



PIAA DISTRICT III POWER RANKINGS: EXPLAINED

PIAA District III uses a mathematical power ranking system to determine its team championship playoff qualifiers. The math and the process for determining a school's power ranking is here:

<http://piaadistrict3.org/wp-content/uploads/2011/01/POWER-RANKING-EXPLANATION.pdf>

That's all well and good to have the arithmetic in front of you, but what does all of this mean in plain English? That is a very good question which leads to other fine questions. We will attempt to answer them here in classic FAQ fashion.

Who is responsible for entering results into the District III Power Rankings System?

Each District III member school is tasked with reporting its own results. Schools are required to enter results as soon as possible following a completed contest and have until noon the following day to enter the information. District III schools are responsible for loading their own schedules into the system.

District III is responsible for collecting and entering results of non-District III PIAA schools that play District III schools. The district is under the same time constraints as its member schools once a schedule has been entered. District III is responsible for checking all schedules and properly maintaining the power rankings system.

What do TWWP and OWWP mean?

TWWP and OWWP are acronyms for **T**eam's **W**eighted **W**inning **P**ercentage and **O**pponents' **W**eighted **W**inning **P**ercentage. They are the critical components in determining a District III school's final power ranking number.

To understand those terms, it is important to understand the second word in each: Weighted. District III felt it was critical to create value based on a school's PIAA classification. Why? Because PIAA has classifications to begin with, whereupon it groups schools of similar size for post-season purposes. That must be accounted for mathematically.

In order to properly rank teams within a given classification, those teams are given a weighting in that classification. This way, District III teams are properly compared in their own classification based on their own wins and losses (TWWP) and their opponents' wins and losses (OWWP). All of those wins and losses are weighted by an opponent's classification as well.

As noted in the linked explanation, TWWP and OWWP are calculated separately. Once calculated, 55% of the TWWP total and 45% of the OWWP total are added. That sum is a school's final power ranking.

TWWP and OWWP are very important.





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How does OWWP work?

It's not complicated, actually. OWWP is best understood as a strength of schedule component, which it is. District III calculates the wins and losses of all of a member school's PIAA opponents (weighted the same as District III schools), believing that the entire body of work – not just contests played against District III opponents – is critical to an accurate strength of schedule number.

When are OWWP points entered into the calculations?

District III calculates a member school's OWWP on its opponents' entire schedule from the first day of a season through the power ranking deadline. It does not add in the OWWP number from scratch after a contest has been played.

Why did District III take this position? Two reasons: (1) District III believes that calculating the OWWP for the full schedule throughout the season rather than adding the points with each ensuing contest gives a true picture of a school's strength of schedule at any given point of the season.

(2) By calculating strength of schedule for all opponents throughout the season rather than waiting for a contest to be played, it eliminates the big spikes and valleys that would occur in OWWP by playing a particularly strong team or a particularly weak team.

Do schools that play more opponents have a greater advantage toward gaining a better power ranking total?

Not at all. The District III Power Ranking System is based on two separate sets of winning percentages (explained above). A winning percentage is affected by results as opposed to the sheer number of contests. For example, a team that goes 10-10 with 20 contests and a team that goes 8-8 with 16 contests will have very similar TWWP numbers, varied only by weighting.

Some have argued that having more contests gives a school a greater *opportunity* to gain points than a school with fewer contests. This is only true if the school with the greater number of contests wins the vast majority of those additional contests. But if the school loses the vast majority of those additional contests, its power ranking will be harmed. So the opportunity argument is neutral: a school can either benefit or be harmed depending on its own results.

The key is not the total number of wins or the total number of contests. The key is the percentages.





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Why are the values for six classifications different than the values for sports with four, three and two classifications?

District III engaged in significant discussion and debate about what to do with the values once the PIAA adopted six classifications for football, basketball, baseball and softball. In the end, District III felt that the difference in value between classes, which had always been two-tenths of a point, should be reduced to one-tenth of a point.

