



## NCAA Power Index (NPI) FAQ and Cheat Sheet

### Frequently Asked Questions

**Q: What is the NPI?**

A: The NPI is a system that houses the division's statistical data and objectively applies the selection criteria to the data based on the sport committee's established weighted criteria. NPI is a combination of the following: winning percentage; strength of schedule; home-away multiplier; quality win bonus; and overtime results (when relevant).

The weight of winning percentage versus strength of schedule is often referred to as one of the "dials" that a sport committee can adjust, placing any subjectivity within the criteria themselves. For example, a sport committee could set the dials to 30/70; 25/75, etc. Other "dials" a sport committee can also choose to apply are home and away multiplier, quality win bonus (QWB), and overtime win/loss weights.

**Q: Why update the current championship selection process?**

A: The Championships Committee has been reviewing the current team at-large selection process to ensure that selection criteria is applied consistently to teams during selections. The change from the current championships selection process to the NPI will take the data analysis from a subjective application, varying by sport committee, to an objective computer data analysis based on the weights established by each sport committee.

**Q: Does this mean our current selection criteria goes away?**

A: Most of the current selection criteria will no longer be used. The following criteria will no longer be used: head-to-head competition; results versus common Division III opponents; results versus ranked Division III teams; and secondary criteria. However, winning percentage and strength of schedule will continue to be used.

**Q: Will any new selection criteria be adopted?**

A: The NPI will continue to use winning percentage and strength of schedule along with a home/away multiplier, quality win bonus (QWB) and overtime results (in applicable sports).

The home/away multiplier can be used to increase the weight of away wins and home losses while decreasing the weight of home wins and away losses. The QWB provides a bonus for wins against top-level teams, the degree of which is determined by the sport committee. Overtime win/loss weights may be applicable in some sports to reflect results that are less than full wins/losses. For example, in ice hockey a win that comes in 3-on-3 overtime is treated as two-thirds of a win and one-third of a loss, with the opponent receiving one-third of a win and two-thirds of a loss.

The criteria are explained in the NPI cheat sheet document included at the end of the FAQ.

**Q: What are the benefits of the NPI?**

A: One benefit of the NPI is that all data will be analyzed, and the criteria will be applied objectively to establish the championships field (the at-large berths remaining after AQs are awarded). Additionally, based on this objective analysis teams will know how they compare against other teams in their region and nationally.

Another benefit of the database is that teams are not penalized for winning a contest that it should win. For example, in the current system if a strong team plays a weaker team its strength-of-schedule will be negatively impacted even though it won the contest – as it should. In the selection criteria database, the team that wins a contest against a lesser opponent will not be statistically impacted by winning a contest it should win. This will greatly benefit stronger teams in weaker conferences.

**Q: Will the formula/weights be consistent across all sports? If not, why would one sport committee weight one criterion differently than another sport committee?**

A: Each sport will use the same NPI criteria framework (winning percentage, strength of schedule, home-away multiplier, quality win bonus, overtime) but each committee will have the ability to determine the weights/values for each. This allows each sport committee to develop the criteria that is appropriate for its sport. The first dial of winning percentage versus strength of schedule can be set at any two values equaling 100. Home-away multiplier and QWB values may differ from sport to sport if a sport committee elects to use those criteria. Sports with overtime can choose to weight an overtime victory or loss different than a regulation win or loss.

Factors affecting the appropriate values from sport to sport may include the degree of intra-conference vs inter-conference play, the observed home field/court/ice advantage, and playing rules which may dictate overtime play that is conducted in a manner that is different from regulation play.

**Q: What will happen to regional advisory committees?**

A: Regional Advisory Committees will still be called upon to ensure that results are populating correctly into the database. RACs will also be asked to spend some time during the season being trained as site representatives to serve during the preliminary rounds of the championship.

**Q: Do regional rankings go away?**

A: Regional rankings will still be published. The top teams from each region will be taken from the database and published by region based on the selection criteria database descending order list. For example, to establish Region I rankings, the Region I teams will be extracted from the list in the order they appear to fill the established number of ranked teams (i.e., maximum of seven per region).

**Q: When in the governance cycle would committees adjust dials/weights?**

A: Sport committees will use their annual meeting to review the championship rankings and selection. Any changes to the weights will be communicated to the membership via the annual meeting report, direct communication to the coaching body and posted on the sport committee's landing page on NCAA.org. Once the weights are established, they cannot be changed for a minimum of two seasons. Dials will not be changed weekly during the season.

**Q: How has this been tested?**

A: Sport committees have reviewed sport specific data for at least three championship seasons (2021-22, 2022-23 and 2023-24). Committees were able to see the selected championship field versus teams that would have been selected based on the NPI and saw only slight variances between the two fields, almost regardless of the dial settings which have not yet been reviewed by sport committees.

**Q: What will the education for committees be on adjusting the dials/weights?**

A: NCAA sport liaisons will incorporate a selection criteria training into the already established committee orientation to onboard each committee member.

