

Chicago Fire FC: Roster Efficiency & Player Value Report

1. EXECUTIVE SUMMARY

Chicago Fire's roster shows a consistently high percentage of valuable players across multiple seasons, with a notable improvement in Designated Player ROI from 2024 to 2025. The single greatest strength is the 2025 forward group, where two Designated Players show elite negative percent change values (-8.93%, -11.31%), representing a successful recent investment. The most urgent roster need is addressing the TAM and U22-Initiative players who show positive percent change, as several allocation money slots are being used on players who do not improve the team.

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., -13.7%) 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%): 19.0%** (26 of 137 player-seasons). These players significantly hurt the team if removed.
- **Not Impactful / Replaceable (Percent change > 5.0%): 10.2%** (14 of 137 player-seasons). The team performs better without these players.

Team Summary (from team_summary.csv):

- Total player-seasons analyzed: 137
- Percentage of roster that is valuable (percent change < 0): **46.7%**
- Average percent change across all players: **-0.20%** (slightly net-negative, meaning on average the team is marginally better with these players)
- Average impact magnitude: 3.1%

4. DESIGNATED PLAYER ROI AUDIT

Player	Year	Salary	PE % change	Value Verdict
2022 M	2022	\$8,153,000	-13.69%	Elite Core
2022 M	2022	\$2,360,667	-2.29%	Core (Marginal)
2023 M	2023	\$8,153,000	-1.89%	Core (Marginal)
2023 M	2023	\$1,633,333	-9.25%	Core
2024 M	2024	\$1,633,333	-5.66%	Core
2024 F (Intl.)	2024	\$3,528,044	+4.22%	Harmful
2025 F (Intl.)	2025	\$5,581,806	-8.93%	Elite Core
2025 F (Intl.)	2025	\$3,528,044	-11.31%	Elite Core
2021 F	2021	\$2,703,164	+0.08%	Neutral
2021 M	2021	\$2,358,667	-4.57%	Core
2021 F (Young DP)	2021	\$821,501	-3.46%	Core

- **Flagged (Percent change < 0 - Valuable):** 8 of 11 Designated Player seasons show negative percent change. The 2025 DPs are elite.
- **Flagged (Percent change > 0 - Harmful):** 2 players – 2024 F DP (+4.22%) and 2021 F DP (+0.08%). The 2024 DP forward represents a misallocation that was corrected in 2025.

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

- **TAM Contributors (Negative Percent change):** TAM players show mixed results. Valuable TAM contributors include a 2022 D TAM (-17.67%), 2023 D TAM (-20.53%), 2023 D TAM (-2.03%), 2023 F TAM (-1.28%), 2024 D TAM (-3.14%), 2024 F TAM (-1.08%), and 2025 D TAM players (-14.13%, -0.50%). However, several TAM players show positive percent change: 2024 D TAM (+4.19%), 2024 D TAM (+3.86%), 2024 D TAM (+4.80%), 2025 F TAM (+3.29%), and 2025 F TAM (+5.20%).
- **U22-Initiative Impact:** U22 slots are generally ineffective, with most showing positive percent change:
 - 2023 D U22: -2.28% (valuable)
 - 2023 F U22 (Intl.): -0.68% (valuable)
 - 2024 M U22: -1.58% (valuable)
 - 2024 D U22: +6.19% (harmful)
 - 2024 F U22 (Intl.): +0.72% (marginal)
 - 2025 M U22: +0.87% (marginal)

- 2025 M U22 (Intl.): +0.70% (marginal)
- 2025 D U22 (Intl.): +0.24% (marginal)
- 2025 D U22 (Intl.): -0.17% (valuable)

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

1. **2023 D TAM** (\$1,336,667, -20.53%)
2. **2022 D TAM** (\$1,336,667, -17.67%)
3. **2025 D TAM** (\$1,628,477, -14.13%)

6. HOMEGROWN PLAYER EVALUATION

Player	Year	Salary	PE % change
2025 M Homegrown	2025	\$113,400	-1.24%
2025 D Homegrown	2025	\$104,000	-1.02%
2025 M Homegrown	2025	\$88,622	-1.41%
2025 D Homegrown	2025	\$83,408	-1.50%
2024 M Homegrown	2024	\$94,383	-4.22%
2024 M Homegrown	2024	\$89,716	-4.25%
2024 D Homegrown	2024	\$71,401	-7.22%
2023 GK Homegrown	2023	\$213,246	-0.15%
2023 F Homegrown	2023	\$97,905	-1.33%
2023 D Homegrown	2023	\$67,360	-5.21%
2022 F Homegrown	2022	\$96,461	+0.16%

