

# Misery Index: 2018 Q3

The Misery Index is an indicator measuring the impact of changing economic conditions on people. This index, as calculated by CEDBR, is a combination of the quarterly percent change in the Housing Price Index (HPI), the quarterly average change in the Consumer Price Index (CPI), and the quarterly average unemployment rate (UR). The combination of changes in these factors indicates the changing level of economic misery experienced by people in different geographic areas.

#### **Misery Index**

|        |                    | cory much   |         |                  |                   |                  |        |                  | Change              |                  |        |                  |        |  |
|--------|--------------------|-------------|---------|------------------|-------------------|------------------|--------|------------------|---------------------|------------------|--------|------------------|--------|--|
|        |                    | Index Value |         |                  | % Change in Index |                  |        |                  | in Index Components |                  |        |                  |        |  |
|        |                    | 2018 Q3     | 2018 Q2 | Qι               | ıarterly          | A                | Annual |                  | HPI                 |                  | CPI    |                  | UR     |  |
|        | U.S.               | 3.88        | 3.84    |                  | 1.1%              | Þ                | -11.9% |                  | -0.010              |                  | -0.001 |                  | 0.033  |  |
|        | Kansas             | 3.45        | 3.34    |                  | 3.3%              | $\triangleright$ | -10.2% |                  | -0.010              |                  | -0.001 |                  | 0.100  |  |
| Kansas | Wichita, KS        | 3.79        | 3.77    |                  | 0.5%              | $\blacksquare$   | -14.3% |                  | 0.013               |                  | 0.000  |                  | 0.033  |  |
|        | Kansas City, MO-KS | 3.41        | 3.45    |                  | -1.1%             | ight angle       | -14.7% |                  | -0.027              |                  | 0.000  | Þ                | -0.067 |  |
|        | Lawrence, KS       | 3.18        | 3.14    |                  | 1.2%              | Þ                | -7.1%  |                  | -0.004              |                  | 0.000  | 4                | 0.033  |  |
|        | Topeka, KS         | 3.52        | 3.40    |                  | 3.5%              | $\blacksquare$   | -6.8%  |                  | -0.019              |                  | 0.000  |                  | 0.100  |  |
| Region | Oklahoma City, OK  | 3.12        | 3.60    |                  | -13.4%            | $\blacksquare$   | -18.5% | •                | -0.019              |                  | 0.000  |                  | -0.500 |  |
|        | Omaha, NE          | 2.84        | 2.92    | $\triangleright$ | -2.6%             | Þ                | -6.3%  | $\triangleright$ | -0.025              |                  | 0.000  | Þ                | -0.100 |  |
|        | St. Louis, MO-IL   | 3.44        | 3.37    |                  | 1.8%              | Þ                | -11.2% |                  | 0.004               | $\triangleright$ | -0.001 | 4                | 0.067  |  |
|        | Tulsa, OK          | 3.38        | 3.88    | Þ                | -12.9%            | $\blacksquare$   | -23.9% | $\triangleright$ | -0.033              |                  | 0.000  | $\triangleright$ | -0.533 |  |
| Peer   | Akron, OH          | 4.34        | 4.47    |                  | -3.0%             | $\blacksquare$   | -12.7% |                  | 0.033               |                  | 0.000  |                  | -0.100 |  |
|        | Grand Rapids, MI   | 2.97        | 3.04    |                  | -2.4%             | Þ                | -26.7% |                  | -0.028              |                  | 0.000  | Þ                | -0.100 |  |
|        | Greenville, SC     | 3.20        | 2.81    |                  | 13.6%             | Þ                | -21.5% |                  | 0.015               |                  | -0.003 |                  | 0.400  |  |
|        | Lancaster, PA      | 3.51        | 3.21    |                  | 9.3%              | $\overline{}$    | -13.0% |                  | -0.029              |                  | 0.004  |                  | 0.267  |  |

Values are impacted by rounding.

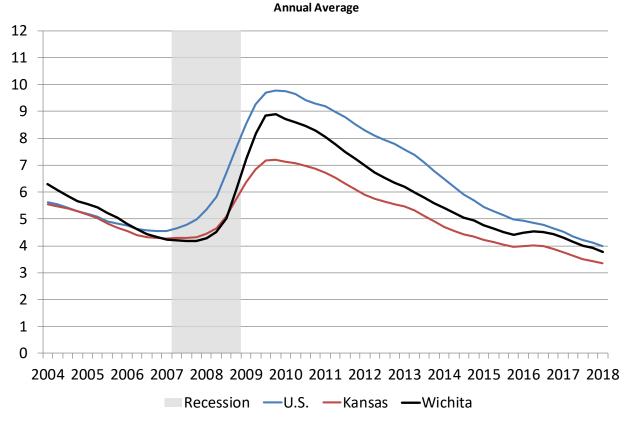
Between the second and third quarters of 2018, the general level of misery experienced by people in the United States and Kansas increased. This can be attributed to an increase in the unemployment rate. The level of misery is less than the third quarter of 2017.

Each of the metropolitan areas in Kansas except Kansas City experienced an increase in misery. Among the metropolitan areas in the state, Wichita and Topeka have levels of misery above the state level. However, all areas in Kansas are below the national level.

