

**Ratings Committee Report – 2025**  
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The Ratings Committee (RC) had another active year, addressing a range of issues related to the maintenance and refinement of the US Chess rating system. Much of the committee's work centered on supporting the transition to a new rating platform managed by Leago, which required close examination of the existing rating code and specifications. During this process, the committee uncovered several discrepancies between the documented rating system and its historical implementation, leading to important clarifications and corrections. The RC also responded to requests from the Executive Board (EB) concerning policy interpretation and system behavior, recommended updates to international conversion formulas considering rating adjustments made by FIDE and the Chess Federation of Canada (CFC), and performed its routine diagnostic analyses to monitor trends in rating inflation and deflation. What follows is a summary of the year's key issues, actions taken, and recommendations.

During testing of updated rating system code being implemented by Leago, a discrepancy was discovered involving players who played only 3 ratable games in an event, specifically when two of the games were against the same opponent. The ratings formula specification appeared to allow bonus points in 3-game events, but was at odds with the implemented code which did not award bonus points if the 3 games included multiple games against the same opponent. The Ratings Committee confirmed that the behavior of the legacy code was intentional and correctly enforced the intended rule. The requirement that players face 3 distinct opponents to be eligible for bonus points in 3-game events was traced back to 2005 committee correspondence and implementation decisions. However, the formal ratings specification document lacked this detail. To resolve this inconsistency, the committee updated the specifications document to explicitly state that players in 3-game events are only eligible for bonus points if they face three different opponents. The updated wording has now been incorporated into the rating system specifications to match the software implementation.

Also, during the implementation of the new rating system software, a discrepancy was discovered regarding how matches involving non-established players are handled. According to the current US Chess rating specifications, matches should not be rated if either player does not have an established rating. However, in practice, the US Chess office has been rating these

matches, often because they are embedded within larger events and not explicitly reported as matches. Two options were proposed by the RC: either enforce the existing rule and prevent such matches from being rated or revise the rating algorithm to allow these matches to be rated using an approach that limits the inclusion of multiple games between player pairs. The Executive Board (EB) discussed the matter at its March 13, 2025, meeting and decided not to issue a blanket directive. Instead, the office will continue to use its discretion in adjudicating these cases. At the same time, the EB identified a gap in the rulebook, noting that the term “match” is not formally defined, and referred the matter to the Rules Committee to develop a definition. The RC’s next steps, including whether to revise the algorithm, will depend on the outcome of that process. Until then, the status quo remains, with the office applying judgment case by case and coordination between the Ratings and Rules Committees.

The RC identified an error in the FIDE-to-US Chess rating conversion formula that had been implemented in March 2024. This formula is used to initialize US Chess ratings for players who already have an established FIDE rating. The error in the original formula resulted in US Chess ratings that were too high, affecting players with FIDE ratings under 2000. The RC developed corrected conversion formulas once the error was discovered.

These corrected formulas were:

- **Non-Youth:**

- If  $FIDE \leq 2000$ :  $USChess = -1073 + 1.5667 \times FIDE$
- If  $FIDE > 2000$ :  $USChess = 20 + 1.02 \times FIDE$

- **Youth:**

- If  $FIDE \leq 2000$ :  $USChess = -453 + 1.2667 \times FIDE$
- If  $FIDE > 2000$ :  $USChess = 80 + 1.0 \times FIDE$

A rerating using the new formulas revealed that the revised method typically resulted in US Chess ratings about 200 points lower than those assigned using the erroneous March 2024 formula, consistent with anecdotal observations that the previous converted ratings were inflated. The updated conversion was deemed a necessary correction and was made retroactive to March 1, 2024.

The RC reviewed a case presented by the EB involving a player with a US Chess rating of over 2200 whose membership had lapsed for approximately two years. During this period, the player participated in several FIDE-rated events and later requested that those game results be incorporated into his US Chess rating after renewing his membership. The committee was asked to consider two related questions: first, whether these FIDE-rated games could now be rated given the player's active membership status; and second, whether rating them would be appropriate if the player were to pay back dues covering the lapsed period. Notably, the Rating System specifications state that “only current US Chess members are eligible for FIDE adjustments.” While the RC acknowledged that the existing policy could potentially be revised to allow retroactive rating of games from a lapsed membership period, it emphasized that such a change must apply uniformly rather than being left to individual discretion. In the committee’s view, the option to pay back dues should not influence whether games are rated, as this would create inequity by allowing players to selectively determine which games—FIDE or otherwise—should be included in their rating history. Accordingly, the RC recommended that either games from a lapsed membership period be rated, consistent with current policy, or that all such games be rated if a future policy change is adopted.

The RC considered whether recent changes to the CFC rating system necessitate an update to the US Chess conversion formula used to translate CFC ratings into US Chess ratings. It was brought to the committee’s attention that the CFC had recently revised its rating algorithm, reportedly in a manner similar to FIDE’s 2024 rating adjustment. Specifically, the CFC conversion, implemented at the start of 2025, awarded 2 rating points per game played since 2016, subject to a cap aligned with the FIDE adjustment model. Given these changes, the RC was asked to evaluate whether the current CFC-to-US Chess conversion formula, outlined in the US Chess rating specifications, remains appropriate or should be revised to reflect the new CFC methodology.

After analyzing summary data provided by the CFC, the RC recommended a revised conversion formula that adjusts for the CFC conversion. The new formula is a piecewise linear function with four segments, designed to reflect the new relationship between adjusted CFC ratings and US Chess equivalents. The recommendation was that the new formula replaces the

existing one in the official US Chess Rating System documentation and be applied retroactively to January 1, 2025. The proposal received consensus approval within the committee and was formally approved by the Executive Director for implementation. The revised formulas are the following:

- $USChess = -115 + 0.815 \times CFC.new$  for  $CFC.new < 1150$
- $USChess = -650 + 1.28 \times CFC.new$  for  $1150 \leq CFC.new < 1610$
- $USChess = -856 + 1.41 \times CFC.new$  for  $1610 \leq CFC.new < 2000$
- $USChess = -240 + 1.1 \times CFC.new$  for  $2000 \leq CFC.new$

Finally, the RC performed its usual set of diagnostic analyses to monitor trends in the rating pool. Overall rating levels deflated from the mid-1990s through 2000 when rating floors were decreased by 100 points without a counteracting inflationary mechanism. With the new rating system implemented in 2001, ratings started to re-inflate. The RC's goal has been to re-inflate and then maintain rating levels roughly where they were at the end of 1997. Our analyses have focused on players with established ratings who have been active over the current and previous three years and who are aged 35-45 years old in the current year. Our analysis this year indicates that ratings on average continue to deflate over time and are well below rating levels at the end of 1997. The committee recommends decreasing the bonus point threshold from B=12 to B=10, retroactive to January 2025, to inject points into the rating system. The committee will examine the impact on rating levels in next year's analysis.