



# UNIVERSITY OF NORTH ALABAMA REGIONAL ECONOMIC UPDATE

January 2023



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# INTRODUCTION

Another six months have passed since the previous edition of the Florence-Muscle Shoals MSA economic update and inflation continues to dominate the economic landscape at the local and national level. After generally ignoring inflation for much of the first half of 2022, during June the FED began to pursue tighter monetary policy, raising rates five times between mid-June and mid-December 2022.

Over the course of changing policy positions during 2022, the FED also changed a definition related to their stated goal of 2% average annual inflation. During the first half of the year, the FED held onto the position that the overall goal was a mathematical average annual inflation rate of 2%. As the rate of inflation continued to increase during 2022, the FED abandoned this mathematical average perspective.<sup>1</sup> Currently, the new FED policy stance will be to use monetary policy to increase inflation to the 2% annual target if inflation is below 2%; however, a corresponding policy will not be pursued to bring the average inflation rate down to 2% if the annual rate is above 2%. Certainly, the FED will attempt to utilize monetary policy to slow down the rate of inflation, but action will not be taken to bring the annual average back down to 2%. Essentially, under current or similar conditions where inflation is above 2%, that price level becomes the new baseline with the goal of 2% inflation for the following year. Thus, during periods of excessive inflation, the FED is not going to squeeze the money supply enough to induce an appropriate amount of deflation to sustain a 2% annual average. With this change, one must question if the FED is anticipating current inflationary pressure to persist.

Overall inflation seems to have responded to the pivot toward tighter monetary policy with the Bureau of Labor Statistics (BLS) estimating December U.S. City Average (USC) inflation at 6.5%, down from 9.1% as reported in June. On an annualized basis, USC inflation is estimated to be 8.0% for 2022. Considering the East South Central (ESC) statistical region, inflation is also 6.5% during December and 7.4% for the year. While data indicating general inflation is cooling is certainly refreshing, further investigation of inflation by category indicates that inflation is not cooling in all areas. In fact, within the ESC region, inflation during the second half of 2022 was higher than in the first half of 2022 in seven of nine major categories as estimated by the BLS. The rate of inflation is lower in the second half of the year only in the Apparel and Transportation major categories. Inflation increased during the second half of the year in the Fuel and Utilities major category even with inflation in the Motor Fuel sub-category dropping significantly from 45.8% during the first half of the year to 17.5% during the second half of the year. To further investigate these discrepancies, this edition of the economic update also considers the 1-month % change in the inflation rate to get a picture of how inflation is changing on a month-to-month basis. As in past editions, employment conditions are also included in this update, and the second half of 2022 is reviewed and discussed.

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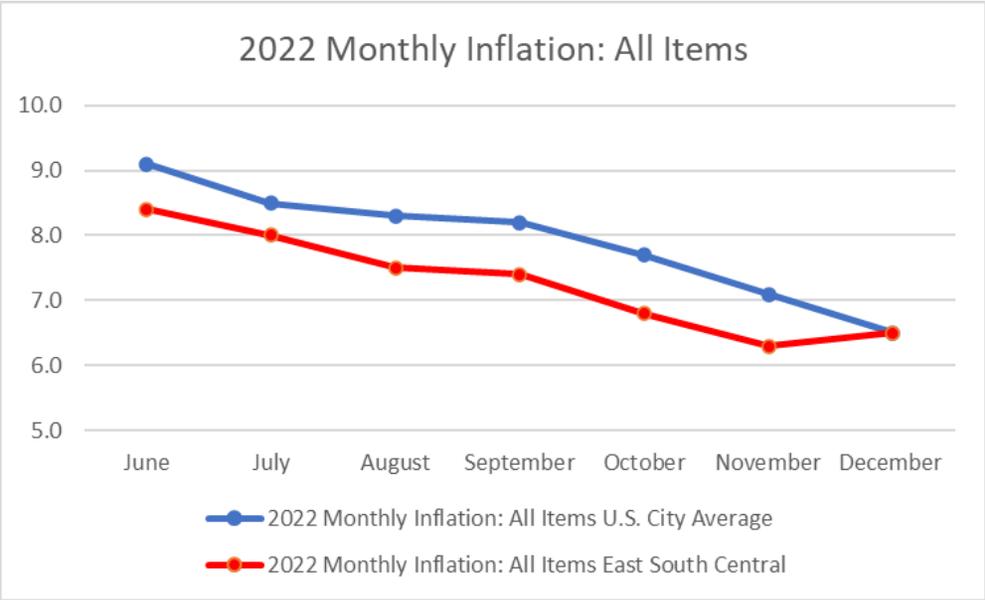
<sup>1</sup> As is customary, the FED releases various policy reports throughout the year. Interested readers can read these policy reports for more information regarding this change in procedure. One such interesting report was published by The Board of Governors of the Federal Reserve System on June 17, 2022, and is titled "Monetary Policy Report."

