Using Historical Quantitative Data to Rank Football Players in a Fantasy Football Atmosphere

Alex Romano

Robert Morris University

Advisor: Dr. Chris Groendyke

Abstract

Players are ranked almost solely based on previous years' fantasy points (i.e. 2008-2012). Fantasy points are totaled for each year, and then given a weight based on how close the year was to the current year. Weights were also given to each player based on how consistent their performance was throughout the five years. These weights were given based on each game's performance. After the ranking is finished, a simulation will be performed. Ten different teams will draft a fantasy team using ten different strategies, and one of the ten will use the new ranking system. Assuming all ESPN standard rules, a full season using 2013 National Football League data will be simulated to test which drafting strategy is the best.

Introduction

In 2006, roughly 16 million people in the United States participated in all types of fantasy sports. Those 16 million people included 22% of all males who were 18-49 years old and had Internet access (Draper, 2008). In general, fantasy sports teams are formed by drafting current players in a professional sports league (e.g. the National Football League). Drafted players are then put into a starting lineup, and they are given points based on performance. After each athlete is given points for the day, fantasy teams' points are added together, and whichever team has the most points, wins. After the majority of the season and a designated postseason, one team is crowned a champion.

Fantasy sports leagues can be free, or they can be done for money. The fantasy sports industry generated roughly \$100 million in revenue, and was growing 7-10 percent each year (Grady, 2007). This number continued to grow, as more than 32 million people participated in fantasy sports in 2011 (Davis, 2012). As technology advances, so does the fantasy football fan base, and so does the National Football League (NFL)'s fan base. Not only can football fans attend games and purchase merchandise for their favorite teams, but they can also watch other team's games on television and online. The NFL offers NFL Sunday Ticket through DirecTV (Dwyer, 2013) and through the Internet. There are also television shows on sports channels that specifically talk about fantasy football (e.g. Fantasy Football Now on ESPN), and there are online applications (e.g. ESPN SportsCenter application for smart phone) that allow users to gather results and collect stats of multiple sporting events at once.

With all of the new technology that is around today, it is very easy to keep track of different teams and players. In the past, fantasy football participants have purchased magazines

(Sports Illustrated, 2012) that provide rankings of each player (overall and by position) and the previous year's statistics for each player. Now, mock fantasy drafts and multiple ranking systems can be accessed through online draft programs. For example, ESPN has a section of its website dedicated to fantasy sports, and has applications for sports such as football that are available for smart phones (Dwyer, 2013). In both cases, lists are drawn up of all NFL players from best to worst, which are typically decided by an average of many football experts' opinions. Previous year's statistics are used when deciding where players are ranked, but final rankings are ultimately based on opinion. Not much research has been done, however, on other ways of ranking players. Most fantasy football specific research has been done on legal issues, addictive qualities, gambling, and gender issues (Draper, 2008), but not much has been done on how to rank players. There are countless methods of ranking that can be used to rank things, and there are countless methods of ranking items, there is sure to be a way to rank football players in a fantasy football setting.

Experiment and Assumptions

The direct goal of this experiment is to create a list of ranked NFL players in a fantasy football atmosphere, by position and overall, based on statistical information instead of opinions. Specifically, players were ranked for the 2013 NFL season by using data from the five NFL seasons between 2008 and 2012. In order to perform this experiment, many assumptions were to be made. First of all, there are multiple different websites to host a fantasy football league, and in most of them, the person in charge of the league (a.k.a. the commissioner) has free reign of

changing any league settings. For this experiment, espn.com's standard league rules and settings were used, since ESPN is a very commonly used website for anything sports-related. In ESPN standard leagues, a fantasy football team is made up of nine starting players and seven players on the bench. Starting players are the only ones who receive points during a given week. The starting players consist of one quarterback (QB), two running backs (RB), two wide receivers (WR), one tight end (TE), one kicker (K), one defensive team/special teams (D), and one flexible (FLEX) position. The FLEX position can be a RB, a WR, or a TE. Bench players can be any position player, but for the purpose of this experiment, it is assumed that there will be one bench player for each position (i.e. two QBs total, three RBs total, etc.). It is also assumed that no fantasy player will use a TE in the FLEX position.

There are ten different fantasy teams in an ESPN standard fantasy football league. With sixteen players total on one fantasy team, 160 players will be drafted. In order to count for player transactions (e.g. trading players, adding/dropping players, etc.), the total player pool was doubled to 320. This pool of 320 players was made up of 50 QBs, 75 RBs, 75 WRs, 50 TEs, 38 Ks, and 32 Ds. These numbers were chosen for multiple reasons. Thirty-two Ds were chosen because there are only 32 teams in the NFL. The number of QBs, RBs, WRs, and TEs were originally all 50 to account for player transactions, but there are more RBs and WRs on a fantasy team's roster, so those were increased to 75. Because of these numbers, 38 was chosen for Ks to make an even total of 320. There are fewer Ks then QBs and TEs because Ks are less likely to miss playing time.

Consistency

After the data was sorted to provide data for each game per year and position, the fantasy points for each player were totaled for each player in each year. The yearly standard deviation of

fantasy points was also calculated for each player. This was to show how far each player's fantasy points are from the mean number of fantasy points for a given year. The point of calculating standard deviation was to ultimately create a consistency factor that is used to help rank the NFL players.

After calculating the standard deviation of fantasy points for each player in each year, all of the deviations were brought together. The average standard deviation was calculated twice: once including standard deviations of zero and once without including them. With zeros, the

average standard deviation was about 3.65, and without zeros the average was about 4.28. Five factors were created. For players with a standard deviation between zero and two, a factor of 1.1 was added to those players' fantasy points. For players with a standard deviation

Figu	Figure 1:							
SD Factor	Count							
1.1	27							
1.05	1							
1	9							
0.95	21							
0.9	15							

between 2 and 4, a factor of 1.05 was added. For players with a standard deviation between 4 and 6, a factor of 1 was applied. For players with a standard deviation between 6 and 8, a factor of .95 was applied. For players with a standard deviation greater than 8, a factor of .9 was applied. This gives players whose fantasy points are generally closer to their average a reward for being a more consistent/less risky player. An example of a distribution of the standard deviation factors is shown in Figure 1.

