

Towards Open League

Midland Region Hockey Association
Men's League

This presentation contains two main sections on moving Towards Open League .

The first 14 slides outline the current 'state-of-play' in the Midland Men's League, moving from a brief background, defining the overall approach, highlighting the nature of the work undertaken, and concluding with a formal proposal to Clubs

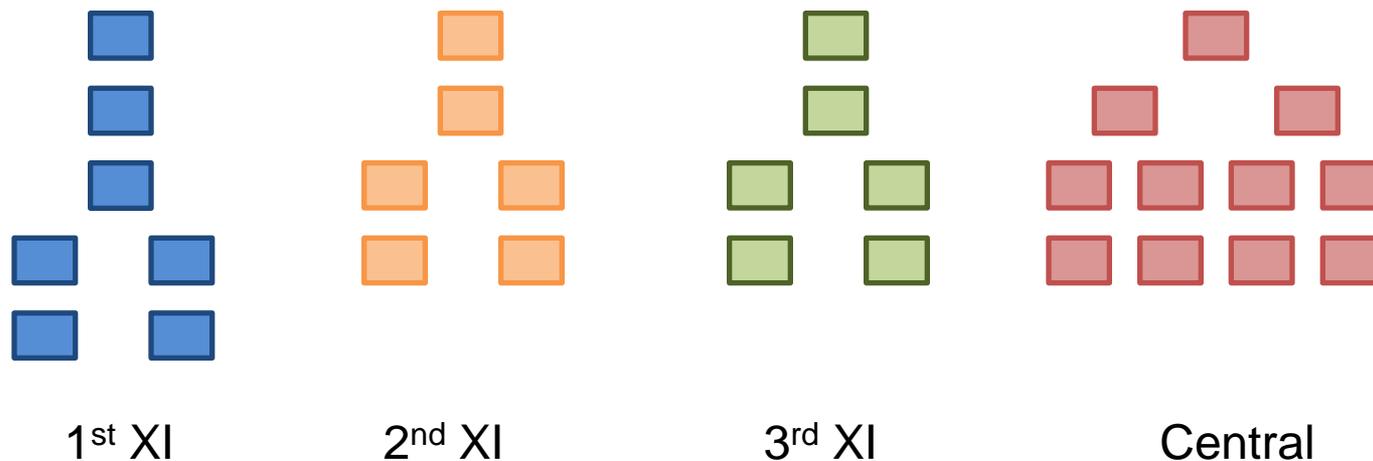
-- that the Midland Men's League migrate to the recommended Open League Structure for the start of the 2018-19 season.

Clubs are requested to respond to this formal proposal by 31st January 2018.

There then follows a series of slides detailing the work behind that Proposal.

The intention is to circulate this presentation to all Midland Clubs in Dec 2017 both as a response to their request that the League undertake this work, and in the hope that it helps them decide on a possible future for the Men's League .

MRHA has traditionally been organised as 4 discrete Leagues



at 2016-17 31 divisions - but only 335 teams – 93% occupancy

Problems ?? Considerations ??

- each league DOES NOT HAVE multiples of 12 teams ...
- incomplete divisions -> lower sides suffer lack of fixtures
- 4 degrees of competitiveness – 4 sets of geography
- 2nd XI / 3rd XI / Central top divisions have competitive CEILING

Towards Open League

- **Background**

- 2015 Open League Paper looked at ..
 - club numbers/progression/survival
 - possible Open Structure
 - potential for reduced travelling
 - more 'even' competition between sides
- Conclusion
 - minimum benefit as claimed by proponents
 - no significant reduction in travelling
 - a promise to undertake more work ...

Background ...

By 2017 the League had lost a further 3 divisions,
and Open Leagues resurfaced ..

March 2017

- Poll of clubs ...

'Does your Club want the MRHA Men's League to
progress towards an Open League or not?'

June 2017

- Poll Result 43 out of 83 Clubs in favour (51.8%)

though further replies have increased this number ...

The Men's League Committee took up the Challenge ..

We started with a BRAINSTORM of all requirements / suggestions / possibilities

- we created a list of: 'League Objectives' ...
- we created a list of: 'Items To Be Considered' (both are listed in the Appendix)

With these in mind - we created 3 specialist working sub-groups.

Structure Sub-Group

determine the best structure for an Open League fitting all the required criteria.

Ranking Sub-Group

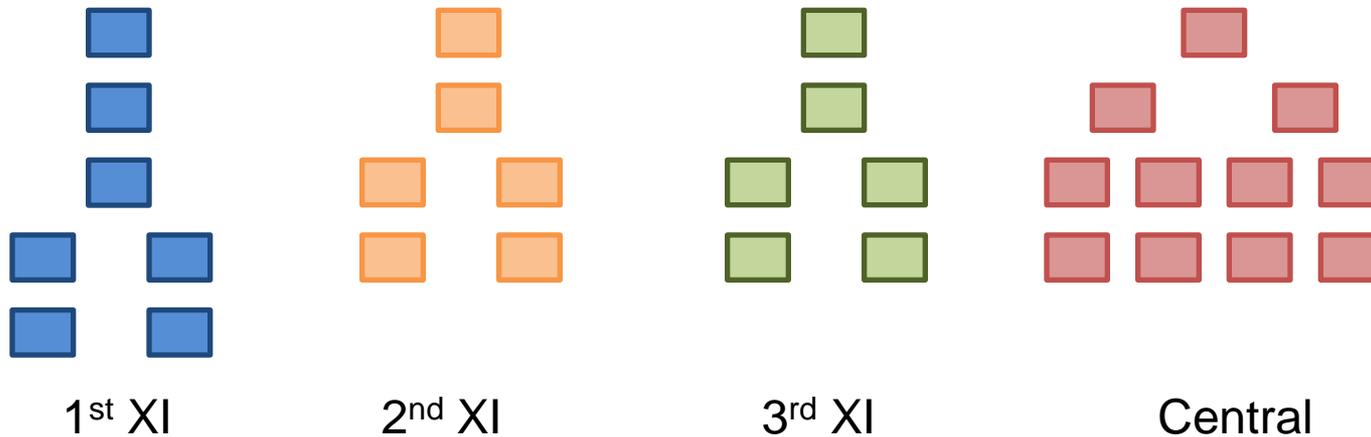
formulate a ranking or weighting for all current clubs in all divisions across existing leagues - with a view to then using this value to populate a new structure

Rules Sub-Group

determine Rule changes necessary to move to, and use, that structure.

Overall Considerations ...

MRHA has traditionally been organised as 4 discrete Leagues



desire to move to Open League ??

