WICHITA STATE UNIVERSITY
W. FRANK BARTON SCHOOL OF BUSINESS
*Center for Economic Development and Business Research*

# Misery Index: 2017 Q1

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**

| | | Index Value | | % Change in Index | | Change in Index Components | | |
|---|---|---|---|---|---|---|---|---|
| | | 2017 Q1 | 2016 Q4 | Quarterly | Annual | HPI | CPI | UR |
| | U.S. | 4.88 | 4.54 | 7.5% | -6.1% | -0.001 | 0.007 | 0.333 |
| | Kansas | 4.06 | 3.88 | 4.8% | -4.1% | -0.010 | 0.008 | 0.167 |
| Kansas | Wichita, KS | 4.56 | 4.45 | 2.6% | -1.4% | -0.019 | 0.031 | 0.067 |
| Kansas | Kansas City, MO-KS | 4.39 | 3.87 | 13.4% | 0.4% | -0.010 | 0.008 | 0.500 |
| Kansas | Lawrence, KS | 3.32 | 3.28 | 1.2% | -3.9% | -0.009 | 0.031 | 0.000 |
| Kansas | Topeka, KS | 4.09 | 3.81 | 7.5% | -7.2% | -0.021 | 0.031 | 0.233 |
| Region | Oklahoma City, OK | 3.97 | 4.04 | -1.7% | -4.3% | 0.001 | 0.031 | -0.100 |
| Region | Omaha, NE | 3.43 | 3.08 | 11.4% | -5.0% | 0.014 | 0.031 | 0.333 |
| Region | St. Louis, MO-IL | 4.41 | 4.05 | 9.0% | -11.1% | 0.010 | 0.008 | 0.367 |
| Region | Tulsa, OK | 4.67 | 4.88 | -4.3% | -4.5% | 0.006 | 0.031 | -0.233 |
| Peer | Akron, OH | 5.94 | 4.82 | 23.1% | 6.1% | 0.016 | 0.031 | 1.100 |
| Peer | Grand Rapids, MI | 3.51 | 3.08 | 13.8% | 0.2% | 0.039 | 0.031 | 0.433 |
| Peer | Greenville, SC | 4.07 | 3.78 | 7.9% | -14.3% | 0.014 | 0.011 | 0.300 |
| Peer | Lancaster, PA | 4.02 | 3.77 | 6.5% | -6.7% | -0.005 | 0.006 | 0.233 |

Values are impacted by rounding.

