Syracuse WLAX 2025 Stakeholder Report

Purpose: Convert season descriptives into tiered actions, with quantified uncertainty and a fully documented process.

Executive Summary

Syracuse WLAX has played 19 games with a 10–9 record (52.6% win rate; Wilson 95% CI [31.7%, 72.7%]). Average goal margin is +0.74. Team scoring totals 235 goals; the top three scorers contribute 96 (40.9%). Uncertainty is wide due to the small sample size but consistent across bootstrap and sensitivity checks.

Recommended actions (with risk):
• **Operational (low):** Targeted shot-selection coaching, momentum governors, weekly PPG snapshots.
• **Investigatory (medium):** Build opponent-adjusted efficiency metrics, run A/B practice blocks, log richer context.
• **High-stakes (high):** Defer roster/scholarship changes until replication and fairness checks pass.

Background & Decision Question

The coaching staff and athletic department need to decide which short-term adjustments can improve efficiency now and which decisions should be deferred until further evidence accumulates. The stakes range from low (training drills) to high (roster/scholarship decisions).

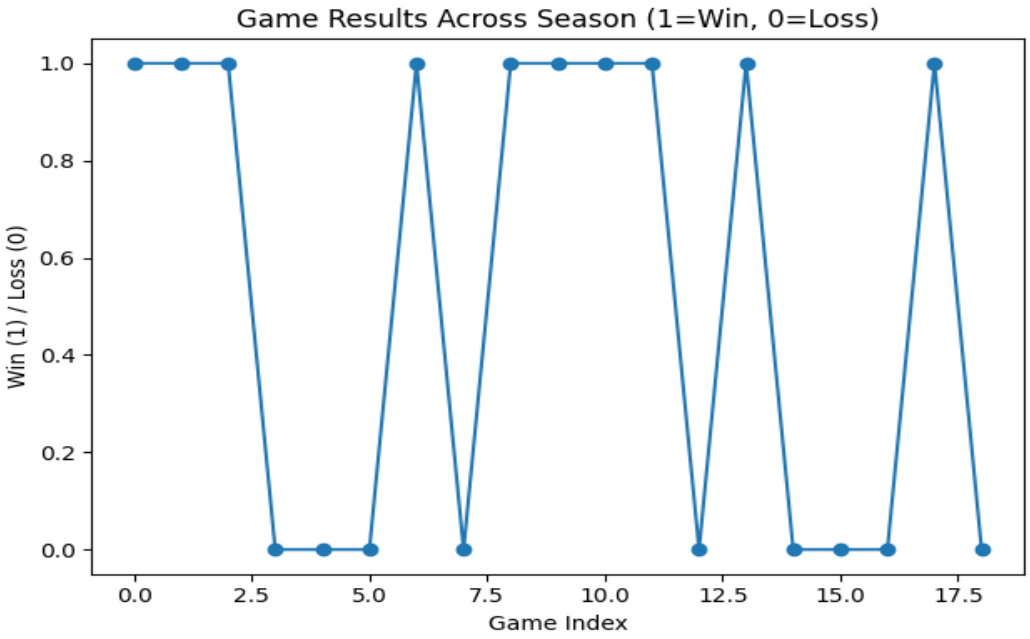
Data & Methods

Data included game scores (SU_Score, Opponent_Score) and player stats (Games_Played, Goals, Assists, Points, Shots). Analyses used descriptive stats, Wilson confidence intervals for win rates, bootstrap estimates for player points per game, sanity checks (missingness, outliers, internal consistency), and robustness tests (removing top players, blowouts, or normalizing by games). Random seed = 42 for all resampling.

