

Playtype Frequency and Success By Team: Visuals



Dashiell Nusbaum [Follow](#)

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L→R, Top→Bottom: ISO, Transition, P&R Ball Handler, Hand Off, Cutting, Spot Up, P&R Roll Man, Post Up, Off Screen

It can be hard to accurately judge coaches (except Jason Kidd) when so much of a team's on-court results come down to the talent of the guys that hustle up and down the hardwood for forty-eight minutes. One way we evaluate coaches is through the plays they run. But teams go through thousands of possessions over the course of an 82 game season, making it difficult to see in real time the way that minor differences in playtype frequency and efficacy add up to major differences in wins.

So I set out to visualize it, to simplify every NBA offense to nine bubbles. These bubbles would show how much and how well each team ran the nine different play types (I know there are more than nine, but they can essentially be boiled down to these nine, and that's how Synergy keeps track). The bubbles are also color coded to show how teams performed versus league average. Finally, I included some comments and analysis below each.

Obviously, this won't be an exact science for team and coach evaluation. For example, while cutting is far and away the most effective play in the league,

teams can only cut so many times before defensive adjustments are made, and players may cut but not receive credit for that play type if they don't receive the ball.

Still, these charts tell us a lot. So let's go.

How to read these charts

Higher Up: Scored lots of points per possession from this play

Lower Down: Scored few points per possession from this play

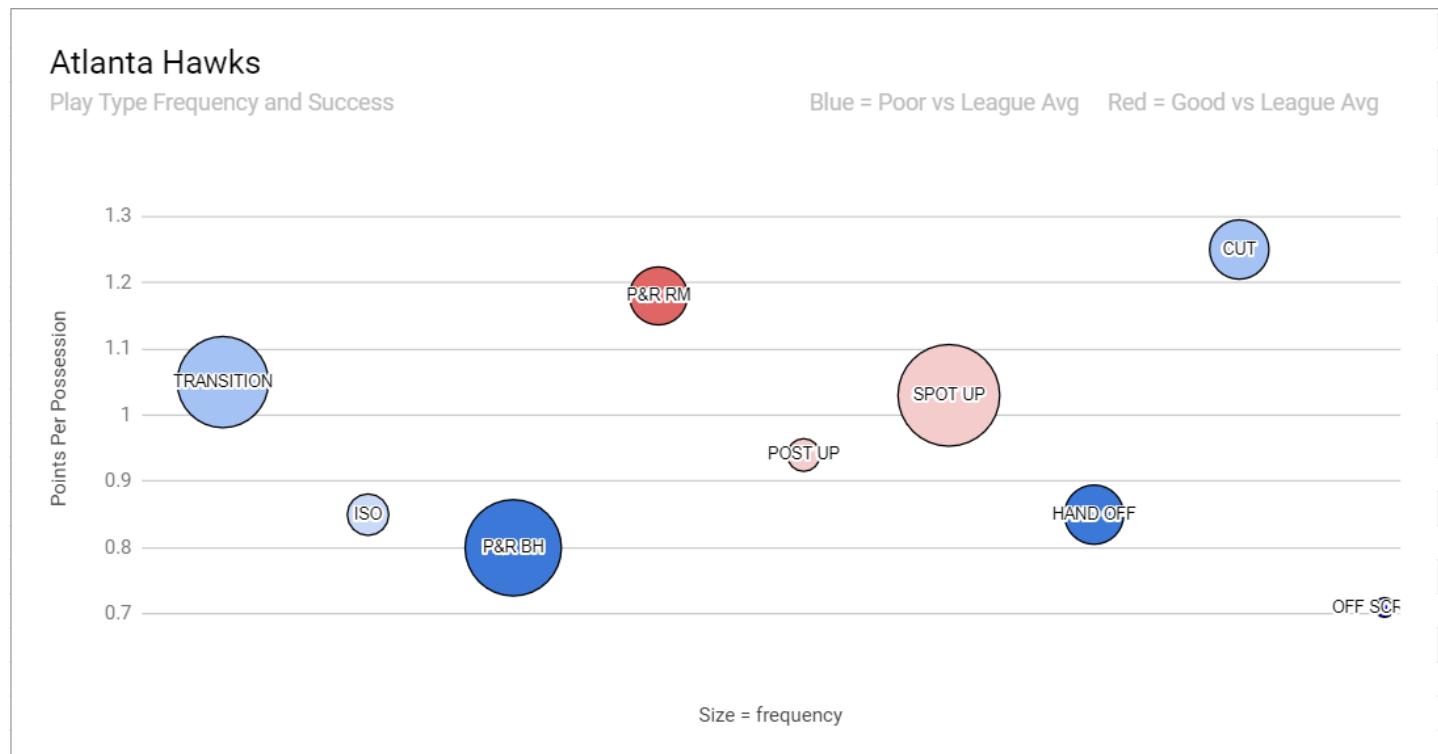
Larger: Used this play frequently

Smaller: Used this play rarely

More Red: Scored more points per possession from this play than the league average points per possession scoring from this play

More Blue: Scored less points per possession from this play than the league average points per possession scoring from this play

Note: You can come back soon for an article that displays up-to-date versions of these charts for the 2019 season.

