

Artificial Intelligence and the Economics of NCAA Division I Athletics

Jared Curran

University of Massachusetts Amherst

RESECON 490AI – AI in Economics

Instructor: Dr. Christian Rojas

November 18, 2025

(a) Industry Definition and Scope

This report analyzes the economics of National Collegiate Athletic Association (NCAA) Division I athletics in the United States, with a particular focus on the emerging market for name, image, and likeness (NIL) compensation. From the standpoint of federal industry classification, college sports are most closely aligned with the broader category of spectator sports and performing arts. In the North

American Industry Classification System (NAICS), this activity is grouped under 711 – Performing Arts, Spectator Sports, and Related Industries, which includes professional teams, independent sports organizations, and promoters. NCAA Division I athletics is a distinct subset of this sector because it is embedded in nonprofit universities but increasingly operates with commercial logics similar to professional sports.

The geographic scope of the analysis is national, covering all Division I institutions but with particular attention to the Football Bowl Subdivision (FBS), where media rights, postseason distributions, and NIL markets are most developed. Within this landscape, athletic departments can be conceptualized as multiproduct firms producing live events, media content, and brand value. Revenues come from a mix of ticket sales, conference and College Football Playoff distributions, sponsorships and licensing, donations, and institutional support, while expenses include coaching compensation, scholarships, facilities, recruiting, and administrative overhead (Knight Commission, 2023). The report treats athletic departments and related NIL platforms as the core economic actors in the industry, with student–athletes serving as key inputs in both competition and content production.

(b) Industry Overview: Size, Structure, and Recent Trends

NCAA Division I athletics has grown into a multibillion-dollar enterprise. Using the Knight–Newhouse College Athletics Database, the Knight Commission and Syracuse University document sustained growth in both athletics revenues and expenses over the past two decades, especially among FBS institutions (Knight Commission, 2023). At the upper end of the market, conference media rights agreements illustrate the scale of contemporary college sports. For example, the Big Ten Conference signed a seven-year media deal with FOX, CBS, and NBC that has been reported at more than \$7 billion in total value (ESPN, 2022). At the postseason level, the College Football Playoff (CFP) has agreed to a new contract with ESPN that will average roughly \$1.3 billion per year under the expanded 12-team format (Associated Press, 2024). These deals underscore that live college football has become a premium media asset in the broader entertainment economy.

The revenue mix for athletic departments combines market and non-market sources. In the Knight–Newhouse data, athletics revenues include ticket sales, conference distributions, bowl and CFP payouts, sponsorships, licensing, and donor contributions, alongside student fees and institutional support that effectively subsidize athletics (Knight Commission, 2023).

Government macroeconomic data provide context for these trends. The Bureau of Economic Analysis reports that real value added in arts, entertainment, and recreation has grown steadily over the past decade, with spectator sports serving as a key driver within services (Bureau of Economic Analysis [BEA], 2025). The Bureau of Labor Statistics shows that wages in spectator sports remain relatively high compared to many other service industries, reflecting the skill and scarcity of coaching and elite athletic talent (Bureau of Labor Statistics [BLS], 2024).

Demand for college sports is not uniform across teams or sports. Football and men's basketball account for a large share of media rights value, but women's sports have become increasingly important properties in their own right. Nielsen reported that the 2024 NCAA women's basketball championship drew an average of 18.9 million viewers, making it the most-watched women's college basketball game on record (Nielsen, 2024). ESPN similarly reported record-breaking audiences across the Women's Final Four, with multi-platform coverage and star players driving attention (ESPN Press Room, 2024). At the same time, NCAA sponsorship and participation data show a long-run increase in the number of women's teams and participants across Division I, particularly in basketball, soccer, and volleyball (National Collegiate Athletic Association [NCAA], 2024). Together, these trends suggest that women's sports are moving from a perceived cost center toward a growth engine within the collegiate athletics portfolio.

