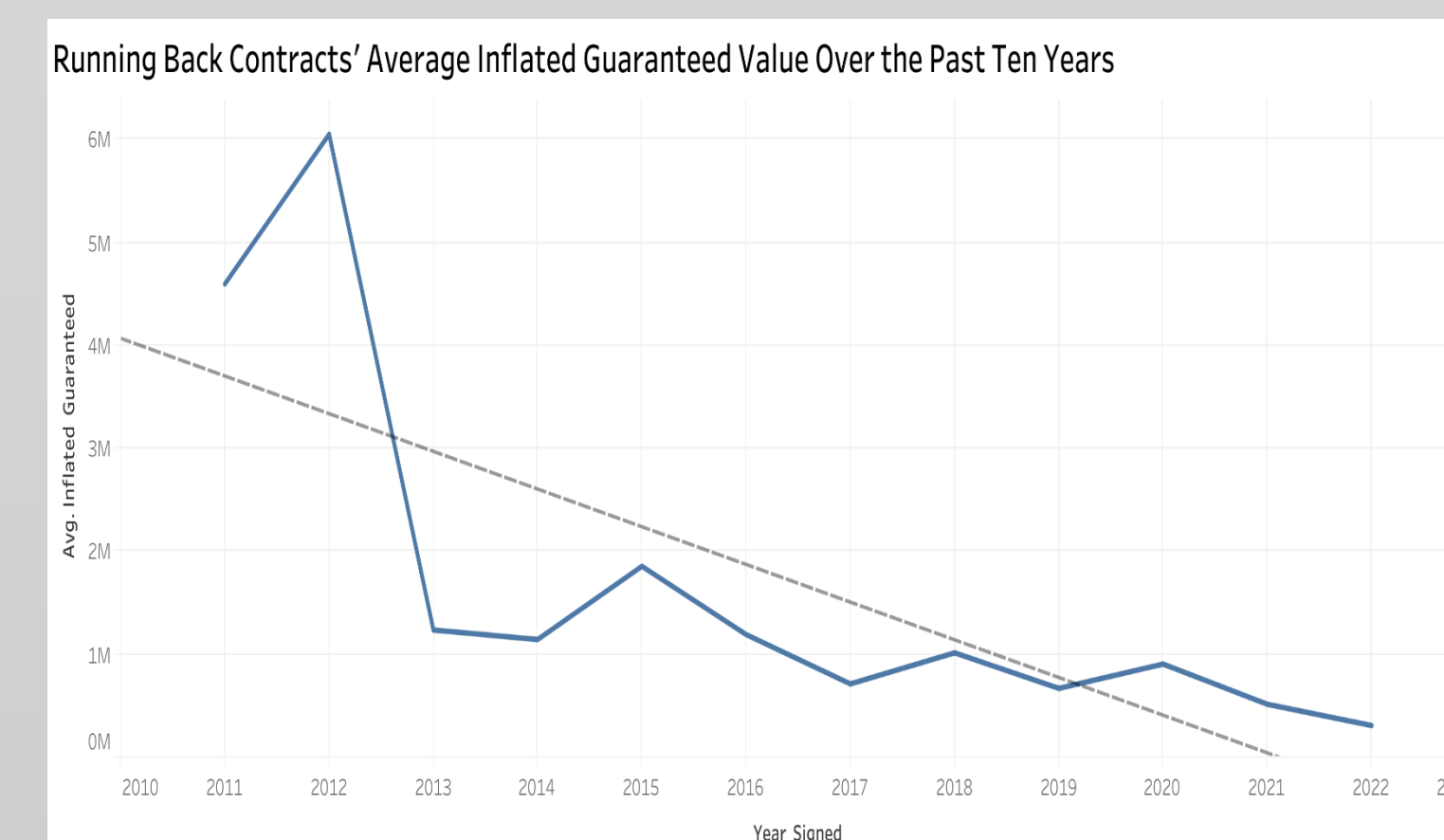
PRO FOOTBALL
REFERENCE

