

Houston Dynamo FC: Roster Efficiency & Player Value Report

1. EXECUTIVE SUMMARY

Houston Dynamo's roster shows a moderate percentage of valuable players, with a net-negative average impact suggesting the team is generally better with its players. The single greatest strength is the 2025 TAM defender group, which has delivered elite negative percent change values (-15% to -17%) at reasonable salaries. The most urgent roster need is the 2025 Designated Forward (+11.37%), who is actively harmful, and the overall inefficiency of the senior roster, where many players show neutral or positive percent change.

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., -18.0%) 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%): 15.0%** (23 of 153 player-seasons). These players significantly hurt the team if removed.
- **Not Impactful / Replaceable (Percent change > 5.0%): 13.1%** (20 of 153 player-seasons). The team performs better without these players.

Team Summary (from team_summary.csv):

- Total player-seasons analyzed: 153
- Percentage of roster that is valuable (percent change < 0): **42.5%**
- Average percent change across all players: **-0.51%** (net-negative, meaning on average the team is better with these players)
- Average impact magnitude: 3.5%

4. DESIGNATED PLAYER ROI AUDIT

Player	Year	Salary	PE % change	Value Verdict
2021 F	2021	\$1,352,055	+0.92%	Marginal
2021 F	2021	\$1,125,177	+0.30%	Marginal
2022 M	2022	\$5,246,875	-0.70%	Core (Marginal)
2022 F	2022	\$1,970,200	+4.76%	Marginal
2022 F	2022	\$1,179,177	+0.31%	Marginal
2023 M	2023	\$5,246,875	-0.49%	Core (Marginal)
2023 F	2023	\$2,130,200	+3.53%	Marginal
2023 F	2023	\$1,288,077	+0.25%	Marginal
2024 M	2024	\$5,246,875	-0.50%	Core (Marginal)
2024 F (Intl.)	2024	\$2,822,200	+3.05%	Marginal
2024 F	2024	\$2,290,200	+0.80%	Marginal
2025 F (Intl.)	2025	\$2,852,200	+11.37%	Harmful

- **Flagged (Percent change < 0 - Valuable):** 4 of 12 Designated Player seasons show negative percent change, all marginal (-0.5% to -0.7%). No DP shows strong negative impact.
- **Flagged (Percent change > 0 - Harmful): 8 players** – most DP seasons are positive (harmful). The 2025 F DP (+11.37%) is the most concerning, but even the "better" DPs are only marginally valuable. This represents a systemic failure to extract significant value from DP slots.

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

- **TAM Contributors (Negative Percent change):** TAM players show mixed results but include some elite values. Valuable TAM contributors include a 2022 GK TAM (-11.27%), 2023 D TAM (-3.81%), 2024 GK TAM (-7.06%), 2025 D TAM (-15.52%, -17.23%). However, many TAM players show positive or neutral percent change: 2023 F TAM (-0.02% - *valuable*), 2024 D TAM (+1.87%), 2024 M TAM (+0.02%), 2024 F TAM (+0.05%), 2024 M TAM (+0.02%), 2025 F TAM (+0.12%), 2025 M TAM (0.00%), 2025 M TAM (0.00%).
- **U22-Initiative Impact:** U22 slots are generally ineffective to marginal:
 - 2023 F U22 (Intl.): -0.03% (valuable)
 - 2024 F U22 (Intl.): +0.04% (marginal)
 - 2024 F U22 (Intl.): +0.02% (marginal)
 - 2024 F U22 (Intl.): -0.18% (valuable)
 - 2025 F U22 (Intl.): -0.07% (valuable)

- 2025 M U22: 0.00% (neutral)
- 2025 F U22 (Intl.): -0.39% (valuable)

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

1. **2025 D TAM** (\$782,672, -17.23%)
2. **2025 D TAM** (\$825,000, -15.52%)
3. **2022 GK TAM** (\$620,031, -11.27%)

6. HOMEGROWN PLAYER EVALUATION

Player	Year	Salary	PE % change
2025 D Homegrown	2025	\$277,500	+11.42%
2025 D Homegrown	2025	\$170,625	+2.90%
2025 M Homegrown	2025	\$143,063	0.00%
2025 M Homegrown	2025	\$89,272	0.00%
2024 M Homegrown	2024	\$226,533	+0.02%
2024 F Homegrown	2024	\$150,000	-0.18%
2024 M Homegrown	2024	\$118,063	0.00%
2024 GK Homegrown	2024	\$99,427	-0.77%
2024 D Homegrown	2024	\$73,594	-18.80%
2023 M Homegrown	2023	\$103,507	0.00%
2023 F Homegrown	2023	\$85,444	-0.29%
2022 GK Homegrown	2022	\$75,211	+3.50%

- **Ready for Roster Promotion (Negative Percent change + Low Salary):**
 - **2024 D Homegrown (\$73,594, -18.80%):** Elite-level negative impact from a low-cost supplemental defender. Exceptional value.
 - **2024 GK Homegrown (\$99,427, -0.77%):** Marginal but negative impact.
 - **2024 F Homegrown (\$150,000, -0.18%):** Marginal but negative impact.

