

# THE *Missouri* ECONOMIC DATABOOK

*A summary of regional economic indicators  
for the state of Missouri*



MARCH 25, 2019

FEDERAL RESERVE BANK *of* KANSAS CITY

## SUMMARY OF CURRENT MISSOURI ECONOMIC CONDITIONS

In Missouri, the unemployment rate was 3.2 percent in February, and total payroll employment grew 0.5 percent compared to the previous year. Employment growth was mixed across industries, with the strongest gains in the mining and logging and manufacturing sectors. Missouri nominal personal income grew 3.9 percent in the third quarter of 2018 compared to the previous year, with workplace earnings up 3.8 percent. Home prices increased 7.3 percent in the fourth quarter of 2018 compared to a year ago, while single-family and multifamily permits recorded a -4.3 and 153.8 percent change, respectively, year-to-date through January 2019. Missouri exports were 2.1 percent higher in the fourth quarter of 2018 compared to the same period in 2017.

This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: employment; employment by industry; county and state unemployment; personal income; home prices; housing indicators; manufacturing activity; and exports. These indicators can be found on the following pages.



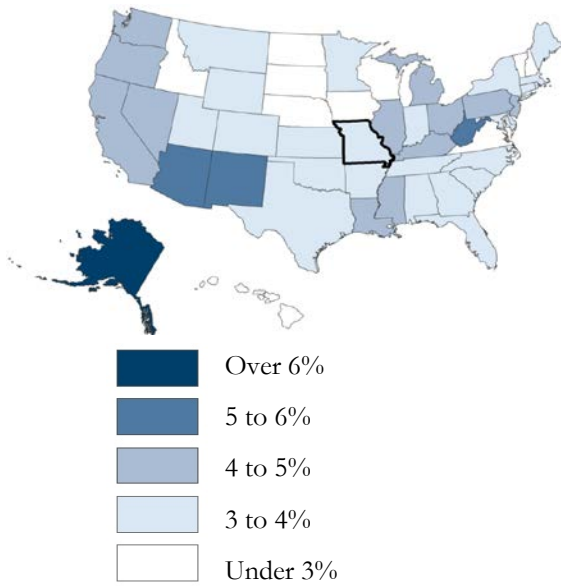
Jason Brown is an Assistant Vice President, Economist, and Regional Executive at the Federal Reserve Bank of Kansas City. In this role, Brown is the Federal Reserve Bank of Kansas City's regional economist in Kansas and Missouri. He is responsible for briefing the Kansas City Fed's President on the economy in these states and the Tenth District.

**Unemployment Rates**

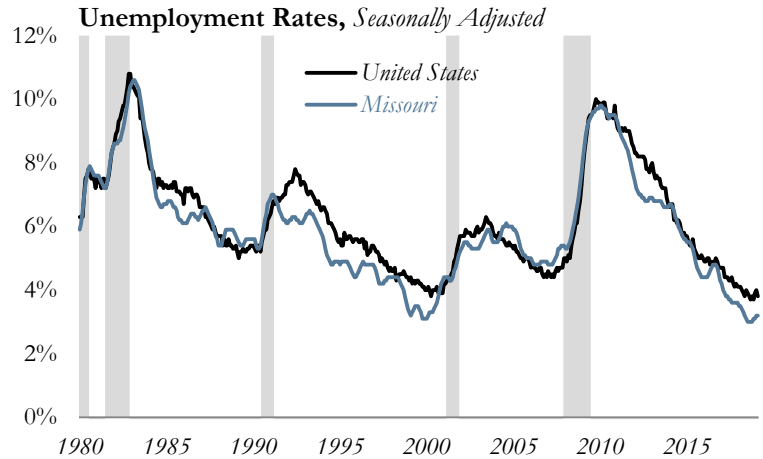
*Seasonally Adjusted*

**February 2019 Unemployment Rates**

*Seasonally Adjusted*



| February 2019                       |                      |                 |
|-------------------------------------|----------------------|-----------------|
|                                     | <i>United States</i> | <i>Missouri</i> |
| Unemployment Rate                   | 3.8%                 | 3.2%            |
| Unemployment Rate, <i>Last Year</i> | 4.1%                 | 3.5%            |



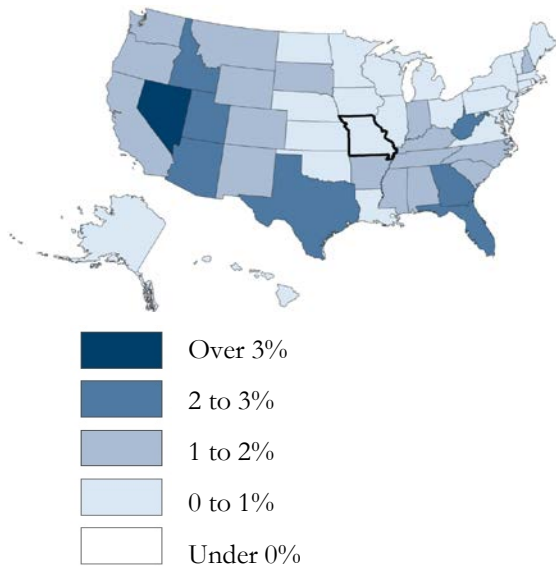
Note: Gray bars indicate recession.

