

Risky Business Week 9

Getting it Right, and also Terribly Wrong, in Arizona

Kliff Kingsbury was dealt more than his fair share of difficult decisions on Sunday in Arizona. He faced four critical 4th and 1s in the second half and, according to our in-depth analysis, managed to get three of them right. It was his final choice to attempt a field goal that came under the greatest scrutiny.

CLOCK	BALL POSITION	SCORE	DOWN AND DISTANCE	PLAY CHOICE	GWC GAIN OR LOSS
5:22 3 rd Qtr	Arizona 46	24 -24	4 th and 1	Rush*	+12.5%
7:43 4 th Qtr	Arizona 47	31 - 31	4 th and 1	Rush	+18.3%
5:20 4 th Qtr	Miami 40	31 - 31	4 th and 1	Rush	+17.6%
1:58 4 th Qtr	Miami 31	31 - 34	4 th and 1	Field Goal	-21.2%

*Initial play was a pass attempt with offsetting penalties

Before we dig into why his final decision to kick the ill-fated field goal was likely very misguided, let's first acknowledge that he made excellent choices leading up to that moment. These were non-obvious and highly leveraged fourth downs that Kingsbury got right. We can't help but wonder what caused him to switch his tactics at the very moment it mattered most, but we have our suspicions. The first two fourth down decisions were successfully executed by Kyle Murray but the third one failed when Chase Edmonds was stopped at the line of scrimmage. Surely, the sting of this recent failure must have been dancing in Kingsbury's head when he chose to attempt the field goal. It also should be noted that the final fourth down decision occurred with the Cardinals now trailing by three with less than two minutes remaining in the game after Miami kicked a field goal to take the lead (a -7% GWC error in its own right). This final choice has a much higher regret factor than the prior choices when the more aggressive action comes up short.

Now let's examine why the field goal was likely such a poor choice. There are several factors to consider.

- The 48 yard field goal is far from a guarantee as NFL average success rates from this distance are historically about 65%. We rated Zane Gonzalez's chances to be close to this percentage.
- When the field goal is unsuccessful, Miami will have excellent field position starting at their 39 yard line.
- A successful field goal only ties the game and will leave Miami ample time to win in regulation, and failing that, nearly even chances in overtime.
- The Cardinals are substantial favorites to convert the first down. Empirical data suggests an average NFL team would be expected to convert this about 70% of the time.

With the EdjPower Index ranking Arizona 3rd in rushing offense and Miami 30th in rushing defense, we think they would be closer to 75% to convert.

- A successful first down retains the optionality of a (higher percentage) field goal, reduces Miami’s prospects for a subsequent possession, and most importantly increases the prospects for winning in regulation with a touchdown by nullifying the value of a late Miami field goal.
- Failing to get the first down is certainly costly but it does not end the game. The Cardinals would still cling to about 7% GWC. This is slightly higher than the 6% they would retain after a missed field goal.

When assessing these types of controversial decisions, we do not play results but only look at the best available information prior to the snap. Yes, the Cardinals missed the field goal but that was expected to occur about 35% of the time. More importantly, how do the respective merits of rushing vs kicking stand up to the underlying assumptions of success rates?

This graphic clearly illustrates just how heavily weighted the Cardinals’ GWC equity is in favor of a rushing attempt.

Field Goal Success Rate	Cardinals’ GWC
30%	18.1%
40%	22.1%
50%	26.1%
60%	29.9%
70%	34.0%
80%	38.0%
90%	41.9%

First Down Rushing Success Rate*	Cardinals’ GWC
30%	25.2%
40%	31.2%
50%	37.2%
60%	43.1%
70%	49.1%
80%	55.1%
90%	61.0%

*For the purposes of this comparison, the conservative assumption is that successful first down attempts will gain exactly one yard and use approximately 30 seconds of game clock, and unsuccessful rushing attempts will be stopped at the line of scrimmage and use 8 seconds of game clock.

At EdjSports we always like to speak more about plausibility than certainty, because we can never be certain of the underlying assumptions. In this instance, a wide range of assumptions

strongly favor the first down attempt by a large margin. We therefore feel it is highly plausible that Kliff Kingsbury cost the Cardinals 21% GWC on average, and should be charged with a blunder.