Kansas Micropolitan Area Economic Conditions Index

Wichita State University's Center for Economic Development and Business Research has developed indices to measure the general current economic conditions in each of Kansas' sixteen micropolitan statistical areas[1]. Each index is designed to provide a broad perspective on the local economy for each of these micropolitan areas throughout the state.

The indices are based on local employment, unemployment rates, inflation-adjusted retail sales, and manufacturing wages, while also taking into account statewide performance in the oil and farm sectors in the areas where those sectors are relevant to the local economy. Generally, increasing values for a micropolitan area's index indicate improving economic conditions.

In the first quarter of 2018[2], most micropolitan areas' indices continued their recent upwards trend, with eleven of the sixteen micropolitan areas recording an increase in their index value compared to the fourth quarter of 2017. Only two micropolitan areas, Atchison and Great Bend, experienced declines of larger than one percent in their index values from quarter to quarter. Similarly, eleven of the sixteen areas' index values were higher in the first quarter of 2018 compared to one year earlier.

Micropolitan Areas Economic Index						
Micropolitan Area	2017Q1	2017Q4	2018Q1	Quarterly		Yearly
Arkansas City-Winfield	101.5	101.9	101.9	0.0%	0.4%
Atchison	96.5	103.4	100.9	-2.4%	4.5%
Coffeyville	86.0	85.9	86.9	1.2%	1.0%
Dodge City	102.3	102.2	103.1	1.0%	0.9%
Emporia	104.6	104.5	106.7	2.1%	2.0%
Garden City	107.3	108.6	110.0	1.3%	2.6%
Great Bend	100.1	99.8	97.4	-2.4%	-2.7%
Hays	99.3	98.6	99.4	0.8%	0.1%
Hutchinson	97.5	98.0	98.3	0.3%	0.8%
Junction City	90.6	92.4	92.5	0.1%	2.1%
Liberal	94.2	92.2	93.5	1.4%	-0.8%
McPherson	105.1	105.5	106.5	1.0%	1.3%
Ottawa	107.3	106.2	105.8	-0.4%	-1.5%
Parsons	100.0	100.1	101.7	1.5%	1.7%
Pittsburg	105.0	104.1	103.5	-0.5%	-1.4%
Salina	104.5	103.7	104.3	0.6%	-0.1%

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[1] A map of Kansas' micropolitan and metropolitan statistical areas can be viewed at https://www2.census.gov/geo/maps/metroarea/stcbsa_pg/Feb2013/cbsa2013_KS.pdf.
[2] The most recent index updates can be found at www.kansaseconomy.org/local-indices/county-indices.

Eastern Kansas Micropolitan Index
Annual Average
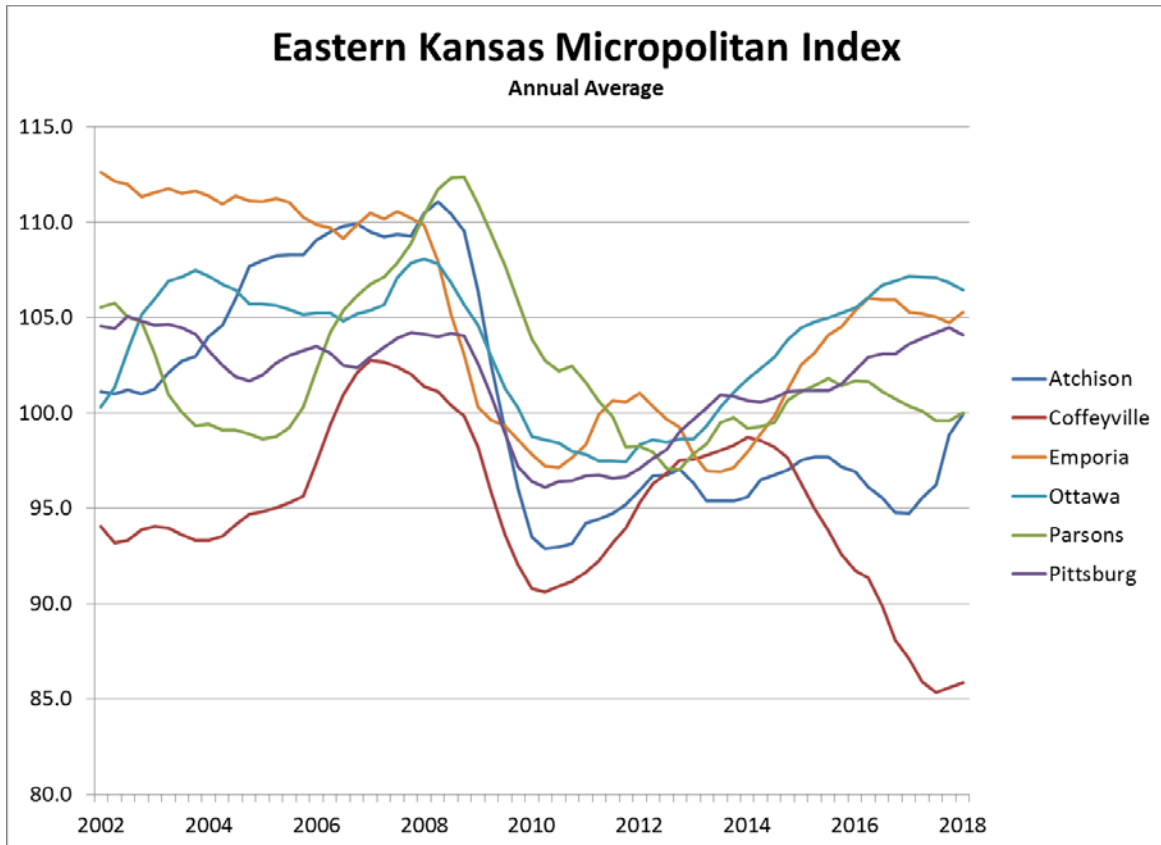
Eastern Kansas' micropolitan areas have generally slowly recovered following the job losses and unemployment during the 2008 recession. The Ottawa micropolitan area had the strongest recovery in its index since 2010 due in part to a sharp decline in its unemployment rate, as well as continued increases in employment, manufacturing wages, and retail sales. The area's index declined in early 2018 due to declines in retail sales in the area in that time. The Emporia area experienced a similar increase due to a broad-based increase in employment and wages with a decline in unemployment since 2014. The Atchison micropolitan area's index had the sharpest increase in 2017 of any Eastern Kansas micropolitan area, with a 4.4 index point increase from the first quarter of 2017 to the first quarter of 2018.