**Payroll Employment**

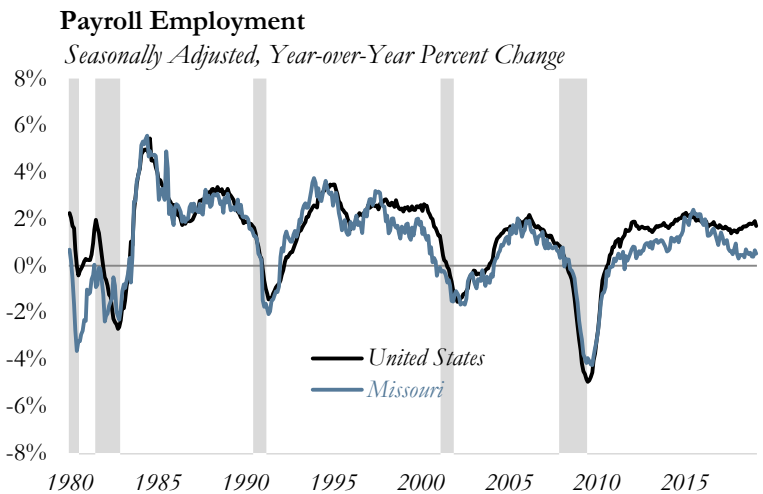
*Seasonally Adjusted*

**February 2019 Payroll Employment**

*Seasonally Adjusted, Year-over-Year Percent Change*



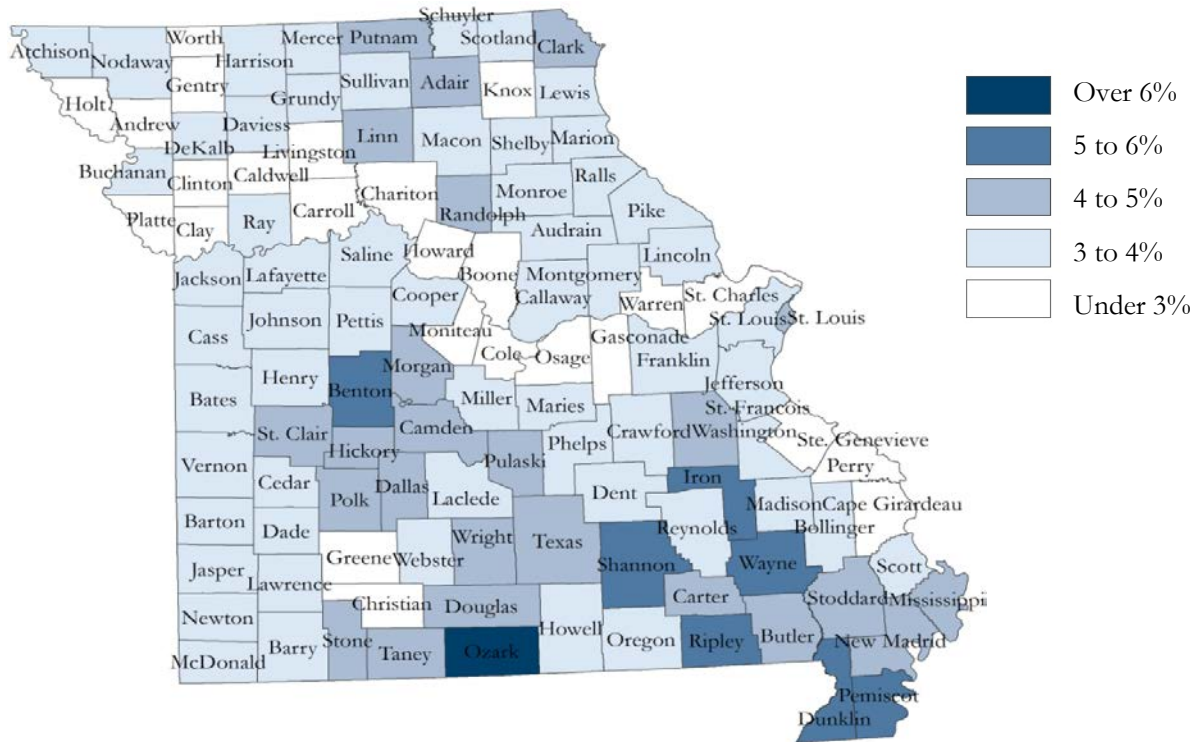
| February 2019                |                      |                 |
|------------------------------|----------------------|-----------------|
|                              | <i>United States</i> | <i>Missouri</i> |
| Jobs ( <i>Thousands</i> )    | 150,606.0            | 2,898.6         |
| <i>Change from Last Year</i> | 1.7%                 | 0.5%            |



Note: Gray bars indicate recession.

Source: Bureau of Labor Statistics/Haver Analytics

**January 2019 Unemployment Rates & Civilian Labor Force**  
*Seasonally Adjusted*



|                      | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> |      |             | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> |       |
|----------------------|---------------------------|--------------------------------|------|-------------|---------------------------|--------------------------------|-------|
| <b>United States</b> | <b>4.0%</b>               | <b>163,229</b>                 | 19   | Mississippi | 4.4                       | 5.9                            |       |
| <b>Missouri</b>      | <b>3.2</b>                | <b>3,057</b>                   | 20   | Douglas     | 4.4                       | 4.9                            |       |
| 1                    | Ozark                     | 6.4                            | 3.5  | 21          | Wright                    | 4.3                            | 7.4   |
| 2                    | Pemiscot                  | 5.8                            | 6.3  | 22          | Clark                     | 4.3                            | 3.2   |
| 3                    | Dunklin                   | 5.8                            | 11.9 | 23          | Camden                    | 4.3                            | 18.3  |
| 4                    | Shannon                   | 5.8                            | 3.3  | 24          | Randolph                  | 4.3                            | 10.2  |
| 5                    | Iron                      | 5.4                            | 3.6  | 25          | Stone                     | 4.2                            | 13.4  |
| 6                    | Ripley                    | 5.3                            | 5.1  | 26          | St. Louis (City)          | 4.2                            | 155.4 |
| 7                    | Wayne                     | 5.2                            | 5.3  | 27          | Polk                      | 4.1                            | 14.6  |
| 8                    | Benton                    | 5.0                            | 7.1  | 28          | Dallas                    | 4.1                            | 7.1   |
| 9                    | Carter                    | 4.8                            | 2.5  | 29          | Morgan                    | 4.0                            | 7.9   |
| 10                   | St. Clair                 | 4.8                            | 3.8  | 30          | Pulaski                   | 4.0                            | 14.7  |
| 11                   | New Madrid                | 4.8                            | 8.1  | 31          | Adair                     | 4.0                            | 10.8  |
| 12                   | Butler                    | 4.7                            | 17.7 | 32          | Putnam                    | 4.0                            | 2.5   |
| 13                   | Stoddard                  | 4.6                            | 13.1 | 33          | Oregon                    | 4.0                            | 3.9   |
| 14                   | Hickory                   | 4.6                            | 3.9  | 34          | Grundy                    | 3.9                            | 4.4   |
| 15                   | Washington                | 4.6                            | 10.1 | 35          | Schuyler                  | 3.9                            | 2.0   |
| 16                   | Taney                     | 4.5                            | 26.0 | 36          | Reynolds                  | 3.9                            | 3.0   |
| 17                   | Linn                      | 4.5                            | 5.0  | 37          | Jackson                   | 3.9                            | 364.2 |
| 18                   | Texas                     | 4.5                            | 8.9  | 38          | Bates                     | 3.9                            | 8.0   |

