

NBA 75TH ANNIVERSARY SEASON

NBA's 3-point revolution: How I shot is changing the game

As it celebrates its 75th anniversary season, the rise of the 3-pointer has launched the NBA into a new era.



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[Archive](#)

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Miami Heat assistant Chris Quinn likes to remind coach Erik Spoelstra about one of the best regular-season wins in franchise history. It was a three-point victory in Charlotte in which Chris Bosh put the Heat ahead with [an and-one drive](#) with 23.5 seconds left.

It wasn't a great win because of Bosh's performance or the opponent, though that was the best Charlotte team since the birth of the Bobcats. No, it was a great win "because we won on the road in the 'modern-day era,'" Spoelstra says, "without making a 3-point field goal."

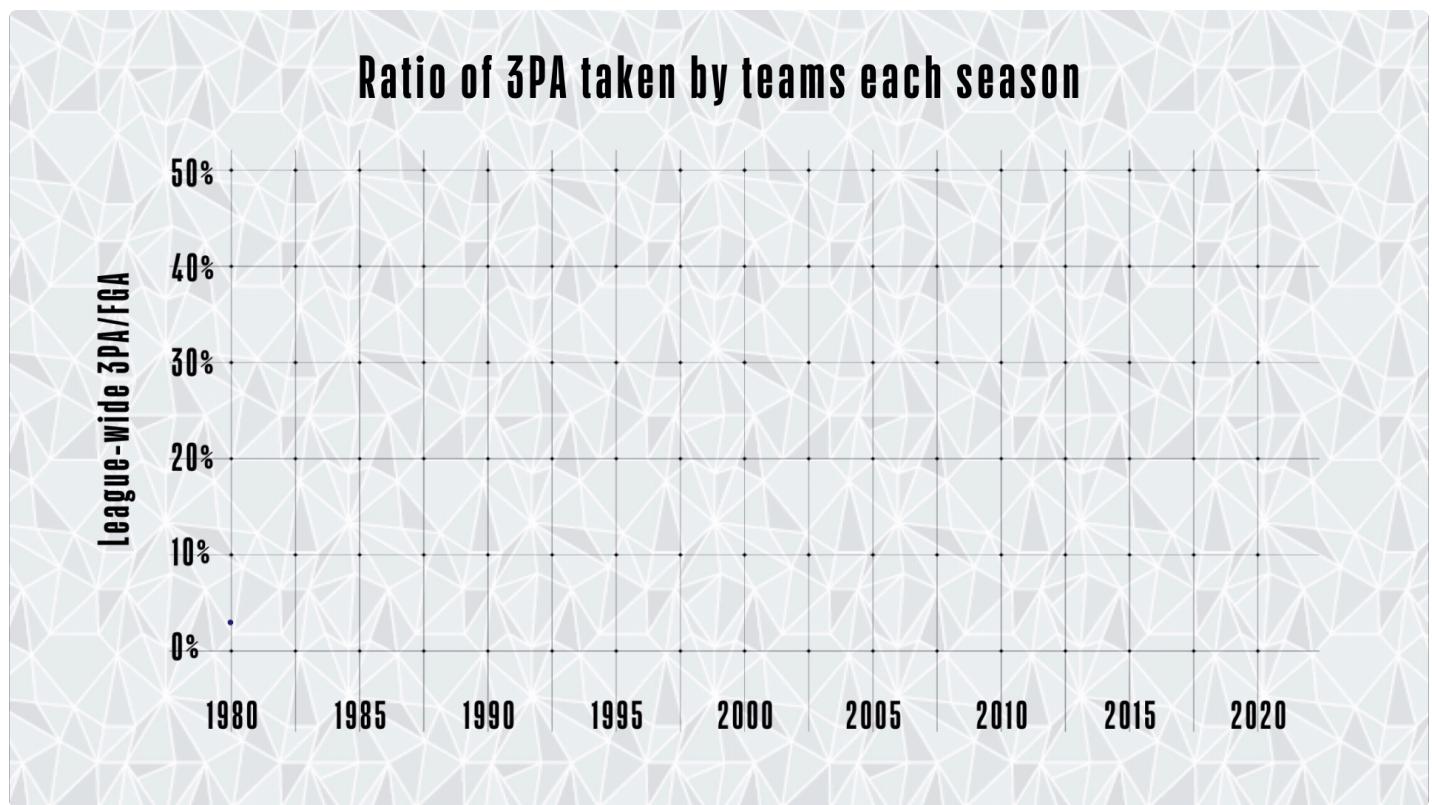
Indeed, that was the last time *any* team has won a game in which it didn't make a 3. The Heat were 0-for-9 from beyond the arc.