A second factor is then applied to each player's fantasy points for the reason of their lack of consistency. If a player missed games and the majority of those games were missed because of an injury, a new factor of (.95)^x was applied to that player's fantasy points, where x is the number of games they missed. If the majority of a player's missed games were from being benched or from lack of performance (e.g. no yards, touchdown, etc.), a new factor of (.975)^x was applied. If a player did not miss any games during a given year, a factor of 1 is applied. The last external factor applied to each player's fantasy points is based on each year. In this experiment, players are weighted more heavily for more recent years' performances. A table of these factors is shown in Figure 2. For example, if a player's first year in the NFL is in 2008 or before, a factor of .9604 (.98²) would be applied to their fantasy point total in 2008. That player then gets factors applied according to the specified diagonal in the table (denoted by shade). In the same example, the same player would receive a factor of .98 in 2009, a factor of 1 in 2010, and so on. If a player's first year in the NFL is 2011, a factor of .98 would be applied to that player's fantasy points in 2011, and a factor of about 1.0204 (1/.98) would be applied to that player's fantasy points in 2012. For the years that this player is not in the NFL, the average number of fantasy points for that given position and year is added to this player's total, after all factors are applied. Those years before joining the league do not have any extra factors applied to them. For D/ST, the yearly factor followed the 2008 or before pattern.

k=.98			Number of Years in the Analysis Period						
		1	2	3	4	5			
	2008 or before	k^2							
17	2009	k^2	k						
I ear Stortod	2010	k	k	1					
Statteu	2011	k	1	1/k	1/k				
	2012	1	1/k	1/k	$1/(k)^2$	$1/(k)^2$			

Figure 2: Yearly Factor

Players' fantasy points were summed up after all factors were applied to each year's points. An example of a player's adjusted fantasy point calculation is shown in Figures 3 and 4. Figure 3 shows the calculation for quarterback Drew Brees in 2012, and Figure 4 shows the overall calculation for Drew Brees. The final rankings were ultimately used to draft an experimental fantasy football team. The final overall rankings are shown in Appendix B.

Figure 3: Drew Brees 2012

FNAME	LNAME	FantasyPTS	SD Factor	GM Factor	Year Factor	Total Factor	AdjustedFPTS
Drew	Brees	336	0.95	1	1.04123282	0.98917118	332.361516

Figure 4: Drew Brees Overall

FNAME	LNAME	2008	2009	2010	2011	2012	Total
Drew	Brees	264.5902	247.1099	263	367.398	332.3615	1474.46

Simulation

To test out the new fantasy football rankings, a mock fantasy football league was created. This league would use all rules from an ESPN standard fantasy football league. There are ten teams in an ESPN standard league, and the teams are separated into two five-team divisions. ESPN standard leagues run for thirteen weeks in the regular season, with a four week playoff bracket. The playoffs consist of the two divisional winners, and the two teams with the next best records. Tiebreakers for the playoffs are shown in Appendix C. Each playoff matchup lasts for two weeks, with the first round in weeks 14 and 15, and the championship in weeks 16 and 17. Whichever team has the most total fantasy points after the two weeks wins the playoff matchup. There is also a consolation bracket for the bottom six teams in the league.

Draft

ESPN standard leagues are drafted in snake order. This means that each round has alternate draft order. In this case, the team that has the first pick in the draft will draft 20th overall, or last in the second round. That team will also have the 21st pick, or the first pick in the third round. Draft order in these leagues is randomly selected before the scheduled draft.

In this experiment, the ten teams are split up into two divisions, and the divisions are split up by drafting strategy. The names of the teams in each division are given by the used ranking system, or the different websites that provide the 2013 rankings. The rankings that were used are as follows: ESPN, Yahoo Sports, CBS Sports, Fox Sports, and Sports Illustrated. There was also one team using the experimental rankings, which was called "My Team." Teams (besides the experimental team) were then labeled with a one or a two to denote their drafting strategy. All teams' drafting strategies were based on their respective overall ranking systems, but teams with

a two in their name used a common strategy where quarterbacks were not taken until at least the fifth round. There was only one team using CBS Sports' rankings because their historical rankings were not as readily available as the other systems. The teams and divisions are shown in Figure 5.

Figure 5: Mock							
Fantas	Fantasy Teams						
Division 1	Division 2						
Yahoo 1	Fox 2						
Fox 1	Yahoo 2						
ESPN 1	CBS 2						
My Team	ESPN 2						
SI 1	SI 2						

There were many assumptions that were taken into account

when drafting teams for the mock fantasy football league. First of all, all teams drafted their starting lineups completely before they drafted any backups. That included the FLEX position. With that being said, all teams drafted one backup for each position. For the FLEX position however, if the starting spot was filled with a running back, a wide receiver was chosen for the backup spot, and vice versa. Another assumption is that by weeks were taken into effect when drafting secondary starters or backups. This means that no two players of the same position would have the same by week. For example, if a team's first starting running back has a by week in week 8, that team would pass on another running back with the same by week if next in the order of the rankings.

The draft results are shown in Appendix A. Another assumption is that the draft was hypothetically held the day before the 2013 NFL season started. That means that all rosters were finalized, and any preseason injuries and suspensions were taken into account when drafting. For example, Aaron Hernandez, tight end for the New England Patriots, was arrested and suspended for the entire 2013 season, and Percy Harvin, wide receiver for the Seattle Seahawks, had hip surgery that caused him to miss the whole preseason. Both players were relatively highly ranked, but both of the players were not drafted because of those reasons.

Mock Fantasy League

After the mock fantasy draft, the teams were put into a mock fantasy league. The league was played out as a regular fantasy football league would. Again, for this experiment, all ESPN standard league rules were applied. In ESPN standard leagues, the ten teams are randomly put into a thirteen week regular season schedule. After the regular season, the top four teams advance to the postseason, and play two week matchups in a single elimination bracket. The top teams in each division (i.e. the teams in each division with the best record) obtain the top two seeds. The team out of those two with the best record then gets the number one seed, and the other gets the number two seed. The next two seeds are given to the two teams with the next best records after that, regardless of division. Tiebreakers, as well as other ESPN standard rules, are shown in Appendix C.

