

Charlotte FC: Roster Efficiency & Player Value Report

1. EXECUTIVE SUMMARY

Charlotte FC demonstrates strong roster efficiency, with a high percentage of valuable players and a negative average impact across the squad. The single greatest strength is the Designated Player group, which has consistently delivered elite negative percent change values, particularly in 2022 and 2024. The most urgent roster need is the 2025 Designated Forward group, where both players show positive percent change (team improves without them), representing a significant reversal in DP efficiency.

2. PLAYER ABSENCE IMPACT METRIC

The *Player Absence Impact* metric, derived from the Lasso regression model, quantifies an individual player's marginal contribution to team performance. The process simulates the team's Pythagorean Expectation (PE) score with the player on the roster and then recalculates it after removing that single player.

The resulting **percent change** (% change) is the key indicator:

- **Negative percent change** (e.g., -25.5%) means the team's PE score *decreases* without the player, identifying a **valuable** asset.
- **Positive percent change** means the team's PE score *increases* without the player, identifying a **replaceable** or potentially harmful contract.

This metric allows the front office to evaluate roster construction efficiency by isolating each player's true on-field impact.

3. ROSTER HEALTH OVERVIEW

- **Genuinely Impactful (Percent change < -5.0%): 7.9%** (9 of 114 player-seasons). These players significantly hurt the team if removed.
- **Not Impactful / Replaceable (Percent change > 5.0%): 3.5%** (4 of 114 player-seasons). The team performs better without these players.

Team Summary (from team_summary.csv):

- Total player-seasons analyzed: 114
- Percentage of roster that is valuable (percent change < 0): **46.5%**
- Average percent change across all players: **-0.92%** (net-negative, meaning on average the team is better with these players)
- Average impact magnitude: 1.8%

4. DESIGNATED PLAYER ROI AUDIT

Player	Year	Salary	PE % change	Value Verdict
2022 F	2022	\$2,258,000	-25.54%	Elite Core
2023 F	2023	\$2,258,000	-20.89%	Elite Core
2024 F (Young DP, Intl.)	2024	\$2,448,500	-35.28%	Elite Core
2022 F	2022	\$1,017,000	+2.99%	Marginal
2023 F	2023	\$1,217,000	+2.65%	Marginal
2023 F	2023	\$1,142,250	+2.43%	Marginal
2023 M	2023	\$999,375	-0.44%	Core (Marginal)
2022 M (Young DP)	2022	\$325,600	+0.05%	Neutral
2025 F (Intl.)	2025	\$2,751,667	+2.02%	Harmful
2025 F (Intl.)	2025	\$2,548,500	+5.79%	Harmful

- **Flagged (Percent change < 0 - Valuable):** 4 of 10 Designated Player seasons show strong negative impact. The 2022, 2023, and 2024 DPs are elite.
- **Flagged (Percent change > 0 - Harmful): 4 players** – most notably the two 2025 Designated Forwards (+2.02%, +5.79%). This represents a critical decline in DP efficiency. The 2022 second DP (+2.99%) and 2023 second/third DPs (+2.65%, +2.43%) are also marginal.

5. ALLOCATION MONEY EFFICIENCY (TAM / U22-INITIATIVE)

- **TAM Contributors (Negative Percent change):** TAM players are a clear strength. Most TAM players show negative percent change, including a 2022 D TAM (-0.56%), 2022 GK TAM (-1.80%), 2023 M TAM (-0.11%), 2023 D TAM (-0.42%), 2023 GK TAM (-2.74%), 2023 D TAM (-0.38%), 2024 D TAM players (-1.26%, -1.49%, -1.44%), and 2025 TAM players (-1.29%, -3.56%, -3.94%, -3.30%, -2.83%). One 2025 M TAM is neutral (+0.05%).
- **U22-Initiative Impact:** U22 slots are generally effective but with some exceptions:
 - 2022 F U22: -0.05% (valuable)
 - 2023 F U22: -1.77% (valuable)
 - 2024 F U22: +0.81% (marginal)
 - 2024 F U22 (Intl.): +0.77% (marginal)
 - 2024 M U22 (Intl.): +0.18% (marginal)
 - 2025 F U22: -1.20% (valuable)
 - 2025 F U22 (Intl.): -3.92% (valuable)

- 2025 M U22 (Intl.): +0.11% (marginal)
- 2025 M U22 (Intl.): +0.07% (marginal)

Top 3 TAM "Steals" (Most Negative Percent change):

1. **2025 D TAM** (\$1,080,000, -3.94%)
2. **2025 D TAM** (\$1,020,000 (Intl.), -3.30%)
3. **2025 D TAM** (\$1,127,750, -3.56%)

