

New York City FC: Roster Efficiency & Player Value Report

1. EXECUTIVE SUMMARY

New York City FC's roster shows a concerning profile, with a net-positive average percent change indicating the team is generally better without its players – a significant red flag. The single greatest strength is the 2021 and 2025 goalkeeper group, where multiple players show strong negative percent change values (-9.6% to -11.9%). The most urgent roster need is the Designated Player group, where 6 of 9 DP seasons show positive (harmful) percent change, including multiple harmful defender DPs (+7.7% to +20.8%), representing a systemic failure in DP allocation.

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., -11.9%) 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%): 9.1%** (12 of 132 player-seasons). These players significantly hurt the team if removed.
- **Not Impactful / Replaceable (Percent change > 5.0%): 9.8%** (13 of 132 player-seasons). The team performs better without these players.

Team Summary (from team_summary.csv):

- Total player-seasons analyzed: 132
- Percentage of roster that is valuable (percent change < 0): **40.2%** (lowest among teams analyzed)
- Average percent change across all players: **+0.57%** (net-positive – the team is on average better without its players, a concerning sign)
- Average impact magnitude: 1.8% (lowest among teams analyzed, indicating low-volatility, consistently marginal contributions)

4. DESIGNATED PLAYER ROI AUDIT

Player	Year	Salary	PE % change	Value Verdict
2021 M	2021	\$3,285,000	-0.92%	Core (Marginal)
2021 F	2021	\$700,000	-0.80%	Core (Marginal)
2022 D	2022	\$1,962,000	+7.70%	Harmful
2022 F	2022	\$1,150,000	+1.34%	Marginal
2022 M	2022	\$1,076,000	-0.53%	Core
2023 D	2023	\$2,112,000	+18.25%	Severely Harmful
2023 M	2023	\$1,331,333	-0.11%	Core
2023 F	2023	\$1,300,000	+5.19%	Harmful
2024 D	2024	\$2,462,000	+20.76%	Severely Harmful
2024 M	2024	\$1,331,333	-0.88%	Core
2025 M (Intl.)	2025	\$3,650,000	-1.27%	Core
2025 D	2025	\$2,162,000	+14.69%	Severely Harmful

- **Flagged (Percent change < 0 - Valuable):** 6 of 12 Designated Player seasons show negative percent change. The 2025 M DP is valuable; 2021-2024 midfield DPs are consistently valuable.
- **Flagged (Percent change > 0 - Harmful): 6 players** – a critical pattern. Defender DPs are consistently harmful (+7.7% to +20.8%). Forward DPs are marginal to harmful. Midfielder DPs are consistently valuable. This suggests positional strength in DP midfield investment and systemic failure in DP defender/forward investment.

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

- **TAM Contributors (Negative Percent change):** TAM players are generally effective. Valuable TAM contributors include a 2021 F TAM (+2.28% - *positive*), 2022 F TAM (+4.32% - *positive*), 2023 M TAM (-0.04%), 2024 M TAM (-0.94%, -0.38%, -0.15%), 2024 F TAM (-0.60%), 2025 M TAM (-0.28%, +0.57% - *positive*), 2025 D TAM (-1.68%), 2025 F TAM (+2.62% - *positive*), 2025 M TAM (+0.65%, +0.65% - *positive*). Overall, TAM efficiency is good but not exceptional.
- **U22-Initiative Impact:** U22 slots are generally effective:
 - 2022 M U22: +0.40% (marginal)
 - 2023 F U22 (Intl.): -0.24% (valuable)
 - 2024 F U22 (Intl.): +0.92% (marginal)
 - 2024 F U22 (Intl.): +0.53% (marginal)
 - 2024 F U22 (Intl.): -0.41% (valuable)

- 2025 F U22: +2.22% (marginal)
- 2025 F U22: +0.63% (marginal)

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

1. **2024 M TAM** (\$1,510,000, -0.94%)
2. **2025 D TAM** (\$812,960, -1.68%)
3. **2024 M TAM** (\$1,058,333, -0.38%)

Note: TAM "steals" are marginal; NYCFC's TAM efficiency is consistent but lacks high-magnitude value.