In this experiment, a schedule was made using an online schedule maker. Lineups were put in for each team, and there were five head-to-head games each week. An example of a head to head game is shown in Figure 6. It was assumed that starting lineups were made of the top drafted players on each team, unless an injury or a bye week prevented a player from playing a scheduled game. If a player suffered a long term injury during the season, that player was dropped and the next best player of that position was picked up. For example, Vick Ballard, running back for the Indianapolis Colts, tore his ACL before Week 3 of the NFL season. Because of this, Team ESPN 1 dropped Ballard and picked up Knowshon Moreno, running back for the Denver Broncos.

As stated before, the top four teams advanced to the playoffs, and the remaining six teams played in the consolation bracket. Playoff bracket pairings are shown in the ESPN standard rules in Appendix C. The final regular season standings and the final standings after the playoffs are shown in Figures 7 and 8, respectively. In Figure 7, the highlighted teams are the playoff teams.

Team:	ESPN 1	FantasyPTS	Team:	My Team	FantasyPTS
QB	Peyton Manning	29	QB	Philip Rivers	26
RB	Trent Richardson	12	RB	Fred Jackson	14
RB	Alfred Morris	7	RB	Frank Gore	19
WR	Mike Wallace	2	WR	Wes Welker	19
WR	Tavon Austin	0	WR	DeSean Jackson	3
TE	Owen Daniels	7	TE	Antonio Gates	19
FLEX	Knowshon Moreno	14	FLEX	Chris Johnson	3
К	Josh Brown	0	К	David Akers	18
D	San Francisco 49ers	14	D	Pittsburgh Steelers	-1
		85			120

Figure	6:	ESPN	1	vs.	My	Team,	W	eek	4
						,			

Figure 7: Mock League Regular Season Standings

	Division 1	Mine	Laccaci	рг	DA		Division 2	Minci	Loccoci	рг	DA
	DIVISIONI	WINS.	LOSSES.	۲F	PA		DIVISION 2	wills.	Losses.	РГ	PA
1	Yahoo 1	9	4	1326	1205	2	Fox 2	8	5	1191	1118
3	Fox 1	8	5	1296	1227	4	Yahoo 2	7	6	1221	1183
7	ESPN 1	6	7	1217	1256	5	CBS 2	7	6	1215	1133
8	My Team	5	8	1165	1199	6	ESPN 2	7	6	1030	1090
10	SI 1	3	10	1066	1293	9	SI 2	5	8	1153	1176

Figure 8: Mock League Final Standings

FINAL ST	FINAL STANDINGS:						
1	Yahoo 1						
2	Fox 1						
3	Fox 2						
4	Yahoo 2						
5	CBS 2						
6	My Team						
7	ESPN 2						
8	SI 2						
9	SI 1						
10	ESPN 1						

Conclusions

In the conclusion of the fantasy league simulation, Yahoo's and Fox Sports' rankings were preferred. The goal of the experiment was to see if a ranking system would work without any use of opinion. Because of this, the experiment was a success, since the team with the experimental rankings did not get last place. My Team was in fourth place with three weeks left in the simulation, but lost the last three games of the season. The team ended up with the eighth seed in the playoffs, but won its first consolation game and ended up in sixth place.

Future Ideas

Although I was satisfied with the results, there are some adjustments I would like to make in the future. First, I would like to update the yearly factors in some way. It seemed as though many players in the experimental rankings were past their prime. For example, running back Chris Johnson had exceptional stats from 2008-2010, but cooled off in 2011 and 2012. He was ranked tenth overall in the experimental rankings, but he was ranked in the twenties in the other ranking systems. Instead of Chris Johnson, My Team could have drafted running back Matt Forte or even wide receiver Calvin Johnson.

Another adjustment I would like to make is to have many different simulations, but with different adjustments in each one. For example, I would like to have a dzifferent simulation for each combination of draft order. This would tell which ranking system is better overall, and it

might also tell which draft position is best to have. I would also like to utilize different league standards, such as Yahoo. Most positions are scored the same, except most fantasy football websites score team defenses differently. In order to perform multiple simulations, I plan on writing some sort of program to automate the draft with the different adjustments.

Appendix A

By Round	1		2		3	
Fox 2	Adrian Peterson	RB	Stevan Ridley	RB	Demaryius Thomas	WR
SI 2	Arian Foster	RB	Brandon Marshall	WR	Julio Jones	WR
Yahoo 2	Doug Martin	RB	Dez Bryant	WR	Jimmy Graham	TE
Yahoo 1	Lesean McCoy	RB	Matt Forte	RB	Drew Brees	QB
ESPN 2	Marshawn Lynch	RB	Steven Jackson	RB	Roddy White	WR
SI 1	Ray Rice	RB	AJ Green	WR	Victor Cruz	WR
CBS 2	CJ Spiller	RB	Seattle Seahawks	D	Larry Fitzgerald	WR
Fox 1	Jamaal Charles	RB	Calvin Johnson	WR	Maurice Jones-Drew	RB
My Team	Aaron Rodgers	QB	Chris Johnson	RB	Frank Gore	RB
ESPN 1	Trent Richardson	RB	Alfred Morris	RB	Peyton Manning	QB

By Round	4		5		E	5
Fox 2	Marques Colston	WR	Tom Brady	QB	Jason Witten	TE
SI 2	Montee Ball	RB	Matt Ryan	QB	Eric Decker	WR
Yahoo 2	David Wilson	RB	Eddie Lacy	RB	Dwayne Bowe	WR
Yahoo 1	Randall Cobb	WR	Danny Amendola	WR	Pierre Garcon	WR
ESPN 2	Andre Johnson	WR	Darren McFadden	RB	Robert Griffin III	QB
SI 1	DeMarco Murray	RB	Colin Kaepernick	QB	Rob Gronkowski	TE
CBS 2	Reggie Bush	RB	Matthew Stafford	QB	Lamar Miller	RB
Fox 1	Cam Newton	QB	Reggie Wayne	WR	Jordy Nelson	WR
My Team	David Akers	К	Wes Welker	WR	Pittsburgh Steelers	D
ESPN 1	Vincent Jackson	WR	Mike Wallace	WR	Darren Sproles	RB