## 2022 Monthly Inflation Estimates: June through December

Overall inflation cooled during the second half of 2022 as the FED increased interest rates five times between June and December 2022. U.S. City Average: All Items (USC) inflation, on an annualized basis, peaked during June 2022 at 9.1% as measured by the Consumer Price Index (CPI). Since that time, the twelve-month average inflation rate declined for six consecutive months and ended the year at 6.5%. As shown in the chart below, inflation declined only slightly during August and September when compared to the remaining months covered by this update. Other than these two months, inflation declines consistently from July through December. The cooling over the last six months decreases the overall inflation rate for the USC during the second half of the year to 7.7%, compared to the rate of 8.3% experienced during the first half of 2022. Overall, the BLS estimates that the 2022 USC annual inflation rate to be 8.0%, 1.7 times larger than the annual rate of 4.7% experienced during 2021.

We continue to utilize East South Central (ESC) inflation estimates to serve as our measure of inflation for the Florence-Muscle Shoals MSA. Continuing the trend from the first half of 2022, ESC inflation remains below USC inflation between July and November 2022. Furthermore, the trend of declining inflation within the ESC region is very similar to that shown by the USC average between July and November. The major deviation in the trend occurred during December when ESC inflation increased from 6.3% to 6.5% on an annualized basis. The slight increase during December places the ESC inflation rate equal to USC inflation rate for the first time during 2022. Similar to the USC, at an inflation rate of 8.4% during June 2022, this represents the highest inflation rate for the ESC during the period covered by this update. The steady decline from July through November 2022 produced an overall inflation rate of 7.1% during the second half of the year. Examining the inflation rate across the entirety of 2022, the BLS estimates an average annual inflation rate of 7.4%. This is only 1.25 times larger than the ESC annual rate of 5.9% during 2021. While this comparison is slightly better than the USC annual average, discussed above, this is expected since the ESC annual inflation rate was higher than the USC average rate during 2021. The remaining question revolves around the slight uptick in ESC inflation during December 2022 – is inflation beginning to increase again or is ESC inflation returning to a pattern more like 2021 when ESC inflation was higher than USC inflation during most of the year?

The previous edition of this update included a discussion of “forward-looking” inflation as compared to “backward-looking” estimates provided by the BLS. At the time the last edition was published during July 2022, the FED had not yet taken an aggressive approach in an attempt to curb inflation and such forward looking estimates were appropriate given that inflation during the first half of 2022 was much higher than the second half of 2021. However, since June 2022, the FED has taken a more aggressive approach, increasing the Federal Funds Rate (FFR) by 75 basis points four times between June and November 2022. Furthermore, the FED increased the FFR by an additional 50 basis points during December 2022 and another 25 basis points during February 2023. With these changes, and additional rate hikes expected during 2023, forward looking rates are not as valuable for discussion as they were during June 2022. Instead, the next section will report annual inflation by category as well as focus on how inflation is changing by major category on a month-to-month basis in an effort to ascertain how inflation is expected to change during 2023.



	U.S. City Average	East South Central
June	9.1	8.4
July	8.5	8.0
August	8.3	7.5
September	8.2	7.4
October	7.7	6.8
November	7.1	6.3
December	6.5	6.5
1st Half 2022	8.3	7.7
2nd Half 2022	7.7	7.1
Annual	8.0	7.4

Source: Bureau of Labor Statistics

### Inflation by Major Category: July through December 2022

This section discusses inflation by major BLS category and focuses specifically on the ESC region. Examination of the table below reveals an interesting disconnect between overall inflation discussed in the previous section and inflation by category results. With overall inflation falling from 8.4% in June 2022 to 6.5% during December, one might expect that inflation is generally falling across the economy. However, an examination of the table below reveals a different picture. The BLS reports inflation estimates for ten major economic categories. In the ESC region, December inflation estimates were higher than BLS estimates for the July through November time frame for five of the ten regions. Specifically, December represents the highest inflation recorded during

the period covered in this update for the Education and Communication, Food and Beverage, Housing, Fuels and Utilities, and Recreation categories. In fact, December 12-month average inflation estimates for these five categories are higher than for any month during 2022. The Food and Beverage and Fuel and Utilities categories have the highest inflation estimates at 11.5% and 11.2% respectively. Further investigation of the Food and Beverage category reveals inflation estimates of 8.4% for food away from home and 12.1% for Food at Home in December. Although Fuel and Utilities show inflation increasing during the second half of the year, we also know objectively that gas prices were declining during the latter part of 2022. Examining the Motor Fuel subsector, the BLS indicates inflation of -1% inflation during December. Thus, this subsector experienced deflation during December; however, this deflation is likely short-lived as gas prices began increasing again during January.