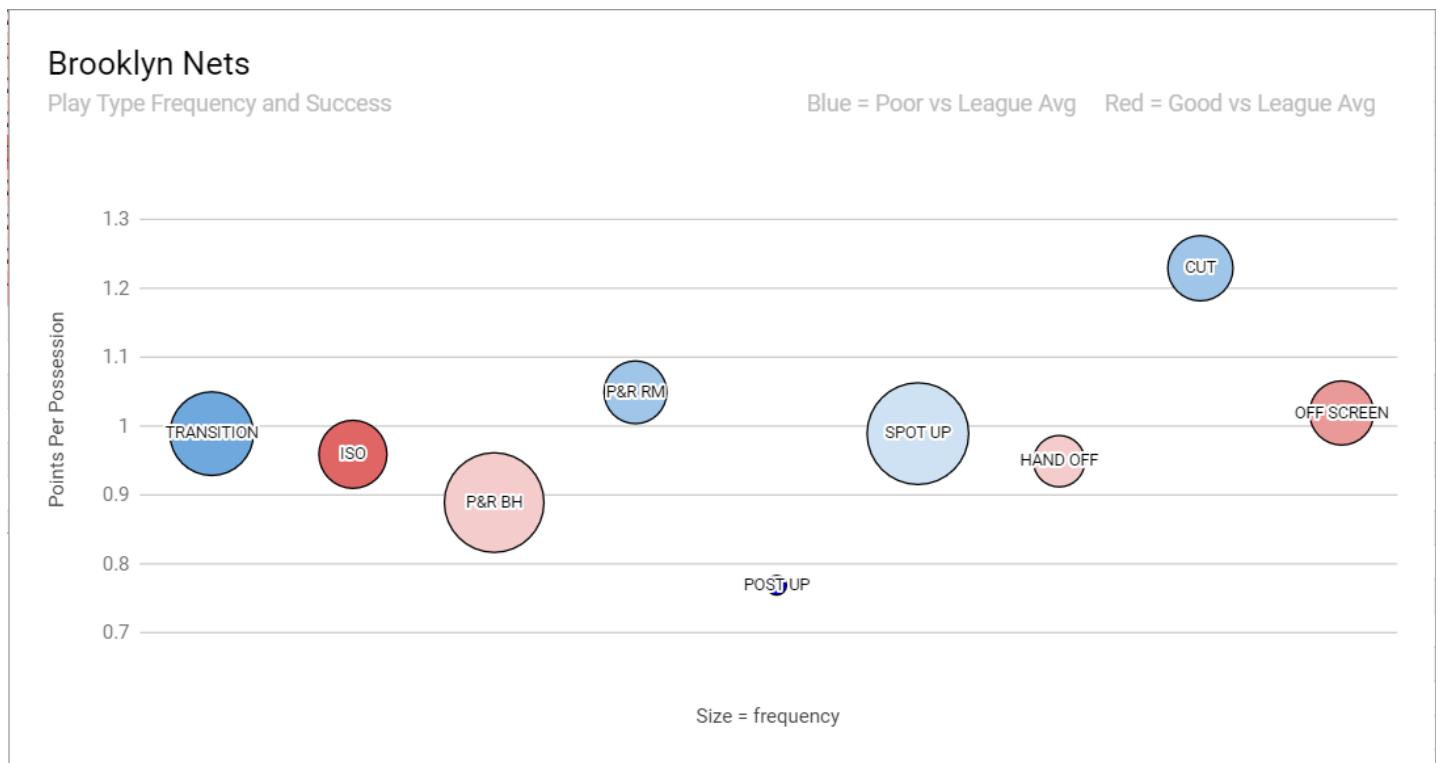


ATL: Atlanta used Trae Young a lot, giving him a long leash to figure things out (and he did!). Look for play type frequencies to remain similar in 2019–2020, but with improved numbers in isolation and P&R BH.



