

# Portland Timbers: Roster Efficiency & Player Value Report

## 1. EXECUTIVE SUMMARY

The Portland Timbers' 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 2024-2025 forward group, where multiple Designated and TAM forwards show strong negative percent change values (-5.5% to -8.0%). The most urgent roster need is the Designated Midfielder position, where every DP midfielder season (7 of 7) shows positive (harmful) percent change (+4% to +16%), representing a catastrophic systemic failure at the most important roster slots.

## 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., -8.0%) 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%): 10.0%** (13 of 130 player-seasons). These players significantly hurt the team if removed.
- **Not Impactful / Replaceable (Percent change > 5.0%): 13.1%** (17 of 130 player-seasons). The team performs better without these players.

**Team Summary (from team\_summary.csv):**

- Total player-seasons analyzed: 130
- Percentage of roster that is valuable (percent change < 0): **41.5%**
- Average percent change across all players: **+0.41%** (net-positive – the team is on average better without its players, a concerning sign)
- Average impact magnitude: 2.2%

## 4. DESIGNATED PLAYER ROI AUDIT

Player	Year	Salary	PE % change	Value Verdict
<b>2021 M</b>	<b>2021</b>	<b>\$2,313,333</b>	<b>+10.26%</b>	<b>Harmful</b>
2021 F	2021	\$1,392,000	-2.73%	<b>Core</b>
2021 F	2021	\$908,758	-0.94%	<b>Core (Marginal)</b>
2022 F	2022	\$1,803,000	-0.70%	<b>Core (Marginal)</b>
<b>2022 M</b>	<b>2022</b>	<b>\$1,708,000</b>	<b>+8.10%</b>	<b>Harmful</b>
2022 F	2022	\$976,758	-0.30%	<b>Core (Marginal)</b>
<b>2023 M (Intl.)</b>	<b>2023</b>	<b>\$2,230,000</b>	<b>+4.19%</b>	<b>Harmful</b>
2023 F	2023	\$1,803,000	-1.51%	<b>Core</b>
<b>2023 M</b>	<b>2023</b>	<b>\$1,748,000</b>	<b>+0.75%</b>	<b>Marginal</b>
2023 F	2023	\$1,019,244	-1.06%	<b>Core</b>
<b>2024 F (Intl.)</b>	<b>2024</b>	<b>\$2,627,500</b>	<b>-5.49%</b>	<b>Core</b>
<b>2024 M (Intl.)</b>	<b>2024</b>	<b>\$2,355,000</b>	<b>+9.75%</b>	<b>Harmful</b>
<b>2025 F (Intl.)</b>	<b>2025</b>	<b>\$3,627,500</b>	<b>-7.85%</b>	<b>Elite Core</b>
<b>2025 M (Intl.)</b>	<b>2025</b>	<b>\$3,425,000</b>	<b>+15.74%</b>	<b>Severely Harmful</b>
<b>2025 F (Intl.)</b>	<b>2025</b>	<b>\$3,027,000</b>	<b>-8.05%</b>	<b>Elite Core</b>
2025 M	2025	\$988,333	+3.61%	<b>Marginal</b>

- **Flagged (Percent change < 0 - Valuable):** 7 of 16 Designated Player seasons show negative percent change. Forward DPs are consistently valuable; midfielder DPs are universally harmful.
- **Flagged (Percent change > 0 - Harmful): 9 players** – every Designated Midfielder in the dataset is harmful (+0.75% to +15.74%). This is a catastrophic systemic failure. The Timbers should never invest a DP slot in a midfielder.

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

- **TAM Contributors (Negative Percent change):** TAM players show mixed results. Valuable TAM contributors include a 2021 D TAM (-1.09%), 2022 D TAM (+11.04% - *positive*), 2022 M TAM (+1.32% - *positive*), 2023 D TAM (+8.10% - *positive*), 2023 D TAM (-4.64%), 2023 M TAM (+0.57% - *positive*), 2023 F TAM (+0.64% - *positive*), 2023 D TAM (+8.24% - *positive*), 2024 F TAM (-2.83%), 2024 D TAM (-6.53%, -11.70%, -9.95%), 2024 M TAM (+0.26% - *positive*), 2024 D TAM (+1.02% - *positive*), 2024 D TAM (-1.13%), 2025 F TAM (+7.38% - *positive*), 2025 D TAM (+2.05%, -2.88%, +0.74% - *positive*), 2025 D TAM (+8.54%, +7.58%). TAM efficiency is inconsistent.
- **U22-Initiative Impact:** U22 slots are generally ineffective to marginal:
  - 2022 M U22: +0.24% (marginal)

- 2023 M U22: +0.12% (marginal)
- 2023 F U22 (Intl.): +1.91% (marginal)
- 2024 F U22: -1.35% (valuable)
- 2024 F U22 (Intl.): -1.17% (valuable)
- 2024 M U22: +0.02% (marginal)
- 2025 F U22 (Intl.): -0.29% (valuable)
- 2025 F U22: +0.49% (marginal)
- 2025 M U22: +1.52% (marginal)

