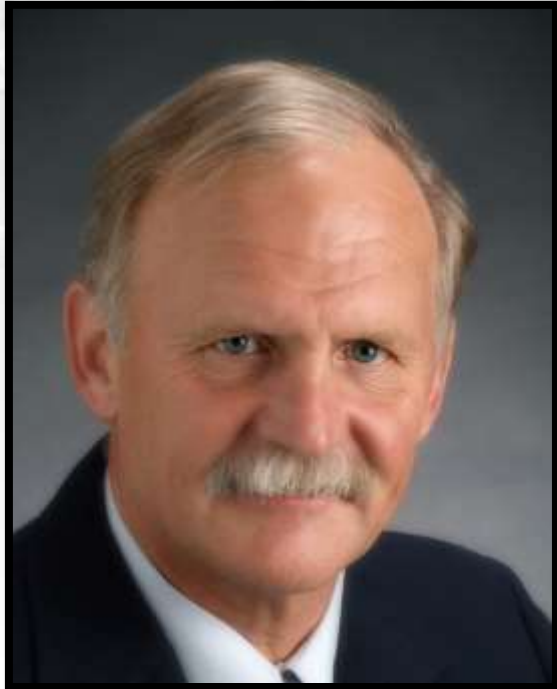


# *Eastern Arkansas Demographic & Economic Trends: An Exploratory Analysis*



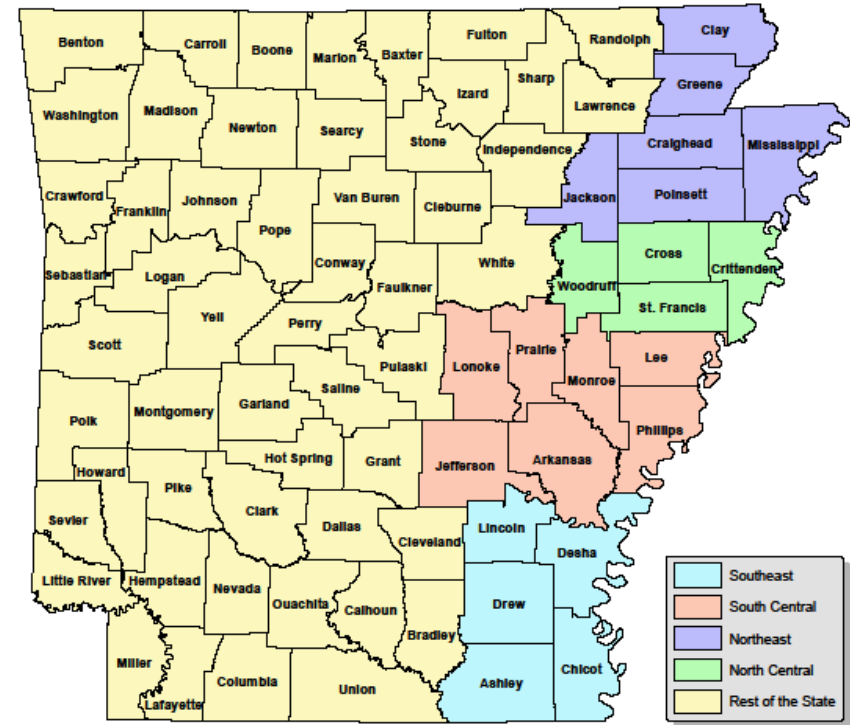
Dr. Greg Hamilton

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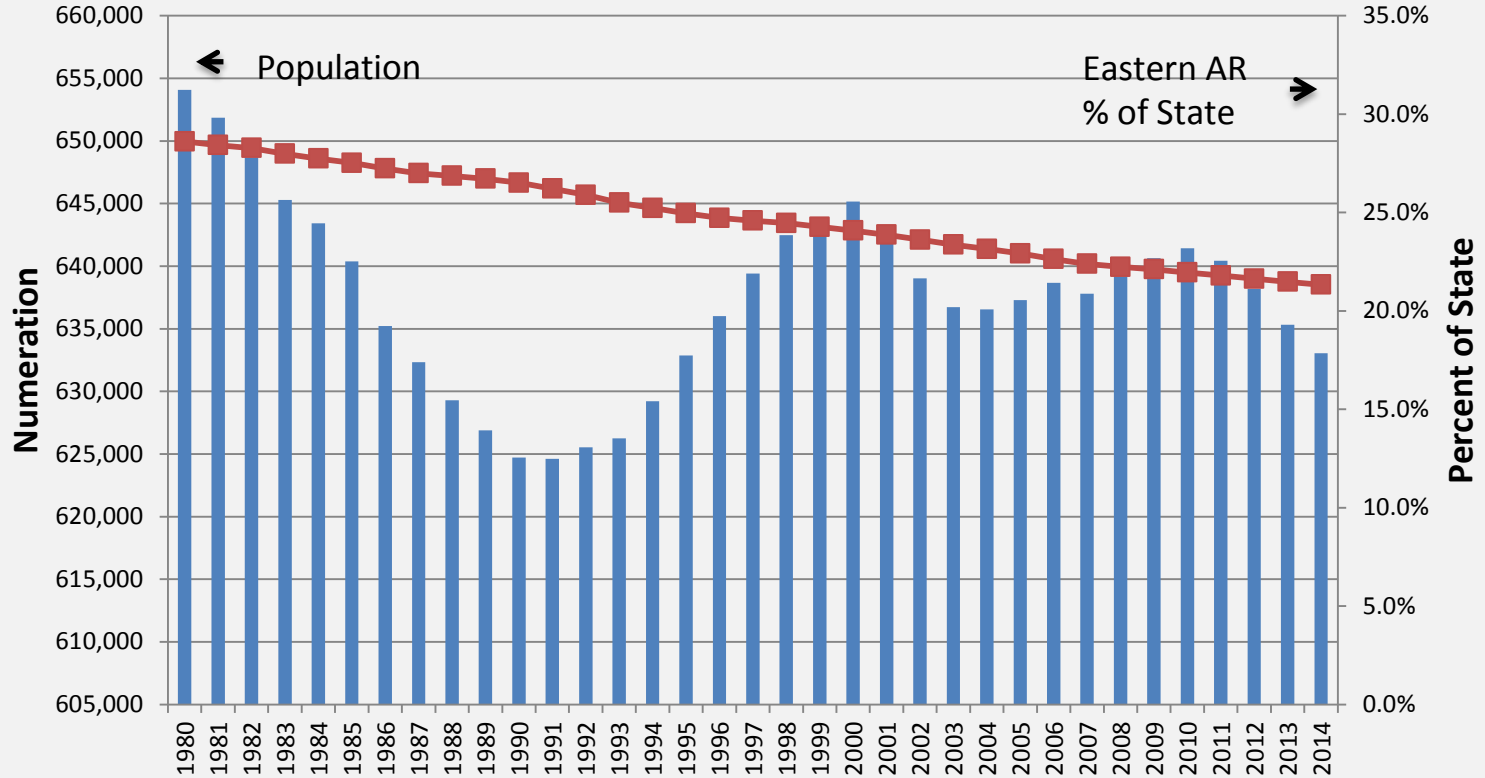
# Topic Areas:

- Population Characteristics and Trends
- Personal Income Facts and Trends
- Per Capita Personal Income Facts and Trends
- Economic Development Indicators
- Labor Force Characteristics
- Jobs in Eastern Arkansas
- Policy Implications

