PFF Usage for Football Teams

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Introduction

Pro Football Focus (PFF) is an organization that started in 2006 as a way of using advanced statistics to evaluate football players and teams, more than just using conventional stats, like yards and points. Their attention to detail and accuracy attracted the New York Giants to use their data in 2009, and PFF has supported football teams ever since. Now, after 15 more years of experience and growth, PFF is considered one of the top resources for helping teams gain a little competitive edge through data and analytics. Assuming, then, I'm a candidate to work on a professional football team that does not use PFF, below is a proposal discussing how I would use PFF for research and analysis.

How PFF Supports Football Teams

First, I would like to provide an overview of how PFF helps football teams in general. This is done mainly by its data analysis tools, like PFF Ultimate and PFF IQ, but PFF also provides consultation as well.

The foundation of PFF's data analysis is its grading system. PFF is very thorough in grading every player on every play. This is done on a scale of -2 to +2. A grade of zero is used for expected outcomes or typical performance on plays, so zeroes are used quite often, unless a player does something performance-wise a little more positively or negatively. Then, the

grades are compiled for each game, compared to other players of the same position group, and then set to a scale of 0 to 100.

PFF grades, then, help teams in evaluating players because they're not based on statistical outcomes, so all player positions can be evaluated. Also, grades are isolated by player, so if a receiver drops a pass, it does not affect the grade of the quarterback.

Teams can access PFF grades and other advanced statistics in PFF Ultimate. PFF Ultimate consists of common statistics, like rushing attempts, passing attempts, yards, and touchdowns, but also, PFF grades and other non-traditional statistics are available, like yards after catch or passing air yards. With this information, data can then be filtered and reviewed in greater detail to find exactly what is needed. For example, if a team is looking to acquire a player based on certain highly detailed characteristics, they can use PFF Ultimate to search through these characteristics. Then, they can even pull videos showing how these characteristics are demonstrated. For instance, a defensive back can have his videos filtered by each interception he made.

PFF Ultimate is also very helpful in scouting opponents. Teams can use it to filter data based on their upcoming opponent and then determine trends like which receivers operate best in the red zone, what coverages defenses like to operate, and what areas quarterbacks like to throw. In fact, a passing map can also be pulled up to visually observe the tendencies of where a quarterback likes to throw.

Perhaps another analytics layer beyond PFF Ultimate is PFF IQ, which is created exclusively for football teams. PFF IQ consists of a lot more detailed raw statistics, like player tracking, for data scientists to use for predictive modeling.

Use of PFF for Rookie Player Acquisition

As someone working in football operations, I can then apply these PFF tools to help my team. Probably the most obvious use of these tools is for player acquisition. I can break this down between college players and veteran players, even though both processes are similar.

Acquisition of college players occurs either during the draft or after the draft through free agency. Before the draft, prospects are scouted for multiple years. Similarly, data is collected on these prospects in PFF.

As a football operations employee with an analytics background, I can help my team by first talking to the coaches and scouting department and find out what they value most in players. This includes heights and weights by position; for defensive players, how well they defend the run and how well they defend the pass; for quarterbacks, how effective they are on deep passes and sensing the rush; and many other statistics and grades. Not every player can be great at everything, so some traits need to be weighed more heavily.

Based on this input, I can analyze the data in PFF and build models that favor these players' values. For this, I can use the advanced statistics in PFF Ultimate. Also, I can dive deeper by looking into player tracking and other advanced tools in PFF IQ, and I can work directly with the PFF staff to gather some of their recommendations.

As a simple example, suppose my team is looking for an interior defensive lineman entering the 2025 draft. For this example, I'm going to review only 2024 statistics and the top 30 based on PFF grade for players that played at least 200 snaps. Let's also assume that my team favors linemen who do well at stopping the run, that they play for a Power 5 school, and that they line up on the inside. Therefore, I will use these factors and weights in my analysis:

- Overall PFF grade, 0.4
- PFF run defense grade, 0.5
- Whether they were in a Power 5 school, 0.05
- Versatility along the defensive line, 0.05

Below is a snapshot of these 30 defensive linemen from PFF Ultimate.

