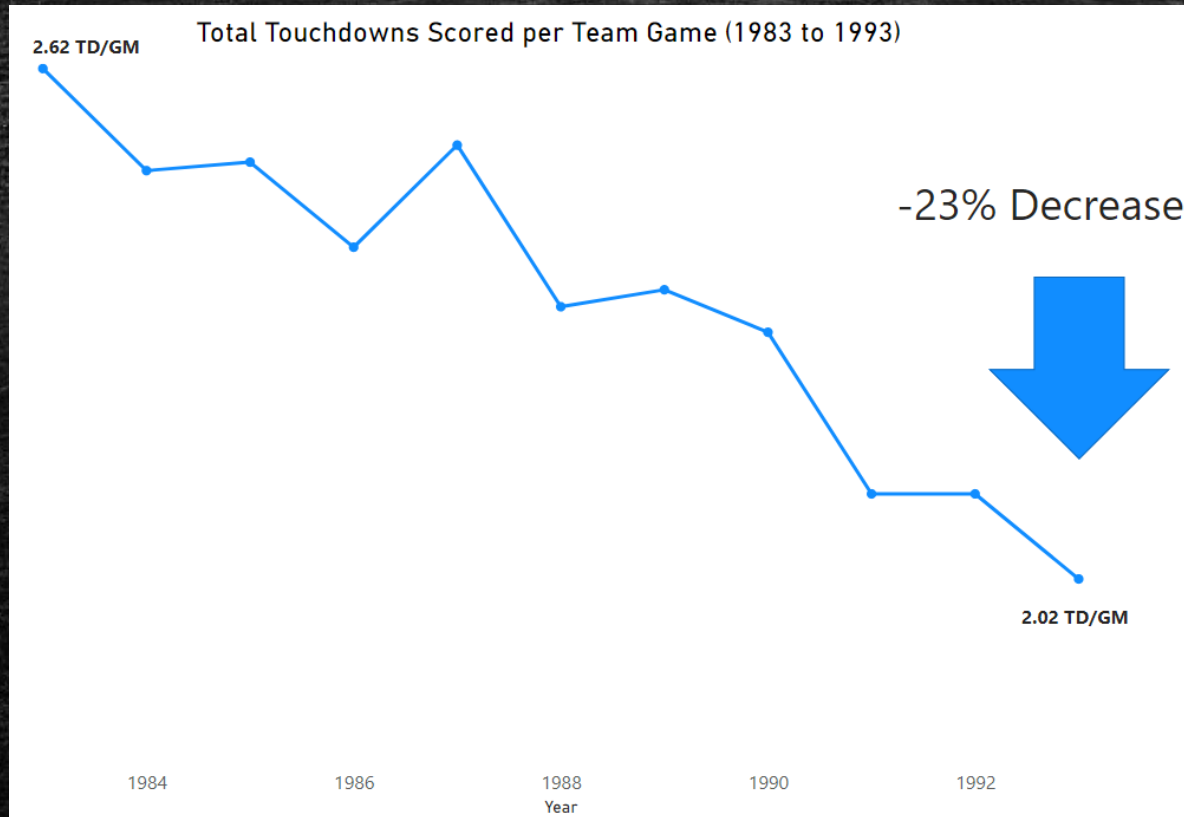


Bigger Faster Stronger

How NFL rule changes have led it on a collision course with player safety

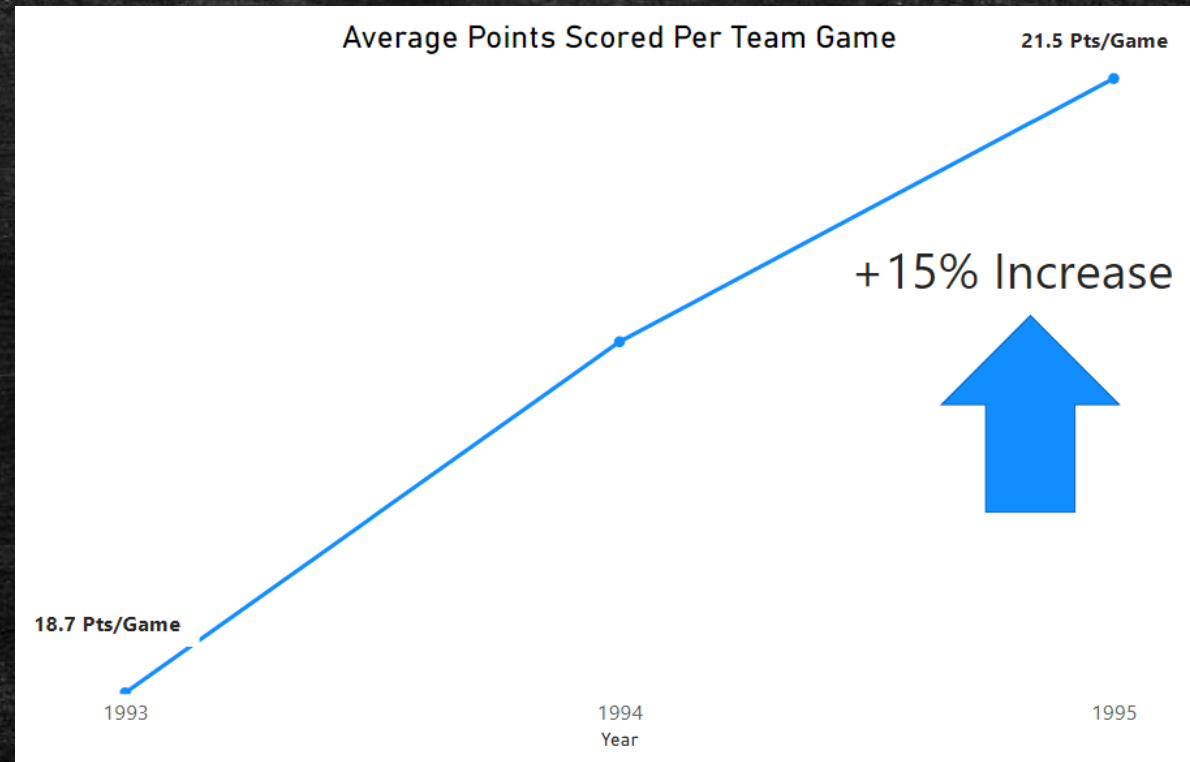
1983 to 1993: A League in Decline



The year is 1993, and the League is concerned that the lack