Findings

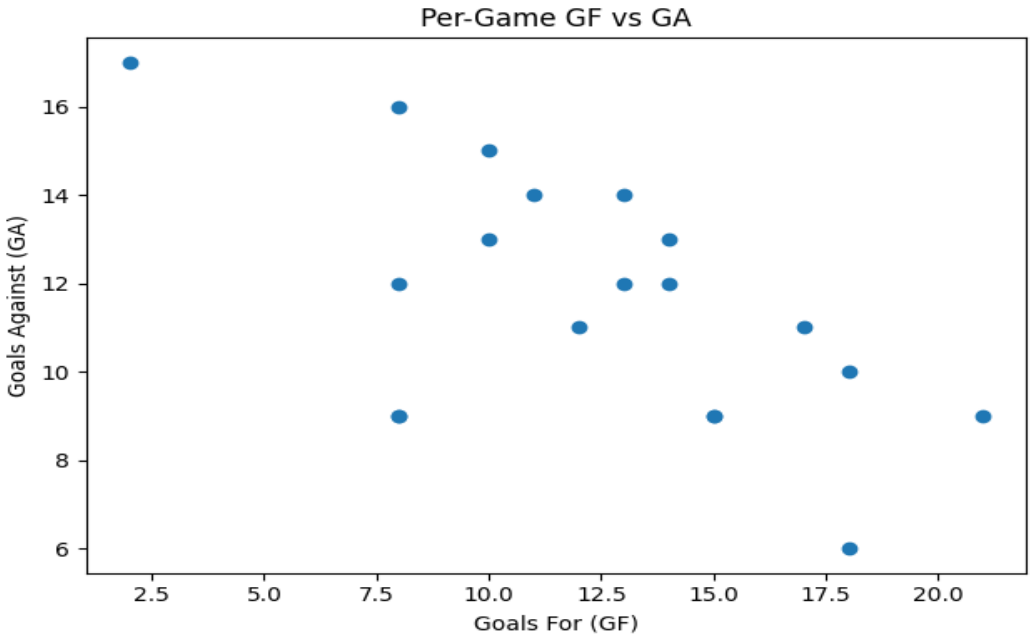
Win/Loss Trend Across Season

The team alternated between short win streaks and clusters of losses. This inconsistency explains the wide confidence interval and suggests mental/physical fatigue or matchup dependence.



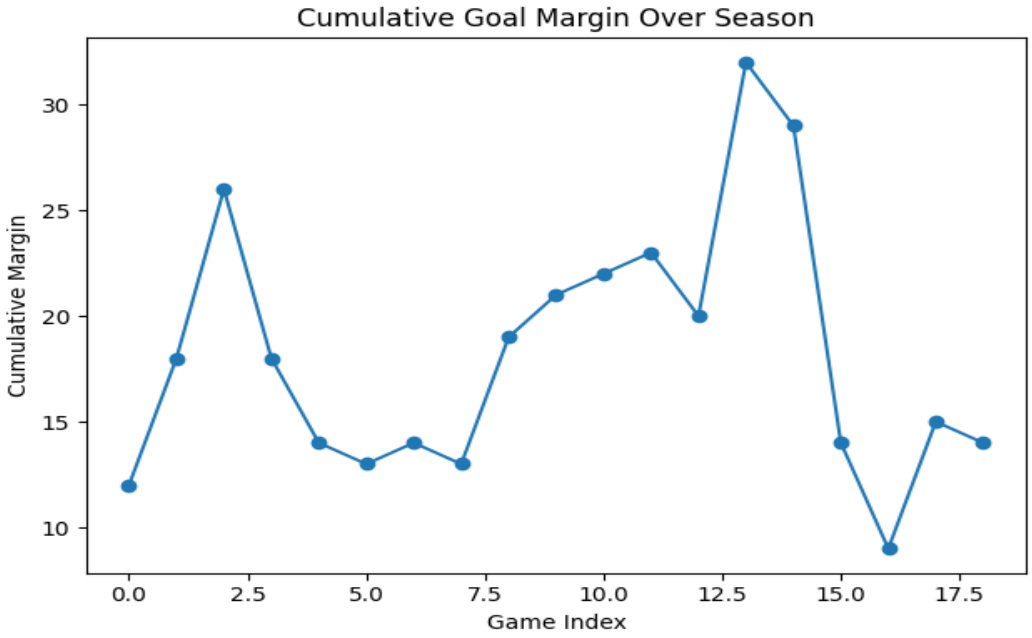
Goals For vs Goals Against Scatter

Most games cluster around parity with narrow margins. Offensive surges did not always secure control, indicating fragile consistency.