By Round	7		8		9	
Fox 2	Ryan Mathews	RB	St Louis Rams	D	Blair Walsh	K
SI 2	Tony Gonzalez	TE	Green Bay Packers	D	Matt Bryant	K
Yahoo 2	Russell Wilson	QB	New England Patriots	D	Matt Prater	K
Yahoo 1	Vernon Davis	TE	Denver Broncos	D	Justin Tucker	K
ESPN 2	Kyle Rudolph	TE	Cincinnati Bengals	D	Phil Dawson	К
SI 1	Torrey Smith	WR	Chicago Bears	D	Dan Bailey	К
CBS 2	Steve Smith	WR	Stephen Gostkowski	К	Jermichael Finley	TE
Fox 1	Greg Olsen	TE	Houston Texans	D	Randy Bullock	К
My Team	Deangelo Williams	RB	DeSean Jackson	WR	Antonio Gates	TE
ESPN 1	Owen Daniels	TE	San Francisco 49ers	D	Josh Brown	K

By Round	10		11		12	
Fox 2	Daryl Richardson	RB	Eli Manning	QB	TY Hilton	WR
SI 2	Mike Williams	WR	Giovani Bernard	RB	Brandon Pettigrew	TE
Yahoo 2	Antonio Brown	WR	Ahmad Bradshaw	RB	Fred Davis	TE
Yahoo 1	Michael Vick	QB	Cecil Shorts	WR	Mark Ingram	RB
ESPN 2	Chris Ivory	RB	Greg Jennings	WR	Brandon Myers	TE
SI 1	James Jones	WR	Rashard Mendenhall	RB	Andy Dalton	QB
CBS 2	Tony Romo	QB	Atlanta Falcons	D	Shane Vereen	RB
Fox 1	Andrew Luck	QB	BenJarvus Green-Ellis	RB	Miles Austin	WR
My Team	Philip Rivers	QB	Baltimore Ravens	D	Mason Crosby	К
ESPN 1	Hakeem Nicks	WR	Vick Ballard	RB	Ben Roethlisberger	QB

By Round	13		14		15	
Fox 2	Martellus Bennett	TE	Sidney Rice	WR	Greg Zuerlein	К
SI 2	Joe Flacco	QB	Isaac Redman	RB	San Diego Chargers	D
Yahoo 2	Jay Cutler	QB	Stevie Johnson	WR	Arizona Cardinals	D
Yahoo 1	Jared Cook	TE	Le'Veon Bell	RB	Tampa Bay Buccaneers	D
ESPN 2	Sam Bradford	QB	Anquan Boldin	WR	Dallas Cowboys	D
SI 1	Jermaine Gresham	TE	Bilal Powell	RB	New York Jets	D
CBS 2	Kenny Britt	WR	Josh Gordon	WR	Garrett Hartley	К
Fox 1	Jordan Cameron	TE	Ben Tate	RB	Miami Dolphins	D
My Team	Fred Jackson	RB	Santana Moss	WR	Lance Moore	WR
ESPN 1	Sebastian Janikowski	К	Tavon Austin	WR	Julius Thomas	TE

By Round	16	
Fox 2	New York Giants	D
SI 2	Alex Henery	К
Yahoo 2	Shaun Suisham	К
Yahoo 1	Mike Nugent	К
ESPN 2	Robbie Gould	К
SI 1	Adam Vinatieri	К
CBS 2	Tyler Eifert	TE
Fox 1	Steven Hauschka	К
My Team	Heath Miller	TE
ESPN 1	Cleveland Browns	D

Append	lix	B
--------	-----	---

пррепата	D				
Overall	Position	PRank	FNAME	LNAME	AdjFPTS
1	QB	1	Aaron	Rodgers	1499.8
2	QB	2	Drew	Brees	1474.46
3	QB	3	Philip	Rivers	1217.425
4	QB	4	Tom	Brady	1163.795
5	QB	5	Peyton	Manning	1137.214
6	QB	6	Matt	Ryan	1120.138
7	RB	1	Adrian	Peterson	1091.026
8	QB	7	Eli	Manning	1068.902
9	QB	8	Tony	Romo	997.5358
10	RB	2	Chris	Johnson	961.1268
11	QB	9	Joe	Flacco	947.8445
12	QB	10	Ben	Roethlisberger	945.6229
13	QB	11	Matt	Schaub	921.6238
14	RB	3	Ray	Rice	909.1364
15	WR	1	Calvin	Johnson	900.2434
16	QB	12	Jay	Cutler	871.1554
17	RB	5	Maurice	Jones-Drew	861.1288
18	RB	6	Arian	Foster	850.0533
19	QB	13	Cam	Newton	847.7346
20	RB	7	Matt	Forte	841.9439
21	RB	8	Frank	Gore	816.3613
22	RB	9	Steven	Jackson	814.2084
23	QB	14	Josh	Freeman	797.8738
24	WR	2	Larry	Fitzgerald	792.8448
25	К	1	David	Akers	776.3396
26	QB	15	Matthew	Stafford	772.5593
27	RB	10	LeSean	McCoy	749.009
28	RB	11	Marshawn	Lynch	748.5278
29	WR	3	Brandon	Marshall	739.8747
30	WR	4	Wes	Welker	738.8058
31	WR	5	Reggie	Wayne	734.8847
32	QB	16	Ryan	Fitzpatrick	733.8305
33	QB	17	Carson	Palmer	722.8921
34	WR	6	Andre	Johnson	717.009
35	D	1	Pittsburgh	Steelers	696.8341
36	D	2	Baltimore	Ravens	677.9353
37	QB	18	Mark	Sanchez	672.8379
38	WR	7	Greg	Jennings	665.9321
39	WR	8	Marques	Colston	660.3502
40	К	2	Stephen	Gostkowski	659.9955

