

SEEDING THE STATE BASKETBALL TOURNAMENTS USING FLEX SEEDING AND KPI

FLEX SEEDING is an innovative method to bracket the state boys and girls basketball tournaments. By using a flexible bracketing process rather than a true S-curve, critical geographic integrity is protected. A bracket reveal leading into the tournaments can generate excitement leading into March.

DATA SUMMARY

- In the 2017 Boys Model, there was a net increase of **only 1.49 miles** traveled per school (from 19.8 miles to 21.3 miles). 86% of teams would be in the same or a closer district than they were in 2017 (78% would be in the same district, 8% would be in a closer district).
- In the 2017 Girls Model, there was a net increase of **only 1.24 miles** traveled per school (from 20.0 miles to 21.3 miles). 86% of teams would be in the same or a closer district than they were in 2017 (76% would be in the same district, 10% would be in a closer district).
- The MHSAA was able to place 81% of schools their closest district in 2017. In the 2017 Flex Seeding model, **77% of boys and girls teams played in their closest district.**
- In a winter survey to BCAM members, **86% (766 of 895 responses) supported work toward a flex seeding model** while maintaining geographic principles.

HOST SITE SELECTION

- MHSAA selects regional and district hosts, same as current practice.

ASSIGN SCHOOLS TO REGIONALS

- MHSAA assigns teams to regionals (rather than both districts and regionals) according to geography. This could also be done by optimization if desired.

RANK SCHOOLS

- All boys and girls basketball teams would be ranked by KPI.
- KPI is a **results-based metric** that ranks teams based on results of games played, assigning values to each win and loss based on the quality of that result on a scale of approximately -1.0 to +1.0. It factors elements that make one game different from another (location of game, quality of opponent, etc.).
- **Margin of Victory has been removed** from the equation. A 1-point win and 50-point win against the same team has the same value.
- All games against teams participating in the state tournament are used. (The MHSAA website has scores for 99.8% of boys games and 96.2% of girls games played between two state tournament teams)
- **The risk of negative effects on scheduling are not eliminated, but are minimized** because (a) all teams qualify for the tournament, (b) there is no minimum win total, (c) there are up to 20 data points rather than nine in football, and (d) KPI accounts for opponent's opponent's win percentage rather than evaluating win strength strictly by opponent win percentage and classification. No system is perfect, and there will always be some reliance on the scheduling integrity of coaches and schools.
- Attention paid to rankings adds life to the later part of the regular season, providing a jumpstart as the state tournament begins.
- Rankings sorted within each district serve as a **guideline and starting point** to the geographic-based bracketing process.

BRACKETING

- This is where **ranking ends** and **bracketing begins**.
- **This is NOT an S-curve**. It is designed for flexibility.
- The district host always plays in their own district.
- Districts and seeds are assigned by solving for the fewest total miles traveled while keeping teams either on their seed line or up 1 seed line (for top two teams on seed line) or down 1 seed line (for bottom two teams on seed line).
- **A mileage cap of 75 miles further than the closest district site** is being used to accommodate non-traditional and geographically-isolated districts.
- A single violation of the mileage cap to the bracketing rules **triggers a geographically-isolated district**.
- It is infeasible in any model to send all teams to their closest geographic district. Flex Seeding decides who is going “out of district” by rankings rather than the current practice of making those selections by hand, enhancing perceived credibility.

TEAM	SEED																							
	DISTRICT 1				DISTRICT 2				DISTRICT 3				DISTRICT 4											
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BRACKETING BEYOND DISTRICTS

- District champions are pre-bracketed into regional semifinal matchups based on the seeds of the top four teams in the regional.
- Regional champions meet in the quarterfinals, semifinals, and state championship no different than they do currently.

ACADEMIC COMPONENT

- Work with existing or new group to engage students in an academic component in sports analytics.
- Student group can assist in data collection and meet virtually to learn about data collection and optimization, culminating at the state tournament with possible high school or college credit attached.

FINANCIAL IMPACT

- By using existing regionals and implementing a mileage cap, the anticipated change in travel costs is minimal (cost to MHSAA could adjust slightly if a team just above or below 75 miles moves to a site on the other side of the 75-mile travel reimbursement threshold).
- The impact on attendance is thought to be neutral. Playing more competitive games later in the tournament (once others are eliminated) could generate increased availability for some to attend. Matchups change year over year regardless of the process and help drive attendance increases.

BUSINESS

- Proposal is customized to MHSAA structure by listening to feedback from coaches and administrators in the state. MHSAA would need and have full control of the parameters (including adjustments) to the system.
- While there is a belief that operation could be covered financially by new advertising opportunities generated from new content, there is admittedly a difference of opinion to that fact.

OUTCOMES: Participants across the state have the ability to earn their starting point in the state tournament by performance rather than random draw. Those interested also have a mechanism to compare teams to stimulate discussion and increase interest around the sport.

CONSEQUENCES: There are some legitimate questions about the financial model and what opportunities may exist.