A Markov Model of Football

Using Stochastic Processes to Model a Football Drive

Keith A. Goldner

Northwestern University

Abstract

A team is backed into a 4th-and-26 from their own 25, down 3 points. What are the odds that drive ends in a field goal? In the 2003 playoffs, Donovan McNabb and the Eagles scoffed at such a probability as they converted and ultimately kick a field goal to send the game into overtime. This study creates a mathematical model of a football drive that can calculate such probabilities, labeling down, distance, and yardline into states in an absorbing Markov chain. The Markov model provides a basic framework for evaluating play in football. With all the details of the model—absorption probabilities, expected time until absorption, expected points—we gain a much greater situational understanding for in-game analysis.

Special Thanks

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Introduction

After an 11-yard sack, Donovan McNabb and the Philadelphia Eagles were backed up to their own 25 yardline. Down 17-14 to the Green Bay Packers with 1:12 remaining in the game, the top-seeded Eagles were on the verge of being eliminated from their first game in the 2003 playoffs. On 4th-and-26, the Eagles call for a 25-yard slant. McNabb drops back and throws a bullet to Freddie Mitchell in stride, converting and laughing in the face of probability[1]. The Eagles then drove down the field and kicked a field goal, sending the game into overtime where they would eventually win. What are the odds that a drive containing a 4th-and-26 from the 25 would end with a made field goal? According to our model, a whopping 1 out of 175.

A football team's ultimate goal is to win. Each season is divided into games, each game is divided into drives, and each drive is divided into plays. The goal of this study is to use a mathematical model known as a stochastic process—more specifically, a Markov chain—to model a football drive.

Each drive has a finite number of states. A state is defined by down (1-4), distance to a first down (1-100), and yardline (1-99). Each drive can only end in a finite number of ways as well: scoring play, giving the ball back to the other team, the end of the half or game. Through this study, we will determine the probability of a drive ending in any number of ways based on the team being in any situation on the field. For example, we can estimate a team's chances of scoring a touchdown given that they have a 2nd down-and-4 to go on their own 40 yardline.

From these probabilities, we will also be able to determine the expected number of plays a team will run before the drive ends. In addition, we can create a model of expected points for every state. That is, we can assign a value to every down, distance, and yardline that represents the expected number of points a team will score. Expected points are extremely beneficial in measuring the efficiency of plays, players, and teams.

The mathematical model can be used to give a greater understanding of a team's position in a drive since it encompasses every possible situation. From there, it can be used to optimize strategic decisions like play-calling based on the probabilities and expected points. With proper data, our model can be fit to measure specific play-calling, players or teams.

Stochastic Processes & Markov Chains

A stochastic process is "any process in nature whose evolution we can analyze successfully in terms of probability" (Doob 1996). That is, a process for which we do not know the outcome but can make estimates based on the probability of different events occurring over time. A primary example of a stochastic process is the Markov chain. The essence of a Markov chain is that the next state depends only on the current state (the

[1] 4th-and-26 video can be found here: http://www.youtube.com/watch?v=QOEq7p4r00U

Markov property, seen in equation **(1)**); all previous events have no effect on the future of the chain.

(1) $\mathbf{P(X_{n+1} = x \mid X_1 = x_1, \ldots, X_n = x_n) = P(X_{n+1} = x \mid X_n = x_n)}$

This equation simply means that the probability of event $\boldsymbol{n + 1}$ (the next event) being $\boldsymbol{x}$ given that we know all previous events ***1, 2, 3, … n***, is the same as just knowing event $\boldsymbol{n}$ (the most recent event). A good example of this is flipping a coin and adding 1 for every heads and 0 for every tails. If the total is 60 after 100 flips, we do not know what the total will be after the 101st flip, but we can estimate based on probability—making this a stochastic process. Further, it does not matter what the total was after the 1st flip, the 20th flip, or the 99th flip; all we need to know is the total after the 100th flip in order to estimate the 101st flip—making this a Markov chain.

We are specifically dealing with discrete-time Markov chains with a finite number of states. Discrete-time means that the process can be divided into specific steps—in our case, plays, in the previous example, flips of a coin. In football, if a team is in a certain situation, what happened previously has no effect on what will happen next. For example, if we have a 1st-and-10 from our own 20, it does not matter if the previous play was a kickoff for a touchback or a 10-yard gain for a first down after a 3rd-and-10 from the 10-yardline. Either way, we now have a new situation that will only directly affect the next play.

A football drive can be seen as an *absorbing Markov chain*. In an absorbing Markov chain, there is a set of special states known as absorbing states. The main distinction of an absorbing chain is that as time goes to infinity—in our case, as the number of plays in a drive gets higher—the probability of ending up in one of the absorbing states goes to 1. Since a drive can only end in a specific number of ways, and a drive *must* end, these drive-endings are the absorbing states. Specifically, it is impossible to leave an absorbing state. Once a team scores a touchdown, they cannot leave that state, the drive ends and the Markov chain is absorbed.

In order to define a Markov chain, we must know the *transition probabilities*. A transition probability is the probability of going from one state to another in one step (seen in **(2)**)

(2) $\mathbf{P_{x,y}}$ **= Probability of going from state 'x' to state 'y' in one step**

In a Markov chain with a finite number of states, like ours, these probabilities can be written in the form of a *transition matrix*, seen below in **(3).**

(3) Transition matrix for Markov chain with 'n' states:

$$P_{x,y} = \begin{bmatrix} P_{1,1} & P_{1,2} & \dots & P_{1,n} \\ P_{2,1} & P_{2,2} & \dots & P_{2,n} \\ \dots & \dots & \dots & \dots \\ P_{n,1} & P_{n,2} & \dots & P_{n,n} \end{bmatrix}$$

From these transition probabilities we can determine the probability of being absorbed into any of the absorbing states. In addition, we can estimate the expected number of plays before being absorbed.

Data

For this study, we used play-by-play data from the last 5 seasons (2005-2009). This includes about 200,000 plays, 30,000 drives, and 1,280 games[2]. Play-by-play data was checked for accuracy against Pro-Football-Reference.com to ensure proper totals for categories like touchdowns, field goals, safeties, etc…

A Mathematical Model of Football

The first step was to divide a drive into all possible situations and label them as distinct states. The non-absorbing—non-drive-ending states, also known as transient states—were determined by down, distance-to-go, and yardline. The field was divided into 20 zones, one for every 5 yards. Similarly, the distance-to-go was split into 5-yard increments[3]. This was done to ensure high enough frequencies for every state; if there were any states that never occurred in a game in the past 5 years, it would detract from the accuracy of the model. The range of frequencies was 6 to 6624, with an average of about 550 visits to each state. Frequencies can be found in **Table 3**. There were a total of 340 transient states.

There are 9 possible drive-ending scenarios fitting into the three categories listed before: scoring, giving the ball back, end of half or game. These absorbing states are as follows: touchdown, field goal, safety, missed field goal, fumble, interception, turnover on downs, punt, end of half or game.

With this list of 349 states, we parsed the play-by-play to determine the start state and end state of every single play. From here, we can calculate the transition probabilities for all states and create our transition matrix. We looked at all the actual transitions of a specific start state—which end states the start state led to directly. In other words, if we

[2] Data was generously provided by Albert Lyu and AdvancedNFLStats.com
[3] All distance-to-go greater than 20 yards was lumped into one increment

were in state ***x*** 100 times, 40 times we went to state ***y***, 60 times we went to state ***z*** then the transition probabilities are $\mathbf{P_{x,y} = 0.4, P_{x,z} = 0.6}$.

These transition probabilities were then placed into a matrix with 349 rows and 349 columns, with the first 340 entries as the transient states and the last 9 as the absorbing states. Thus, we have a transition matrix with entry ***(i,j)*** as the probability of going from state ***i*** to state ***j*** in one step. Since a team cannot start in one of the absorbing states, the first 340 columns of the last 9 rows will all be 0. Similarly, since a team cannot leave an absorbing state, the last 9 columns of the last 9 rows will be all 0s except for a diagonal of 1s representing the probability of 1 going from an absorbing state to itself. The general form of a transition matrix for an absorbing Markov chain with ***n*** transient states and ***r*** absorbing states can be seen in **Table 1** (Grinstead 1997)**:**

Table 1: Absorbing Transition Matrix

	Transient	**Absorbing**
Transient	**Q** (***n*** x ***n***)	**R** (***n*** x ***r***)
Absorbing	**0** (***r*** x ***n***)	**I** (***r*** x ***r***)

The whole transition matrix has ***n*** + ***r*** rows and columns, but can be divided into these four sub-matrices: ***Q, R, 0, I*** (the dimensions of which are labeled in **Table 1**).

Absorption Probabilities

In order to calculate absorption probabilities, we must perform some matrix manipulation. As seen above, the transition matrix can be divided into 4 distinct segments—sub-matrices. We attain a 340-row, 9-column matrix, ***B***, with absorption probabilities from each state from equation **(5)**.

(5) $\boldsymbol{B = [(I - Q)^{-1}]*R}$

Here, ***I*** is a 340x340 identity matrix. That is, entry ***(i,j)*** = 0 for all ***i,j*** unless ***i*** = ***j***; if ***i*** = ***j***, ***(i,j)*** = 1. The absorption probabilities can be found at the end in **Table 3**. The maximum absorbing probabilities can be seen in **Table 2.**

Table 2: Max Absorption Probabilities	
Absorbing State	**Max Absorption Probability**[4]
Downs	0.207
Fumble	0.210
Interception	0.127
Punt	1.000*
Missed FG	0.324
Field Goal	1.000*
Touchdown	0.803
Safety	0.067
End Half/Game	0.138

One note should be made, which is that initial probabilities were not included. That is, there was no weight assigned to specific situations that may be more common when starting a drive. For example, starting at 1st-and-10 from a team's own 20 is weighted equally to starting 1st-and-10 from the 50. Initial probabilities will be added in future calculations to refine the model. The lack of these weights, however, should not greatly affect the overall calculations and will serve only to increase the accuracy of absorption probabilities.

