



Lawrence, KS Economic Overview

Appendix I: Data Benchmarking

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The better the question. The better the answer.
The better the world works.



Building a better
working world

Introduction

This data benchmarking appendix examines a wide range of topics and statistics from a variety of best-in-class and most recent data sources. Whenever possible, data comes from publicly available sources, including the US Census, US Bureau of Labor Statistics (BLS), US Patent & Trademark Office (PTO), and more. Employment data at the city level was purchased from EMSI - a labor market analytics firm.

The benchmarking data includes a performance review of areas critical to the economic vibrancy of a region - momentum, prosperity, talent, livability, housing, innovation, entrepreneurship, resiliency, and infrastructure, among others. The appendix concludes with an industry cluster location quotient analysis.

Disclaimer

Our Report may be relied upon by City of Lawrence for the purpose set out in the Scope section only pursuant to the terms of our engagement letter dated July 15, 2020. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

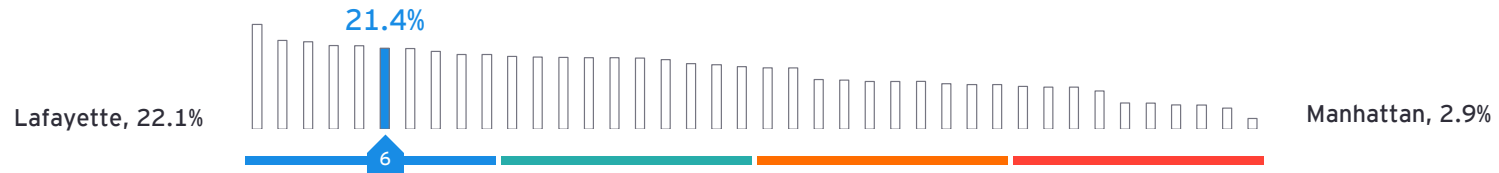
Selected Benchmarks

The following examination of Lawrence involves comparisons with 39 other metropolitan areas with populations between 100,000 and 250,000 located within 500 miles of Lawrence. With approximately 233,000 residents, Lafayette, Indiana is the most populous region included in the analysis. With approximately 103,000 residents, Fond du Lac, Wisconsin is the smallest region by population. In 2018, the population of Lawrence, Kansas metropolitan area topped 120,000.

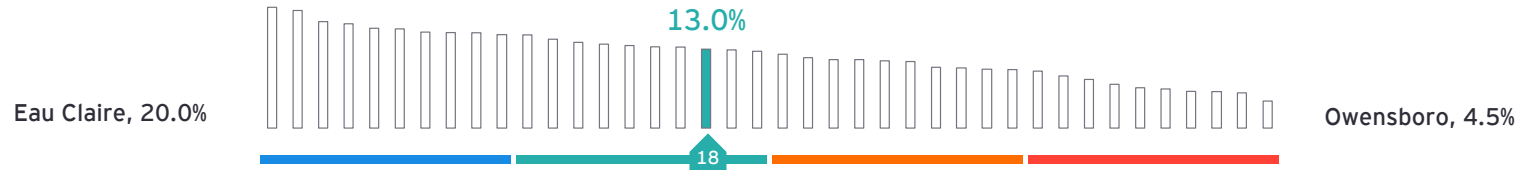


Momentum Metrics

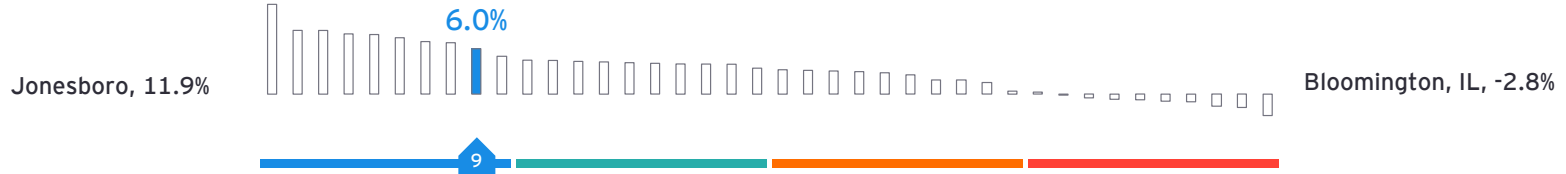
Gross regional product growth,
2013- 2018



Per capita gross regional product growth,
2013- 2018



Employment growth,
2014- 2019



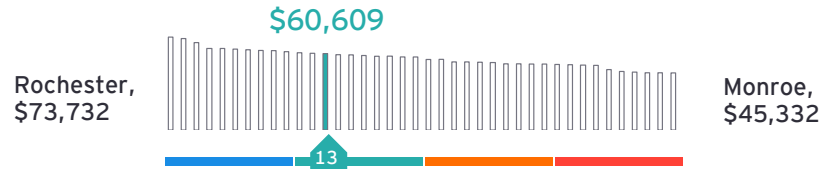
Population growth,
2014- 2019



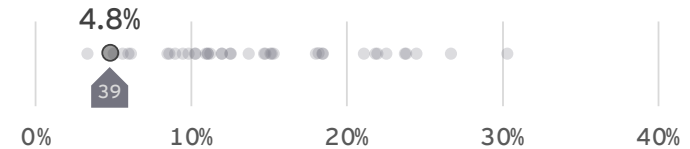
Sources: Bureau of Economic Analysis, US Census Bureau, EMSI

Prosperity Metrics

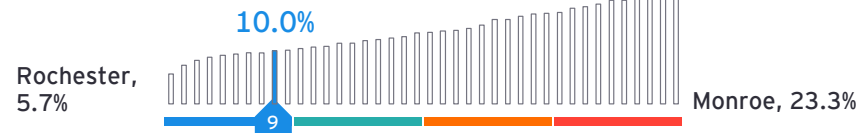
Median household income (excluding householders under 25 years), 2018



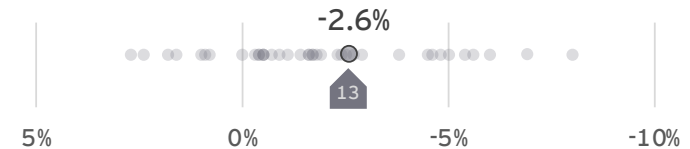
Change in median household income, 2013 - 2018



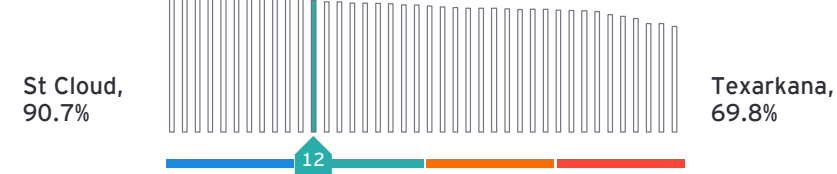
Poverty rate among residents age 3 and older (excluding individuals enrolled in college), 2018



Change in rate among residents age 3 and older (excluding individuals enrolled in college), 2013 - 2018



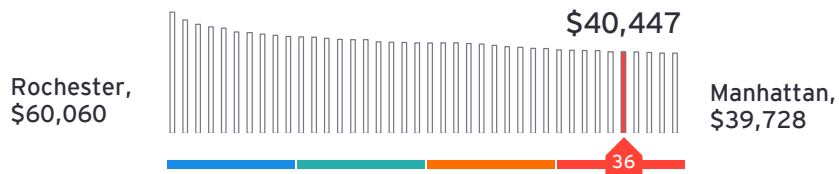
Labor force participation rate, 2018



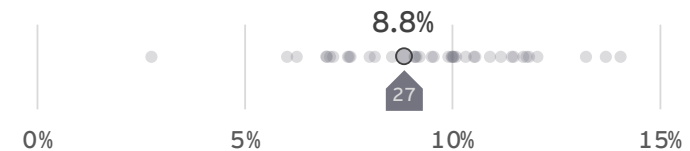
Change in Labor force participation rate, 2013 - 2018



