

Wisconsin Football Playoff Matrix Proposal

Executive Summary

The Wisconsin Football Playoff Matrix introduces a fair, data-driven approach to high school football playoffs, designed to ensure transparency, reduce travel, and provide consistency. Developed by Andy LaVoy and Jesse Norris of Edgewood High School in collaboration with the WFCB Executive Board, the system draws inspiration from the Ohio High School Athletic Association (OHSAA), while addressing Wisconsin's unique needs. We conducted a poll of over 400 head coaches across the state, with 87.5% endorsing the proposed system.

We aim to ensure transparency in the seeding and qualification process while maintaining a system of checks and balances with the WIAA. Our approach prioritizes minimizing travel distances where possible, while also ensuring that schools from all regions of the state have a fair opportunity to compete for a spot at Camp Randall in the state championship.

Key Features

1. **Division Placement:** Seven divisions based on enrollment, evenly distributed for fair competition, and established before each season starts.
2. **Ranking System:**
 - Teams earn Tier 1 points for wins, scaled by the division strength of their opponents.
 - Tier 2 points reward quality wins by factoring in the success of defeated opponents.
 - Combined scores provide a clear, objective ranking for playoff qualification.
3. **Playoff Qualification:** Top 32 teams in each division qualify for postseason play.
4. **Seeding and Regions:** Teams are seeded 1–8, assigned to one of four geographic regions (A, B, C, D) to minimize travel, and ensure regional representation giving all areas of the state an equal opportunity to play for a state championship.

Benefits

- **Fairness:** Objective rankings and clear rules ensure equal opportunities.
- **Travel Reduction:** Geographic seeding minimizes travel for teams and fans.
- **Consistency and Transparency:** A fully computerized system eliminates subjective decisions and ensures results are clear and reliable.
- **Checks and Balances:** The WFCB can run an unofficial program alongside the WIAA's official process, allowing results to be compared weekly for accuracy and alignment.
- **Improved Scheduling Control/Realignment:** The matrix addresses complaints about realignment by scoring two non-conference games equally, giving teams greater control over their overall schedule.
- **Proven Track Record:** Ohio has successfully used this qualification and seeding method for over 30 years.
- **Geographic Representation:** The 2024 implementation showed better geographic representation in 5 of the 7 divisions. [See explanation and example](#)

- **Division Placement and Performance Factor:** Both are determined before the season begins, ensuring clarity and consistency in planning.
- **Efficient Playoff Selection Process:** On the final Friday of the regular season, the matrix will finalize playoff seeding and qualification immediately after the last game score is entered, streamlining what has traditionally been a lengthy process.

Implementation and Next Steps

This proposal is designed for immediate implementation in the 2025 season, with minimal adjustments needed for schools and administrators. The system can be used for both 11 player and 8 player leagues. Stakeholder feedback from the WIAA, coaches, and school administrators is encouraged to refine the system further and ensure a smooth transition.

Explainer Video: <https://www.loom.com/share/7c231f2d83df4ecd95a6ff78d850e25>

2024 Hypothetical Results Website: <https://andylavoy.com/football>

Division Placement

DIVISIONS are calculated before the season starts, based upon the enrollment numbers from the previous school year. The largest schools will be placed in D1, the smallest in D7. We will break the **DIVISIONS** down 1 through 7 as evenly possible, with the remainders placed evenly in larger-enrollment **DIVISIONS** on down.

8-Player will be considered its own **DIVISION** for the purposes of the rest of this document.

The WIAA Performance Factor will continue to be applied without modification.

Ranking Methodology

Tier 1 **POINTS** are awarded for each win:

- Win over a **DIVISION 1** school - 6.5 **POINTS**
- Win over a **DIVISION 2** school - 6.0 **POINTS**
- Win over a **DIVISION 3** school - 5.5 **POINTS**
- Win over a **DIVISION 4** school - 5.0 **POINTS**
- Win over a **DIVISION 5** school - 4.5 **POINTS**
- Win over a **DIVISION 6** school - 4.0 **POINTS**
- Win over a **DIVISION 7** school - 3.5 **POINTS**
- Win over an **8-Player** school - 3.0 **POINTS**
- Win over an **8-Player** school with over 200 enrollment - 3.3 **POINTS**

The steps to calculate a team's **TOTAL** are as follows:

1. Calculate Tier 1 **POINTS** for each win.
2. Divide by the number of games played to get the Tier 1 **SCORE**.
3. To get Tier 2 **POINTS** you add the total of defeated opponents' Tier 1 **POINTS**.

4. Divide Tier 2 **POINTS** by opponents' games played and multiply by 9.
 - a. We multiply by 9 to give a 100% bonus to your Strength of Victory.
5. Add Tier 1 **SCORE** and Tier 2 **SCORE** to get the **TOTAL**.

Franklin's 2024 **TOTAL** calculation

$$(56.0 / 9) + (228.5 / 81 * 9) = 31.61$$

Teams will be **RANKED** within their own **DIVISION** based upon their **TOTAL**.

Playoff Qualification

The top 32 teams from each **DIVISION** will be the qualifying field, as set Friday Night of Week 9 at 11:59pm.

