

FAQs for IHSAA football's new postseason RPI

The Iowa High School Athletic Association will use RPI to determine its at-large playoff qualifiers in football starting in the 2018 season. Below are explanations to frequently asked questions and questions that may arise from the formula and our switch.

What is the RPI formula? And where did it come from?

RPI stands for Ratings Percentage Index. The NCAA uses variations of the RPI as a metric to rank teams for postseasons in multiple sports. The RPI number will range between .0000 and 1.000 with higher numbers being “better” in terms of a rating. In short, it is a way to measure a team's strength relative to other teams, based largely on the strength of their schedules.

What percentages are being used in the formula?

The IHSAA decided to weigh three criteria in its first football RPI, which was approved at January's Board of Control meeting following a recommendation at December's advisory committee meeting.

WP = Your own winning percentage (weighted 37.5%),

OWP = Your opponents' composite winning percentage (weighted 37.5%), and

OOWP = Your opponents' opponents' composite winning percentage (weighted 25%)

So, the RPI formula used for the 2018 football season is:

$$\text{RPI} = (.375 \times \text{WP}) + (.375 \times \text{OWP}) + (.25 \times \text{OOWP})$$

How are the components of the formula specifically calculated?

Winning percentage (WP): Divide the number of wins by the number of total games played.

Opponents' winning percentage (OWP): Total the number of wins of your opponents and divide by the total games played by your opponents

Opponents' opponents winning percentage (OOWP): The same process as described above, except calculated for the opponents of a team's opponents. Note that there is an exception for out-of-state teams, which is addressed below.

How will out-of-state opponents be handled?

When calculating out-of-state opponents, their direct winning percentage (for example, .750 with a 6-2 record) will count toward the formula through the Thursday of Week 9 of the regular season, but each of their opponents will have a .500 winning percentage assigned.

Why use RPI instead of another type of rating system?

A major advantage of the RPI is the transparency that comes with its accuracy. The components of the formula are known, and its results can be easily replicated.

What data will be used in the RPI formula?

All games played in the regular season will be counted toward the RPI calculation.

Where will be the RPI standings be published?

The IHSAA's official RPI standings will be published on the football page at www.iahsaa.org. Any RPI data published elsewhere is unofficial and should be viewed as such.

How will cross-classification games be handled?

Schools will not be penalized or rewarded for playing a school in a different class. A win over a Class A school is calculated the same as a win over a Class 4A school.

What happens if two teams are tied in the final RPI standings?

We have created a tiebreaker for this unlikely scenario. It is as follows:

1. Head-to-head result between the two teams
2. Winning percentage
3. Opponents' winning percentage
4. Opponents' opponents winning percentage
5. Alphabet Draw

How should teams be scheduling?

The main thing to remember with the RPI is it takes an entire schedule into account. Do not fret over scheduling one game. Instead, see the schedule as a whole.

Do road wins count differently than home wins in the RPI?

There is no advantage in the formula for winning on the road or at home. All wins and losses are factored in equally.

Does the score of the contest matter in the RPI formula?

Only in that it provides a winner and a loser. There is currently no factor for score differential in the RPI formula. A 14-13 win counts the same as 70-0 win.

What happens if a game is cancelled and can't be rescheduled?

Because the RPI system works off averages, it will not matter to the final formula if a game cannot be rescheduled. It would not penalize, nor benefit, any team involved in that scenario.

How do schools that drop programs affect the RPI?

If a school drops a program prior to the start of the competitive season, no forfeits will be involved. Instead, their opponents now have open dates in the spots where they were scheduled to play the teams who dropped their program, and they are free to try and find another game, if possible.

If a school drops a program after the competitive season has started, that team shall forfeit their remaining games to their opponents.

In this instance, the competitive season is defined as week 5 of the NFHS Standardized Calendar.

How often will the RPI standings be published?

The IHSAA's football RPI standings will be published for the first time on Monday of Week 4 of the 2018 regular season.