Average annual salary, 2019

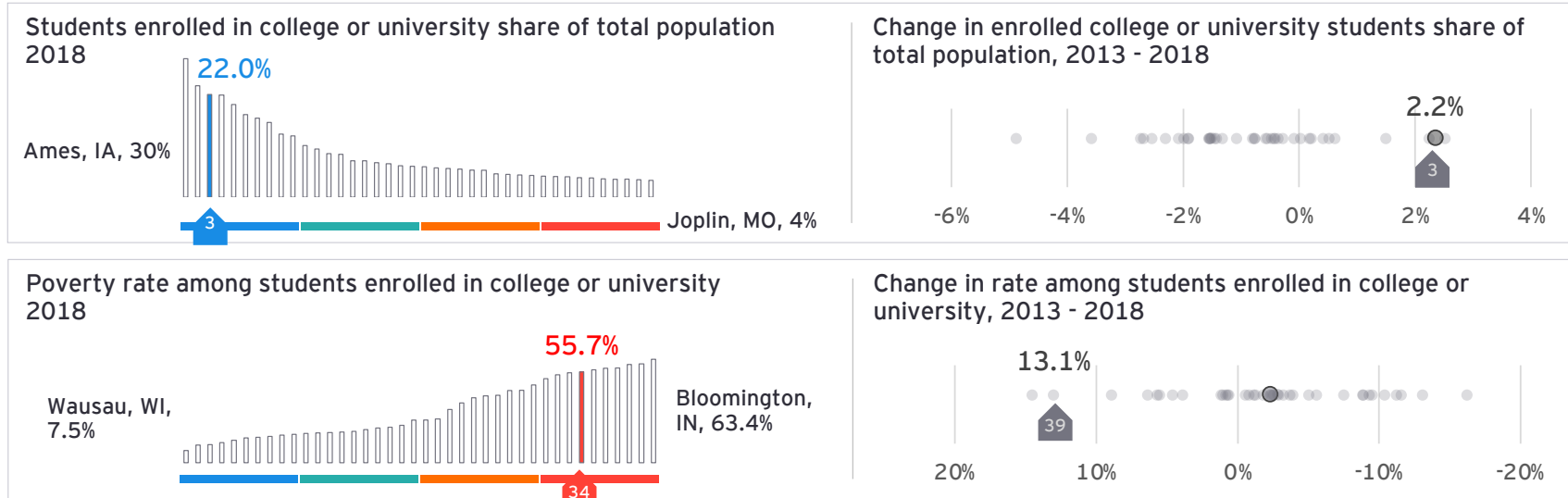


Change in average annual salary, 2013 - 2018



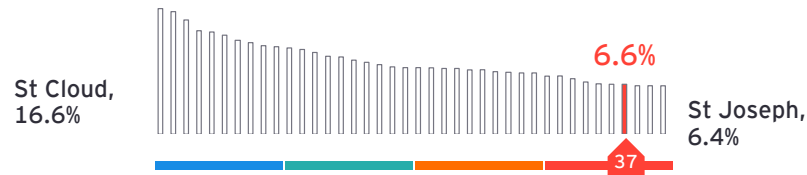
Sources: US Census Bureau, EMSI

Student Metrics

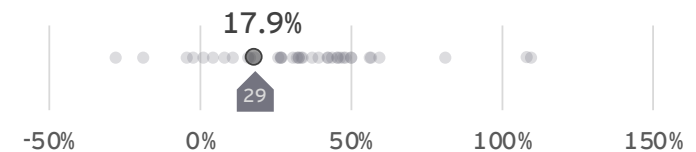


Talent Metrics

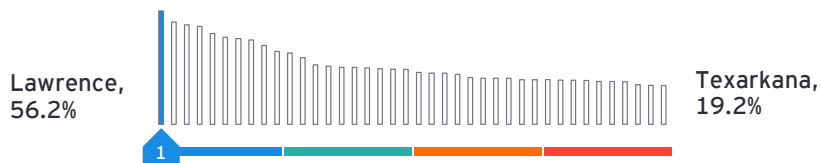
Percent of residents age 25 and older with associate's degree, 2018



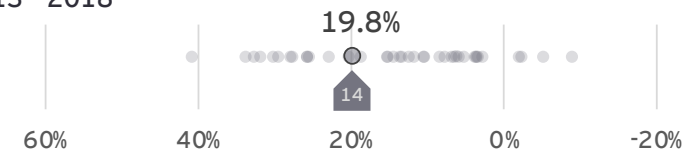
Change in percent of residents age 25 and older with associate's degree, 2013 - 2018



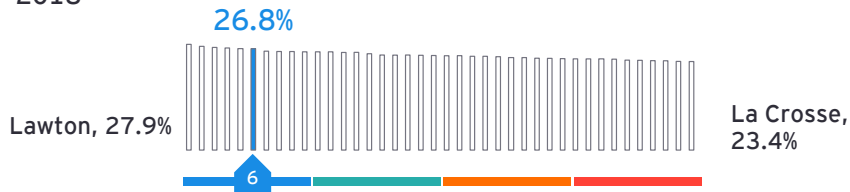
Percent of residents age 25 and older with bachelor's degree or higher level of educational attainment, 2018



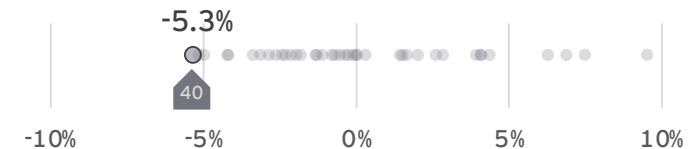
Change in percent of residents age 25 and older with bachelor's degree or higher level of educational attainment, 2013 - 2018



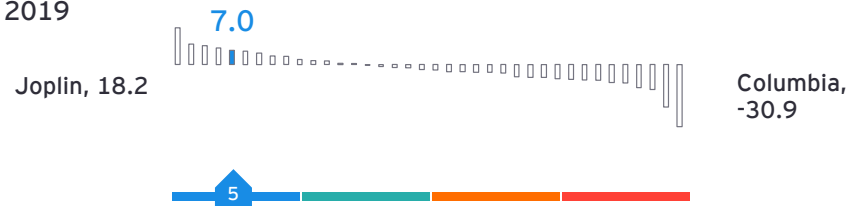
Young professionals (age 25 to 44) as share of total population, 2018



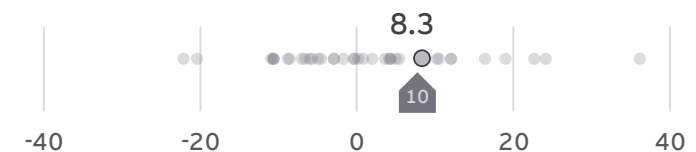
Change in young professionals as share of total population, 2013 - 2018