The NIL market has emerged as a new layer in this ecosystem. The Opendorse NIL at 3 report estimates that total NIL activity grew from roughly \$917 million in the first two academic years of NIL (2021–22) to a projected \$1.67 billion in 2024–25, with a growing share of activity funneled through school-affiliated collectives and larger brand campaigns (Opendorse, 2024). NIL platforms such as Opendorse and On3 aggregate performance statistics, social media metrics, and sponsor data to estimate athlete market value and facilitate transactions. While these valuations are proprietary and imperfect, they provide a starting point for understanding how value is distributed among athletes and how institutional

characteristics influence NIL opportunities. This industry overview motivates the more detailed analysis of lifecycle stage, data sources, and AI-driven change in the sections that follow.

(c) Industry Stage: Mature Core with Growth Edges

Evidence from revenues, costs, and institutional structure suggests that NCAA Division I athletics is best characterized as a mature industry with important growth edges. The hallmarks of maturity include multi-year, conference-wide media rights agreements that lock in revenue streams; stable governance through conferences and the NCAA; and an arms race in spending on coaching salaries, facilities, and support staff that has caused expenses to rise roughly in tandem with revenues (Knight Commission, 2023). In economic terms, athletic departments exhibit high fixed and sunk costs and rely heavily on a relatively stable base of fan demand, alumni donations, and media distributions. The fact that few athletic departments consistently report large operating surpluses, despite aggregate revenue growth, underscores the tight margin environment typical of a mature sector.

At the same time, several corners of the industry behave more like growth markets. Women's basketball and other women's sports have experienced rapid audience gains and incremental investment, suggesting a meaningful expansion of both supply and demand (NCAA, 2024; Nielsen, 2024). The NIL ecosystem, while still relatively small compared to total athletics spending, is growing quickly and attracting specialized intermediaries, legal expertise, and data vendors (Opendorse, 2024). Digital and streaming platforms also create new opportunities for packaging and monetizing live events, archival content, and behind-the-scenes programming. These growth edges introduce new strategic options for athletic departments but do not fundamentally change the mature character of the overall sector, in which media rights and football remain dominant.

The mature-plus-growth-edges framing is important for understanding the potential role of artificial intelligence. In a mature core, AI is most likely to be deployed as a cost-management and revenue-optimization tool, improving ticket pricing, sponsorship targeting, and performance analysis at the margin. In growth segments such as NIL and women's sports, AI has the potential to help create new products, more transparent marketplaces, and better targeted marketing campaigns. The next sections detail the data used in this report and illustrate how NIL valuations and institutional characteristics can be combined to understand these dynamics more concretely.

(d) Data, Evidence, and NIL Valuation Visualization

A core objective of this analysis is to document how economic value is created and distributed within NCAA Division I athletics using credible and reproducible data sources. The primary financial backbone is the Knight-Newhouse College Athletics Database, which aggregates annual revenue and expense reports submitted by NCAA institutions and allows researchers to track trends in athletics spending, subsidies, debt, and coaching compensation over time (Knight Commission, 2023). To contextualize these data within the broader macroeconomy, I draw on the Bureau of Economic Analysis for measures of value added in arts, entertainment, and recreation (BEA, 2025) and on the Bureau of Labor Statistics for wage and employment information in spectator sports (BLS, 2024). At the program level, NCAA Sports Sponsorship

and Participation Reports and Equity in Athletics Disclosure Act filings provide sport-by-sport information on team sponsorship, roster sizes, and gender-segmented spending (NCAA, 2024; U.S. Department of Education, n.d.).

On the performance side, statistics from NCAA.com, program media guides, and public APIs such as CollegeFootballData supply detailed information on player output and team success. These datasets can be linked to institutional characteristics from Integrated Postsecondary Education Data System (IPEDS) and Census data, such as total enrollment and metropolitan population, to proxy for local and alumni market size. Together, this data stack allows for program-level and athlete-level analyses of financial sustainability, performance, and demand. Within this broader environment, the NIL market stands out as an important but relatively opaque component of the industry. NIL platforms like On3 publish estimated market valuations for individual athletes based on performance, social media following, and endorsement activity. Although these valuations are proprietary and not precise, they are widely referenced by media and stakeholders and represent one of the few systematic attempts to quantify NIL value (On3, n.d.; Opendorse, 2024).

