



Chicago Fed Insights, July 2025

Tracking Unemployment in (Near) Real Time with CHURN: Data Update for June 2025

By [Scott A. Brave](#), [Ben Henken](#), [Ezra Karger](#)

Mathematical and Quantitative Methods Labor and Demographic Economics

Early last month, we unveiled a new real-time model called CHURN—short for Chicago Fed Unemployment Rate Nowcast. CHURN is designed to provide a weekly tracking estimate for the U.S. civilian unemployment rate by blending monthly statistics on job flows from the U.S. Bureau of Labor Statistics’ (BLS) Current Population Survey (CPS) with both traditional and alternative high-frequency labor market indicators from government and private sector sources.

In this *Chicago Fed Insights* article, we update our CHURN weekly tracking estimates for the civilian unemployment rate to include the period of May 18–June 14, 2025. As such, our update here covers the period between the May and June reference weeks¹ used by the BLS in the CPS—with our latest CHURN tracking estimate representing the nowcast for the June unemployment rate, which will be released in the next Employment Situation report on July 3, 2025.

At 4.26%, the CHURN nowcast for June suggests little change in the rate from its unrounded value in May. However, from a broader probabilistic standpoint, the uncertainty inherent in our CHURN estimates implies roughly 50/50 odds of (at least) a 0.1 percentage point increase in the civilian unemployment rate from its *rounded* value (as it is customarily reported by the BLS) of 4.2% in May.

Recent developments in job flows according to CHURN

As our Chicago Fed Letter explains in more detail, CHURN is based on what is often referred to as the *bathtub model of unemployment*, focusing on the flows into (job separations) and out of (job finding) unemployment. Together, the job-separation and job-finding rates define a flow-consistent unemployment rate (FCR) capturing the net effect of these job flows over time.² FCRs are widely known to be accurate predictors of official unemployment statistics. With CHURN, high-frequency measures of job flows that correlate highly with the job-separation and job-finding rates derived from the CPS are used jointly to construct a model-implied job-separation rate, job-finding rate, and FCR from which an unemployment rate nowcast for the latest BLS reference week is then formed.

Figure 1 shows the CHURN model-implied job-separation rate, job-finding rate, and FCR values for each BLS reference week since January 2025 alongside the official civilian unemployment rates observed for the same periods. The CHURN values are predicted from a two-factor partial least squares (PLS) model estimated on CPS-derived measures of the job-separation and job-finding rates along with ten other traditional and alternative labor market indicators.³

1. CHURN model-implied estimates and the U.S. civilian unemployment rate, 2025

	Jun	May	Apr	Mar	Feb	Jan
CHURN model-implied estimates (percent)						
Job-separation rate	2.08	2.07	2.04	2.05	2.03	2.04
Job-finding rate	46.37	46.68	47.72	48.17	47.78	47.78

	Jun	May	Apr	Mar	Feb	Jan
Flow-consistent unemployment rate	4.30	4.25	4.10	4.07	4.07	4.03
Civilian unemployment rate (<i>percent</i>)	4.26	4.24	4.19	4.15	4.14	4.01

Notes: The figure reports Chicago Fed Unemployment Rate Nowcast (CHURN) model-implied estimates of the job-separation, job-finding, and flow-consistent unemployment rates for the *Current Population Survey* (CPS) reference weeks during the first six months of 2025, along with the official U.S. civilian unemployment rates reported by the U.S. Bureau of Labor Statistics (BLS) for those months. The job-separation rate is defined as the share of workers transitioning from employment to unemployment during a given period, and the job-finding rate is defined as the share of workers transitioning from unemployment to employment. The unemployment rate for June 2025 (in blue) is the CHURN nowcast for the official value to be reported by the BLS on July 3, 2025; the other numbers in the final row are the (unrounded) official unemployment rates released by the BLS for those periods.