Net in-migration rate per 1,000 residents (college educated), 2019

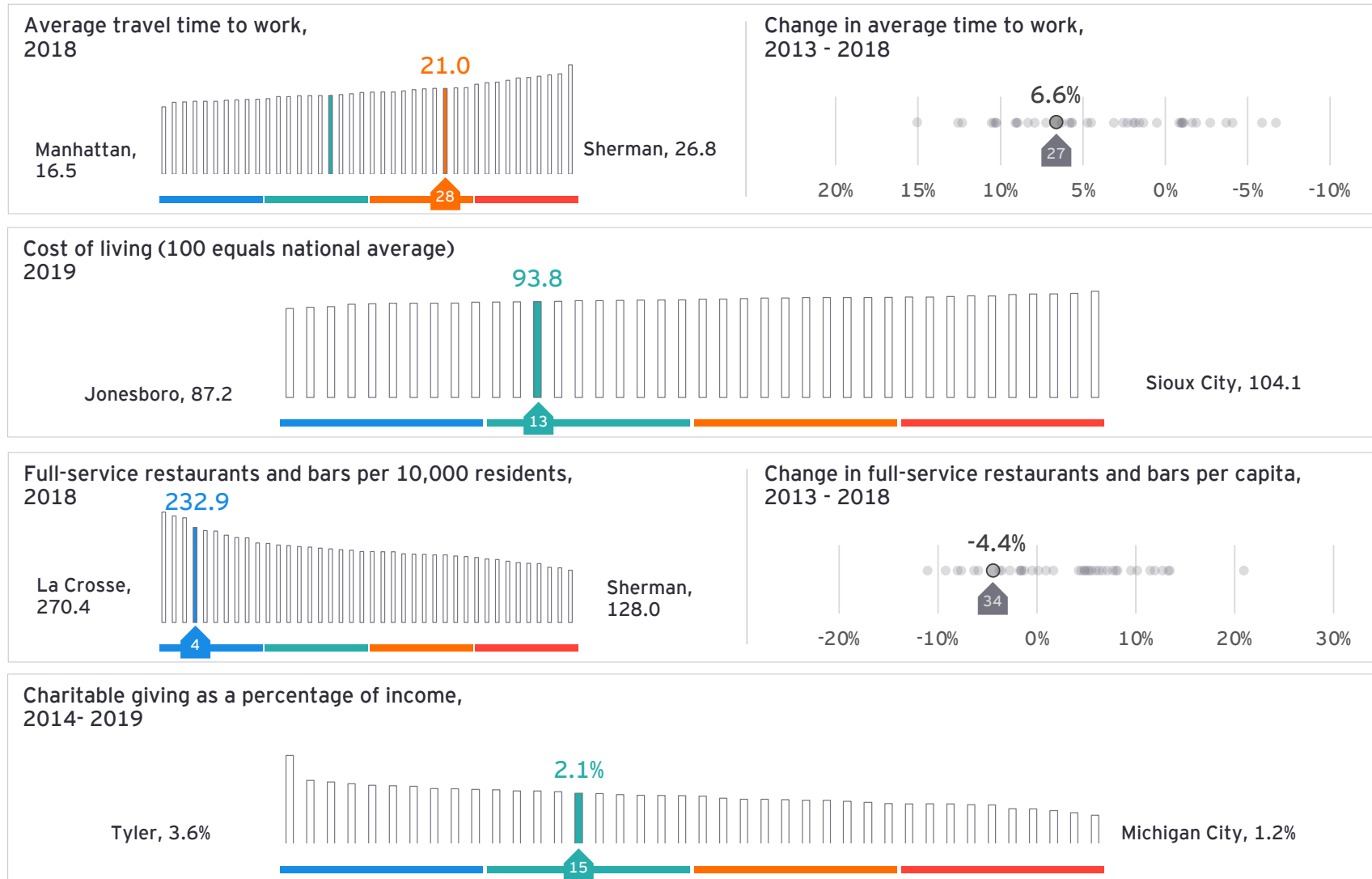


Change in net in-migration rate per 1,000 residents (college educated), 2013 - 2018



Sources: US Census Bureau, EMSI Note: Migration data unavailable for Monroe and Kankakee

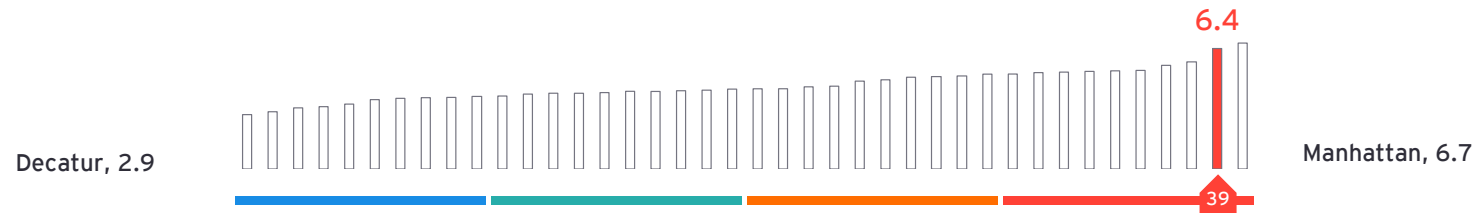
Liveability Metrics



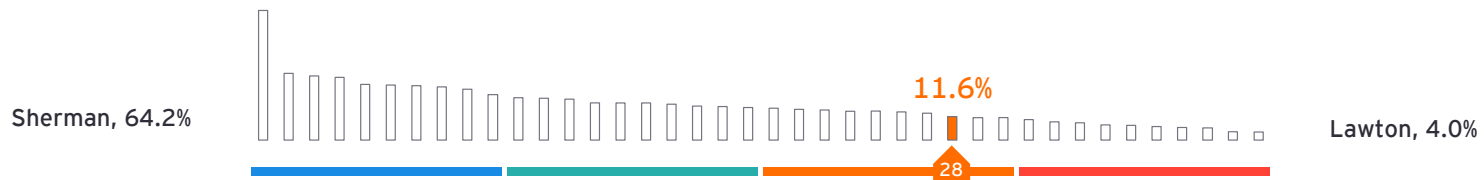
Sources: US Census Bureau, EMSI, Internal Revenue Service

Housing Metrics

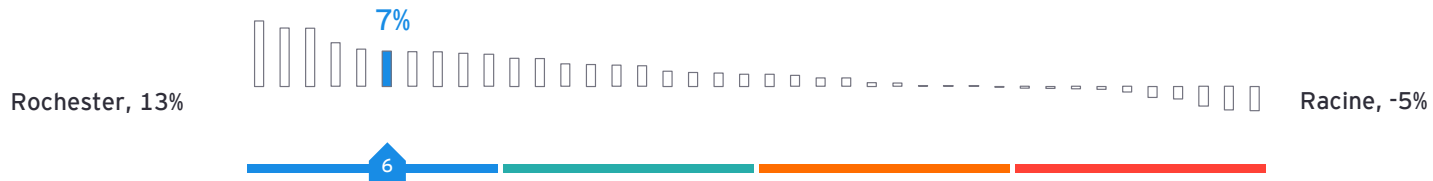
Ratio of median value of owner-occupied housing to median wage, 2018



