Change in Exurbia: Demography, Policy and Research Needs

Jill Clark, The Ohio State University
Allen Prindle, Otterbein College
Larry Libby, The Ohio State University
Exurbia:
What is it?
Where is it?
And why do we care?

Jill Clark, Program Manager
Exurban Change Project
The Ohio State University
What is Exurbia?

- Exurban: Areas outside the outerbelt of a major metro area, but within its commutershed.

General Characteristics

- 10 to 50 miles from urban centers of approximately 500,000; or 5-30 miles from a city of at least 50,000
- Commuters travel at least 25+ minutes to work
- Communities containing a mix of long-term and newer residents
- Low density development
- A mix of urban and rural land uses

Adapted from: Daniels, 1999.
Current Research Projects

- National
  - Spatial patterns of exurbanization in the U.S.
    - Elena Irwin and Ron McChesney
- Ohio
  - Exurban township typology
    - Elena Irwin and Jeff Sharp
  - Exurban policy research, agricultural zoning
    - Peggy Kirk Hall
Spatial Patterns of Exurbanization in the US

- Examine the type, amount and patterns of land settlement in U.S. exurban areas
- Compare regional patterns of exurbanization and how they differ across metro areas
- Correlate these patterns with socio-demographic, landscape factors and other spatial characteristics
Initial Pattern Analysis
Initial Pattern Analysis
Regional Differences

Average Percent of Exurban Settlement in MSAs

- Mountain
- Pacific
- West North Central
- West South Central
- National Average
- East South Central
- South Atlantic
- East North Central
- Middle Atlantic
- New England
<table>
<thead>
<tr>
<th>Rank</th>
<th>MSA Name</th>
<th>Percent Exurban Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bridgeport--Stamford--Norwalk, CT</td>
<td>60%</td>
</tr>
<tr>
<td>2</td>
<td>Gainesville, GA</td>
<td>59%</td>
</tr>
<tr>
<td>3</td>
<td>New Haven--Milford, CT</td>
<td>58%</td>
</tr>
<tr>
<td>4</td>
<td>Barnstable Town, MA</td>
<td>55%</td>
</tr>
<tr>
<td>5</td>
<td>York--Hanover, PA</td>
<td>49%</td>
</tr>
<tr>
<td>6</td>
<td>Hartford--West Hartford--East Hartford, CT</td>
<td>48%</td>
</tr>
<tr>
<td>7</td>
<td>Boston--Cambridge--Quincy, MA-NH</td>
<td>48%</td>
</tr>
<tr>
<td>8</td>
<td>Providence--New Bedford--Fall River, NY</td>
<td>47%</td>
</tr>
<tr>
<td>9</td>
<td>Lancaster, PA</td>
<td>43%</td>
</tr>
<tr>
<td>10</td>
<td>Flint, MI</td>
<td>43%</td>
</tr>
<tr>
<td>11</td>
<td>Cleveland--Elyria--Mentor, OH</td>
<td>42%</td>
</tr>
<tr>
<td>12</td>
<td>Bremerton--Silverdale, WA</td>
<td>41%</td>
</tr>
<tr>
<td>13</td>
<td>Holland--Grand Haven, MI</td>
<td>41%</td>
</tr>
<tr>
<td>14</td>
<td>Norwich--New London, CT</td>
<td>41%</td>
</tr>
<tr>
<td>15</td>
<td>Dalton, GA</td>
<td>40%</td>
</tr>
<tr>
<td>16</td>
<td>Baltimore--Towson, MD</td>
<td>40%</td>
</tr>
<tr>
<td>17</td>
<td>Reading, PA</td>
<td>39%</td>
</tr>
<tr>
<td>18</td>
<td>Akron, OH</td>
<td>39%</td>
</tr>
<tr>
<td>19</td>
<td>Trenton--Ewing, NJ</td>
<td>38%</td>
</tr>
<tr>
<td>20</td>
<td>Spartanburg, SC</td>
<td>37%</td>
</tr>
<tr>
<td>21</td>
<td>Worcester, MA</td>
<td>36%</td>
</tr>
<tr>
<td>22</td>
<td>Johnson City, TN</td>
<td>35%</td>
</tr>
<tr>
<td>23</td>
<td>Cape Coral--Fort Myers, FL</td>
<td>35%</td>
</tr>
<tr>
<td>24</td>
<td>Raleigh--Cary, NC</td>
<td>35%</td>
</tr>
<tr>
<td>25</td>
<td>Philadelphia--Camden--Wilmington, PA</td>
<td>35%</td>
</tr>
<tr>
<td>26</td>
<td>Allentown--Bethlehem--Easton, PA-NJ</td>
<td>34%</td>
</tr>
<tr>
<td>27</td>
<td>Knoxville, TN</td>
<td>33%</td>
</tr>
<tr>
<td>28</td>
<td>New York--Newark--Edison, NY-NJ-PA</td>
<td>32%</td>
</tr>
<tr>
<td>29</td>
<td>Manchester--Nashua, NH</td>
<td>32%</td>
</tr>
<tr>
<td>30</td>
<td>Atlanta--Sandy Springs--Marietta, GA</td>
<td>32%</td>
</tr>
</tbody>
</table>
Correlated Variables – Preliminary Findings

