Understanding Data at the Local Level

Pat Curry & Sarah Low, ExCEED

MARCH 29, 2019
Today’s Session:

• Why should you be interested in data at the local level?

• About data at the local level

• ExCEED data, analysis, & research services
Why Data at a Local Level?

1. Enhance our understanding of the places we live and work.
2. Explore relationships between environmental, social and economic conditions and trends.
3. Gain perspective by comparing our region with similar places.
4. Identify opportunities and understand how to use data in planning.
A Model for Our Work

- **Knowledge**
- **Information**
- **Meaningful metrics**
- **Superfluous data**
- **Noise and mis-information**

**Tools**
- Predictive intelligence based decision support
- Application of statistical models
- Dashboards and basic analytics
- Automated data collection
- Adhoc data capture and reporting

**Value**
- Wisdom
- Insight
- Understanding
- Confusion
- Ignorance
The Dangers of Bad Analysis

• Localities can make costly mistakes based on bad analysis

• Do not rely on one person’s analysis
  • Federal Statistical Agencies ensure results are replicable before publication—and their analysis is done by professionals
  • Data being used for decision-making should meet the same standard
  • Never use a consultant who does not carry liability insurance
What would you do if a national news outlet selected your county as the slowest growing in the State?

How about calling ExCEED for help!
About Data Used at the Local Level
Data Sources

• Administrative Records -- Data collected by governmental agencies and private businesses. This data is normally of high quality.
  • Employment – Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)
  • Income and Migration – Internal Revenue Service
  • Vital Statistics and Health – Missouri Department of Health and Senior Services, National Center for Health Statistics

• Surveys
  • Population and Household Characteristics – Census Bureau, Decennial Census and American Community Survey
  • Public Opinion – Pew Research Center, Gallup

• Be careful with survey data at the local level!

• Be extra careful with “modeled” data! (Can you identify modeled data?)
Important Data Concepts

**Normalized Data** – adjusting values of indicators so they can be compared. A simple example is the use of per capita or ratio measurements (birth rates, per capita income).

**Benchmark** – standard or point of reference against which things may be compared or assessed. Compare population change for counties to the state (benchmark).

**Rank** -- a way to compare the relative position of a geographic area based on an indicator. Between 2010 and 2015 St. Charles County ranked 1 in total growth and 3 in percent change, 75 counties lost population.

**Change over time** – how much an indicator changes between measurements. Missouri total population increased 1.6 percent between 2010 and 2015 (ranked 39 in the US).
Recovery from the Recession

- Only 20 of 115 counties have exceeded 2007 levels of population and employment (Resilient).

- 29 counties have gained population but not jobs (Population Resilient) and 11 have added jobs but lost population (Employment Resilient).

- 55 counties (New Normal) are still below 2007 levels for employment (-8.3% average deficit) and population (-3.9% average deficit).

Sources/Notes: Census Bureau and Economic Modeling Systems International
The Composite Index is the sum of the percent change in population (2007 to 2017) and full-time employment (2007 to 2018).
County Classification

- The federal Office of Management and Budget county classification system uses the size of the largest urbanized area as the basis for classifying counties.

- Metropolitan (Metro) counties have 50,000 or more in a central city.

- Metro Outlying counties send at least 25% of workers to a Metro county.

- Micropolitan (Micro) have an urban area between 10,000 and 50,000 and Micro Outlying are Rural counties that send at least 25% of workers to a neighboring Micropolitan county.

- Rural counties do not have an urbanized place with 10,000 or more.

Sources/Notes: Census Bureau and US Office of Management and Budget
How We Can Help: ExCEED Programs & Services
ExCEED Programs

• **Fundamentals of Economic Development**: an overview of best practices for promoting and sustaining economic development programs at the local and regional level.

• **Data for Decision Makers**: a deep dive into the demographic, social, and economic indicators for a community or region with an emphasis on identifying potential barriers and opportunities for economic development.

• **Building Local Prosperity**: combines Fundamentals and Data for Decision Makers and adds an action-oriented planning process to create economic development plans for communities and regions.

Also...