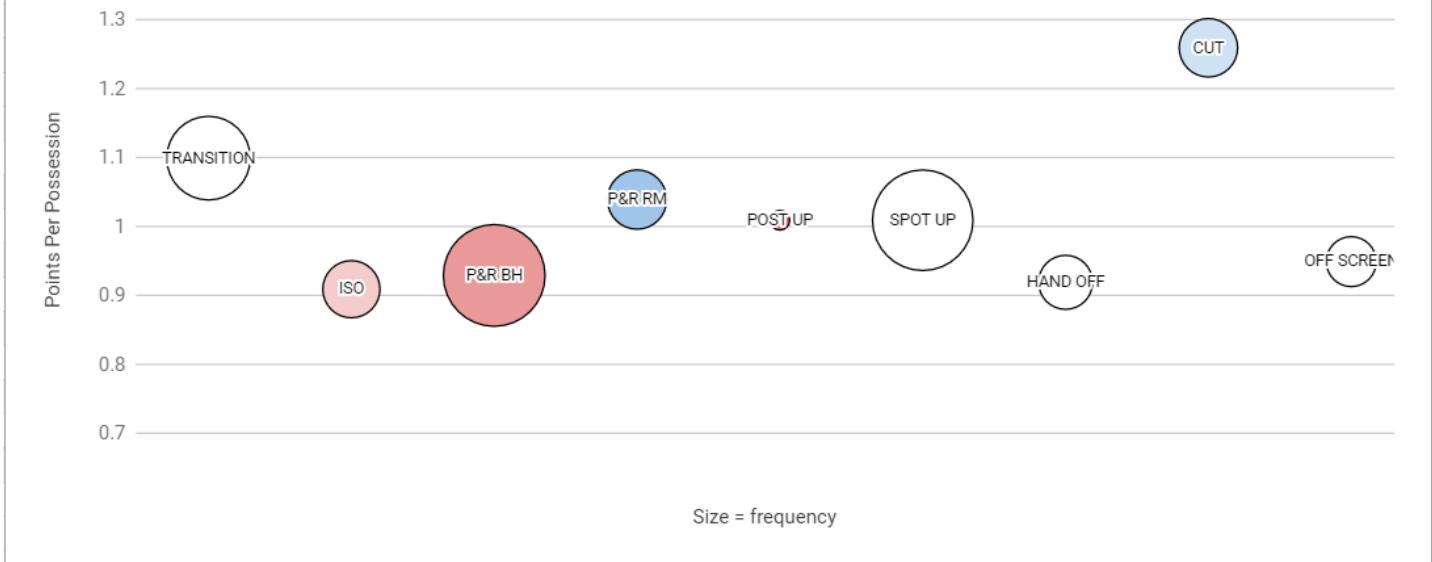


BOS: Boston was above league average at plays they used more frequently. Good for them! Notably, they performed poorly in isolation (a category Kemba's Hornets did well in). Here's to another odd year for Brad Steven's Celtics.

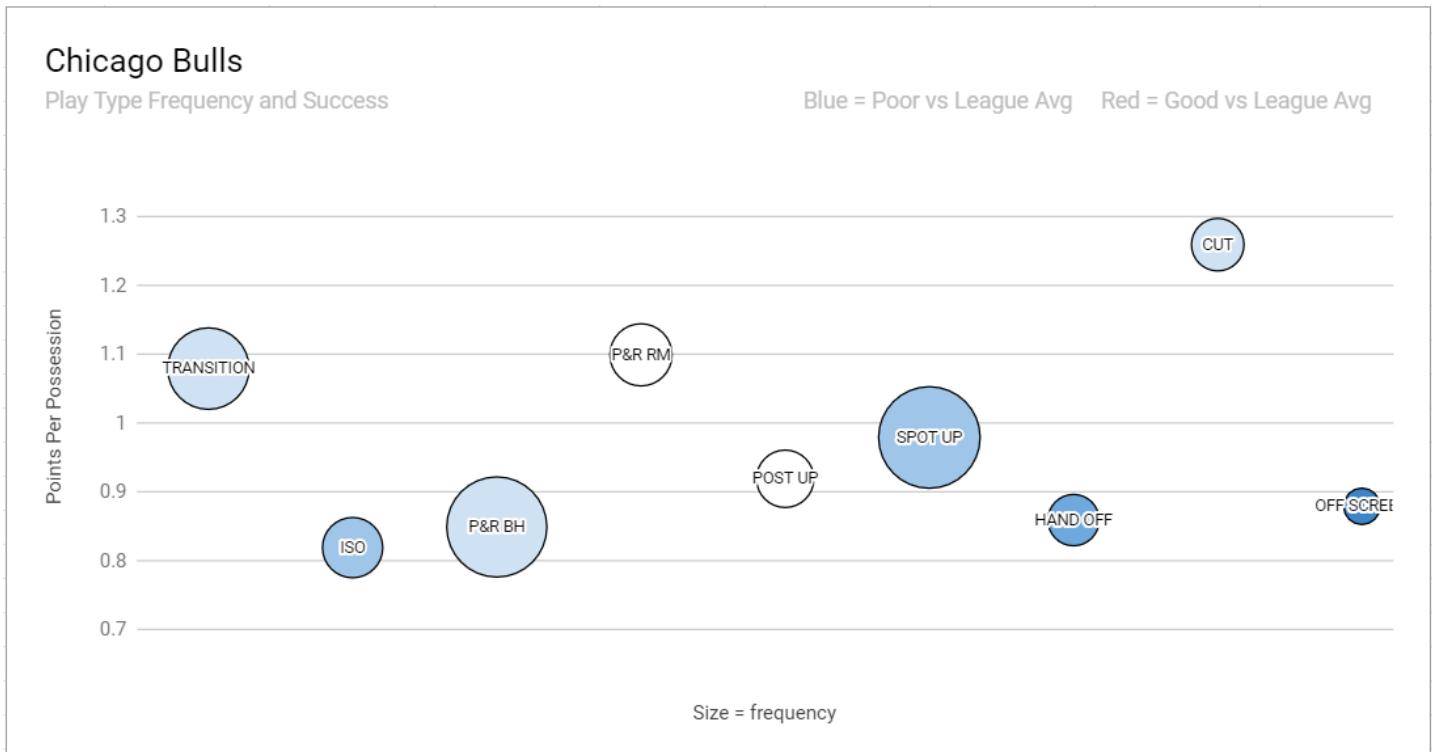


BKN: Other than post ups, the Nets were a very balanced team by play type. This upcoming Kyrie year followed by the Kyrie + Durant year will be an interesting duo to follow. Role players like Joe Harris can pop up here — those hand off and off screen numbers look real good, while cutting should improve with the addition of the two megastars.