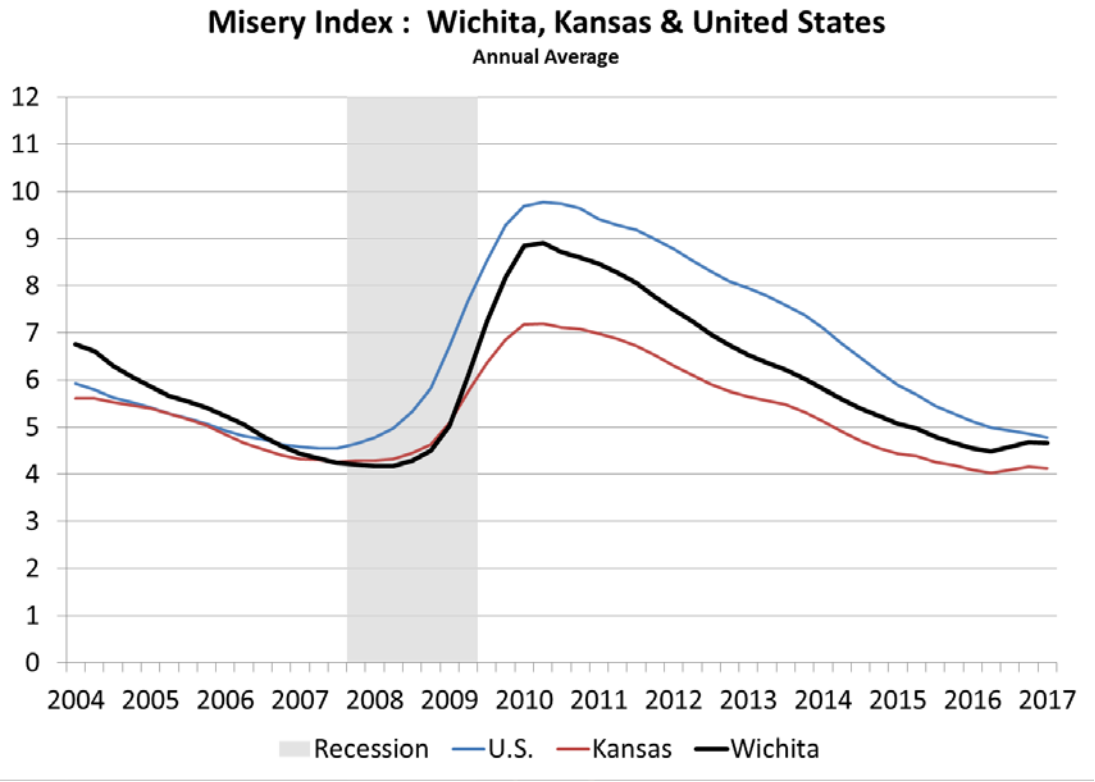
Between the fourth quarter of 2016 and first quarter of 2017, the general level of misery experienced by people in the United States and Kansas increased but remained below the 2016 level. This can be attributed to a small decrease in housing prices, increased inflation, and an increase in the unemployment rate.

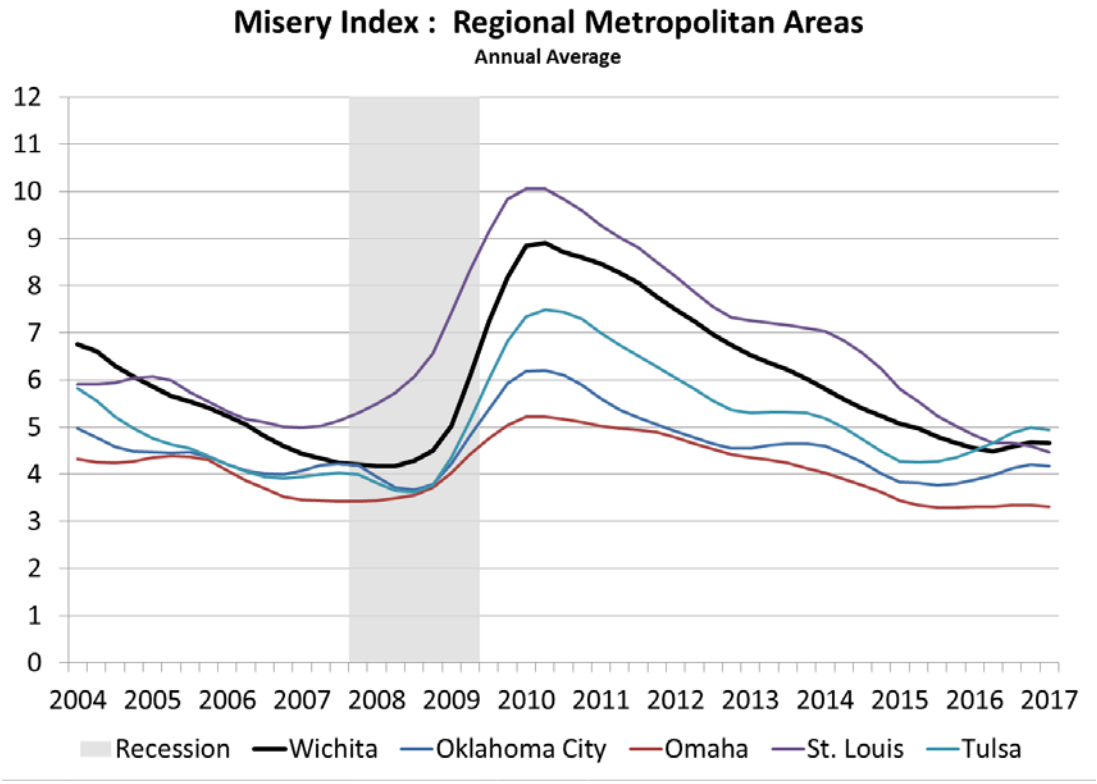
This is also true of each of the metropolitan areas in Kansas, with the exception of Kansas City. In the first quarter, the level of misery in Kansas City moved above the 2016 level. Among the metropolitan areas in the state, Lawrence continues to be the only area to have a level of misery below the state