NIL Market Data and Performance–Value Relationships

To illustrate how on-field performance, institutional scale, and NIL valuation interact, I construct a simple visualization using NIL estimates and quarterback statistics for four high-profile Power Five players: Arch Manning (Texas), Shedeur Sanders (Colorado), Jalen Milroe (Alabama), and LaNorris Sellers (South Carolina). For each athlete, I compile On3’s reported NIL valuation in millions of dollars, the most recent full-season passing yardage, and total university enrollment based on official institutional reports. NIL valuations serve as a proxy for the market price of athlete attention, passing yards capture a key dimension of on-field productivity for quarterbacks, and enrollment proxies for the size of the potential local and alumni audience. The resulting scatterplot places passing yards on the horizontal axis and NIL valuation on the vertical axis, with bubble size proportional to enrollment.

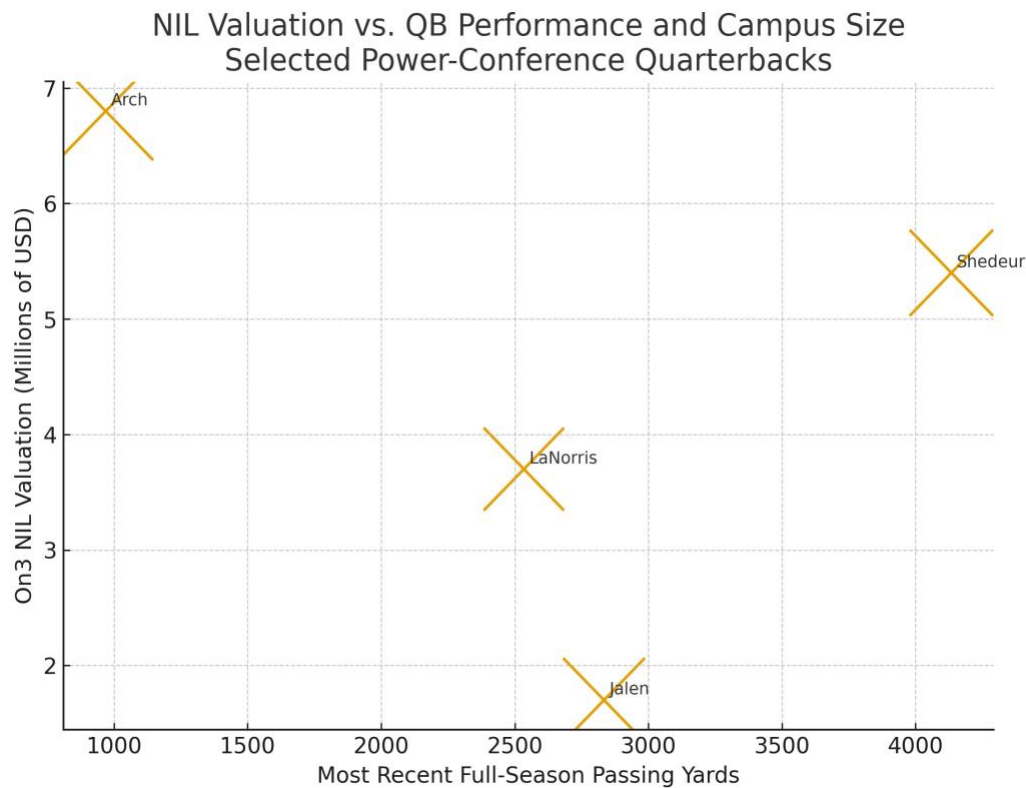


Figure 1. NIL valuation versus quarterback performance and campus size. This figure plots On3 NIL valuations against each quarterback’s most recent full–season passing yards, with bubble sizes scaled by total campus enrollment. Arch Manning sits at the top of the NIL market despite relatively modest on–field production so far, reflecting the value of brand, pedigree, and exposure at a flagship like Texas. By contrast, Shedeur Sanders and LaNorris Sellers combine high production with strong but slightly lower valuations, while Jalen Milroe shows how elite performance at Alabama still yields a lower price tag than pure brand icons. Taken together, the pattern illustrates that NIL value is shaped by a mix of performance and market size, but also by hard–to–quantify brand factors that sophisticated data and AI models could help athletic departments measure more systematically.