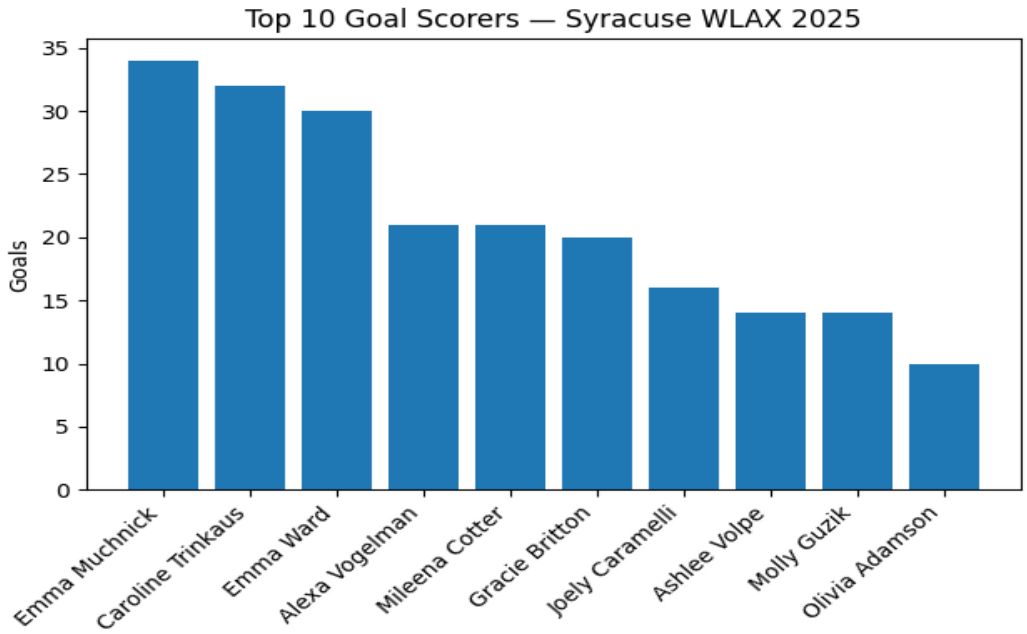
Cumulative Goal Margin

Momentum swings are visible: strong stretches followed by sharp dips. This reveals the team cannot yet sustain multi-game dominance.



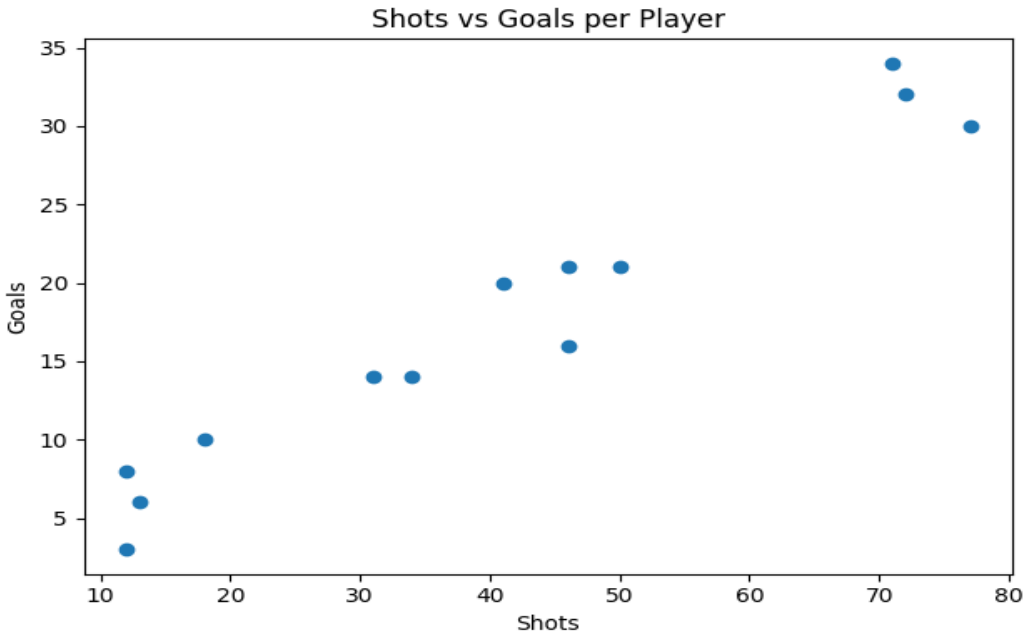
Top-10 Goal Scorers

Top three scorers account for ~41% of total goals. Secondary scorers remain productive, but reliance on leaders could be risky if multiple are unavailable.