7. INTERNATIONAL SLOT OPTIMIZATION

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2024 F	2024	F	\$2,822,200	+3.05%	No
2024 D TAM	2024	D	\$824,996	+1.87%	No
2024 M TAM	2024	M	\$530,618	+0.02%	No

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2024 F U22	2024	F	\$524,250	+0.04%	No
2024 F U22	2024	F	\$501,379	+0.02%	No
2024 F U22	2024	F	\$252,890	-0.18%	Yes
2024 D	2024	D	\$149,250	-21.18%	Yes
2024 M	2024	M	\$201,657	+0.02%	No
2024 F (Gen. adidas)	2024	F	\$85,151	-0.18%	Yes
2024 M	2024	M	\$71,401	0.00%	No
2025 F	2025	F	\$2,852,200	+11.37%	No
2025 M TAM	2025	M	\$771,871	0.00%	No
2025 M TAM	2025	M	\$594,618	0.00%	No
2025 F U22	2025	F	\$549,250	-0.07%	Yes
2025 D	2025	D	\$443,400	+3.07%	No
2025 F U22	2025	F	\$272,894	-0.39%	Yes
2025 D	2025	D	\$207,500	+2.80%	No
2025 M	2025	M	\$123,533	0.00%	No
2025 F (Gen. adidas)	2025	F	\$103,750	-0.39%	Yes
2023 D TAM	2023	D	\$460,532	-3.81%	Yes
2023 D	2023	D	\$134,250	-28.68%	Yes

- **Flagged Slot Misuse (Percent change > 5%):**
 - **2025 F DP (\$2.85M, +11.37%)** – severe misuse
 - **2025 D Homegrown (\$277,500, +11.42%)** – homegrown international slot misuse

8. POSITIONAL DEPTH AUDIT

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
F (Forward)	18	7	Yes	No (DP forwards are consistently positive/harmful; TAM forwards are neutral)
M (Midfielder)	18	6	No	Yes (DP midfielders are marginally)

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
				valuable; TAM midfielders are neutral)
D (Defender)	18	6	No	Yes (TAM defenders are elite; homegrown defender shows elite value; senior defenders mixed)
GK (Goalkeeper)	7	4	No	Yes (TAM goalkeepers show strong negative impact; homegrown GKs are neutral)

- **Critical Need:** Forward position at the DP level. Houston has not had a valuable Designated Forward since at least 2021.
- **Strength:** Defender position is an organizational strength, particularly TAM and homegrown defenders.

9. SALARY vs. VALUE MATRIX

Quadrant	Definition	Players (Top 5 or All)
CORE ASSET	% change < 0 & Salary > \$500K	2025 D TAM (\$783K, -17.23%), 2025 D TAM (\$825K, -15.52%), 2022 GK TAM (\$620K, -11.27%), 2024 GK TAM (\$684K, -7.06%), 2022 M DP (\$5.25M, -0.70% - <i>marginal</i>)
HIDDEN GEM	% change < 0 & Salary ≤ \$500K	2024 D Homegrown (\$74K, -18.80%), 2023 D (\$134K, -28.68%), 2022 D (\$89.5K, -17.93%), 2022 D (\$91.5K, -18.03%), 2023 D (\$135K, -28.65%)
OVERPAID	% change ≥ 0 & Salary > \$500K	All in this quadrant: 2025 F DP (\$2.85M, +11.37%) , 2024 F DP (\$2.82M, +3.05%), 2022 F DP (\$1.97M, +4.76%), 2022 D TAM (\$1.04M, +22.54%), 2022 D (\$372.5K, +10.07%), 2022 D

Quadrant	Definition	Players (Top 5 or All)
		(\$290K, +18.97%), 2022 D (\$259K, +18.66%), 2022 GK (\$139.5K, +7.80%), 2024 GK (\$280K, +7.83%)
REPLACEABLE	% change ≥ 0 & Salary \leq \$500K	Most senior midfielders with neutral percent change, many U22 players with marginal positive change, and a significant portion of the supplemental roster.

