Recent Cross County Commuting Patterns

Local Employment Dynamics (LED) Workshop Presentation

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Jeff Rosenthal
Senior Labor Market Analyst
NC Department of Commerce
Who is LEAD?

NC’s primary source of economic & labor market data, information, & analysis

Funding
Multiple sources, including state $
Most significantly by US Dept. of Labor (BLS & ETA)
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NC Economic Trends Blog:
The LEAD FEED
https://www.nccommerce.com/news/the-lead-feed

On Twitter:
@CareersInNC
@LeadNC
Goal of Research

• To better understand commuting patterns and labor markets across North Carolina
Mean commuting time and how it has changed

Significant Changes 2010-2014 to 2015-2019*

Diff. in Minutes
-3.6  5.6

Source: U.S. Census Bureau. American Community Survey 5-Year Estimates
Interconnected Markets (Average 2011-2014)

Percentages represent the residents that live and work in that labor market.

Strongly Interconnected Markets, SIM (Greater Than 50% Cohesion)
Loosely Interconnected Markets, LIM (Less Than 50% Cohesion)
Changing patterns towards increased cross-county commuting
Do workers live and work in the same county, and if so, how has this relationship changed over time?
Population’ (16+, noninstitutionalized)

Employed + Unemployed = LABOR FORCE for Orange County

Jobs/Employment Wake County
Do workers live and work in the same county, and if so, how has this relationship changed over time?
Method for work/live in same county
### Method for work/live in same county

<table>
<thead>
<tr>
<th>County</th>
<th>2018 Inflow/Outflow Job Counts (Private Primary Jobs)</th>
<th>Employed in County Live Outside (A)</th>
<th>Employed and Live in County (B)</th>
<th>Live in County Employed Outside (C)</th>
<th>Residents of County Workers (B+C)</th>
<th>Percent (B/(B+C))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamance County</td>
<td>27,983</td>
<td>24,485</td>
<td>33,001</td>
<td>57,486</td>
<td>42.6%</td>
<td></td>
</tr>
<tr>
<td>Alexander County</td>
<td>4,445</td>
<td>3,344</td>
<td>9,288</td>
<td>12,632</td>
<td>26.5%</td>
<td></td>
</tr>
<tr>
<td>Alleghany County</td>
<td>1,107</td>
<td>1,160</td>
<td>1,794</td>
<td>2,954</td>
<td>39.3%</td>
<td></td>
</tr>
<tr>
<td>Anson County</td>
<td>2,848</td>
<td>2,028</td>
<td>5,683</td>
<td>7,711</td>
<td>26.3%</td>
<td></td>
</tr>
</tbody>
</table>
Method for work/live in same county

- First time we did this, we just used OnTheMap and pulled the following pieces of information for each county using Inflow/Outflow Analysis.

- Only takes 100 sets of clicks for each of the 100 counties in NC, and then data entry for 3 data points each.

- For each year.
Results for work/live in same county

Number of Counties where majority of worker residents work in the same county they live in
Results for work/live in same county 2005

Source: U.S. Census Bureau. LODES Private Primary Jobs
Results for work/live in same county 2018

Source: U.S. Census Bureau. LODES Private Primary Jobs
Question for commuting patterns by labor market

• What can we learn about the nature of commuting patterns by examining these by size of labor market?

• Do workers from large metro areas commute outside their region?

• Do workers from smaller sized counties and labor markets commute into larger sized labor markets?
What do we mean by labor market size?

North Carolina’s Labor Markets by Size

- Large Labor Markets
- Medium Labor Markets
- Micropolitan Labor Markets
- Rural Labor Markets
Method for commuting patterns by labor market

• Wrote SAS program to capture this by setting counties into our pre-set labor market sizes to see if workers commuted to other counties in similar labor market sizes.
## Results for commuting patterns by labor market

<table>
<thead>
<tr>
<th>Lives in...</th>
<th>Works in...</th>
<th>Large</th>
<th>Medium</th>
<th>Micropolitan</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>85.7%</td>
<td>9.7%</td>
<td>3.9%</td>
<td></td>
<td>0.7%</td>
</tr>
<tr>
<td>Medium</td>
<td>16.4%</td>
<td>74.9%</td>
<td>6.6%</td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>23.0%</td>
<td>21.1%</td>
<td>51.4%</td>
<td></td>
<td>4.6%</td>
</tr>
<tr>
<td>Rural</td>
<td><strong>16.6%</strong></td>
<td><strong>24.4%</strong></td>
<td>14.5%</td>
<td></td>
<td><strong>44.4%</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. LODES Private Primary Jobs
Live and Work in the Same County

Statewide, 47.7% of private primary workers work in the same county they live in.

This varies by Labor Market Size:

<table>
<thead>
<tr>
<th>Labor Market Size</th>
<th>% Live and Work in Same County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>51.4%</td>
</tr>
<tr>
<td>Medium</td>
<td>48.0%</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>40.8%</td>
</tr>
<tr>
<td>Rural</td>
<td>35.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. LODES Private Primary Jobs
## Results for commuting patterns by labor market (work outside home county)

<table>
<thead>
<tr>
<th>Lives in...</th>
<th>Works in...</th>
<th>Large</th>
<th>Medium</th>
<th>Micropolitan</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>70.6%</td>
<td>20.0%</td>
<td>8.0%</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>31.5%</td>
<td>51.7%</td>
<td>12.6%</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Micropolitan</td>
<td>38.8%</td>
<td>35.6%</td>
<td>17.8%</td>
<td>7.8%</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>25.8%</td>
<td>37.8%</td>
<td>22.5%</td>
<td>14.0%</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. LODES Private Primary Jobs
Results for commuting patterns by labor market

Workers in Rural and Micropolitan areas are:
  • more likely to work in a different county than their residence
  • more likely to drive to larger labor markets to work.

This process does not work in reverse.
Future Research

- Update Interconnected Markets research to see if these areas have shifted over time

- How commuting patterns relate to industrial patterns

- How commuting patterns relate to population growth or decline

- Keep eye on this relationship going forwards with potential increase in Working from Home
Thank You!

Jeff Rosenthal

jeff.rosenthal@nccommerce.com

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