CHA: Arguably the league's most boring team has the numbers to prove it. After losing Kemba, their only real strong points (ISO and P&R BH) have vanished. Other play types should increase their frequency, but dip heavily in PPP. I hate to say it but... they could stand to post up a bit more. Alongside Houston, Charlotte had the most predictable offense in league (their playtypes were either very often or very sparingly used).



CHI: They're more successful at P&R with a roll man, they could stand to use a roll man more than they have been. Chicago was the only team that was negative in every single playtype. It's possible they have similar frequencies to last year. If that's the case, it will be interesting to see Coby White's affect on points per possession as a P&R ball handler.

CLE: This team has a lot of problems, and it would be unfair to place too much of the blame on the coaching. However, I'll note that isolations and post ups could probably be phased out of a Cleveland offense that lacks highly skilled one on one players.

DEN: The Nuggets were a *team* last season— they hardly ever isolated, they cut, they passed, they did everything the “right way.” If Michael Porter Jr. plays next season (or ever), I wonder how he fits into this dynamic. I would expect hand offs to be a stronger category for Denver next year as they age and improve.

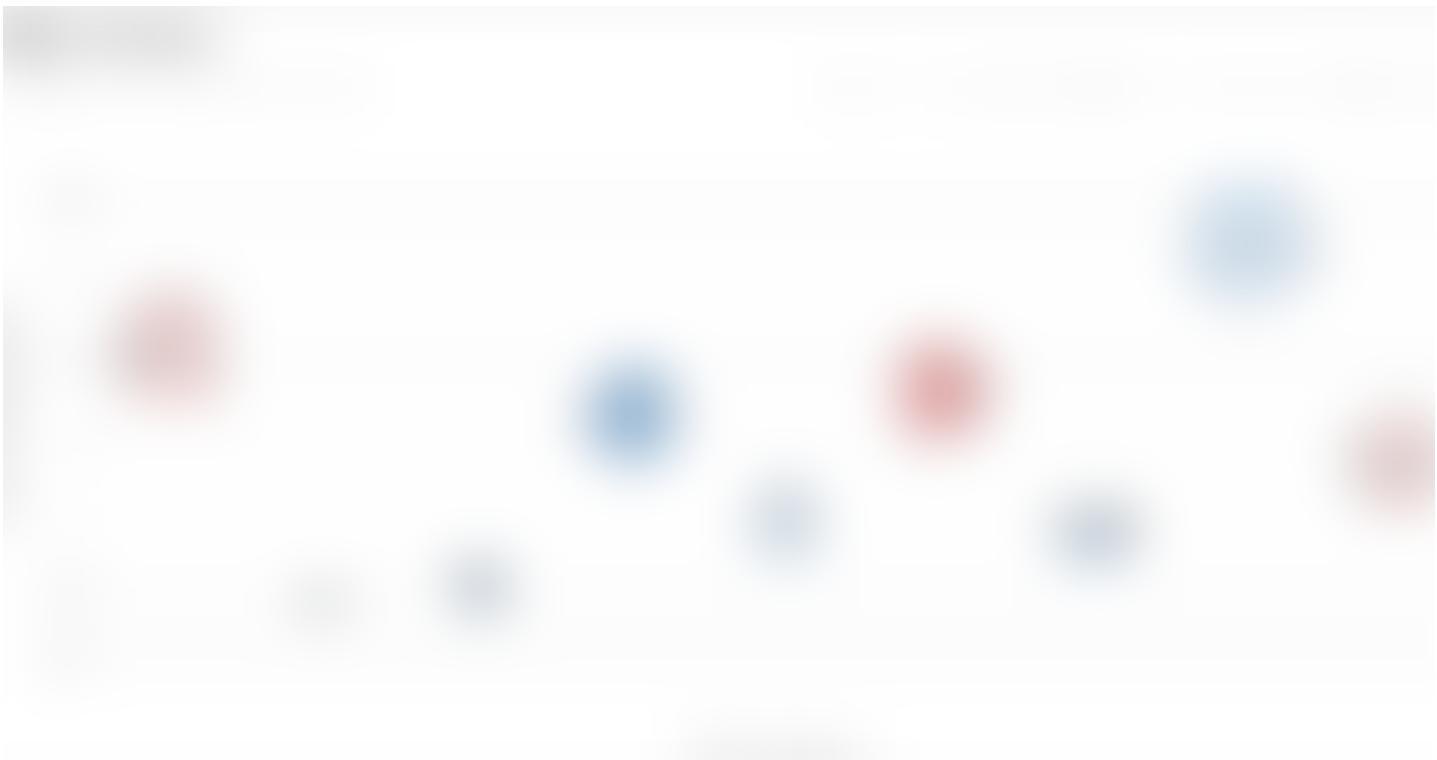
DAL: How does a healthy Porzingis change things? They're already a pretty good half court team — do they improve THAT much in transition with him? It seems like his impact will be larger in other areas like post ups. They were already a good rolling team. Rick Carlisle will figure things out.

DET: The Pistons' bigs were great at initiating hand off plays, but the two big men hampered cutting potential as a result. Also, shouldn't they have been better at posting up? I don't know what the plan is here.

