2016-2017 PIAA District III Power Ranking System

The District III power ranking is a combination of the team's weighted winning percentage (TWWP) and their opponents' weighted winning percentage (OWWP). The ranking will be the sum of 55 percent of the team's TWWP and 45 percent of the team's OWWP.

CALCULATING TEAM WEIGHTED WINNING PERCENTAGE (TWWP)

The TWWP is based on the results of all games that a team plays against PIAA opponents. It values wins and losses by the classification of the opponent. The TWWP is calculated by dividing the WEIGHTED WIN VALUE by the sum of the WEIGHTED WIN VALUE and WEIGHTED LOSS VALUE.

WEIGHTED WIN - LOSS VALUES

6 CLASS SYSTEM (Baseball, Basketball, Football, Softball)

CLASS	WIN	LOSS
6A	1.25	0.75
5A	1.15	0.85
4A	1.05	0.95
3A	0.95	1.05
2A	0.85	1.15
1A	0.75	1.25

4 CLASS SYSTEM (Soccer, Girls Volleyball)

CLASS	WIN	LOSS	TIE
3A	1.3	0.7	0.65 / 0.35
3A	1.1	0.9	0.55 / 0.45
2A	0.9	1.1	0.45 / 0.55
1A	0.7	1.3	0.35 / 0.65

3 CLASS SYSTEM (Field Hockey)

CLASS	WIN	LOSS	TIE
3A	1.2	0.8	0.6 / 0.4
2A	1.0	1.0	0.5 / 0.5
1A	0.8	1.2	0.4 / 0.6

2 CLASS SYSTEM (Lacrosse, Tennis, Boys Volleyball, Wrestling)

CLASS	WIN	LOSS	TIE
3A	1.1	0.9	0.55 / 0.45
2A	0.9	1.1	0.45 / 0.55

All games against PIAA opponents will count in calculating a team's TWWP. Games against NON-PIAA opponents are not considered for power ranking calculations.

EXAMPLES

4 CLASS SYSTEM – Football Example

Game	Class	Result	WW	WL
1	AAAA	W	1.3	
2	AAA	W	1.1	
3	AA	L		1.1
4	AAA	L		0.9
5	AAA	W	1.1	
6	AA (Non-D3)	W	0.9	
7	AAAA	L		0.7
8	A	L		1.3
9	Non-PIAA	L		0.0
10	AAA	W	1.1	
	TOTALS	*5-5*	*5.5*	*4.0*

TWWP = 5.5/(5.5+4.0) = 0.5789473

3 CLASS SYSTEM

Game	Class	Result	WW	WL
1	A (Team 1)	W	0.8	
2	AAA (Team 2)	W	1.2	
3	AA (Team 3)	L		1.0
4	AAA(Team 4)	T	0.6	0.4
5	AAA (Team 2)	W	1.2	
6	AA (Non-D3)	W	1.0	
7	A (Team 1)	L		1.2
8	AA (Team 5)	W	1.0	
9	Non-PIAA	L		0.0
10	AAA (Team 2)	W	1.2	
11	A (Non-D3)	W	0.8	
12	A (Team 6)	T	0.4	0.6
13	AA (Team 3)	L		1.0
14	AAA (Team 4)	L		0.8
15	A (Team 6)	W	0.8	
16	A (Team 7)	W	0.8	
	TOTALS	*9-5-2*	*9.8*	*4.8*

TWWP = 9.8/(9.8+4.8) = 0.6712328

CALCULATING OPPONENTS' WEIGHTED WINNING PERCENTAGE (OWWP)

The OWWP is calculated by totaling the weighted win values and weighted loss values of all of the team's opponents; then, dividing the total of the weighted win values by the sum of the totals of the weighted win values and the weighted loss values. Non-PIAA opponents will not be included in calculating the OWWP. If you play your opponent more than once, their totals will be included for each contest played.

EXAMPLES

4 CLASS SYSTEM – Football Example

Game	Class	Result	WW	WL
1	AAAA	W	4.2 *	6.4 #
2	AAA	W	6.3	2.6
3	AA	L	8.6	1.1
4	AAA	L	7.4	1.8
5	AAA	W	1.1	8.7
6	AA	W	4.5	5.1
7	AAAA	L	10.4	1.6
8	A	L	6.3	2.4
9	Non-PIAA	L		
10	AAA	W	6.4	3.4
	TOTALS		55.2	33.2

OWP = 55.2/(55.2+33.2) = 0.6244344

3 CLASS SYSTEM

Game	Class	Result	WW	WL
1	A (Team 1)	W	7.8	9.4
2	AAA (Team 2)	W	2.2	13.4
3	AA (Team 3)	L	13.2	1.6
4	AAA(Team 4)	T	6.6	12.2
5	AAA (Team 2)	W	2.2	13.4
6	AA (Non-D3)	W	8.8	5.4
7	A (Team 1)	L	7.8	9.6
8	AA (Team 5)	W	9.6	5.6
9	Non-PIAA	L		
10	AAA (Team 2)	W	2.2	13.4
11	A (Non-D3)	W	14.4	0.8
12	A (Team 6)	T	7.4	9.2
13	AA (Team 3)	L	13.2	1.6
14	AAA (Team 4)	L	6.6	12.2
15	A (Team 7)	W	8.2	5.4
16	A (Team 8)	W	4.4	10.6
	TOTALS		114.6	123.8

OWP = 114.6/(114.6+123.8) = 0.4807047

* 4.2 equals 2 wins against AA opponents (.9 + .9), 1 win against AAA opponent (1.1) and 1 win against a AAAA opponent (1.3)

\# 6.4 equals 2 loses against A opponents (1.3 + 1.3), 2 loses against AA opponents (1.1 + 1.1), 1 loss against a AAA opponent (.9) and 1 loss against a AAAA opponent (.7)

CALCULATING POWER RANKING

The Power Ranking is the sum of 55% of the TWWP and 45% of the OWWP. This number will not be over 1.000.

EXAMPLES (USING THE CALCULATIONS ABOVE)

4 CLASS SYSTEM

TWWP: 0.5789473 * 0.55 = 0.318421
OWWP: 0.6244344 * 0.45 = 0.2809954

0.318421 + 0.2809954

POWER RANKING = 0.5994164

3 CLASS SYSTEM

TWWP: 0.6712328* .55 = 0.369178
OWWP: 0.4807047* .45 = 0.2163171

0.4807047 + 0.2163171

POWER RANKING = 0.5854951

TIE BREAKING CRITERIA

#1 – Head to Head
#2 – Best TWWP
#3 – Unweighted Winning Percentage against common Regular Season
#4 – Unweighted Winning Percentage against Regular Season
#5 – Unweighted Winning Percentage of Common Regular Season
#6 – Unweighted Winning Percentage of Regular Season Opponents
#7 – Lowest Points/Goals Yielded Average Against Common Opponents
#8 – Lowest Points/Goals Yielded Average Against All Opponents
#9 – Coin Toss