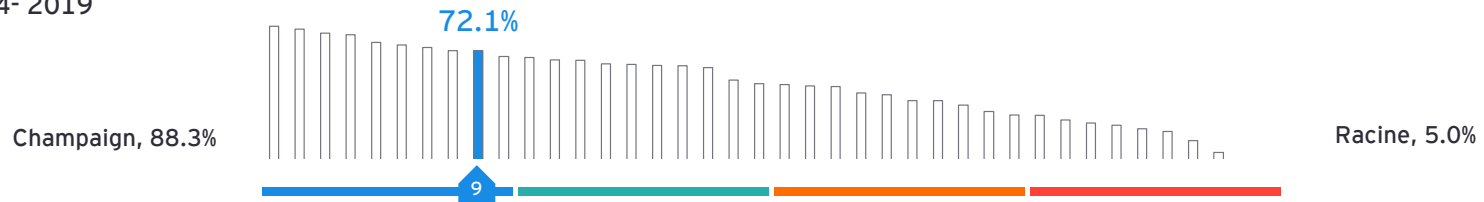
Change in home values, 2013 - 2018



Growth in total new housing units, 2013 - 2018



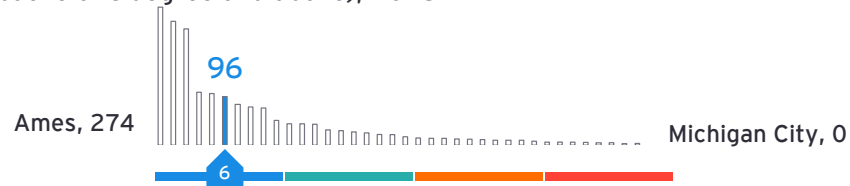
Multi-family permits issued as a percentage of total housing permits issues (city geography), 2014- 2019



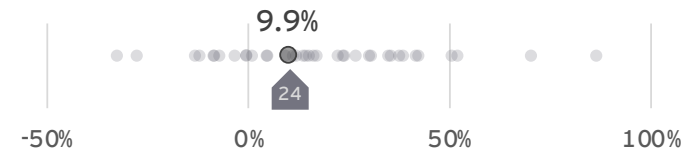
Sources: US Census Bureau, Bureau of Labor Statistics. Note: Building permit data unavailable for Bloomington, IN and Wausau, WI.

Innovation Metrics

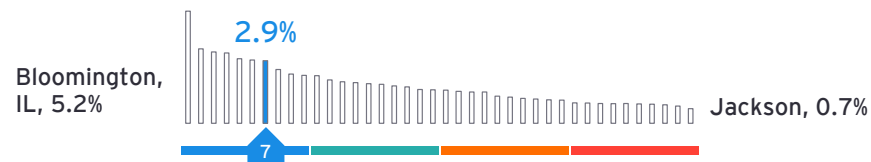
Post-Secondary STEM degree production per 10,000 residents (bachelor's degree and above), 2018



Change in per capita STEM degree production, 2013 - 2018



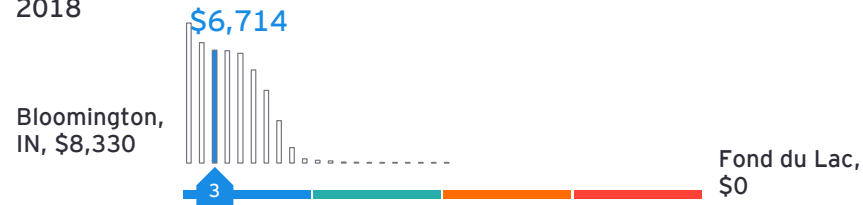
Computer & math workers as percentage of total, 2019



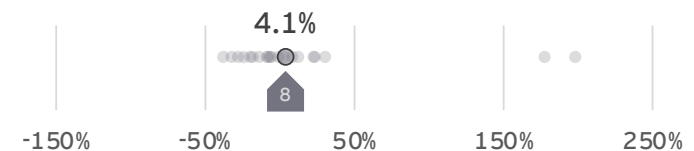
Change in share of computer & math workers, 2014 - 2019



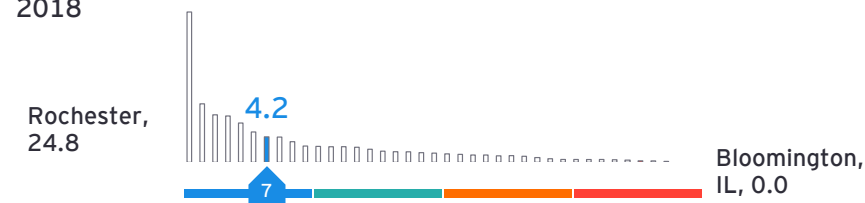
Per capita university R&D expenditures, 2018



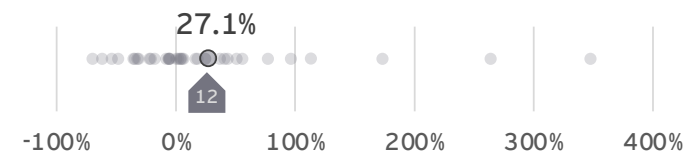
Change in per capita university R&D expenditures 2013 - 2018



Patents produced per 10,000 residents, 2018



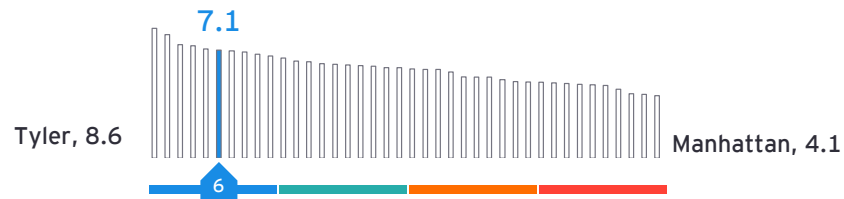
Change in per capita patent production 2013 - 2018



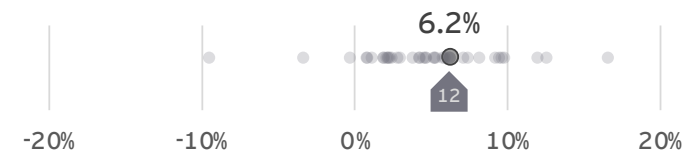
Sources: National Center for Education Statistics, EMSI, National Science Foundation, US Patent & Trade Office

Entrepreneurship Metrics

Self-employed workers per 100 residents, 2018



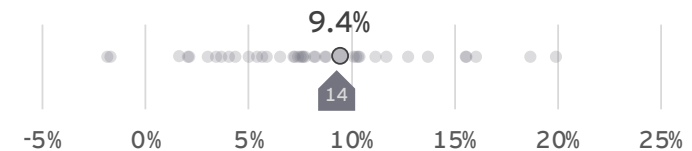
Change in per capita STEM degree production, 2013 - 2018



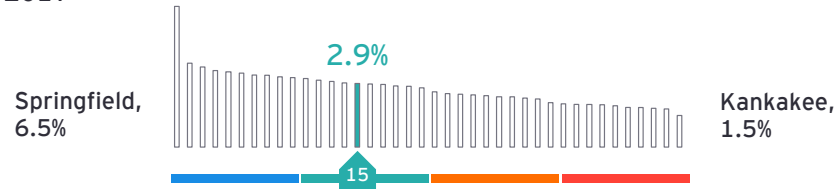
Average annual receipts of self-employed workers, 2018



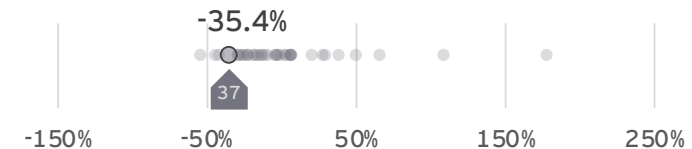
Change average annual receipts of self-employed workers, 2013 - 2018



