Lawrence, KS
Economic Overview

Appendix I: Data Benchmarking
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

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lafayette</td>
<td>21.4%</td>
</tr>
<tr>
<td>Manhattan</td>
<td>2.9%</td>
</tr>
<tr>
<td>Jonesboro</td>
<td>11.9%</td>
</tr>
<tr>
<td>Bloomington, IL</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Sherman</td>
<td>5.0%</td>
</tr>
<tr>
<td>Decatur</td>
<td>-4.2%</td>
</tr>
</tbody>
</table>

### Per capita gross regional product growth, 2013-2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eau Claire</td>
<td>13.0%</td>
</tr>
<tr>
<td>Owensboro</td>
<td>4.5%</td>
</tr>
<tr>
<td>Jonesboro</td>
<td>6.0%</td>
</tr>
<tr>
<td>Bloomington, IL</td>
<td>-2.8%</td>
</tr>
</tbody>
</table>

### Employment growth, 2014-2019

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonesboro</td>
<td>6.0%</td>
</tr>
<tr>
<td>Bloomington, IL</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Sherman</td>
<td>9.0%</td>
</tr>
<tr>
<td>Decatur</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

### Population growth, 2014-2019

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sherman</td>
<td>5.0%</td>
</tr>
<tr>
<td>Decatur</td>
<td>-4.2%</td>
</tr>
</tbody>
</table>

*Sources: Bureau of Economic Analysis, US Census Bureau, EMSI*
### Prosperity Metrics

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

<table>
<thead>
<tr>
<th>Location</th>
<th>Median Household Income (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>$73,732</td>
</tr>
<tr>
<td>Monroe</td>
<td>$45,332</td>
</tr>
</tbody>
</table>

#### Change in median household income, 2013 - 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>4.8%</td>
</tr>
<tr>
<td>Monroe</td>
<td>0%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Location</th>
<th>Poverty Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>5.7%</td>
</tr>
<tr>
<td>Monroe</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Location</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Monroe</td>
<td>-5%</td>
</tr>
</tbody>
</table>

#### Labor force participation rate, 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Labor Force Participation Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Cloud</td>
<td>90.7%</td>
</tr>
<tr>
<td>Texarkana</td>
<td>69.8%</td>
</tr>
</tbody>
</table>

#### Change in Labor force participation rate, 2013 - 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Cloud</td>
<td>3.6%</td>
</tr>
<tr>
<td>Texarkana</td>
<td>5%</td>
</tr>
</tbody>
</table>

#### Average annual salary, 2019

<table>
<thead>
<tr>
<th>Location</th>
<th>Average Annual Salary (2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>$60,060</td>
</tr>
<tr>
<td>Manhattan</td>
<td>$39,728</td>
</tr>
</tbody>
</table>

#### Change in average annual salary, 2013 - 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rochester</td>
<td>8.8%</td>
</tr>
<tr>
<td>Manhattan</td>
<td>2%</td>
</tr>
</tbody>
</table>

Sources: US Census Bureau, EMSI
## Student Metrics

<table>
<thead>
<tr>
<th>City</th>
<th>Students enrolled in college or university share of total population 2018</th>
<th>Change in enrolled college or university students share of total population, 2013 - 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ames, IA, 30%</td>
<td>22.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Joplin, MO, 4%</td>
<td></td>
<td>-6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City</th>
<th>Poverty rate among students enrolled in college or university 2018</th>
<th>Change in rate among students enrolled in college or university, 2013 - 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wausau, WI, 7.5%</td>
<td>55.7%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Bloomington, IN, 63.4%</td>
<td></td>
<td>-10%</td>
</tr>
</tbody>
</table>
Talent Metrics

Percent of residents age 25 and older with associate's degree, 2018
- St Cloud, 16.6%
- St Joseph, 6.4%

Change in percent of residents age 25 and older with associate's degree, 2013 - 2018
- 6.6%
- 17.9%