RANK	PLAYER	#	POS	#G	TEAM	TOT	RDEF	PRSH	COV	DEF	RDEF	TACK	PRSH	COV	TOT	SK
1	Mason Graham	# D55	DI	12	MICHIGAN	548	210	338	0	91.1	92.6	78.0	81.1	59.0	34	5
2	Peyton Zdroik	# D96	DI	10	AIR FORCE	382	176	206	0	90.8	89.5	59.1	90.4	-	26	2
3	Santana Hopper	# D29	DI	10	APP STATE	390	180	210	0	89.8	86.1	64.8	84.8	58.0	28	7
4	Aeneas Peebles	# D16	DI	12	VA TECH	516	223	290	3	89.3	78.5	55.3	91.2	60.6	37	3
5	Walter Nolen	# D02	DI	12	OLE MISS	551	216	334	1	89.0	91.7	79.0	74.6	67.9	30	6
5	Alfred Collins	# D95	DI	13	TEXAS	464	230	233	1	89.0	89.6	83.8	71.1	73.5	15	1
7	Darius Alexander	# D09	DI	11	TOLEDO	555	254	296	5	87.9	91.1	62.7	75.3	58.8	33	3
8	Tim Keenan III	# D96	DI	12	ALABAMA	420	200	220	0	84.6	88.9	78.0	70.9	62.2	13	3
9	David Gusta	# D60	DI	12	WASH STATE	579	216	358	5	84.4	79.4	49.9	84.8	57.9	29	1
10	Derrick Harmon	# D55	DI	12	OREGON	486	193	292	1	84.3	77.4	29.8	88.7	60.2	49	4
11	Skyler Gill-Howard	# D00	DI	12	N ILLINOIS	449	190	251	8	83.8	87.9	72.2	74.9	60.2	29	5
11	Josaih Hayes	# D97	DI	3	KENTUCKY	80	50	30	0	83.8	82.4	54.6	72.7	-	2	0
13	Kenneth Grant	# D78	DI	12	MICHIGAN	547	217	329	1	83.7	87.5	69.0	75.3	58.4	27	3
14	CJ West	# D08	DI	13	INDIANA	420	178	238	4	83.6	88.1	47.5	73.0	57.6	25	1
15	Will Whitson	# D44	DI	4	COAST CAR	182	79	103	0	83.2	78.5	66.2	78.2	60.9	11	2
16	Thor Griffith	# D50	DI	12	LOUISVILLE	304	133	170	1	82.6	82.5	72.3	66.8	83.5	13	2
17	Dominique Ratcliff	# D17	DI	12	TEXAS ST	318	151	166	1	82.5	90.2	65.5	66.5	59.1	17	2
18	Rayshaun Benny	# D26	DI	10	MICHIGAN	283	109	173	1	82.4	85.0	83.8	70.9	64.6	15	2
19	T.J. Sanders	# D90	DI	12	S CAROLINA	425	188	236	1	82.3	76.5	65.0	82.3	60.6	32	5
19	Kyonte Hamilton	# D48	DI	12	RUTGERS	588	237	351	0	82.3	75.8	72.8	80.0	62.6	25	4
21	Bernard Gooden	# D03	DI	12	USF	512	221	291	0	82.2	87.9	67.6	72.1	58.4	30	2
22	Jared Harrison-Hunte	# D81	DI	13	SMU	561	219	341	1	82.1	77.4	61.8	78.0	70.3	37	6
23	Soane Toia	# D42	DI	12	S JOSE ST	711	354	357	0	81.4	82.9	58.0	71.8	62.4	29	5
24	Jamaree Caldwell	# D90	DI	12	OREGON	432	196	234	2	81.3	83.2	48.7	71.6	65.0	20	1
25	Peyton Price	# D09	DI	12	E MICHIGAN	483	243	238	2	81.1	77.2	59.2	78.2	71.0	21	4
26	Nick Buchys	# D56	DI	1	ARMY	5	1	4	0	80.9	60.0	-	73.8	-	1	0
26	Jared Dawson	# D93	DI	10	LOUISVILLE	294	129	164	1	80.9	84.5	74.4	69.9	63.9	12	5
28	Nasir Washington	# D52	DI	12	MIAMI OH	399	189	209	1	80.8	85.9	83.1	64.0	64.1	3	0
29	Tommy Ziesmer	# D96	DI	4	KENTUCKY	15	9	6	0	80.7	73.4	75.0	70.9	60.0	1	0
29	Simeon Barrow Jr.	# D10	DI	12	MIAMI FL	378	135	243	0	80.7	83.3	73.4	70.5	72.6	28	7

Figure 1: Snapshot of Defensive Linemen from PFF Ultimate

Next, I can work with this data in Excel by clicking the “CSV” button in PFF Ultimate to convert it to a CSV file. Then, to normalize the data, I will convert all the factors to a scale of 0 to 100. (I don’t need to do this for the overall PFF grades and the run defense PFF grades because they are already based on a scale of 0 to 100.) For the Power 5 school factor, I will use a score of 100 if the player is in a Power 5 school and 0 if the player is not in a Power 5 school.