Economically, this visualization highlights how NIL markets resemble a hybrid of labor markets and attention markets. Traditional productivity metrics such as passing yardage clearly matter for valuation, but they do not fully explain observed outcomes. Arch Manning’s valuation substantially exceeds what his statistical profile alone would predict, suggesting large returns to inherited reputation and the media value of playing for a marquee program. Meanwhile, players like Sanders and Sellers, who combine high productivity with strong but less historically entrenched brands, occupy a middle range of valuations, and Milroe demonstrates how even elite performance at a powerhouse does not guarantee top–tier NIL pricing. For athletic departments, collectives, and athletes themselves, these dynamics underscore the importance of data–driven NIL models that incorporate performance, market size, and brand factors when making strategic decisions.

(e) The Impact of Artificial Intelligence on the Industry

The rapid diffusion of generative artificial intelligence across the sports economy is reshaping NCAA Division I athletics in ways that extend well beyond NIL headlines. As a mature industry characterized by high fixed costs, entrenched institutions, and constrained revenue growth, Division I athletics is particularly sensitive to technologies that lower information costs, automate routine processes, and enhance the extraction of value from existing audiences. At the same time, the sector's most dynamic growth areas—especially NIL markets and the rise of women's sports—create fertile opportunities for AI-enabled innovation. This section analyzes AI's influence across four dimensions: impacts on workers, impacts on firms and competitive dynamics, emerging risks, and new economic opportunities.

First, AI is reshaping the skill composition of coaching staffs and athletic departments. Predictive tools embedded in scouting, performance analysis, and workload management raise the productivity of staff with data fluency—analysts, sports scientists, and technical coordinators—while reducing reliance on more traditional observational roles. Universities have begun forming dedicated analytics teams and cloud-computing partnerships, signaling that hybrid human-AI roles will become part of standard athletics operations. Athletes are experiencing their own occupational shift as NIL platforms use AI to match athletes with brands, assess reach and engagement, and optimize content strategies. As NIL markets expand, athletes who build and manage strong digital identities can command value independent of on-field statistics, echoing the patterns revealed in Figure 1.

Second, AI is transforming how athletic departments compete and manage resources. Predictive ticketing and demand-forecasting systems allow schools to optimize pricing and inventory for home events, generating meaningful revenue gains in an environment where marginal dollars affect competitive standing. In NIL markets, AI strengthens the role of intermediary platforms that aggregate performance data, social metrics, and sponsor-athlete matching. These firms develop network effects and may eventually set informal reference prices for athlete value, influencing both individual compensation and departmental NIL strategy. AI also supports marginal gains in performance, health, and preparation; injury-risk models and training-load optimization tools can reduce costly injuries and improve win probabilities, particularly for resource-rich programs capable of integrating advanced systems.

Third, AI introduces risks that may exacerbate existing inequities in college sports. Because AI tools depend on data richness and institutional capacity, Power Four programs with larger resources can capture greater performance and revenue benefits, widening gaps with mid-major institutions. AI-driven NIL valuations also tend to reward athletes with pre-existing brand visibility, limiting opportunities for high-performing but low-exposure athletes. Opacity in proprietary valuation algorithms raises the possibility of biased or distorted pricing, undermining trust in the fairness of NIL markets. Automation may displace some administrative and media roles as generative AI produces highlights, recaps, and promotional content at low marginal cost, creating localized labor market disruptions in smaller college towns where athletics is a major employer.

Finally, AI opens substantial opportunities for innovation, productivity gains, and workforce development. NIL marketplaces powered by AI can improve efficiency by lowering search and matching costs and by providing more transparent information about deal values.

Specialized platforms focused on women's sports, Olympic sports, or regional audiences may emerge as generative tools reduce entry barriers, complementing the growth trends documented in participation and viewership data. Fan experience is another major frontier: AI-generated highlights, conversational stat bots, and personalized content streams can deepen engagement and strengthen revenue streams in a sector where expanding the fan base is costly but increasing revenue per fan is feasible. In addition, AI-enhanced workload management, academic scheduling, and injury forecasting can materially improve athlete welfare and roster productivity.