GSW: The Warriors were only below league average at P&R RM (but to their credit hardly used the play). Props to Golden State for not only having talent, but utilizing it effectively — they used their best plays most frequently, and their worst least frequently. Despite getting league-average results, they cut more than any other team in the league (a smart move, as cutting is the most efficient play type, and a predictable move, seeing as they had talent on the perimeter to open up the middle of the court and high IQ players to make the right reads). Surprisingly, the Warriors were last in P&R Ball Handler frequency. That should increase this season.

HOU: The Rockets, surprisingly enough, were the most efficient post up team in the league (though almost never posted up). Alongside Charlotte, they were the most predictable offense in league (most play types were either very often or very sparingly used). Westbrook finished the most

possessions in transition last year, but at one of the worst marks in the league. It'll be interesting to see if he affects their transition game (oh, and how he affects every single other aspect of the Rockets. I'll leave that discussion to others though, who analyze the move with a depth it deserves).



IND: Nate McMillan's Pacers played extremely efficiently, running the highest-scoring plays most frequently. The Pacers used a roll man and shot off screens more than any other team in the league. For plays off screens, the frequency gap between Indiana and 2nd place Orlando was larger than the gap between Orlando and last place. They also didn't run many isolations or use the ball handler in the pick and roll much. And yet, despite all that, Indiana had the most balanced playtype usage of any team in the league.

LAC: Kawhi and Paul George fit in beautifully here, and cutting should increase as a result of their talent. So should LA's transition, with George and Leonard producing more turnovers (and, thus, transition opportunities). The Clippers had more Pick n Roll Ball Handler possessions than any team in the league. It'll be interesting to see how much they run it next year, and with which players.

LAL: Like their Staples Center sibling, a lot changed for the Lakers this offseason. They changed head coaches, got a new superstar, supporting cast, etc. I'll leave it to the think pieces to parse out all the changes, instead of trying to sum it up in a sentence.

Mem: Memphis' defense, as always, will be it's strong suit as JJJ and Brandon Clarke leading the charge. Ja Morant gives Memphis a smart ball handler in the pick and roll, but like Mike Conley before him he will struggle on a Grizzlies team that begs for spacing. Post ups will be down without Marc Gasol (doesn't it seem like so long since he's been on the team?).

MIA: I expect the Heat's playtype frequencies to look similar to last year, but with Butler leading the charge at the 2/3 (instead of Richardson and Wade), they should convert on their efforts more frequently. The Heat had the most hand off possessions in the NBA last season, which is something that is both weirdly obvious and so unremarkable that it wouldn't ever cross your mind.

MIL: The Bucks were the only team to be above league average in every single offensive playtype. To fault them for optimization would be silly here. But, seeing as that's what we are, they could probably use the roll man a bit more (especially when that roll man is the reigning MVP). They really only utilize four playtypes (of those that are listed) — Transition, ISO, Pick and Roll Ball Handler and Spot Up (creds to Splash Mountain).

MIN: They are so clearly good at three playtypes and so clearly horrible at everything else. Karl Anthony towns needs help in the form of axing Andrew Wiggins. Wiggins accounts for the majority of those blue iso possessions.

NOP: Their guards were not meant to handle the ball, and won't next season either. Zion should help with transition and in isolation. JJ Redick gives them the potential to incorporate more hand offs into their game, as one of the best in the league in that category last season.

NYK: lolknicks. (Also, they got rid of Hezonja, the one player who extremely effective in that category.) (Also, they barely cut at all, despite it being the most efficient play at all.) (Of course, that's because they didn't have the talent to open up the floor.) (lolknicks.)

OKC: None of this will remain the same. At least they should share the ball a bit more.

ORL: For all the praise Vucevic got, this was a team meant to run. They were worse than league average at post ups. They used their best play types less frequently. Finally, while DJ is a great backup point who started serviceably, but a breakout season from Fultz would propel this team (and their high volume of P&R BH possessions) to the next level.