of scoring is making the game stale and boring. Rule changes are made to benefit Offenses.

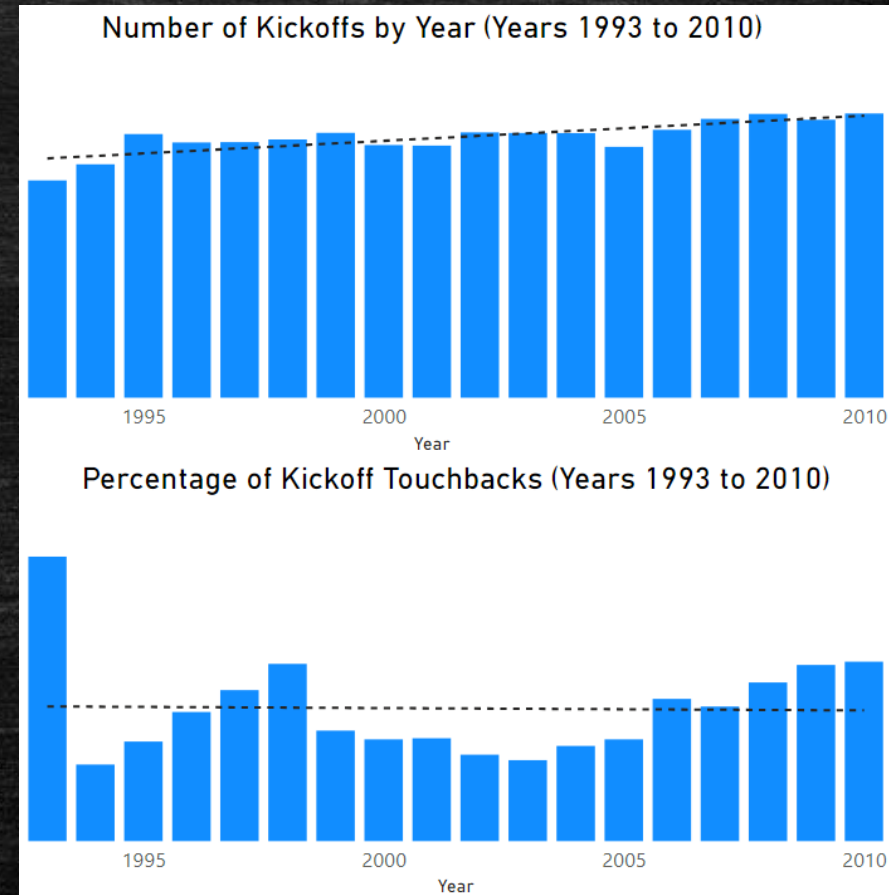
1994: A Season of Change

The Offensive-favoring rule changes have the immediate effect of increasing scoring by 15%, but they come with a downside.