• **Applied Research Projects**
How your CED CES can help with local data needs

- LOREDC and Camden County have utilized ExCEED for applied research support
- Michele Kroll, the CED-CES in Camden County, works closely with community leaders to identify opportunities for ExCEED to support decision-making in the County.
  - We provided four presentations to LOREDC summarizing key economic indicators.
  - Created a Housing Site Information System to help local officials identify the best sites for new housing.
  - Compiled a report for County officials that examined factors influencing the cost of public safety services.
Gladstone Arts Incubator Feasibility study

• GK Callahan, CED-CES in Clay County, identified a need for a feasibility study in Gladstone for an Arts Incubator and called ExCEED for assistance.

• ExCEED worked with GK to prepare a feasibility study that included a survey of artists and analysis of the demand for an incubator.

• Although we recommended the City not invest in the incubator, GK identified a private developer that saw opportunity based on our analysis and invested in the project.
Retail Trade Analysis—Examples of what data at the local level can do for you

- Richard Proffer, CED Field Specialist in southeast Missouri, recognized a need for a retail trade study in Piedmont following the closure of a Walmart store. ExCEED prepared a retail trade area analysis for the community with recommendations for marketing the building and community.

- Benton County Commissioners needed an analysis of retail sales as they prepared for a tax referendum. ExCEED prepared a report on sales trends and demographic factors that will influence sales in the future.
### Retail Trade Analysis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Piedmont</th>
<th>Fredericktown</th>
<th>Poplar Bluff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Potential (millions)</td>
<td>$64.6</td>
<td>$136.1</td>
<td>$423.8</td>
</tr>
<tr>
<td>2018 Population Estimate</td>
<td>5,736</td>
<td>10,444</td>
<td>31,999</td>
</tr>
<tr>
<td>2018 Median Age</td>
<td>45</td>
<td>40.2</td>
<td>40</td>
</tr>
<tr>
<td>2018 Average Age</td>
<td>43.3</td>
<td>40.7</td>
<td>40.5</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$33,256</td>
<td>$35,429</td>
<td>$36,123</td>
</tr>
<tr>
<td>Average Household Income</td>
<td>$43,637</td>
<td>$46,281</td>
<td>$49,432</td>
</tr>
<tr>
<td>Median Disposable Income</td>
<td>$29,355</td>
<td>$30,939</td>
<td>$31,950</td>
</tr>
<tr>
<td>Average Disposable Income</td>
<td>$36,186</td>
<td>$39,405</td>
<td>$41,143</td>
</tr>
<tr>
<td>In Poverty</td>
<td>24.0%</td>
<td>20.10%</td>
<td>22.80%</td>
</tr>
<tr>
<td>Area in square miles</td>
<td>144</td>
<td>207</td>
<td>185</td>
</tr>
<tr>
<td>Estimated Population per square mile</td>
<td>39.7</td>
<td>50.5</td>
<td>173.3</td>
</tr>
<tr>
<td>Estimated Households per square mile</td>
<td>16.6</td>
<td>20.3</td>
<td>71.4</td>
</tr>
<tr>
<td>Daytime population</td>
<td>5,320</td>
<td>9,906</td>
<td>39,829</td>
</tr>
<tr>
<td>Business establishments</td>
<td>183</td>
<td>310</td>
<td>1,323</td>
</tr>
</tbody>
</table>

Sources/Notes: Synergies Technologies Inc., Popstats
Retail Trade Analysis

1. Benton, like most rural counties in the State, has experienced notable volatility in retail sales. Between 2001 and 2016 annual changes varied from a high of 14.8% in 2004 to a low of -2.1% in 2009 during the height of the Great Recession.

2. The County is experiencing substantial leakage of potential retail sales. An estimated 25% of retail sales in 2016 ($54.1 million) was lost to outshopping. This is up from 15% leakage in 2008.

3. In the Prerecession period (2001-2007) Benton experienced a higher rate of growth than all neighboring counties. During the Recession losses were nearly identical to the average for all of Rural MO (-3.1%), neighboring Pettis and Hickory counties were among the few counties that experienced an increase in sales. In the Recovery from the recession retail sales growth (12.6%) lagged all benchmarks except Pettis.

4. The 6.0% annual growth rate prior to the recession decreased to 2.7% in the 2012 to 2016 period (2012 was the first year sales increased after the recession). If Benton would have grown at the Prerecession rate of 6.0% during the Recovery there would have been an additional $43.4 million in sales.