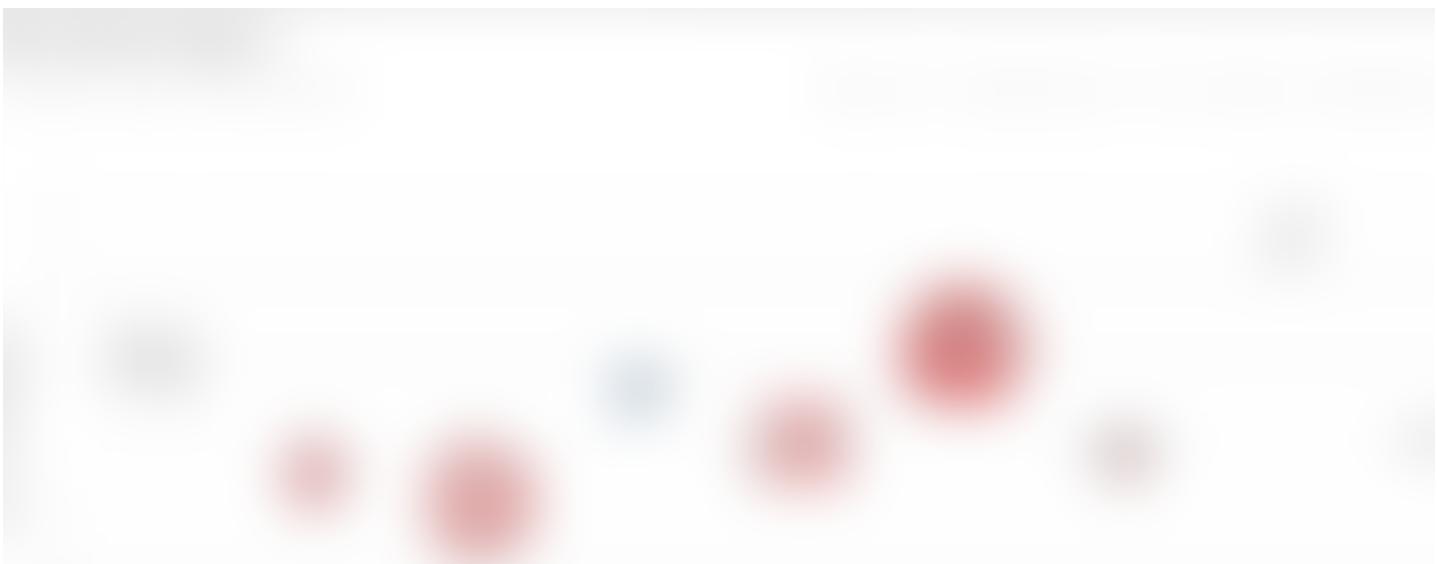
PHI: What a weird offseason. They probably won't improve in transition, and their shooting got worse (hurting hand offs and plays off screens). Maybe they can still get Korver. They have a lot of great roll men, but can't do anything about it because they have a lot of great roll men (a sentence that is somehow correct).

PHX: Phoenix used ineffective plays frequently and successful plays quite infrequently. The data points to a need to do something many Suns fan clamored for throughout the season — feed DeAndre Ayton. Please. (Also, they need a better point guard. Ricky Rubio probably isn't the answer.)

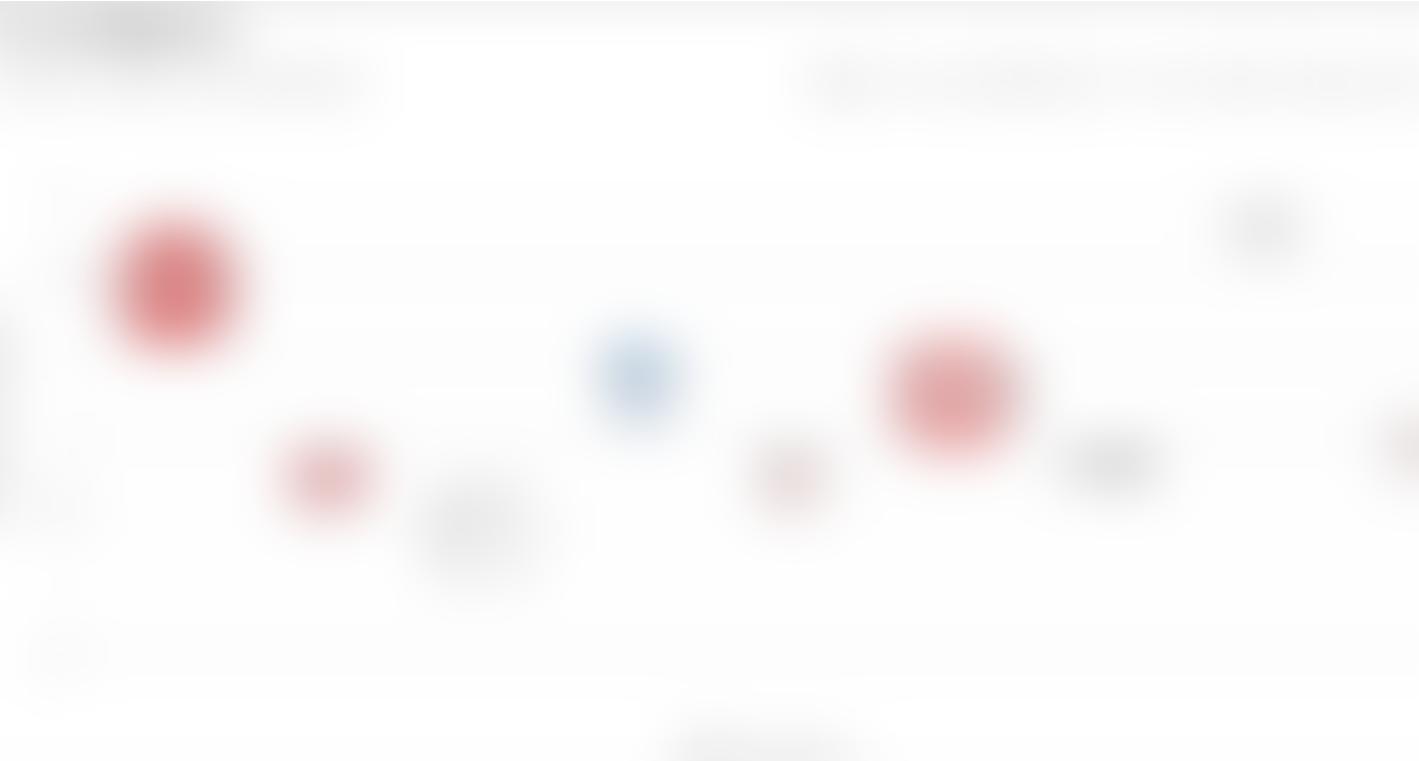
POR: Dame and CJ's influence is clear in these charts. This is a team built to thrive in the halfcourt, which bodes well for playoff basketball.