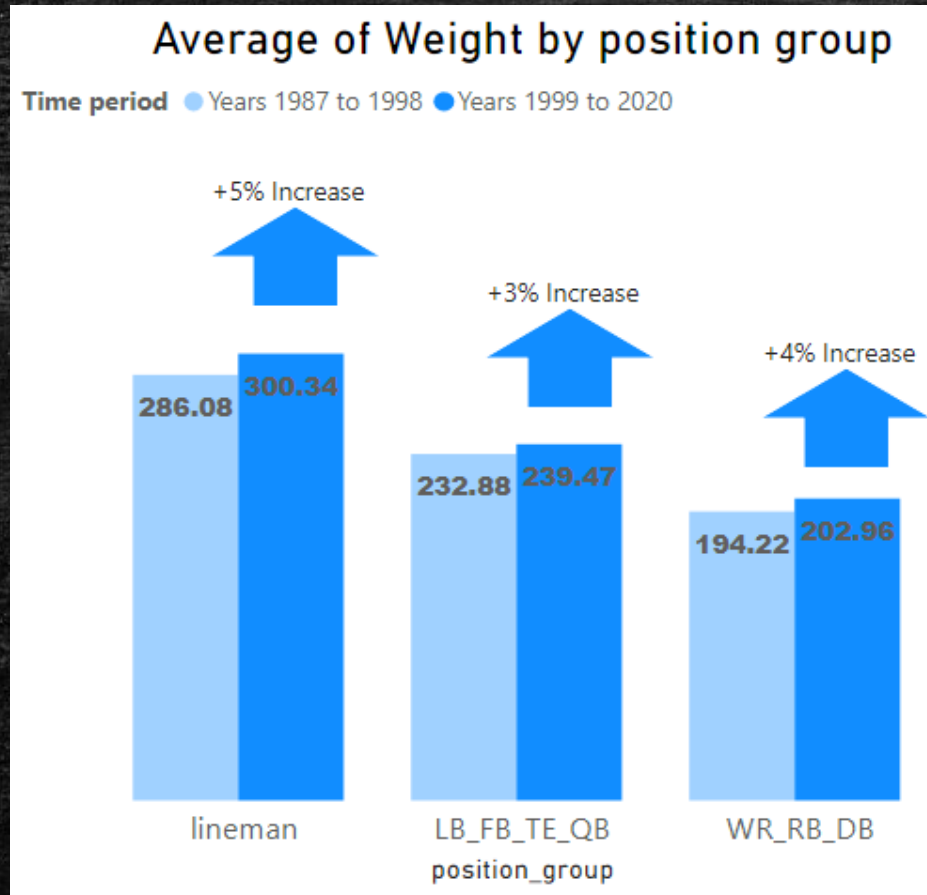


More scoring Leads to more of the most dangerous play in the NFL: Kickoffs

- Kickoffs create an increased risk of concussions as players race full-speed toward each other.
- Kickoffs increased but touchback percentage remained the same.
- Concussions are five times more likely to occur on kickoffs than any other play.



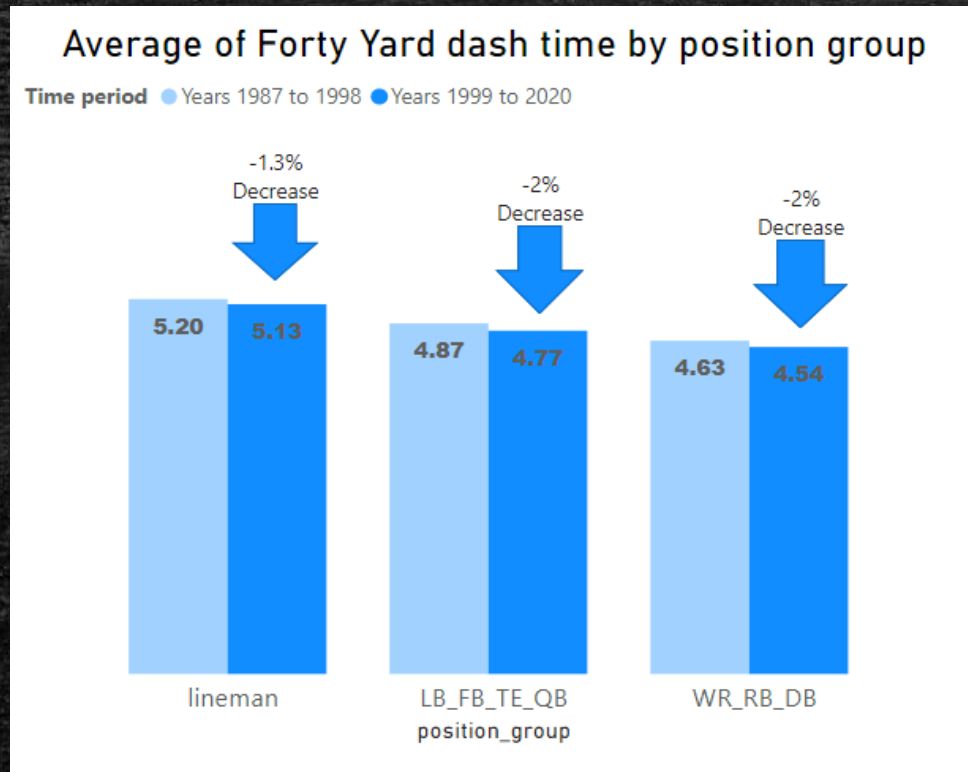
Collisions during kickoffs have become more dangerous as modern NFL players have gotten Bigger...