AI also creates new educational and career opportunities within universities. Athletics is becoming a hands-on laboratory for applied analytics, machine learning, and product development, especially when departments collaborate with data science, engineering, and business programs. This positions Division I athletics not only as an entertainment enterprise but also as a training ground for emerging AI talent. Across all of these dimensions, the central theme is that the future competitiveness of programs and athletes will depend not only on traditional performance, but on the ability to harness and interpret data in an increasingly complex and AI-mediated marketplace.

References

Associated Press. (2024). College Football Playoff, ESPN agree to new deal through 2031–32 season.

Bureau of Economic Analysis. (2025). Industry economic accounts: GDP by industry.

Bureau of Labor Statistics. (2024). Occupational employment and wages, NAICS 7112 spectator sports.

ESPN. (2022). Big Ten completes 7–year, \$7 billion media rights agreement with FOX, CBS and NBC.

ESPN Press Room. (2024). 2024 NCAA women’s championship and Final Four on ESPN platforms is most watched on record.

Knight Commission. (2023). Financial projections through 2032 for Division I FBS programs.

National Collegiate Athletic Association. (2024). Sports sponsorship and participation rates report.

Nielsen. (2024). NCAA women’s basketball championship draws record–breaking 18.9 million viewers.

On3. (n.d.). NIL valuation methodology and athlete NIL rankings.

Opendorse. (2024). NIL at 3: The annual Opendorse report.

U.S. Department of Education. (n.d.). Equity in Athletics Disclosure Act data analysis cutting tool.

2-3 Roles in the industry:

- NIL manager
- Director of Compliance
- Director/Assistant Director of Business Operations

5-7 skills that repeatedly appear:

- creation of student-athlete financial aid documents
- rules education
- Monitoring NCAA coaching and personnel limits
- Monitoring roster maintenance within ARMS and Compliance Assistant
- academic support

What I already Bring:

- Rules education (educating the current golf team)
- Roster maintenance (golf team)
- Corporate Budgeting skills

Gaps:

- Experience (most jobs ask for 2 years and a masters degree)

Quick outline:

Where I fit:

- Assistant director of compliance

Why this role:

- I already have compliance experience
- A very difficult task, therefore much less desirable for new comers

Skills that matter:

- Rules education
- Writing
- Clear interpretations
- Reading

My current strengths:

- Writing
- AI use and generation

My gaps:

- 2 years of experience
- Rules knowledge

6–12-month plan:

- Network
- Use coursework as proof of experience
- Find job/internship in related field

Narrative (Not AI):

In order to obtain the role of assistant director of compliance I need to do a few things. One of the major roadblocks is that many roles ask for 1-2 years of compliance experience, with some calling for a masters degree. One of the major things I have going for me is that I have 2 years of internship experience with an accounting firm in banking regulatory compliance. Although this does not cover the NCAA compliance experience I need, it is a great talking point allowing myself to relate to some of the soft skills many compliance professionals find in their job (ie writing, reading, rules interpretation etc). In spring 2026 I will attempt to find a NCAA compliance internship to better meet the criteria for this role. It was also recommended to me to read the NCAA rule book, which although boring, is a necessary step that many applicants may not be aware of.

AI Output:

1. High-Level Feedback (3–5 bullets)

- **Clear motivation but needs more specificity.** You identify the role you want (Assistant Director of Compliance) and acknowledge the experience gap, but you don't clearly outline *which* responsibilities you are preparing for (e.g., Bylaw areas, CMS systems, recruiting logs, waivers, LSDBi workflows).
 - **Good self-awareness, but shallow articulation of strengths.** You mention soft skills from regulatory compliance, but the reader would benefit from 2–3 specific examples (e.g., interpreting federal banking rules → transferable to NCAA bylaws).
 - **The plan feels short-term and incomplete.** “Find an internship in Spring 2026” is a start, but there's no month-by-month structure or mention of what you can do *before* spring.
 - **Missing alignment with your earlier AI-in-sports industry analysis.** If your report analyzed AI's role in college sports economics, your plan should mention how AI/data skills complement compliance roles (e.g., data quality, roster audits, scholarship modeling).
 - **Needs clearer skill priorities.** You should explicitly name the competencies compliance offices repeatedly request: rules education, LSDBi, ARMS, initial eligibility, financial aid knowledge, data management, documentation, and communication.
-

2. Concrete Skills & Experiences That Would Help You (5–10 items)

(All realistic given your background.)