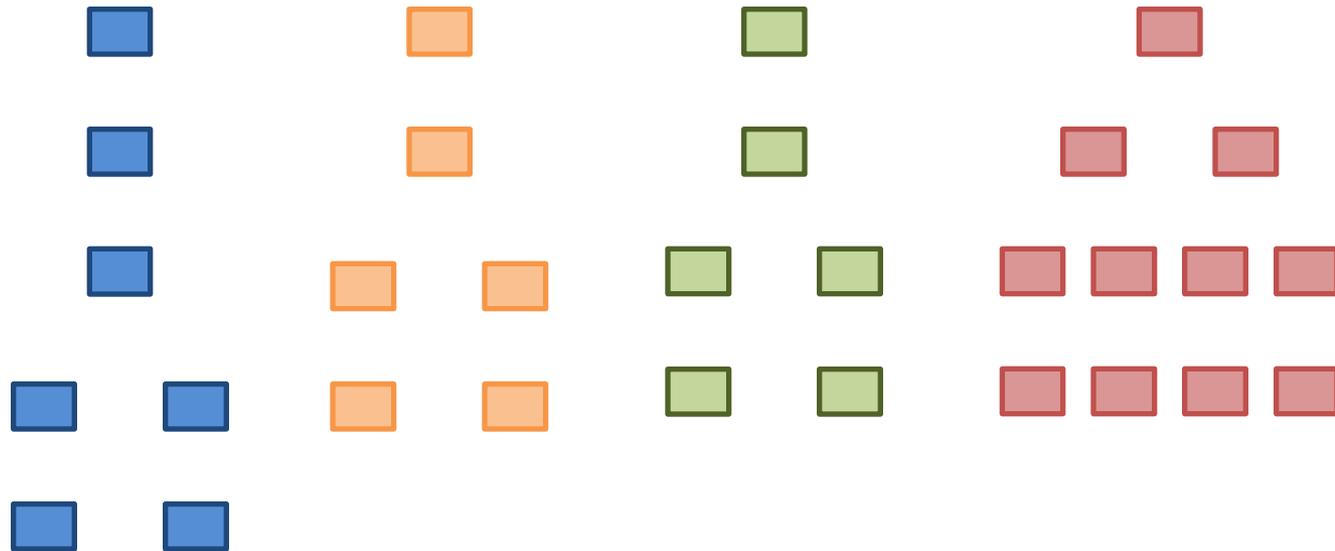
exists elsewhere?

always quoted as 'better'??

but what does this mean to us???

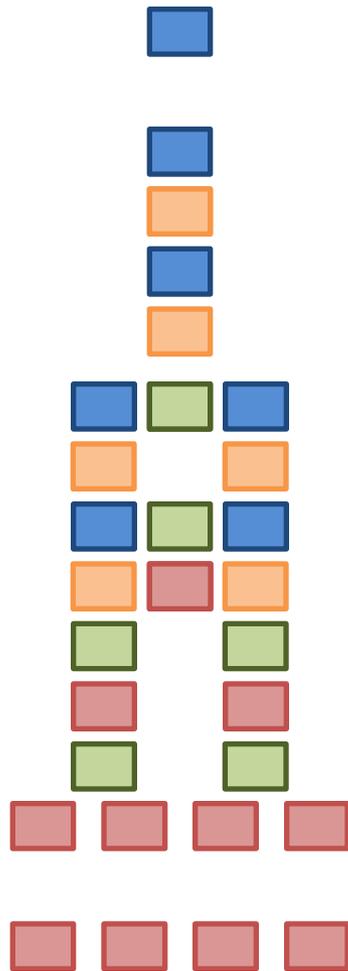
Towards Open League

Merge four Leagues into an Open League ... ??? ...



Click to see a **schematic representation only** of how we could merge four leagues into a single open pyramid.

In reality we are looking to merge **teams** rather than complete divisions to deliver 'greater equality' of teams within more competitive divisions throughout.



So the agreed overall thinking is to merge the existing four leagues into a single 'pyramid shaped' structure

—
this begs the questions

What is the best pyramid structure for the Midlands ?

How do we migrate to that structure ?

The following pages look at potential Structures, the Ranking process, and how the values calculated can be used to populate ANY new structure.

Structure

The 'Structure Sub-Group' was looking to provide :-

- maximum competition for all teams
- most flexible promotion/relegation as club strengths evolve
- stability of tenure to avoid yo-yo between divisions

The format should balance the requirement for the strongest teams to face challenges in a pan-Midland context, while others face strong opponents within geographically reduced 'local' divisions - which therefore give less mileage and less costs against exacting competition.

Most divisions would be of 12 teams with a (general) 2-up 2-down promotion and relegation to allow a clear path for promotion to the National League from the top of the pyramid.

Ranking

The 'Ranking Sub-Group' used the following Terms of Reference.

- assess relative strengths of each team in each division in each league ...
- assess/gauge relative strength of each League AGAINST all other Leagues
- assess individual strength of each team within each division ...
- combine to give a single weighted list of all teams ...

The process defined should be fair and equitable to all teams, and be transparent for all clubs to view how the process was undertaken ...

- no desire / scope / time for play-off games or interdivisional challenges ..
- minimum (zero) subjective comparison by Club / Club Name / Club size
- no Club history – assessed purely on final 2017-18 season placings
(incomplete divisions and/or recent restructuring would make history awkward
– while traditional promotion/relegation is applied to this year's performance only)

Rules

The 'Rules Sub-Group' used the following Terms of Reference.

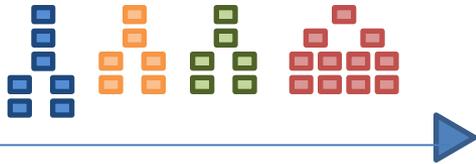
- Support recommendation of the Structure and Ranking sub-groups to enable smooth transition and give clear definition to any required changes.
- Review existing rules and identify areas that may be affected by a new structure and/or by any external factors e.g. England Hockey

The following areas were identified as requiring review/change – to then incorporate as much standardisation as possible