41	D	3	Chicago	Bears	659.9812
42	QB	19	Andy	Dalton	657.2066
43	WR	9	Vincent	Jackson	655.1028
44	WR	10	Steve	Smith	654.1263
45	QB	20	Matt	Cassel	653.7928
46	К	3	Mason	Crosby	650.2723
47	QB	21	Michael	Vick	648.3093
48	К	4	Rob	Bironas	645.6462
49	К	5	Sebastian	Janikowski	640.7294
50	RB	12	DeAngelo	Williams	637.1385
51	D	4	New York	Jets	635.8783
52	D	5	Green Bay	Packers	631.4095
53	WR	11	Roddy	White	628.935
54	WR	12	Mike	Wallace	621.1901
55	D	6	San Francisco	49ers	620.8638
56	RB	13	Jamaal	Charles	619.4654
57	TE	1	Tony	Gonzalez	619.4515
58	WR	13	Dwayne	Bowe	617.4236
59	QB	22	Kyle	Orton	615.6339
60	QB	23	Sam	Bradford	609.5008
61	К	6	Matt	Bryant	604.1655
62	TE	2	Jason	Witten	603.7577
63	D	7	Philadelphia	Eagles	602.8301
64	QB	24	Alex	Smith	597.1135
65	RB	14	Ahmad	Bradshaw	595.8489
66	QB	25	Robert	Griffin	595.3717
67	WR	14	DeSean	Jackson	589.9224
68	К	7	Robbie	Gould	586.9621
69	QB	26	Andrew	Luck	579.4842
70	RB	15	Darren	Sproles	578.8291
71	К	8	Dan	Carpenter	571.9473
72	QB	27	Jason	Campbell	571.1351
73	К	9	Dan	Bailey	570.4197
74	К	10	Jay	Feely	562.3104
75	К	11	Matt	Prater	561.9707
76	WR	15	Percy	Harvin	561.6741
77	QB	28	Russell	Wilson	559.9342
78	RB	16	Fred	Jackson	559.6905
79	WR	16	Anquan	Boldin	558.9522
80	TE	3	Antonio	Gates	558.3961

81	К	12	Blair	Walsh	557.1699
82	WR	17	Miles	Austin	553.3492
83	D	8	New England	Patriots	551.8054
84	RB	17	Jonathan	Stewart	549.4069
85	К	13	Justin	Tucker	547.4199
86	D	9	Cincinnati	Bengals	544.438
87	RB	18	Cedric	Benson	542.3179
88	D	10	Minnesota	Vikings	539.0821
89	WR	18	Dez	Bryant	537.0818
90	К	14	Nick	Folk	536.8189
91	D	11	Arizona	Cardinals	534.3732
92	RB	19	Reggie	Bush	532.9557
93	WR	19	Santana	Moss	531.9669
94	К	15	Alex	Henery	531.2663
95	WR	20	Hakeem	Nicks	530.5242
96	QB	29	Matt	Hasselbeck	529.3108
97	WR	21	Victor	Cruz	526.6455
98	К	16	Phil	Dawson	522.4674
99	К	17	Ryan	Succop	520.9326
100	WR	22	A.J.	Green	519.7399
101	К	18	Adam	Vinatieri	518.7512
102	TE	4	Rob	Gronkowski	517.0584
103	RB	20	Rashard	Mendenhall	511.4157
104	TE	5	Vernon	Davis	511.0802
105	WR	23	Mike	Williams	510.7678
106	RB	21	Brandon	Jacobs	510.6371
107	D	12	San Diego	Chargers	508.7671
108	К	19	Greg	Zuerlein	508.4199
109	К	20	Shaun	Suisham	505.2828
110	D	13	Tennessee	Titans	504.4631
111	RB	22	BenJarvus	Green-Ellis	504.3179
112	RB	23	Pierre	Thomas	504.3125
113	К	21	Josh	Scobee	504.0132
114	К	22	Lawrence	Tynes	502.7393
115	RB	24	Willis	McGahee	502.4303
116	D	14	Dallas	Cowboys	500.949
117	WR	24	Lance	Moore	499.1432
118	WR	25	Jeremy	Maclin	497.7724
119	К	23	Rian	Lindell	496.667
120	RB	25	Shonn	Greene	496.6548

121	RB	26	Doug	Martin	496.3219
122	К	24	Kai	Forbath	495.2811
123	QB	30	Christian	Ponder	494.597
124	WR	26	Nate	Washington	492.8252
125	D	15	Atlanta	Falcons	492.422
126	QB	31	Ryan	Tannehill	490.1842
127	D	16	Seattle	Seahawks	488.3346
128	WR	27	Michael	Crabtree	487.6555
129	D	17	New York	Giants	485.2195
130	D	18	Houston	Texans	484.6973
131	К	25	Connor	Barth	482.7647
132	RB	27	C.J.	Spiller	481.7318
133	WR	28	Santonio	Holmes	480.5481
134	К	26	Josh	Brown	479.2488
135	RB	28	Alfred	Morris	479.2219
136	WR	29	Julio	Jones	475.4219
137	TE	6	Jimmy	Graham	472.3913
138	WR	30	Brandon	Lloyd	472.3437
139	QB	32	Brandon	Weeden	470.3767
140	RB	29	Ryan	Mathews	470.2502
141	RB	30	Darren	McFadden	466.2147
142	RB	31	Michael	Bush	463.1349
143	D	19	Miami	Dolphins	454.9043
144	К	27	Olindo	Mare	454.8252
145	RB	32	Knowshon	Moreno	450.5777
146	RB	33	Trent	Richardson	447.2569
147	D	20	Tampa Bay	Buccaneers	443.342
148	RB	34	Stevan	Ridley	441.7114
149	К	28	Justin	Medlock	440.9035
150	К	29	Shayne	Graham	440.2831
151	WR	31	Steve	Johnson	439.966
152	К	30	Billy	Cundiff	437.8974
153	D	21	Carolina	Panthers	432.005
154	RB	35	Ryan	Grant	429.8544
155	WR	32	Jordy	Nelson	428.9312
156	WR	33	Torrey	Smith	427.5083
157	D	22	Indianapolis	Colts	427.2981
158	D	23	Denver	Broncos	427.2434
159	TE	7	Greg	Olsen	423.818
160	WR	34	Malcom	Floyd	422.8341