With only five categories experiencing higher inflation during December, along with weighting procedures utilized by the BLS, it is feasible that overall inflation would be declining during the second half of the year as depicted in the previous table. Examining inflation by category for the second half of the year unfortunately adds to the complexity surrounding current inflation conditions in the USC and ESC regions. Specifically, for the ESC region, average annualized inflation for the second half 2022 was higher in seven of nine major categories. This indicates that inflation is higher between July and December 2022 than during the period of January to June 2022. Inflation is lower during the second half of the year for the Apparel and Transportation categories, falling from 7.9% to 6.8% in Apparel and 21.0% to 9.5% in Transportation. The subcategory of Motor Fuel experienced the largest decrease between the first and second half of 2022, decreasing from 45.8% to 17.5%. Even with this large decrease in inflation for Motor Fuel, inflation within the Fuel and Utilities major category still experiences an increase from 4.5% during the first half of the year to 7.8% in the second half of 2022. Both Food at Home and Food Away from home also experience higher levels of inflation during the second half of the year. Food Away from Home is up from 6.1% to 7.2% while the inflation rate for Food at Home is increasing at a faster rate, from 10.5% to 13.6%. See the table below for monthly estimates of 12-month average inflation rates by major category.

Given the FED pivot toward a more aggressive response to current inflationary conditions, forward-looking inflation rates are not currently beneficial. Therefore, to gauge how the ESC region is being impacted on a month-to-month basis, we will examine inflation on a 1-month percent change basis rather than a 12-month percent change. In addition to a table containing 1-month percent change inflation estimates for January through December 2022, four charts are also included to assist in the visualization of the current inflationary conditions within the ESC region. Examination of the charts and table exposes at least a portion of the circumstances that currently have overall inflationary trends at odds with inflation trends by major category. Month-to-month inflation continues to be erratic, even in the presence of a tighter monetary policy environment. Additional details and discussion by major category are found on the next page.

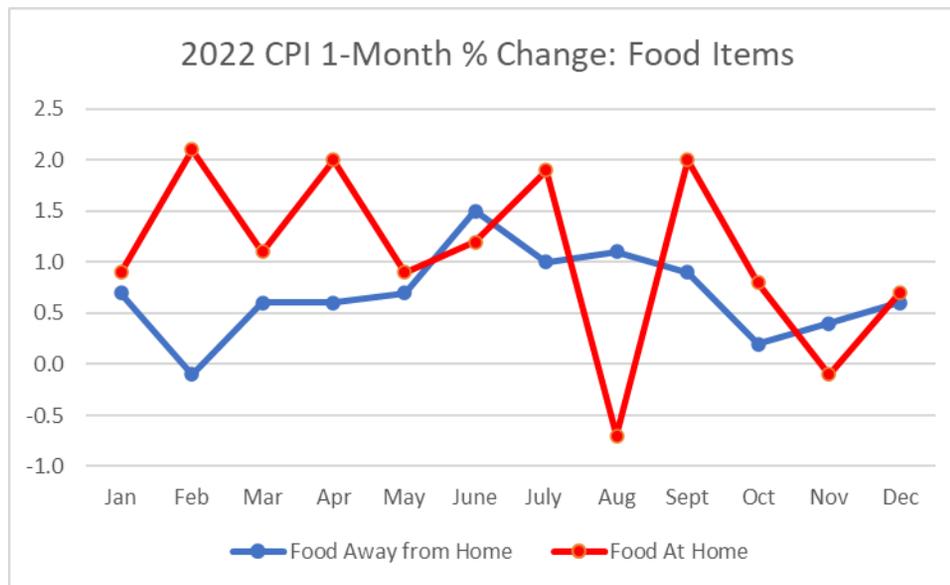
**2022 Monthly CPI by Category**  
**All Urban Consumers: East South Central**