Percent of residents age 25 and older with bachelor's degree or higher level of educational attainment, 2018
- Lawrence, 56.2%
- Texarkana, 19.2%

Change in percent of residents age 25 and older with bachelor's degree or higher level of educational attainment, 2013 - 2018
- 19.8%

Young professionals (age 25 to 44) as share of total population, 2018
- Lawton, 27.9%
- La Crosse, 23.4%

Change in young professionals as share of total population, 2013 - 2018
- -5.3%

Net in-migration rate per 1,000 residents (college educated), 2019
- Joplin, 18.2
- Columbia, -30.9

Change in net in-migration rate per 1,000 residents (college educated), 2013 - 2018
- 7.0
- 8.3

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

**Average travel time to work, 2018**
- Manhattan, 16.5
- Sherman, 26.8

**Change in average time to work, 2013 - 2018**
- 6.6%
- -10%
- -5%
- 0%
- 5%
- 10%
- 15%
- 20%
- 27%

**Cost of living (100 equals national average), 2019**
- Jonesboro, 87.2
- Sioux City, 104.1

**Full-service restaurants and bars per 10,000 residents, 2018**
- La Crosse, 270.4
- Sherman, 128.0

**Change in full-service restaurants and bars per capita, 2013 - 2018**
- -4.4%
- -20%
- -10%
- 0%
- 10%
- 20%
- 30%

**Charitable giving as a percentage of income, 2014-2019**
- Tyler, 3.6%

**Sources:** US Census Bureau, EMSI, Internal Revenue Service
Housing Metrics

- **Ratio of median value of owner-occupied housing to median wage, 2018**
  - Decatur, 2.9
  - Manhattan, 6.4

- **Change in home values, 2013 - 2018**
  - Sherman, 64.2%
  - Lawton, 4.0%

- **Growth in total new housing units, 2013 - 2018**
  - Rochester, 13%
  - Racine, -5%

- **Multi-family permits issued as a percentage of total housing permits issues (city geography), 2014-2019**
  - Champaign, 88.3%
  - Racine, 5.0%

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

- Ames, 274
- Michigan City, 0

Change in per capita STEM degree production, 2013 - 2018

Computer & math workers as percentage of total, 2019

- Bloomington, IL, 5.2%
- Jackson, 0.7%

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

Per capita university R&D expenditures, 2018

- Bloomington, IN, $8,330
- Fond du Lac, $0

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

Patents produced per 10,000 residents, 2018

- Rochester, 24.8
- Bloomington, IL, 0.0

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**
  - Tyler, 8.6
  - Manhattan, 4.1

- **Change in per capita STEM degree production, 2013 - 2018**
  - 6.2%

- **Average annual receipts of self-employed workers, 2018**
  - Bowling Green, $55,366
  - Decatur, $35,388

- **Change average annual receipts of self-employed workers, 2013 - 2018**
  - 9.4%

- **Percentage of firms less than 1 year old, 2017**
  - Springfield, 6.5%
  - Kankakee, 1.5%

- **Change in proportion of firms less than 1 year old, 2012 - 2017**
  - -35.4%

- **Establishments with less than 20 workers, 2018**
  - Lawrence, 85.8%
  - Oshkosh, 78.9%

- **Change in percent of establishments with less than 20 workers, 2013 - 2018**
  - -0.1%

*Sources: US Census Bureau*
Equity Metrics

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

- St Joseph, 1.0
- St Cloud, 4.6

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

- 2.4

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

- Bloomington, IN, 1.5
- Tyler, 0.4

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

- 0.2

Female versus male earnings, 2017

- Sherman, 89.9%
- Kankakee, 50.8%

Percentage point change in female versus male earnings 2012 - 2017

- -25.3%

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

- Janesville, 10.5
- Champaign, 23.8

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

- -0.1

Sources: US Census Bureau
Resiliency Metrics

Percent of population with health care insurance
2018

St Cloud, 96.5%
Sherman, 80.3%

Change in percent of population with health care insurance, 2013 - 2018
-5% 0% 5% 10% 15%