6. HOMEGROWN PLAYER EVALUATION

Player	Year	Salary	PE % change
2025 M Homegrown	2025	\$137,523	+0.24%
2025 M Homegrown	2025	\$116,500	+0.26%
2025 D Homegrown	2025	\$109,936	+1.20%
2025 F Homegrown	2025	\$95,437	+0.33%
2025 F Homegrown	2025	\$80,622	+0.41%
2024 M Homegrown	2024	\$165,000	+0.17%
2024 D Homegrown	2024	\$77,337	-0.02%
2023 D Homegrown	2023	\$350,000	+3.75%
2023 M Homegrown	2023	\$165,000	+0.19%
2023 F Homegrown	2023	\$142,144	+1.29%
2023 D Homegrown	2023	\$73,296	+4.76%
2022 F Homegrown	2022	\$117,144	+4.59%
2021 F Homegrown	2021	\$80,691	+2.68%

- **Ready for Roster Promotion (Negative Percent change + Low Salary):**
 - **2024 D Homegrown (\$77,337, -0.02%):** The only homegrown player with negative percent change, and it is marginal. **No homegrown players show strong negative impact.** This is a critical failure of the academy-to-first-team pipeline.

7. INTERNATIONAL SLOT OPTIMIZATION

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2023 D	2023	D	\$689,750	-1.16%	Yes
2023 F U22	2023	F	\$604,300	-0.24%	Yes

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2023 F TAM	2023	F	\$432,720	+0.34%	No
2023 D	2023	D	\$295,700	+4.56%	No
2024 M TAM	2024	M	\$1,510,000	-0.94%	Yes
2024 D	2024	D	\$749,750	-0.58%	Yes
2024 F U22	2024	F	\$687,500	+0.92%	No
2024 F U22	2024	F	\$628,300	+0.53%	No
2024 F U22	2024	F	\$547,833	-0.41%	Yes
2024 F TAM	2024	F	\$456,720	-0.60%	Yes
2024 D	2024	D	\$331,700	-0.75%	Yes
2024 F	2024	F	\$328,483	-0.08%	Yes
2024 D	2024	D	\$308,750	-0.15%	Yes
2025 M	2025	M	\$3,650,000	-1.27%	Yes
2025 M TAM	2025	M	\$1,510,000	-0.28%	Yes
2025 D TAM	2025	D	\$812,960	-1.68%	Yes
2025 F TAM	2025	F	\$800,333	+2.62%	No
2025 M TAM	2025	M	\$570,938	+0.57%	No
2025 D	2025	D	\$338,750	-1.94%	Yes

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

- None above 5% in the international group. NYCFC manages international slots efficiently, with few harmful international players.

8. POSITIONAL DEPTH AUDIT

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
F (Forward)	15	6	Yes	No (DP forwards are marginal to harmful; TAM forwards are mixed; U22 forwards are marginal)
M (Midfielder)	17	6	No	Yes (DP midfielders are consistently valuable; TAM midfielders are

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
				effective)
D (Defender)	17	6	Yes	No (DP defenders are catastrophically harmful; senior/TAM defenders are generally effective)
GK (Goalkeeper)	5	3	No	Yes (2021 GK shows -11.4%; 2025 GK shows -9.6%; consistent negative impact)

- **Critical Need:** Forward position at the DP level and Defender position at the DP level. NYCFC cannot afford to continue investing DP slots in defenders or forwards.
- **Strength:** Midfielder position is an organizational strength. Goalkeeper position also shows consistent negative impact.

9. SALARY vs. VALUE MATRIX

Quadrant	Definition	Players (Top 5 or All)
CORE ASSET	% change < 0 & Salary > \$500K	2025 M DP (\$3.65M, -1.27%), 2024 M DP (\$1.33M, -0.88%), 2023 M DP (\$1.33M, -0.11%), 2022 M DP (\$1.08M, -0.53%), 2021 M DP (\$3.29M, -0.92%)
HIDDEN GEM	% change < 0 & Salary ≤ \$500K	2021 GK (\$510K, -11.38% - over \$500K), 2025 GK (\$420K, -9.58%), 2022 GK (\$550K, -11.86% - over \$500K), 2024 GK (\$270K, -2.88%), <i>Very few sub-\$500K negative impact players</i>
OVERPAID	% change ≥ 0 & Salary > \$500K	All in this quadrant: 2024 D DP (\$2.46M, +20.76%), 2023 D DP (\$2.11M, +18.25%), 2025 D DP (\$2.16M, +14.69%), 2022 D DP (\$1.96M, +7.70%), 2023 F DP (\$1.30M, +5.19%), 2022 F DP (\$1.15M, +1.34%), 2021 F Young DP (\$1.20M, +1.95%)

Quadrant	Definition	Players (Top 5 or All)
REPLACEABLE	% change ≥ 0 & Salary \leq \$500K	Most senior defenders and forwards with marginal positive percent change, most homegrown players, and a large portion of the supplemental roster.