Source: Bureau of Labor Statistics/Haver Analytics

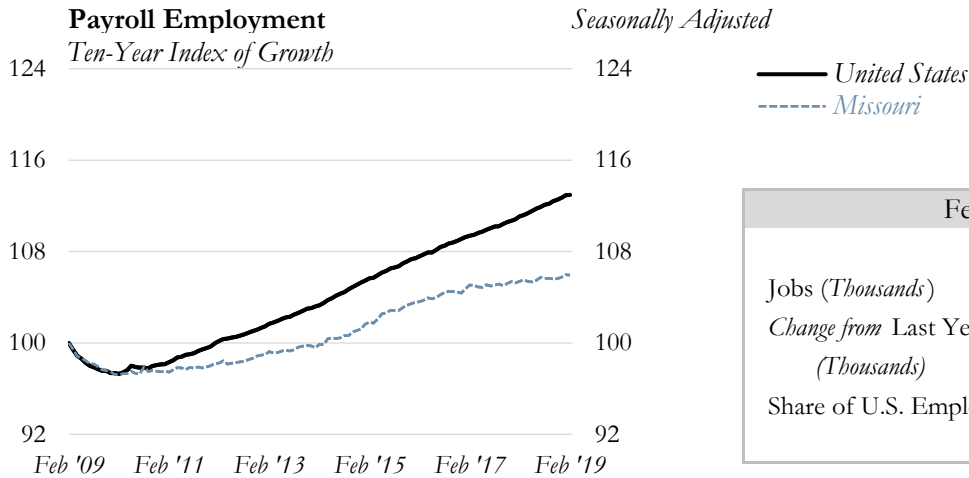
## January 2019 Unemployment Rates &amp; Civilian Labor Force

|    |              | <i>Percent<br/>Unemployed</i> | <i>Labor Force<br/>(Thousands)</i> |     |                | <i>Percent<br/>Unemployed</i> | <i>Labor Force<br/>(Thousands)</i> |
|----|--------------|-------------------------------|------------------------------------|-----|----------------|-------------------------------|------------------------------------|
| 39 | St. Francois | 3.9                           | 26.3                               | 78  | Sullivan       | 3.2                           | 2.8                                |
| 40 | Henry        | 3.9                           | 9.7                                | 79  | Mercer         | 3.2                           | 1.9                                |
| 41 | Maries       | 3.8                           | 5.4                                | 80  | Harrison       | 3.2                           | 3.7                                |
| 42 | Audrain      | 3.8                           | 10.7                               | 81  | Cass           | 3.2                           | 54.5                               |
| 43 | Madison      | 3.8                           | 7.7                                | 82  | Atchison       | 3.1                           | 2.8                                |
| 44 | Cedar        | 3.8                           | 5.7                                | 83  | Nodaway        | 3.1                           | 10.7                               |
| 45 | Howell       | 3.8                           | 16.4                               | 84  | Lafayette      | 3.1                           | 17.0                               |
| 46 | Pettis       | 3.8                           | 20.4                               | 85  | DeKalb         | 3.1                           | 4.8                                |
| 47 | Pike         | 3.8                           | 7.5                                | 86  | Montgomery     | 3.1                           | 5.7                                |
| 48 | Vernon       | 3.8                           | 9.6                                | 87  | Callaway       | 3.0                           | 21.0                               |
| 49 | Scott        | 3.8                           | 20.0                               | 88  | Lewis          | 3.0                           | 5.1                                |
| 50 | Bollinger    | 3.7                           | 5.5                                | 89  | Scotland       | 3.0                           | 2.4                                |
| 51 | Dent         | 3.7                           | 6.2                                | 90  | Barton         | 3.0                           | 5.2                                |
| 52 | Crawford     | 3.6                           | 10.8                               | 91  | Knox           | 3.0                           | 1.9                                |
| 53 | Lawrence     | 3.6                           | 18.1                               | 92  | Andrew         | 3.0                           | 9.7                                |
| 54 | Ray          | 3.6                           | 11.1                               | 93  | Greene         | 2.9                           | 151.5                              |
| 55 | McDonald     | 3.5                           | 14.3                               | 94  | Christian      | 2.9                           | 44.4                               |
| 56 | Cooper       | 3.5                           | 7.4                                | 95  | Cape Girardeau | 2.9                           | 40.1                               |
| 57 | Miller       | 3.5                           | 12.2                               | 96  | Caldwell       | 2.9                           | 4.4                                |
| 58 | Monroe       | 3.5                           | 3.9                                | 97  | Moniteau       | 2.9                           | 7.2                                |
| 59 | Marion       | 3.5                           | 3.9                                | 98  | Clinton        | 2.9                           | 10.9                               |
| 60 | Johnson      | 3.5                           | 22.6                               | 99  | Clay           | 2.8                           | 134.8                              |
| 61 | Webster      | 3.5                           | 17.2                               | 100 | Chariton       | 2.8                           | 3.7                                |
| 62 | Laclede      | 3.5                           | 16.7                               | 101 | Carroll        | 2.8                           | 4.7                                |
| 63 | St. Louis    | 3.5                           | 528.4                              | 102 | Howard         | 2.8                           | 4.9                                |
| 64 | Phelps       | 3.4                           | 19.6                               | 103 | Cole           | 2.8                           | 38.1                               |
| 65 | Newton       | 3.4                           | 27.5                               | 104 | Perry          | 2.7                           | 10.2                               |
| 66 | Macon        | 3.4                           | 10.6                               | 105 | Gasconade      | 2.7                           | 7.7                                |
| 67 | Shelby       | 3.4                           | 3.0                                | 106 | Warren         | 2.7                           | 17.4                               |
| 68 | Barry        | 3.4                           | 15.6                               | 107 | St. Charles    | 2.7                           | 221.8                              |
| 69 | Ralls        | 3.3                           | 5.6                                | 108 | Ste. Genevieve | 2.6                           | 2.0                                |
| 70 | Buchanan     | 3.3                           | 44.5                               | 109 | Gentry         | 2.6                           | 3.6                                |
| 71 | Dade         | 3.3                           | 3.6                                | 110 | Boone          | 2.5                           | 97.4                               |
| 72 | Daviess      | 3.3                           | 4.0                                | 111 | Worth          | 2.5                           | 1.2                                |
| 73 | Jefferson    | 3.3                           | 116.6                              | 112 | Livingston     | 2.5                           | 7.5                                |
| 74 | Lincoln      | 3.3                           | 27.2                               | 113 | Platte         | 2.4                           | 57.7                               |
| 75 | Jasper       | 3.3                           | 57.1                               | 114 | Holt           | 2.4                           | 2.6                                |
| 76 | Franklin     | 3.2                           | 52.4                               | 115 | Osage          | 2.3                           | 7.0                                |
| 77 | Saline       | 3.2                           | 10.8                               |     |                |                               |                                    |