- **Ready for Roster Promotion (Negative Percent change + Low Salary):**
 - **2024 D Homegrown (\$71,401, -7.22%):** Elite-level negative impact from a low-cost supplemental defender. This is exceptional value.
 - **2023 D Homegrown (\$67,360, -5.21%):** Strong negative impact at a minimum salary.
 - **2024 M Homegrown (\$94,383, -4.22%) & (\$89,716, -4.25%):** Two midfielders providing strong value approaching the elite threshold.
 - **2025 Homegrown group (-1.0% to -1.5%):** Solid depth contributors across multiple positions.

7. INTERNATIONAL SLOT OPTIMIZATION

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2025 F	2025	F	\$5,581,806	-8.93%	Yes
2025 F	2025	F	\$3,528,044	-11.31%	Yes
2025 F TAM	2025	F	\$1,631,290	+3.29%	No
2025 M	2025	M	\$697,083	+0.63%	No
2025 M TAM	2025	M	\$690,000	+0.67%	No
2025 M U22	2025	M	\$660,490	+0.70%	No
2025 D	2025	D	\$555,400	+0.89%	No
2025 F	2025	F	\$427,500	+3.75%	No
2025 D U22	2025	D	\$345,500	+0.24%	No
2025 D U22	2025	D	\$307,000	-0.17%	Yes (Marginal)
2024 F	2024	F	\$3,528,044	+4.22%	No
2024 F	2024	F	\$383,500	+1.06%	No
2023 F U22	2023	F	\$470,800	-0.68%	Yes

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

- None above 5% in 2025. The 2024 F DP (+4.22%) is close but below the 5% flag threshold.

8. POSITIONAL DEPTH AUDIT

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
F (Forward)	19	8	No	Yes (2025 DPs are elite; several TAM forwards need evaluation)
M (Midfielder)	17	6	No	Yes (Designated midfielders consistently valuable; homegrown midfielders strong)
D (Defender)	27	9	No	Yes (TAM defenders show elite negative impact; homegrown)

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
				defenders excellent)
GK (Goalkeeper)	7	5	No	Mixed (Some negative, some positive; no elite impact)

- **Critical Need:** None urgent, but TAM and U22 forwards/midfielders with positive percent change should be reviewed.
- **Strength:** Defender and Midfielder groups contain multiple elite TAM and homegrown contributors. The 2025 DP forwards are also a clear strength.

9. SALARY vs. VALUE MATRIX

Quadrant	Definition	Players (Top 5 or All)
CORE ASSET	% change < 0 & Salary > \$500K	2025 F DP (\$5.58M, -8.93%), 2025 F DP (\$3.53M, -11.31%), 2022 M DP (\$8.15M, -13.69%), 2023 M DP (\$1.63M, -9.25%), 2024 M DP (\$1.63M, -5.66%)
HIDDEN GEM	% change < 0 & Salary ≤ \$500K	2024 D Homegrown (\$71K, -7.22%), 2023 D Homegrown (\$67K, -5.21%), 2024 M Homegrown (\$94K, -4.22%), 2024 M Homegrown (\$90K, -4.25%), 2023 F U22 (\$471K, -0.68%)
OVERPAID	% change ≥ 0 & Salary > \$500K	All in this quadrant: 2024 F DP (\$3.53M, +4.22%), 2025 F TAM (\$1.63M, +3.29%), 2025 F TAM (\$762K, +5.20%), 2024 D TAM (\$1.34M, +4.19%), 2024 D TAM (\$700K, +3.86%), 2024 D TAM (\$454K, +4.80%), 2023 M (\$564K, +3.92%)
REPLACEABLE	% change ≥ 0 & Salary ≤ \$500K	Several senior midfielders with marginal positive percent change, most U22 players, and a number of supplemental players with neutral to positive change.