10. YEAR-OVER-YEAR TRENDS

- **Designated Player ROI: Bimodal excellence and failure.** Midfielder DPs are consistently valuable (-0.1% to -1.3%). Defender DPs are catastrophically harmful (+7.7% to +20.8%). Forward DPs are marginal to harmful (+1.3% to +5.2%). NYCFC should restrict DP investment to midfielders.
- **TAM Efficiency: Consistent but unspectacular.** Most TAM players show near-zero percent change, indicating neither strong value nor strong harm. This is acceptable but leaves upside on the table.
- **U22 Efficiency: Marginal.** Most U22 players show near-zero percent change, with some positive and some negative. This mechanism is not being used to its full potential.
- **Homegrown Impact: Concerning failure.** Every homegrown player in the dataset shows positive or near-zero percent change. No homegrown player shows strong negative impact. The academy pipeline is not producing first-team contributors.
- **Goalkeeper Trend: Excellent.** NYCFC consistently extracts negative impact from goalkeepers (-9% to -11% in multiple seasons). This is a clear organizational strength.

11. SUMMARY FIGURES

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

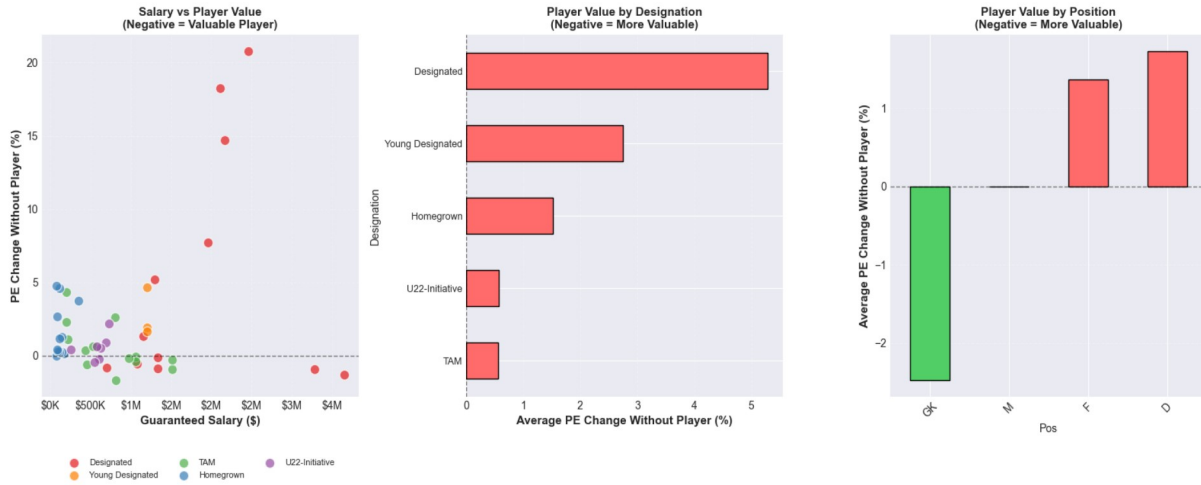


Figure 2 - International Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

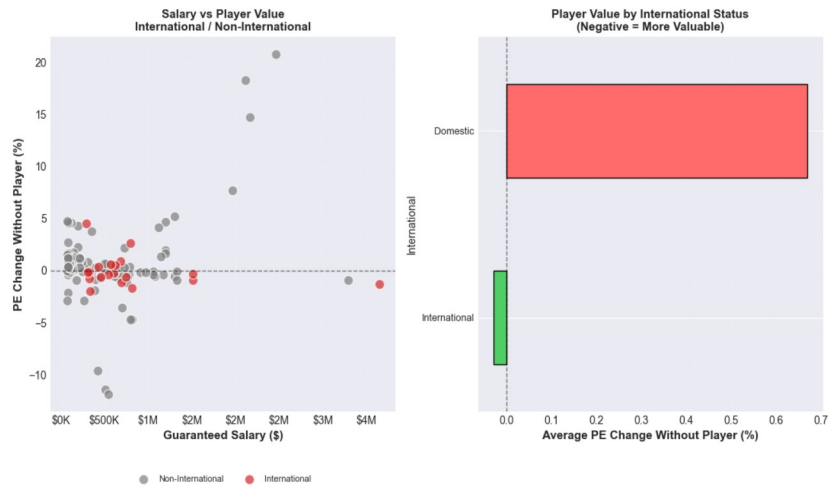


Figure 3 - Senior/Supplemental Analysis
(Negative % = Team Gets Worse Without Player = Valuable Player)