**DEPENDENT VARIABLE – Proportion of study area in exurban settlement pattern**

- Region
- Population Characteristics
  - Central urban area population +
  - Central urban area density -
- Socio-economic Characteristics
  - Longer commutes +
  - Average household income +
- Geographic Characteristics
  - Accessibility - Road density +
  - Number of urban clusters +
  - Total square miles of metro area -
Township Typology:

Analyzing Differences among Ohio Exurban Communities
Identifying Township Types

Research Questions:

- What are the “types” of exurbanization?
- What are the characteristics of townships of different types of exurbanization?
- Can we predict how a township will progress through these types like stages to suburbanization?
Factors Determining Exurban Type

- Population density, amount of urbanization and population growth
- Economic and land use characteristics of the locale
- Demographic and socioeconomic characteristics of the residents
## Preliminary Results: Stages of Exurbanization

<table>
<thead>
<tr>
<th>Stage Description</th>
<th>Percent of All Townships</th>
<th>Percent of Township Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>21.0%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Stage 1: Low urban, slow growth</td>
<td>27.0%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Stage 2: Low urban, above average growth</td>
<td>15.3%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Stage 3: Low urban, fast growth</td>
<td>10.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Stage 4: Medium urban, above average growth</td>
<td>7.7%</td>
<td>22.7%</td>
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<tr>
<td>Stage 5: Med-high urban, below average growth</td>
<td>15.5%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Stage 6: High urban, average growth</td>
<td>3.4%</td>
<td>7.8%</td>
</tr>
</tbody>
</table>
Township Typology:
An Analysis of *Policy* in Exurbia
Zoning in Exurban Ohio

- Describe characteristics of local zoning that relate to development of agricultural or open land in exurban areas.
- Identify relationships between local zoning characteristics and a township’s stage of exurbanization.
- Identify relationships between local zoning characteristics and the use of land.
Zoning by Exurban Stage

The chart illustrates the distribution of zoning by exurban stage across various counties or townships. It shows the percentage of townships in each stage from rural to exurban, with categories for county or township zoning, rejected county, and no zoning. The stages are represented from 1 to 6, with stage 6 indicating the highest level of exurban development. The data suggests a trend where the percentage of townships with no zoning increases as one moves from rural to more exurban stages, while the percentage of townships with county or township zoning decreases.
Agricultural Zoning in Exurban Ohio

- Three approaches to agricultural zoning:
  - Agriculture is the primary (exclusive) use
  - Agriculture is a preferred use, but merely one of many permitted uses in a zone
  - Agriculture is an incidental or ignored use
Initial Results

- For townships in the earliest and later stages, we find more primary/exclusive approaches to agricultural zoning for the purpose of farmland base protection.
- For townships in the high-growth stages (3 and 4) we find that agriculture is excluded from the ordinance or it is an incidental use to a district.
- Most exurban townships are using outdated agricultural zoning approaches.
Exurbia