To evaluate versatility along the defensive line, I will look at the number of snaps at each spot along the defensive line (at the a-gap, at the b-gap, over the tackle, and outside the tackle) and compute a percentage for each spot. Then, I will determine the maximum percentage, so the most versatile lineman will have a maximum percentage of 25% while the least versatile lineman will have a maximum percentage of 100%. Therefore, using a scale of 0 to 100, a percentage of 25% means a score of 100, and a percentage of 100 means a score of 0.

Below is a table showing the scores from all the factors for these 30 defensive linemen.

Player	School	Overall Grade	Run Defense Grade	Power 5	Versatility
Mason Graham	MICHIGAN	91.1	92.6	100	32.7
Peyton Zdroik	AIR FORCE	90.8	89.5	0	31.8
Christian Dowell	TENN MARTN	89.9	91	0	11.3
Aeneas Peebles	VA TECH	89.3	78.5	100	33.9
Walter Nolen	OLE MISS	89	91.7	100	35.7
Alfred Collins	TEXAS	89	89.6	100	68.1
Darius Alexander	TOLEDO	87.9	91.1	0	17.0
Taylor Bolesta	STNY BROOK	85.5	78.5	0	55.5
Tim Keenan III	ALABAMA	84.6	88.9	100	53.0
Derrick Harmon	OREGON	84.3	77.4	100	55.0
Kenneth Grant	MICHIGAN	83.7	87.5	100	43.0
CJ West	INDIANA	83.6	88.1	100	63.8
Jeremiah Williams	JACKSON ST	83.6	88.9	0	48.0
Nick Karika	DELAWARE	83.5	88.9	0	25.0
Thor Griffith	LOUISVILLE	82.6	82.5	100	32.1
Rayshaun Benny	MICHIGAN	82.4	85	100	44.0
Kyonte Hamilton	RUTGERS	82.3	75.8	100	83.1
T.J. Sanders	S CAROLINA	82.3	76.5	100	19.9
Bernard Gooden	USF	82.2	87.9	0	53.1
Jared Harrison-Hunte	SMU	82.1	77.4	100	39.5
Zeke Birch	WEBER ST	81.8	84.6	0	24.3
Carson Primrose	RHODE ISLD	81.5	84.1	0	37.5
Soane Toia	S JOSE ST	81.4	82.9	0	68.6
Jamaree Caldwell	OREGON	81.3	83.2	100	52.8
Peyton Price	E MICHIGAN	81.1	77.2	0	34.0
Devin Love	S ILLINOIS	80.9	80.7	0	53.4
Nasir Washington	MIAMI OH	80.8	85.9	0	1.4
Jaden Taylor	NC CENT	80.8	88.5	0	20.5
Simeon Barrow Jr.	MIAMI FL	80.7	83.3	100	69.3
Ethan Rodriguez	CAL POLY	80.7	83.5	0	29.6

Figure 2: Defensive Linemen Scores based on Scale of 0 to 100

Now, I can compute an overall rating based on the weights of importance mentioned earlier times each of the scores listed above and then adding them together. For example, Mason Graham's rating would be (91.1*0.4) + (92.6*0.5) + (100*0.05) + (32.7*0.05) = 89.4. Below are the ratings for all the players based on this calculation.

Player	School	Overall Grade	Run Defense Grade	Power 5	Versatility	Rating
Mason Graham	MICHIGAN	91.1	92.6	100	32.7	89.4
Alfred Collins	TEXAS	89	89.6	100	68.1	88.8
Walter Nolen	OLE MISS	89	91.7	100	35.7	88.2
Tim Keenan III	ALABAMA	84.6	88.9	100	53.0	85.9
CJ West	INDIANA	83.6	88.1	100	63.8	85.7
Kenneth Grant	MICHIGAN	83.7	87.5	100	43.0	84.4
Peyton Zdroik	AIR FORCE	90.8	89.5	0	31.8	82.7
Rayshaun Benny	MICHIGAN	82.4	85	100	44.0	82.7
Simeon Barrow Jr.	MIAMI FL	80.7	83.3	100	69.3	82.4
Christian Dowell	TENN MARTN	89.9	91	0	11.3	82.0
Jamaree Caldwell	OREGON	81.3	83.2	100	52.8	81.8
Aeneas Peebles	VA TECH	89.3	78.5	100	33.9	81.7
Darius Alexander	TOLEDO	87.9	91.1	0	17.0	81.6
Thor Griffith	LOUISVILLE	82.6	82.5	100	32.1	80.9
Jeremiah Williams	JACKSON ST	83.6	88.9	0	48.0	80.3
Derrick Harmon	OREGON	84.3	77.4	100	55.0	80.2
Kyonte Hamilton	RUTGERS	82.3	75.8	100	83.1	80.0
Bernard Gooden	USF	82.2	87.9	0	53.1	79.5
Nick Karika	DELAWARE	83.5	88.9	0	25.0	79.1
Jared Harrison-Hunte	SMU	82.1	77.4	100	39.5	78.5
Jaden Taylor	NC CENT	80.8	88.5	0	20.5	77.6
Soane Toia	S JOSE ST	81.4	82.9	0	68.6	77.4
T.J. Sanders	S CAROLINA	82.3	76.5	100	19.9	77.2
Carson Primrose	RHODE ISLD	81.5	84.1	0	37.5	76.5
Zeke Birch	WEBER ST	81.8	84.6	0	24.3	76.2
Taylor Bolesta	STNY BROOK	85.5	78.5	0	55.5	76.2
Ethan Rodriguez	CAL POLY	80.7	83.5	0	29.6	75.5
Devin Love	S ILLINOIS	80.9	80.7	0	53.4	75.4
Nasir Washington	MIAMI OH	80.8	85.9	0	1.4	75.3
Peyton Price	E MICHIGAN	81.1	77.2	0	34.0	72.7

