THE AUDRAIN COUNTY BASELINE: 1996-2006

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Introduction

This report describes a set of annual baseline projections on demographic, economic and fiscal conditions through 2006 for Audrain County, Missouri. Its findings are the product of an extensive analysis of the local economy, interviews with key public and private sector leaders throughout the county, and use of the Show Me Community Model, developed by the Rural Policy Research Institute (RUPRI).

The Show Me Community Model is based on sound economic theory, econometric techniques and years of empirical research and testing. It is designed to assist policy makers in assessing the impacts of a variety of economic and policy changes on their local community. For detailed information and documentation on the model, please contact the authors of this report.

Project Overview

Following a period of significant losses in employment and economic activity, Audrain County has recently attracted several new industries and hundreds of new manufacturing jobs, as well as a new women's state correctional center scheduled to open in 1998. The Show Me model and the baseline projections described in this report will assist public officials and county residents address the consequences of these and other future changes. The baseline does not represent a forecast of local economic performance. The model does not account for changes in the business cycle or other macroeconomic effects. Dollar figures are reported in constant 1995 terms, with no attempt to account for inflation. Rather than a forecast, the baseline is designed to help decisionmakers see local economic activity as a comprehensive system that is both logically consistent and statistically valid. The baseline can then be used as a measuring tool to estimate the direct and total effects of numerous expected changes.

Findings in this report are discussed in two separate sections. The first describes future demographic and economic conditions in Audrain County with no major changes. The second reports related fiscal implications for County government.

Acknowledgments

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Assessor) Stuart Miller (Co. Sheriff) William Johnson (City/County Health Dept. Director) and Mary Sobba (Audrain Co. Extension Office). The authors would also like to thank Tanna Parish (City of Mexico), Todd Hileman and Al Minner (City of Vandalia), and a number of county residents, including Dan Botts, Jim Dye, and Jim Glover, for insights and information shared. Finally, the authors thank the people of Audrain County and the Rural Policy Research Institute for providing funds to support this research.

Audrain County Commission

Richard Webber, Presiding Commissioner
  Thomas Groves
  Roger Young

Project Advisory Committee

  Don Bobbitt
  Fowler Ennis
  Bill Fennewald
  Byron Jahn
  Russell Runge
  Randy Sudbrock
  Bob Swank

Audrain County Baseline Projection, 1995-2006

<table>
<thead>
<tr>
<th>Variables</th>
<th>1995</th>
<th>2006</th>
<th>Absolute Change</th>
<th>Annual Growth Rate</th>
</tr>
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<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>23,600</td>
<td>26,287</td>
<td>2,687</td>
<td>1.03%</td>
</tr>
<tr>
<td>Labor force</td>
<td>12,410</td>
<td>13,959</td>
<td>1,549</td>
<td>1.13%</td>
</tr>
<tr>
<td>Employment by Workplace</td>
<td>12,097</td>
<td>13,761</td>
<td>1,664</td>
<td>1.25%</td>
</tr>
<tr>
<td>Employment by Residence</td>
<td>11,892</td>
<td>13,388</td>
<td>1,496</td>
<td>1.14%</td>
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<tr>
<td>Incommuters</td>
<td>1,949</td>
<td>2,240</td>
<td>292</td>
<td>1.36%</td>
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<tr>
<td>Outcommuters</td>
<td>1,743</td>
<td>1,867</td>
<td>124</td>
<td>0.65%</td>
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<tr>
<td>Unemployed</td>
<td>519</td>
<td>572</td>
<td>53</td>
<td>0.92%</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand for owner-occupied housing</td>
<td>7,054</td>
<td>7,853</td>
<td>799</td>
<td>1.03%</td>
</tr>
<tr>
<td>Demand for renter-occupied housing</td>
<td>2,509</td>
<td>2,907</td>
<td>398</td>
<td>1.44%</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Real Per Capita Income</td>
<td>$18,139</td>
<td>$20,991</td>
<td>$2,852</td>
<td>1.43%</td>
</tr>
<tr>
<td>Real Total Personal Income ($1,000)</td>
<td>$428,083</td>
<td>$551,781</td>
<td>$551,353</td>
<td>2.63%</td>
</tr>
</tbody>
</table>
Assessed Property Value ($1,000)  $187,350  $247,104  $59,754  2.90%
Retail Sales ($1,000)  $186,554  $241,595  $55,042  2.68%

Audrain County Revenues and Expenditures

General Fund
Revenues ($1,000)  $1,925  $2,456  $530  2.50%
Property tax  $244  $335  $91  3.41%
Sales tax  $933  $1,208  $275  2.68%
Intergovernmental revenues  $310  $289  ($21)  -0.61%
Charges for services  $370  $544  $173  4.25%
Interest income and other revenues  $69  $80  $11  1.47%
Expenditures  $1,871  $2,481  $609  2.96%
Sheriff  $285  $421  $135  4.31%
Jail  $268  $403  $135  4.57%
Court  $387  $518  $131  3.08%
Administration  $931  $1,139  $208  2.03%

Special Road & Bridge Fund
Revenues ($1,000)  $905  $1,204  $299  3.00%
Expenditures ($1,000)  $852  $1,190  $338  3.60%

Bridge Trust Fund
Revenues ($1,000)  $1,301  $1,788  $487  3.41%
Expenditures ($1,000)  $1,301  $1,788  $487  3.41%

Total Revenues ($1,000)  $4,131  $5,447  $1,317  2.90%
Total Expenditures ($1,000)  $4,024  $5,458  $1,434  3.24%
Revenues minus Expenditures ($1,000)  $107  ($11)  ($118)  -10.04%

