

Strength Bid Allocation Proposal

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Background:

There was some controversy with the existing strength bid allocation system at Club 2008 Nationals. One public complaint is that the existing allocation scheme didn't allow for the Open 5-8 bracket to be rearranged in order for NE2 to face NW3 even though the relative placement of the two teams decided a strength bid.

I also believe that the existing algorithm does not insure that the strongest regions receive strength bids.

I propose a new strength bid allocation system. I intend to show that it does a better job of getting the best regions more bids and avoids some of the problems in the current system.

Executive Summary:

There is extensive justification and analysis of my proposal below. The basic premise of the idea is that we should answer the question "which region(s) would have the best 3rd finishing team next year?" for the first bid. Then repeat the question but compare the projected 4th place finishing team¹ from the region that received the first strength bid.

When comparing the strength of the third team from two regions *A* and *B*, if both *A* and *B* have 3 teams at Nationals, we can directly compare those third finishing teams (*A3* and *B3*). If *A* and *B* don't both

¹ If the region receiving the first strength bid only has two teams at Nationals, then they will be ineligible to receive the second strength bid.

have three teams at Nationals, then we should compare their second finishing teams (*A2* and *B2*) as the best indicator for which region would have the best third finishing team.

Proposal:

Assumptions:

1. The best indicator we have for regional strength next year is regional strength this year based on performance at Nationals.
2. When comparing the strength the third finishing team from regions *A* and *B*, a direct comparison of *A3* and *B3* finish at Nationals is best.
3. If it isn't possible to compare *A3* and *B3* at Nationals because one of the regions only sent two teams, a direct comparison of the second finishing teams from regions *A2* and *B2* is best.

The first assumption is a paraphrased version of the UPA's own public statement².

The second and third assumptions are a departure from the current UPA methodology. If region *A* has two teams at Nationals, and region *B* has three teams at Nationals, the UPA currently compares *A2* to *B3* to determine which region has a stronger third team and is more deserving of a strength bid. The existing assumption

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http://www.upa.org/upa/about/publicstatements/strength_bid

is that **A3** would have performed at the same level as **A2**. I believe this assumption unfairly handicaps regions that have sent three or more teams to Nationals.

Regions with three teams at Nationals have a harder time earning or retaining strength bids under the current system. All teams have to perform well, which is more difficult if you have three teams in attendance.

The size and growth wildcards are (presumably) designed to encourage the growth of ultimate and do not have any implied tie to strength of a region. As such, if a region were to earn one of those bids in the current year, it would serve as a handicap in the strength bid allocation. In all three divisions, the regions that received either the growth or size bid had their lowest team finish 14th or 16th.

The Proposed Strength Bid Allocation:

The algorithm is:

- a) Compare all 2nd finishing regional teams. Does the best one come from a region with 3+ teams at Nationals? If not, that region gets the first strength bid. If they do have 3+ teams, go to b.
- b) We can do a direct comparison of 3rd place finishing teams. Compare all 3rd teams from all regions that sent at least 3 teams. The best one gets the strength bid.
- c) For the second strength bid, pretend the top finishing team from the region that received the first strength bid doesn't exist. Repeat from "a".

Proposal In Practice:

Lets look at the proposed algorithm as it would have applied to this years Club Nationals in Open, Mixed, and Women's.

OPEN FINISHING:

- 1) NW1
- 2) NE1
- 3T) S1
- 3T) SW1
- 5) NW2
- 6) NE2
- 7T) MA1
- 7T) NW3
- 9) CN1
- 10) CN2
- 11) S2
- 12) NE3
- 13) SW2
- 14) NE4
- 15) MA2
- 16) S3

First bid: The NW region has the best finishing second team. By "a", we also see that they had 3+ teams at Nationals. Lets go to "b" and see if another region with three or more teams finished a better third team. NW3 finished better than all other third teams, so NW earns the first bid.

Second bid: ignore NW1. Now NE has the best second place team. NE has three or more teams at Nationals, so we have to compare third place finishing teams (after eliminating NW1 from the ranking). Since NE3 did better than S3, NE gets the second strength bid.

This allocation is different than the actual allocation to the Northwest and Central regions. If the UPA keeps the existing Championship competition rules but adopts this proposal, the 5-8 bracket could

have been rearranged to have a head to head meeting between NE2 and NW3 as the NW and NE would have been in direct contention for the second strength bid.

MIXED:

- 1) NW1
- 2) NW2
- 3T) NW3
- 3T) CN1
- 5T) NE1
- 5T) NE2
- 7T) MA1
- 7T) SW1
- 9) MA2
- 10) S1
- 11) S2
- 12) NW4
- 13) CN2
- 14) NE3
- 15) SW2
- 16) S3

The first bid: NW has the highest second finishing team, but also three or more teams at Nationals. Therefore, we have to compare all third place finishing teams. Again the NW wins, so the NW gets the first strength bid.