"There's no way," Spoelstra laughs, "you can do that now."

Yes, the game has changed a lot since then. But "then" was only five years ago on Feb. 5, 2016 in Charlotte.

The proliferation of 3-point shooting is a story that's been written before. But it's not a story that's over.

The league-wide 3-point rate (the percentage of all field goal attempts that have come from beyond the arc) has increased in each of the last 10 seasons, rising from 22.2% in 2010-11 to 39.2% last season. And it's increased more in the last five years than it did in the previous five.



In that 2015-16 season, there were [six teams](#) that took at least 1/3 of their shots from 3-point range. Last season, [28 of the 30 teams](#) did so, with the only teams under the 33.3% mark being the Washington Wizards (31.9%) and San Antonio Spurs (31.4%). And with their most prolific mid-range shooters having moved to other teams, it's very possible that both the Wizards and Spurs see significant jumps in their 3-point rate this season.

An 11th straight jump in 3-point rate appears likely. But how far is it going, and how did we get here? Here are some numbers, notes, and tales to know from the NBA's ongoing 3-point revolution.

PUSHING THE LEAGUE FORWARD

This is a copycat league, but there are certain inflection points and teams that pushed the envelope in regard to 3-point rate. Here are the teams that broke barriers, becoming the first to cross certain thresholds in regard to the percentage of their shots that came from 3-point range, with their coach and where they ranked offensively in parentheses:

- **10%**: 1987-88 Boston Celtics (K.C. Jones, 1st)
- **15%**: 1988-89 New York Knicks (Rick Pitino, 9th)
- **20%**: Multiple teams in 1994-95
- **25%**: 1994-95 Houston Rockets (Rudy Tomjanovich, 6th)
- **30%**: 2002-03 Celtics (Jim O'Brien, 24th)
- **35%**: 2009-10 Orlando Magic (Stan Van Gundy, 4th)
- **40% & 45%**: 2016-17 Rockets (Mike D'Antoni, 2nd)
- **50%**: 2017-18 Rockets (D'Antoni, 1st)

The three seasons with a shorter 3-point line – 1994-95 through '96-97 – provided a temporary jump. A couple of the coaches above – Pitino and O'Brien – didn't last long with those teams, and those thresholds (15% and 30%) weren't crossed again for a few more years. But all of the teams above won at least one playoff series that season. And when you talk about putting a maximum amount of shooting around an MVP, you start with the championship Rockets of the 1990s, not the James Harden edition.

Over the last 20 years, the team that saw the biggest year-to-year jump in 3-point rate (3PA/FGA) was the 2007-08 Magic. In Van Gundy's first season in Orlando, the Magic took 32.2% of their shots from beyond the arc, **up from 15.8% the season before**. They were the first team to cross that 30% threshold after O'Brien's '02-03 Celtics.

The jump was a combination of philosophy, personnel and unforeseen circumstances. When Tony Battie suffered a season-ending shoulder injury before training camp began,

the Magic didn't have another "traditional" power forward to turn to. So Rashard Lewis slid from the three to the four, and the Magic had four shooters around Dwight Howard.



The Orlando Magic placed emphasis on floor spacing and 3-point shooting under coach Stan Van Gundy.