1. **NCAA LSDBi proficiency** — especially reinstatement cases, waivers, and bylaw search workflows.
2. **Hands-on experience with ARMS or Teamworks** (recruiting logs, CARA documentation, squad lists).
3. **Bylaw specialization** — choose 1–2 areas to build depth (Bylaws 12, 14, 15, 16, or 17).
4. **Rules-education communication** — preparing short memos, flowcharts, or coach-facing summaries.
5. **Data validation & audit skills** — leveraging Excel, Sheets, or basic Python to check rosters, countable hours, financial aid spreadsheets.
6. **Interpretation writing** — practice writing short, high-clarity interpretations using real NCAA case precedent.
7. **Understanding of transfer landscape & NIL impacts** — especially how NIL intersects with Bylaw 12 and institutional involvement.
8. **Working familiarity with eligibility certification** — amateurism, initial eligibility, and continuing eligibility.
9. **Experience helping with game-day operations or administrative tasks** that compliance touches (pass lists, ticket requests, recruiting checks).

10. **A small portfolio of compliance artifacts** — rule visualizations, tracking templates, eligibility flowcharts, etc.
-

3. Suggested Courses, Certificates, & Portfolio Projects (5–10 realistic for 6–12 months)

Courses / Certificates

1. **UMass Sport Management electives** (especially any class covering NCAA governance or compliance-adjacent topics).
2. **NCAA Eligibility Center webinars** — free, short, and directly relevant.
3. **NCAA Amateurism or Initial Eligibility education modules** (publicly available).
4. **UMass CS/AI electives** in data ethics or applied data analytics (aligns with your AI-in-econ project).
5. **Coursera: Sports Analytics / Sports Data Science** courses to pair AI skills with compliance data tasks.
6. **Coursera/edX: Regulatory Compliance Fundamentals** (helps connect your banking compliance background to athletics).
7. **Excel: Advanced Formulas & Data Cleaning** — extremely relevant for roster and scholarship auditing.

Portfolio-Ready Projects

8. **Build a “mock compliance toolkit”** — CARA log template, scholarship tracker, recruiting visit checklist.
 9. **Create a short written guide** summarizing 1–2 complex bylaws using clear language (showing rules education ability).
 10. **AI-in-compliance mini-project** — e.g., an Excel model that flags potential CARA violations or identifies missing roster data (just a demo, not real data).
 11. **A NIL data visualization** using public data to show trends and institutional risk areas.
 12. **A personal “Bylaw Mastery Plan”** where you document what you learn as you read the Manual (coaches love this).
-

4. Areas Where Your Current Plan Is Vague, Unrealistic, or Disconnected

- **Timeline is unclear.** “In Spring 2026 I will attempt to find an NCAA compliance internship” is two steps too vague. You need:
 - When you will start outreach,
 - Which schools you’ll target (regional + remote),
 - What roles you would accept (volunteer, part-time, special-project assistant).
- **Missing actionable milestones.** For example:
 - Finish Bylaws 12–17 by February.
 - Build two compliance templates by March.
 - Complete a rules-education project by May.
- **No integration with AI/data skills,** despite the course requirement. NCAA compliance offices increasingly value data cleaning, reporting automation, and documentation accuracy—your background already points strongly in this direction.
- **Doesn’t directly connect your past regulatory compliance experience** to specific NCAA tasks. You should explicitly link:
 - interpreting federal financial rules → interpreting NCAA bylaws;
 - writing audit memos → writing compliance interpretations;
 - documentation standards → CARA/recruiting monitoring.
- **The narrative is too short for a final report.** It needs more depth, reflection, and specificity to read like a thoughtful professional plan.