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

1. **2024 D TAM** (\$767,500, -11.70%)
2. **2024 D TAM** (\$705,313, -9.95%)
3. **2024 D TAM** (\$907,950, -6.53%)

**6. HOMEGROWN PLAYER EVALUATION**

Player	Year	Salary	PE % change
2023 F Homegrown	2023	\$89,716	+1.20%
2023 GK Homegrown	2023	\$89,247	+0.47%
2022 F Homegrown	2022	\$85,444	-2.80%
2022 GK Homegrown	2022	\$69,892	-0.38%
2021 M Homegrown	2021	\$236,500	-0.06%
2021 GK Homegrown	2021	\$68,143	+0.40%

- **Ready for Roster Promotion (Negative Percent change + Low Salary):**
  - **2022 F Homegrown (\$85,444, -2.80%):** Solid negative impact from a supplemental forward.
  - **2021 M Homegrown (\$236,500, -0.06%):** Marginal but negative impact.
  - **2022 GK Homegrown (\$69,892, -0.38%):** Marginal but negative impact.

**7. INTERNATIONAL SLOT OPTIMIZATION**

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2023 M	2023	M	\$2,230,000	+4.19%	No
2023 D TAM	2023	D	\$680,313	-4.64%	Yes

Player	Year	Pos	Salary	PE % change	Justifies Slot?
2023 F U22	2023	F	\$490,042	+1.91%	No
2024 F	2024	F	\$2,627,500	-5.49%	Yes
2024 M	2024	M	\$2,355,000	+9.75%	No
2024 D TAM	2024	D	\$705,313	-9.95%	Yes
2024 F U22	2024	F	\$490,042	-1.17%	Yes
2024 D	2024	D	\$202,183	-3.97%	Yes
2024 GK	2024	GK	\$145,833	+1.17%	No
2025 F	2025	F	\$3,627,500	-7.85%	Yes
2025 M	2025	M	\$3,425,000	+15.74%	No
2025 F	2025	F	\$3,027,000	-8.05%	Yes
2025 F U22	2025	F	\$752,804	-0.29%	Yes
2025 D TAM	2025	D	\$525,625	+0.74%	No
2025 D TAM	2025	D	\$355,000	+7.58%	No
2025 D	2025	D	\$226,983	+1.09%	No
2025 GK	2025	GK	\$220,833	+1.92%	No

- **Flagged Slot Misuse (Percent change > 5%):**
  - **2025 M DP (\$3.43M, +15.74%)** – catastrophic DP slot misuse
  - **2024 M DP (\$2.36M, +9.75%)** – severe DP slot misuse
  - **2022 D TAM (\$767K, +11.04%)** – TAM slot misuse
  - **2023 D TAM (\$939K, +8.10%)** – TAM slot misuse
  - **2023 D TAM (\$372K, +8.24%)** – TAM slot misuse
  - **2025 D TAM (\$355K, +7.58%)** – TAM slot misuse

## 8. POSITIONAL DEPTH AUDIT

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
<b>F (Forward)</b>	15	6	No	Yes (DP forwards are consistently valuable; TAM forwards are mixed)
<b>M (Midfielder)</b>	15	7	Yes	No (DP midfielders are universally

Position	Senior Count	Supplemental Count	Critical Upgrade Need?	Strength Area?
				harmful; TAM midfielders are mixed; U22 midfielders are marginal)
<b>D (Defender)</b>	18	6	<b>Yes</b>	No (TAM defenders are mostly harmful; homegrown defenders are minimal)
<b>GK (Goalkeeper)</b>	6	4	No	<b>Mixed</b> (Most GKs show near-zero impact; no elite contributors)

- **Critical Need:** Midfielder position at the DP level (catastrophic). Defender position at the TAM level (consistently harmful).
- **Strength:** Forward position is an organizational strength. The Timbers should invest all DP slots in forwards.

## 9. SALARY vs. VALUE MATRIX

Quadrant	Definition	Players (Top 5 or All)
<b>CORE ASSET</b>	% change < 0 & Salary > \$500K	2025 F DP (\$3.63M, -7.85%), 2025 F DP (\$3.03M, -8.05%), 2024 F DP (\$2.63M, -5.49%), 2024 D TAM (\$767K, -11.70%), 2024 D TAM (\$705K, -9.95%)
<b>HIDDEN GEM</b>	% change < 0 & Salary ≤ \$500K	2022 F Homegrown (\$85K, -2.80%), 2023 D TAM (\$680K - over \$500K), 2024 D (\$202K, -3.97%), <i>Very few sub-\$500K negative impact players</i>
<b>OVERPAID</b>	% change ≥ 0 & Salary > \$500K	<b>All in this quadrant:</b> 2025 M DP (\$3.43M, +15.74%), 2024 M DP (\$2.36M, +9.75%), 2021 M DP (\$2.31M, +10.26%), 2022 M DP (\$1.71M, +8.10%), 2023 M DP (\$2.23M, +4.19%), 2022 D TAM (\$767K, +11.04%), 2023 D TAM (\$939K, +8.10%), 2025 F