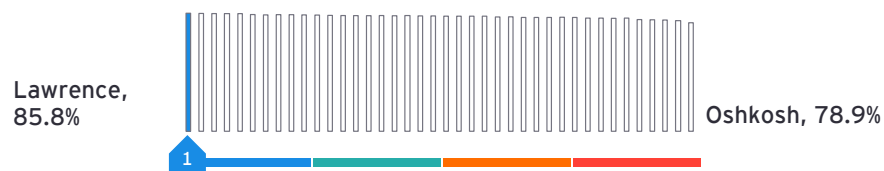
Percentage of firms less than 1 year old, 2017



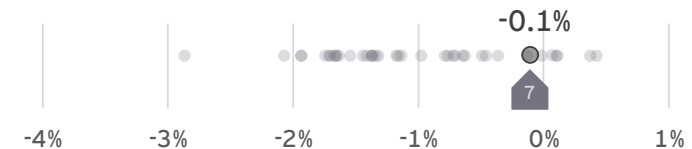
Change in proportion of firms less than 1 year old, 2012 - 2017



Establishments with less than 20 workers, 2018



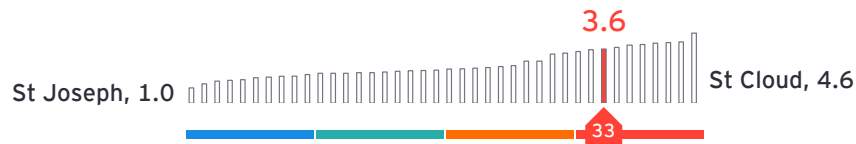
Change in percent of establishments with less than 20 workers, 2013 - 2018



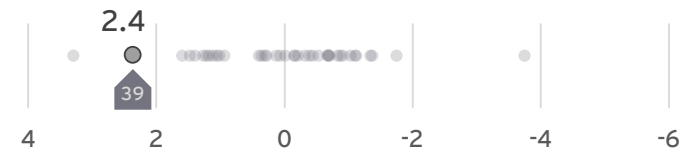
Sources: US Census Bureau

Equity Metrics

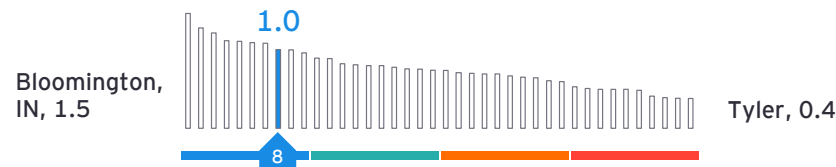
Ratio of non-white poverty rate to white poverty rate (excluding individuals age 18 to 24), 2018



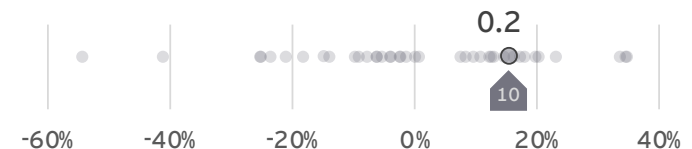
Change in ratio of non-white poverty rate to white poverty rate (excluding individuals age 18 to 24), 2013 - 2018



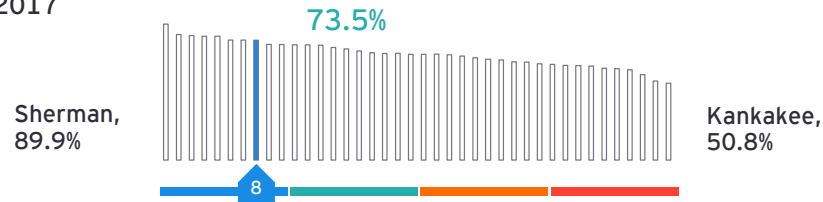
Ratio of non-white college educational attainment to white college educational attainment, 2018



Change in ratio of non-white college educational attainment to white college educational attainment, 2013 - 2018



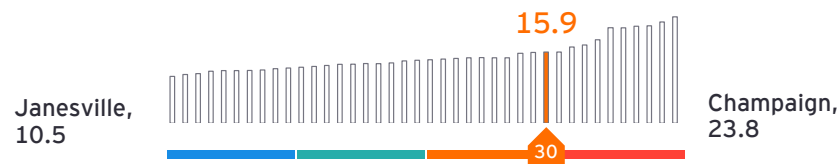
Female versus male earnings, 2017



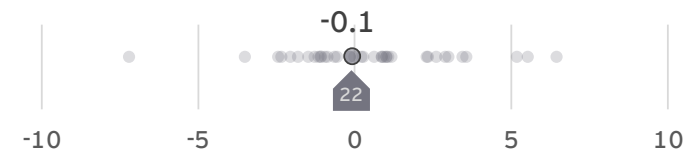
Percentage point change in female versus male earnings 2012 - 2017



Ratio of household income of top 20% of households versus household income of bottom 20% of households, 2017