Rewritten Personal Opportunity & Skills Plan

My goal over the next year is to position myself competitively for an Assistant Director of Compliance role. Most postings for this position list two major requirements: (1) one to two years of NCAA compliance experience, and (2) in many cases, a master’s degree. Because I do not currently meet either requirement, I need a clear plan to build relevant experience, strengthen my technical and interpretive skills, and demonstrate readiness for full-time work in this area.

One advantage I bring is my two years of internship experience in banking regulatory compliance at an accounting firm. While this experience is not NCAA-specific, it does give me a foundation in core compliance tasks: reading and interpreting rules, writing clear summaries, understanding documentation standards, and approaching problems with attention to detail and consistency. These are skills that often carry over directly to NCAA work. However, I still need hands-on experience with NCAA bylaws, monitoring systems, and day-to-day processes to close the gap between my background and the expectations of the role.

To address that gap, my primary goal is to secure an NCAA compliance internship in Spring 2026. This would allow me to build direct experience that job descriptions consistently emphasize—especially roster management, recruiting monitoring, initial and continuing eligibility, and bylaw interpretation. Before that point, I plan to begin reading the NCAA rulebook in a structured way. It was recommended to me by professionals in the field, and although it may not be the most exciting task, it is an important step that many applicants overlook. Developing familiarity with the core bylaw sections will help me ask better

questions, understand how compliance offices make decisions, and become more confident in the daily language of the job.

Overall, my path forward is to leverage the strengths I already have, be honest about the areas where I lack direct experience, and focus on specific, achievable steps: gaining exposure to NCAA rules, continuing to build rule-interpretation and writing skills, and pursuing an internship that gives me the practical experience most Assistant Director roles expect. With a consistent approach over the next 6–12 months, I can put myself in a realistic position to meet those requirements and enter the field.

3–5 Edits You Should Consider to Tie This Section to the Rest of Your Report

1. **Explicitly connect to your industry analysis** by mentioning how AI, data, or analytics skills you discussed earlier can support compliance tasks (e.g., roster audits, CARA monitoring, NIL tracking).
2. **Add 1–2 sentences referencing trends you identified** in the economics of college sports—such as increased regulatory pressure, NIL complexity, or athlete mobility—and explain how these trends shape the skills you need.
3. **Include a reference to the types of compliance work you analyzed** (e.g., eligibility certification, roster management, transfer rules) to show continuity across sections.
4. **Tie your personal plan to long-term structural changes** you described earlier in your report, such as expanding administrative staff or the growing role of data tools in athletic departments.
5. **Clarify how your skills plan responds to risks or opportunities you highlighted** in earlier sections (e.g., demand for improved documentation, digital systems, or oversight mechanisms).

Reflection:

One of the biggest reflection points during this project was seeing how NCAA Division 1 athletics now functions has a two sided market, with media and general brands on one side, and the universities on the other. This shows that the new NCAA valuations of schools and students need to take a multivariable approach, rather than just a single valuation formula/thought process. I have also noticed that athlete branding as become its own micro-market in college athletics. Although universities are the ones with the multimillion dollar TV

deals, athletes even at the smallest schools are still making great progress on their independent deals.

AI has helped me quickly gather resources and data from across the web that would otherwise take hours to find. It was also great at connecting bits of data and organizing data sets for better viewing, so I (the Human) and put together my own conclusions. Per usual, the AI did struggle with overstated data availability. Although it did not hallucinate any data sets or points, it did confidently state that the data was there for use, when it actually didn't exist.

My skills with AI have improved dramatically. Before this course I was simply typing questions into chatGPT, and letting it give me misguided outputs. I would quickly get frustrated with AI when the outputs are not what I was expecting, but now I feel like a professional with my AI uses. My newfound AI talent should be a great draw in the workplace and in my further career. I consistently deploy my own personal GPTs for my coursework, and im sure my future employers will be satisfied if I get up these programs for use with internal company questions or data sets.