"For most teams, it was a lineup they went to," Van Gundy says. "I think we were one of the first that just started games that way. It was simply a matter of saying, 'How do we get our best players on the floor for the most minutes?'"

Van Gundy and his staff didn't try to erase the mid-range game completely; Step-in 2-pointers against close-outs were OK. But even in 2007, they knew the value of spacing the floor.

"We worked on spacing all the time," he says. "It was always behind the 3 and enough behind the 3 that you could step into your shot. We wanted to attack the basket, No. 1, on post-ups and drives. And if we didn't have anything, we wanted to throw the ball out and shoot 3s."

The 2007-08 Magic ranked fourth offensively, up from 19th the season prior. The following year ('08-09), they were in The Finals. And '09-10, when they crossed the 35%

threshold for 3-point rate, was arguably their best season of Van Gundy's five-year tenure in Orlando. It all started with Battie's injury and Lewis' willingness to defend bigger forwards.

"That just sort of sped up the process of going to that full time," Van Gundy says. "From there, even after The Finals run, we traded and got Ryan Anderson. It was clear that that's the way we wanted to go and also that's the way the game started to head."

SETTING A RECORD ... IN RECORD TIME

The best illustration for how much the game has changed might be the paths that Reggie Miller, Ray Allen and Stephen Curry took to [the top three in career 3-pointers](#).

Miller entered the league in 1987 and ranked in the top 10 in made 3-pointers in each of his first 15 seasons, ranking in the top five 11 times and leading the league twice. But, at a rate of 1.8 per game, it took him 1,389 games to accumulate his 2,560 career 3-pointers. Allen, drafted in 1996, ranked first or second in made 3-pointers in six different seasons and passed Miller in Game 1,074.

And then came Curry. Having played 762 games (55% of Miller's total), he's already passed Miller and is set to become the all-time leader (passing Allen) this season.



In 2005-06, Allen set a new record with 269 3-pointers in a season. Fifteen years later, that mark has been topped 16 times, with Curry accounting for six of those 16 instances. The current record of 402 was set in his second MVP season, when the Warriors won 73 games.

Curry is also different than Miller and Allen in that he's taken more 3-pointers off the dribble. Over the eight seasons of Second Spectrum tracking, 54% of Curry's 3-point attempts have been pull-ups.