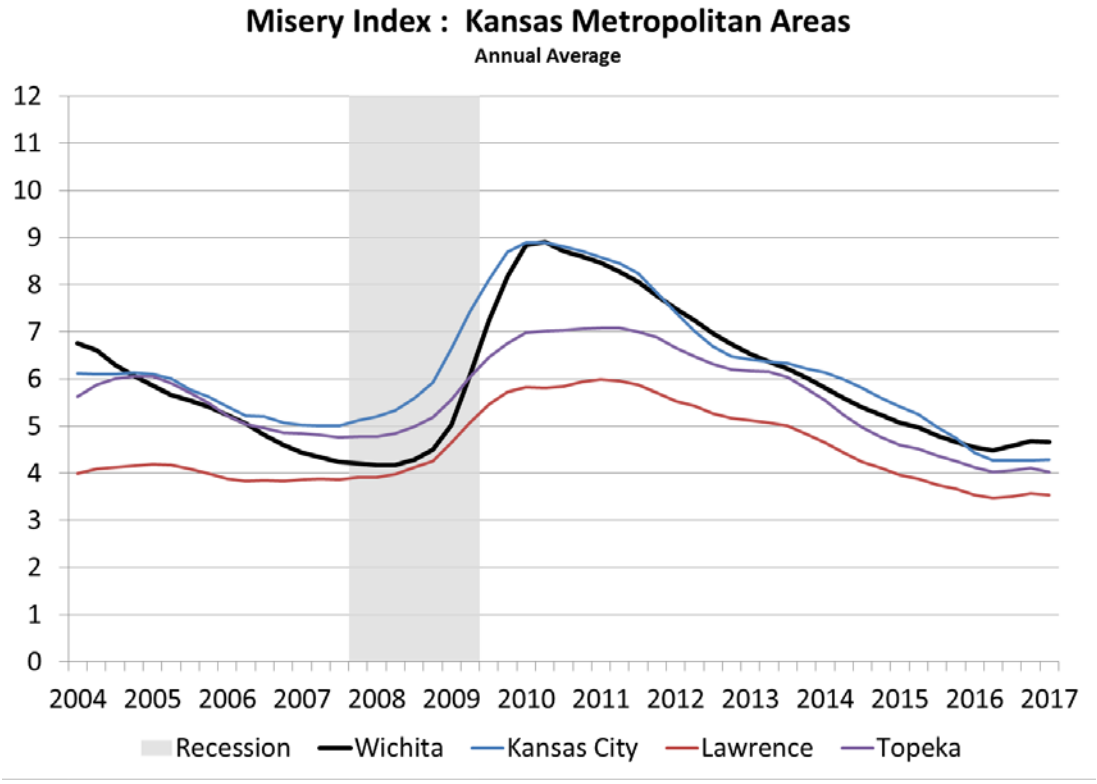
level. The level of misery in Topeka was only slightly above the state level in the first quarter. Wichita continues to have the highest level of misery. However, all levels of misery in the metropolitan areas of Kansas are below the national level.

