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NFL Draft Pick Research

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What NFL Positions Have the Highest Return on Early Draft Investment?

Summary of the Data

To articulate the methodology behind this comprehensive dataset, it's important to understand the parameters and rationale used in the analysis. This dataset meticulously details the performance metrics of first-round NFL draft picks from 2013 to 2019, broken down by position, with a focus on three key criteria: Longevity, Consistency, and Star Power.

- Longevity: This is measured by whether the player is still a starter. Longevity is a crucial indicator of a player's durability and the sustained trust placed in them by their teams. It provides insights into how well players adapt to the professional level and maintain their performance over time.
- Consistency: This is gauged by the number of times a player has made multiple Pro Bowls. The Pro Bowl selection is a significant marker of a player's performance, as it recognizes excellence in the field. By focusing on multiple selections, the analysis aims to drown out fluke performance years and highlight those players who demonstrate consistent excellence over their careers.
- **Star Power**: Determined by being selected as an All-Pro. This is a more exclusive accolade than Pro Bowl selections, as it places players in elite company, recognizing them as the best at their position in a given year. This category underscores the peak performance level of players and their impact on the game.

These categories were carefully selected not only to evaluate the players' performance but also to balance the varying career stages of the draftees. For instance, a player drafted in 2013 is less likely to still be a starter due to the natural progression of an NFL career, but they are more likely to have accumulated multiple Pro Bowls. Conversely, a player drafted more recently, like in 2019, has had less time to earn multiple Pro Bowl selections but is more likely to still be starting, reflecting their current standing in the league.

By employing these parameters, the dataset offers a holistic view of the careers of first-round picks, highlighting their longevity, consistency, and star power in the NFL. This approach allows for a nuanced understanding of player development and success within the league, across different positions and draft years. Note: In all data, decimals are used for ties in rank.

Data: First Round NFL Draft Picks (2013-2019)

Position	Still Starter	Longevity Rank	Multiple Pro Bowls (%)	Consistency Rank	All- Pro (%)	Star Power Rank	Draft Success Rank
OG	50	4	40	2	30	1	7
OLB	65	1	35	4	18	5	10
С	50	4	50	1	17	6	11
OT	62	2	19	8.5	15	7	17.5
RB	17	13	39	3	28	2	18
S	44	7	19	8.5	19	3	18.5
QB	40	8	30	5	10	8	21
CB	29	12	29	6	19	3	21
DT	48	6	22	7	9	9.5	22.5
MLB	36	9.5	18	10	9	9.5	29
TE	50	4	12	13	0	13	30
DE	36	9.5	16	12	8	11	32.5
WR	33	11	17	11	4	12	34

Figure 1: Positional Longevity Graph

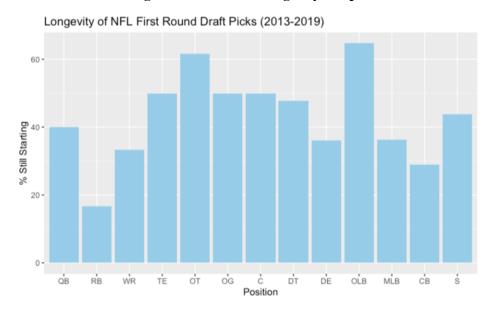


Figure 2: Positional Consistency Graph

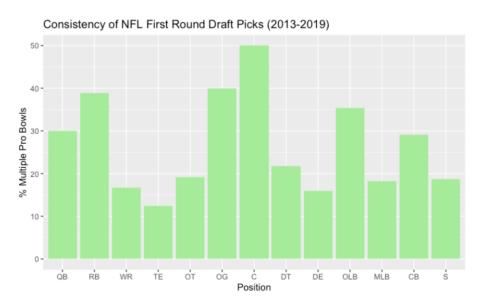
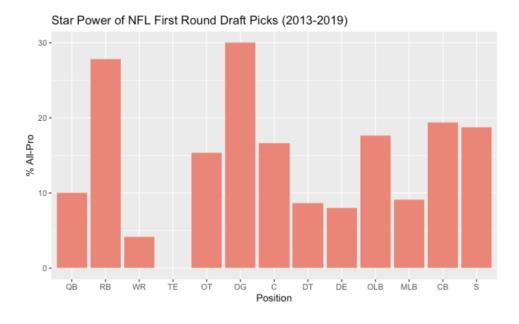