NFL average player weights have increased by 3 percent* or more in the past 21 years.

*Results are statistically significant

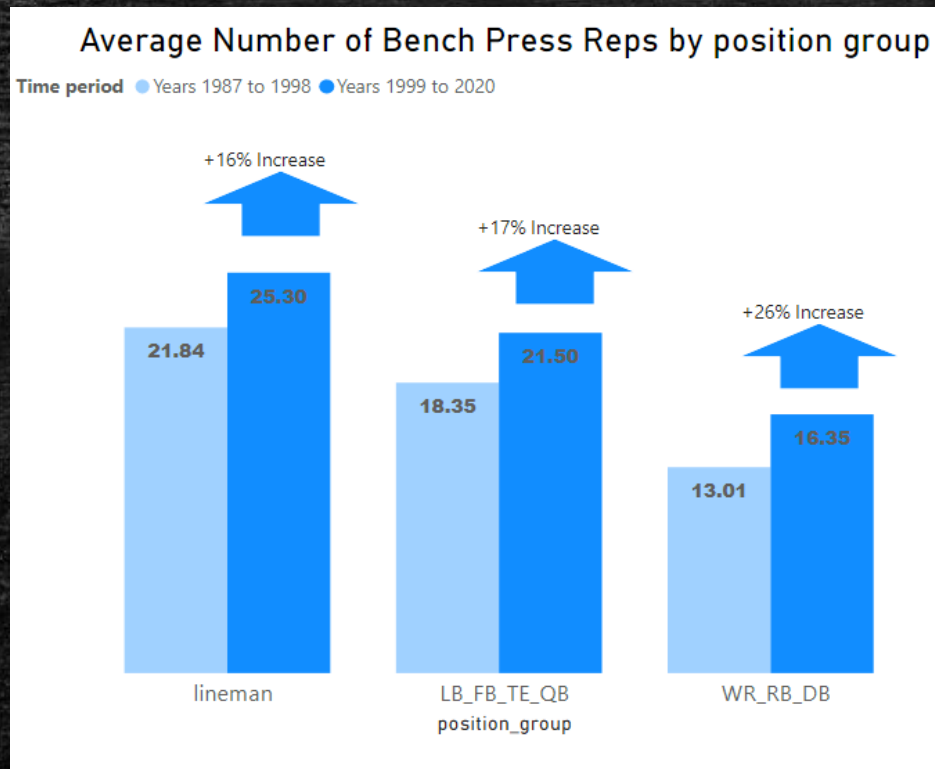
Faster...



NFL average forty-yard dash times have decreased by 1.5 percent* across most positions in the past 21 years.