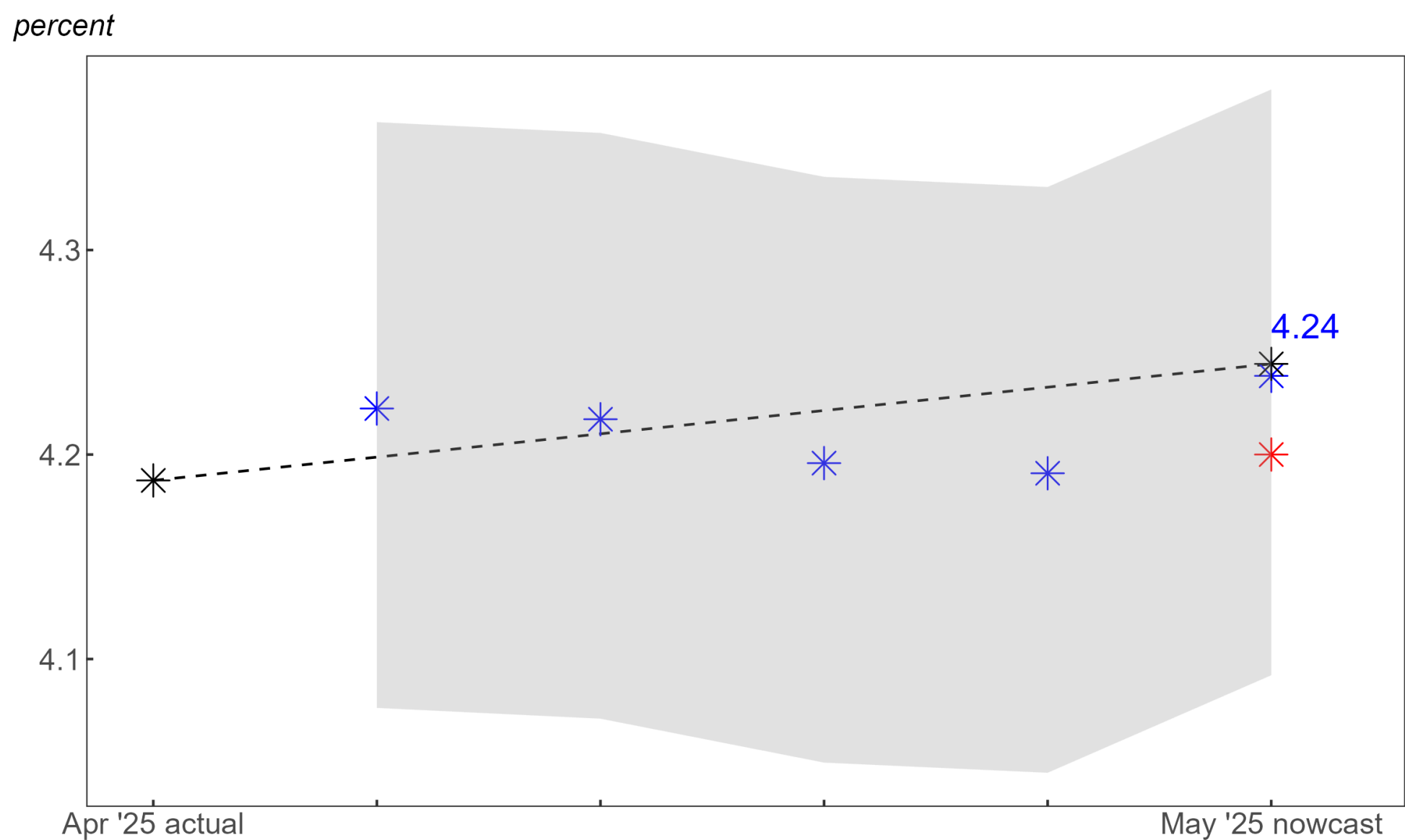
Sources: Authors’ calculations based on data from Bloomberg (via Investing.com), Google, Indeed, Morning Consult, and Haver Analytics.

As the June values demonstrate, CHURN sees a small uptick in the model-implied job-separation rate since the May reference week and a modest decline in the model-implied job-finding rate. On net, this produces a June model-implied FCR of 4.30%, five basis points higher than the estimated May value. This change in the model-implied FCR translates to a two basis point increase, from 4.24% to 4.26%, in the (unrounded) civilian unemployment rate from May to June.