Source: Bureau of Labor Statistics/Haver Analytics

**Payroll Employment**

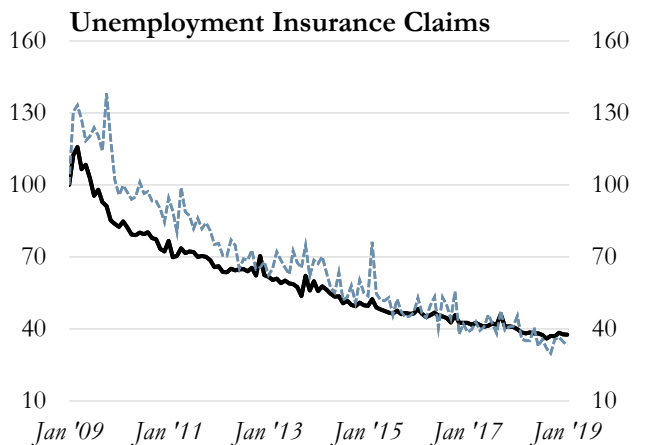
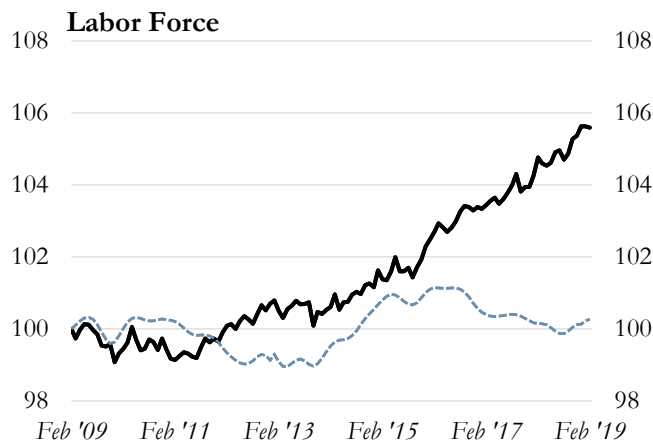
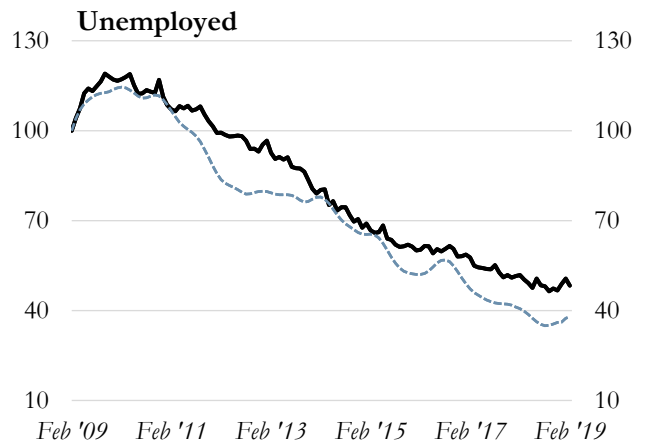
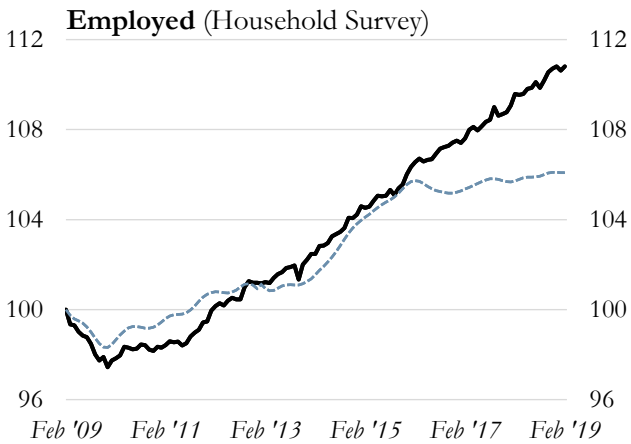
*Seasonally Adjusted*



| February 2019                        |               |          |
|--------------------------------------|---------------|----------|
|                                      | United States | Missouri |
| Jobs (Thousands)                     | 150,606.0     | 2,898.6  |
| Change from Last Year<br>(Thousands) | 2,509.0       | 14.8     |
| Share of U.S. Employment             |               | 1.9%     |