Major Category	July	Aug	Sept	Oct	Nov	Dec	1st Half	2nd Half	Annual
							2022	2022	
<b>All Items</b>	8.0	7.5	7.4	6.8	6.3	6.5	<b>7.7</b>	<b>7.1</b>	<b>7.4</b>
<b>Apparel</b>	8.0	9.0	8.4	7.6	5.4	2.5	<b>7.9</b>	<b>6.8</b>	<b>7.3</b>
<b>Education and Comm.</b>	1.8	1.9	2.7	2.1	2.7	3.1	<b>1.5</b>	<b>2.4</b>	<b>1.9</b>
<b>Food and Beverage</b>	11.1	10.0	10.8	10.5	10.9	11.5	<b>8.4</b>	<b>10.8</b>	<b>9.6</b>
<b>Housing</b>	5.7	6.9	6.8	6.3	6.3	8.3	<b>4.8</b>	<b>6.7</b>	<b>5.8</b>
<b>Household Furnishings and Ops</b>	8.4	8.1	9.0	8.8	7.4	7.2	<b>6.6</b>	<b>8.1</b>	<b>7.4</b>
<b>Fuels and Utilities</b>	6.3	8.5	8.4	6.0	6.6	11.2	<b>4.5</b>	<b>7.8</b>	<b>6.2</b>
<b>Medical Care</b>	2.8	3.1	3.6	3.3	3.1	2.1	<b>1.9</b>	<b>3.0</b>	<b>2.5</b>
<b>Recreation</b>	4.4	3.5	4.1	2.6	2.2	6.1	<b>2.3</b>	<b>3.8</b>	<b>3.1</b>
<b>Transportation</b>	6.5	12.4	10.5	9.3	6.3	2.4	<b>21.0</b>	<b>9.5</b>	<b>15.0</b>
<b>Food Away from Home</b>	7.3	6.8	6.8	6.5	7.5	8.4	<b>6.1</b>	<b>7.2</b>	<b>6.7</b>
<b>Food at Home</b>	14.2	12.6	14.0	13.7	13.6	12.1	<b>10.5</b>	<b>13.6</b>	<b>12.1</b>
<b>Motor Fuel</b>	45.5	25.2	15.9	13.0	8.2	- 1.0	<b>45.8</b>	<b>17.5</b>	<b>30.7</b>

Source: Bureau of Labor Statistics

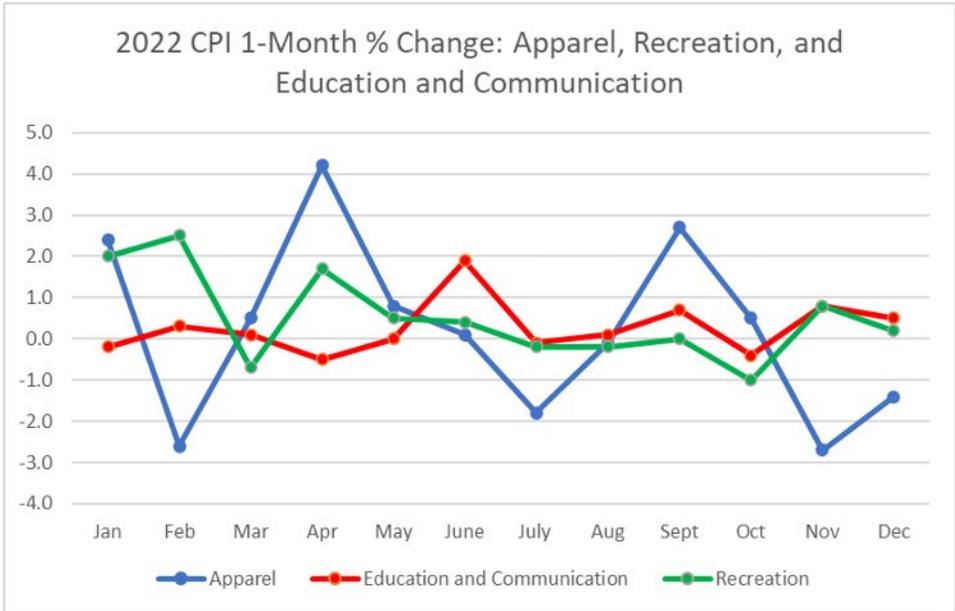
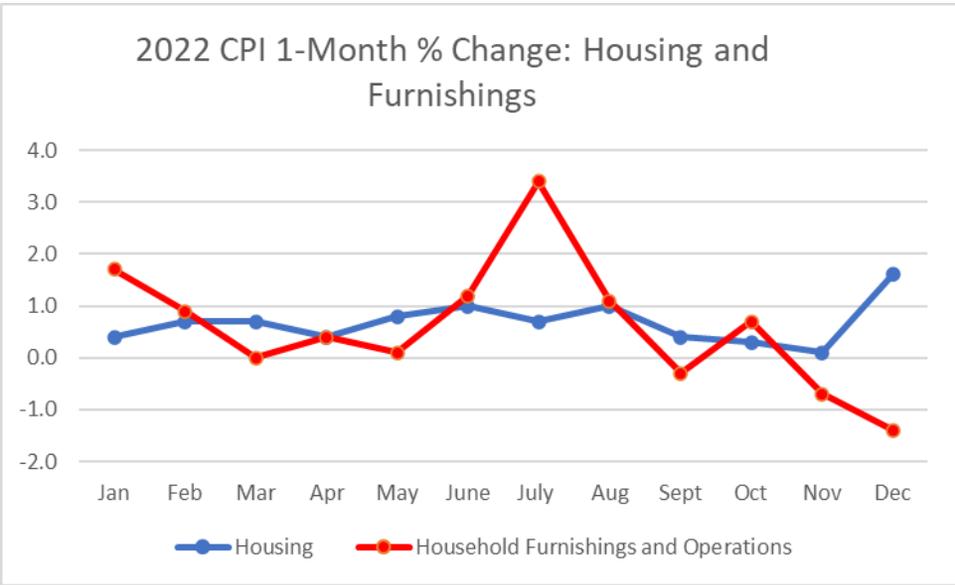
## 2022 Monthly 1-Month % Change Inflation Rates by Category