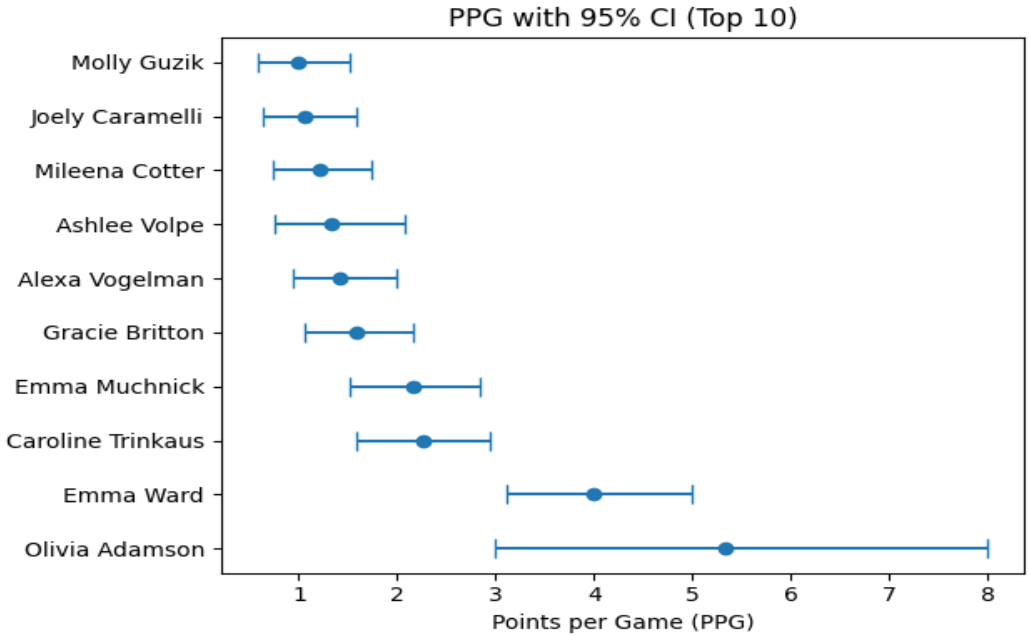
Shots vs Goals (Efficiency Check)

Mid-tier players underperform relative to their shot volume. Targeted coaching could yield quick efficiency gains with minimal risk.



Points Per Game with 95% CI

Top players like Olivia Adamson and Emma Ward consistently outperform peers. Mid-tier rankings are less stable due to overlapping CIs, emphasizing the need for broader skill development.



Uncertainty & Robustness Checks

Bootstrap confirmed fragility in win rate (CI [0.316–0.737]). Sanity checks revealed no missingness or major outliers but a minor discrepancy in goal totals. Robustness tests showed conclusions hold after removing top players or blowout games.

Recommendations (Tiered by Risk)

Operational (low risk): Shot-selection coaching for mid-tier players; momentum management via timeouts/substitutions; weekly feedback snapshots.

Investigatory (medium risk): Develop opponent-adjusted stats; test shooting interventions in controlled settings; expand logging for assists and shot zones.

High-stakes (high risk): Defer roster/scholarship decisions until more evidence and fairness reviews are available.

Ethical / Legal Concerns

Data contained no personally identifiable information. All LLM-generated content is labeled. High-risk personnel decisions require human oversight and compliance checks.

Next Steps & Validation Plan

1. Implement operational actions over the next 2–3 weeks and track outcomes.
2. Develop investigatory tools for opponent adjustments and experimental drills.
3. Re-estimate uncertainty after the next 4–6 games and revisit medium/high-risk recommendations.

Appendices

- Raw LLM outputs, prompts, and annotated edits.
- Code (seed=42) for descriptives, uncertainty estimates, and plots.
- Data lineage: CSV schemas and version dates.
- Logs/screenshots for robustness, sanity, and uncertainty checks.