What do absorption probabilities tell us? In other words, how can a team benefit from this? Most great football minds have a general idea of how a drive will end up; coaches and strategists have an innate understanding of these probabilities. But by assigning values to every single situation, we provide a framework for much greater detailed analysis of in-game play. At any position on the field, a team can look at the potential outcomes and evaluate their efficiency against the expected outcome. The model, with additional data, can be tailored to a specific team, offense/defense, and in-game strategy like run versus pass or individual play-calling. The use of expected points, as we will discuss later, can provide a metric for efficiency as well.

Expected Absorption Time

Using our initial transition matrix, we can make a simple calculation to determine the expected number of steps before absorption. That is, formula **(6)** gives an estimate for the length of remaining plays in a drive given that a team is in a specific state (Grinstead 1997).

(6) $$t = [(I - Q)^{-1}]c$$

[4] *In very rare situations, teams always ended up with the same outcome. For example, on 4th-and-21 from the opponents 21 yardline, all 13 times over the last 5 years, teams successfully made a field goal. Similarly, on every 4th-and-16 to 4th-and-20 from within a teams own 5 yardline (which occurred 32 times over the 5-year span), not surprisingly, teams always punted.

Vector ***t*** has 340 entries, each of which gives the expected number of plays before the chain is absorbed into a drive-ending state. ***c*** is a vector with 340 entries, all of which are 1. More specifically, we are summing the rows of matrix $\mathbf{(I - Q)^{-1}}$. For some situations, this may seem meaningless—obviously on a 4th-and-extremely long, the drive should only last 1 more play. But, for example, knowing that a 2nd-and-7 from the opponents 32 should last approximately 4.36 more plays can help the play-calling process. As mentioned, using all the information from the Markov chain can help build a basic structure for evaluation and decision-making. The maximum expected time of absorption is 7.57 plays (for 1st-and-5 from a team's own 16-20) and the minimum is 1 play. Expected number of plays before absorption can be found in **Table 3**.

Expected Points

The idea of expected points was first developed by Virgil Carter in "*Operations Research*[5]" and was refined in *The Hidden Game of Football* (Carroll, et al. 1989). More recently, studies have attempted to better estimate these expected points after the realization that there is not a linear relationship between field position and expected points[6]. The general concept is that for every down, distance, and yardline, we can assign a numeric value that represents the expected number of points a team will score. In other words, we have a function of the form ***EP = f(down, distance, yardline)***. Generally, these values are determined as follows: for down ***x***, distance ***y***, and yardline ***z***, we look at every time a drive contained that situation in play-by-play over several years and divide the total points scored over those drives by the number of drives in which our situation showed up. For example, if 1st-and-10 from our own 20 showed up in 100 drives, and 14 of those drives scored touchdowns, 8 scored field goals, and 1 was a safety, the expected points will be:

$$\mathbf{EP_{1,10,20} = f(1,10,20) = 14*7 + 9*3 + (-2)*1 = 122 / 100 = 1.22 \text{ expected points}}$$

A team gains 7 points for a touchdown, 3 for a field goal, and loses 2 for a safety since the other team gets 2 points[7]. The division by 100 represents the total number of drives during which our situation occurred.

For our expected points model, we use the absorption probabilities rather than making calculations directly from the play-by-play. For each state, we use equation **(7)**:

$$\mathbf{(7)} \qquad \mathbf{EP_{x,y,z} = f(x,y,z) = \rho_{x,TD}*7 + \rho_{x,FG}*3 + \rho_{x,SAF}*(-2)}$$

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[5] Published with the Cincinnati Bengals in 1971

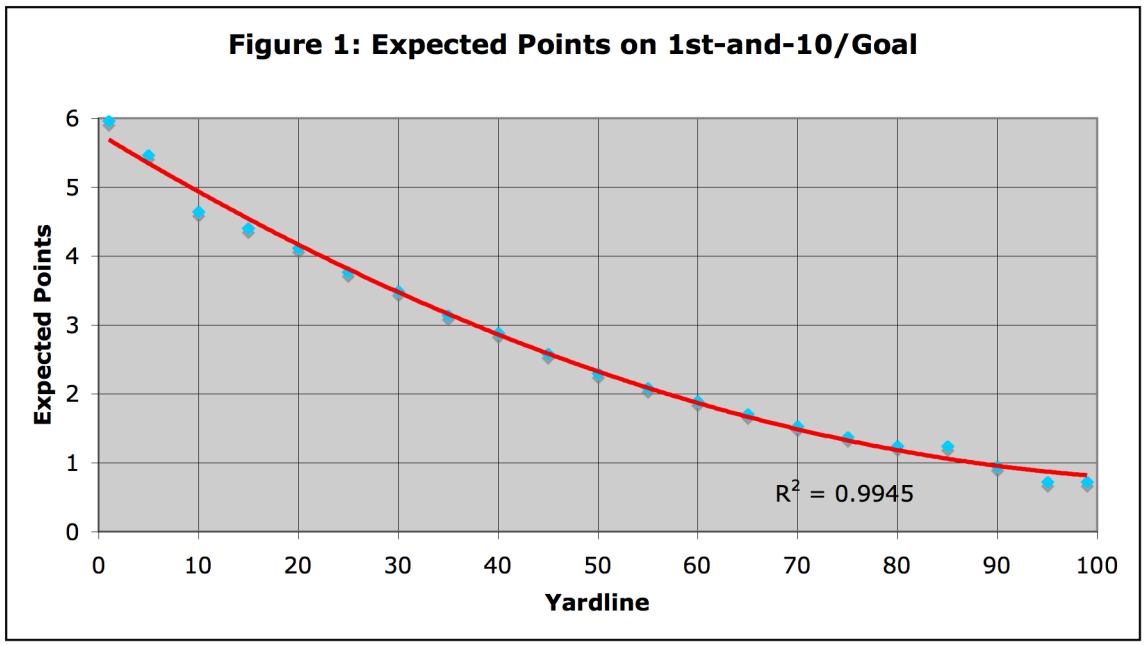
[6] Including Brian Burke at advancedNFLstats.com, Aaron Schatz at FootballOutsiders.com, and Ben Alamar author of *"Measuring Risk in NFL Playcalling"*

[7] In reality, we use 6.96 for the touchdown since there is a 96% chance of making the extra point and teams go for a two-point-conversion extremely rarely

Here $\rho_{x,a}$ represents the probability of being absorbed in drive-ending state ***a*** given that a team is in state ***x***. For the above example of 1st-and-10 from the team's own 20, if we use our data we get the following value:

$EP_{1,10,20} = f(1,10,20) = 0.138*7 + 0.093*3 + (-2)*0.002 = 1.24$ expected points

The expected points model can be found in **Table 3.** In Figure 1, we see a graph of expected points from our absorption probabilities on 1st-and-10 or 1st-and-Goal situations:



We see that even backed up against a team's own goal line, there is a greater chance of the team scoring than allowing a safety.

Expected points allow for a good measure of efficiency. One example is the metric of Net Expected Points or NEP (Alamar 2010). NEP takes the difference in expected points between play ***n*** + **1** and play ***n*** to measure the efficiency of play ***n*** + **1**. By looking at the difference between expected points before a play and after a play, as well as any points scored on the play, we can calculate NEP. This shows how productive the team was versus the league average in a similar situation. If the NEP is positive, the team did better than expected; if negative, the team did worse. This metric has been used to evaluate offensive play-calling[8] as well as determine the relative importance of offense, defense, and special teams within the NFL (Goldner 2010).

[8] Ben Alamar used it to measure risk of play-calling in the NFL (Alamar 2010)

Conclusion

By determining the transition probabilities between any possible states on the football field, we are able model a football drive after an absorbing Markov chain. While the accuracy of the model can be increased slightly by adding initial probabilities and more data to ensure higher frequencies, our model gives a solid framework for basic analysis. Teams can compare their actual performance against the model as well as gain a greater understanding on a situational level. Additionally, the absorption probabilities lead us to an accurate expected points model, which can be used to measure the efficiency of plays, players, and teams.

How to read Table 3:

Below is a list of states ordered by yardline (99 is a team's own 1 yardline, 1 is 1 yard from a touchdown), down, then distance. Next to each situation is a state number from 1-340. For a specific situation, find the state number, then look on **Table 3** for that state to find all the details.