Figure 3: Positional Star Power Graph



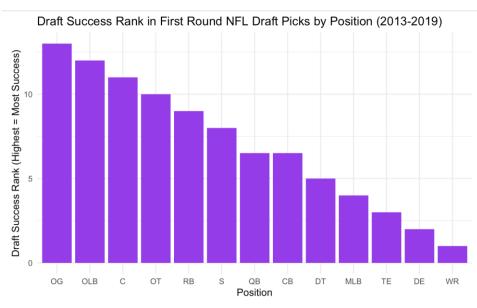


Figure 4: Overall Draft Success Rank Graph

Pulling from a previous data project I did, the rough order in value of NFL positions based on their elite tier (elite tier used as we are drafting in first round) player salary is as follows:

- 1. QB
- 2. DE/OLB
- 3. DT
- 4. WR
- 5. OT
- 6. CB
- 7. MLB
- 8. OG
- 9. S
- 10. RB
- 11. TE
- 12. C

Adding this column to our existing data, we see this updated table:

Data: First Round NFL Draft Picks (2013-2019)

			Multiple					
	Still		Pro		All-	Star	Draft	Position
	Starter	Longevity	Bowls	Consistency	Pro	Power	Success	Value
Position	(%)	Rank	(%)	Rank	(%)	Rank	Rank	Rank

^{*}This is based on objective salary data. I am not making my own argument on which positions are most valuable.

OG	50	4	40	2	30	1	7	9
OLB	65	1	35	4	18	5	10	2.5
С	50	4	50	1	17	6	11	13
OT	62	2	19	8.5	15	7	17.5	6
RB	17	13	39	3	28	2	18	11
S	44	7	19	8.5	19	3	18.5	10
QB	40	8	30	5	10	8	21	1
СВ	29	12	29	6	19	3	21	7
DT	48	6	22	7	9	9.5	22.5	4
MLB	36	9.5	18	10	9	9.5	29	8
TE	50	4	12	13	0	13	30	12
DE	36	9.5	16	12	8	11	32.5	2.5
WR	33	11	17	11	4	12	34	5

Creating one final table, we can add the "Draft Success" rank and the "Positional Value" rank to create an argument for the most effective first round draft position, "Overall Draft ROI Rank":

Overall Draft ROI Rank

Position	Draft Success Rank	Positional Value Rank	Overall Draft ROI Rank
OLB	2	2.5	1
QB	7	1	2
OT	4	6	3.5
OG	1	9	<mark>3.5</mark>
DT	9	4	<mark>5</mark>
DE	12	2.5	<mark>6</mark>
CB	8	7	7
C	3	13	9
S	6	10	9
RB	5	11	9

MLB	10	8	<mark>11.5</mark>
WR	13	5	<mark>11.5</mark>
TE	11	12	<u>13</u>

Therefore, I argue that the highlighted column, using both draft success rates and positional value, presents the greatest return on investment in where to use first round capital in the NFL Draft.

Sources of Uncertainty

In analyzing my dataset, I've come across several limitations that are worth noting. One significant issue is the categorization of Defensive Ends (DEs) and Outside Linebackers (OLBs), particularly concerning the "EDGE" role. This categorization might be misleading, as off-ball OLBs have shown different performance trends compared to DEs. Another critical factor is the evolution of the NFL, especially over the past five years. This is particularly evident in the wide receiver position, where players now seem to be more NFL-ready straight out of college than they were before. This evolution could potentially skew the accuracy of my dataset in reflecting current trends and player performances. Position changes also add to the complexity; for instance, Justin Pugh, initially drafted as an Offensive Tackle (OT), now plays as a starting Offensive Guard (OG). Furthermore, the case of Cordarrelle Patterson, who has achieved multiple Pro Bowl and All-Pro selections, poses another challenge. In my dataset, I did not count this data since he was selected as a Returner, not as a Running Back (RB). Additionally, the Pro Bowl selection process, heavily influenced by fan voting, may not always accurately reflect a player's performance or position, further complicating the analysis. Every position also has its unique importance in the team's dynamics, with some roles like an elite QB having a potentially greater impact than others, such as an elite RB. For a more detailed comparison of specific positions, such as QB vs. RB, I have conducted another project, available on my GitHub (https://github.com/PJakeCar120/Projects/tree/main), that delves into these nuances, highlighting the different values and impacts of various positions in the NFL landscape.

Sources Used

[&]quot;Drafthistory.Com." DraftHistory.Com, www.drafthistory.com/. Accessed 18 Dec. 2023.

[&]quot;Pro Football Stats, History, Scores, Standings, Playoffs, Schedule & Records." *Pro*, <u>www.pro-football-reference.com/</u>. Accessed 18 Dec. 2023.