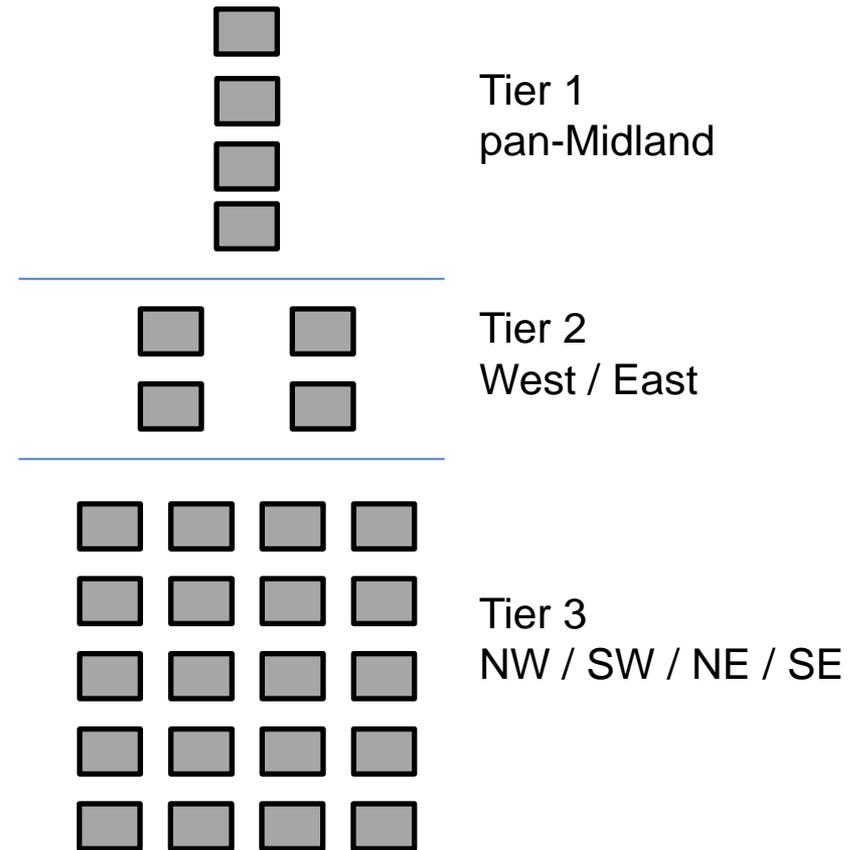
- League Structure
- Promotion/Relegation
- Start times and playing window
- Submission of Results
- Allocation of Umpires

Recommendation

Upon consolidating the work of all three sub-groups the following Structure recommendation is proposed for the Midland Men's Open League



the work behind this recommendation is detailed in appendices later in this presentation ...



**Midland Men's
Open League Structure**

Moving Forward - Timescales

December 2017

Formal League Proposal to all eligible Clubs - posted to Club Secretary

-- that the Midland Men's League migrate to the recommended Open League Structure for the start of the 2018-19 season.

Clubs requested to Vote: **YES** to implement - **NO** to reject the proposal

31st January 2018

Final date for Club responses from Club Secretary

Early February 2018

Clubs informed of results ...

NB The Men's League will NOT be publishing any details of potential team positions within the proposed new structure - just the mechanics of production

The following Appendices try to explain some of the inner workings
behind the Proposal ...

Appendices

Here we document the initial BRAINSTORM lists ..
and outline the work of the 3 subgroups ...

- Brainstorm
- Structure
- Ranking
- Rules

The opening BRAINSTORM included requirements / suggestions / possibilities

in the category of -- **Open League Objectives** -- our list included ..

Less travel / More competitive Hockey – High and low level / Complete fixture calendar / Promotion/Relegation through all divisions / Easier for new clubs / Support for struggling clubs / All teams find relevant level / Increase pool of neutral umpires / Club retention / Player retention / Bring back clubs that have left the league / Improve standards of lower teams (on & off the pitch) / Build on best practice.

while --- **Items to be considered** --- said we should not forget ...

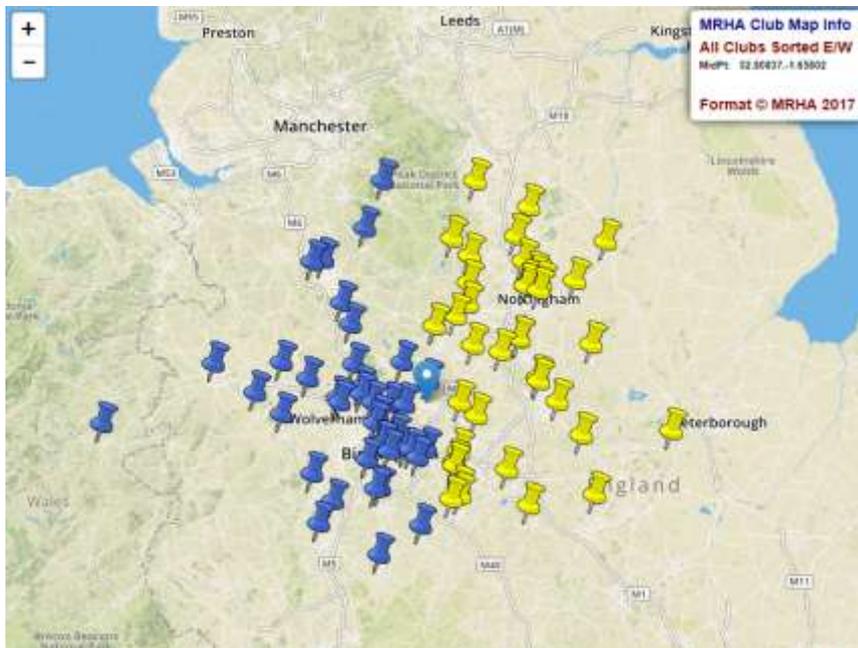
Teams in divisions / Ranking of all teams / Play offs to decide positions ? / Define structure / Define teams in structure / Implementation - League Committee – roles / Implementation - Divisional Secretaries – roles / Set of rules / Promotion / Relegation / Consistent admin / Start times / Appointment of umpires within structure / Club Approval / Number off non-1st teams in top division / Not ‘full’ open league ? / Not full implementation day 1 – phased ? / Enable new teams to enter at higher level / Multiple teams in a division

While not exhaustive – we used these as a basis for our 3 specialist working sub-groups

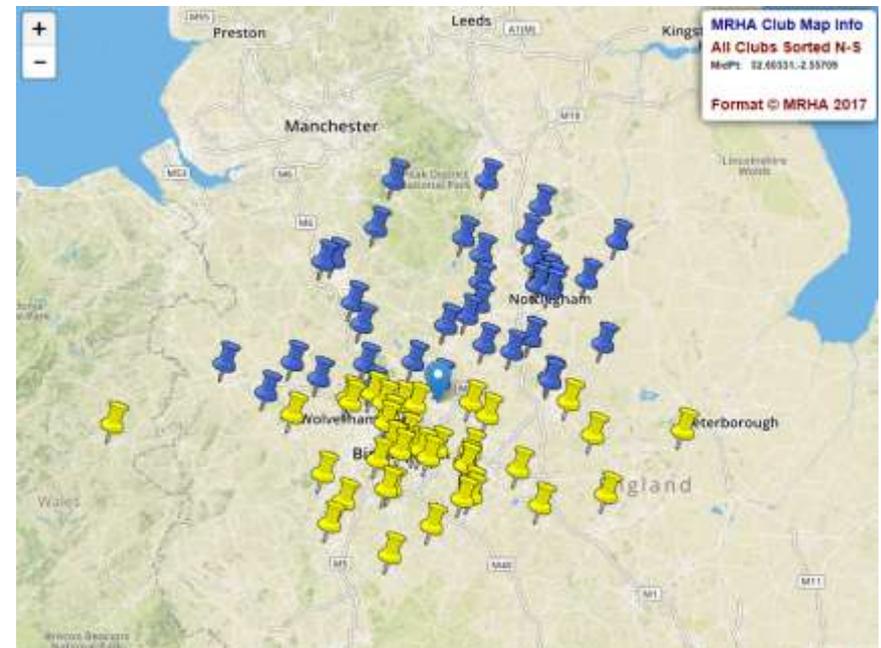
Structure

So how do we accommodate 340 sides, from 84 clubs, that cover 8 counties, encompassing 80 miles North to South and 115 miles East to West.