CHURN tracking between reference weeks

Figure 1 focuses on only the BLS reference week of each month. CHURN, however, also provides a tracking estimate for every week in between those weeks. Figure 2 shows the progression of CHURN weekly values during the May tracking period⁴ (blue markers) compared with actual values of the civilian unemployment rate (black markers) and the Bloomberg consensus forecast⁵ for the May unemployment rate (red marker).

2. May 2025 CHURN tracking period



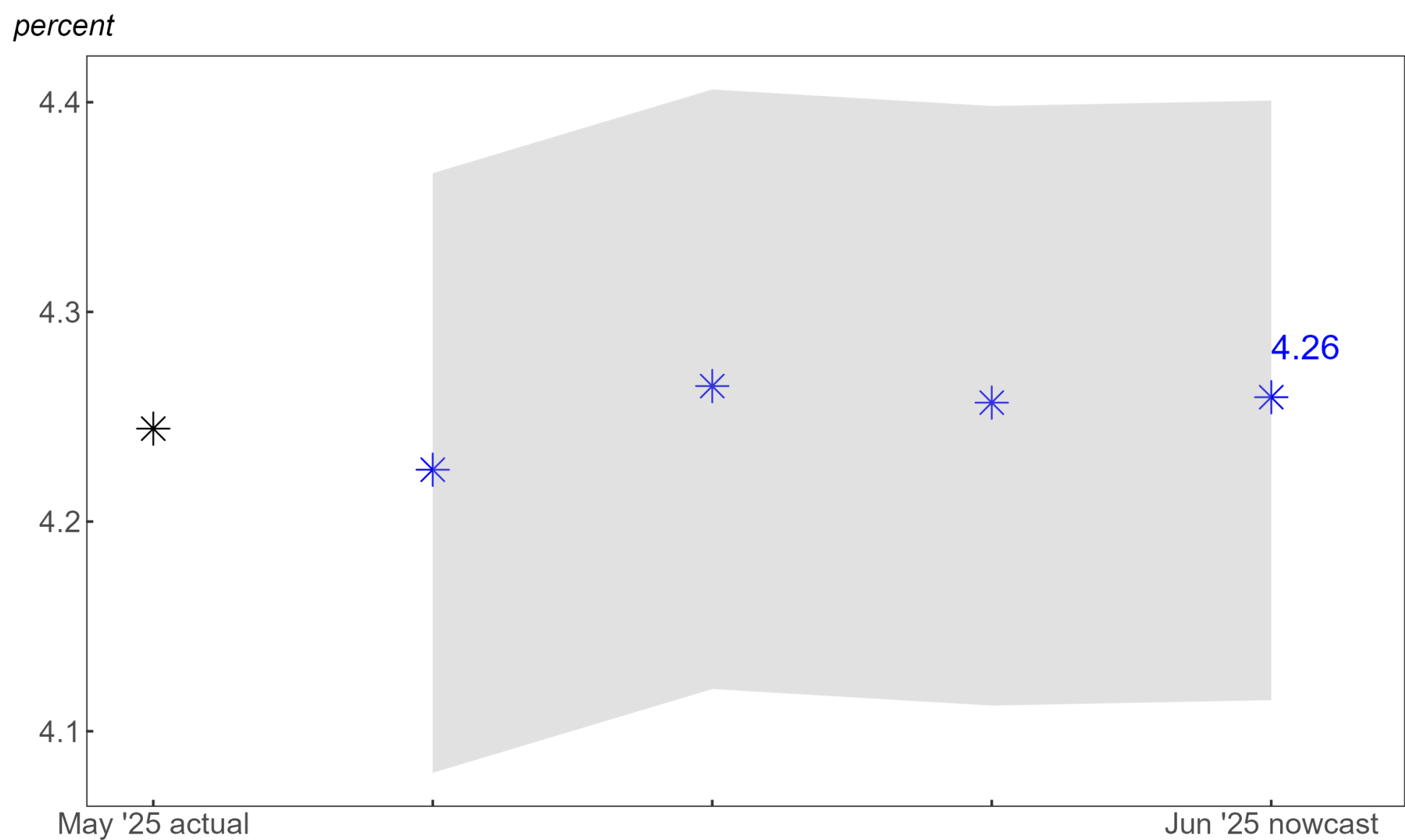
Notes: The figure reports actual and estimated values for the U.S. civilian unemployment rate. Black markers represent actual values of the unemployment rate reported by the U.S. Bureau of Labor Statistics (BLS) for April and May 2025, connected through the intervening weeks by a dashed black line, while the remaining blue and red markers correspond to estimates of the May unemployment rate from the Chicago Fed Unemployment Rate Nowcast (CHURN) and the Bloomberg consensus forecast, respectively. CHURN provides a tracking estimate for every week in between each month's BLS reference week (data from which the official unemployment rate is determined), so there is more than one blue marker. The gray ribbon surrounding the CHURN markers is a 68% prediction interval.

