Land Use Projections Past and Future

Perspectives in Little Rock Region
1993-2019
Recent Trends

- Regional population growth slightly above U.S. average, suburban counties growing faster than central (Pulaski) county
Suburban Region With High-Density Core

• Downtown core in Little Rock...
New Urbanism Springing Up

- Pockets of urban revival in downtown North Little Rock, Hendrix Village near downtown Conway, beginning in Benton
Multi-Family Rising in Importance, Poverty and Disinvestment Too
Control totals, hierarchy, observation, trends

PROJECTIONS
TELUM

• Metroplan was an original beta-tester (2002)
• Required heavy data development, but also improved our capability
• First run came out wacky – flawed inputs?
Land Use SatelliteData

[Map showing land use data with various colors representing different types of land use such as Developable Land, Residential, Commercial, Industrial, Other, Park, Right of Way, Flood Plain, Steep Slope, and Water. Counties such as Faulkner County, Pulaski County, and Lonoke County are also labeled on the map.]
First Run TELUM

• Completed in 2004
• Hollowed out downtown, midtown
• Agglomeration benefits?
First Run TELUM Insights

- Northern Saline County - wacky or prescient?
Low-Density Region

- Few external growth constraints
First Run TELUM Employment Insight

- Recognized approx location of major retail center
Past Assumptions Re-examined

FORECASTING IN HINDSIGHT
Art not science

- Land use models are useful but can’t do the heavy lifting
- Human judgment for the big picture
- Assumptions must be recorded and examined for validity
- Constant adjustment for new information
Precepts

• 1. Control total (triangulation on accuracy from top down and bottom up)
• 2. Hierarchy (means of getting from the simple to the complex, from overall to local)
• 3. Observation of Land traits.
• 4. Trends (telling things you can’t see)
Error Factors

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<tr>
<th>Geography</th>
<th>Name</th>
<th>HH 2019</th>
<th>Absolute Error</th>
<th>Percent Error</th>
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<td>Tract</td>
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Forecast vs Reality in Faulkner County

Metro 2020
Metro 2025
Actual
Forecast Change 1990-2020

Percent Change 1990-2020
-38% to 0%
0% to 25%
25% to 150%
150% to 598%
Actual Change 1990-2019

Percent Change 1990-2019
-81% to 0%
0% to 25%
25% to 150%
150% to 2894%

Conway
Little Rock
Benton
Cabot
Actual v Forecast: Too Low

Actual vs Forecast 1990 - 2019
- 50 to 325
- 325 to 875
- 875 to 1550
- 1550 to 3030

- Conway
- Cabot
- Little Rock
- Benton
Actual v Forecast: Too High
Close-up: Tract 30.01
Tract 30.01 – Creeping Redevelopment

![Graph showing the population trend over time. The y-axis represents the population, and the x-axis represents the years from 1990 to 2019/20. The population in 1990 was 2,161, decreased to 1,100 by 2010, and is forecasted to be 1,264 by 2019/20. The graph includes a bar chart for the year 2019/20, showing a significant drop from 1,100 to 1,264.]
Tract 42.13 – Western LR
Tract 42.13 – fast-growing suburban tract
Faulkner County

- Incredibly fast growth in early 90s, hard to get right.
- No trend to go from
- Tract 305.01 – greatest error in entire region
Tract 305.01 – Western Conway
Tract 305.01 – Super Fast-growing

• Largest error in entire projection
Old Tract 1 – Little Rock CBD
Little Rock CBD*

• Forecast decline for 2020 projection (in 1994)
• Trend shift looked likely for 2025 (in 1999)

*Tract 44, BG1 (Old Tract 1)
Back-Casting: Conclusions

• Accuracy greatest at overall level; least in small areas
• Fast-growing areas hardest to forecast
• Watch for local anomalies (Faulkner female fertility)
• Insight from land use modeling must be filtered
Words of Wisdom

- A useful exercise
- Usually the best there is; little competition
- Good for tracking trends, adjusting as you go
- Don’t get bogged down in TAZ-level details.