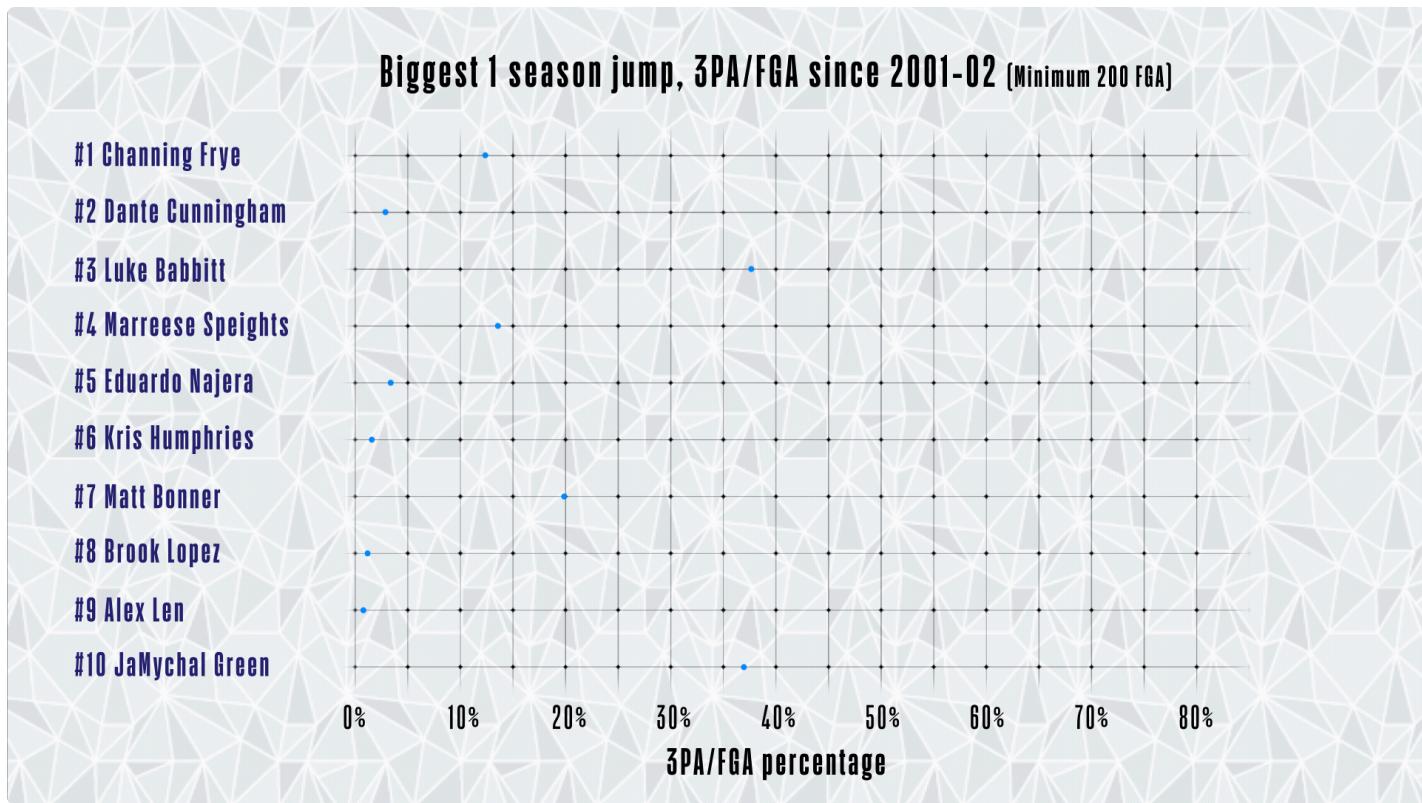
League-wide, the percentage of 3-point attempts that have been off the dribble has risen from 23% in 2013-14 to as high as 30% in 2019-20, before dropping back to 28% last season.

THE OG BROOK LOPEZ

Curry is one avatar for the 3-point revolution. Another is Brook Lopez, a seven-footer who attempted 12 times as many 3-pointers in his ninth season ([387](#)) as he did in his first eight seasons combined (31).

Channing Frye was the OG Brook Lopez. Playing for the New York Knicks and Portland Trail Blazers in his first four seasons, Frye attempted 70 total 3-pointers, which accounted for just 3% of his total field goal attempts. Frye was a jump-shooting big man, with almost two-thirds of his shots coming from outside the paint. But almost all of those jump shots came from inside the arc. He took 61% of his shots from mid-range, the fifth-highest rate among 280 players with at least 1,000 total field goal attempts over those four years.

Then Frye went to Phoenix. In his first season with the Suns, he turned most of those mid-range shots into 3-pointers. In fact, in the last 20 years, no player that has taken at least 200 shots in consecutive seasons has seen a bigger jump in 3-point rate (3PA/FGA) than Frye did in 2009-10.



"If you're not the fastest or jump the highest or you're not the most skilled, you have to have something that makes you difficult to guard," Frye says. "For me, it was 'How am I gonna get on the floor?' and 'How does this fit into what we need to do?'"

In their sixth season together, the Suns' offense was still built around the Steve Nash-Amar'e Stoudemire pick-and-roll. And if Frye was going to get extended minutes on the floor, he had to be a spacer. The coaching staff told him to stop shooting mid-range shots. Their first challenge to him was to see how many shooting sessions it took for him to make 1,000 3-pointers.

"It took me four days," he says. "I was shooting those in-between shots and they were like, 'Don't shoot those anymore. The spacing isn't right. It's too close.'"