The Coffeyville micropolitan area had a sharp decline in its economic index since 2014, following a modest recovery from 2010 to 2014. Employment in the Coffeyville area peaked in 2012 with 17,300 employees and declined 17.5 percent through 2018 to approximately 14,300 employees. Taxable retail sales in the area have declined 16 percent since 2014, and manufacturing wages in the first quarter of 2018 were at approximately inflation-adjusted 2014 levels for the area.

The Pittsburg area's index consistently increased since 2010 due to increases in local manufacturing wages and retail sales along with declines in the unemployment rate even though employment remained relatively flat in that time. In contrast, the Parsons area's index experienced relatively little growth since its nadir in 2012 due to declines in retail sales and stagnant inflation-adjusted manufacturing wages, while employment increased modestly.

Central Kansas Micropolitan Index
Annual Average
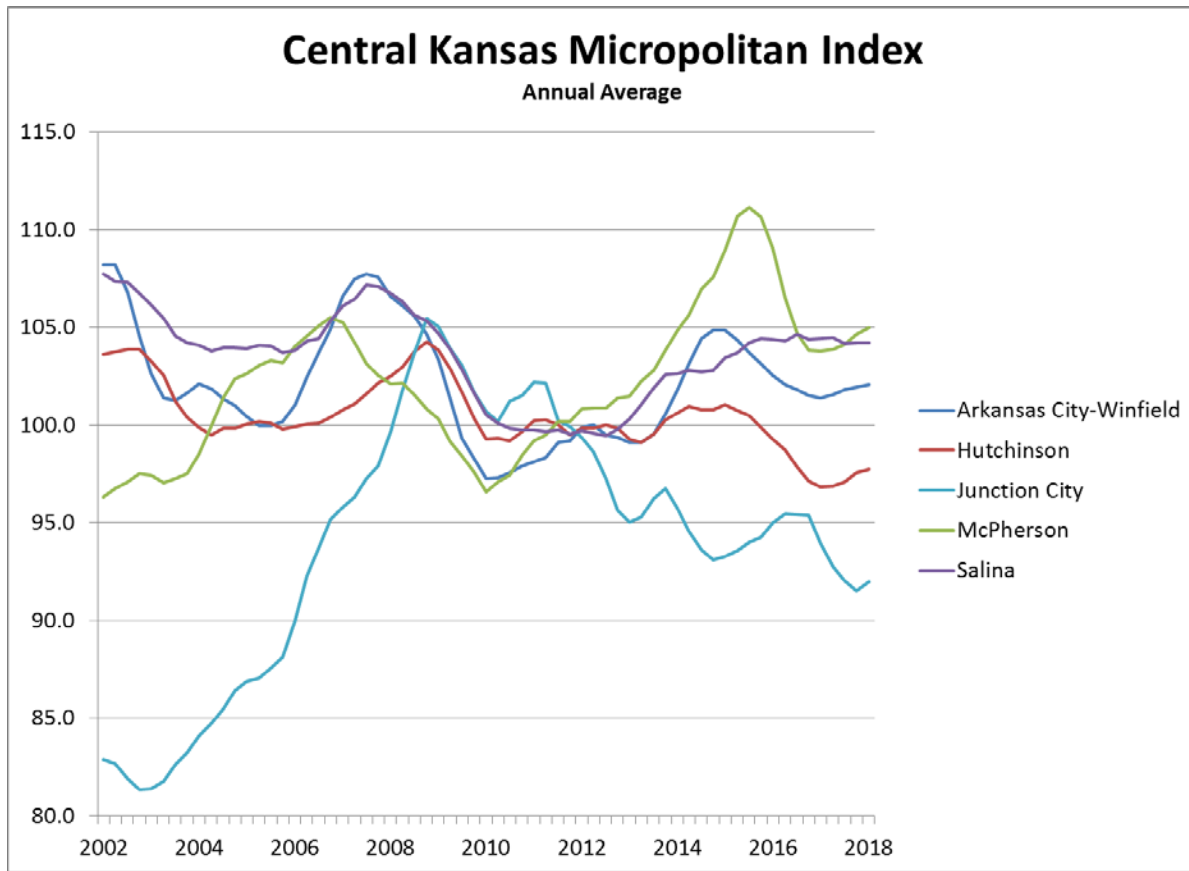
Central Kansas' micropolitan areas had the widest dispersion of index values of any Kansas region, with McPherson reaching some of the highest index values of a micropolitan area, while Junction City's index had the single largest increase of any Kansas micropolitan area. McPherson's index increased sharply following the 2008 recession due to increases in employment and manufacturing wages in addition to an extremely low unemployment rate, which reached 2.5 percent in the first quarter of 2018.

