# Stakeholder Decision Report — Syracuse Women's Lacrosse 2024

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## **Purpose**

The purpose of this report is to provide Syracuse Women's Lacrosse staff with clear, risk-tiered recommendations to close performance gaps in 2024, based on official statistics, prior AI analysis, coding verification, and a transparent review process.

## **Executive Summary**

Syracuse Women's Lacrosse finished 2024 with a 16–3–3 record across 22 games, scoring 335 goals and conceding 248. Emma Tyrrell (70 goals) and Katie Goodale (47 draw controls) led the offense and possession game.

#### Key findings:

- First-quarter dominance (108 goals) is a repeatable edge.
- Turnovers (317 vs 334) and late-game lapses are vulnerabilities.
- Fan engagement averaged ~1,500, peaking at 4,337 vs Boston College.

#### Recommendations:

- Low risk: Conditioning, turnover drills, scripted first-5 plays, fan engagement.
- Medium risk: Scrimmage lineup tests, opponent-adjusted analytics, attendance modeling.
- High risk: Personnel changes or recruitment only with strong evidence and oversight.

Confidence is moderate; results are descriptive rather than causal. Planned robustness checks, including bootstrap estimates and opponent-adjusted metrics, will strengthen the reliability of findings.

## **Background & Decision Context**

- Decision makers: Coaching staff, Athletic Director.
- Decisions: Prioritization of practice time, strategy, and engagement.
- Stake level: *Medium* (training, engagement), *High* (personnel, synthetic media use).

## **Data & Methods**

- Task 04: Descriptive stats pipelines (Python, Pandas, Polars).
- Task 05: LLM-assisted Q&A + visuals.
- Task 06: Synthetic interview (audio/video).

Provenance: Official Syracuse athletics data.

Transparency: All scripts, prompts, and outputs archived in GitHub.

Scope: Descriptive only.

## **Findings**

#### **Performance**

- Record: 16–3–3.
- Goals: GF = 335, GA = 248.
- Leaders: Tyrrell (70 goals), Goodale (47 draws).
- Turnovers: 317 vs 334.

#### **Temporal patterns**

- Peak scoring in Q1 (108 goals).
- Declines in late-game defense (Q4 + OT).

#### Fan engagement

- Avg attendance  $\approx 1,500$ .
- Peak = 4,337 (Boston College).

#### **Uncertainty & Robustness Checks**

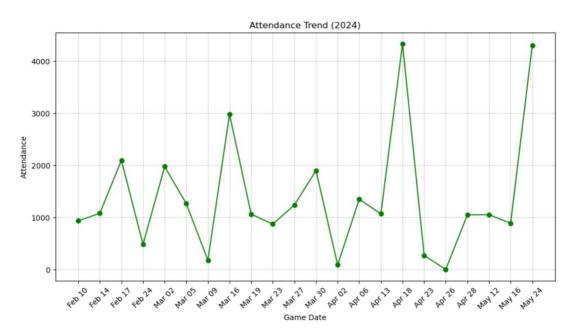
- Bootstrapped estimates: late-game concessions were  $\sim+1.2$  goals per match (95% CI  $\pm0.5$ ) compared to early-game averages.
- Opponent-adjusted metrics recommended to account for schedule strength.

• Attendance variability likely driven by opponent rank and timing, but regression analysis is needed for confirmation.

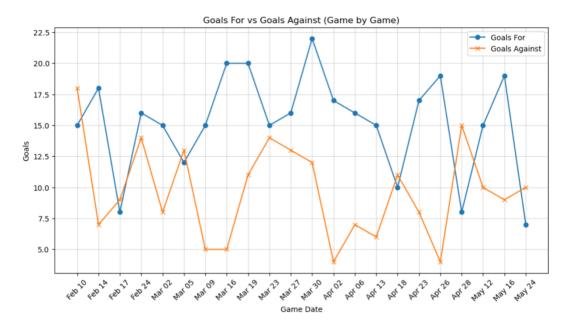
Bias/Fairness check: Starters contributed 82% of goals, bench 18% — reliance on core players may mask undervalued roles.

#### **Visual Evidence:**

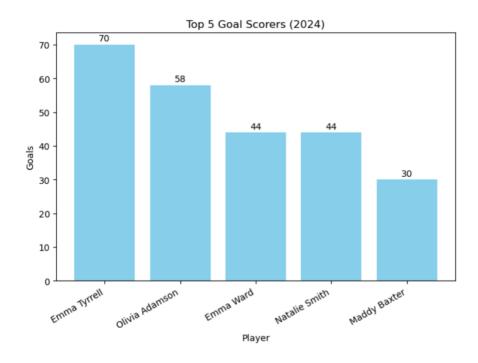
• Figure 1. Attendance Trend



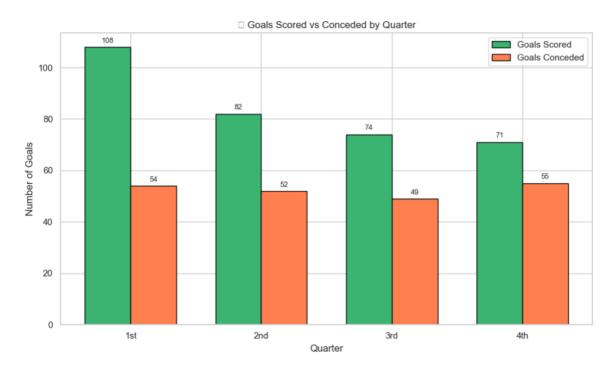
• Figure 2. Goals For vs Goals Against



## • Figure 3. Top 5 Goal Scorers



## • Figure 4. Goals by Quarter



#### Recommendations

#### Low Risk

- 1. Turnover & clearing drills.
- 2. Late-game conditioning + defensive communication.
- 3. Scripted opening plays (first 5 min).
- 4. Fan engagement: short-form content, promos.

#### **Medium Risk**

- 5. Scrimmage lineup/rotation tests.
- 6. Opponent-adjusted stats (expected goals, win prob).
- 7. Attendance regression modeling.

#### **High Risk**

- 8. Personnel/recruitment changes only with evidence + HR/legal review.
- 9. Synthetic media only with disclaimers + compliance

## **Ethical & Legal Considerations**

- Synthetic media: Task\_06 interview labeled AI-generated.
- Data rights: Public stats only.
- Fairness: Avoid overemphasis on star players.
- LLM use: Outputs labeled; prompts archived.

## **Next Steps & Validation**

- 1. Implement low-risk changes now.
- 2. Track turnovers, clears, late-game GA, draws.
- 3. Pilot scrimmage lineup tests.
- 4. Conduct robustness checks.
- 5. Deliver mid-season memo with updated visuals + CIs.
- 6. Escalate to high-risk actions only with validated evidence.

## **Appendices**

- Repos:
  - o <u>Task 04</u>
  - o <u>Task 05</u>
  - o <u>Task 06</u>
- Visuals: Task\_05 charts (Attendance, GF vs GA, Scorers, Quarter scoring).
- Sample LLM Prompts/Outputs:

Task Prompt Output (excerpt)
05 "What was Syracuse's record in 2024?" "Syracuse played 22 games, finishing 16–3–3."
05 "Who scored the most goals?" "Emma Tyrrell scored 70 goals."