We started with the geographic location of each of the 84 clubs we administer.



do we employ an East / West split
below pan-Midland

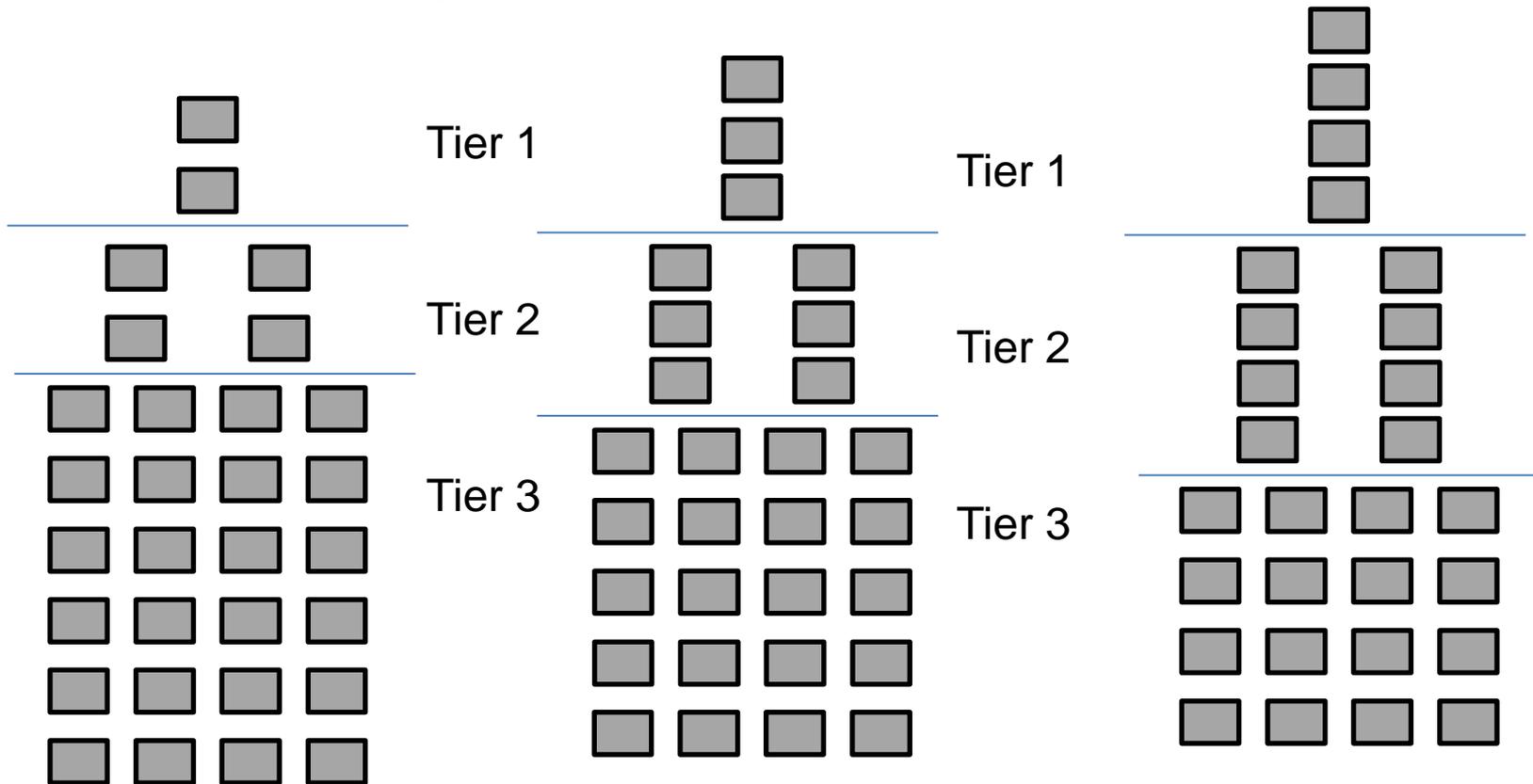


or perhaps a North / South split
below pan-Midland

Structure requirements include

- maintain the Midland wide competitiveness for the top clubs
- increases the competitiveness for teams in other leagues by appropriate mixing of 1st, 2nd, 3rd and Central teams into new 'Open' divisions ..
- reduce the difference in strength in each division
- try to reduce the overall travel costs of clubs
- accommodate EH proposal allowing 2nd XI sides promotion into EHL
- fill divisions with 12 teams wherever possible
- flexible allocation avoiding more than 2 teams per club in any division
- consider - BUT REJECT - proposals that do not match criteria

Consideration was given to three basic models ...



Each variant was tested with WEST / EAST split at Tier 2 ...
 and with NORTH / SOUTH split at Tier 2
 followed by a four-way traditional geographical split a Tier 3.

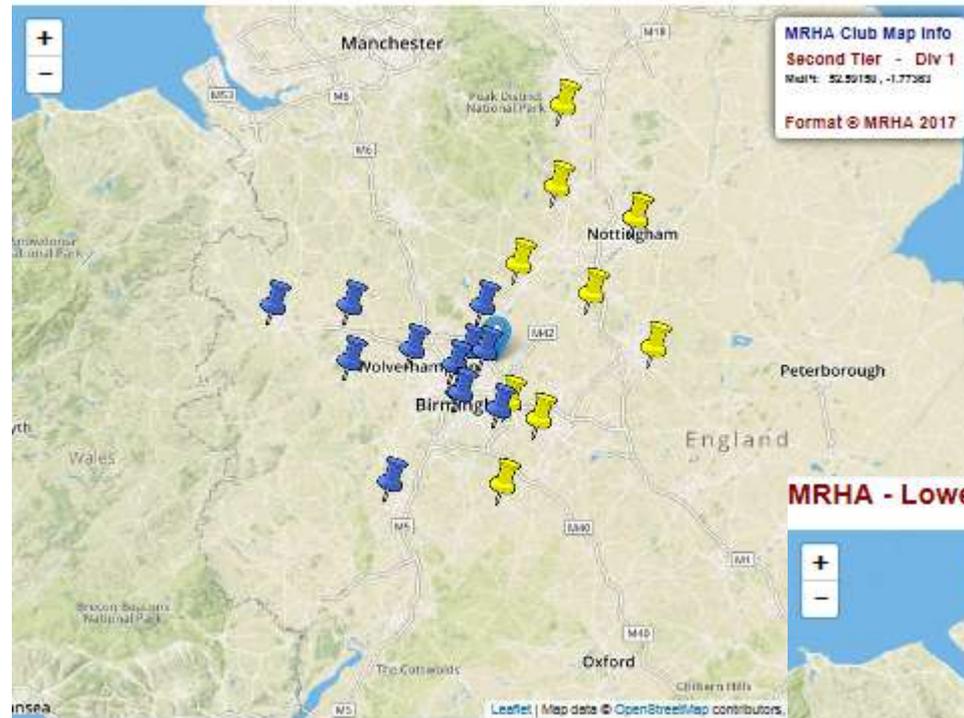
For each of the 6 models ... we looked at...