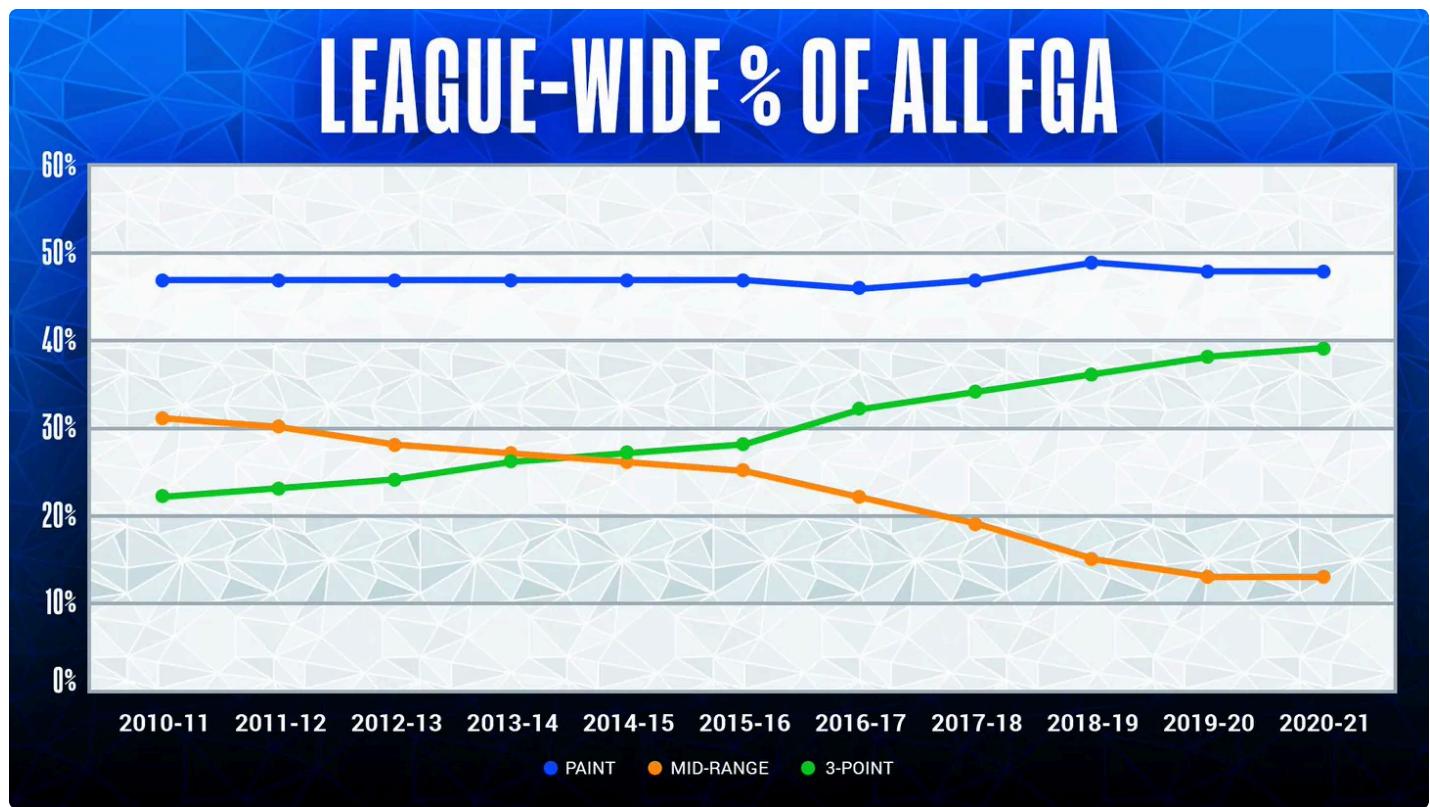
Frye started 41 games and played 2,190 minutes that season, with **1,469** (67%) of those coming alongside Stoudemire. In 1,325 total minutes with Nash, Stoudemire and Frye on the floor together, the Suns scored 118.0 points per 100 possessions, **the highest mark** among 449 three-man combinations that played at least 500 minutes that season.

