Advancement Policy
Updated for 2017 HYDRO DYNAMICS℠

Advancement Percentages

For regions with qualifying tournaments, *FIRST*® LEGO® League **recommends**:
- 10% is the <u>minimum</u> percentage of teams that should advance
- Around 30% is the recommended percentage of teams to advance
- 50% is the <u>maximum</u> percentage of teams that should advance

After considering the advancement recommendations, the Partner is **required** to decide on a region-wide advancement percentage. The advancement percentage should be the same (or as close as possible) for all qualifying tournaments in the same level of events. For instance, in a three-tiered system, a Partner may choose to advance 30% of teams from a 1st level qualifier to a 2nd level qualifier but may decide that 50% of teams attending the 2nd level qualifier will advance to the Championship

To determine how many teams will advance from each event, multiply the regional advancement percentage by the total number of teams at the event. Round to find the number of advancing teams.

(Advancement %) * (total number of planned teams at event) = Approx. number of advancing teams

Example: A qualifying tournament is planned for 12 teams. The advancement percentage rate for this region is 30%. Multiply the advancement percentage by the number of teams or .30 x 12 = 3.6. Rounding up, 4 teams will advance from this event.

In a region with multiple qualifiers, it may sometimes be necessary to not follow standard rounding rules in this procedure. A region with 110 teams is planning for 36 teams to attend the Championship. 36 / 110 = 33% region-wide advancement percentage. They have 4 qualifiers: 20 teams, 24 teams, 32 teams, 34 teams.
20 teams x .33 = 6.6 → 7 teams advance
24 teams x .33 = 7.92 → 8 teams advance
32 teams x .33 = 10.56 → 10 teams advance **Rounded down to create a total of 36 advancing teams**
34 teams x .33 = 11.22 → 11 teams advance

Team Eligibility for Advancement

Teams are **eligible** for advancement if they meet the following criteria as **required** by the *FIRST* LEGO League Global Standards and the annual Challenge. Specifically, teams must:
- Follow the *FIRST* LEGO League Participation Rules
- Have no disqualifying (Red-level) Core Values behaviors
- Have a rank in the top 75% of Robot Game scores at the event

Robot Performance Advancement Hurdle (Updated for 2017 HYDRO DYNAMICS[SM])

In order to ensure they meet a minimum level of achievement in Robot Performance, **advancing teams must have a rank in the top 75% of robot game scores at the event.** (In other words, the bottom quartile is *not* eligible to advance.)

The number of teams eligible for advancement always applies to the ***planned*** number of teams. The planned number of teams is defined as the number reasonably expected to attend an event; the teams have registered, paid, and/or otherwise confirmed their intent to be at the event. This planned number ***must*** be announced to teams in advance of the event. The number of teams eligible for advancement *must **not be** changed* for no-shows after teams have been notified of planned number of teams expected at the event, including at any time during the tournament day.

Example: 12 teams are expected to attend an event, but one team does not arrive. Teams still must be ranked in the top 75% out of the planned 12 teams (75% * 12 teams = Top 9 teams are eligible to advance).

The Robot Performance Hurdle for advancement does ***not*** impact the hurdle for Champion's Awards. **Teams at all tournaments must be ranked in the top 40%** of Robot Game scores to be considered **for Champion's Awards**.

Advanced Notice of Robot Performance Advancement Hurdles

Partners are ***required*** to announce the advancement hurdle to teams before the tournament. This helps ensure all teams know the policy and it is applied consistently for all teams at every tournament. *FIRST* LEGO League ***strongly recommends*** including:

- Number of teams planned for the event
- Number of teams who will be eligible for Champion's Award (rank in top 40%)
- Number of teams who will be eligible to advance based on the Advancement Hurdle (rank in top 75%)
- Number of teams that will advance from that tournament.

Recommended Statement for Publication: *"The ABC Qualifying Tournament will host **WW** teams. Teams must be ranked in the top **XX** Robot Game scores to be considered for Champion's Award. The top **YY** teams will advance based on their average ranking by the Judges in Core Values, Project and Robot Design, and must finish ranked in the top **ZZ** (actual number, not percentage) Robot Game scores at the event."*

Example: "*The Smallville Qualifying Tournament will host **12** teams. Teams must be ranked in the top **5** Robot Game scores to be considered for Champion's Award. The top **4** teams will advance based on their average ranking by the Judges in Core Values, Project and Robot Design, and must finish ranked in the top **9** Robot Game scores at the event to be considered for advancement."*

Advancing Team Selection Procedures

All advancing teams are selected using the Champion's Award criteria; the highest achieving teams who meet the 75% minimum Robot Performance Hurdle will advance. *FIRST* LEGO League does not require a specific method of ranking teams within each judging room or within the overall judging area. Ranking teams through numeric compilation of rubrics is ***not*** recommended, but if done, it ***must*** be used as an addition to a discussion-based deliberations process and should be just one of many indicators of team performance.

Advancing teams *must* be selected using the "golf score" approach **OR** using official *FIRST* LEGO League Judging Lite or Advancement Calculator tools. The "golf score" method requires adding the team's area ranks to create an overall rank, then removing any teams below the hurdle. Judge Advisors are encouraged to use Judging Lite or the Advancement Calculator to simplify the advancing team selection process.

When selecting teams for advancement, Champion's Award winning teams are *always* chosen first.

Example: 4 teams are advancing from a 12-team tournament and is awarding a 1st place Champion's Award. The Champion's Award winner must be ranked in the top 5 Robot Performance scores (40% hurdle) and the advancing teams must be ranked in the top 9 scores (75% hurdle). The Judges create a "golf score" rank by adding the ranks; the top five teams' combined ranks are 4, 6, 7, 8, and 12. The team with a combined rank of 4 finished at 10th place in the Robot Game Scores. Since they are not ranked in the top 9 teams (75% hurdle) at the event eligible to advance, they are removed from the advancing teams. The first team chosen to advance (with combined rank of 6) is the 1st place Champion's Award winning team; they were required to be in the top 5 scores (40% hurdle). The remaining 3 teams advancing *must* be in the top 9 scores (75%) but are *not* required to be in the top 5 (40%). In addition to the Champion's Award winning team, the remaining 3 teams (with combined ranks of 7, 8, and 12) are selected to advance.