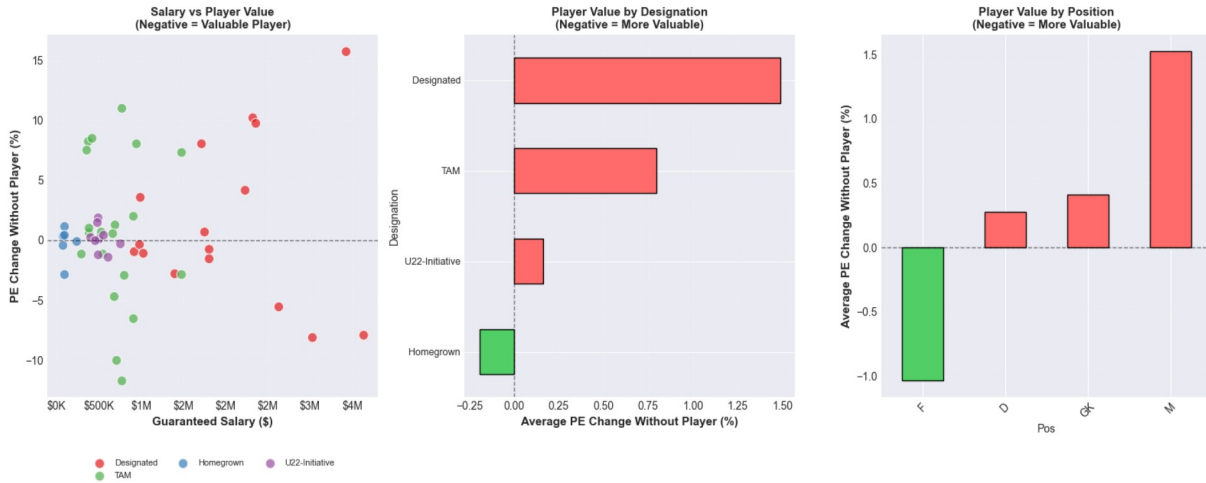
Quadrant	Definition	Players (Top 5 or All)
		TAM (\$1.47M, +7.38%), 2025 D TAM (\$355K, +7.58%)
<b>REPLACEABLE</b>	% change $\geq 0$ & Salary $\leq$ \$500K	Most senior midfielders with marginal positive percent change, many U22 players, and a large portion of the supplemental roster.

## 10. YEAR-OVER-YEAR TRENDS

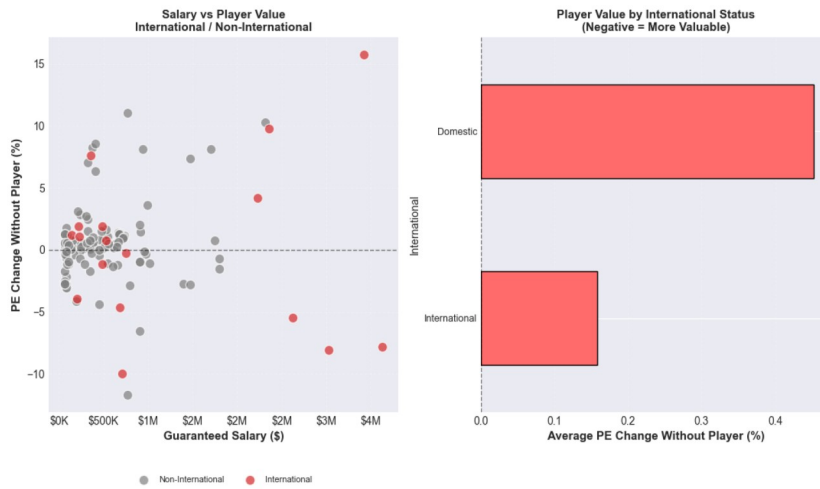
- **Designated Player ROI: Bimodal excellence and catastrophic failure.** Forward DPs are consistently valuable (-0.3% to -8.0%). Midfielder DPs are universally harmful (+0.75% to +15.74%). The Timbers must never invest a DP slot in a midfielder again.
- **TAM Efficiency: Poor, particularly on defense.** Most TAM players show positive percent change, with several exceeding +7% harmful impact. TAM defenders are especially problematic.
- **U22 Efficiency: Marginal to poor.** Most U22 players show near-zero or positive percent change. This roster mechanism is not being used effectively.
- **Homegrown Impact: Weak.** Only one homegrown player (2022 F) shows meaningful negative impact (-2.8%). Most homegrown players are neutral or positive.
- **Goalkeeper Trend: Neutral.** Most GKs show near-zero percent change, 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)