6. HOMEGROWN PLAYER EVALUATION

Player	Year	Salary	PE % change
2025 M Homegrown	2025	\$133,026	+0.02%
2025 F Homegrown	2025	\$124,934	-3.80%
2024 F Homegrown	2024	\$104,650	-0.07%
2024 M Homegrown	2024	\$97,742	+0.11%
2023 M Homegrown	2023	\$75,386	0.00%
2023 D Homegrown	2023	\$69,360	-2.14%

- **Ready for Roster Promotion (Negative Percent change + Low Salary):**
 - **2025 F Homegrown (\$124,934, -3.80%):** Strong negative impact from a low-cost supplemental forward, approaching the elite threshold (-5%).
 - **2023 D Homegrown (\$69,360, -2.14%):** Excellent value from a homegrown defender.
 - **2024 F Homegrown (\$104,650, -0.07%):** Marginal but negative impact at a reasonable salary.

7. INTERNATIONAL SLOT OPTIMIZATION

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2024 F (Young DP)	2024	F	\$2,448,500	-35.28%	Yes
2024 F U22	2024	F	\$427,700	+0.77%	Marginal
2024 M U22	2024	M	\$406,250	+0.18%	Marginal
2024 D TAM	2024	D	\$353,083	+2.26%	No
2024 M	2024	M	\$297,944	+0.16%	No
2024 F	2024	F	\$101,769	-0.12%	Yes
2024 D	2024	D	\$101,311	+0.28%	No
2025 F	2025	F	\$2,751,667	+2.02%	No

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2025 F	2025	F	\$2,548,500	+5.79%	No
2025 M TAM	2025	M	\$1,545,163	-1.29%	Yes
2025 D TAM	2025	D	\$1,020,000	-3.30%	Yes
2025 D	2025	D	\$541,250	+1.95%	No
2025 M U22	2025	M	\$466,250	+0.11%	No
2025 F U22	2025	F	\$452,700	-3.92%	Yes
2025 F	2025	F	\$341,187	-4.91%	Yes
2025 M	2025	M	\$337,944	+0.09%	No
2025 M U22	2025	M	\$269,500	+0.07%	No
2023 D (Gen. adidas)	2023	D	\$74,860	-2.21%	Yes

- **Flagged Slot Misuse (Percent change > 5%):**

- **2025 F (\$2,548,500, +5.79%):** Team improves nearly 6% without this high-cost international Designated Forward.

8. POSITIONAL DEPTH AUDIT

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
F (Forward)	15	7	Yes	No (2025 DPs are harmful; early DPs were elite but departed)
M (Midfielder)	15	7	No	Yes (Most midfielders show neutral or slightly negative impact; 2023 M DP is valuable)
D (Defender)	18	5	No	Yes (TAM defenders consistently show negative impact; homegrown defenders add value)
GK (Goalkeeper)	5	2	No	Yes (TAM GKs show negative impact; 2025

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
				supplemental GK shows -3.17%)

- **Critical Need:** Forward position. The 2025 Designated Forwards (+2.02%, +5.79%) are a significant problem. The team has failed to replace the elite DP production from 2022-2024.
- **Strength:** Defender and Midfielder groups contain multiple TAM and homegrown players with consistent negative impact.

9. SALARY vs. VALUE MATRIX

Quadrant	Definition	Players (Top 5 or All)
CORE ASSET	% change < 0 & Salary > \$500K	2024 F DP (\$2.45M, -35.3%), 2022 F DP (\$2.26M, -25.5%), 2023 F DP (\$2.26M, -20.9%), 2025 M TAM (\$1.55M, -1.29%), 2025 D TAM (\$1.13M, -3.56%)
HIDDEN GEM	% change < 0 & Salary ≤ \$500K	2025 F U22 (\$452.7K, -3.92%), 2025 F (\$341K, -4.91%), 2025 F Homegrown (\$125K, -3.80%), 2023 D Homegrown (\$69K, -2.14%), 2024 F Homegrown (\$105K, -0.07%)
OVERPAID	% change ≥ 0 & Salary > \$500K	All in this quadrant: 2025 F DP (\$2.75M, +2.02%) , 2025 F DP (\$2.55M, +5.79%) , 2023 F DP (\$1.22M, +2.65%), 2023 F DP (\$1.14M, +2.43%), 2022 F DP (\$1.02M, +2.99%), 2024 D TAM (\$353K, +2.26%)
REPLACEABLE	% change ≥ 0 & Salary ≤ \$500K	Most senior midfielders with marginal positive percent change, several U22 players, and a number of supplemental players with neutral to positive change.