State	Yardline	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance
1	99-95	1	10	**36**	89-85	1	10	**71**	84-80	4	16-20	**106**	74-70	4	1-5	**141**	64-60	3	11-15
2	99-95	1	15	**37**	89-85	1	15	**72**	84-80	4	21+	**107**	74-70	4	6-10	**142**	64-60	3	16-20
3	99-95	1	20+	**38**	89-85	1	20+	**73**	79-75	1	5	**108**	74-70	4	11-15	**143**	64-60	3	21+
4	99-95	2	6-10	**39**	89-85	2	1-5	**74**	79-75	1	10	**109**	74-70	4	16-20	**144**	64-60	4	1-5
5	99-95	2	11-15	**40**	89-85	2	6-10	**75**	79-75	1	15	**110**	74-70	4	21+	**145**	64-60	4	6-10
6	99-95	2	16-20	**41**	89-85	2	11-15	**76**	79-75	1	20+	**111**	69-65	1	5	**146**	64-60	4	11-15
7	99-95	2	21+	**42**	89-85	2	16-20	**77**	79-75	2	1-5	**112**	69-65	1	10	**147**	64-60	4	16-20
8	99-95	3	6-10	**43**	89-85	2	21+	**78**	79-75	2	6-10	**113**	69-65	1	15	**148**	64-60	4	21+
9	99-95	3	11-15	**44**	89-85	3	1-5	**79**	79-75	2	11-15	**114**	69-65	1	20+	**149**	59-55	1	5
10	99-95	3	16-20	**45**	89-85	3	6-10	**80**	79-75	2	16-20	**115**	69-65	2	1-5	**150**	59-55	1	10
11	99-95	3	21+	**46**	89-85	3	11-15	**81**	79-75	2	21+	**116**	69-65	2	6-10	**151**	59-55	1	15
12	99-95	4	6-10	**47**	89-85	3	16-20	**82**	79-75	3	1-5	**117**	69-65	2	11-15	**152**	59-55	1	20+
13	99-95	4	11-15	**48**	89-85	3	21+	**83**	79-75	3	6-10	**118**	69-65	2	16-20	**153**	59-55	2	1-5
14	99-95	4	16-20	**49**	89-85	4	1-5	**84**	79-75	3	11-15	**119**	69-65	2	21+	**154**	59-55	2	6-10
15	99-95	4	21+	**50**	89-85	4	6-10	**85**	79-75	3	16-20	**120**	69-65	3	1-5	**155**	59-55	2	11-15
16	94-90	1	5	**51**	89-85	4	11-15	**86**	79-75	3	21+	**121**	69-65	3	6-10	**156**	59-55	2	16-20
17	94-90	1	10	**52**	89-85	4	16-20	**87**	79-75	4	1-5	**122**	69-65	3	11-15	**157**	59-55	2	21+
18	94-90	1	15	**53**	89-85	4	21+	**88**	79-75	4	6-10	**123**	69-65	3	16-20	**158**	59-55	3	1-5
19	94-90	1	20+	**54**	84-80	1	5	**89**	79-75	4	11-15	**124**	69-65	3	21+	**159**	59-55	3	6-10
20	94-90	2	1-5	**55**	84-80	1	10	**90**	79-75	4	16-20	**125**	69-65	4	1-5	**160**	59-55	3	11-15
21	94-90	2	6-10	**56**	84-80	1	15	**91**	79-75	4	21+	**126**	69-65	4	6-10	**161**	59-55	3	16-20
22	94-90	2	11-15	**57**	84-80	1	20+	**92**	74-70	1	5	**127**	69-65	4	11-15	**162**	59-55	3	21+
23	94-90	2	16-20	**58**	84-80	2	1-5	**93**	74-70	1	10	**128**	69-65	4	16-20	**163**	59-55	4	1-5
24	94-90	2	21+	**59**	84-80	2	6-10	**94**	74-70	1	15	**129**	69-65	4	21+	**164**	59-55	4	6-10
25	94-90	3	1-5	**60**	84-80	2	11-15	**95**	74-70	1	20+	**130**	64-60	1	5	**165**	59-55	4	11-15
26	94-90	3	6-10	**61**	84-80	2	16-20	**96**	74-70	2	1-5	**131**	64-60	1	10	**166**	59-55	4	16-20
27	94-90	3	11-15	**62**	84-80	2	21+	**97**	74-70	2	6-10	**132**	64-60	1	15	**167**	59-55	4	21+
28	94-90	3	16-20	**63**	84-80	3	1-5	**98**	74-70	2	11-15	**133**	64-60	1	20+	**168**	54-50	1	5
29	94-90	3	21+	**64**	84-80	3	6-10	**99**	74-70	2	16-20	**134**	64-60	2	1-5	**169**	54-50	1	10
30	94-90	4	1-5	**65**	84-80	3	11-15	**100**	74-70	2	21+	**135**	64-60	2	6-10	**170**	54-50	1	15
31	94-90	4	6-10	**66**	84-80	3	16-20	**101**	74-70	3	1-5	**136**	64-60	2	11-15	**171**	54-50	1	20+
32	94-90	4	11-15	**67**	84-80	3	21+	**102**	74-70	3	6-10	**137**	64-60	2	16-20	**172**	54-50	2	1-5
33	94-90	4	16-20	**68**	84-80	4	1-5	**103**	74-70	3	11-15	**138**	64-60	2	21+	**173**	54-50	2	6-10
34	94-90	4	21+	**69**	84-80	4	6-10	**104**	74-70	3	16-20	**139**	64-60	3	1-5	**174**	54-50	2	11-15
35	89-85	1	5	**70**	84-80	4	11-15	**105**	74-70	3	21+	**140**	64-60	3	6-10	**175**	54-50	2	16-20

State	Yard	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance	State	Yard	Down	Distance
176	54-50	2	21+	**211**	44-40	2	6-10	**246**	34-30	1	15	**281**	29-25	4	21+	**316**	19-15	4	16-19
177	54-50	3	1-5	**212**	44-40	2	11-15	**247**	34-30	1	20+	**282**	24-20	1	5	**317**	14-10	1	5
178	54-50	3	6-10	**213**	44-40	2	16-20	**248**	34-30	2	1-5	**283**	24-20	1	10	**318**	14-10	1	10
179	54-50	3	11-15	**214**	44-40	2	21+	**249**	34-30	2	6-10	**284**	24-20	1	15	**319**	14-10	1	11-14
180	54-50	3	16-20	**215**	44-40	3	1-5	**250**	34-30	2	11-15	**285**	24-20	1	20+	**320**	14-10	2	1-5
181	54-50	3	21+	**216**	44-40	3	6-10	**251**	34-30	2	16-20	**286**	24-20	2	1-5	**321**	14-10	2	6-10
182	54-50	4	1-5	**217**	44-40	3	11-15	**252**	34-30	2	21+	**287**	24-20	2	6-10	**322**	14-10	2	11-14
183	54-50	4	6-10	**218**	44-40	3	16-20	**253**	34-30	3	1-5	**288**	24-20	2	11-15	**323**	14-10	3	1-5
184	54-50	4	11-15	**219**	44-40	3	21+	**254**	34-30	3	6-10	**289**	24-20	2	16-20	**324**	14-10	3	6-10
185	54-50	4	16-20	**220**	44-40	4	1-5	**255**	34-30	3	11-15	**290**	24-20	2	21+	**325**	14-10	3	11-14
186	54-50	4	21+	**221**	44-40	4	6-10	**256**	34-30	3	16-20	**291**	24-20	3	1-5	**326**	14-10	4	1-5
187	49-45	1	5	**222**	44-40	4	11-15	**257**	34-30	3	21+	**292**	24-20	3	6-10	**327**	14-10	4	6-10
188	49-45	1	10	**223**	44-40	4	16-20	**258**	34-30	4	1-5	**293**	24-20	3	11-15	**328**	14-10	4	11-14
189	49-45	1	15	**224**	44-40	4	21+	**259**	34-30	4	6-10	**294**	24-20	3	16-20	**329**	9-5	1	5
190	49-45	1	20+	**225**	39-35	1	5	**260**	34-30	4	11-15	**295**	24-20	3	21+	**330**	9-5	1	6-9
191	49-45	2	1-5	**226**	39-35	1	10	**261**	34-30	4	16-20	**296**	24-20	4	1-5	**331**	9-5	2	1-5
192	49-45	2	6-10	**227**	39-35	1	15	**262**	34-30	4	21+	**297**	24-20	4	6-10	**332**	9-5	2	6-9
193	49-45	2	11-15	**228**	39-35	1	20+	**263**	29-25	1	5	**298**	24-20	4	11-15	**333**	9-5	3	1-5
194	49-45	2	16-20	**229**	39-35	2	1-5	**264**	29-25	1	10	**299**	24-20	4	16-20	**334**	9-5	3	6-9
195	49-45	2	21+	**230**	39-35	2	6-10	**265**	29-25	1	15	**300**	24-20	4	21+	**335**	9-5	4	1-5
196	49-45	3	1-5	**231**	39-35	2	11-15	**266**	29-25	1	20+	**301**	19-15	1	5	**336**	9-5	4	6-9
197	49-45	3	6-10	**232**	39-35	2	16-20	**267**	29-25	2	1-5	**302**	19-15	1	10	**337**	4-1	1	1-4
198	49-45	3	11-15	**233**	39-35	2	21+	**268**	29-25	2	6-10	**303**	19-15	1	15	**338**	4-1	2	1-4
199	49-45	3	16-20	**234**	39-35	3	1-5	**269**	29-25	2	11-15	**304**	19-15	1	16-19	**339**	4-1	3	1-4
200	49-45	3	21+	**235**	39-35	3	6-10	**270**	29-25	2	16-20	**305**	19-15	2	1-5	**340**	4-1	4	1-4
201	49-45	4	1-5	**236**	39-35	3	11-15	**271**	29-25	2	21+	**306**	19-15	2	6-10				
202	49-45	4	6-10	**237**	39-35	3	16-20	**272**	29-25	3	1-5	**307**	19-15	2	11-15				
203	49-45	4	11-15	**238**	39-35	3	21+	**273**	29-25	3	6-10	**308**	19-15	2	16-19				
204	49-45	4	16-20	**239**	39-35	4	1-5	**274**	29-25	3	11-15	**309**	19-15	3	1-5				
205	49-45	4	21+	**240**	39-35	4	6-10	**275**	29-25	3	16-20	**310**	19-15	3	6-10				
206	44-40	1	5	**241**	39-35	4	11-15	**276**	29-25	3	21+	**311**	19-15	3	11-15				
207	44-40	1	10	**242**	39-35	4	16-20	**277**	29-25	4	1-5	**312**	19-15	3	16-19				
208	44-40	1	15	**243**	39-35	4	21+	**278**	29-25	4	6-10	**313**	19-15	4	1-5				
209	44-40	1	20+	**244**	34-30	1	5	**279**	29-25	4	11-15	**314**	19-15	4	6-10				
210	44-40	2	1-5	**245**	34-30	1	10	**280**	29-25	4	16-20	**315**	19-15	4	11-15				