**Labor Force Dynamics**

*Ten-Year Index of Growth, Seasonally Adjusted*

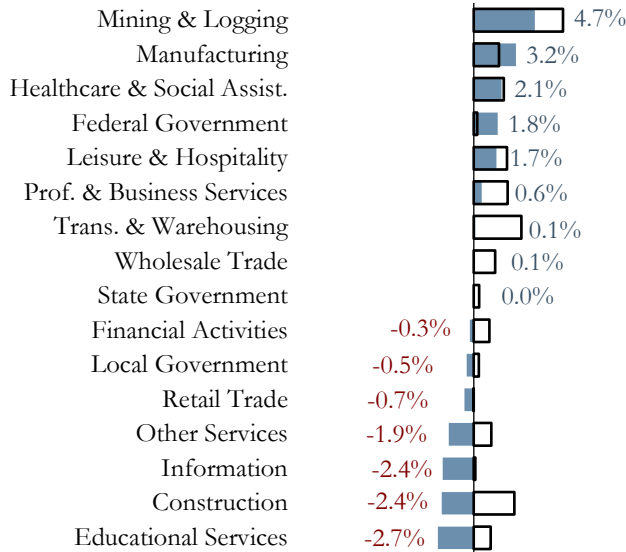


Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

**Payroll Employment by Industry**

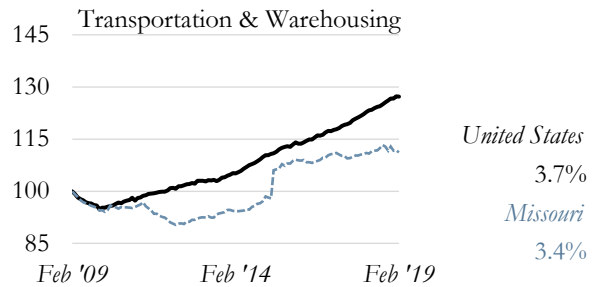
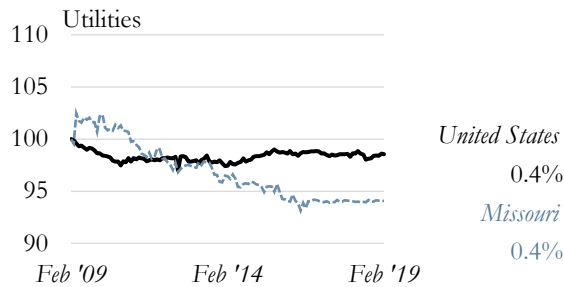
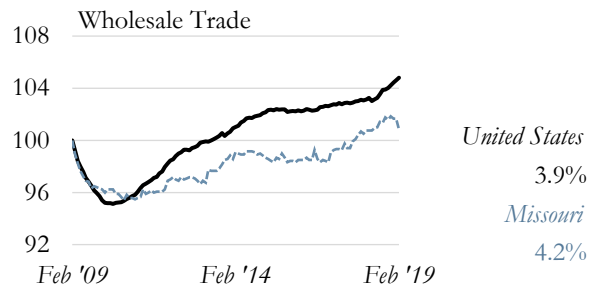
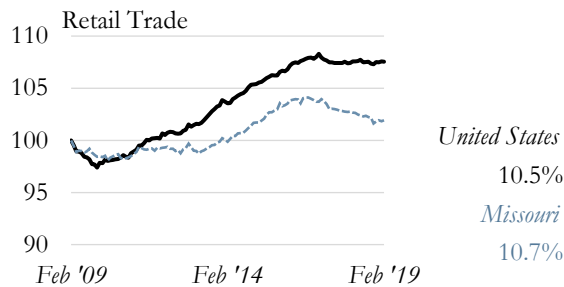
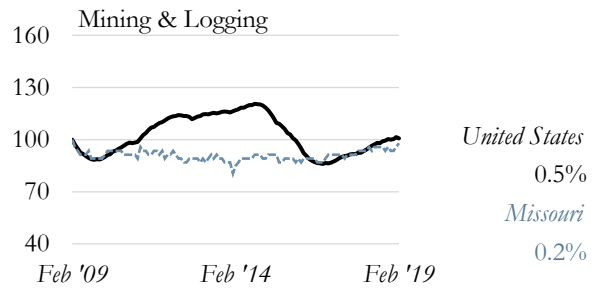
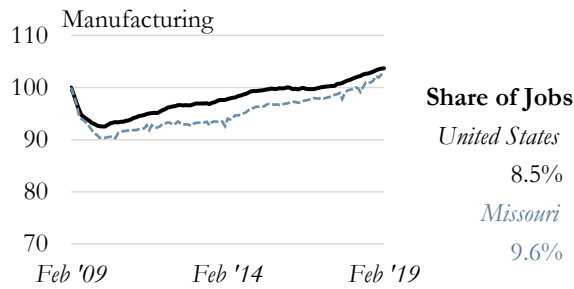
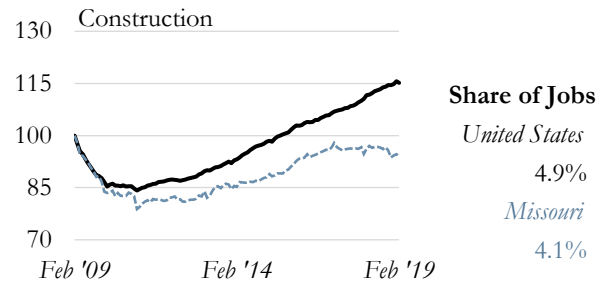
*Seasonally Adjusted*

**February 2019** *Percent Change Year-over-Year*



— United States  
 - - - - Missouri

*Ten-Year Index of Growth*

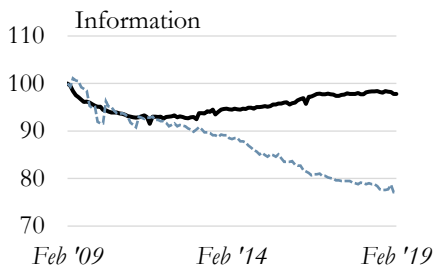


Source: Bureau of Labor Statistics/Haver Analytics

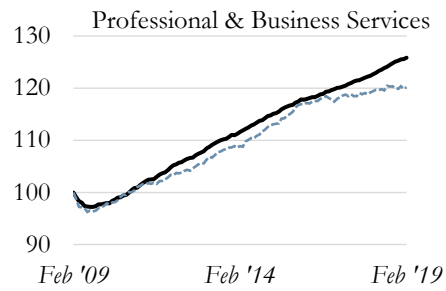
**Payroll Employment by Industry**

Ten-Year Index of Growth, Seasonally Adjusted

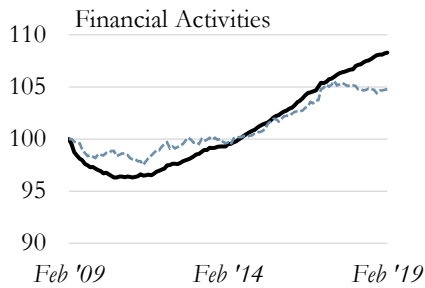
— United States  
 - - - - Missouri



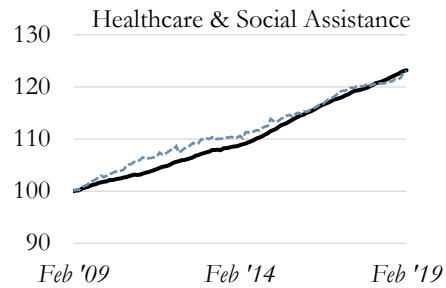
**Share of Jobs**  
 United States 1.9%  
 Missouri 1.7%



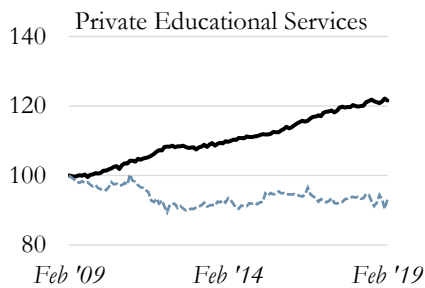
**Share of Jobs**  
 United States 14.2%  
 Missouri 13.4%