10. YEAR-OVER-YEAR TRENDS

- **Designated Player ROI: Improving significantly.** 2021-2023 DPs were mixed (range: -13.7% to +0.08%). The 2024 F DP (+4.22%) was a clear miss. The 2025 F DPs (-8.93%, -11.31%) represent a strong correction and return to elite value.
- **TAM Efficiency: Declining.** Early TAM players (2022-2023) showed elite negative impacts (-17% to -20%). 2024-2025 TAM players are increasingly positive (harmful), suggesting a need to re-evaluate TAM targeting.
- **U22 Efficiency: Persistent underperformance.** Across 2023-2025, the majority of U22 players show positive percent change. Chicago Fire is not extracting value from this roster mechanism.
- **Homegrown Impact: Excellent and improving.** Early Homegrown players (2022) were marginal. 2023-2025 Homegrown players consistently show negative impact, with the 2024 D Homegrown (-7.22%) being elite. This is a clear organizational strength.
- **Goalkeeper Trend: Neutral.** Most goalkeepers show marginal impacts near zero, indicating neither strength nor weakness at this position.

11. SUMMARY FIGURES

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

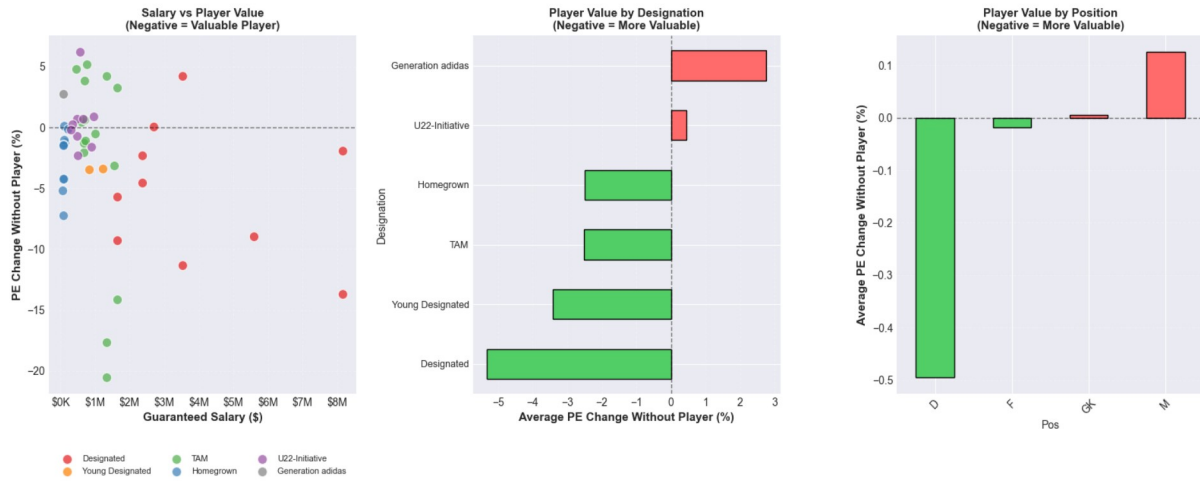


Figure 2 - International Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

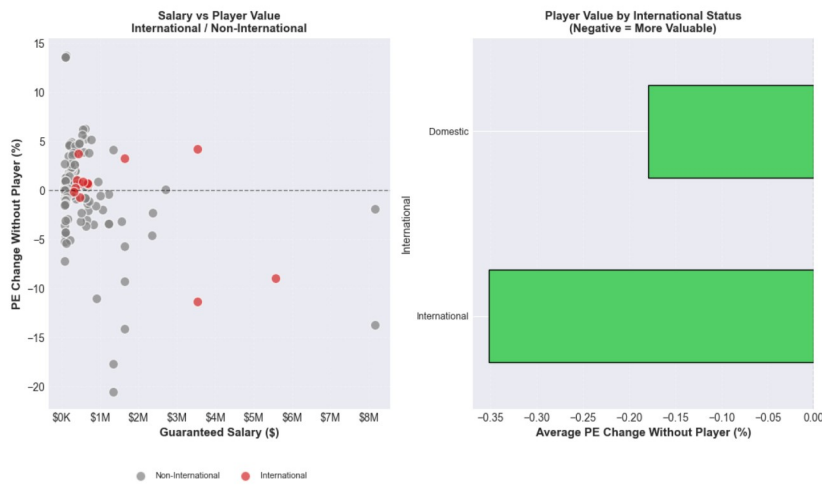


Figure 3 - Senior/Supplemental Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