- applying the Ranking formula outlined in detail below ...
- applying end-of-season promotion and relegation placings ..
- the overall placement of clubs using their geographic location ..
namely West/East or NW / SW / NE / SE
- the mileages travelled to fixtures in each division ..
initially this was as-the-crow-flies ..
and was improved to actual road mileages ...

So for all 28 divisions in each of 6 models we exhaustively checked these details - both numerically and pictorially ...

Examples of the screens we used are detailed overleaf ...

MRHA - Second Tier Div 1 (24) Sorted EastWest



**We looked at:
Team Placement ...**

Tier 2 teams

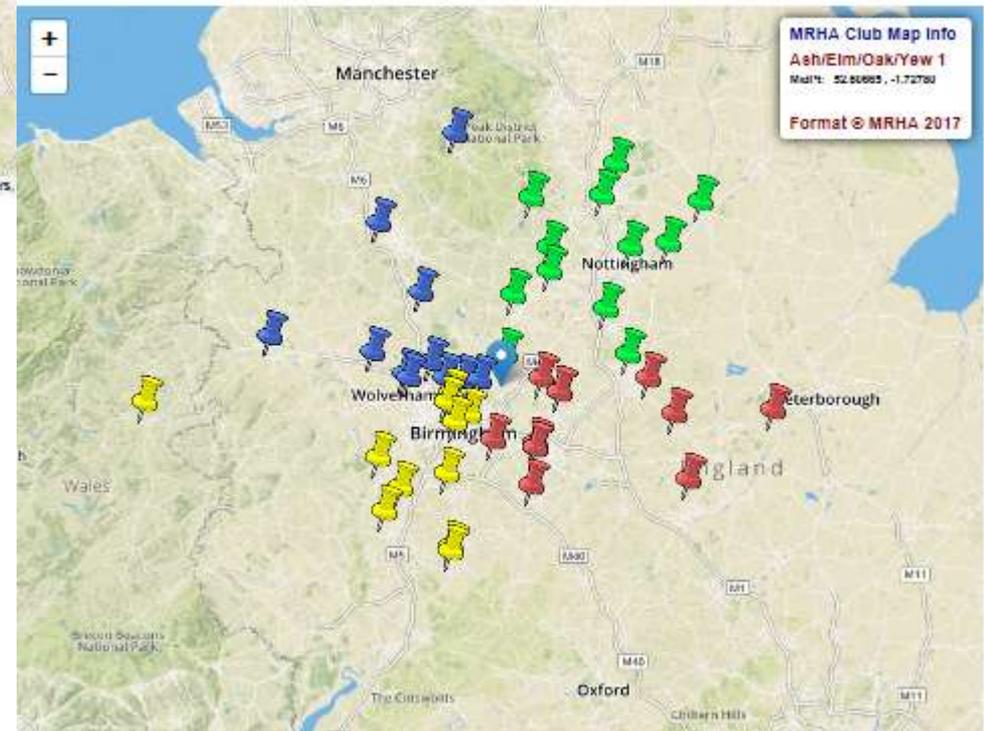
Sorted West / East

Tier 3 teams

Sorted West / East
then North / South ...

the images were used to validate
our geographic club placement ..

MRHA - Lower Tier Div 1 (48) Sorted EastWest then NorthSouth



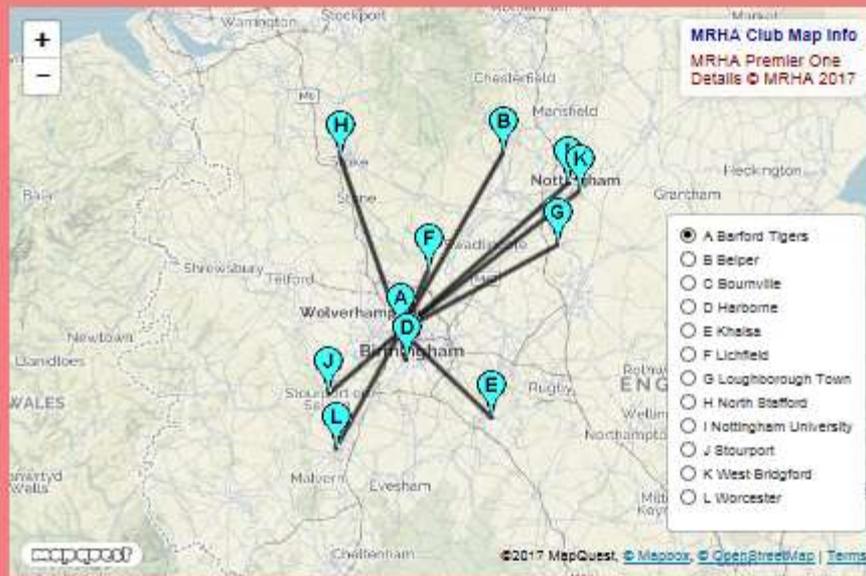
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We looked at: Team Mileages

individual
divisional
placement ...

as-the-crow-flies
travelling
mileages ...

for all 28 divisions in each
model studied..