SAC: For the first time in years, shoutout to the Kings. This team bodied opponents in transition. Will a new coach and Bagley at the five lead to even more thrashing in transition?



SAS: Pop runs this team well, and did his best with the players he had last season. San Antonio ran plays that suited their talents (for example, they led the league in post up possessions and were third best at converting them). Next season's Spurs will probably remain pretty quiet in transition, but perhaps an improved defense (a reasonable assumption with the return of Murray and the coaching of Popovich) will add a few more transition possessions. Good for them.



TOR: Transition was a key part of Toronto's game in the regular season, a play type that decreases in frequency come playoff time. It was a good thing, then, that they unlocked playoff Kawhi. Without Leonard, Siakam should take over the reins to the team this season, and I don't see them losing more than a few steps because of it (despite my continued assertion that Siakam plays every game like the YouTube highlights of a bad player having a good game. Not a criticism, just an observation. I love to watch him play).

UTA: Not a shocker that this team ran isolations less than any other team in the league. It became more than the sum of its parts last year, so expect this well-built offense to become a humming machine next year after the additions of Mike Conley Jr. and Bojan Bogdanovic.

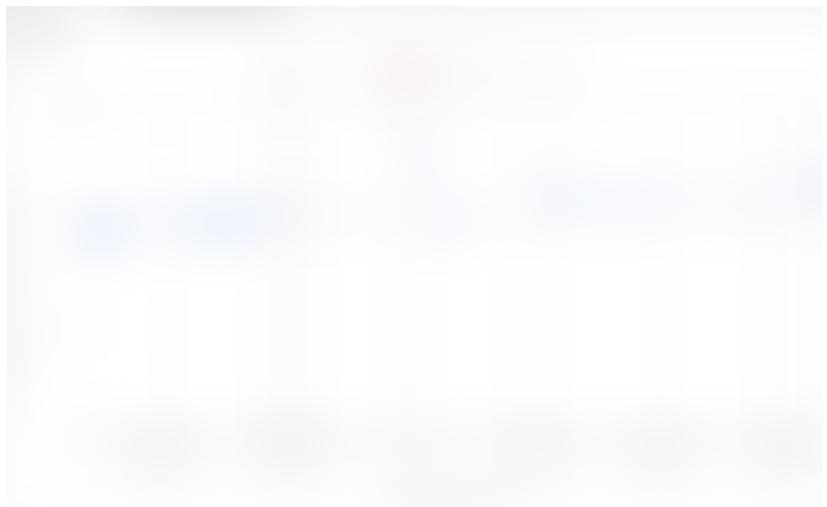
WAS: The chart makes it look as if it might have had John Wall played, with slightly fewer possessions from the P&R BH. Transition remained strong without Wall.

Playtype Efficiency Rankings

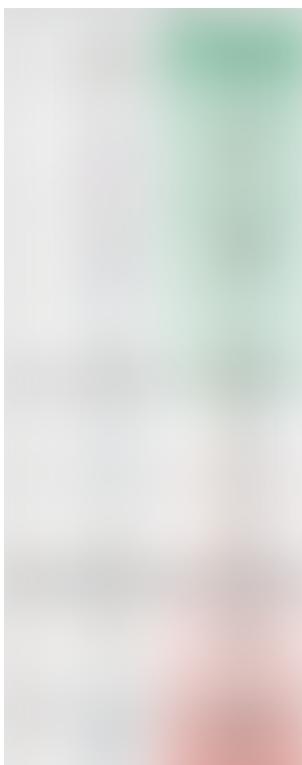




Where these numbers come from: Teams that used more efficient plays more frequently and less efficient plays less frequently get better scores. Even if a team performed poorly overall on offense, it can perform well in these rankings (e.g. Atlanta), as these rankings measure the slope of frequency and points per possession. Golden State, for example, got the “1.27” from here.



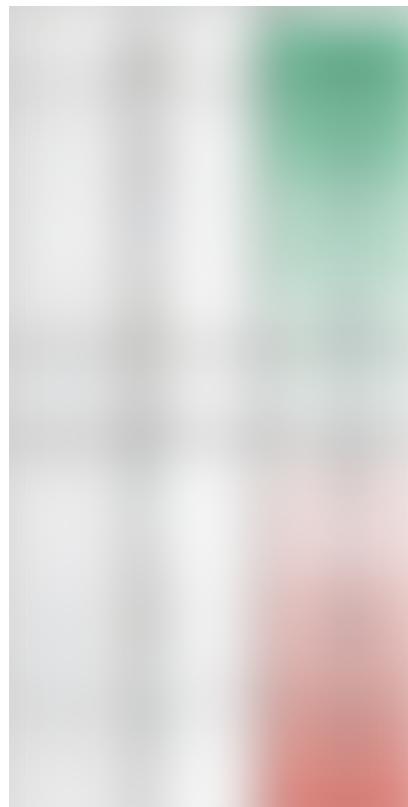
Talent Maximization Rankings



These numbers are harder to see on the graphs. If a team is better than league average at a given play type and use it more frequently than league average, they receive a better score (They maximize their talent through the plays they run). Here's where Brooklyn's 2.39 comes from