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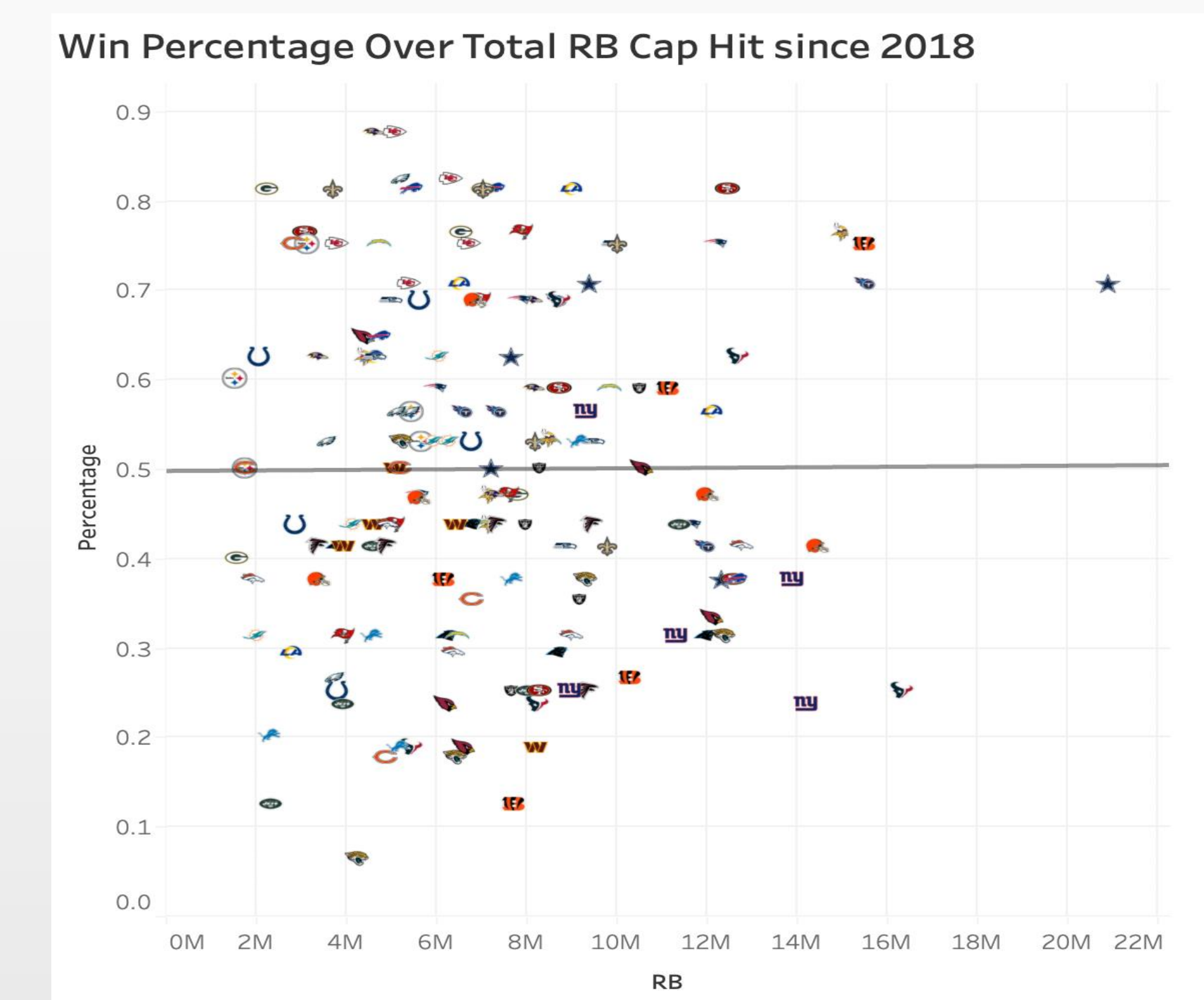
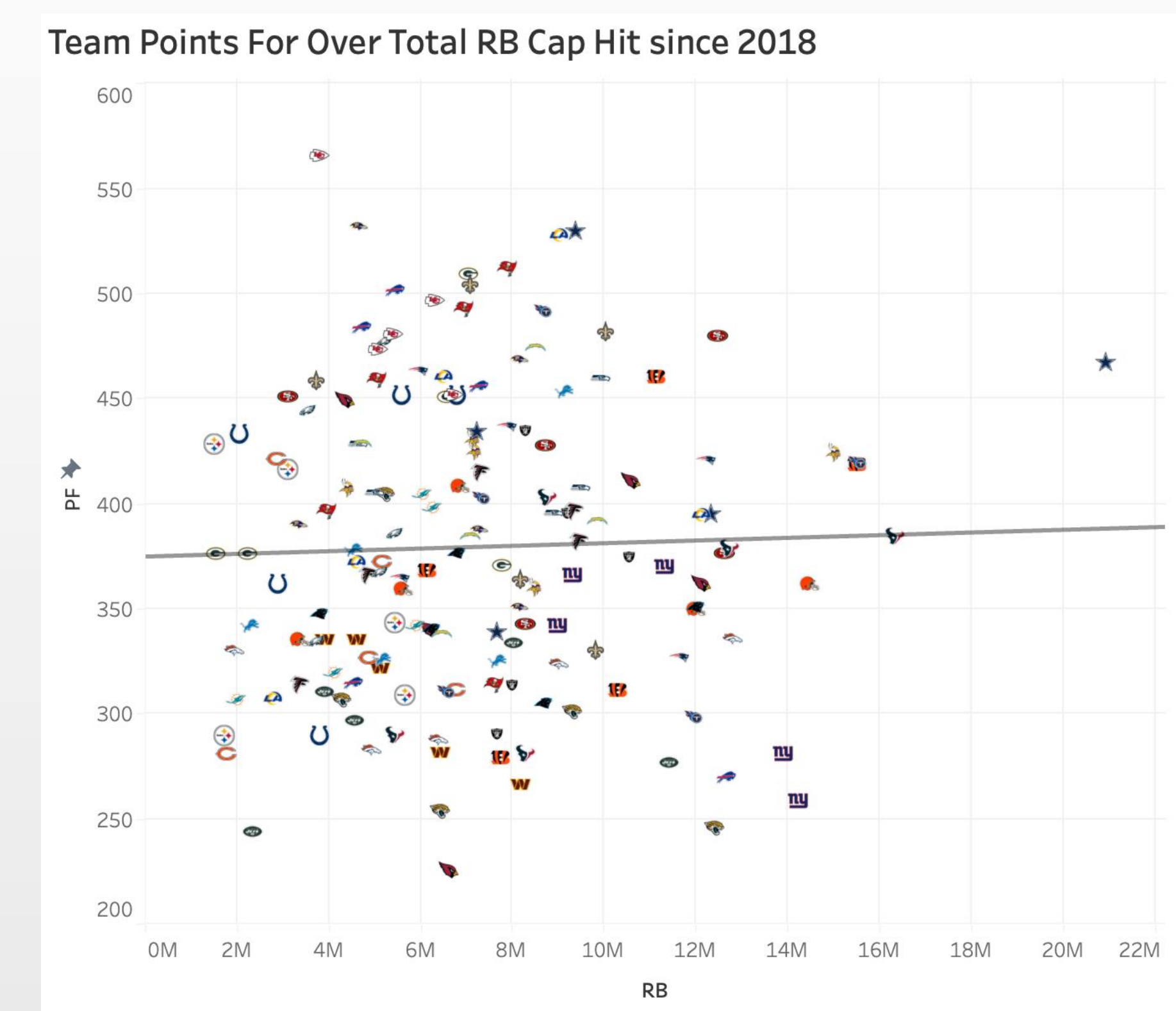