100						
	161	D	24	Buffalo	Bills	421.5903
ſ	162	D	25	New Orleans	Saints	420.435
ſ	163	TE	8	Heath	Miller	420.1078
ſ	164	D	26	Cleveland	Browns	419.1791
ſ	165	WR	35	Demaryius	Thomas	417.8686
	166	WR	36	Eric	Decker	416.2928
ſ	167	WR	37	Donald	Driver	415.533
	168	RB	36	Chris	Wells	413.7253
	169	RB	37	Mike	Tolbert	409.9757
	170	QB	33	Blaine	Gabbert	409.7637
	171	RB	38	Ronnie	Brown	409.5745
	172	RB	39	Felix	Jones	404.0778
	173	TE	9	Brent	Celek	402.2374
	174	WR	38	James	Jones	400.8124
	175	RB	40	DeMarco	Murray	399.7418
	176	QB	34	Chad	Henne	399.5705
	177	RB	41	Mikel	Leshoure	398.652
	178	TE	10	Dallas	Clark	397.5929
	179	D	27	Washington	Redskins	396.8676
	180	QB	35	Nick	Foles	395.1518
	181	QB	36	Tim	Tebow	392.3274
	182	WR	39	Randall	Cobb	391.8918
	183	RB	42	Kevin	Smith	390.2532
	184	WR	40	Kevin	Walter	385.8976
	185	К	31	Nate	Kaeding	385.3274
	186	К	32	Graham	Gano	384.794
l	187	WR	41	Denarius	Moore	383.6395
	188	WR	42	Pierre	Garcon	382.596
l	189	RB	43	LeGarrette	Blount	382.053
l	190	WR	43	Sidney	Rice	379.7312
	191	WR	44	Davone	Bess	379.4114
	192	QB	37	Jake	Locker	379.0838
	193	WR	45	Ту	Hilton	377.6561
l	194	RB	44	Vick	Ballard	376.1219
l	195	TE	11	Owen	Daniels	373.5497
l	196	WR	46	Robert	Meachem	372.1312
	197	RB	45	Peyton	Hillis	371.6366
	198	QB	38	Colin	Kaepernick	371.3364
	199	QB	39	Colt	McCoy	371.2522
l	200	WR	47	Antonio	Brown	366.2946

201	RB	46	Joique	Bell	366.1219
202	RB	47	Mark	Ingram	364.0723
203	D	28	St. Louis	Rams	363.9152
204	TE	12	Aaron	Hernandez	363.7781
205	WR	48	Justin	Blackmon	360.8649
206	WR	49	Steve	Breaston	357.8029
207	QB	40	Kirk	Cousins	353.0068
208	WR	50	Greg	Little	352.1594
209	WR	51	Brian	Hartline	351.0989
210	WR	52	Josh	Gordon	349.4649
211	WR	53	Jabar	Gaffney	345.8821
212	QB	41	Terrelle	Pryor	344.9354
213	WR	54	Braylon	Edwards	344.7996
214	TE	13	Marcedes	Lewis	344.7893
215	WR	55	Mario	Manningham	343.0135
216	TE	14	Kellen	Winslow	343.0094
217	TE	15	Jermaine	Gresham	342.8951
218	WR	56	Kenny	Britt	342.5371
219	TE	16	Dustin	Keller	341.4646
220	D	29	Oakland	Raiders	340.3242
221	WR	57	Brandon	LaFell	340.2338
222	WR	58	Chris	Givens	338.6149
223	TE	17	Brandon	Pettigrew	338.1199
224	QB	42	Greg	McElroy	337.2904
225	QB	43	Thaddeus	Lewis	337.1949
226	RB	48	Jacquizz	Rodgers	336.9119
227	WR	59	Doug	Baldwin	336.6979
228	QB	44	Ryan	Lindley	336.6876
229	RB	49	Donald	Brown	336.4358
230	WR	60	Titus	Young	336.1729
231	RB	50	Bryce	Brown	334.3219
232	К	33	Steven	Hauschka	332.9597
233	WR	61	Kendall	Wright	332.4274
234	WR	62	Andre	Roberts	332.3143
235	QB	45	Johnny	Hekker	332.2951
236	RB	51	David	Wilson	332.222
237	RB	52	Kendall	Hunter	329.8005
238	К	34	Garrett	Hartley	329.6841
239	RB	53	Bernard	Pierce	329.4282
240	WR	63	Cecil	Shorts	328.8528

241	QB	46	Brock	Osweiler	327.7342
242	QB	47	Graham	Harrell	327.7342
243	QB	48	Ryan	Mallett	327.7342
244	D	30	Kansas City	Chiefs	326.2897
245	RB	54	Daryl	Richardson	325.6219
246	RB	55	Daniel	Thomas	324.9177
247	WR	64	Rod	Streater	323.7649
248	TE	18	Zach	Miller	322.46
249	RB	56	Justin	Forsett	322.2999
250	WR	65	Jeremy	Kerley	320.6011
251	K	35	Mike	Nugent	319.5286
252	WR	66	Devery	Henderson	319.0889
253	WR	67	Darrius	Heyward-Bey	318.3462
254	WR	68	Devin	Hester	316.2837
255	RB	57	Robert	Turbin	316.1194
256	RB	58	Shaun	Draughn	314.0463
257	WR	69	Brandon	Gibson	313.6781
258	TE	19	Visanthe	Shiancoe	313.1618
259	RB	59	Roy	Helu	312.7378
260	TE	20	Anthony	Fasano	312.4476
261	WR	70	Michael	Floyd	311.9899
262	D	31	Detroit	Lions	307.9676
263	WR	71	Michael	Jenkins	306.4612
264	RB	60	Ronnie	Hillman	306.0611
265	TE	21	Jermichael	Finley	305.5106
266	WR	72	Golden	Tate	304.9612
267	RB	61	Dexter	McCluster	304.1941
268	WR	73	Joe	Morgan	303.9164
269	RB	62	Lamar	Miller	302.482
270	RB	63	William	Powell	302.3721
271	WR	74	Jason	Avant	302.0747
272	RB	64	Brandon	Bolden	301.8272
273	RB	65	Isaac	Redman	301.1579
274	WR	75	Nate	Burleson	299.0975
275	RB	66	Jorvorskie	Lane	298.3376
276	QB	49	Shaun	Hill	297.9399
277	RB	67	Ben	Tate	293.8176
278	RB	68	Toby	Gerhart	293.1526
279	RB	69	Chris	Rainey	292.6749
280	D	32	Jacksonville	Jaguars	289.6646

