

Game Scenario 1: 4th-and-2 with 20 mph Wind at Arrowhead

I used our weather-adjusted field goal model to compare expected points (EP) from kicking versus going for it on 4th-and-2 at various distances, assuming a 50% conversion rate. This creates a clear, data-backed guide for decision-making.

Inside the 16 – Go for it

This is a high-success range for both options, but the upside favors going for it. A successful 4th-and-2 keeps the drive alive deep in the red zone and opens up a higher scoring ceiling. For example, at the 7-yard line, expected points are 3.33 if you go and 2.90 if you kick. The downside is slightly higher, but the potential for a touchdown, especially early in the game, makes this the stronger call.

Summary: Passing on three is worth it when seven is in play.

16 to 31 – Kick the Field Goal

Kicks from this range are well within a typical kicker's range and offer a high chance of success, while the upside of going for it drops off. Even with a 50% conversion rate, taking the 3 is slightly more valuable (e.g., at the 25: EP is 2.09 kick vs. 1.83 go).

Summary: Take the points.

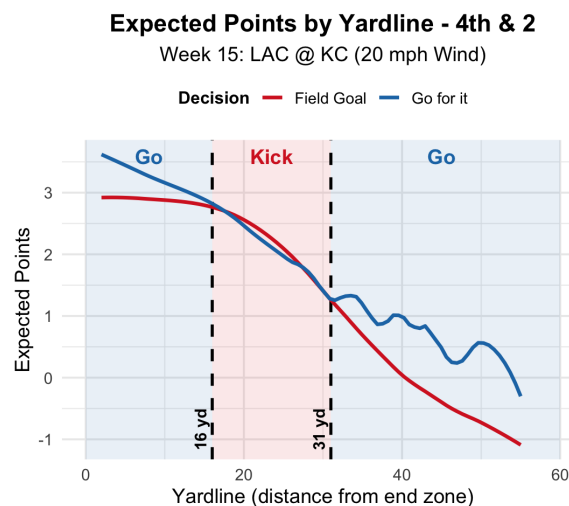
31 and beyond – Go for it

Wind and distance cause field goal success rates to fall sharply, especially in a place like Kansas City in December. A 48-yard attempt or longer into the wind carries real miss risk, and a miss gives the opponent strong field position at the spot of the kick. At that point, even a 50 percent chance of extending the drive is more valuable than a low-percentage three-point try.

Summary: A risky kick in the wind is not worth the field position trade-off.

Final Recap:

- Inside the 16 → Go for it
- 16 to 31 → Kick the field goal
- Beyond 31 → Go for it



Game Scenario 2: Evaluating Range with a Replacement-Level Kicker

With our regular kicker unavailable in Week 7, we simulated expected field goal success rates for a typical replacement-level kicker using league-wide data. These kickers convert at a rate about 11.4 percent lower than the league average. We adjusted our model accordingly and simulated kicks from every yard line under standard October conditions in Los Angeles.

We identified two key decision points:

- **Target Line – 25-yard line (42-yard FG):**

This is where the adjusted make probability remains above 75 percent. Historically, field goals with a predicted make rate above 75 percent are converted 90 percent of the time. This is considered a confident zone.

- **Stretch Line – 37-yard line (54-yard FG):**

This is where the adjusted make probability falls to 50 percent. Kicks predicted between 50 and 75 percent are made approximately 73 percent of the time. Once probability drops below 50 percent, success rates fall to 28 percent. This defines the low-confidence zone.

Recommendation:

Field goals inside the 25-yard line (42 yards or shorter) are high-confidence attempts. Kicks between the 25 and 37 fall into a stretch zone and should be evaluated based on pregame warmups and game context. Attempts beyond the Stretch Line should be avoided unless the situation demands it.