Offensive Coaching Score Rankings

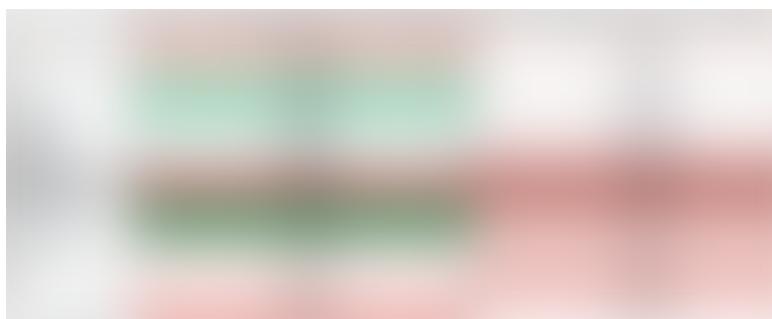
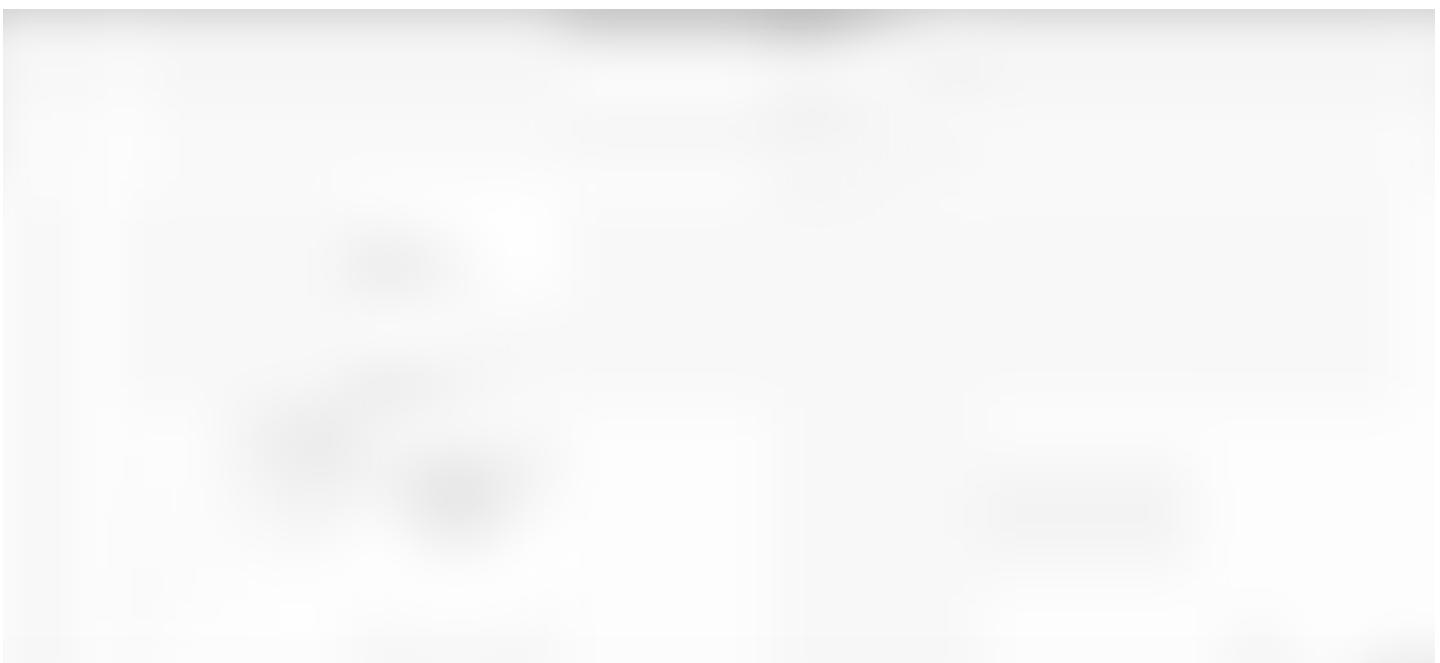


This takes the average of a team's percentiles in the first two tables and converts it into one number. Obviously, this is not a perfect catch-all metric — the Knicks offense was not better coached than the Bucks — but is perhaps one way to measure how well a team's offense is coached for the talent it has.



Indiana, interestingly enough, was 2nd best in playtype maximization and 4th worst in talent optimization (in other words, they maximized for overall efficiency, regardless of the fact their players weren't best suited to do so).

2018–2019 NBA Regular Season → Post Season: Tracking Playtype Frequency and PPP (of teams that made the playoffs)



In the playoffs, post ups and shots off screens decreased the most in usage, while spot up and isolation plays saw more actions. As expected, the effectiveness for all play types went down in the playoffs (where defensive effort ramps up). Post up plays took the biggest hit, whereas isolations and pick and roll ball handlers remained mostly unchanged. Teams can look to these charts to see what sorts of plays they need to focus on as to not falter come playoff time.

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