The second bid: Eliminate NW1, now NW3-> NW2, and is still the highest finishing "2nd" regional team. NW has a "third" team (NW4-> NW3) so we compare all 3rd teams. NW is still the best finishing third team, (NW4 finished above all other third place teams) so the NW also wins the 2nd strength bid.

This is different from the actual allocation of NW and MA.

WOMENS:

- 1) NW1
- 2) NW2

- 3T) S1
- 3T) NW3
- 5) NE1
- 6) S2
- 7) MA1
- 8) NE2
- 9) NE3
- 10) SW1
- 11) CN1
- 12) CN2
- 13) MA2
- 14) NE4
- 15) SW2
- 16) S3

First bid: NW. Their 2nd place team finished higher than any other, but they have three or more teams at Nationals. So compare all third place teams, NW still wins the first bid.

Second bid: eliminate NW1. The best 2nd place finishing team is still a NW team (NW3). The NW didn't send four teams though, so we can't compare the "third" teams from regions, so NW gets the second strength bid.

No change in allocation.

Pros:

Only teams in contention for a strength bid can affect the outcome of bid allocation:

Only teams that are in contention to earn a strength bid can affect the outcome of strength bids for others. In Open, the 5-8 bracket could have been modified to have NW3 and NE2 face directly as both teams are in contention for a strength bid. The existing problem arose because of an "exception rule" for three teams from a region earning two strength bids.

Increased Consistency:

The proposed system is also more consistent than the existing system. All regions are on more equal footing to earn strength bids without a handicap for having more teams at Nationals.

For example, lets say that all the regions remain the same strength at next year's Nationals. The best example of consistency is from the Mixed division:

Under the current system if all teams finish in the same order, the strength bids would return to the NW. So even though the strength of regions remained identical between years, the strength bids will flip flop between NW and MA.

The best 14 teams at Nationals:

I believe that the proposed solution has a better chance of getting the 14 best teams to Nationals. The remaining two teams would still be allocated based on strength and size.

Cons:

The proposed system isn't perfect. There are a couple of cons worth noting.

Incorrect Consistency:

It is possible to get into a situation where a weaker team is at Nationals and that region will be able to retain their strength bid.

Ignoring non-strength bids, lets say two regions **A** and **B** are competing for a single strength bid. Their top three teams (year to year) would finish at Nationals:

- 1) A1
- 2) B1

- 3) B2
- 4) A2
- 5) A3
- 6) B3

If they compete for a single strength bid when **A** has three teams at Nationals while **B** only has two teams, **B** will win the strength bid. The next year, **A** will have two teams at Nationals and **B** will have three teams, and **B** will retain the strength bid even though **A3** is stronger than **B3**.

The current system doesn't have this problem. I believe my proposal has a better chance of getting the best teams to Nationals, but the existing system does provide for more opportunity for a region to "unseat" a strong region. I would argue that this "upset" opportunity is at the cost of a stronger Nationals.

Possibility for a cycle with two evaluation systems:

When comparing two regions **A** with two teams and **B** with three, which team has a higher finishing second team has an unintended affect on a third region.

- 1) A1
- 2) B1
- 3) A2
- 4) C1
- 5) C2
- 6) B2
- 7) B3
- 8) A3

If one strength bid is allocated to these 8 teams, the proposed algorithm will give that strength bid to region **B**. Specifically, region **A** has the highest finishing second team. But region **A** also has three teams at Nationals, so we do a direct third team comparison against all other regions (in

this case region **B**). So, **B** earns the strength bid even though **C** has a second team that finished higher than **B2** and **B3**.

In this case, there is a cycle because of the two allocation methods. In comparing second place finishing teams, we have the ranking $A > C > B$. In comparing third place finishing teams we have $B > A > C$.

To resolve the conflict, we have a rules priority. The fact that **C2** finished lower than **A2** means that the **C** region is eliminated from contention. However, we look for additional information regarding third place finishing teams. We can clearly see that region **B** has a stronger third team than region **A** so they are given the strength bid.

Easier to earn both strength bids:

I agree that it should be very difficult for a region to earn both strength bids. However, I believe that the current system makes it unreasonably difficult and in many cases a region that “deserves” both strength bids will not receive both strength bids. In Mixed this year, I believe that all evidence indicates that NW3 and NW4 will out perform the third finishing team from any other region. It is possible that this isn't the case (MA3 could possibly beat NW4) but there is no evidence to support that claim. Essentially, the current system awards a strength bid to the only region that has any chance of having a team better than NW4 instead of granting it to the region most likely to have a stronger finisher.

Financial Implication:

I do not believe this will have any financial implication.

Conclusion:

I believe that the proposed solution makes better use of available information, is more consistent, and will lead to stronger competition at club Nationals. It would have also provided a head-to-head match-up between NE2 and NW3 in the Open division.