What is higher for each of the 32 NFL teams, EPA per Rush, or EPA per Pass?

1. Calculate Expected Points as a function of Down, Distance, Position, HTYear, ATYear
   1. Outcome\_Points ~ linear(Down, Distance, Position, HTYear, ATYear)
   2. Use data from 2009-2018 (all available)
   3. Assume field position before punt or missed fg or turnovers don’t matter (Remove all data from drives which do not end in FG or TD.)
   4. Assume team always trying to maximize points (remove data 5 min before halftime. Remove data 5 min before end of game. Remove data where score differential > 8(?) pts & quarter == 4)
2. Econometric tests for regression validity
3. For each play in resulting dataset, calculate EPA (compare to existing EPA to see if its semi-in line, use as a sanity check perhaps)
   1. For each play(p), plug in pre-snap variables, get Expected\_Points(p)
   2. For each play(p), plug in new variables for subsequent play, get Expected\_Points(p+1)
   3. For each play(p), calculate resulting Expected\_Points\_Added(p)
4. For each team, sum the Expected\_Points\_Added following rush attempts
   1. Then, calculate EPA per Rush for each team by dividing by # of rushes (do not count QB keepers as either rushes or passes)
   2. Do not count “give-up” plays towards the calculation (rushes during third and 12+)
5. For each team, sum the Expected\_Points\_Added following pass attempts
   1. Then, calculate EPA per Pass for each team by dividing by # of rushes (do not count QB keepers as either rushes or passes)
6. Plot EPA per Rush and EPA per Pass for all 32 teams, identify which teams favor rushing and which teams favor passing (and for which teams it’s basically the same!)