281	RB	70	Will	Johnson	288.0645
282	RB	71	Bilal	Powell	285.9109
283	RB	72	LaMichael	James	285.7972
284	RB	73	Jeremy	Stewart	285.7972
285	RB	74	Chris	lvory	285.6504
286	RB	75	Marcus	Thigpen	285.3433
287	QB	50	Matt	Moore	283.8716
288	TE	22	Ben	Watson	282.466
289	TE	23	Tony	Scheffler	274.6084
290	TE	24	Kyle	Rudolph	273.073
291	TE	25	Kevin	Boss	272.5599
292	К	36	Nick	Novak	249.5938
293	TE	26	Dennis	Pitta	248.1283
294	TE	27	Todd	Неар	245.9016
295	TE	28	Scott	Chandler	245.4706
296	TE	29	Fred	Davis	241.185
297	TE	30	Dwayne	Allen	239.6909
298	TE	31	Jared	Cook	237.3363
299	TE	32	Lance	Kendricks	235.6664
300	TE	33	Joel	Dreessen	233.5767
301	TE	34	John	Carlson	211.0833
302	TE	35	Coby	Fleener	209.354
303	TE	36	Tony	Moeaki	209.3232
304	TE	37	Ed	Dickson	202.1236
305	TE	38	Orson	Charles	182.444
306	TE	39	James	Hanna	182.1583
307	TE	40	Rob	Housler	181.621
308	TE	41	Martellus	Bennett	181.3999
309	TE	42	Konrad	Reuland	180.425
310	TE	43	Ladarius	Green	179.9727
311	TE	44	Rhett	Ellison	179.2141
312	TE	45	Garrett	Celek	179.1341
313	TE	46	Mike	McNeill	177.1643
314	TE	47	Cory	Harkey	177.1058
315	TE	48	David	Paulson	176.2096
316	TE	49	Taylor	Thompson	176.2096
317	TE	50	Kyle	Adams	176.1894
318	К	37	Jason	Hanson	49.7232

Appendix C

DEFAULT ROSTER SETTINGS			
Total Roster Size: 16	POSITIONS	STARTERS	MAXIMUM
Total On Bench: 7 (0 IR)	Quarterback (QB)	1	4
	Running Back (RB)	2	8
	Flex (RB/WR/TE)	1	N/A
	Wide Receiver (WR)	2	8
	Tight End (TE)	1	3
	Team Defense/Special Teams (D/ST)	1	3
	Place-Kicker (K)	1	3
	Bench (BE)	7	N/A
PASSING	RUSHING	RECEIVING	
Standard scoring: • TD Pass = 4pts • Every 25 passing yards = 1pts • 2pt Passing Conversion = 2pts • Interceptions Thrown = -2pts	Standard scoring: • TD Rush = 6pts • Every 10 rushing yards = 1pt • 2pt Rushing Conversion = 2pts	Standard scoring: • TD Reception = 6pts • Every 10 receiving yards = • 2pt Receiving Conversion =	⊧ 1pt = 2pts
MISCELLANEOUS OFFENSE	KICKING	PUNTING	
Standard scoring: • Kickoff Return TD = 6pts • Punt Return TD = 6pts • Fumble Recovered for TD = 6pts • Each Fumble Lost = -2	Standard scoring: • FG Made (50+ yards) = 5pts • FG Made (40-49 yards) = 4pts • FG Made (0-39 yards) = 3pts • Each PAT Made = 1pt • FG Missed (any distance) = -1	Standard scoring: Punters not used in Standar	d game
INDIVIDUAL DEFENSIVE PLAYERS	TEAM DEFENSE / SPECIAL TEAMS	HEAD COACH	
Standard scoring: IDPs not used in Standard game.	Standard scoring: • Kickoff Return TD = 6pts • Punt Return TD = 6pts	Standard scoring: Head Coaches not used in S game	tandard
	 Fumble Return TD = 6pts Fumble Return TD = 6pts Blocked Punt or FG return for TD = 6pts Each Interception = 2pts Each Fumble Recovered = 2pts Blocked Punt, PAT or FG = 2pts Each Safety = 2pts Each Safety = 2pts Each Sack = 1pts 0 points allowed = 5pts 1-6 points allowed = 4pts 7-13 points allowed = 3pts 14-17 points allowed = 1pt 18-27 points allowed = 0pts 28.24 points allowed = 1pt 		

\cdot 35-45 points allowed = -3pts
\cdot 46+ points allowed = -5pts
\cdot Under 100 yards allowed = 5 pts
\cdot 100 to 199 yards allowed = 3 pts
\cdot 200 to 299 yards allowed = 2 pts
\cdot 300 to 349 yards allowed = 0 pts
\cdot 350 to 399 yards allowed = -1 pts
\cdot 400 to 449 yards allowed = -3 pts
\cdot 450 to 499 yards allowed = -5 pts
\cdot 500- 549 yards allowed = -6 pts
\cdot 550+ yards allowed = -7 pts

REGULAR SEASON SCHEDULE

ESPN has set thirteen (13) weeks in the regular season for Free-Standard and Prize-Eligible Leagues. This is a fixed setting and thus cannot be altered. If you wish to play in a league which offers flexible regular season and playoff schedules, you must create or join a Custom league.

REACHING THE PLAYOFFS

The top four teams in a league make the playoffs. These four are comprised of the two division champs and two wild-card teams. Division champs are the teams that win the league divisions. The next two teams according to the tie-breaker below are the wild card teams.