The Junction City micropolitan area's index increased rapidly prior to the 2008 recession due in large part to employment increasing from approximately 12,000 workers in 2001 to 14,500 workers in 2008, as well as increases in manufacturing wages and retail sales. Since the recession, that trend reversed for Junction City, with employment declining to approximately 13,000 workers in 2017 and similar declines in manufacturing wages and retail sales.

The Arkansas City-Winfield and Hutchinson micropolitan areas' indices have both declined modestly since 2014, as in both areas retail sales have declined more than 10 percent on an inflation-adjusted basis from 2014 to 2018. Salina's micropolitan index remained relatively flat since 2015 as employment declined less than one percent while manufacturing wages increased modestly

Western Kansas Micropolitan Index

Annual Average
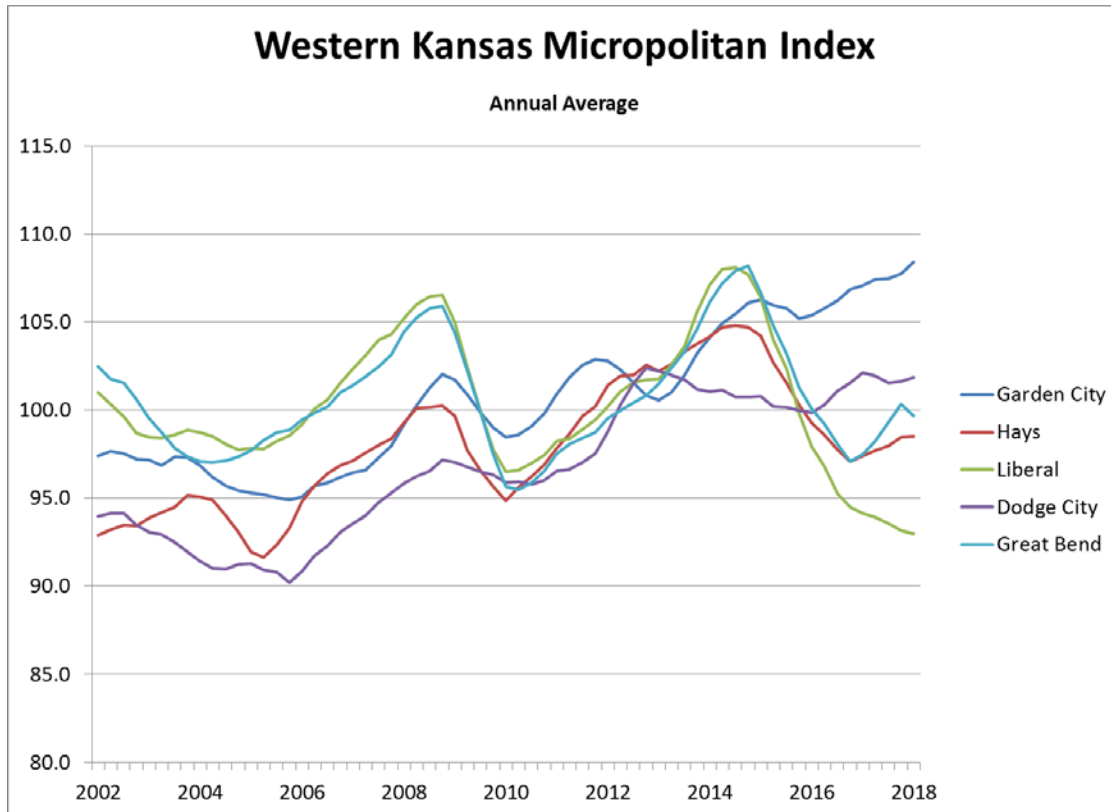
Western Kansas micropolitan areas have largely experienced declines in their economic indices since 2014, though several have begun recovering in 2017 and 2018. The largest decline was in the Liberal area's micropolitan index, which declined by more than 15 index points, while both the Great Bend and Hays indices declined by more than eight index points.