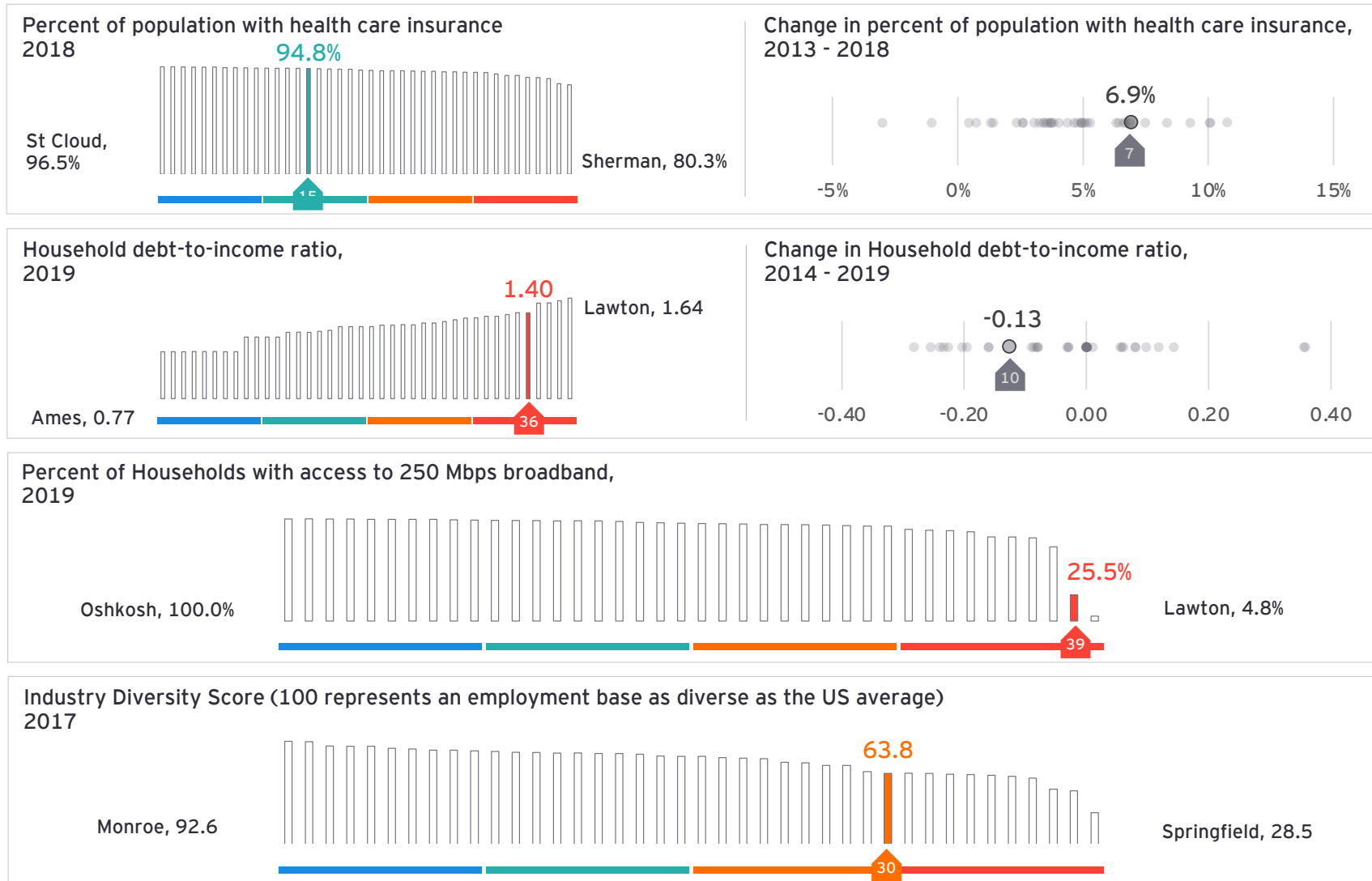


Change in ratio of household income of top 20% of households versus bottom 20% of households, 2013 - 2018



Sources: US Census Bureau

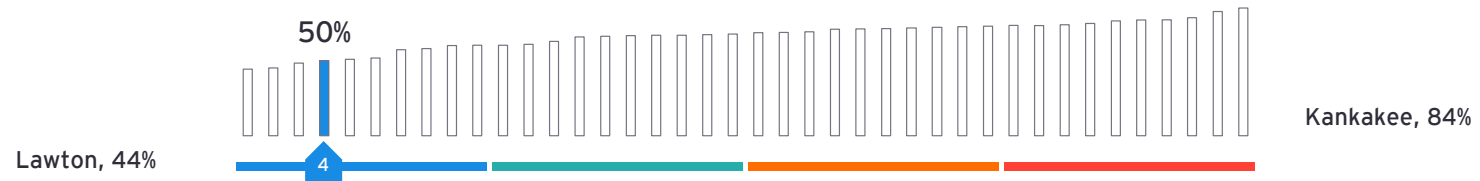
Resiliency Metrics



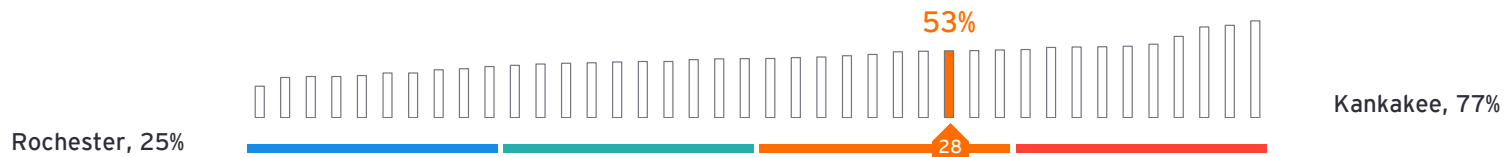
Sources: US Census Bureau, Federal Reserve, Federal Communications Commission, EMSI

Commuting Metrics

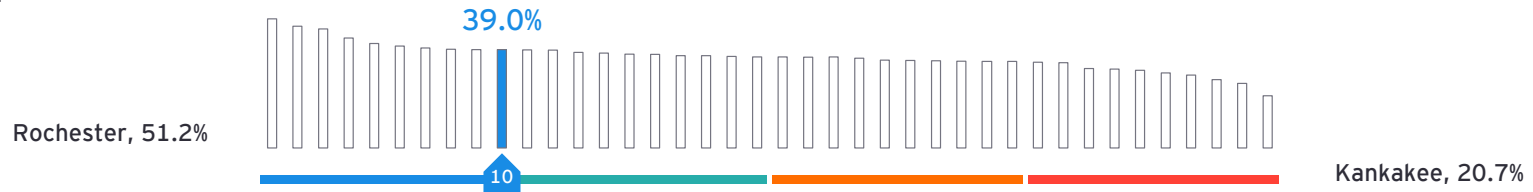
Percent of workers commuting into city from outside jurisdictions, 2018



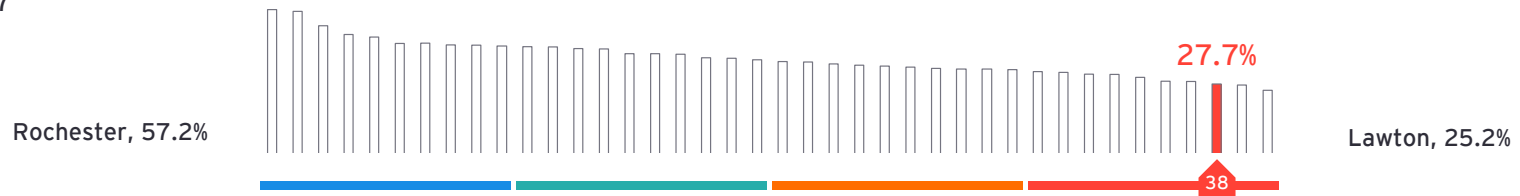
Percent of residents commuting outside city for employment, 2018



Percent of employed residents in the city earning more than \$3,333 a month, 2017