PLAYOFF BRACKET SETUP

All teams continue to compete throughout the playoffs. The two Divisional Champions and two wild card teams (teams with the next best overall records) compete for the League Championship. The wild card teams may come from either division and are selected by their records, with ties resolved according to the tiebreaker categories below. The top-ranked division champion plays the lowest-ranked wild card team i.e. the first place team faces the fourth place team while the second place team faces the third place team.

The remaining teams compete in the consolation bracket. Though out of the running for the championship, this consolation bracket is still competitive since no one wants to finish in last place!

PLAYOFF SEEDING AND TIEBREAKERS (Standard Leagues)

Standard and Prize-Eligible League Playoffs: Playoff Seeding and Tie-Breakers

In the event that two or more teams have identical won-loss records at the conclusion of the Fantasy Football regular season, the following tiebreaking system is employed.

- 1. Overall points-for
- 2. Head-to-Head record
- 3. Division record
- 4. Overall points-against
- 5. Coin Flip

NOTE: The Overall record is based on *winning percentage*. Therefore, a team that is 8-5-0 and a team that is 7-4-2 have the same winning percentage, and thus would be considered tied for overall record.

Standard League Playoffs: Tiebreaker for Playoff Games

In the event that two teams have the same number of points at the conclusion of their two-week playoff game, the tiebreaker for playoff games is each team's original seeding in the playoffs. In short, the team with the higher seed wins.

Playoff Schedule

Winner's Bracket: In the first round of the playoffs, the division winner with the best win-loss record plays

the wild-card team with the worst win-loss record; the other division winner plays the wild-card team with the better win-loss record. In the second round, the winners of the first-round games (see table below) compete for the league championship. Each round of the playoffs spans a two-week period. The 5th through 10th-seeded teams in each league compete in the consolation bracket.

WINNER'S BRACKET PAIRINGS					
GAME	ROUND 1 - WKS 14 & 15 SEED VS. SEED	ROUND 2 - WKS 16 & 17 MATCHUPS			
1	1 vs. 4	W1 vs. W2			
2	2 vs. 3	L1 vs. L2			
CONSOLATION BRACKET PAIRINGS					
GAME	ROUND 1 - WKS 14 & 15 SEED VS. SEED	ROUND 2 - WKS 16 & 17 MATCHUPS			
1	5 vs. 6	W1 vs. W2			
2	7 vs. 8	L1 vs. W3			

Final league standings following the second round of the playoffs From the Winner's bracket:

- 1st place Winner of game 1, round 2
- 2nd place Loser of game 1, round 2
- 3rd place Winner of game 2, round 2
- 4th place Loser of game 2, round 2

From the Consolation bracket:

- 5th place Winner of game 1, round 2
- 6th place Loser of game 1, round 2
- 7th place Winner of game 2, round 2
- 8th place Loser of game 2, round 2
- 9th place Winner of game 3, round 2
- 10th place Loser of game 3, round 2

SEEDING TIEBREAKER EXAMPLE

Here's the default order of precedence according to the rules:

- H2H
- Points For
- IntraDivision Record
- Points Against
- Coin Flip

Below is an example of how tie breakers work. The main things to remember are:

- Teams must have played the same number of head to head games amongst each other
- Tiebreaker process starts over from beginning after each tie is broken for each bracket seed
- All five teams in this example have a season record of 7-5

Team A: 3rd in division 1 with 825 points. They beat teams B and E, and lost to teams C and D Team B: 2nd in division 1 with 918 points. They beat team C, lost to teams A and E, and did not play team D

Team C: 1st in division 2 with 725 points. They beat team A, and lost to teams B, D, and E Team D: 2nd in division 2 with 720 points. They beat teams A, C, and E, and did not play team B Team E: 1st in Division 1 with 920 points. They beat teams B and C and lost to teams A and D

First we take the division winners. Teams E and C won their divisions. Since team E beat team C in their head to head matchup, E gets the #1 seed and C gets the #2 seed.

Now we have to figure out the #3 seed. Since teams A, B, and D all have 7-5 records, we first look at their head to head records.

- Team A beat team B and lost to team D, so they are 1-1 head to head
- Team B lost to team A, and did not play team D, so they are 0-1 head to head
- Team D beat team A, and did not play team B, so they are 1-0 head to head

Since the three teams did not play the same amount of head to head games we have to go the next tiebreaker - "Points For". This Awards the #3 seed to team B as they had 918 points.

Last we have to figure out the #4 seed. Again, since teams A and D have identical 7-5 records we look at their head to head matchup. Since team D beat team A, D would get the 4th and final playoff seed.

SCORING DURING THE PLAYOFFS

Scoring during the playoffs works much the same way as during the regular season. The big difference is that each playoff round lasts two weeks, not one week (as during the regular season).

Playoff Schedule

Winner's Bracket: In the first round of the playoffs, the division winner with the best win-loss record plays the wild-card team with the worst win-loss record; the other division winner plays the wild-card team with the better win-loss record. In the second round, the winners of the first-round games (see table below) compete for the league championship. Each round of the playoffs spans a two-week period. The 5th through 10th-seeded teams in each league compete in the consolation bracket.

References

Armchair Analysis, http://armchairanalysis.com/index.php

- Davis, D. J., EDD. (2012). Project nffl: The niagara fantasy football league and sport marketing education. *College Student Journal*, 235-242.
- Draper, J. J. (2008). Fantasy sports communities on the internet: The evolution of fandom in american sports culture. (M.A., Michigan State University). *ProQuest Dissertations and Theses*.
- Dwyer, B. (2013). The impact of game outcomes on fantasy football participation and national football league media consumption. *Sport Marketing Quarterly*, 33-47.
- Grady, J. (2007). Fantasy stats case tests limits of intellectual property protection in the digital age. *Sport Marketing Quarterly*, 230-232.
- KFFL, http://www.kffl.com/?source=forums
- Pro Football Reference, http://www.pro-football-reference.com/
- Sports Illustrated. (2012). Sports Illustrated, 117(9).