**Q: How long is the commitment from NCAA with the new NPI software?**

A: NPI will move forward as the established selection metric for team sports effective September 1, 2024. Any future changes would need to be brought forth from the sport committees through the governance structure.

**Q: What is the process for adopting a new selection metric?**

A: Changes to selection criteria can be accomplished through a legislative vote at convention or through an administrative regulation adopted through the governance structure (e.g., recommendation from the Championships Committee to Management and Presidents Council).

**Q: If/when changes are made how is the membership going to be made aware of the changes?**

A: Changes to the NPI weights/dials will be communicated to the membership through the sport committee's annual meeting report, published on its NCAA.org landing page, and through various membership communications including the Championships Newsletter, the Division III Monthly Update, a direct email communication etc. The established values (e.g., how the dials are set) will also be published in each sport's pre-championship manual annually.

**Q: Will individual-team sports be included in the selection criteria database transition?**

A: Currently, only team sports are being considered for the transition to the selection criteria database. Individual-team sports will continue to be vetted to bring them into the database if it makes sense to do so.

**Q: Will the selection criteria database rankings be publicly available?**

A: Yes, the rankings will be posted to each sports landing page on NCAA.com in the same way they are currently published.

**NCAA Power Index (NPI) – Cheat Sheet**

**Winning Percentage/Strength of Schedule:**

The two main “dials” are winning percentage and strength of schedule.

25/75 is the default starting value (win percentage / strength of schedule) and sport committees will discuss and set these dials.

- 1) Winning percentage: A team’s number of wins divided by the number of that team’s total contests.
- 2) Strength of Schedule: SOS is simply an average of a team’s opponent’s NPI.

Example: Team A plays contests against teams with NPIs of 52, 58 and 70. SOS is calculated as  $52 + 58 + 70 = 180$ ;  $180 / 3 = 60$ . SOS = 60.

**Quality Win Bonus**: A bonus applied to wins/partial wins (e.g., overtime victory) against “quality” teams.

- 1) Quality Win Bonus – Base Value:
  - a. The sport committee determines the base NPI value at which a QWB is applied.
  - b. The amount of bonus is determined by the difference between opponents NPI value and the QWB base value, multiplied by the QWB multiplier.

Example: Base value is set at 55.00. A bonus will be applied for all wins/partial wins against opponents with an NPI value of 55.00 or higher.

- 2) Quality Win Bonus – Multiplier:
  - Set the multiplier/magnitude of bonus awarded for wins against teams with an NPI above the QWB base. Values can range from 0.00 to 1.00. Default setting is .500.

Example: QWB base is set at 52.00. Multiplier is set at .500.

- $\text{NPI-QWB Base} = X$ ;  $X * .500 = \text{Bonus}$ .
- Win over team with NPI of 56.00.

- $56.00 - 52.00 = 4.00$ ;  $4.00 * .500 = 2.00$  (2.00 is the Quality Win Bonus)
- Win over team with NPI of 61.00.
- $61.00 - 52.00 = 9.00$ ;  $9.00 * .500 = 4.50$  (4.50 is the Quality Win Bonus)

Example: QWB base is set at 51.00. Multiplier is set at .333.

- Win over team with NPI of 60.00.
- $60.00 - 51.00 = 9.00$ ;  $9.00 * .333 = 3.00$  (3.00 is the Quality Win Bonus)
  
- Win over team with NPI of 57.00.
- $57.00 - 51.00 = 6.00$ ;  $6.00 * .333 = 2.00$  (2.00 is the Quality Win Bonus)

### **Home/Away Multiplier:**

- 1) Allows for additional emphasis/weights to be placed on away wins and home losses, with less emphasis on home wins and away losses.
- 2) Different weights can be applied to non-conference, conference, and [conference] post-season contests.
- 3) This is an optional adjustment and can be set a 1.0/1.0 to weigh all wins and losses, at home or away, as equal.

Example: Weights set at 1.2/0.8

- Away wins/home losses weigh as 1.2 wins/losses.
- Home wins/away losses weigh as 0.8 wins/losses.

### **Overtime Win/Loss:**

- 1) Allows for an overtime win/loss to count as less than a full win/loss.
- 2) An example is in ice hockey. Overtime is played 3-on-3 versus 5-on-5 in regulation. Since a win in overtime required extra time and was played differently an OT win can be weighted at .75 win/.25 loss. The losing team would bet .25 wins/.75 losses.
- 3) Regular season and post-season can be weighted differently.
- 4) This is an optional adjustment and can be set at 1.00/0.00 meaning a win is a win, or a loss is a loss regardless of regulation or overtime.

**Minimum Wins:** The committee can elect to require a minimum number of wins to be retained in the NPI adjustment.

To ask additional questions or to provide feedback, please contact Laura Peterson-Mlynski ([lpeterson@ncaa.org](mailto:lpeterson@ncaa.org)) or JP Williams ([jpwiliams@ncaa.org](mailto:jpwiliams@ncaa.org)).