Table 3: Absorption Probabilities

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
1	0.0202	0.0535	0.0752	0.5405	0.0124	0.0567	0.0920	0.0430	0.1065	**946**	6.246	0.724
2	0.0218	0.0409	0.0675	0.6112	0.0132	0.0588	0.0898	0.0207	0.0761	**61**	6.390	0.760
3	0.0171	0.0260	0.0601	0.6399	0.0082	0.0360	0.0538	0.0208	0.1380	**10**	5.033	0.441
4	0.0189	0.0439	0.0832	0.6089	0.0100	0.0451	0.0689	0.0496	0.0716	**371**	5.203	0.515
5	0.0201	0.0306	0.0572	0.6496	0.0087	0.0402	0.0684	0.0350	0.0901	**114**	4.548	0.527
6	0.0168	0.0207	0.0638	0.7563	0.0072	0.0307	0.0444	0.0370	0.0231	**38**	4.182	0.327
7	0.0181	0.0243	0.0167	0.8656	0.0063	0.0150	0.0118	0.0300	0.0123	**14**	3.453	0.067
8	0.0168	0.0205	0.0723	0.7010	0.0068	0.0304	0.0448	0.0596	0.0478	**163**	3.637	0.284
9	0.0230	0.0087	0.0593	0.7820	0.0044	0.0195	0.0279	0.0407	0.0345	**83**	2.804	0.171
10	0.0139	0.0074	0.0153	0.9035	0.0040	0.0175	0.0250	0.0043	0.0090	**30**	2.814	0.218
11	0.0179	0.0349	0.0016	0.8612	0.0104	0.0174	0.0021	0.0530	0.0015	**35**	2.221	-0.039
12	0.0130	0.0129	0.0001	0.9736	0.0000	0.0001	0.0001	0.0002	0.0001	**79**	1.032	0.001
13	0.0392	0.0000	0.0196	0.9020	0.0000	0.0000	0.0000	0.0392	0.0000	**52**	1.020	-0.078
14	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	**32**	1.032	0.000
15	0.0000	0.0000	0.0000	0.9333	0.0000	0.0000	0.0000	0.0667	0.0000	**30**	1.000	-0.133
16	0.0242	0.0478	0.0752	0.5124	0.0166	0.0763	0.1174	0.0101	0.1198	**19**	7.069	1.026
17	0.0232	0.0556	0.0787	0.5445	0.0160	0.0718	0.1083	0.0106	0.0914	**1537**	6.666	0.948
18	0.0209	0.0391	0.0839	0.5743	0.0140	0.0619	0.0917	0.0129	0.1012	**64**	6.006	0.798
19	0.0217	0.0367	0.0696	0.6322	0.0116	0.0543	0.0849	0.0073	0.0817	**100**	5.570	0.739
20	0.0219	0.0452	0.0669	0.5909	0.0131	0.0633	0.1051	0.0243	0.0694	**93**	6.083	0.873
21	0.0214	0.0484	0.0702	0.6276	0.0132	0.0591	0.0899	0.0162	0.0540	**616**	5.641	0.771
22	0.0174	0.0354	0.0574	0.6469	0.0095	0.0422	0.0674	0.0265	0.0973	**187**	4.637	0.543
23	0.0196	0.0360	0.0617	0.7134	0.0086	0.0410	0.0602	0.0187	0.0408	**108**	4.256	0.505
24	0.0193	0.0172	0.0628	0.7788	0.0057	0.0233	0.0316	0.0097	0.0517	**33**	3.751	0.271
25	0.0202	0.0255	0.0587	0.6818	0.0099	0.0461	0.0765	0.0225	0.0586	**134**	4.645	0.626
26	0.0197	0.0331	0.0523	0.7293	0.0096	0.0425	0.0664	0.0178	0.0293	**272**	3.969	0.554
27	0.0145	0.0255	0.0411	0.7877	0.0055	0.0254	0.0361	0.0364	0.0277	**134**	3.056	0.255
28	0.0196	0.0075	0.0234	0.8753	0.0032	0.0133	0.0186	0.0175	0.0217	**77**	2.639	0.135
29	0.0181	0.0092	0.0291	0.9085	0.0024	0.0086	0.0106	0.0074	0.0061	**44**	2.442	0.085
30	0.0157	0.0038	0.0061	0.9387	0.0014	0.0061	0.0091	0.0136	0.0053	**74**	1.478	0.055
31	0.0164	0.0005	0.0087	0.9630	0.0002	0.0010	0.0015	0.0083	0.0005	**130**	1.074	-0.003
32	0.0130	0.0000	0.0002	0.9738	0.0000	0.0000	0.0000	0.0130	0.0000	**80**	1.026	-0.026
33	0.0356	0.0009	0.0016	0.9534	0.0004	0.0018	0.0027	0.0024	0.0012	**57**	1.171	0.019
34	0.0207	0.0004	0.0000	0.9771	0.0000	0.0000	0.0000	0.0016	0.0003	**50**	1.061	-0.003
35	0.0245	0.2098	0.0717	0.4207	0.0182	0.0807	0.1179	0.0015	0.0550	**6**	6.356	1.060
36	0.0247	0.0540	0.0889	0.5283	0.0177	0.0793	0.1219	0.0037	0.0815	**1622**	6.679	1.079
37	0.0227	0.0391	0.0917	0.5555	0.0145	0.0651	0.0972	0.0038	0.1104	**63**	5.990	0.864
38	0.0256	0.0362	0.0732	0.6370	0.0143	0.0637	0.0937	0.0026	0.0536	**46**	5.825	0.838
39	0.0244	0.0592	0.0806	0.5520	0.0176	0.0808	0.1201	0.0032	0.0621	**165**	6.498	1.072
40	0.0215	0.0492	0.0786	0.6178	0.0145	0.0639	0.0955	0.0050	0.0540	**759**	5.600	0.846

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
41	0.0192	0.0356	0.0909	0.6149	0.0118	0.0521	0.0779	0.0052	0.0923	**172**	4.817	0.688
42	0.0202	0.0330	0.0820	0.7123	0.0088	0.0398	0.0689	0.0040	0.0310	**173**	4.302	0.591
43	0.0232	0.0180	0.0414	0.7558	0.0080	0.0341	0.0463	0.0054	0.0680	**27**	4.003	0.414
44	0.0189	0.0317	0.0592	0.6924	0.0119	0.0533	0.0832	0.0035	0.0458	**205**	4.855	0.732
45	0.0158	0.0332	0.0546	0.7577	0.0095	0.0393	0.0543	0.0051	0.0306	**312**	3.728	0.486
46	0.0142	0.0381	0.0417	0.7799	0.0051	0.0223	0.0391	0.0111	0.0487	**143**	3.036	0.317
47	0.0170	0.0440	0.0309	0.8532	0.0028	0.0125	0.0177	0.0057	0.0160	**143**	2.537	0.150
48	0.0241	0.0075	0.0443	0.8633	0.0038	0.0165	0.0230	0.0082	0.0093	**32**	2.697	0.193
49	0.0014	0.0003	0.0106	0.9782	0.0002	0.0032	0.0052	0.0006	0.0002	**103**	1.106	0.045
50	0.0071	0.0007	0.0013	0.9794	0.0003	0.0015	0.0022	0.0067	0.0009	**157**	1.096	0.006
51	0.0134	0.0012	0.0139	0.9582	0.0012	0.0047	0.0060	0.0000	0.0014	**84**	1.169	0.056
52	0.0222	0.0108	0.0000	0.9559	0.0000	0.0000	0.0000	0.0111	0.0000	**93**	1.024	-0.022
53	0.0323	0.0000	0.0000	0.9677	0.0000	0.0000	0.0000	0.0000	0.0000	**31**	1.000	0.000
54	0.0291	0.0536	0.0844	0.5076	0.0215	0.0957	0.1400	0.0018	0.0663	**17**	7.572	1.258
55	0.0285	0.0512	0.0907	0.4980	0.0208	0.0930	0.1384	0.0015	0.0781	**6624**	6.653	1.239
56	0.0279	0.0528	0.0762	0.5536	0.0188	0.0836	0.1208	0.0014	0.0648	**194**	6.335	1.089
57	0.0268	0.0361	0.0855	0.5889	0.0154	0.0679	0.1051	0.0015	0.0728	**106**	5.566	0.932
58	0.0277	0.0554	0.0824	0.5222	0.0204	0.0911	0.1325	0.0015	0.0669	**552**	6.658	1.192
59	0.0249	0.0457	0.0792	0.5941	0.0169	0.0755	0.1145	0.0018	0.0474	**1999**	5.648	1.020
60	0.0232	0.0399	0.0714	0.6283	0.0134	0.0604	0.0904	0.0019	0.0711	**636**	4.924	0.807
61	0.0249	0.0295	0.0600	0.6928	0.0117	0.0524	0.0732	0.0016	0.0537	**202**	4.474	0.664
62	0.0230	0.0527	0.0584	0.7128	0.0078	0.0335	0.0454	0.0031	0.0634	**54**	3.740	0.410
63	0.0220	0.0392	0.0839	0.6296	0.0148	0.0665	0.0991	0.0010	0.0440	**564**	5.086	0.887
64	0.0184	0.0386	0.0684	0.7027	0.0114	0.0510	0.0794	0.0013	0.0288	**787**	3.944	0.703
65	0.0188	0.0190	0.0550	0.7739	0.0075	0.0339	0.0474	0.0016	0.0428	**491**	3.173	0.428
66	0.0211	0.0090	0.0234	0.8644	0.0044	0.0192	0.0262	0.0015	0.0307	**166**	2.639	0.237
67	0.0237	0.0060	0.0245	0.8771	0.0036	0.0157	0.0207	0.0067	0.0220	**73**	2.539	0.178
68	0.0080	0.0045	0.0017	0.9790	0.0005	0.0020	0.0029	0.0002	0.0012	**283**	1.160	0.026
69	0.0036	0.0009	0.0015	0.9871	0.0005	0.0022	0.0031	0.0001	0.0011	**367**	1.124	0.028
70	0.0109	0.0037	0.0000	0.9783	0.0000	0.0000	0.0000	0.0004	0.0066	**304**	1.048	0.000
71	0.0144	0.0070	0.0000	0.9645	0.0000	0.0000	0.0000	0.0002	0.0139	**144**	1.022	0.000
72	0.0290	0.0000	0.0000	0.9424	0.0000	0.0000	0.0000	0.0286	0.0000	**71**	1.029	-0.057
73	0.0338	0.0491	0.0827	0.4226	0.0263	0.1164	0.1669	0.0004	0.1019	**46**	7.116	1.510
74	0.0319	0.0523	0.0888	0.4791	0.0236	0.1049	0.1526	0.0006	0.0661	**4762**	6.741	1.376
75	0.0292	0.0405	0.0949	0.5373	0.0183	0.0815	0.1165	0.0008	0.0810	**101**	6.003	1.054
76	0.0299	0.0596	0.0811	0.5431	0.0183	0.0827	0.1286	0.0007	0.0560	**99**	5.600	1.142
77	0.0298	0.0541	0.0834	0.5094	0.0218	0.0974	0.1447	0.0008	0.0584	**784**	6.381	1.298
78	0.0291	0.0456	0.0792	0.5673	0.0195	0.0869	0.1257	0.0010	0.0457	**2681**	5.736	1.134
79	0.0265	0.0416	0.0818	0.5968	0.0150	0.0670	0.0932	0.0008	0.0774	**456**	4.760	0.848
80	0.0264	0.0432	0.0596	0.6757	0.0120	0.0536	0.0854	0.0011	0.0428	**181**	4.295	0.753
81	0.0276	0.0428	0.1052	0.6677	0.0118	0.0499	0.0665	0.0011	0.0274	**48**	3.987	0.610