Why do we care?
Sign up here for the latest in from the project.
Policy Issues

Allen Prindle, Otterbein College
Policy History

1997: Ohio Farmland Preservation Task Force Recommendations

- Create Office of Farmland Preservation
- Create Easement Purchase Program
- TDR
- Viable Agriculture Development
Policy History

- 1999 SB223 “allow ODA, local governments, and nonprofit organizations to hold, acquire, and accept agricultural easements”
- No funding
- Donation Program created
## Policy History

### 2000 Clean Ohio Funds (4 years)

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
<th>Agency</th>
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<tbody>
<tr>
<td>Brownfields</td>
<td>$200 M</td>
<td>Development</td>
</tr>
<tr>
<td>Green Space</td>
<td>$150 M</td>
<td>Public Works</td>
</tr>
<tr>
<td>Trails</td>
<td>$25 M</td>
<td>ODNR</td>
</tr>
<tr>
<td>Farmland</td>
<td>$25 M</td>
<td>ODA</td>
</tr>
</tbody>
</table>
Ohio Agricultural Easement Purchase Program Ranking

- Statewide competition
- Minimum 25% local donation
- Soils
- “Intermediate” development pressure
- Clusters
- Local support
## Ohio Program Summary

<table>
<thead>
<tr>
<th></th>
<th>Funds (Mil)</th>
<th>Easements #</th>
<th>Acres #</th>
<th>Applicants #</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$7.85</td>
<td>24</td>
<td>4535</td>
<td>442</td>
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<tr>
<td>2003</td>
<td>$4.82</td>
<td>13</td>
<td>2913</td>
<td>299</td>
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<tr>
<td>2004</td>
<td>$3.1</td>
<td>14</td>
<td>2458</td>
<td>271</td>
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<tr>
<td>Donation</td>
<td>17</td>
<td>2277</td>
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<tr>
<td>Total</td>
<td>$15.7</td>
<td>68</td>
<td>12183</td>
<td>1012</td>
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</table>
Clean Ohio Funding

2005  $6.25 Mil
2006  $6.25 Mil

- Continued funding after 2006?
- Program included with brownfields, green space, trails?
- Regional or statewide?
- Other sources of funds?
Current Policy Questions

- Agricultural Security Areas
- Impact Fees
- Relationships with school funding, infrastructure funding
- CAUV
- TDR
- 5-acre subdivision exemption
- Zoning, Comprehensive planning
Current Policy Environment

- State Budget deficits
- Greater Ohio
- Wolpert Subcommittee on Growth and Land Use
- Annual Farmland Preservation Summit
Future Considerations

Build Coalitions:

- Rural/Urban
- Water
- County/Township/Muni
- Regions

Jobs: Need to compete with other states
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Research Needs for Exurban Policy

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C. William Swank Professor of Rural-Urban Policy
Ohio State University
Exurban land policy has evolved, not planned

- Purposes -- to protect open areas, guide development pattern
- General options are well known
- A “try and see” approach taken
- Researchers from many social science disciplines documenting the results
- Have been various efforts to identify information needs for policy design
- More coherent research agenda would be useful
Categories of Research Needed to Inform Policy Choice

- Understanding the drivers of change
- The implications of alternative development patterns
- Policy performance – consequences of the options
Drivers of Change at the Rural-Urban Interface

- Need better data on land use and land cover change
- Why do people and business move to exurbia – the influencers of change
- Understand adaptation strategies by farmers at the edge
- Analyze concepts of “critical mass” and “tipping points” between land use categories – slogans or substance?
- Diagnose exurban areas – typology, economy, demographics, correlations
Implications of Alternative Development Patterns

- Effects of fragmentation on ag and communities
- Costs to serve linear, cluster development patterns (cases)
- Human health effects (physical, psychological) of different patterns
- Document human preferences, what people value, willingness to pay for open space
- Political coalitions interested in development
- Effects on social capital
Performance of policy alternatives

- With/without – what difference do they make and who pays?
- Rural zoning – what is out there, implementation, effect on land use
- Effect of zoning on housing, community diversity, land value (cases)
- Incentives – use value, circuit breaker, impact fees, TIF
- Density transfer – TDR, mitigation, conservation development
Contact Information

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