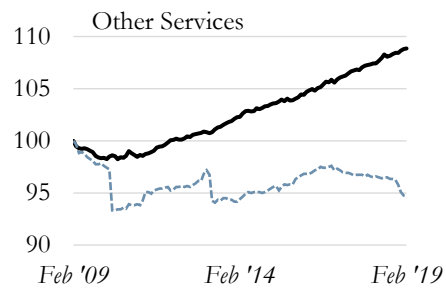
United States 5.7%  
 Missouri 6.0%



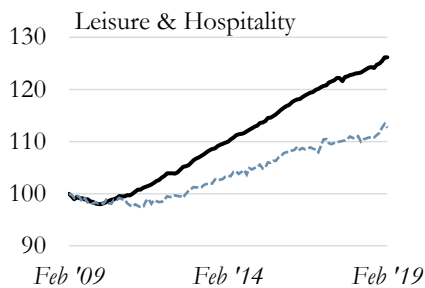
United States 13.4%  
 Missouri 14.9%



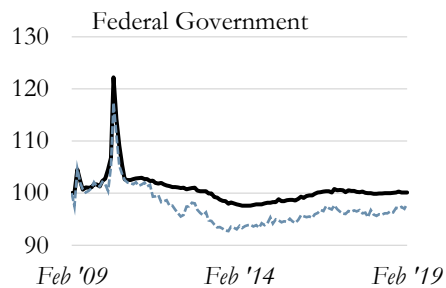
United States 2.5%  
 Missouri 1.9%



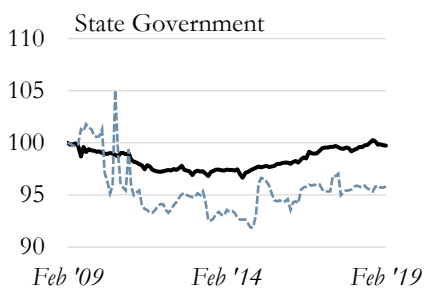
United States 3.9%  
 Missouri 3.9%



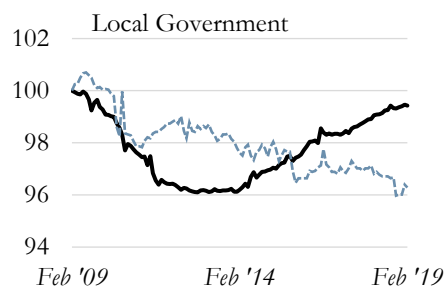
United States 11.1%  
 Missouri 10.7%



United States 1.9%  
 Missouri 1.9%



United States 3.4%  
 Missouri 3.5%

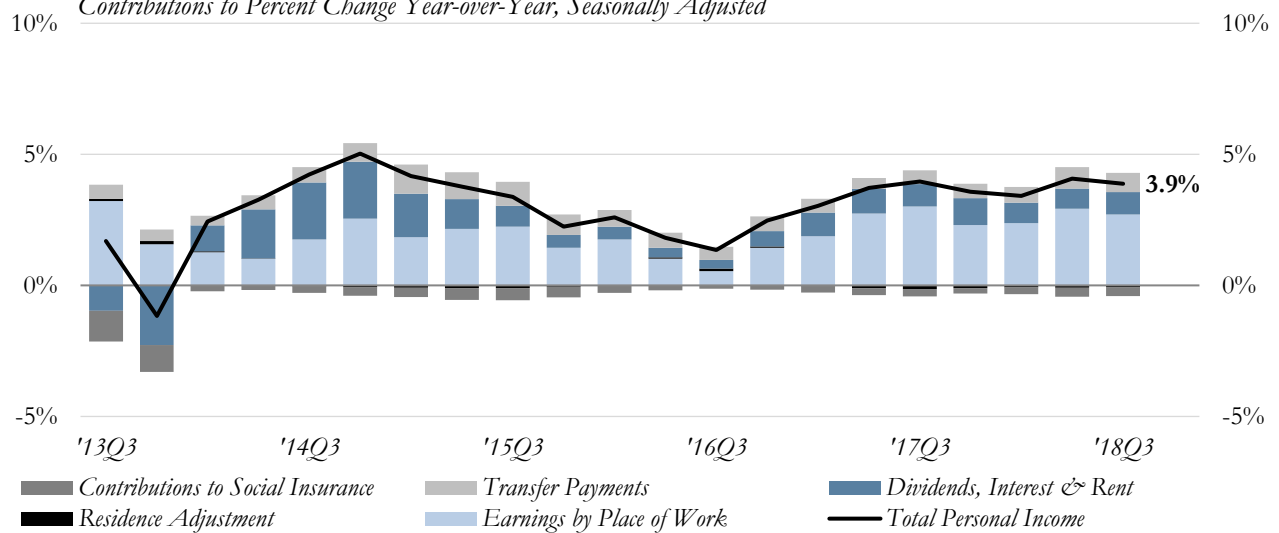


United States 9.6%  
 Missouri 9.5%

Source: Bureau of Labor Statistics/Haver Analytics

### Missouri Nominal Personal Income Growth

*Contributions to Percent Change Year-over-Year, Seasonally Adjusted*

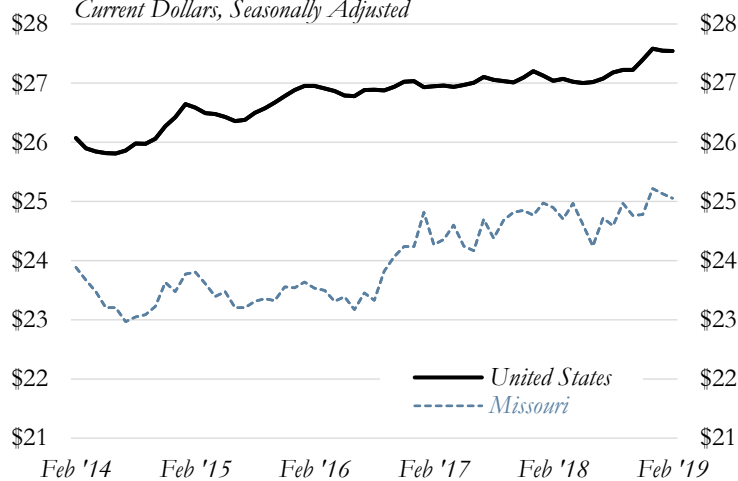


| 2018Q3                          | Percent Change Year-over-Year |             | Share of Personal Income |          |
|---------------------------------|-------------------------------|-------------|--------------------------|----------|
|                                 | United States                 | Missouri    | United States            | Missouri |
| <b>Total Personal Income</b>    | <b>4.5%</b>                   | <b>3.9%</b> |                          |          |
| Earnings by Place of Work       | 4.3%                          | 3.8%        | 70.7%                    | 71.5%    |
| Social Insurance Contributions* | -4.7%                         | -4.1%       | -7.7%                    | -8.1%    |
| Residence Adjustment            |                               | 4.3%        |                          | -1.9%    |
| Dividends, Interest & Rent      | 5.7%                          | 4.6%        | 20.0%                    | 18.8%    |
| Transfer Payments               | 4.2%                          | 3.7%        | 17.0%                    | 19.7%    |

\*Subtracted from personal income.