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
82	0.0247	0.0394	0.0596	0.6355	0.0164	0.0730	0.1090	0.0012	0.0412	**785**	4.886	0.975
83	0.0250	0.0375	0.0628	0.6894	0.0128	0.0567	0.0847	0.0012	0.0299	**1239**	4.001	0.757
84	0.0230	0.0302	0.0604	0.7263	0.0086	0.0382	0.0508	0.0008	0.0616	**333**	3.018	0.467
85	0.0201	0.0217	0.0646	0.7966	0.0056	0.0243	0.0330	0.0013	0.0328	**141**	2.792	0.300
86	0.0305	0.0055	0.0077	0.9164	0.0030	0.0130	0.0173	0.0007	0.0059	**45**	2.434	0.158
87	0.0114	0.0015	0.0026	0.9698	0.0009	0.0039	0.0055	0.0026	0.0018	**392**	1.219	0.045
88	0.0193	0.0063	0.0012	0.9593	0.0005	0.0022	0.0030	0.0019	0.0064	**546**	1.122	0.023
89	0.0212	0.0057	0.0008	0.9662	0.0005	0.0020	0.0026	0.0000	0.0010	**198**	1.097	0.024
90	0.0010	0.0004	0.0007	0.9906	0.0007	0.0026	0.0031	0.0005	0.0004	**108**	1.068	0.028
91	0.0376	0.0007	0.0012	0.9454	0.0013	0.0057	0.0065	0.0010	0.0006	**56**	1.126	0.060
92	0.0357	0.0489	0.0820	0.4200	0.0281	0.1241	0.1755	0.0004	0.0854	**31**	7.144	1.593
93	0.0344	0.0528	0.0886	0.4459	0.0260	0.1159	0.1693	0.0003	0.0667	**5472**	6.549	1.525
94	0.0344	0.0492	0.0817	0.4618	0.0246	0.1120	0.1750	0.0004	0.0608	**134**	6.119	1.553
95	0.0339	0.0358	0.0766	0.5392	0.0213	0.0950	0.1459	0.0004	0.0518	**92**	5.717	1.300
96	0.0341	0.0528	0.0846	0.4660	0.0260	0.1155	0.1653	0.0005	0.0554	**1446**	6.575	1.496
97	0.0322	0.0447	0.0771	0.5396	0.0219	0.0974	0.1390	0.0004	0.0476	**2423**	5.628	1.259
98	0.0309	0.0406	0.0710	0.5773	0.0173	0.0784	0.1171	0.0006	0.0669	**496**	4.852	1.049
99	0.0309	0.0289	0.0790	0.6316	0.0157	0.0697	0.0965	0.0006	0.0470	**180**	4.475	0.880
100	0.0274	0.0206	0.0512	0.6830	0.0127	0.0583	0.0782	0.0007	0.0679	**47**	4.007	0.718
101	0.0296	0.0365	0.0648	0.5956	0.0197	0.0871	0.1260	0.0007	0.0401	**1440**	5.075	1.137
102	0.0273	0.0312	0.0555	0.6743	0.0152	0.0681	0.0972	0.0003	0.0308	**1074**	3.999	0.880
103	0.0289	0.0238	0.0569	0.7348	0.0092	0.0427	0.0662	0.0008	0.0367	**386**	3.035	0.587
104	0.0274	0.0330	0.0506	0.7919	0.0059	0.0258	0.0335	0.0008	0.0311	**131**	2.632	0.309
105	0.0183	0.0044	0.0321	0.8936	0.0040	0.0168	0.0224	0.0009	0.0075	**43**	2.446	0.205
106	0.0182	0.0027	0.0046	0.9470	0.0019	0.0088	0.0121	0.0014	0.0033	**761**	1.353	0.108
107	0.0162	0.0003	0.0004	0.9764	0.0002	0.0007	0.0010	0.0000	0.0048	**448**	1.049	0.009
108	0.0322	0.0004	0.0007	0.9543	0.0004	0.0016	0.0021	0.0000	0.0084	**252**	1.074	0.019
109	0.0313	0.0101	0.0000	0.9582	0.0000	0.0001	0.0001	0.0000	0.0000	**99**	1.033	0.001
110	0.0025	0.0000	0.0003	0.9959	0.0001	0.0002	0.0003	0.0007	0.0000	**47**	1.092	0.001
111	0.0386	0.0471	0.0805	0.3763	0.0316	0.1477	0.2276	0.0002	0.0503	**29**	6.975	2.027
112	0.0377	0.0510	0.0895	0.4070	0.0297	0.1313	0.1885	0.0002	0.0651	**6029**	6.485	1.705
113	0.0349	0.0460	0.1121	0.4345	0.0257	0.1121	0.1613	0.0002	0.0731	**130**	5.826	1.459
114	0.0361	0.0359	0.0847	0.4980	0.0243	0.1071	0.1472	0.0002	0.0665	**79**	5.569	1.345
115	0.0377	0.0514	0.0805	0.4412	0.0291	0.1286	0.1823	0.0003	0.0488	**1191**	6.482	1.654
116	0.0359	0.0423	0.0806	0.5071	0.0245	0.1081	0.1559	0.0002	0.0454	**2670**	5.564	1.409
117	0.0331	0.0381	0.0830	0.5507	0.0206	0.0892	0.1246	0.0003	0.0605	**500**	4.821	1.134
118	0.0299	0.0358	0.0781	0.6212	0.0156	0.0691	0.1044	0.0004	0.0454	**165**	4.224	0.933
119	0.0294	0.0156	0.0455	0.7312	0.0104	0.0458	0.0628	0.0003	0.0590	**32**	3.818	0.574
120	0.0337	0.0379	0.0635	0.5787	0.0215	0.0954	0.1353	0.0006	0.0334	**1212**	4.966	1.227
121	0.0307	0.0308	0.0709	0.6402	0.0164	0.0732	0.1049	0.0002	0.0328	**1202**	3.921	0.949
122	0.0285	0.0226	0.0657	0.6997	0.0115	0.0474	0.0639	0.0003	0.0604	**399**	3.056	0.586