5. Several retail sectors posted exceptional growth in the 2012 to 2016 period including: General Merchandise 20.7%, Eating and Drinking Places 19.5%, Building Materials, Garden, Hardware and Mobile Home Dealers 87%, Automotive Repair 134.3% Home Furniture and Furnishing 78.8% -- all of these sectors had sales growth of $500,000+.

6. Per capita retail sales increased from $6,056 in 2001 to $8,725 in 2016. The 44.1% increase was significantly above the State growth of 25.2%, however in 2016 the County per capita sales of 8,725 was only 64% of the State average of $13,694.

### Change in Retail Sales for Selected Years (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Prerecession</th>
<th></th>
<th>Recession</th>
<th></th>
<th>Recovery</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benton</td>
<td>$43.88</td>
<td>41.6%</td>
<td>-$4.59</td>
<td>-3.1%</td>
<td>$18.22</td>
<td>12.6%</td>
</tr>
<tr>
<td>Camden</td>
<td>$152.48</td>
<td>24.1%</td>
<td>-$111.42</td>
<td>-14.2%</td>
<td>$131.30</td>
<td>19.5%</td>
</tr>
<tr>
<td>Henry</td>
<td>$26.58</td>
<td>12.6%</td>
<td>-$7.08</td>
<td>-3.0%</td>
<td>$29.45</td>
<td>12.8%</td>
</tr>
<tr>
<td>Hickory</td>
<td>$10.33</td>
<td>31.0%</td>
<td>$1.47</td>
<td>3.4%</td>
<td>$7.35</td>
<td>16.3%</td>
</tr>
<tr>
<td>Morgan</td>
<td>$39.97</td>
<td>28.1%</td>
<td>-$5.12</td>
<td>-8.2%</td>
<td>$53.76</td>
<td>30.3%</td>
</tr>
<tr>
<td>Pettis</td>
<td>$97.91</td>
<td>21.3%</td>
<td>$26.44</td>
<td>4.7%</td>
<td>$32.19</td>
<td>5.5%</td>
</tr>
<tr>
<td>Rural MO</td>
<td>$1,473.51</td>
<td>26.8%</td>
<td>-$214.13</td>
<td>-3.1%</td>
<td>$1,026.76</td>
<td>15.2%</td>
</tr>
<tr>
<td>Missouri</td>
<td>$12,419.35</td>
<td>20.1%</td>
<td>-$4,137.53</td>
<td>-5.6%</td>
<td>$13,448.50</td>
<td>19.2%</td>
</tr>
</tbody>
</table>
Survey Research

Missouri Rural Development Partners wanted to conduct a statewide survey to identify concerns and issues at the local level. ExCEED worked with the Department of Economic Development and MRDP to create a survey and managed all data collection, analysis, and report writing.
Other examples of ExCEED work

Each year ExCEED responds to over 50 requests for a wide variety of applied research support. A few examples:

• Warrensburg Main Street needed a profile for the Warrensburg downtown.

• An agriculture supply business in Bollinger County is hiring new employees and wanted to know the average wages for detailed occupational titles in surrounding counties.

• Warsaw is preparing an application for a Federal grant and needs help identifying how the planned transportation improvements will impact the local economy.

• A Catholic priest working with Hispanic families in northeast Missouri needs help identifying where there are high densities of Hispanic households.

• Lexington is preparing a grant application and needs income data for a neighborhood.

• Poplar Bluff is thinking about building a new police station and wanted to know the location that provides the best access to the targeted service area.
Brookfield-Marceline Labor Force Talking Points and Considerations

1. Linn County has a significantly higher concentration of manufacturing workers than neighboring communities. 18.2% of the workforce is employed in manufacturing compared with 7.2% in Livingston County and 8.3% in Macon.

2. Linn County has more unemployed job seekers with manufacturing experience. In the most recent estimate of unemployed by industry Linn had 59 manufacturing workers looking for a job compared with 16 in Livingston and 25 in Macon.

3. The labor force has been growing in recent years. Most rural areas have experienced a shrinking labor force since the end of the recession. In the 2016 to 2017 period the labor force increased a modest 20 persons but in Livingston (-27) and Macon (-87) there were losses.