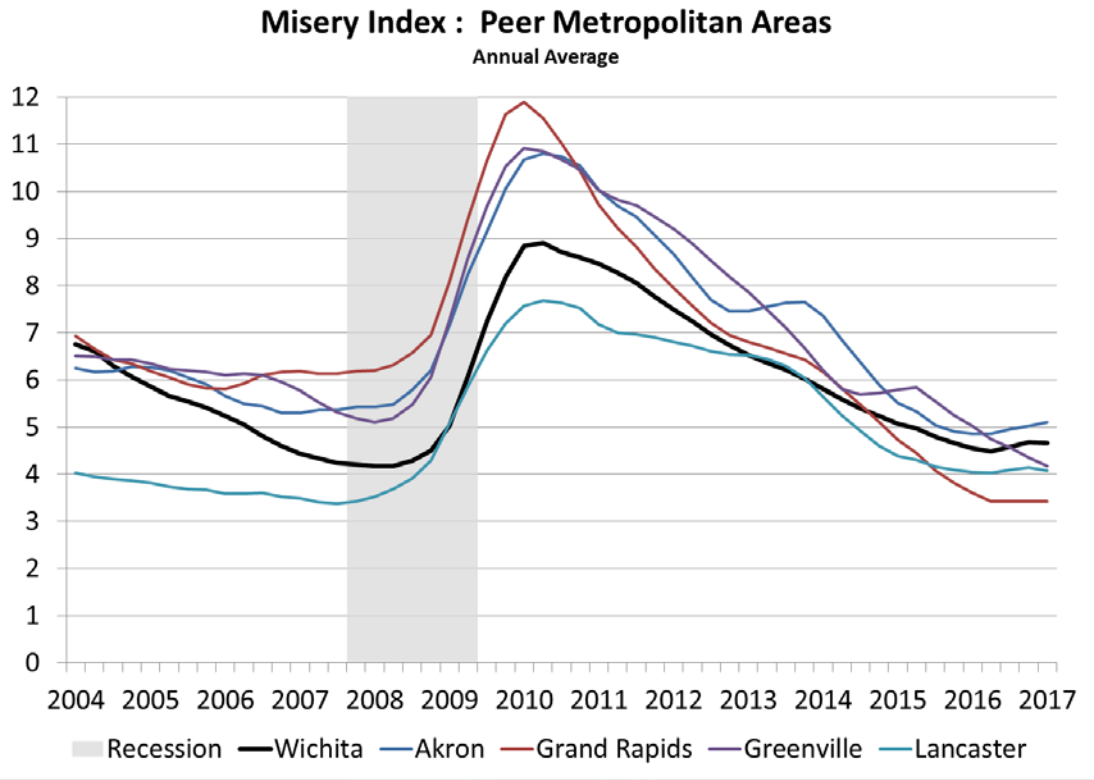
Within the region, Tulsa continues to have the highest level of misery, followed by Wichita and St. Louis. The lowest level of misery in the region is in Lawrence, followed by Omaha. Oklahoma City and Tulsa both experienced decreases in misery in the first quarter.

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. Akron and Grand Rapids had levels of misery above the 2016 level.




Misery Index : Regional Metropolitan Areas
Annual Average
12
11
10
9
8
7
6
5
4
3
2
1
0
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Recession
Wichita
Oklahoma City
Omaha
St. Louis
Tulsa


Misery Index : Kansas Metropolitan Areas
Annual Average
12
11
10
9
8
7
6
5
4
3
2
1
0
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Recession
Wichita
Kansas City
Lawrence
Topeka




**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[1]
- House Price Index (HPI) from the Federal Housing Finance Agency[2]
- Unemployment Rates (UR) from the Bureau of Labor Statistics[3]

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 Kansas City and St. Louis metropolitan area's inflation rates. Midwest – Size Class B/C, with a base year of December 1996, was used for the Wichita, Topeka, Lawrence, Grand 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

[1] http://www.bls.gov/cpi/ Data accessed March 25, 2017.
[2] http://www.fhfa.gov/Default.aspx?Page=87 Data accessed March 25, 2017.
[3] http://www.bls.gov/bls/unemployment.htm Data accessed March 25, 2017.

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.