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
123	0.0271	0.0166	0.0424	0.7946	0.0094	0.0423	0.0562	0.0010	0.0104	**132**	2.912	0.516
124	0.0196	0.0039	0.0626	0.8447	0.0050	0.0236	0.0294	0.0001	0.0111	**39**	2.397	0.275
125	0.0245	0.0040	0.0041	0.9403	0.0019	0.0089	0.0119	0.0016	0.0029	**636**	1.328	0.106
126	0.0207	0.0006	0.0048	0.9613	0.0006	0.0028	0.0044	0.0001	0.0047	**534**	1.119	0.039
127	0.0251	0.0002	0.0000	0.9745	0.0000	0.0001	0.0001	0.0000	0.0000	**205**	1.026	0.001
128	0.0121	0.0000	0.0116	0.9760	0.0000	0.0001	0.0001	0.0000	0.0000	**86**	1.038	0.001
129	0.0163	0.0000	0.0002	0.9671	0.0000	0.0000	0.0001	0.0000	0.0161	**62**	1.018	0.001
130	0.0423	0.0468	0.0817	0.3512	0.0358	0.1557	0.2356	0.0002	0.0508	**50**	7.000	2.106
131	0.0407	0.0511	0.0895	0.3716	0.0337	0.1481	0.2075	0.0001	0.0578	**5487**	6.410	1.888
132	0.0381	0.0381	0.0990	0.4435	0.0266	0.1178	0.1716	0.0002	0.0653	**109**	5.721	1.547
133	0.0411	0.0366	0.0753	0.4836	0.0274	0.1186	0.1598	0.0001	0.0574	**75**	5.611	1.468
134	0.0413	0.0469	0.0839	0.3930	0.0329	0.1449	0.2051	0.0001	0.0519	**1275**	6.293	1.862
135	0.0386	0.0468	0.0791	0.4626	0.0289	0.1259	0.1731	0.0001	0.0450	**2515**	5.544	1.582
136	0.0361	0.0380	0.0696	0.5336	0.0225	0.0973	0.1346	0.0002	0.0681	**438**	4.749	1.229
137	0.0356	0.0293	0.0732	0.5854	0.0182	0.0842	0.1151	0.0001	0.0590	**154**	4.255	1.053
138	0.0366	0.0279	0.0669	0.6355	0.0182	0.0755	0.0981	0.0001	0.0413	**34**	3.984	0.909
139	0.0393	0.0366	0.0654	0.5394	0.0243	0.1067	0.1511	0.0001	0.0371	**1249**	4.881	1.372
140	0.0311	0.0311	0.0575	0.6313	0.0196	0.0848	0.1158	0.0001	0.0288	**1062**	3.989	1.060
141	0.0300	0.0294	0.0462	0.7268	0.0120	0.0521	0.0702	0.0003	0.0331	**324**	3.059	0.645
142	0.0293	0.0059	0.0275	0.8188	0.0066	0.0320	0.0529	0.0001	0.0270	**110**	2.648	0.464
143	0.0246	0.0267	0.1032	0.7710	0.0042	0.0185	0.0219	0.0000	0.0299	**42**	2.172	0.208
144	0.0355	0.0030	0.0069	0.9172	0.0026	0.0114	0.0153	0.0000	0.0081	**657**	1.407	0.141
145	0.0097	0.0090	0.0039	0.9625	0.0012	0.0054	0.0071	0.0000	0.0012	**502**	1.160	0.066
146	0.0189	0.0002	0.0052	0.9724	0.0003	0.0012	0.0015	0.0000	0.0003	**224**	1.082	0.014
147	0.0131	0.0003	0.0125	0.9626	0.0002	0.0031	0.0076	0.0000	0.0008	**83**	1.100	0.062
148	0.0290	0.0000	0.0000	0.9705	0.0000	0.0000	0.0000	0.0000	0.0005	**35**	1.029	0.000
149	0.0454	0.0453	0.0804	0.3092	0.0415	0.1843	0.2452	0.0001	0.0484	**39**	6.878	2.259
150	0.0435	0.0493	0.0893	0.3294	0.0375	0.1648	0.2283	0.0001	0.0577	**4892**	6.187	2.083
151	0.0443	0.0503	0.0915	0.3464	0.0369	0.1584	0.2090	0.0001	0.0631	**104**	5.788	1.930
152	0.0470	0.0366	0.1173	0.3903	0.0342	0.1382	0.1818	0.0001	0.0546	**63**	5.373	1.679
153	0.0453	0.0481	0.0778	0.3559	0.0377	0.1635	0.2251	0.0001	0.0464	**1235**	6.244	2.057
154	0.0428	0.0433	0.0779	0.4331	0.0316	0.1382	0.1893	0.0001	0.0438	**2322**	5.340	1.732
155	0.0408	0.0440	0.0743	0.4585	0.0262	0.1170	0.1673	0.0001	0.0719	**402**	4.628	1.515
156	0.0413	0.0443	0.0655	0.5803	0.0204	0.0842	0.1130	0.0001	0.0510	**124**	4.060	1.039
157	0.0441	0.0191	0.1086	0.5895	0.0236	0.0809	0.1054	0.0000	0.0288	**36**	3.730	0.976
158	0.0453	0.0394	0.0647	0.4887	0.0289	0.1239	0.1739	0.0001	0.0351	**1267**	4.908	1.582
159	0.0376	0.0339	0.0594	0.6060	0.0205	0.0900	0.1222	0.0001	0.0303	**1038**	3.705	1.121
160	0.0334	0.0272	0.0494	0.6658	0.0129	0.0587	0.0819	0.0000	0.0708	**297**	2.961	0.746
161	0.0397	0.0270	0.0385	0.8050	0.0075	0.0265	0.0435	0.0000	0.0122	**100**	2.463	0.382
162	0.0366	0.0047	0.0691	0.8067	0.0081	0.0220	0.0473	0.0001	0.0055	**37**	2.250	0.395
163	0.0515	0.0079	0.0096	0.8760	0.0041	0.0183	0.0245	0.0000	0.0081	**622**	1.593	0.225

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
164	0.0248	0.0008	0.0014	0.9544	0.0011	0.0050	0.0076	0.0000	0.0050	**467**	1.116	0.068
165	0.0158	0.0004	0.0109	0.9452	0.0006	0.0030	0.0087	0.0000	0.0153	**202**	1.084	0.069
166	0.0251	0.0005	0.0128	0.9537	0.0007	0.0029	0.0037	0.0000	0.0006	**84**	1.092	0.034
167	0.0007	0.0000	0.0007	0.9987	0.0000	0.0000	0.0000	0.0000	0.0000	**35**	1.031	0.000
168	0.0462	0.0421	0.0764	0.2496	0.0455	0.2114	0.2825	0.0001	0.0462	**37**	6.502	2.600
169	0.0472	0.0486	0.0898	0.2837	0.0422	0.1836	0.2506	0.0001	0.0542	**4527**	6.025	2.295
170	0.0472	0.0459	0.0677	0.3085	0.0397	0.1731	0.2332	0.0001	0.0847	**102**	5.601	2.142
171	0.0544	0.0348	0.0775	0.3644	0.0465	0.1673	0.1972	0.0001	0.0579	**64**	5.356	1.874
172	0.0482	0.0437	0.0838	0.3029	0.0426	0.1851	0.2470	0.0001	0.0467	**1119**	6.050	2.274
173	0.0483	0.0454	0.0834	0.3862	0.0356	0.1542	0.2054	0.0001	0.0414	**2093**	5.184	1.892
174	0.0444	0.0345	0.0693	0.4200	0.0295	0.1300	0.1839	0.0001	0.0883	**358**	4.492	1.670
175	0.0506	0.0325	0.0832	0.4994	0.0303	0.1091	0.1467	0.0000	0.0481	**133**	4.056	1.348
176	0.0541	0.0317	0.0624	0.5526	0.0443	0.1150	0.1025	0.0000	0.0375	**36**	3.825	1.058
177	0.0505	0.0362	0.0665	0.4478	0.0324	0.1429	0.1911	0.0001	0.0327	**1118**	4.810	1.758
178	0.0461	0.0281	0.0566	0.5773	0.0232	0.1005	0.1353	0.0001	0.0329	**927**	3.656	1.243
179	0.0398	0.0356	0.0409	0.6027	0.0167	0.0740	0.0936	0.0000	0.0967	**258**	2.936	0.874
180	0.0435	0.0256	0.0264	0.6898	0.0144	0.0509	0.1083	0.0000	0.0410	**111**	2.598	0.906
181	0.0433	0.0475	0.0614	0.6760	0.0364	0.0758	0.0309	0.0000	0.0287	**48**	2.311	0.442
182	0.0614	0.0079	0.0096	0.8599	0.0048	0.0216	0.0300	0.0000	0.0048	**556**	1.595	0.273
183	0.0424	0.0013	0.0049	0.9251	0.0018	0.0079	0.0103	0.0000	0.0064	**429**	1.203	0.095
184	0.0204	0.0006	0.0016	0.9555	0.0010	0.0036	0.0044	0.0000	0.0129	**164**	1.120	0.041
185	0.0108	0.0000	0.0001	0.9684	0.0000	0.0001	0.0001	0.0000	0.0206	**98**	1.033	0.001
186	0.0233	0.0000	0.0233	0.9534	0.0000	0.0000	0.0000	0.0000	0.0000	**43**	1.072	0.000
187	0.0500	0.0419	0.0985	0.1870	0.0519	0.2305	0.2981	0.0001	0.0418	**39**	6.340	2.766
188	0.0513	0.0452	0.0822	0.2301	0.0493	0.2108	0.2797	0.0001	0.0513	**4064**	5.903	2.578
189	0.0524	0.0354	0.0933	0.2372	0.0500	0.2022	0.2619	0.0001	0.0675	**105**	5.432	2.429
190	0.0524	0.0331	0.1271	0.2277	0.0643	0.2180	0.2217	0.0001	0.0557	**56**	5.044	2.197
191	0.0520	0.0454	0.0802	0.2497	0.0471	0.2041	0.2770	0.0001	0.0443	**1016**	5.791	2.540
192	0.0546	0.0403	0.0736	0.3373	0.0423	0.1772	0.2346	0.0001	0.0401	**1905**	5.119	2.164
193	0.0535	0.0422	0.0640	0.3384	0.0384	0.1577	0.2167	0.0001	0.0889	**356**	4.442	1.981
194	0.0593	0.0330	0.0982	0.3639	0.0565	0.1692	0.1623	0.0000	0.0576	**120**	4.035	1.637
195	0.0552	0.0257	0.1265	0.4204	0.0740	0.1424	0.1005	0.0000	0.0554	**40**	3.257	1.126
196	0.0608	0.0357	0.0637	0.4006	0.0365	0.1577	0.2141	0.0001	0.0308	**1026**	4.676	1.963
197	0.0510	0.0298	0.0684	0.5217	0.0277	0.1151	0.1571	0.0001	0.0292	**851**	3.595	1.438
198	0.0523	0.0286	0.0618	0.5227	0.0235	0.0952	0.1292	0.0000	0.0867	**258**	3.025	1.185
199	0.0726	0.0186	0.0479	0.5768	0.0528	0.1122	0.0802	0.0000	0.0389	**103**	2.594	0.895
200	0.0671	0.0316	0.0697	0.5636	0.1003	0.1205	0.0176	0.0000	0.0296	**40**	2.113	0.484
201	0.0901	0.0114	0.0123	0.7909	0.0078	0.0345	0.0464	0.0000	0.0065	**541**	1.802	0.427
202	0.0392	0.0038	0.0176	0.9092	0.0046	0.0086	0.0103	0.0000	0.0066	**386**	1.185	0.098
203	0.0419	0.0011	0.0081	0.9336	0.0012	0.0056	0.0067	0.0000	0.0019	**153**	1.192	0.063
204	0.0442	0.0006	0.0154	0.9272	0.0011	0.0051	0.0057	0.0000	0.0007	**71**	1.112	0.055