The large decline in the Liberal index after 2014 was due in large part to an employment decline of 13.3 percent from 2014 to 2018, in addition to a 19.5 percent decline in retail sales over the same period. The area had previously experienced an employment and sales increase from 2010 to 2014, so the 2018 index value was only 2.1 index points lower than the previous nadir in 2010.

The Hays area index increased rapidly from 2010 to 2014 as employment and retail sales grew, along with a large increase in manufacturing wages in 2011. Since 2014, employment declined by approximately 600 jobs, while manufacturing wages increased modestly but retail sales declined by 15.6 percent. The Great Bend area experienced similar trends, with employment declining by approximately 1,600 workers since 2014 and retail sales declining more than 20 percent.

The Garden City micropolitan area had the most positive index growth in recent years, with employment increasing from by approximately 1,000 workers since 2014 and manufacturing wages increasing significantly. The unemployment rate for the area declined to 2.4 percent in the fourth quarter of 2017, which, along with Dodge City, was the lowest unemployment rate among Kansas' micropolitan areas.

Methodology

Micropolitan areas include a core urban area, generally a city, with a population between 10,000 and 50,000, and the surrounding area that has a high level of commuter traffic with the core urban area. Micropolitan areas are constructed at the county level, so each micropolitan area always includes the county in which the core city is contained. In Kansas, the Salina micropolitan area includes Ottawa County in addition to the core Saline County, and the Garden City micropolitan area includes Kearny County in addition to the core Finney County.

Each micropolitan economic index was comprised of several local economic measures and state of Kansas level data for sectors where local data is not available in a timely fashion. The three core local indicators used in the index were local employment, the local unemployment rate, and local taxable retail sales. Total local employment for each micropolitan area was sourced from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW). This employment measure includes the number of employees working at firms covered by unemployment insurance. Notably, the QCEW is based on the actual employee count and is not an estimate. The QCEW does not count self-employed workers, agricultural workers on small farms, or, more generally, workers who are not covered by unemployment insurance[3].

For each micropolitan economic index, the local unemployment rate for the micropolitan area was based on the Local Area Unemployment Statistics (LAUS) estimates from the BLS. The LAUS estimates the unemployment rate for each micropolitan area based on national survey data and models for each locality. The measure of local taxable retail sales is based on actual tax collections by the Kansas Department of Revenue.

Multiple measures were used to incorporate key local industries for each micropolitan areas. The local average manufacturing wage from the QCEW was included for all areas for which the QCEW makes the data publically available[4]. For areas with significant local oil production, the U.S. Energy Information Administration's oil production level for the state of Kansas was included, since more local measures are not available in a timely fashion. For all areas, Kansas proprietor's farm income, from the U.S. Bureau of Economic Analysis, was used as a summary measure of the local agricultural economy.

Each variable was seasonally adjusted, and all dollar-denominated variables are inflation-adjusted to 2017 price levels using the Consumer Price Index.   The variables were combined to form the index using a weighted average, putting 40 percent of the weight on employment, 20 percent each on retail sales and unemployment, and 20 percent on the local industrial variables, and then standardized by their standard deviations so that variables with a large variance do not have an outsized effect on the index. Each variable was normalized to the year 2012 so that its 2012 average value is equal to 100, except for the unemployment rate, which is normalized by the state average unemployment rate.

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[3] A more comprehensive list of workers excluded from the QCEW employment count can be found at https://www.bls.gov/cew/cewfaq.htm#Q16.
[4] Seward County average manufacturing wages are not disclosed in the QCEW's publically available data due to confidentiality concerns.