Within the region, Wichita has the highest level of misery, followed by Topeka and St. Louis. The lowest level of misery in the Omaha, followed by Lawrence.

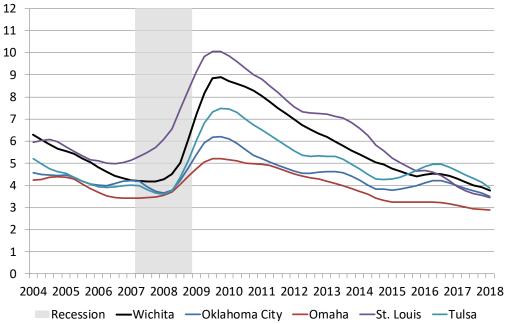
For comparison, the misery index for four metropolitan areas similar to Wichita in population, demographics, and industrial mix are also provided. Within these peer communities, Akron continues to have the highest level of misery due to their higher level of unemployment, followed by Lancaster, PA and Wichita. Grand Rapids has the lowest level of misery among the peer communities.

## Misery Index: Wichita, Kansas & United States

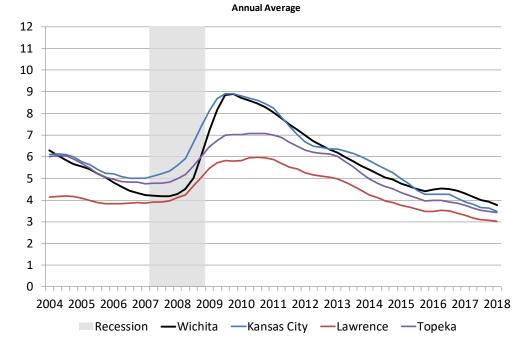


#### Misery Index: Regional Metropolitan Areas

Annual Average

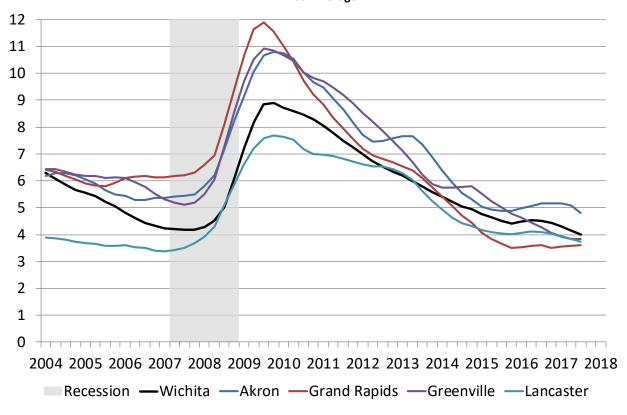


### Misery Index: Kansas Metropolitan Areas



#### Misery Index: Peer Metropolitan Areas

**Annual Average** 



#### Methodology

The Misery Index calculated by the Center for Economic Development and Business Research (CEDBR) includes the following information:

- The Consumer Price Index (CPI) from the Bureau of Labor Statistics<sup>1</sup>
- House Price Index (HPI) from the Federal Housing Finance Agency<sup>2</sup>
- Unemployment Rates (UR) from the Bureau of Labor Statistics<sup>3</sup>

Not seasonally adjusted, monthly data values for the Consumer Price Index – All Urban Consumers were used to calculate the quarterly inflation rates. The specific indices used are as follows. U.S. city average, with a base period of 1982-84, was used for the United States inflation rate. Midwest urban, with a base period of 1982-84, was used for the Kansas inflation rate. Midwest – Size Class A, with the base year of 1982-84, was used for the St. Louis metropolitan area's inflation rates. Midwest – Size Class B/C, with a base year of December 1996, was used for the Wichita, Kansas City, Topeka, Lawrence, Grand

<sup>&</sup>lt;sup>1</sup> http://www.bls.gov/cpi/ Data accessed May 25,2018.

<sup>&</sup>lt;sup>2</sup> http://www.fhfa.gov/Default.aspx?Page=87 Data accessed May 25,2018.

<sup>&</sup>lt;sup>3</sup> http://www.bls.gov/bls/unemployment.htm Data accessed May 25,2018.

Rapids, Omaha, Akron, Oklahoma City and Tulsa metropolitan area's inflation rates. Northeast urban – Size Class B/C, with a base period of December 1996, was used for the Lancaster metropolitan area inflation rate. South – Size Class B/C, with a base period of December 1996, was used for the Greenville metropolitan area inflation rate.

The HPI is a measure of single-family home prices within specific areas. This series is used because the index is produced for a wide range of geographic areas. The CEDBR used the "All-Transactions Index" values for each respective area. The percentage change from the previous quarter was used in the Misery Index. The HPI is a positive indicator for consumers. Therefore, if the HPI is increasing, the Misery Index will decline.

The CEDBR used not seasonally adjusted, area specific, unemployment data (the official unemployment rate) to calculate the Misery Index. The unemployment rate is a negative indicator for consumers. Therefore, if the unemployment rate is increasing, the Misery Index will also increase.

For additional information and methodology details please click **HERE**.