- ❑ This graph reveals the percentage of cap a team is willing to give up for a desired running back
- ❑ The LSRL displays minimal correlation between year and team's priority placed on running backs
- ❑ This suggests executives are still willing to sacrifice locking in talent at other positions when what is considered a top end talent at RB becomes available or needs to be resigned
- ❑ The two clusters of contracts between 2011-2012 and 2019-2021 represent the second contracts of elite RB classes
- ❑ Executives are likely pressured to resign these backs which become the face of the franchise to maintain its locker room culture and satisfy fans

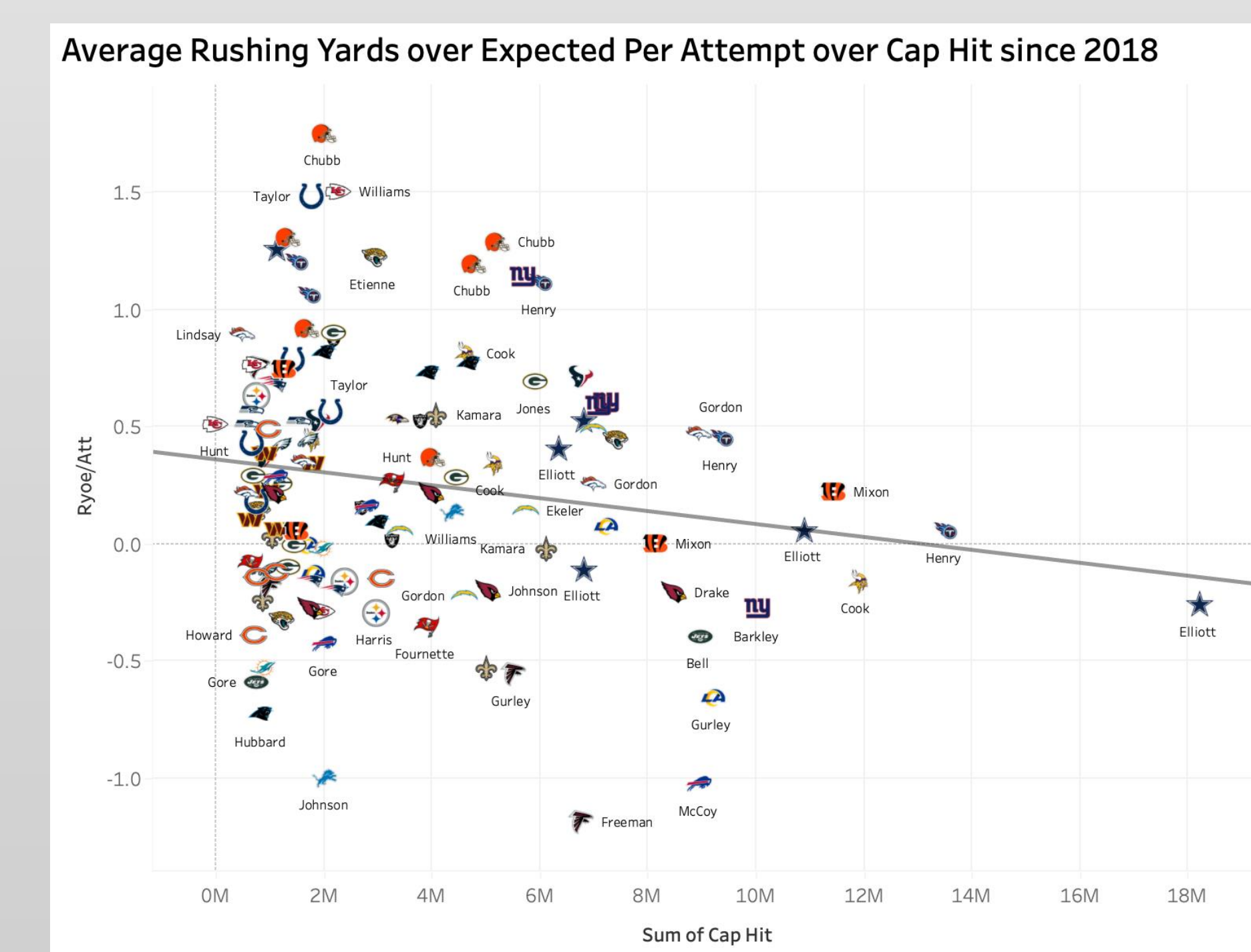


- ❑ This line chart on the left depicts the average inflated guaranteed money RBs earned each year while the one on the right shows the average duration of an RB contract each year
- ❑ Unlike the graph above, NFL teams appear to have grown more wary of fully committing resources to RBs, evidenced by R squared values of .56 and .94 for the respective charts
- ❑ This suggests that while executives still feel obligated to pay their star backs, they have quietly hedged their bets through less observed contract details in the past ten years

Materials and Analysis



- ❑ These graphs reveal that since 2018, there is no correlation between cap hit for running backs and team performance
- ❑ This communicates that a team is far better off resisting the urge to pay up for a star running back because over a large sample size, it has no impact on points scored or win percentage



- ❑ Running backs that absorb a high cap hit are exceptionally talented in their first couple years in the league, but by the time they sign big deals, the toll on their bodies causes regression in explosiveness, resulting in only average RYOE per carry

Conclusion

- ❑ Although teams have displayed increased reluctance to guarantee money and commit long-term to rushers, they cannot resist offering franchise backs large second contracts
- ❑ These backs are average at best during their second contract, communicating the investment is not worthwhile
- ❑ Some teams quickly feel buyers' remorse for their misplaced investment after a lackluster season, while others still maintain a winning roster with talented rookies
- ❑ Either way, pouring cap space into another position will certainly be more beneficial to team performance