The figure below details 1-month percent change inflation rates for Food Items in the ESC. Food at Home has experienced six months of increasing inflation during 2022 and six months of declining inflation rates. In fact, during August and November 2022, this subcategory was experiencing slight deflation of 0.7% and 0.1% respectively. As shown in the figure, Food at Home was plagued with recurrent periods of hotter and cooler inflation trends during 2022, experiencing only two consecutive months of inflationary growth during June and July and only two consecutive months of lower inflation – October and November. Food Away from Home is steadier with 1-month percent change estimates ranging from -0.1% to 1.5% during 2022. The lowest point during the year was February, at -0.1%. After this low point, inflation in this subcategory increased over the next four months to the high point of 1.5% during June. The rate of inflation decreased in three of the next four months between June and October before increasing again during November and December.



Next, we turn to the major categories of Housing and Household Furnishings and Operations. Inflation in the housing sector during 2022 was very steady on a month-to-month basis when compared to the food sector discussed above. From January through November, monthly inflation ranged from 0.4% to 1.0%. The rate of inflation for Housing decreased from September through November during which time the FED enacted their third and fourth rate hikes of 2022. However, during December, Housing experienced the largest 1-month percent change inflation rate for the year at 1.6%.

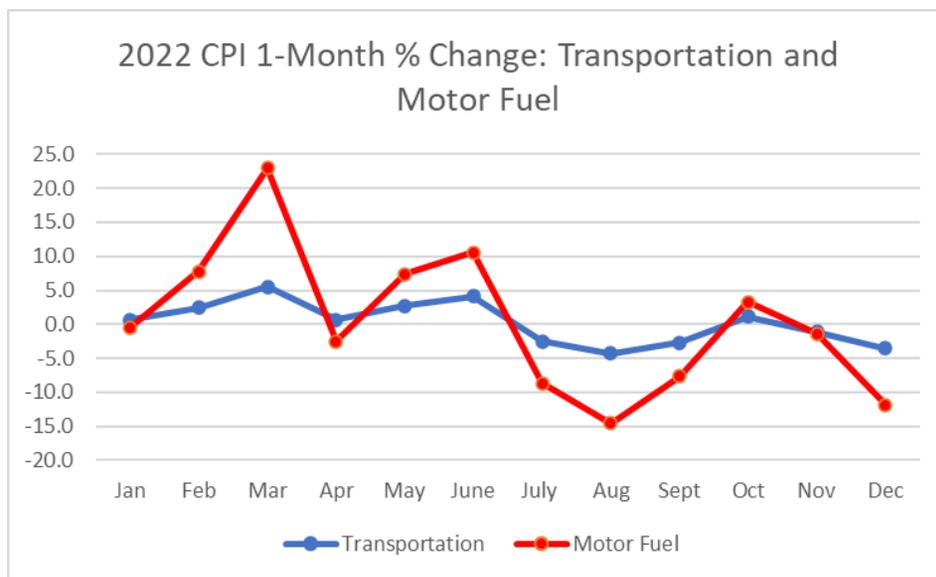
Considering this 1-month percent change basis, the Household Furnishings and Operations category experiences an overall negative trend, which is only seen in one other category during 2022 – Motor Fuel. The month of July is an outlier in this category as the 1-month percent change in inflation was 3.4%. This rate during July is twice as large as the next largest rate of 1.7% from January 2022. The inflation rate declined quickly during August and dropped below 0% during September. This category experiences 1.4% deflation during December, which coincidentally is the best monthly performance of 2022 for this category.