The District feels this will encourage larger schools to schedule smaller schools in those sports with six classifications. But it also decided to keep the same weighted point values in sports with four, three and two classifications because the evidence showed those values were working well.

Why are only PIAA opponents included in the calculations?

Actually, District III included non-PIAA opponents in 2010-2011, the first year it used the current power ranking system. But the District found that it was unable to apply a proper classification to non-PIAA and out of state opponents because those schools do not count enrollments by the same method that PIAA counts enrollments.

After that first year, District III realized that including non-PIAA schools without the same weighting as PIAA schools, it was skewing the calculations. At that point, the District III Committee decided to eliminate non-PIAA opponents from the power rankings.

Starting in the winter of 2016-2017, District III will no longer add non-PIAA opponents to the District III member school schedules in the system. Because those contests do not count in the calculations, there is no reason to enter those contests other than ensuring a school's overall win-loss record is fully updated. The win-loss records that appear on the Fan Page this winter will only reflect contests played against PIAA opponents and may differ from the overall record.

Why are the Fan Page rankings not considered final when the deadline passes?

Again, two reasons: (1) Once a deadline is reached, District III must check to ensure that all results, both from District III and non-District III schools, are accurately entered into the power rankings system. This occasionally takes some time, which means the final rankings might shift slightly as results are added. That means the power rankings you see at 8:30 a.m. could be slightly different at 10 a.m.

(2) District III shares its power rankings database with District XI, which sometimes has later power rankings deadlines than District III. As a result, the rankings can change a day following the deadline if a District III team had a District XI opponent that was still active (we cannot "turn off" or "freeze" the Fan Page).

For those two reasons, District III produces a final rankings sheet in pdf form and posts it on the District III website as the final and official power rankings for each sport.





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And finally, why are the power rankings used to both qualify teams and to seed each bracket?

This is the greatest ongoing debate regarding our team post-season philosophy. Many people have suggested the power rankings are fine for qualifying teams, but not for populating the bracket. Indeed, the District III Committee has had many discussions about this very issue.

First, a brief history: For years, District III qualified teams and populated its championship brackets based on league representation. That necessarily meant the bracket was pre-set, with schools filling the slots based on league finish. This was not an awful system per se, but it essentially treated all league champions as equals for bracketing purposes. This occasionally meant that a league runner-up that otherwise had an excellent season could be placed in the opposite bracket against, possibly, an undefeated team from another league. And though rare, it also meant that a division or section that had three excellent schools might not advance the third team to the district championships.

Additionally, our leagues had different methods of determining its qualifiers. In some sports, the District attempted to use seeding committees to populate the brackets. All have met with mixed results. That prompted District III to investigate and eventually construct an across-the-board power ranking system.

That is not an easy or perfectable task, and the District has endured considerable criticism of the system for various reasons, much like it endured criticism prior to the implementation of the system.

In the end, District III developed a system by which the schools themselves determine their qualification status and their seeding status without human bias or interference.

That philosophy has not been met with universal approval. The most vocal and persistent argument against that philosophy is that the District's job is to ensure the best teams qualify for the PIAA playoffs. Well, this is quite the trick. Proponents of that argument are essentially demanding bracket manipulation and omniscience on the part of the District.

The District III Committee is not in the clairvoyance business. That is to say, when a team is seeded first in a district playoff bracket, the district is saying that team's body of work, measured by an unbiased mathematical formula, merited that slot on the bracket. It is not saying that No. 1 seed is necessarily the best team or the guaranteed champion in that classification. That is why we have playoffs to begin with: for the schools themselves to determine their playoff outcomes. Seeding provides an orderly process; it is not a projection.

Taken to its logical conclusion, if District III is tasked with ensuring its "best" teams reach the PIAA postseason, District III would be forced to act in an undemocratic and authoritarian manner by determining which teams are worthy of this assurance. That would be abhorrent. So District III not only rejects the clairvoyance business, it rejects the nullification business as well.

That's why District III has decided to let the schools qualify and seed themselves.