From his fourth season to his fifth season, Frye's field goal percentage jumped from 42.3% to 45.1%. But because he turned a lot of those mid-range shots into 3-pointers, his **effective field goal percentage** jumped from 44.4% to 57.3%. Among 253 players with at

least 300 field goal attempts in '09-10, Frye ranked 129th in the former, but ninth in the latter.

THE DISAPPEARING MID-RANGE GAME

The rise in 3-pointers has come almost exclusively at the expense of mid-range shots (those between the paint and the 3-point line). Over the last 10 years, the percentage of total shots that have come in the paint has remained pretty steady. But as the percentage from 3-point range has jumped from 22% to 39%, the percentage from mid-range has dropped from 31% to just 13%.



Putting it another way: In 2010-11, the league-wide ratio of 3-point attempts to mid-range attempts was 0.72, with 26 of the 30 teams taking more of the latter. Last season, the league-wide rate was 3.05, and the last teams to take more mid-range shots than 3-pointers did so in 2016-17.

It's simple math. Mid-range shots are made at only a slightly higher rate than 3-pointers (36%). So the 3s (1.1 points per attempt) are worth a lot more than the mid-range shots (0.8), and if you can turn some (or most) of your mid-range shots into 3s, you will score much more efficiently. See the last paragraph in the Channing Frye section above.

Of course, changes to the league's shot selection have certainly changed the game's aesthetics. There are those around the game who lament the reduction in mid-range shots, and an offense's thirst for 3-pointers can certainly result in some unappealing possessions in the eyes of the viewer. (Of course, most games include [some unappealing mid-range jumpers](#), too.)

With how most defenses play these days, mid-range shots are there for the taking. And with the game on the line, you often have to take what the defense gives you.

But over 48 minutes and over 82 games, the math just doesn't work out unless you have elite mid-range shooters. Yes, Chris Paul is a mid-range assassin who [doesn't necessarily have to look at the basket](#) when he gets to his spot. But there is only one Chris Paul.

Over the last five years, only two players — Paul (51.7%) and Kevin Durant (51.2%) — have shot 50% or better on at least 300 mid-range attempts. And 147 of the 175 players who've attempted at least 300 mid-range jumpers over those five years have shot worse than 45% on those shots, which is like shooting worse than 30% from beyond the arc.

OFFENSE WITHOUT SHOOTERS

Frye shot 3s, in part, because he played alongside Stoudemire. Lopez shoots 3s because he plays alongside Giannis Antetokounmpo.

The template for a good offense these days is four capable shooters around a playmaker or interior scorer. But two of the league's best teams aren't set up that way.



The Miami Heat remain a talented unit despite their two stars operating as scorers inside the arc.

The Heat are one of six teams without at least three players who shot the league average or better from deep last season (min. 100 3-point attempts). Kyle Lowry (39.6%) and Duncan Robinson (40.8%) qualify. But as for the Heat's two best players, they do not. Jimmy Butler shot **24% from 3-point range** over the last two years and Bam Adebayo has made **seven 3s** in his four-year career.

The Heat had limited shooting last season and ranked 18th offensively. They **ranked seventh** in the percentage of their shots (43.2%) that came from 3-point range, but lost two better-than-average shooters (Goran Dragic and Kendrick Nunn) in the offseason, adding just one (Lowry).

So if they're going to build a top-10 offense this season, it won't be with the four-shooter template.

"If the objective of your offense is to try to look like everybody else, then you have more chances to not be successful," Spoelstra says. "Offense usually is about getting guys to play together, bring out the best in each other and, ultimately, finding efficiency. That's not necessarily or exclusively about shooting more 3s or making more 3s. There's a lot of other factors that go into having an efficient offense."