The figure above contains monthly inflation estimates for Apparel, Recreation, and Education and Communication major categories for 2022. Inflation in the Apparel sector has numerous up and down periods, similar to Food at Home discussed previously. While inflation in this sector does not change direction quite as many times as experienced by Food at Home, the changes are much sharper. In fact, the monthly inflation rate changed from -2.6% during February to 4.2% during April. Inflation cooled again in this sector beginning in May and by July was again below zero at -1.8%. The up and down cycle repeats during the second half of the year with November experiencing the lowest inflation of the year for Apparel at -2.7%. As can be seen in the figure, the upward trend began again in December. The monthly trend for Education and Communication is flat during the first four months of 2022 has a slight positive trend during the second half of the year. June is the outlier in this category when monthly inflation rose to 1.9%, more than double the next highest monthly inflation rate of 0.8% which occurred during November.

Recreation has a slight negative trend observed between January and December 2022. Beginning the year with a monthly inflation rate of 2.0%, the Recreation category has a higher January rate of inflation than all other categories except for Apparel. During February, the monthly rate of inflation rose to 2.5%, second place to Motor Fuel which increased almost 8% from January to February. Except for an increase in the monthly inflation rate during April, inflation decreased in this category from March through October, with deflation occurring during four months of that period.

Finally, we discuss monthly inflation rates for Transportation and Motor Fuel categories. Monthly inflation in the Transportation category is similar to Housing and mostly steady during 2022, ranging from a high of 5.5% during March and a low of -4.3% during August. The monthly inflation rate for Transportation has a slight positive trend from January through June and a slightly more pronounced negative trend during the second half of the year. In two months, the monthly inflation rate declined from 4.1% in June to -4.3% in August 2022. The next two months saw slight increases in the monthly rate of inflation before finishing the year by declining again during November and December. Motor Fuel is again erratic during 2022 and experiences the largest variation in the monthly inflation rate. During January 2022, Motor Fuel experienced slight deflation of 0.5% and then increased rapidly during February and March. Furthermore, March represents the largest monthly inflation rate for Motor Fuel, estimated to be 23.0%. Deflation returns during April as the monthly rate of inflation falls to -2.5%. As shown in the figure below, inflation increased again during May and June. This process continues with deflation occurring at varying rates from July through September and November and December. October is the only month during the second half of the year with a positive monthly inflation rate, and at only 3.3%, is well below the higher rates experienced during February, March, May and June 2022.