InterClub - Straight Line Distances in miles - as marked in Black on the map

	A	B	C	D	E	F	G	H	I	J	K	L	SUM
A Barford Tigers		0	0	0	0	0	0	0	0	0	0	0	0
B Belper	39.283		0	0	0	0	0	0	0	0	0	0	0
C Bourville	5.484	43.806		0	0	0	0	0	0	0	0	0	0
D Harborne	5.484	43.806	0		0	0	0	0	0	0	0	0	0
E Khalsa	24.187	51.36	20.172	20.172		0	0	0	0	0	0	0	0
F Lichfield	12.508	26.888	17.433	17.433	31.002		0	0	0	0	0	0	0
G Loughborough Town	33.971	20.666	36.369	36.369	35.796	25.219		0	0	0	0	0	0
H North Stafford	35.199	30.448	40.567	40.567	57.852	27.248	44.287		0	0	0	0	0
I Nottingham University	42.542	13.763	45.885	45.885	47.723	31.598	12.101	43.175		0	0	0	0
J Stourport	18.656	57.154	16.293	16.293	31.724	30.397	52.385	45.574	61.194		0	0	0
K West Bridgford	43.084	16.327	46.17	46.17	46.885	32.574	11.089	45.432	2.617	61.732		0	0
L Worcester	26.196	65.48	22.048	22.048	30.6	38.657	57.948	56.184	67.887	10.757	68.082		0
Distance 'as the crow flies'	286.552	408.96	294.207	294.207	397.473	290.934	366.2	466.533	414.37	402.159	420.162	465.886	

Total crow distance between clubs : 4507.64 – gives Average between clubs : 375.63

Towards Open League

MRHA: Premier One

Key: Read across and up to get road mileage travelling Club1 to Club2

	A	B	C	D	E	F	G	H	I	J	K	L	
A Barford Tigers 1	0	43.569	6.657	6.657	29.036	15.227	39.077	40.917	48.827	23.131	50.7	32.681	336.479
B Belper 1	43.489	0	48.396	48.396	58.595	30.302	25.807	35.125	17.396	65.736	20.95	75.286	469.478
C Bournville 1	6.389	48.135	0	0.01	24.251	19.793	41.527	44.861	51.278	19.165	53.151	26.566	335.126
D Harborne 1	6.389	48.135	0.01	0	24.251	19.793	41.527	44.861	51.278	19.165	53.151	26.566	335.126
E Khalsa 1	28.392	58.586	24.203	24.203	0	34.38	43.761	63.868	59.39	37.608	56.173	36.746	467.31
F Lichfield 1	15.665	30.147	20.572	20.572	34.584	0	30.619	30.725	37.419	34.74	40.973	47.462	343.478
G Loughborough Town 1	39.123	25.652	41.635	41.635	43.693	30.634	0	51.474	15.836	59.23	13.505	67.695	430.112
H North Stafford 1	41.042	35.087	44.782	44.782	64.125	30.884	51.482	0	50.805	52.089	53.878	64.066	533.022
I Nottingham University 1	50.265	17.184	53.062	53.062	59.038	37.078	16.161	49.983	0	70.657	4.446	79.123	490.059
J Stourport 1	23.176	64.864	20.016	20.016	37.769	35.186	59.416	51.648	69.167	0	71.04	12.912	465.21
K West Bridgford 1	50.979	21.175	53.491	53.491	56.442	41.069	13.524	53.974	4.39	71.085	0	79.551	499.171
L Worcester 1	31.371	74.189	25.126	25.126	36.982	45.848	66.389	63.765	76.139	12.625	78.013	0	535.573
	336.28	466.723	337.95	337.95	468.766	340.194	429.29	531.201	481.925	465.231	495.98	548.654	
	Total distance travelled to get to fixtures: 5240.144												
	Average mileage travelled in this division = 436.678666666667												

Key: Read across and up to get road mileage travelling Club1 to Club2

Blue entry at end of row - mileage travelled by named Club to get TO away fixtures.

Blue entry base of column - mileage travelled by all clubs to get to fixtures AT named Club.

Calculations based on individual club GPS entered onto Mapquest Route Matrix.

<https://developer.mapquest.com/documentation/open/directions-api/route-matrix/post/>

We looked at: actual inter-club road travel mileages ...

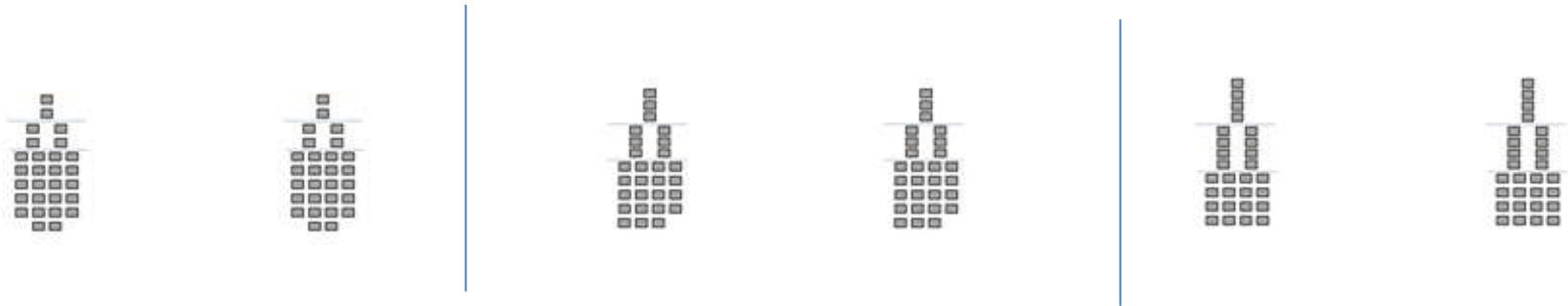
Towards Open League

for all 28 divisions in each model studied..

We then compared:

all factors for all 28 divisions placed in each of the 6 models...

- remembering .. second Tier sorted West / East and then North / South
- each detailed with crow-flies and actual road mileage

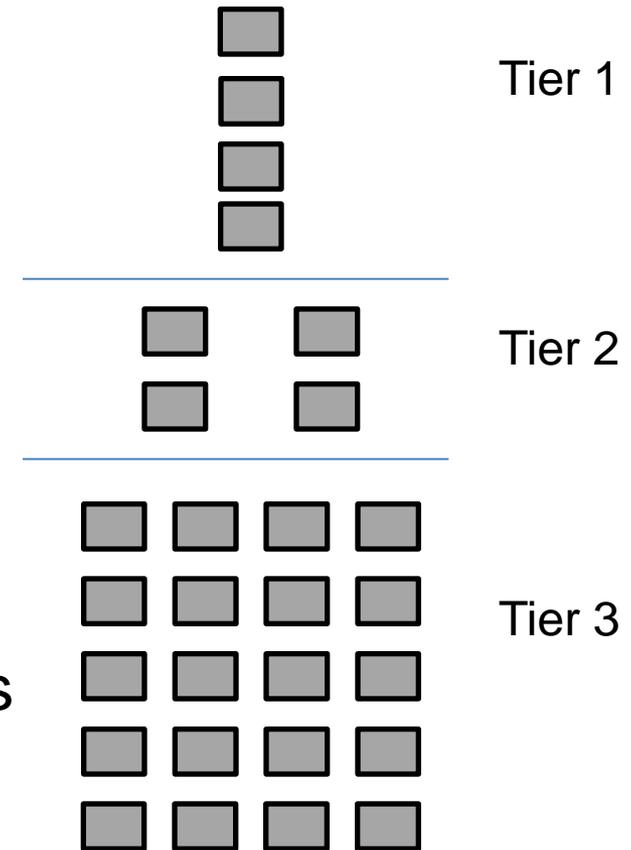


and having considered all available criteria

our Recommendation is :

Structure - recommendation

- best fit ...
- Tier 1 - four pan-Midland divisions
- Tier 2 - West / East
- Tier 3 - NW / SW / NE / SE
- fewer pan-Midland and West/East divisions than current structure gives mileage benefits to many clubs
- matches criteria ..