10. YEAR-OVER-YEAR TRENDS

- **Designated Player ROI: Poor and persistent.** Across 2021-2025, only 4 of 12 DP seasons show negative percent change, and those are marginal (-0.5% to -0.7%). No DP has delivered strong negative impact. The 2025 F DP (+11.37%) is the worst of a consistently underperforming group.
- **TAM Efficiency: Excellent on defense, poor elsewhere.** TAM defenders and goalkeepers deliver elite negative impacts (-11% to -17%). TAM forwards and midfielders are neutral to positive.
- **U22 Efficiency: Marginal to neutral.** Most U22 players show near-zero percent change, indicating neither strong value nor strong harm.
- **Homegrown Impact: Elite on defense, poor elsewhere.** The 2024 D Homegrown (-18.80%) is exceptional. Other homegrown players are neutral or positive.
- **Goalkeeper Trend: Strong when using TAM.** TAM goalkeepers (2022, 2024) show strong negative impact (-7% to -11%). Senior and homegrown GKs are neutral or positive.

11. SUMMARY FIGURES

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

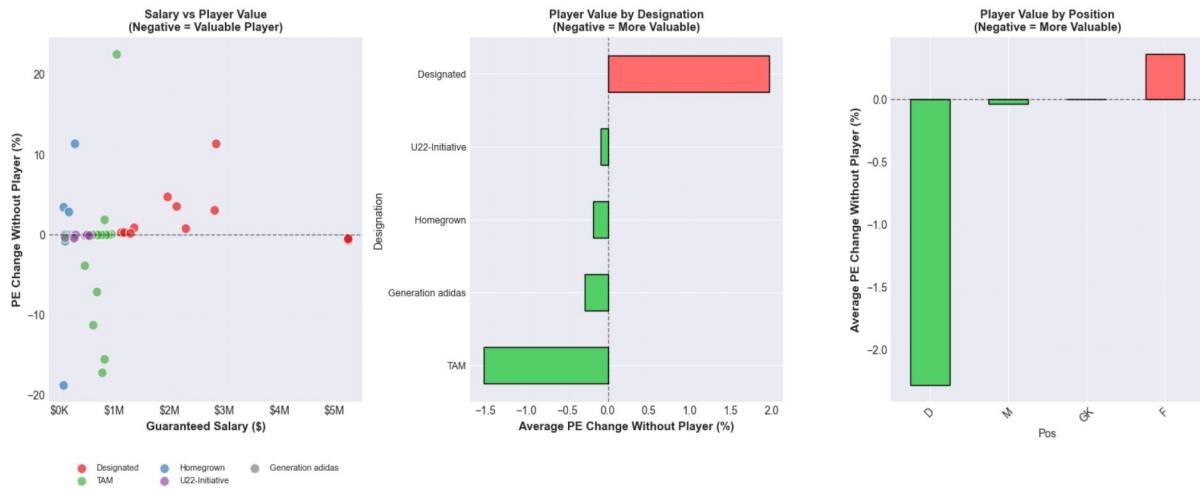


Figure 2 - International Analysis
 (Negative % = Team Gets Worse Without Player = Valuable Player)

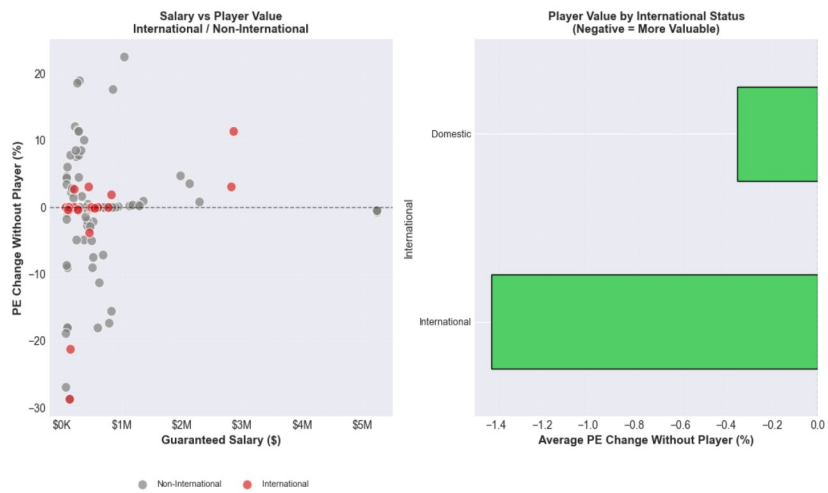


Figure 3 - Senior/Supplemental Analysis
 (Negative % = Team Gets Worse Without Player = Valuable Player)