**2022 CPI 1-Month Percent Change by Category All  
Urban Consumers: East South Central**

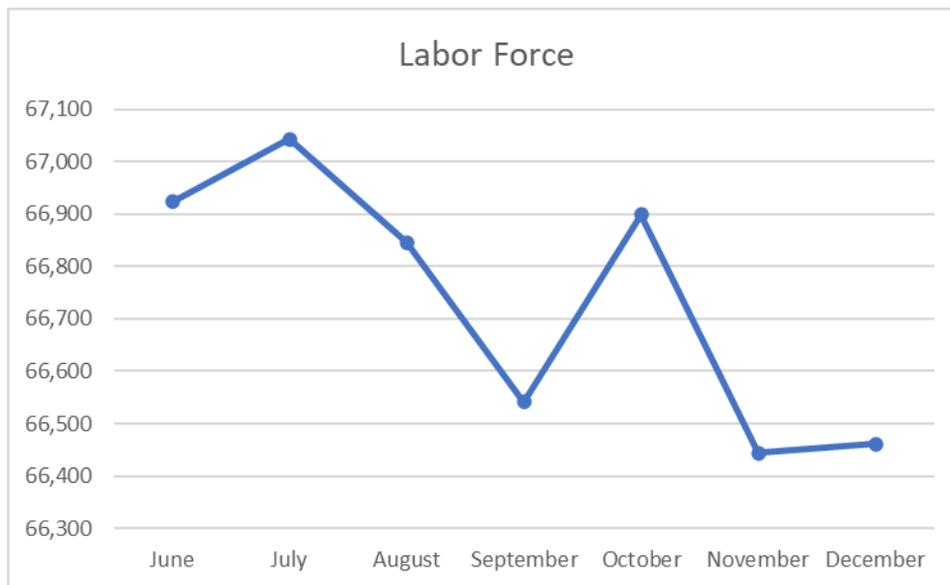
<b>Major Category</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>All Items</b>	0.7	1.1	1.5	0.7	1.1	1.6	0	-0.5	0	0.3	-0.1	0
<b>Apparel</b>	2.4	-2.6	0.5	4.2	0.8	0.1	-1.8	-0.1	2.7	0.5	-2.7	-1.4
<b>Education and Comm.</b>	-0.2	0.3	0.1	-0.5	0.0	1.9	-0.1	0.1	0.7	-0.4	0.8	0.5
<b>Food and Beverage</b>	0.8	1.3	0.9	1.4	0.8	1.3	1.6	0	1.5	0.6	0.1	0.7
<b>Housing</b>	0.4	0.7	0.7	0.4	0.8	1.0	0.7	1.0	0.4	0.3	0.1	1.6
<b>Household Furnishings and Ops</b>	1.7	0.9	0.0	0.4	0.1	1.2	3.4	1.1	-0.3	0.7	-0.7	-1.4
<b>Fuels and Utilities</b>	0.5	0.2	-0.3	0.9	1.1	3.1	-0.1	2.3	0.3	-2.1	0.3	4.6
<b>Medical Care</b>	0.9	0.3	0.3	0.3	0.2	0.2	0.6	0.1	0.5	-0.1	-0.5	-0.7
<b>Recreation</b>	2.0	2.5	-0.7	1.7	0.5	0.4	-0.2	-0.2	0.0	-1.0	0.8	0.2
<b>Transportation</b>	0.7	2.4	5.5	0.7	2.7	4.1	-2.5	-4.3	-2.7	1.1	-1.1	-3.5
<b>Food Away from Home</b>	0.7	-0.1	0.6	0.6	0.7	1.5	1.0	1.1	0.9	0.2	0.4	0.6
<b>Food at Home</b>	0.9	2.1	1.1	2.0	0.9	1.2	1.9	-0.7	2	0.8	-0.1	0.7
<b>Motor Fuel</b>	-0.5	7.8	23.0	-2.5	7.4	10.6	-8.7	-14.5	-7.6	3.3	-1.4	-11.8

Source: Bureau of Labor Statistics

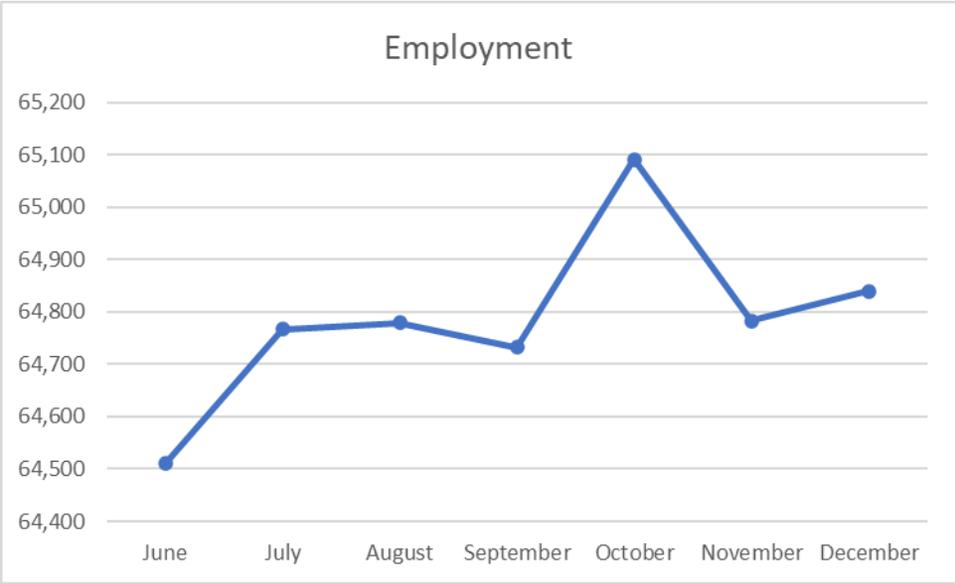
## MONTHLY LABOR FORCE DATA

Labor force participation for 2022 peaked during July at 67,043. Thus, July represents the highest level of labor force participation since October of 2020 and one of only three months where the labor force has been above 67,000 since the beginning of the pandemic in 2020. Labor force participation increased for three straight months from May through July. After the peak during July, labor force participation experiences a downward trend between August and December.