Household debt-to-income ratio, 2019

Ames, 0.77
Lawton, 1.64

Change in Household debt-to-income ratio, 2014 - 2019
-0.40 -0.20 0.00 0.20 0.40

Percent of Households with access to 250 Mbps broadband, 2019

Oshkosh, 100.0%
Lawton, 4.8%

Industry Diversity Score (100 represents an employment base as diverse as the US average)
2017

Monroe, 92.6
Springfield, 28.5

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

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

- Rochester, 57.2%
- Lawton, 25.2%
- Kankakee, 27.7%

Sources: US Census Bureau

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

- Rochester, 51.2%
- Kankakee, 20.7%

Percent of residents commuting outside city for employment, 2018

- Rochester, 25%
- Lawton, 44%
- Kankakee, 77%

Percent of workers commuting into city from outside jurisdictions, 2018

- Lawton, 44%
- Kankakee, 84%

Sources: US Census Bureau
Age Composition

Age composition of residents, 2018:
- Under 18 years: 22.4% (City of Lawrence) vs. 15.9% (US)
- 18 to 24 years: 26.5% (City of Lawrence) vs. 9.4% (US)
- 25 to 34 years: 17.3% (City of Lawrence) vs. 13.9% (US)
- 35 to 44 years: 12.7% (City of Lawrence) vs. 10.9% (US)
- 45 to 54 years: 12.7% (City of Lawrence) vs. 9.2% (US)
- 55 to 64 years: 12.9% (City of Lawrence) vs. 8.0% (US)
- 65 years and over: 16.0% (City of Lawrence) vs. 12.2% (US)

Population growth by age cohort, 2013 - 2018:
- Under 18 years: -1.1% (City of Lawrence) vs. -0.4% (US)
- 18 to 24 years: 8.5% (City of Lawrence) vs. 6.2% (US)
- 25 to 34 years: 6.2% (City of Lawrence) vs. 5.0% (US)
- 35 to 44 years: 16.9% (City of Lawrence) vs. 2.6% (US)
- 45 to 54 years: 5.0% (City of Lawrence) vs. -4.6% (US)
- 55 to 64 years: 7.0% (City of Lawrence) vs. -14.8% (US)
- 65 years and over: 42.3% (City of Lawrence) vs. 17.6% (US)

Sources: US Census Bureau
Racial and Ethnic Composition

Racial and ethnic distribution of residents, 2018

- **White, Non-Hispanic**: 74.3% (Lawrence: 60.2%)
- **Black**: 12.3%
- **Hispanic**: 18.3%
- **Asian**: 5.6%
- **American Indian**: 2.9%
- **Other**: 3.5%

Population growth by racial and ethnic cohort, 2013 - 2018

- **White, Non-Hispanic**: -20%
- **Black**: 14.9%
- **Hispanic**: 24.9%
- **Asian**: 44.0%
- **American Indian**: 1.8%
- **Other**: 4.9%
- **Total**: 20.5%

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.

- **Top left - strong but declining**: Contains clusters that are more concentrated in the region but are declining (negative employment growth). Over time, these clusters may fall to the bottom left as job losses eventually lead to declining concentration.

- **Bottom left - weak and declining**: Contains clusters that are underrepresented in the region (low concentration) and are also losing jobs. In general, clusters in this quadrant reveal a lack of competitiveness.

- **Top right - strong and advancing**: Contains clusters that are more concentrated in the region and are growing. These clusters are usually built on highly competitive local assets and are also experiencing strong national and international growth.

- **Bottom right - weak but advancing**: Contains clusters that are underrepresented in the region but are growing. If growth continues, these clusters will eventually move into the top-right quadrant. These are generally considered “emerging” clusters.
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

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

**Source:** EMSI