10. YEAR-OVER-YEAR TRENDS

- **Designated Player ROI: Declining sharply.** 2022-2024 DPs showed elite negative impacts (-25% to -35%). The 2025 DPs (+2.02%, +5.79%) represent a catastrophic reversal. This suggests a change in scouting, targeting, or contract negotiation strategy.

- **TAM Efficiency: Excellent and consistent.** Across 2022-2025, TAM players consistently show negative percent change. This is a clear organizational strength and a model for other teams.
- **U22 Efficiency: Mixed but improving.** Early U22 players (2022-2023) were valuable. 2024 U22 players were marginal (positive). 2025 U22 players show a return to negative impact (-1.20%, -3.92%).
- **Homegrown Impact: Marginal but present.** Most homegrown players show neutral to slightly negative impact. The 2025 F Homegrown (-3.80%) is the standout. This area has room for improvement.
- **Goalkeeper Trend: Strong.** TAM GKs (2022-2023) showed negative impact. The 2025 supplemental GK shows negative impact (-3.17%). Charlotte FC extracts value from this position efficiently.

11. SUMMARY FIGURES

Figure 1 - Designation Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

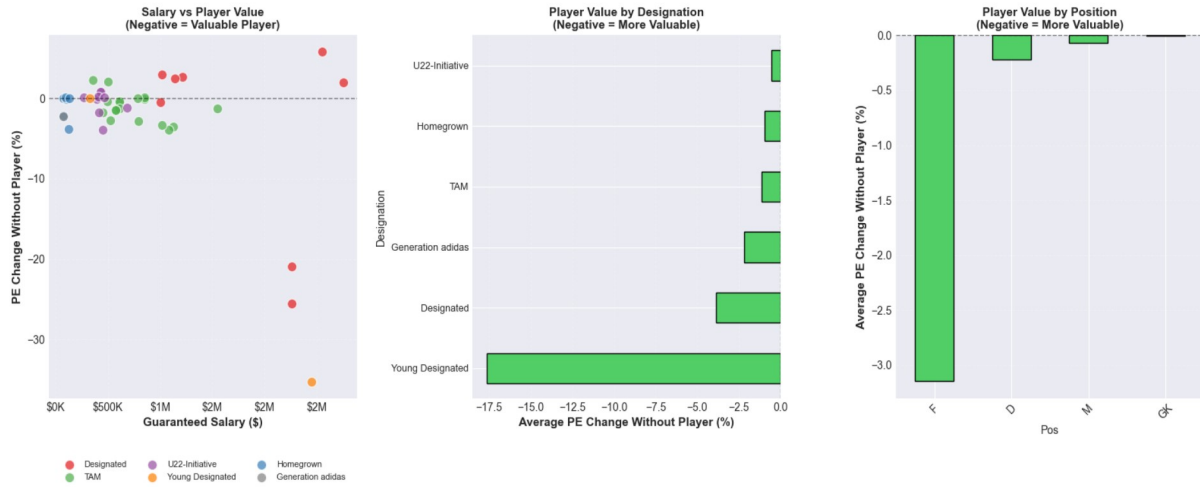


Figure 2 - International Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

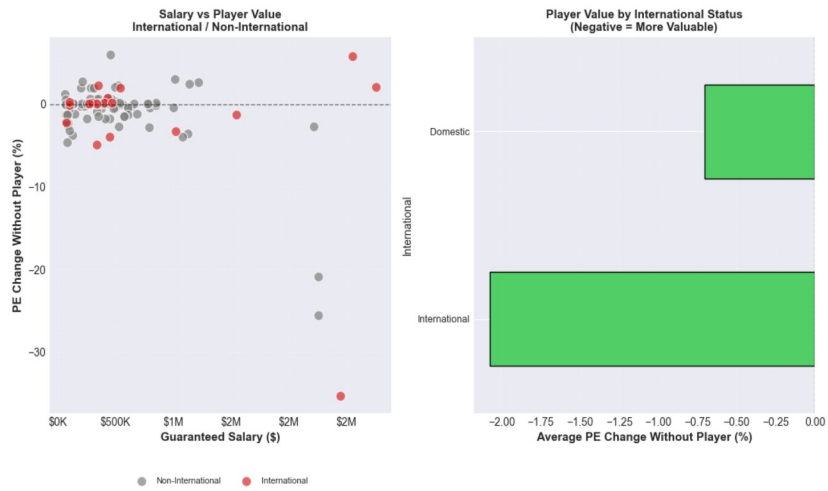


Figure 3 - Senior/Supplemental Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