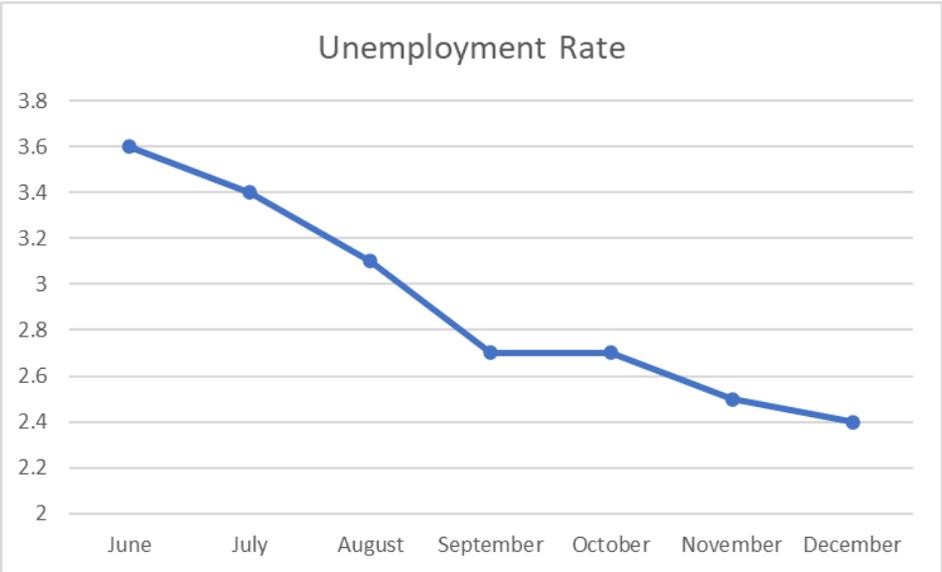
With the exception of a 357 person increase during October, labor force participation declined until November when 66,444 people were estimated to be in the Florence-Muscle Shoals MSA labor force. November's estimate is the lowest since January 2022. Looking back over the longer positive trend to June 2021, December's estimate of 66,461 is slightly below the estimate of 66,613 from May 2022. It is too early to tell if the 501-person reduction in the labor force that occurred during August and September is a slowing of the positive trend the beginning of a reversal of the positive trend experienced since June 2021 or if it is beginning of a negative trend in labor force participation.



Employment within the Florence-Muscle Shoals MSA crossed the 65,000-employee level for only the second time since December 2019 during October of 2022. The first occasion was during May 2022 after the preliminary estimate for May, as contained in the previous edition of this update, was revised upward from 64,869 to 65,013. Regional employment reached a total of 65,013 during October, the highest employment level since December 2019 when the BLS reported a total of 65,117 employees in the region. Following the employment expansion of 277 during May, employment decreased by 503 during June to a total of 64,510. The June employment estimate was the second lowest of the year; however, it is still 996 employees larger than January which was the lowest estimate for 2022. Similar to the employment reduction experienced during June, employment again contracted during November, the month following the breaking through of the 65,000 level. The employment reduction during November was only 359 compared to the reduction of 503 experienced during June. Overall, the area experienced a mild positive employment trend during 2022 following the sharp increase during January.



After declining for much of the first half of the year, the unemployment rate increased from 2.6% in May to 3.6% in June 2022. At this level, the June unemployment rate ties the January rate as the highest experienced during 2022. After declining from February through April, the unemployment rate rose slightly during May and then experienced a sharp increase during June. The increase during June is driven by a 311 increase in the labor force and a decrease of 359 in the number of employees. These changes increased the number of unemployed in the region by 670 during June. During the second half of 2022, the unemployment rate declined steadily except for no change between September and October. The preliminary estimate for December is reported at 2.4%, the lowest rate since April 2022. The December rate is also the second lowest unemployment rate recorded for the Florence-Muscle Shoals MSA since the BLS began publishing employment data for the MSA in 1990.



## MSA Monthly Labor Force Data: June 2022 - December 2022

	<b>Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
<b>June</b>	66,924	64,510	2,414	3.6
<b>July</b>	67,043	64,767	2,276	3.4
<b>August</b>	66,846	64,779	2,067	3.1
<b>September</b>	66,542	64,732	1,810	2.7
<b>October</b>	66,899	65,091	1,799	2.7
<b>November</b>	66,444	64,783	1,661	2.5
<b>December*</b>	66,461	64,839	1,622	2.4

Source: Bureau of Labor Statistics, \* - Preliminary

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