The Los Angeles Lakers have five players (including Nunn) who shot the league average or better on at least 100 3-point attempts last season, but none of the five are the three guys — Anthony Davis, LeBron James and Russell Westbrook — who will be taking the most shots. Playing Davis more at center will help the Lakers' offense, which will, once again, be strong in transition and in the paint. But there's still a question about how good their spacing will be with James or Westbrook playing off the ball.

The Pelicans didn't have ideal spacing last season. In fact, Van Gundy is the architect of both the biggest jump in team 3-point rate over the last 20 years in Orlando and the biggest *drop* in the last six years in New Orleans. After taking 40.3% of their shots from beyond the arc ([ninth-highest rate](#)) in 2019-20, the Pelicans took only 34.2% from deep ([28th](#)) last season.

But, ranking [first](#) in offensive rebounding percentage and [second](#) in free-throw rate, the Pelicans had [a top-10 offense](#) before Zion Williamson and Brandon Ingram were both shut down for the final six games of the season.

"There's certainly more than one way to play and be good," Van Gundy says. "I don't think it's necessarily true that you have to shoot a lot of 3s to be good."

DEFENSE AIN'T WHAT IT USED TO BE

With the proliferation of 3s league-wide, defending NBA offenses has become increasingly difficult. New records for league-wide efficiency (points scored per 100 possessions) have been set in each of the last three seasons, with last season's 111.7 per 100 being a significant jump from the 110.1 the league scored in 2019-20.

The Lakers had [the league's No. 1 defense](#) last season, allowing 106.8 points per 100 possessions, the same as [the 19th-ranked Portland defense](#) allowed in 2015-16. What we think of as good (or bad) defense has quickly been redefined.



The Lakers put together the league's No. 1 defense in 2020-21.

And for every coach, the question of how many 3-pointers your defense is willing to *allow* is more interesting than how many you want your offense to take.

Though 3-point volume has seen a huge increase, 3-point percentage hasn't changed all that dramatically. The league's success rate from beyond the arc last season (36.7%) was the highest mark in the last 12 years, but not that far off from where it was five years ago (35.8%). Great shooters are shooting more 3-pointers than ever, but so are not-so-great shooters.

Trips to the free-throw line (1.56 points per two attempts last season) and shots in the restricted area (1.28 points per attempt) are still more valuable than 3s (1.10), even 3s from the corners (1.18). So protecting the rim remains the No. 1 priority for most defenses.

In the 2019-20 season, the Milwaukee Bucks and Toronto Raptors [ranked first and second defensively](#), even though the Bucks set a new record (broken by four teams last season) by allowing [14.0 3s per game](#) and the Raptors had the league's highest opponent 3-point rate, with 44% of their opponents' shots coming from beyond the arc. Both teams

ranked in the top five in both opponent field goal percentage in the restricted area ([first and second](#)) and the (lowest) percentage of their opponents' shots that came in the restricted area ([first and fifth](#)).

The Bucks were the league's best defensive rebounding team and the Raptors ranked second in opponent turnover rate, but the foundation for both defenses was elite rim protection. And that far outweighed the high volume of 3s that they allowed.

With the Celtics, Clippers and Heat all ranking high defensively while allowing a lot of 3-point attempts as well, '19-20 was the first time in this 10-year, league-wide climb that there was a negative correlation between points allowed per 100 possessions and opponent 3-point rate. Every year prior, preventing 3s correlated (to varying degrees) with having a good defense.

BACK THE OTHER WAY

When he took over the Pelicans last season, Van Gundy followed the math and made rim protection the No. 1 priority of his defense. But instead of playing the more popular "drop" coverage, he had his bigs at the level of the screen on pick-and-rolls, with the weak-side defenders responsible for protecting the rim. The results [were disastrous](#). The Pelicans' weak-side defenders couldn't recover out to shooters after sinking deep into the paint and, through their first 29 games, the Pelicans allowed an amazing [16.3 3s per contest](#) and [ranked 29th defensively](#).