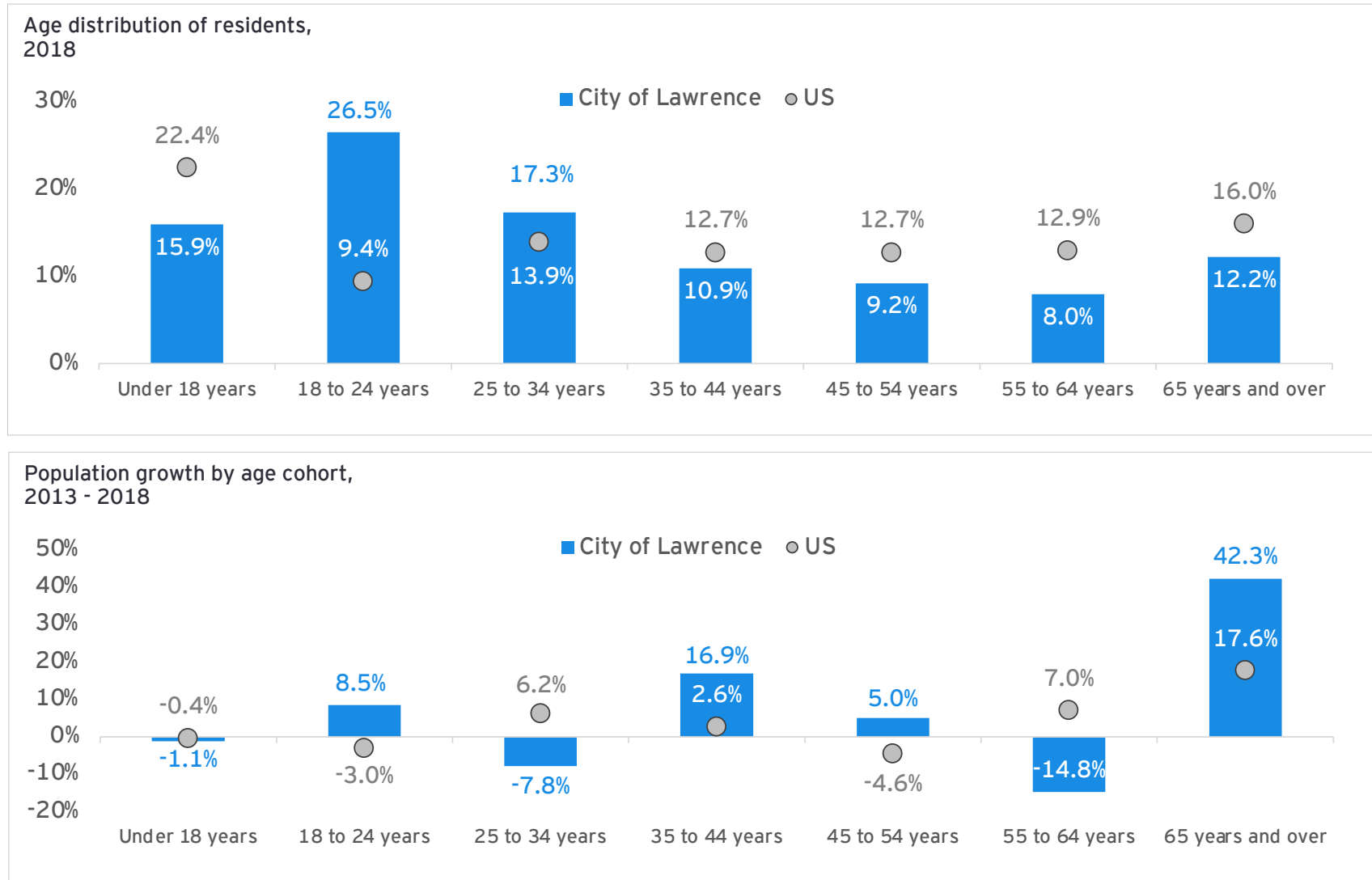


Percent of employed workers in the city earning more than \$3,333 a month, 2017



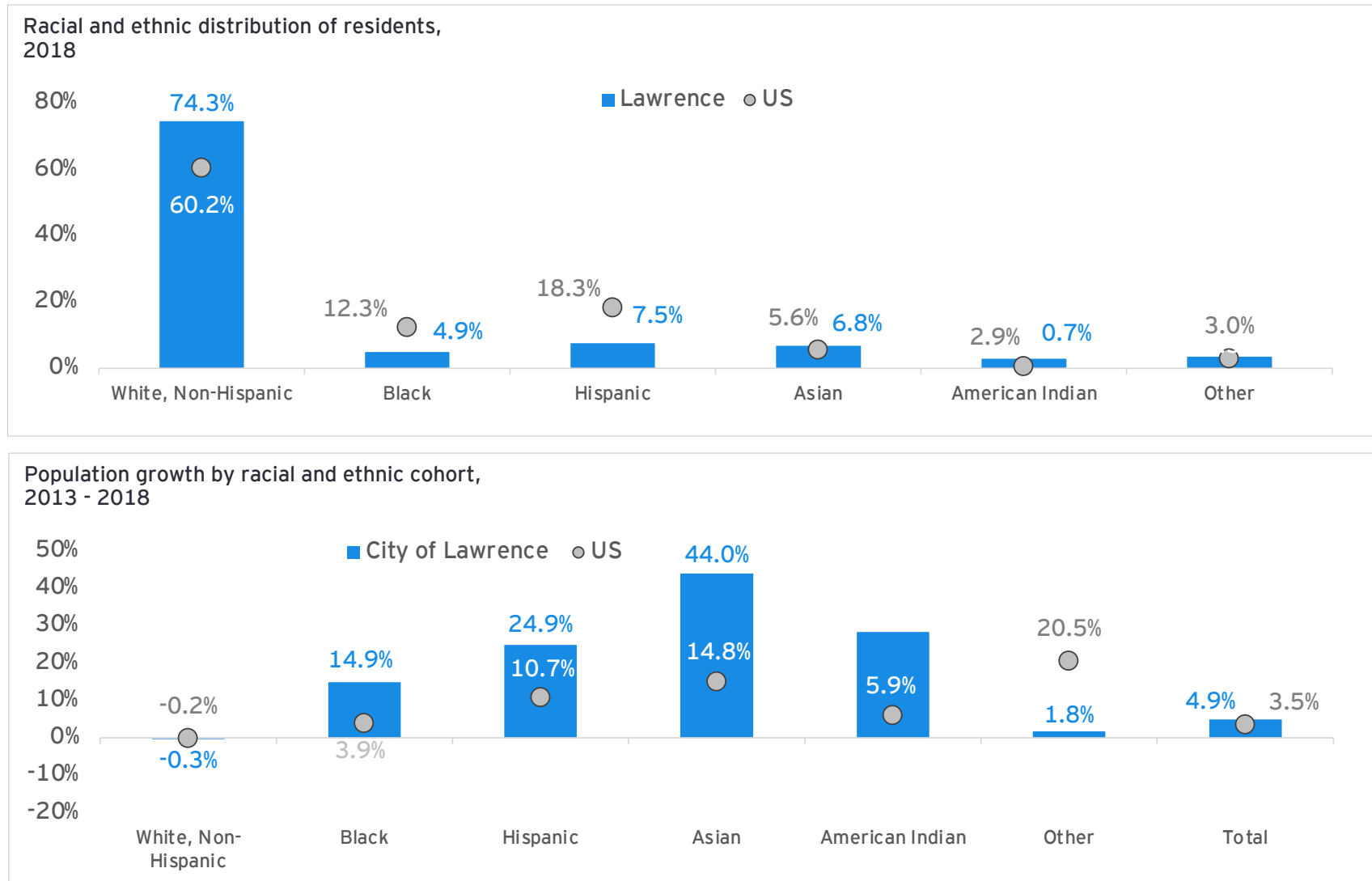
Sources: US Census Bureau

Age Composition



Sources: US Census Bureau

Racial and Ethnic Composition

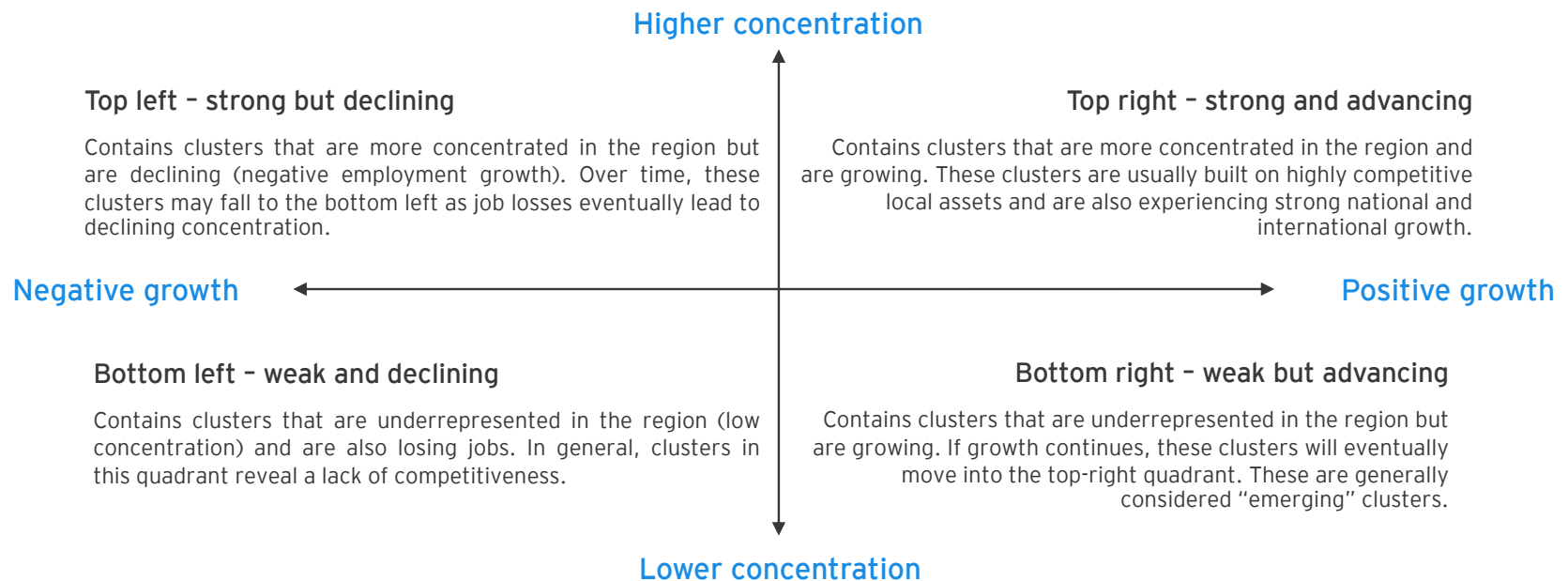


Sources: US Census Bureau

Industry cluster analysis

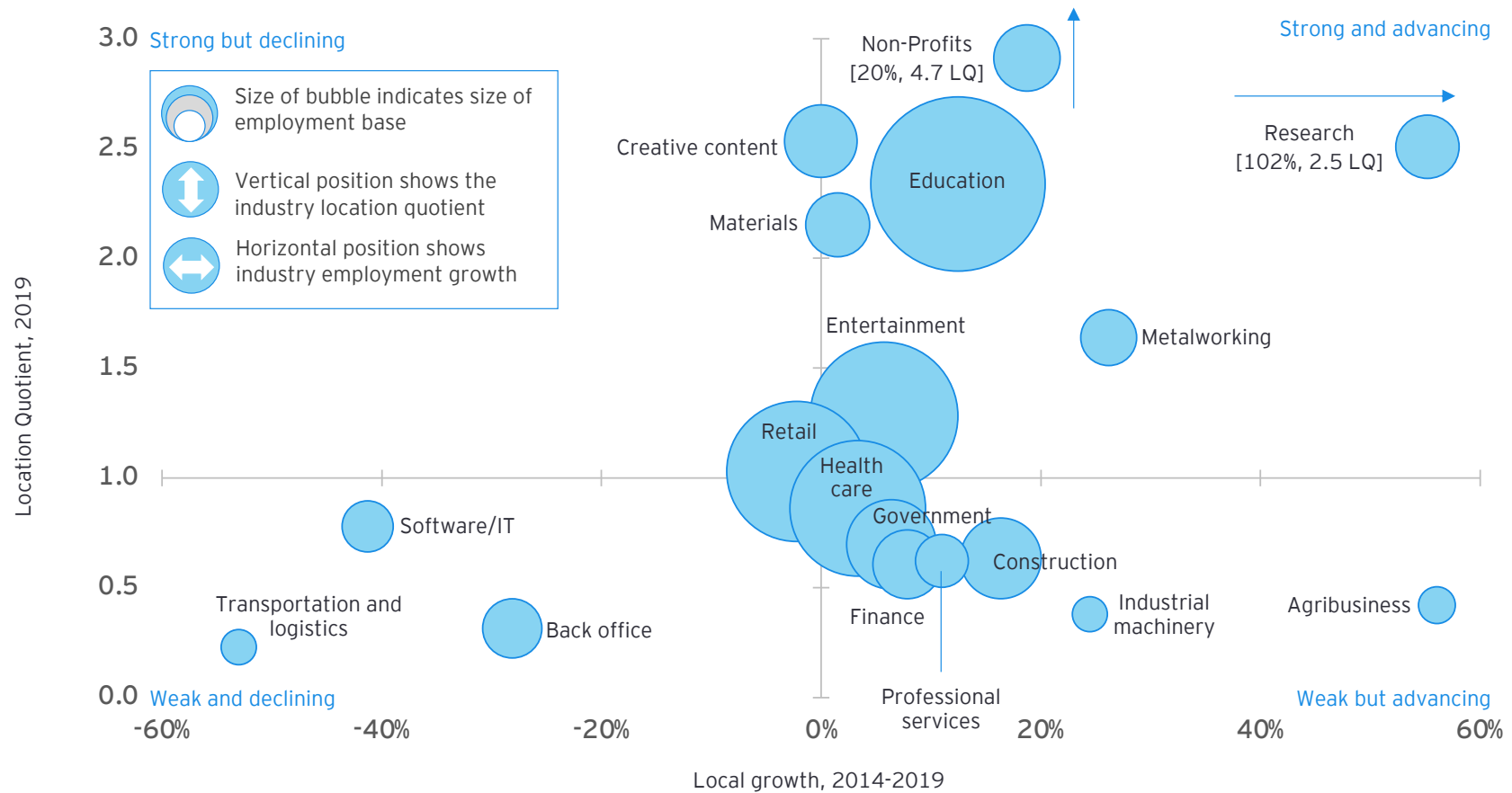
The “bubble chart” on the following page combines location quotients (LQs), growth and relative size to illustrate a snapshot of the community’s industry cluster performance. A location quotient is the relative concentration or density of a specific cluster in a region compared to the US average. For example, a 1.5 LQ indicates that the location has 50% more jobs as a share of the overall economy than the US. This usually indicates local competitive strengths in that cluster. Note that because LQs are a relative measure, a high concentration in one cluster means that others will have lower concentrations.

The horizontal axis displays employment growth of each cluster from 2014 through 2019. The vertical axis shows the LQ. The size of each bubble indicates the number of local jobs in the cluster. Clusters can generally be grouped in four categories, as described in the map below.