**Midland Men's
Open League Structure**

Ranking in detail ...

The process defined should be fair and equitable to all teams, and be transparent for all clubs to view how the process was undertaken ...

the following pages detail the Ranking process ..

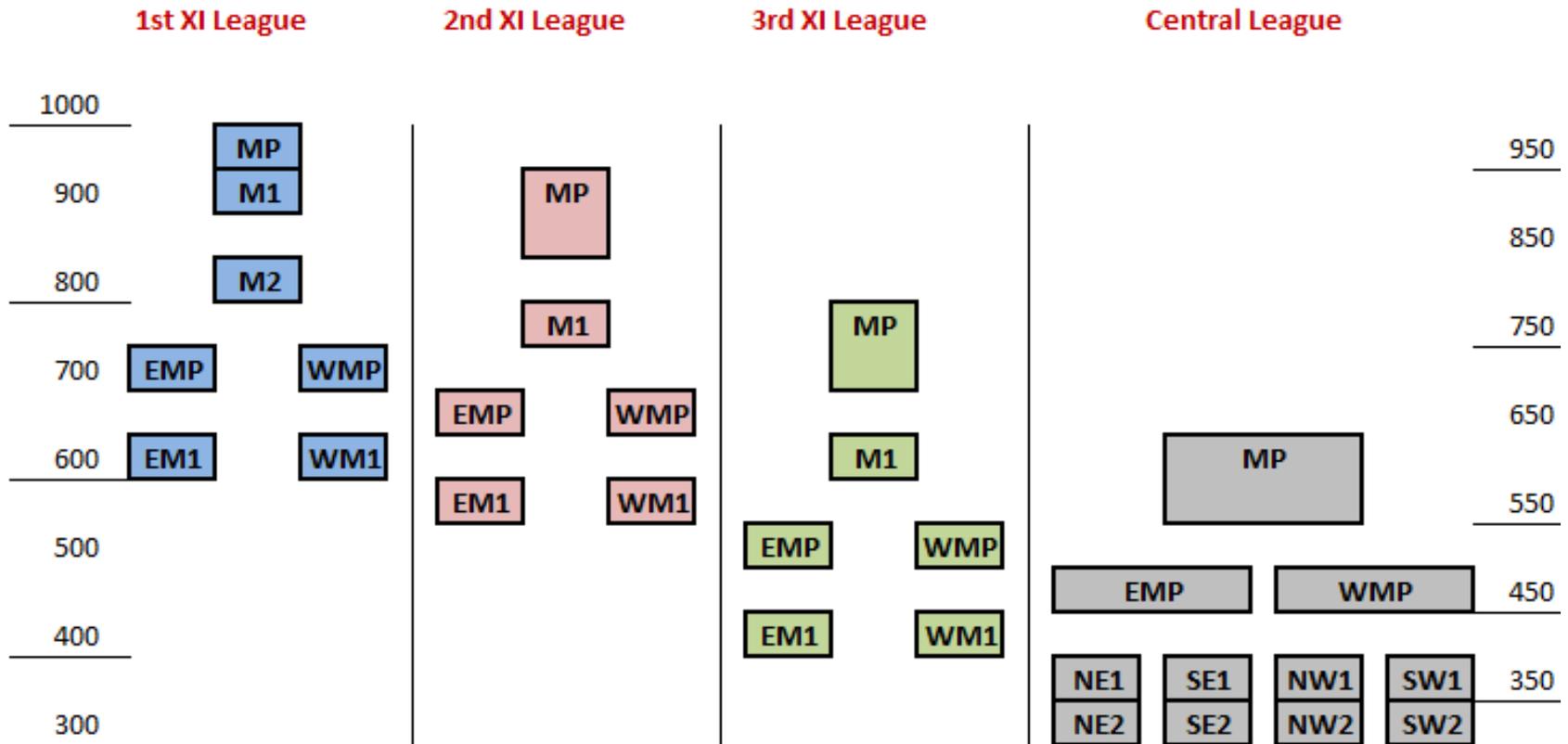
they list worked examples of the weighting calculations

and show

HOW those weightings are used to

ALLOCATE clubs to the new STRUCTURE

Ranking - The Key Diagram behind to the Merge Process ..



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The key diagram was first tested with the 2015 Open League paper.

Several variants have been tried, but none outperform this model, which always ensures the lower teams in any Club are ranked beneath their more senior sides.

While the update for 2nd XI / 3rd XI / Central Midlands Premier sides to have an upward SPAN of 100 appears to 'equate' divisions to the higher League division, mathematically only the better placed sides in the lower division will overtake the ranking of the lower placed sides in the higher division.

The table below explains the points equivalents.

Rather than arbitrarily apply '2 promotion places' to Midlands Premier divisions, this weighting gives rise to the potential for higher points scoring Club teams in a Midlands Premier side, overtaking any lower points scoring teams in the higher divisions.

And the formula can be applied equally well for divisions with less than 12 sides ...

higher division		lower division
.....	
20 pts	==	43 pts
18 pts	==	42 pts
16 pts	==	41 pts
14 pts	==	40 pts
12pts	==	39 pts
10 pts	==	38 pts
.....	

Ranking Formula

Give each division a ranking SPAN of 50 points ...

except 2nd XI / 3rd XI / Central Midlands Premier with SPAN of 100 points

Use chart to determine each division BASELINE ...

For each team in each division

$$\text{calculate Weight} = \text{BASELINE} + \left[\frac{\text{points gained}}{\text{points available}} \right] * \text{SPAN}$$

If team finishes in Promotion place - then ADD 20 points

If team finishes in Relegation position - then DEDUCT 20 points

SORT all Weights into descending order

Ranking Example ..