Seeding and Regional Alignment

After **RANKING** is complete, teams will be assigned a **SEED** based on their **RANK** within their respective **DIVISION**. The top 4 teams in each **DIVISION** will receive a #1 **SEED**, the next 4 teams a #2 **SEED**, and so on through #8 **SEED**.

Regional Alignment for Seeds #1–#4

For the #1 **SEEDS**, teams will be assigned into one of four regions—A, B, C, and D

Travel Optimization for Seeds #2–#8

For **SEEDS** #2–#4, teams will be assigned to the region where the teams' cumulative total drive time to each of the #1 **SEEDS** is minimized. #4 and #3 will be placed directly with their likely 2nd Level opponent, the #1 and #2 **SEEDS** respectively. The #2 will be placed with their closest #1 **SEED**, their likely 3rd Level opponent.

For lower **SEEDS** (#5–#8), matchups prioritize minimal travel distance directly between first Level opponents. For each first Level away team seed (e.g., #5 **SEEDS**) and their respective home teams (e.g., #4 **SEEDS**), all 24 travel distance permutations are calculated, and the matchups with the lowest total travel are chosen, with each away team assigned to the region of its paired home team.

We will prioritize minimizing total travel distance within each region while also considering the longest individual trip. During the calculations, we will track the longest trip assigned to any team within a region. If an alternative arrangement shortens the longest trip and the reduction in the longest trip exceeds the additional total distance incurred (without increasing total travel by more than 10%), we will select the option with the shorter longest trip. This ensures that travel burdens are more evenly distributed, preventing any single team from being disproportionately affected by the regional alignment.

Hosting Privileges

The higher **SEED** in each of the first three Levels will host the game.

This system balances the competition of each bracket while prioritizing logistical efficiency for lower-ranked teams, rewarding regular-season success while minimizing travel burdens.

Handling Special Cases

Forfeits

Forfeits are counted as valid games unless replaced by a different game the same week.

If a team replaces a forfeit win with a new game, the forfeit win will count if the team loses the replacement game. If the team wins the replacement game, the replacement game will be used. This encourages teams to schedule replacement games without risking their playoff score.

No Contests

No-Contest games are not counted.

Out-of-State Games

Enrollment for each out-of-state opponent is collected and the opponent is given an equivalent Wisconsin **DIVISION** for the purposes of Tier 1 **POINTS**. If the enrollment falls between the Wisconsin cut lines, the lower-enrollment **DIVISION** will be used.

All regular season games that end before 11:59 pm Friday of Week 9 are counted in the formula.

Tier 2 **POINTS** for out-of-state opponents are totaled using all of their games played with the **POINTS** they accumulated within the division that school was placed within the Wisconsin enrollment.

Tied Games

Ties result in half of the point value being earned.

Ties in the TOTAL

In the event of a tie in the **RANKINGS**, and only in the event of a tie, we will compare the Tier 3 **SCORE**: This is the average of your defeated opponents' Tier 2 **SCORE**.

Ties in Enrollment

If two or more schools have the same enrollment, the previous year's enrollment will be used as the tiebreaker for the sake of determining **DIVISIONS**.

Example Application: 2024 Franklin

Division Placement

In 2024 we had 364 teams, which evenly divides each **DIVISION** into 52 teams.

Franklin has an enrollment of 1606 and is subject to the Performance Factor, which is larger than the 52nd largest school in the state, placing them in **DIVISION 1** before the start of the season.

Ranking Methodology

Franklin was 9-0, with 5x D1 wins (worth 6.5 **POINTS** each), 3x D2 wins (worth 6.0 **POINTS** each), and 1x D3 wins (worth 5.5 each).

$$(5 \times 6.5) + (3 \times 6.0) + (1 \times 5.5) = 56.0 \text{ Tier 1 } \mathbf{POINTS}$$

They played 9 games, so their Tier 1 **DIVISOR** is 9.

Totalling up all of their defeated opponents (which is all 9 in Franklin's case), their Tier 2 **POINTS** comes to 228.5.

Their opponents played a combined total of 81 games, so their Tier 2 **DIVISOR** is 81.

To determine their **TOTAL** score we do the following:

$$L1 \text{ } \mathbf{POINTS} / L1 \text{ } \mathbf{DIVISOR} + 9 \times L2 \text{ } \mathbf{POINTS} / L2 \text{ } \mathbf{DIVISOR}$$

$$(56.0 / 9) + (9 \times 228.5 / 81) = \mathbf{31.61}$$

Seeding and Regional Alignment

Franklin is top 32 in the state for **DIVISION 1**, they qualify for the playoffs.

Franklin has a higher **TOTAL** than every other team in **DIVISION 1**, they are **RANKED #1**.

Because Franklin is **RANKED #1**, they have earned a #1 **SEED**.

The other Top-4 **RANKED** teams within **DIVISION 1** are: Verona, Oconomoc, and Kimberly. They will all receive a #1 **SEED** and will host up to 3 home games during the playoffs, and be the top **SEED** in their **REGION**.

Calculating their total distances to the four corners of the State, we find the shortest overall travel for the four teams places each team in the following **REGIONS**:

- A: Kimberly, B: Oconomowoc, C: Verona, D: Franklin