The 12 western teams from Districts 1 and 2 cover the largest geographical area. The districts with the greatest geographical separation should ideally have fewer teams. However, this doesn't align with the current proposal. For instance, District 3, whose farthest game is a mere 20-minute drive, has four teams, while District 1 involves multiple trips taking over 2 hours each. To address this, I utilized an Artificial Intelligence (AI), inputting all team addresses, and instructing it to formulate the optimal District lineup. The first image displays the proposed alignment by KHSAA, while the second image shows the AI-generated districts.

The image itself makes the point, but for a more detailed view, refer to the tables at the bottom of this write up.

Key Points from the tables:

With the AI Districts, the farthest district game involves a 3-hour round trip, as opposed to KHSAA's farthest district game being 4 hours and 24 minutes. Notably, it involves the same team, Graves County, reducing their farthest district game by 1 hour and 30 minutes.

The farthest sister district game in the AI Districts is 4 hours and 24 minutes. Interestingly, this game is currently an in-district game with KHSAA's proposed districts. Let me write this again for emphasis, the farthest sister district game, that isn't even a guarantee to happen, in the AI-created format is a KHSAA District Game.

With the AI District schedule, no team, except for District 1, will travel over 1 hour for crucial District games, and none will exceed 2 hours for their first two-round games against their sister district.

The only downside, and a minor one at that, is that just a few teams around Louisville will have to travel a little further. However, no district games for them will extend beyond 30 minutes, a small compromise compared to the hours other teams would spend with the current proposed districting.

This AI system brings several advantages, including cost savings for schools, enhanced player safety as they will not be driving home on county roads in the early morning hours, and potentially increased attendance due to closer game locations. This isn't intended as criticism against KHSAA's proposed districting; rather, it highlights the efficiency of AI in performing calculations that would take a human much longer. I focused on 5A because that's the school I support, but applying this to other classifications wouldn't be difficult.

AI Created Farthest District Matchups					KHSAA Proposed Farthest District Matchups				
Farthest District Games	School A	School B	Time Trip	Round Trip	Farthest District Games	School A	School B	Time Trip	Round Trip
District 1	Graves Co	Muhlenberg Co	1 hr 30 min	3 hrs	District 1	Graves County	Owensboro	2 hrs 12 min	4 hrs 24 min
District 2	Owensboro	Grayson Co	1 hr 3 min	2 hrs 6 min	District 2	Ohio County	Barren County	1 hr 16 min	2 hrs 32 min
District 3	Warren Central	Barren Co	41 min	1hr 22 min	District 3	Seneca	Butler	18 min	36 min
District 4	Butler	Bullitt Central	24 min	48 min	District 4	Jeffersontown	Bullitt Central	30 min	1 hr
District 5	Oldham	Moore	34 min	1 hr 8 min	District 5	Conner	Scott	19 min	38 min
District 6	Conner	Scott	19 min	38 min	District 6	South Oldham	Scott Co	1 hr 10 min	2 hrs 20 min
District 7	Anderson	Montgomery	1 hr 6 min	2 hrs 12 min	District 7	Madison Southern	Montgomery	1 hr	2 hrs
District 8	Madison Southern	Southwestern	57 min	1 hr 54 min	District 8	Southwestern	North Laurel	49 min	1 hr 38 min
		Total Time	6hr 34 min	13 hrs 8 min			Total Time	7 hr 34 min	15 hrs 8 min

AI Farthest Sisiter District Game					KHSAA Farthest Sisiter District Game				
*Possibility these games never happen					*Possibility these games never happen				
Farthest Sister District Game	School A	School B	Time Trip	Round Trip	Farthest Sister District Game	School A	School B	Time Trip	Round Trip
District 1 and 2	Graves Co	Owensboro	2 hrs 12 min	4hrs 24 min	District 1 and 2	Graves County	Barren County	2 hr 54 min	5 hrs 48 min
District 3 and 4	Greenwood	Butler	1 hr 45 min	3 hrs 30 min	District 3 and 4	Bullit Central	Jeffersontown	21 min	42 min
District 5 and 6	Moore	Conner	1 hr 50 min	3 hrs 40 min	District 5 and 6	Anderson	Conner	1 hr 33 min	3 hrs 6 min
District 7 and 8	Scott Co	Southwestern	1 hr 42 min	3 hrs 24 min	District 7 and 8	Montgomery	Southwestern	1 hr 52 min	3 hrs 44 min
		Total Time	7 hr 29 min	14 hrs 58 min			Total Time	6 hr 40 min	13 hrs 20 min

AI Districts

District 1	District 2	District 3	District 4
Graves	Owensboro	Bowling Green	Butler
Marshall	Apollo	Warren Central	Iroquois
Muhlenberg	Grayson	Greenwood	Fairdale
Madisonville	Ohio	Barren County	North Bullitt
			Bullitt Central

KHSAA Districts

District 1	District 2	District 3	District 4
Graves	Bowling Green	Atherton	B. Central
Marshall	Warren Central	Butler	Fairdale
Muhlenberg	Greenwood	Iroquois	Jeffersonto
Madisonville	Barren	Seneca	Moore
Apollo	Ohio		North Bullitt
Owensboro	Grayson		

District 5	District 6	District 7	District 8
Atherton	Conner	Anderson	Madison South
Seneca	Cooper	Woodford	Pulaski
Moore	Boone	Scott Co	Southwestern
Jeffersontown	Scott	Montgomery	North Laurel
South Oldham	Dixie Heights	E Jessamine	South Laurel
Collins		W Jessamine	

District 5	District 6	District 7	District 8
Boone	Anderson Co	E Jessamine	N Laurel
Conner	Collins	W Jessamine	S Laurel
Cooper	Scott	Madison S	Pulaski
Dixie Heights	Oldham	Montgomery	Southwester
Scott	Woodford		