### Real Average Hourly Wage

*Current Dollars, Seasonally Adjusted*

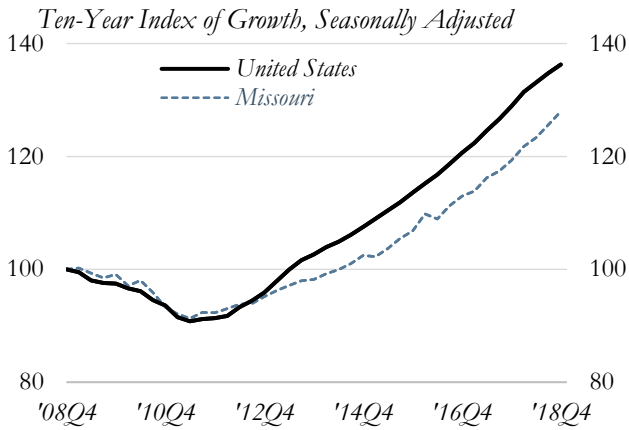


| February 2019           |               |          |
|-------------------------|---------------|----------|
| Average Hourly Wage     | United States | Missouri |
|                         | \$27.54       | \$25.05  |
| <i>Real Change from</i> |               |          |
| Last Month              | 0.0%          | -0.3%    |
| Last Year               | 1.9%          | 0.6%     |

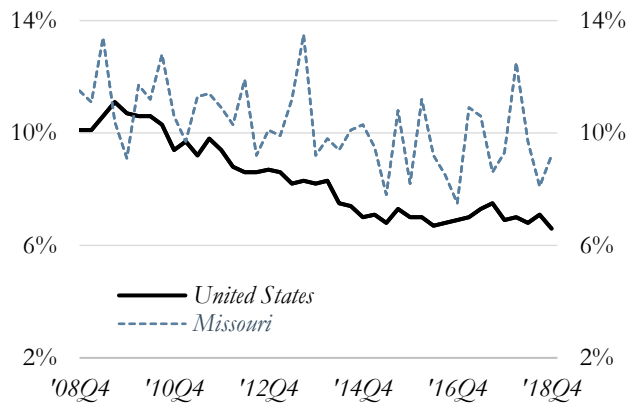
Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics



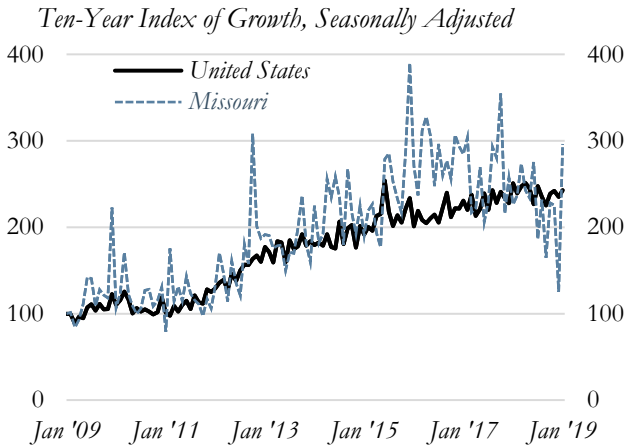
### FHFA Purchase-Only Home Price Index



### Rental Vacancy Rates



### Housing Permits

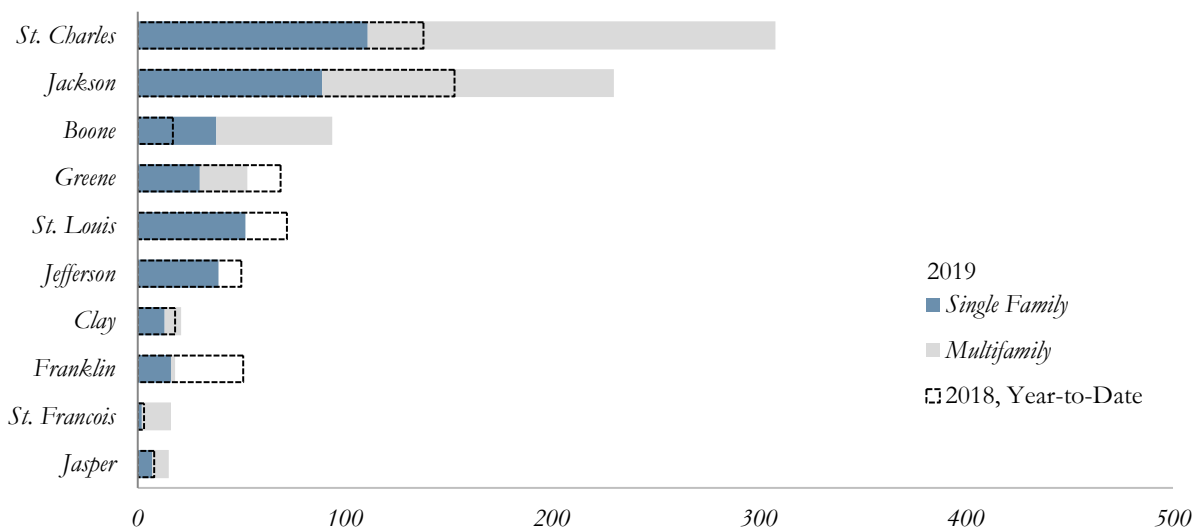


| Summary Statistics      |               |          |
|-------------------------|---------------|----------|
|                         | United States | Missouri |
| Prices (2018Q4)*        | 5.7%          | 7.3%     |
| Vacancy Rates (2018Q4)  | 6.6%          | 9.2%     |
| Permits (Year-to-Date)* |               |          |
| <i>Single Family</i>    | -6.0%         | -4.3%    |
| <i>Multifamily</i>      | 4.1%          | 153.8%   |

\*Percent change year-over-year.