Sources: Authors' calculations based on data from Bloomberg (via Investing.com), Google, Indeed, Morning Consult, and Haver Analytics.

In our [June 5 CHURN release](#), published alongside the *Chicago Fed Letter* introducing CHURN, we reported a May reference week nowcast of 4.24%—which proved to be right in line with the actual unemployment rate published the following day. The Bloomberg consensus forecast, which is only reported to one decimal place, also accurately reflected the rounded May value of the unemployment rate at 4.2%. However, with the weekly tracking provided by CHURN, we can see that the May reference week likely represented a high point for the unemployment rate over the six-week period shown in figure 2.

Figure 3 shows the progression of CHURN values during the June tracking period, ending with the June reference week estimate of 4.26%. CHURN values since the May reference week (i.e., the week ending May 17) have oscillated within a total range of about 4 basis points above and below that reference week's value over the period, peaking at a little over 4.26% in week 2 after the May reference week and falling as low as 4.22% in week 1 after the May reference week.

3. June 2025 CHURN tracking period



Notes: The figure reports actual and estimated values for the U.S. civilian unemployment rate. The black marker represents the actual value of the unemployment rate reported by the U.S. Bureau of Labor Statistics (BLS) for May 2025, while the blue markers correspond to the weekly tracking estimates from the Chicago Fed Unemployment Rate Nowcast (CHURN). The gray ribbon surrounding the CHURN markers is a 68% prediction interval.

Sources: Authors’ calculations based on data from Bloomberg (via Investing.com), Google, Indeed, Morning Consult, and Haver Analytics.

The gray ribbon surrounding the tracking estimates in both figures 2 and 3 represents a 68% prediction interval summarizing the uncertainty inherent in each CHURN weekly estimate. It shows where we would expect, based on the historical performance of the CHURN model, the actual unemployment rate value to fall roughly 68% of the time. We can use the intervals to make a probabilistic judgment of the likely direction of change in the unemployment rate.

The CHURN nowcast of 4.26% for the June reference week implies roughly 50/50 odds that the actual unemployment rate comes in at a rounded value of 4.3% or higher. The most recent CHURN estimates, as of July 2, 2025, are [available online](#).

Notes

- ¹ The BLS reference week for the CPS is typically the week containing the 12th day of each month.
- ² The FCR is the ratio of the job-separation rate to the sum of the job-separation and job-finding rates. With constant job-separation and job-finding rates, the unemployment rate will converge to the FCR over time.
- ³ Further details on the PLS model, the various labor market indicators in CHURN, and the method used to convert the change in the model-implied FCR to a change in the civilian unemployment rate can be found in [Chicago Fed Letter No. 506](#).
- ⁴ The May 2025 tracking period begins with the first week following the April reference week and ends with the May reference week. Therefore, when we refer to a specific month’s tracking period, we mean that month’s reference week plus the preceding weeks back to the previous month’s reference week.
- ⁵ This is the consensus forecast for the yet-to-be-released unemployment rate as shown on Bloomberg’s economic calendar (sourced from [Investing.com](#)).

Opinions expressed in this article are those of the author(s) and do not necessarily reflect the views of the Federal Reserve Bank of Chicago or the Federal Reserve System.