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205	0.1080	0.0000	0.0365	0.8555	0.0000	0.0000	0.0000	0.0000	0.0000	**28**	1.038	0.000
206	0.0525	0.0399	0.0697	0.1515	0.0578	0.2513	0.3146	0.0002	0.0626	**43**	6.223	2.943
207	0.0531	0.0434	0.0780	0.1674	0.0586	0.2413	0.3105	0.0001	0.0476	**3934**	5.658	2.885
208	0.0486	0.0304	0.1207	0.1562	0.0597	0.2311	0.2604	0.0001	0.0928	**98**	4.939	2.506
209	0.0489	0.0472	0.0932	0.1668	0.0789	0.2749	0.2455	0.0001	0.0446	**66**	4.821	2.533
210	0.0587	0.0425	0.0740	0.1942	0.0549	0.2337	0.3001	0.0002	0.0417	**876**	5.637	2.790
211	0.0622	0.0360	0.0661	0.2608	0.0536	0.2132	0.2699	0.0001	0.0380	**1806**	5.026	2.518
212	0.0576	0.0271	0.0752	0.2693	0.0574	0.1914	0.2140	0.0001	0.1078	**342**	4.160	2.064
213	0.0580	0.0362	0.0733	0.3120	0.0814	0.2270	0.1735	0.0000	0.0386	**110**	3.824	1.889
214	0.0561	0.0313	0.0480	0.2851	0.1023	0.2744	0.1457	0.0000	0.0570	**35**	3.620	1.838
215	0.0761	0.0356	0.0647	0.3294	0.0437	0.1806	0.2364	0.0001	0.0334	**867**	4.538	2.187
216	0.0635	0.0286	0.0498	0.4565	0.0380	0.1485	0.1908	0.0001	0.0243	**774**	3.676	1.773
217	0.0651	0.0141	0.0356	0.4682	0.0509	0.1395	0.1525	0.0000	0.0742	**240**	2.985	1.480
218	0.0694	0.0221	0.0498	0.4954	0.0746	0.1728	0.0873	0.0000	0.0285	**97**	2.619	1.126
219	0.0648	0.0392	0.0452	0.4914	0.0796	0.1581	0.0850	0.0000	0.0367	**33**	2.193	1.066
220	0.1313	0.0215	0.0236	0.6530	0.0219	0.0571	0.0785	0.0000	0.0130	**461**	2.102	0.718
221	0.0620	0.0107	0.0068	0.8684	0.0038	0.0180	0.0254	0.0000	0.0050	**362**	1.320	0.230
222	0.0507	0.0077	0.0091	0.8812	0.0090	0.0161	0.0117	0.0000	0.0145	**150**	1.194	0.129
223	0.0606	0.0000	0.0000	0.8939	0.0152	0.0000	0.0000	0.0000	0.0303	**66**	1.000	0.000
224	0.1153	0.0002	0.0022	0.8809	0.0002	0.0004	0.0003	0.0000	0.0004	**37**	1.088	0.003
225	0.0512	0.0615	0.0897	0.1053	0.0613	0.2692	0.3263	0.0001	0.0355	**39**	5.892	3.079
226	0.0507	0.0442	0.0743	0.1043	0.0717	0.2774	0.3321	0.0004	0.0450	**3514**	5.310	3.143
227	0.0466	0.0484	0.0512	0.1294	0.0885	0.2854	0.2898	0.0001	0.0607	**71**	4.729	2.873
228	0.0437	0.0463	0.0749	0.1105	0.0941	0.3210	0.2485	0.0001	0.0609	**59**	4.507	2.692
229	0.0607	0.0380	0.0705	0.1160	0.0671	0.2761	0.3392	0.0001	0.0322	**887**	5.470	3.189
230	0.0631	0.0410	0.0678	0.1694	0.0772	0.2600	0.2862	0.0001	0.0352	**1630**	4.674	2.772
231	0.0535	0.0429	0.0478	0.1877	0.0825	0.2558	0.2294	0.0001	0.1003	**316**	3.916	2.364
232	0.0499	0.0306	0.0596	0.1532	0.1194	0.3431	0.2142	0.0001	0.0299	**109**	3.825	2.520
233	0.0467	0.0243	0.1121	0.1543	0.1536	0.3708	0.1146	0.0000	0.0235	**25**	3.246	1.910
234	0.0946	0.0324	0.0680	0.1998	0.0651	0.2305	0.2799	0.0001	0.0296	**864**	4.634	2.639
235	0.0725	0.0358	0.0472	0.3144	0.0766	0.2151	0.2066	0.0001	0.0317	**727**	3.463	2.083
236	0.0573	0.0339	0.0345	0.3236	0.0969	0.2414	0.1415	0.0000	0.0707	**241**	2.771	1.709
237	0.0520	0.0395	0.0164	0.3401	0.1359	0.3031	0.1071	0.0000	0.0058	**78**	2.411	1.655
238	0.0580	0.0094	0.0499	0.4110	0.1097	0.2676	0.0901	0.0000	0.0044	**28**	2.248	1.430
239	0.2022	0.0209	0.0385	0.3800	0.0618	0.1351	0.1444	0.0001	0.0172	**425**	2.727	1.410
240	0.0836	0.0060	0.0048	0.6443	0.0794	0.1355	0.0373	0.0000	0.0091	**329**	1.405	0.666
241	0.0460	0.0080	0.0015	0.6458	0.1002	0.1703	0.0190	0.0000	0.0093	**143**	1.171	0.643
242	0.0187	0.0157	0.0158	0.7348	0.1144	0.0844	0.0161	0.0000	0.0000	**64**	1.037	0.365
243	0.0526	0.0000	0.0000	0.8947	0.0526	0.0000	0.0000	0.0000	0.0000	**19**	1.000	0.000
244	0.0401	0.0858	0.0735	0.0367	0.0839	0.2996	0.3556	0.0001	0.0246	**36**	4.869	3.374
245	0.0448	0.0412	0.0673	0.0550	0.0742	0.3176	0.3647	0.0001	0.0351	**3310**	4.986	3.491

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246	0.0428	0.0299	0.0577	0.0606	0.0839	0.3483	0.3226	0.0001	0.0542	**68**	4.763	3.290
247	0.0397	0.0298	0.0637	0.0588	0.0903	0.3895	0.2895	0.0001	0.0388	**49**	4.355	3.183
248	0.0585	0.0381	0.0555	0.0584	0.0756	0.3127	0.3701	0.0001	0.0310	**725**	5.054	3.514
249	0.0577	0.0331	0.0632	0.0780	0.0948	0.3313	0.3151	0.0001	0.0267	**1578**	4.356	3.187
250	0.0489	0.0264	0.0690	0.0844	0.1041	0.3344	0.2395	0.0001	0.0931	**289**	3.718	2.670
251	0.0414	0.0343	0.0836	0.0791	0.1027	0.3858	0.2410	0.0001	0.0321	**84**	3.410	2.834
252	0.0493	0.0268	0.0303	0.0435	0.1263	0.5289	0.1749	0.0001	0.0199	**25**	3.377	2.804
253	0.0942	0.0321	0.0502	0.0837	0.1042	0.3068	0.3027	0.0001	0.0260	**785**	4.257	3.027
254	0.0808	0.0218	0.0480	0.1142	0.1343	0.3591	0.2189	0.0001	0.0228	**703**	3.199	2.601
255	0.0605	0.0292	0.0675	0.1170	0.1584	0.3676	0.1463	0.0000	0.0535	**236**	2.661	2.121
256	0.0479	0.0276	0.0373	0.0792	0.1641	0.4812	0.1575	0.0000	0.0053	**71**	2.484	2.539
257	0.0706	0.0481	0.0257	0.0966	0.1644	0.5139	0.0749	0.0000	0.0057	**25**	2.422	2.063
258	0.2074	0.0152	0.0332	0.0580	0.1991	0.3287	0.1416	0.0000	0.0166	**422**	2.348	1.972
259	0.1287	0.0180	0.0193	0.1288	0.2353	0.4228	0.0417	0.0000	0.0053	**317**	1.323	1.559
260	0.0843	0.0023	0.0108	0.1453	0.3244	0.4011	0.0301	0.0000	0.0017	**136**	1.272	1.413
261	0.0455	0.0227	0.0455	0.1136	0.2955	0.4773	0.0000	0.0000	0.0000	**44**	1.000	1.432
262	0.1368	0.0000	0.0667	0.1263	0.2702	0.4000	0.0000	0.0000	0.0000	**15**	1.067	1.200
263	0.0372	0.0666	0.0468	0.0165	0.0517	0.3085	0.4500	0.0001	0.0225	**28**	4.988	4.058
264	0.0381	0.0370	0.0593	0.0241	0.0658	0.3480	0.3914	0.0001	0.0362	**3025**	4.685	3.768
265	0.0330	0.0268	0.0758	0.0223	0.0780	0.3538	0.3670	0.0001	0.0433	**64**	4.152	3.616
266	0.0366	0.0264	0.0840	0.0273	0.0737	0.4290	0.2995	0.0001	0.0234	**54**	3.861	3.372
267	0.0460	0.0389	0.0515	0.0257	0.0664	0.3427	0.4001	0.0001	0.0287	**698**	4.733	3.812
268	0.0464	0.0336	0.0489	0.0325	0.0888	0.3902	0.3324	0.0001	0.0272	**1423**	4.062	3.484
269	0.0376	0.0355	0.0456	0.0329	0.0940	0.3937	0.2611	0.0001	0.0994	**258**	3.495	2.998
270	0.0417	0.0447	0.0603	0.0359	0.1199	0.5142	0.1643	0.0000	0.0191	**67**	3.157	2.686
271	0.0451	0.0224	0.0390	0.0804	0.0872	0.5605	0.1539	0.0000	0.0116	**22**	3.032	2.753
272	0.0686	0.0283	0.0462	0.0254	0.1017	0.3883	0.3174	0.0001	0.0240	**677**	3.979	3.374
273	0.0566	0.0320	0.0433	0.0429	0.1319	0.4560	0.2169	0.0001	0.0201	**651**	2.955	2.878
274	0.0393	0.0319	0.0443	0.0315	0.1325	0.4693	0.1556	0.0000	0.0955	**188**	2.419	2.491
275	0.0438	0.0068	0.0100	0.0211	0.1431	0.6832	0.0893	0.0000	0.0028	**60**	2.304	2.671
276	0.0536	0.0687	0.0095	0.0249	0.1163	0.6908	0.0328	0.0000	0.0034	**16**	2.051	2.301
277	0.1299	0.0081	0.0202	0.0080	0.1948	0.5212	0.1084	0.0000	0.0093	**381**	2.014	2.318
278	0.0747	0.0108	0.0082	0.0125	0.2332	0.6381	0.0215	0.0000	0.0008	**303**	1.137	2.064
279	0.0429	0.0113	0.0017	0.0104	0.2286	0.6768	0.0277	0.0000	0.0005	**98**	1.137	2.223
280	0.0228	0.0013	0.0016	0.0001	0.1281	0.7980	0.0475	0.0000	0.0006	**47**	1.160	2.725
281	0.0884	0.0011	0.0017	0.0871	0.3054	0.4925	0.0228	0.0000	0.0009	**23**	1.150	1.637
282	0.0321	0.0250	0.0825	0.0111	0.0428	0.2917	0.4943	0.0001	0.0203	**26**	4.536	4.315
283	0.0329	0.0348	0.0502	0.0106	0.0527	0.3527	0.4389	0.0001	0.0271	**2737**	4.331	4.113
284	0.0348	0.0248	0.0598	0.0179	0.0536	0.3840	0.3903	0.0001	0.0346	**70**	3.988	3.868
285	0.0374	0.0231	0.0548	0.0135	0.0654	0.4692	0.3067	0.0001	0.0300	**41**	3.912	3.542
286	0.0410	0.0306	0.0575	0.0104	0.0583	0.3643	0.4161	0.0001	0.0216	**634**	4.396	3.989

