

Ratings Committee Report – 2024

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The Ratings Committee (RC) experienced an especially active year, tasked with a variety of responsibilities. Our duties encompassed providing guidance on forthcoming initiatives, clarifying issues related to ratings, concluding the rating variance project, and addressing the significant FIDE rating adjustment implemented earlier in the year. This surge in activity coincides with efforts by the US Chess office to overhaul the existing rating system infrastructure. We summarize the committee's work below.

In late 2022, the US Chess office established an advisory group under the leadership of Emanuel London to initiate the redevelopment of the rating system architecture. The RC engaged in this process primarily through its chair, who participated in the advisory working group. By mid-2023, a request-for-proposal (RFP) was drafted, outlining the objectives for the rating system's redesign. This draft was circulated among RC members, who then submitted their feedback. In early 2024, the RC chair attended a presentation by one of the shortlisted candidates, offering insights on the presentation's quality and assessing the suitability of the company for the rating system redesign project.

In August 2023, the RC's liaison from the Executive Board (EB) raised the possibility that US Chess might allow affiliates to organize Chess960 events with official ratings. The RC was consulted about the development and management of a Chess960 rating system. While further details are necessary, such as determining which of the 960 randomized starting positions would be eligible for rating (for instance, a standard starting position would presumably not be included in a Chess960 system), the general consensus was that a Chess960 rating system could be operated separately yet concurrently with the existing US Chess rating systems. It is understood that this initiative is still in its preliminary stages, and any development would proceed only after the new rating infrastructure is established.

Also in August 2023, the RC was tasked with drafting a description for the Member Services Area (MSA) FAQ to clarify why the "based-on" values that provisionally rated players see now include more than just game counts. This change stems from the methods used to initialize ratings, particularly when an initial rating is derived from another rating system, including any of the US Chess online or over-the-board systems. The comprehensive explanation has been published and is available at the Membership Services Area link on <https://new.uschess.org/frequently-asked-questions-faqs> .

The RC has been working on an ongoing project to develop a measure of ratings variability, dating back to the 2016 U.S. Open when interest was expressed during a ratings workshop and from other sources that ratings should include a simple measure of uncertainty. Tasked by the EB in early 2018, the RC's goal was to create a measure that could determine the reliability of a player's rating, providing valuable information for players and tournament directors. Progress was accelerated after constructive dialogues at the 2023 ratings workshop, which helped the RC refine their approach and develop a

robust algorithm for measuring variability. By February 2024, the RC finalized and submitted a proposal to the EB. The essence of the proposed method involves calculating tournament performance ratings over a player's most recent three years of competition and summarizing their variation. This method emphasizes recent performances by assigning them greater weight in the variability calculation. The full proposal is available for download on the rating chair's website at <http://www.glicko.net/ratings/variance-proposal-FINAL-Feb2024.pdf>.

On March 1, 2024, FIDE implemented significant changes to their rating system, including a notable one-time increase for all ratings below 2000, calculated using the formula:

$$\text{Revised FIDE Rating} = \text{Old FIDE Rating} + 0.4 \times (2000 - \text{Old FIDE Rating})$$

FIDE ratings impact the US Chess rating system, which uses a conversion formula to estimate US Chess ratings from FIDE scores. Detailed in the US Chess Rating system specifications, this formula serves two primary functions: assigning initial US Chess ratings to players without a US Chess rating but with a FIDE rating, and updating US Chess ratings for those competing in FIDE events not recognized by US Chess.

To accommodate the change in FIDE ratings, the US Chess Ratings Committee updated the conversion formula, effective March 1, 2024, as follows:

$$\text{For FIDE ratings} \leq 2000: \text{USChess} = 932 + 0.564 \times \text{FIDE}$$

$$\text{For FIDE ratings} > 2000: \text{USChess} = 20 + 1.02 \times \text{FIDE}$$

Additionally, a separate conversion formula previously used for FIDE youth events has been updated to:

$$\text{For FIDE ratings} \leq 2000: \text{USChess} = 1168 + 0.456 \times \text{FIDE}$$

$$\text{For FIDE ratings} > 2000: \text{USChess} = 80 + 1.0 \times \text{FIDE}$$

These updates have been integrated into the rating system specifications, available on the US Chess website.

The RC performed a 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. As a result of the monitoring analysis last year, the bonus point threshold was decreased from B=14 to B=12, making it easier to gain bonus points. This year, we observed a

small decrease in the average rating for this group of players. Based on committee discussions, our recommendation was to watch and wait, and reevaluate next year after examining the impact of last year's bonus point threshold modification.