Figure 3: Defensive Linemen Ratings based on Example Calculation

Again, this is a simple example. I would probably dig deeper into PFF Ultimate and PFF IQ to find other insights that I could suggest coaches and scouts for further analysis. Also, I would likely look at multiple years for players instead of just their last year.

Use of PFF for Veteran Player Acquisition

As stated, the process for using PFF in research for acquiring veteran players is similar to college players. The data is located in a different place, and there may be some different metrics as well. Also, I imagine our scouting department would like to look the entire career of players for this analysis, including their college career (or before their pro career).

Using PFF to Scout Upcoming Opponents

As a football operations employee, I can also help my coaching staff with pre-game planning by using PFF to investigate any trends from my upcoming opponents. Here are several quick examples that I found from 2024 regular season statistics in PFF Ultimate.

- Arizona Cardinals quarterback Kyler Murray was the 6th most blitzed quarterback in 2024, and it was quite effective because his PFF grade when blitzed dropped 19.9 points, which was a league high.
- The Pittsburgh Steelers put up the best pass rush grade in 2024 with 4 players out of the top 11 in the league for pass rush grades. They lost their last 4 games, in which their team pass rush grade dropped about 20 points, so something may have been done strategically to neutralize the pass rush and, therefore, contribute to the losses.
- When it comes to testing defensive backs, Derek Stingley Jr. of the Houston Texans would not be a good one to test. If he's in man coverage, the passer rating against him is a low 25.5. If he's in zone, it's not much better at 43.0. On the other hand, if safety P.J. Locke of the Denver Broncos is in man coverage, the passer rating against him is 153.6, and in zone, it's a little lower at 110.4.

- PFF grade-wise, running back Jonathan Taylor of the Indianapolis Colts had one of the worst seasons of his career. However, he still ranked 4th for rushing yards, averaging 4.7 yards per carry. The Colts offensive line was not one of the best in the NFL, as only guard Quenton Nelson and tackle Bernhard Raimann had over 200 snaps and posted a grade over 80. Overall, Taylor just took advantage of good opportunities as he had few splashy plays and low yards after contact.
- Running back Derrick Henry also had great rushing statistics in 2024 and great PFF rushing grades to match. I have much respect for Henry and the Baltimore Ravens offense, but I wonder if one way to slow him down would be to load the box and make the Ravens throw the ball when he's on the field. Of the 635 plays Henry was in, he rushed the ball over 50% of them. And when he wasn't running the ball, his grade was about 20 points lower as a receiver, about 30 points lower as a pass blocker, and about 40 points lower as a run blocker.

Similar to the NFL draft example, I would probably dig deeper into PFF Ultimate and PFF IQ to further investigate these points and other possible strategies.

Using PFF to Audit My Own Team

PFF can also be used to check my own team. I can use the grading system and other statistics to confirm which players are doing well for my team. I can also use PFF to make sure our play calling has a good mix, so the team is not constantly doing the same plays.

Lastly, I can benchmark my team against other teams to see where we excel and where we fall short.

Conclusion

Pro Football Focus helps football teams in scouting and data analysis by using their grading system as well as their advanced statistics, player tracking, and consultation. These tools are available through other sources, but PFF provides a “one stop shop” to include them all. Furthermore, PFF has the 15 years of experience to support the quality of their products. For new football teams that do not incorporate this level of analysis, PFF provides at least a good starting point to help them get that competitive edge.