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
287	0.0380	0.0265	0.0463	0.0123	0.0705	0.4109	0.3735	0.0001	0.0220	**1444**	3.728	3.832
288	0.0381	0.0299	0.0591	0.0136	0.0771	0.4275	0.2880	0.0001	0.0667	**244**	3.229	3.287
289	0.0415	0.0149	0.0733	0.0118	0.0957	0.5692	0.1815	0.0000	0.0121	**60**	2.915	2.971
290	0.0313	0.0166	0.0337	0.0196	0.0590	0.4973	0.3340	0.0000	0.0084	**12**	2.597	3.817
291	0.0546	0.0329	0.0361	0.0129	0.0780	0.4344	0.3324	0.0001	0.0187	**715**	3.487	3.616
292	0.0448	0.0182	0.0389	0.0122	0.1083	0.5055	0.2544	0.0001	0.0176	**634**	2.708	3.287
293	0.0478	0.0173	0.0326	0.0148	0.1252	0.5344	0.1759	0.0000	0.0519	**186**	2.287	2.827
294	0.0465	0.0103	0.0573	0.0134	0.1518	0.6242	0.0938	0.0000	0.0026	**68**	2.011	2.526
295	0.0350	0.0039	0.0700	0.0579	0.0656	0.6427	0.1208	0.0000	0.0042	**18**	2.217	2.769
296	0.0965	0.0227	0.0128	0.0072	0.1101	0.6539	0.0880	0.0000	0.0088	**394**	1.658	2.574
297	0.0587	0.0008	0.0079	0.0019	0.1848	0.7231	0.0185	0.0000	0.0041	**296**	1.110	2.298
298	0.0686	0.0007	0.0097	0.0131	0.2208	0.6668	0.0195	0.0000	0.0008	**118**	1.103	2.136
299	0.0343	0.0152	0.0152	0.0040	0.1957	0.7345	0.0010	0.0000	0.0000	**66**	1.052	2.211
300	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	**13**	1.000	3.000
301	0.0320	0.0250	0.0396	0.0059	0.0321	0.3026	0.5418	0.0002	0.0209	**20**	4.524	4.678
302	0.0320	0.0271	0.0493	0.0058	0.0377	0.3407	0.4853	0.0001	0.0220	**2523**	3.921	4.400
303	0.0315	0.0212	0.0336	0.0072	0.0346	0.3643	0.4558	0.0001	0.0516	**61**	3.256	4.265
304	0.0341	0.0287	0.0784	0.0133	0.0437	0.4152	0.3631	0.0001	0.0233	**22**	3.581	3.773
305	0.0342	0.0279	0.0379	0.0053	0.0421	0.3520	0.4785	0.0001	0.0220	**562**	3.947	4.386
306	0.0347	0.0263	0.0444	0.0052	0.0503	0.4092	0.4135	0.0001	0.0163	**1286**	3.335	4.105
307	0.0389	0.0295	0.0444	0.0072	0.0490	0.4382	0.3248	0.0001	0.0679	**243**	2.775	3.575
308	0.0369	0.0406	0.0303	0.0165	0.0593	0.5452	0.2553	0.0000	0.0157	**52**	2.891	3.413
309	0.0420	0.0209	0.0325	0.0061	0.0632	0.4421	0.3787	0.0001	0.0144	**638**	3.194	3.962
310	0.0365	0.0220	0.0385	0.0034	0.0696	0.5269	0.2919	0.0001	0.0111	**616**	2.434	3.612
311	0.0570	0.0103	0.0467	0.0113	0.0750	0.6105	0.1527	0.0000	0.0365	**195**	2.060	2.894
312	0.0345	0.0326	0.0306	0.0047	0.0817	0.7091	0.1027	0.0000	0.0040	**66**	2.115	2.842
313	0.0626	0.0072	0.0099	0.0057	0.1112	0.6713	0.1229	0.0000	0.0091	**376**	1.637	2.869
314	0.0395	0.0145	0.0075	0.0000	0.1065	0.7972	0.0345	0.0000	0.0002	**283**	1.050	2.632
315	0.0886	0.0005	0.0093	0.0001	0.0825	0.7958	0.0143	0.0000	0.0089	**114**	1.045	2.487
316	0.0238	0.0005	0.0220	0.0019	0.1344	0.8031	0.0139	0.0000	0.0004	**47**	1.089	2.506
317	0.0268	0.0209	0.0299	0.0328	0.0149	0.2727	0.5858	0.0008	0.0154	**18**	3.883	4.893
318	0.0339	0.0250	0.0388	0.0031	0.0241	0.3278	0.5255	0.0002	0.0217	**2288**	3.440	4.640
319	0.0339	0.0226	0.0355	0.0041	0.0288	0.3660	0.4723	0.0001	0.0367	**64**	3.544	4.385
320	0.0331	0.0225	0.0375	0.0054	0.0272	0.3129	0.5492	0.0002	0.0120	**540**	3.528	4.761
321	0.0401	0.0218	0.0417	0.0038	0.0333	0.4131	0.4275	0.0001	0.0186	**1266**	2.896	4.214
322	0.0353	0.0246	0.0389	0.0033	0.0339	0.4245	0.3793	0.0001	0.0601	**235**	2.636	3.913
323	0.0420	0.0197	0.0307	0.0056	0.0500	0.4357	0.4059	0.0001	0.0102	**635**	2.795	4.132
324	0.0485	0.0230	0.0427	0.0038	0.0441	0.5505	0.2716	0.0001	0.0157	**646**	2.119	3.542
325	0.0359	0.0199	0.0215	0.0015	0.0533	0.5753	0.2472	0.0000	0.0454	**185**	1.863	3.447
326	0.0637	0.0111	0.0038	0.0060	0.0924	0.7214	0.0970	0.0000	0.0047	**357**	1.364	2.839
327	0.0534	0.0036	0.0098	0.0047	0.0737	0.8114	0.0339	0.0000	0.0095	**335**	1.091	2.670

State	Downs	Fumble	Interception	Punt	Missed FG	Field Goal	Touchdown	Safety	EndHalf/Game	Frequency	Expected Plays until Abs.	Expected Points
328	0.0277	0.0004	0.0009	0.0001	0.1097	0.8392	0.0220	0.0000	0.0002	**112**	1.067	2.670
329	0.0282	0.0229	0.0244	0.0014	0.0086	0.2027	0.6984	0.0003	0.0130	**436**	2.856	5.469
330	0.0305	0.0214	0.0333	0.0022	0.0133	0.2540	0.6283	0.0003	0.0169	**1742**	3.022	5.134
331	0.0395	0.0147	0.0265	0.0022	0.0135	0.2887	0.6065	0.0003	0.0081	**803**	2.715	5.087
332	0.0386	0.0234	0.0339	0.0022	0.0183	0.3667	0.4995	0.0002	0.0171	**1140**	2.516	4.576
333	0.0540	0.0165	0.0270	0.0043	0.0207	0.4479	0.4214	0.0001	0.0080	**772**	2.227	4.277
334	0.0447	0.0181	0.0278	0.0023	0.0244	0.5444	0.3171	0.0000	0.0211	**573**	1.872	3.840
335	0.0927	0.0038	0.0065	0.0072	0.0277	0.7672	0.0930	0.0001	0.0017	**507**	1.246	2.949
336	0.0436	0.0003	0.0128	0.0017	0.0285	0.8646	0.0419	0.0000	0.0065	**324**	1.048	2.885
337	0.0204	0.0189	0.0202	0.0011	0.0041	0.1258	0.8027	0.0003	0.0065	**1761**	2.259	5.963
338	0.0357	0.0172	0.0216	0.0010	0.0055	0.1952	0.7155	0.0005	0.0078	**1584**	2.032	5.565
339	0.0681	0.0133	0.0196	0.0009	0.0077	0.3301	0.5516	0.0009	0.0077	**1199**	1.683	4.828
340	0.1498	0.0140	0.0040	0.0016	0.0104	0.6323	0.1841	0.0001	0.0036	**681**	1.118	3.178
Sum	**1023**	**1491**	**2541**	**12155**	**859**	**3944**	**5614**	**75**	**1986**	**188391**		
Max	0.2074	0.2098	0.1271	1	0.3244	1	0.8027	0.0667	0.1380	6624	7.572	5.963
Min	0	0	0	0	0	0	0	0	0	6	1.000	-0.133

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