

Seasonally-Adjusted Labor Force Estimates for Metropolitan Areas Questions and Answers

Provided by the U.S. Bureau of Labor Statistics

1. Why is BLS producing smoothed seasonally-adjusted metropolitan area estimates?

The development of seasonally-adjusted estimates for metropolitan areas has been a longstanding goal of the LAUS program. The production of smoothed seasonally-adjusted metropolitan area estimates (SSA-MA) will allow for comparison of Statewide and substate estimates within States. It will assist users in analyzing trends in labor force estimates among metropolitan areas. It is also consistent with the practice of the Current Employment Statistics program which produces seasonally-adjusted estimates for nearly all metropolitan areas.

2. What are Smoothed Seasonally-Adjusted (SSA) Estimates?

SSA estimates are seasonally-adjusted estimates that incorporate a long-run trend smoothing procedure. This results in estimates that are less volatile than those produced only using seasonal-adjustment estimation methodology.

3. Does BLS currently produce smoothed seasonally-adjusted estimates for some metropolitan areas?

Yes. BLS currently produces and publishes monthly smoothed seasonally-adjusted estimates for 6 metropolitan areas as part of the LAUS time-series model estimation process. The areas are the Cleveland-Elyria-Mentor and Detroit-Warren-Livonia metropolitan areas and the Chicago-Joliet-Naperville, Los Angeles-Long Beach-Glendale, Miami-Miami Beach-Kendall, and Seattle-Bellevue-Everett metropolitan divisions.

4. What methodology is BLS utilizing to seasonally adjust the metropolitan areas?

BLS is using two methods to seasonally adjust the metropolitan areas estimates of employment and unemployment. The first is a model-based approach (SEATS) and the second is the non-model-based X-11 (including X-11 ARIMA and X-12 ARIMA) that has been the standard BLS approach to seasonal adjustment since the 1970's. Both methods are accepted statistical procedures for seasonal adjustment.

5. **What are the differences between SEATS and X-11?**

X-11 and SEATS have strong similarities. The ARIMA model of the observed series is the starting point for both. They both also use the same basic estimator, which is a weighted moving average of series that produces seasonally-adjusted output. Their methods differ in the derivation of their moving average weights.

X-11 is empirically based. It directly selects moving averages from a pre-specified set. The weights are not designed for any specific series, but fit a wide variety of series. SEATS derives a moving average from the ARIMA model of the series. The moving averages are tailored to the specific modeled properties of the series.

The SEATS methodology is flexible in that it can adjust some series that X-11 finds too variable. It also facilitates analysis with a variety of error measures produced within the system. An advantage of X-11 is that it does not require a model to seasonally adjust a series. Also, it may prove useful in adjusting some complex series where SEATS produces highly variable seasonal factors.

6. **What methodology will be used to smooth the seasonally-adjusted metropolitan area estimates?**

BLS is using the Henderson 13 smoothing algorithm to smooth the metropolitan area estimates. This is the same methodology employed for the State and substate modeled estimates.

7. **How many metropolitan areas are being seasonally adjusted?**

We produce smoothed seasonally-adjusted estimates for all 414 metropolitan series: 380 metropolitan areas (372 in the United States and 8 in Puerto Rico), and 34 metropolitan divisions. This count includes the 2 metropolitan areas and 4 metropolitan divisions that are seasonally adjusted through the LAUS models.

8. **How will BLS publish the MA-SSA data?**

We will post a table of smoothed seasonally-adjusted metropolitan area and metropolitan division labor force estimates on the BLS web site.

9. **What data will be published?**

We will produce smoothed seasonally-adjusted estimates of labor force, employment, unemployment, and the unemployment rate for the period January 2011 to the present month. Historical files (back to January 2000) will be available to users on request.

10. **When will the data be issued?**

The tables will be loaded to the website each month shortly after the publication of the *Metropolitan Area Employment and Unemployment* news release. The schedule for upcoming news releases is as follows: June 29 (May preliminary and April revised), August 3 (June preliminary and May revised) and August 31 (July preliminary and June revised). The release dates for all of 2011 may be found at http://www.bls.gov/schedule/news_release/metro.htm.

11. **Are States required to publish the SSA-MA series?**

No, we do not require that States publish the smoothed seasonally-adjusted metropolitan area estimates.

12. **Who can users contact for more information on the SSA-MA project?** Users should contact Walter Sylva, Branch Chief, LAUS Research and Methods, Bureau of Labor Statistics, 2 Massachusetts Avenue, NE, Suite 4675, Washington, DC, 20212 or at sylva.walter@bls.gov with any questions.

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