Van Gundy adjusted (going to drop coverage so those weak-side defenders could stay closer to home on shooters) and the Pelicans were much better defensively later in the season. But a lot of damage had been done. With the spacing and shooting of today's NBA, you have to have a special group of defenders to have success with an aggressive scheme (one that requires long and/or multiple rotations).

"It's getting harder and harder to defend," Van Gundy says, "and I think everybody's got to come to grips with that."

The 2019-20 Raptors were a special group of defenders. But they went from [ranking first](#) in opponent 3-point percentage that season (33.7%) to [ranking 24th](#) last season (37.9%). They still protected the rim relatively well, but allowing all those 3-point attempts was much more damaging.



The Raptors' defense struggled to defend the 3-point line last season.

With Milwaukee and Toronto seeing the two biggest jumps in points allowed per 100 possessions and with the Pelicans' struggles, the teams that allowed a lot of 3-pointers weren't as good defensively last season as they were the season prior.

Four seasons ago, the Heat were a team that prevented 3s. In the 2016-17 season, they had the league's lowest opponent 3-point rate, with only 27% of their opponents' shots coming from beyond the arc. Last season, they had the *highest* opponent 3-point rate in NBA history (46%).

That dramatic change was partially about personnel, Hassan Whiteside in deep drop coverage vs. Adebayo eagerly switching ball screens. And the Heat have been consistently good defensively no matter the scheme, ranking no worse than 12th on that end of the floor over the last six seasons.

But after last season, Spoelstra knows that his team can do a better job of defending the 3-point line.

"It's something we continue to analyze every year and acknowledge that we're not doing it well," he says. "I'm not sure what the answer is, necessarily, on that yet. I feel like we've gotten better in some areas and then it's like plugging holes in a dam. And it gives up things in other areas. That speaks to the level of skill that players are evolving into, and the systems and space. It's seemingly getting more challenging to do both [protect the paint and defend the 3-point line] every single year."

That's still the goal, though. And Raptors coach Nick Nurse believes his team can get back to defending 3-pointers better. Acknowledging that opponent 3-point percentage will (obviously) vary from night to night, he thinks his team can keep that number down over the course of 82 games.

"That has to be what your goal is if you believe in it," Nurse says. "We wouldn't be trying to concoct these systems and do all this work if we just thought it was all down to luck."

In the 42 years of the 3-point line, only one team (Houston in 1989-90 and '90-91) has led the league in opponent 3-point percentage in two straight seasons. But there has consistently been a correlation (though small) between teams' marks from one year to the next.

To that point, the jump that the Raptors saw (from 33.7% to 37.9%) was the biggest season-to-season jump in the last eight years. Nurse considered it more as a symptom of his team's overall issues and less as an expected regression given the make-or-miss nature of the league.

"It was definitely part of our general struggles, and a key contributing factor," he says. "It was just a lot of moving pieces, and we could never settle in last year. That makes it hard."

THE TIPPING POINT?

With the increased 3-point volume, it is a make-or-miss league more than ever. Last season, teams won 67.4% of the games in which they shot the league average or better from 3-point range. That was the highest such mark in the 42 years of the 3-point line and up from 62.3% in 2015-16.

Talent still trumps everything in this league, but it has become increasingly more important that the talent can shoot from 23 feet away ... or be surrounded by guys who

can.

The jump in league-wide 3-point rate wasn't as big last season (+0.8% from '19-20) as it was the four seasons prior (+2.1% or greater). So maybe we're seeing a deceleration.

And maybe we're not. Neither Spoelstra nor Nurse know what the future holds, but they're ready for anything.

"I think, like any trend, there becomes a tipping point at some point," Spoelstra says. "When that'll be, I have no idea. Are we in the middle of this trend? Are we still in the beginning stages of it? Or are we in the second half of this trend? You don't know yet, but when everybody starts doing something, that's when a tipping point happens, when somebody pivots and goes a different way."

"I don't know [where it goes from here]," Nurse says. "I just think that I would be open-minded enough to believe it could switch back the other way."

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