Industry composition

Lawrence, Kansas industry bubble chart, 2019



Source:
EMSI (only clusters with more than 200 jobs are shown).

Industry composition

Lawrence, Kansas industry cluster performance

Cluster	Employment (2019)	Employment growth (2014-2019)	Location quotient (2019)	Cluster	Employment (2019)	Employment growth (2014-2019)	Location quotient (2019)
Aerospace	75	1777.2%	0.4	Government	2,519	6.4%	0.7
Agribusiness & Food	432	56.1%	0.4	Healthcare	5,764	3.3%	0.9
Automotive	162	163.1%	0.4	Industrial Machinery	392	24.5%	0.4
Back Office	1,109	-28.1%	0.3	Materials	1,291	1.5%	2.2
Biomedical	31	0.1%	0.1	Metalworking	989	26.2%	1.6
Construction	2,053	16.4%	0.6	Non-Profits	2,084	20.3%	4.7
Consumer Goods Mftg	128	35.3%	0.6	Professional Services	885	11.0%	0.6
Creative Content	1,659	0.0%	2.5	Research	1,807	101.5%	2.5
Education	9,510	12.5%	2.3	Retail	6,157	-2.2%	1.0
Electronics	276	4.6%	0.4	Software / Info. Tech.	828	-41.3%	0.8
Energy	165	-21.4%	0.4	Telecom Services	109	-32.7%	0.5
Entertainment	6,835	5.7%	1.3	Transport. & Logistics	396	-53.0%	0.2
Finance	1,495	7.8%	0.6	TOTAL	5.5%	47,169	1.0

Source:
EMSI