The Fourth District unemployment rate fell to 5.7% in January; the U.S. average for the month was 5.2%. In March, the national unemployment rate, which is available sooner than the regional measures, was unchanged. The size of the change in the District unemployment rate was probably affected by the introduction in January of a new methodology for the Local Area Unemployment Statistics (LAUS) program, designed to increase the accuracy and timeliness of the estimates.

Fourth District counties in Pennsylvania and western Kentucky generally had unemployment rates at or below the U.S. average in January. Like the overall Fourth District measure, the county unemployment rates shown here are generated using the redesigned methodology.

LAUS now uses more sophisticated econometric techniques than its predecessor, which had been used since 1994. The LAUS state models allow for real-time benchmarking to the national Current Population Survey (CPS), so that the sum of monthly state estimates will equal national totals. This important constraint should make end-of-year revisions smaller, improving comparability between December-benchmarked and January-modeled estimates.

In addition, state-level error measures, which will be available for the first time, can be used to determine the statistical significance of estimated month-over-month changes. Finally, the Labor Department suggests that the new methodology will improve the seasonal adjustment process and
better reflect the effects of major national shocks on the economy.

In 2004, the Bureau of Labor Statistics produced estimates using both the old and redesigned methods and compared them for the first six months of 2004. Under the redesigned method, 79% of the monthly estimates of state unemployment rates were higher than the estimates from the old model, 8% were the same, and 13% were lower.

This addresses one issue of the old methodology: When summing the state (LAUS) figures and comparing them to the national CPS figures, the old methodology generally overestimated employment and underestimated the unemployment rate. The two series also diverged around the recession and the September 11 terrorist attacks. The redesigned model should reflect economic events such as these more accurately through real-time benchmarking.

Assuming that results from the redesigned model are more accurate, annual unemployment rates for Fourth District states have generally been underestimated since 2000, as shown when bars depicting the new minus the old model’s estimates lie above zero. In fact, for estimates reported since 2000, 60% of annual unemployment rates for Fourth District states were underestimated. Employment numbers were generally overestimated in District states, although the pattern became less distinct in recent years. Total employment since 2000 was overestimated for all District states.