### Top 10 Missouri Counties for Permit Activity

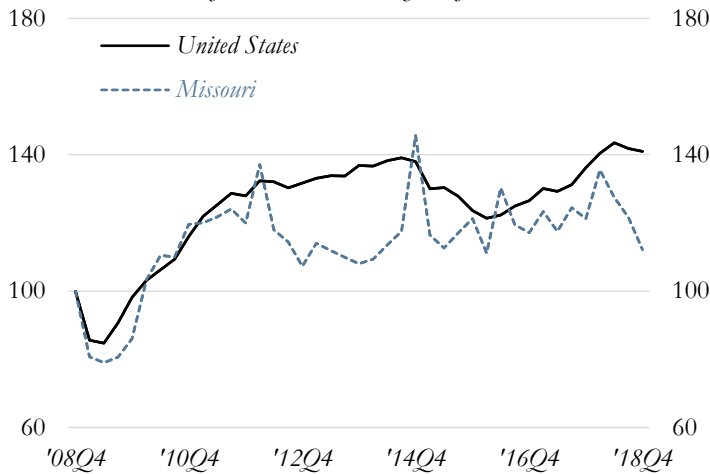
*Year-to-Date through January*



Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

**Global Exports**

*Ten-Year Index of Growth, Seasonally Adjusted*

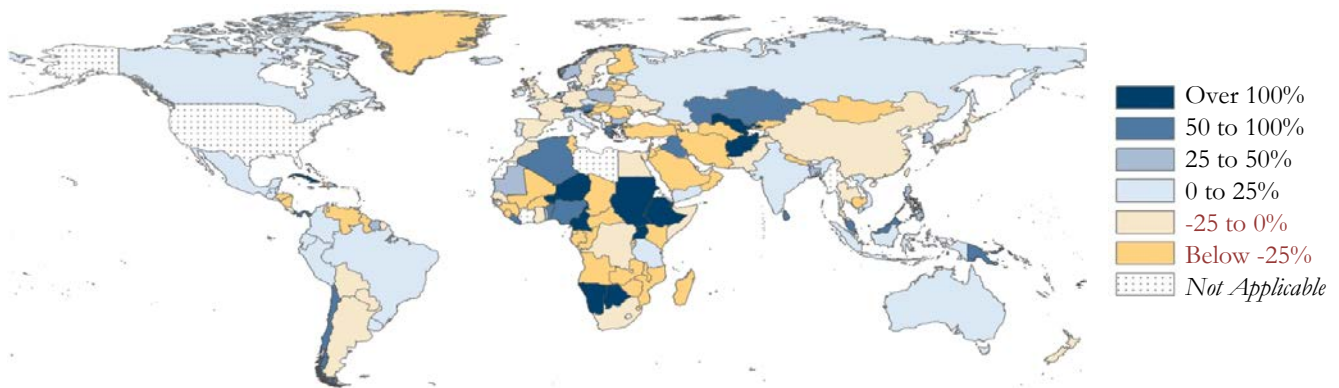


| 2018Q4                   |               |           |
|--------------------------|---------------|-----------|
|                          | United States | Missouri  |
| Exports (Millions)       | \$413,780.2   | \$3,274.1 |
| <i>Change from</i>       |               |           |
| Last Quarter             | -0.7%         | -7.8%     |
| Last Year (year-to-date) | 7.6%          | 2.1%      |
| Share of U.S. Activity   |               | 0.8%      |

| 2017           |               |          |
|----------------|---------------|----------|
| Exports as a   | United States | Missouri |
| Percent of GDP | 7.9%          | 4.7%     |

**Missouri Exports Year-to-Date through 2018Q4**

*Percent Change Year-over-Year*



| Top Markets      | Share |
|------------------|-------|
| 1 Canada         | 38.2% |
| 2 Mexico         | 18.0  |
| 3 China*         | 6.5   |
| 4 Japan          | 3.7   |
| 5 Belgium        | 3.4   |
| 6 Germany        | 3.0   |
| 7 South Korea    | 2.3   |
| 8 United Kingdom | 2.2   |
| 9 Australia      | 2.2   |
| 10 France        | 1.7   |

| Top Exports                      | Share |
|----------------------------------|-------|
| 1 Transportation Equip.          | 25.0% |
| 2 Chemicals & Rare Earth Metals  | 18.0  |
| 3 Food                           | 9.7   |
| 4 Machinery (Except Electrical)  | 9.4   |
| 5 Electronic Equip. & Appliances | 5.1   |
| 6 Computers & Electronics        | 4.6   |
| 7 Fabricated Metal Products      | 4.4   |
| 8 Agriculture & Livestock        | 3.6   |
| 9 Primary Metals                 | 3.2   |
| 10 Plastics & Rubber Products    | 2.6   |

\*China includes Hong Kong, Taiwan, and Macao.

Source: Census Bureau, WISERTrade & Bureau of Economic Analysis/Haver Analytics

*Pages 2 - 4:* County unemployment rates typically lag state data releases by one month. Gray bars show recessionary periods as designated by the National Bureau of Economic Research. The "official" and most commonly reported unemployment rate is calculated as the number of unemployed workers divided by the total civilian labor force. These data are reported from the Bureau of Labor Statistics Current Population Survey, or commonly called the "Household" survey.

*Page 5:* Nonfarm employment data from the Bureau of Labor Statistics Current Employment Survey are commonly called "Payroll" employment data. Estimates from this survey are revised throughout the year and a major revision or "benchmark" of the data occurs in March of each year. "Payroll" and "Household" surveys are released monthly, providing the most current estimates of employment published by the Bureau of Labor Statistics. Because methodologies differ between surveys, employment estimates also differ. For more information, visit:

[http://www.bls.gov/web/empsit/ces\\_cps\\_trends.pdf](http://www.bls.gov/web/empsit/ces_cps_trends.pdf)

Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

*Pages 6 and 7:* Payroll employment by industry is shown for each of the major two-digit North American Industrial Classification System industries.

*Page 8:* Personal income provides a measure of all income received by residents of a given geographic area. Data shown are in nominal terms (not adjusted for inflation). Transfer payments include social benefits such as unemployment insurance, Social Security, and Medicaid. Contributions to social insurance are subtracted from personal income. These contributions include taxes paid by businesses and employees that support social insurance programs such as unemployment insurance, Social Security, and Medicaid. The residence adjustment adds income received outside of a recipient's state of residence and makes a corresponding subtraction from the area where this income was earned or received. Real average hourly wages are calculated as total earnings divided by total employment for a given geographic area. Data are adjusted for inflation using the consumer price index for all urban areas (CPI-U) and are indexed to the most current month of data.

*Page 9:* Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties. Monthly single and multifamily housing permits data are not revised and therefore may not sum to published year-end totals.

*Page 10:* Exports measure the total physical movement of a given product from the United States to a foreign country.

#### Data Revisions

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

#### Seasonal Adjustments

Most data are seasonally adjusted to remove variance caused by seasonal fluctuations in economic activity. Data in this report show the seasonal adjustments of data publishers where available. In other cases, Census X-12 adjustments were applied.

### *Regional Economic Analysis*

Sign up to receive *The Missouri Economic Databook* and other publications each month via email using the link below:

<http://www.kansascityfed.org/ealert/>

### *Additional Resources Available*

- Agricultural Surveys
- Manufacturing Survey
- Energy Survey
- Regional Economic Analysis
- Speeches
- Banker Resources
- Economic Indicators
- Economic Research
- Educational Tools

Visit: [www.KansasCityFed.org](http://www.KansasCityFed.org)