Midlands Premier

	Played	Points	Base	Weight		
Team 1	22	61	950	$+(61 / 66) * 50$	=	996.21
Team 2	22	49	950	$+(49 / 66) * 50$	=	987.12
Team 3	22	45	950	$+(45 / 66) * 50$	=	984.09
Team 10	22	22	950	$+(22 / 66) * 50$	=	966.67
Team 11	22	22	950	$+(22 / 66) * 50$	- 20 =	946.67
Team 12	22	11	950	$+(11 / 66) * 50$	- 20 =	938.33

Midlands 1

Team 1	22	53	900	$+(53 / 66) * 50$	+ 20 =	960.15
Team 2	22	53	900	$+(53 / 66) * 50$	+ 20 =	960.15
Team 3	22	46	900	$+(46 / 66) * 50$	=	934.85
Team 10	22	18	900	$+(18 / 66) * 50$	=	913.64
Team 11	22	14	900	$+(14 / 66) * 50$	- 20 =	890.61
Team 12	22	10	900	$+(10 / 66) * 50$	- 20 =	887.58

2nd XI Midlands Premier

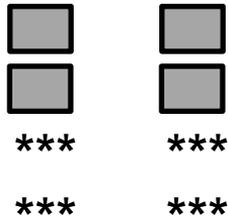
Team 1	22	64	850	$+(64 / 66) * 100$	=	946.97
Team 2	22	53	850	$+(53 / 66) * 100$	=	930.30
Team 3	22	46	850	$+(46 / 66) * 100$	=	919.70
Team 10	22	19	850	$+(19 / 66) * 100$	=	878.79
Team 11	22	16	850	$+(16 / 66) * 100$	- 20 =	854.24
Team 12	22	4	850	$+(4 / 66) * 100$	- 20 =	836.06

New Open League Pyramid -- the overall Look and Feel

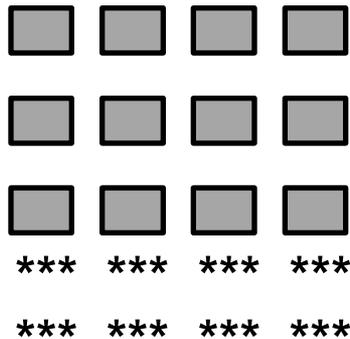
the following **terminology** is used for structures under consideration



Tier 1 - pan-Midland divisions



Tier 2 – West / East demarcation



Tier 3 - geographically based

North West | North East

South West | South East

With a calculated list of all teams in **Weight** order ...
 – we can look to **Allocate** to ANY new structure



to populate a Tier 1 pan-Midland division

take next 12 teams

--- allocate to division ...

	P	W	D	L	GF	GA	Pts
Team 1							
Team 2							
Team 3							
Team 4							
Team 5							
Team 6							
Team 7							
Team 8							
Team 9							
Team 10							
Team 11							
Team 12							

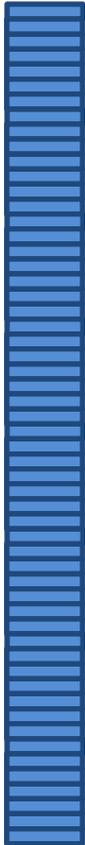
- repeat for all pan-Midland divisions ..

With a calculated list of all teams in Weight order ...
 – we can look to Allocate to ANY new structure

to populate Tier 2 WEST / EAST Midlands division

take next 24 teams and SORT teams WEST / EAST

- Allocate 12 teams to WEST division
- Allocate 12 teams to EAST division



	P	W	D	L	GF	GA	Pts
Team 1							
Team 2							
Team 3							
Team 4							
Team 5							
Team 6							
Team 7							
Team 8							
Team 9							
Team 10							
Team 11							
Team 12							

	P	W	D	L	GF	GA	Pts
Team 1							
Team 2							
Team 3							
Team 4							
Team 5							
Team 6							
Team 7							
Team 8							
Team 9							
Team 10							
Team 11							
Team 12							

- repeat for all Tier 2 West / East Midland divisions ..

With a calculated list of all teams in Weight order ...
 – we can look to Allocate to ANY new structure

to populate Tier 3 NW / SW -- NE / SE Midlands division

take next 48 teams and SORT teams WEST / EAST

-- Take 24 teams in the WEST ...

Sort these 24 as North / South

-- Allocate 12 teams to NorthWest division

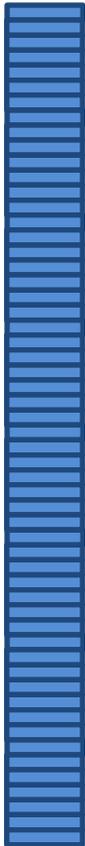
-- Allocate 12 teams to SouthWest division

-- Take 24 teams in the EAST ...

Sort these 24 as North / South

-- Allocate 12 teams to NorthEast division

-- Allocate 12 teams to SouthEast division



North East

Team 1
 Team 2
 Team 3
 Team 4
 Team 5
 Team 6
 Team 7
 Team 8
 Team 9
 Team 10
 Team 11
 Team 12

North West

Team 1
 Team 2
 Team 3
 Team 4
 Team 5
 Team 6
 Team 7
 Team 8
 Team 9
 Team 10
 Team 11
 Team 12

South East

Team 1
 Team 2
 Team 3
 Team 4
 Team 5
 Team 6
 Team 7
 Team 8
 Team 9
 Team 10
 Team 11
 Team 12

South West

Team 1
 Team 2
 Team 3
 Team 4
 Team 5
 Team 6
 Team 7
 Team 8
 Team 9
 Team 10
 Team 11
 Team 12

Rules

- all Rules revised to marry with new Tier 1 / Tier 2 / Tier 3 terminology.
- less variation by 'League' - more consistency across these Tiers ...
- Start times and playing window have been revised ...
 - Midlands Premier and Midlands 1 will be 11:30am thru 2:30pm
 - all other games 11:00am thru 4:30pm unless agreed/confirmed by both sides...
- Submission of Results – will be via text messaging for all teams
- Promotion and Relegation – generally 2-up 2-down ...
 - Depending on how many Midlands teams are relegated from EHL there may be variable promotion and relegation.
- Formal limit of 2 teams from any club in any division ..
- Allocation/appointment of umpires
 - The rules regarding appointed umpires allows for MRHUA to appoint top down and for for EMHUA/BCHUA to appoint to a standard they are comfortable appointing to – which may NOT necessarily be the highest level available.

Moving Forward - Timescales

December 2017

Formal League Proposal to eligible Clubs - posted to Club Secretary

-- that the Midland Men's League migrate to the recommended Open League Structure for the start of the 2018-19 season.

84 Clubs competing in the 2017-18 season will have 1 vote each

Clubs requested to Vote: **YES** to implement - **NO** to reject the proposal

a non-return from any Club will be regarded as a NO vote ...

acceptance by 43 clubs will carry the vote – with, in the event of a tied response, the League Committee using a casting vote to support the implementation.

31st January 2018

Final date for Club responses from Club Secretary

Early February 2018

A League Committee meeting is scheduled to review the response and inform Clubs ..

Please Note:

If the proposal is rejected, then the current League structure will continue...

If there is a majority YES vote it is expected that implementation would proceed for the 2018-19 season along traditional processes.

That concludes this presentation
prepared by the

Midland Region Hockey Association Men's League

We hope you have found it beneficial in explaining the work undertaken
and the reasons behind, the proposal to

Implement Open League

your Club vote will determine the future ...