*Results are statistically significant

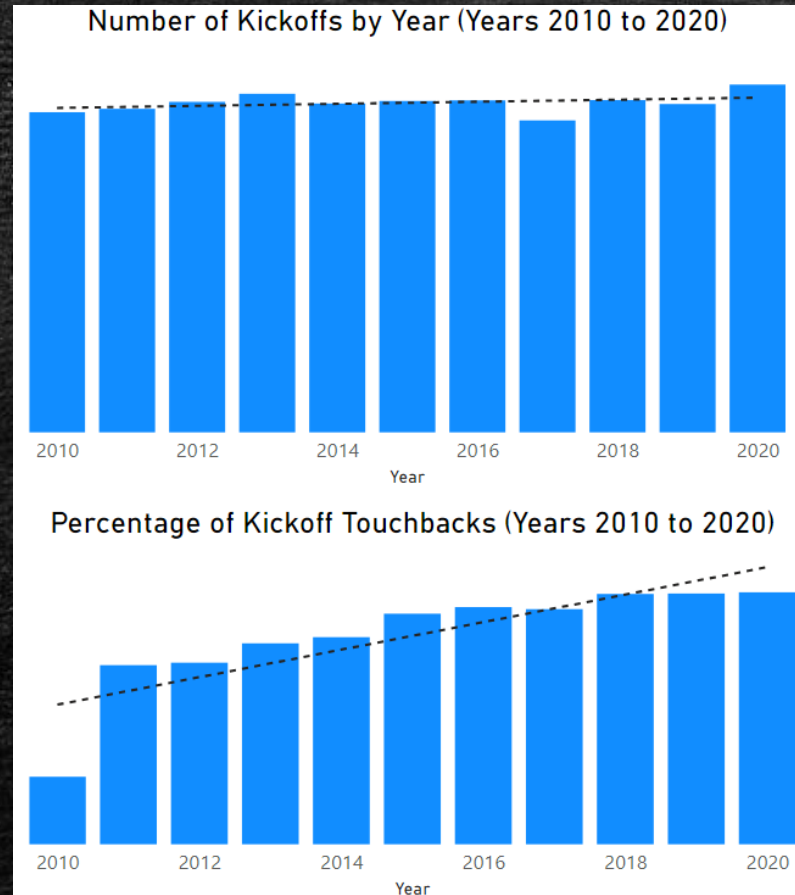
And Stronger



- NFL average player Bench reps have increased by 20 percent* across most positions in the past 21 years.
- As evidence links traumatic brain injuries with playing in the NFL, the pressure mounts for more rule changes.

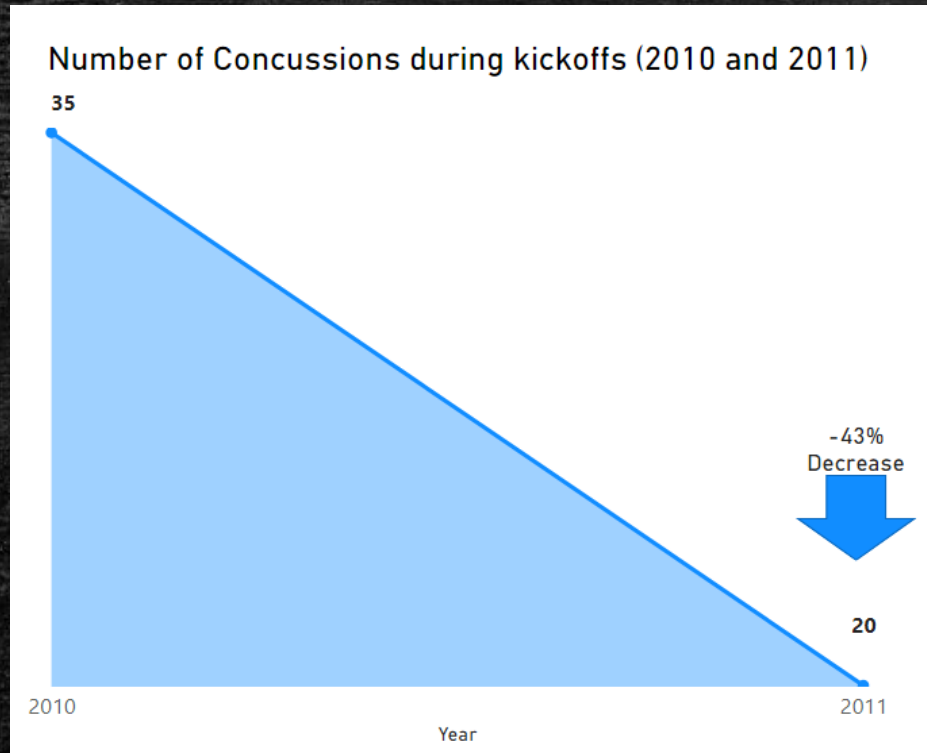
*Results are statistically significant

2011: Changing the kickoff rules



- The NFL moves kickoffs to the 35-yard line to encourage fewer returns.
- The rule succeeds in reducing the exposure of players to one of the most violent plays in football.
- The rule was in addition to the rule banning players from forming wedges of three or more players during kickoffs. Wedges create a human “wall” that coverage teams had to run through to make a tackle.

Preliminary results show promise



- The number of concussions during kickoffs decreased by about 43 percent from 2010 to 2011.
- The initial results indicate the rule changes may have helped reduce concussions.