Demographics and Economics

The following results are based on projected annual growth rates for local employment and real personal income, as well as expected increases associated with the women’s correctional center in Vandalia scheduled to open in 1998. Annual employment and per capita income growth rates were the subject of considerable discussion with members of this study’s advisory committee. The results are based on the average annual rates of the past fifteen, five and two years in the County.
In the current baseline, county population size increases from 23,600 to 26,300 -- an annual growth rate of just over one percent through 2006. Figure 1 illustrates population change in the county since 1970. After peaking in 1980, population size declined moderately for several years, due to employment loss and structural change in agriculture. Over the next ten years, this trend is reversed, due to recent and anticipated local employment gains.
Figure 2 illustrates expected growth in the civilian labor force -- the number of adult who live in the county and are now either gainfully employed or actively looking for work. In this baseline, labor force increases from 12,400 to 14,000 over the next ten years. This is significantly higher than in previous years because new residents are attracted to the area by new job opportunities, and because the proportion of women who work outside the home will continue to increase through the next decade.
Figure 3 shows both the number of full-time jobs located within the county (top line) and the number of full-time jobs held by Audrain County residents. In this baseline, employment is not projected to grow as rapidly as in the very recent past - but it still increases at approximately 1 percent per year through the projection period.
Figure 4 shows expected changes in the number of people who commute from outside the county, and the number of county residents who commute to another county for work. Projections on commuting patterns are particularly important in estimating changes in retail sales, as well as in certain revenues and expenditures for county government. In this baseline, incommuting grows almost 1.5 percent each year through 2006. Residents in surrounding counties are attracted by new local jobs. Outcommuting behavior changes differently. In the short run, many local residents stop commuting to take jobs within the county. However, in a few years, outcommuting is expected to increase at a rate parallel to that for incommuting. This reversal in the trend reflects an expected increase in two+ worker households in the county. Many of these new householders will find employment in Audrain -- but a number of their spouses may decide to commute to work in other locations.
Figure 5 shows the number of unemployed adults in the Audrain County labor force. Unlike in the early 1980’s, the current baseline projects low unemployment rates through 2006. The number of unemployed persons increases slightly, but at a slower rate than the number of jobs available. This projection assumes no major changes in macroeconomic conditions through out the period.
Figure 6 shows the number of renter- and owner-occupied housing units in Audrain County. In the 1980’s, the number of units actually declined, because more older units were taken out of service than new ones added. Since 1990, new construction has increased in response to growing personal income in the area, as well as pent up demand for better housing. Over the next ten years, population, employment and income growth will generate demand for 800 new owner-occupied and 400 new renter-occupied units -- a significant increase over the previous decade.

The average cost of housing is likely to increase significantly over time as well. However, this increased cost is due to the demand for new houses on the upper end of the market -- well in access of $100,000.
Figure 7 shows expected growth in real per capita income through the baseline period. This indicator is often used to measure both local quality of life and productivity growth in a local economy. For the baseline period, real per capita income grows from approximately $18,000 to $21,000 -- or about 1.4 percent annual growth. Real growth of 1 percent per year is considered good in most areas.
Figure 8 shows total personal income (in 1995 dollars) grows through the projection period from $430 million to $551 million -- about 2.6 percent annually. This growth is the result of increased employment and increased real per capita income as well.
Assessed real and personal property value is important in estimating certain county revenues and expenditures. After an adjustment in 1995, assessed property values increase approximately $60 million through the baseline period -- an increase of nearly three percent per year. This increase is generated by increased income in the county and increased demand for better housing.
Figure 10 shows expected retail sales growth within the county, measured in 1995 dollars. The baseline indicates that sales will increase from $185 million in 1995 to nearly $250 million in 2006 -- about 2.7 percent growth per year. This expansion is generated by increased employment and population size, increased commuting traffic and growth in personal income.

Audrain County Revenues and Expenditures

The Show Me Community Model also projects changes in county revenues and changes in the demand for public services, such as law enforcement, roads and bridges and general administration.
Figure 11 shows changes in revenues and demand for expenditures for the county’s general fund. General revenues are expected to grow at an annual rate of 2.5 percent. These funds are used to provide for such services as law enforcement, county corrections, court expenses and general administration. Demand for these services are expected to grow at a three percent annual rate -- somewhat faster than the growth of revenues. By Missouri law, the county is not authorized to spend more than it takes in over time. The rapid growth in demand for services -- particularly to insure public safety -- suggests that county government will be challenged in the future to deliver public services even more efficiently, and generate new sources of government revenue as well.
Figure 12 shows projected revenues and expenditures on county roads and bridges. Revenue growth in this fund is due to expected increase in property value in the county, as well as an increase in the state’s fuel tax rate. In the baseline, roads and bridge fund revenue increase by three percent annually. On the other hand, demand for increased expenditures in this category grows at a faster pace -- 3.6 percent -- due to growth in population, housing commuting and other traffic, as well as personal income.
Figure 13 shows expected increases in revenues collected from the special .5 cent sales tax for bridge repair and replacement -- continued through out the baseline period. Expenditures for these services will reflect revenues collected from this tax and from any available intergovernmental
Figure 15 shows total revenues and expenditures (in 1995 dollars) expected through the baseline period. Over time, demand for services is expected to grow faster than the growth of overall revenue. By 2006, demand for expenditures exceeds available revenues by approximately $120,000. Clearly, if these trends continue, the county will be under increased pressure to find new revenue sources to assure the quality of public services is maintained.