Regions of Eastern Arkansas



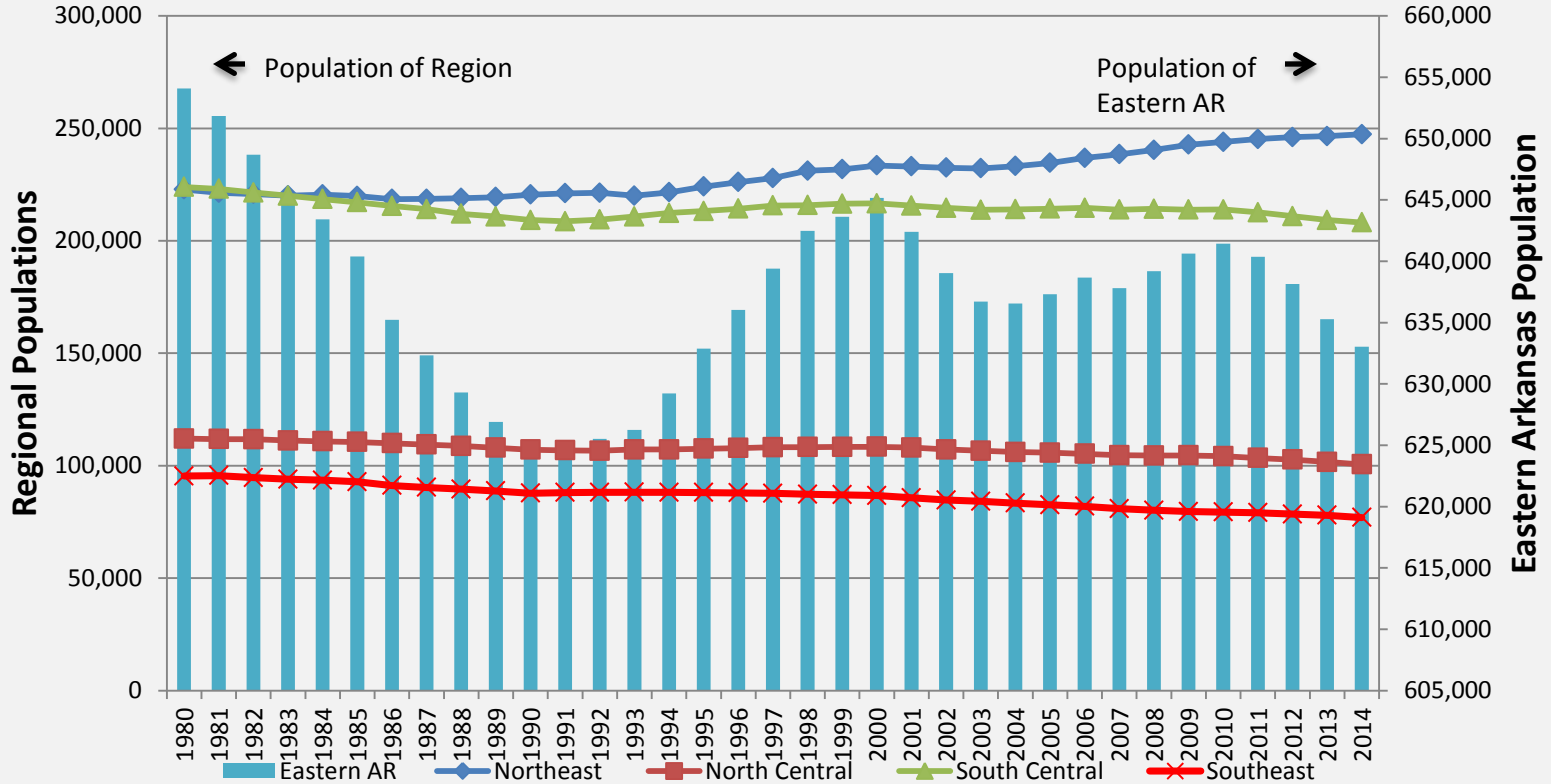
# Eastern Arkansas Counties Historic Population Count



Data Source: U.S. Census Bureau

Region % of state

# Annual Population Estimates Eastern Arkansas



Source: U.S. Census Bureau

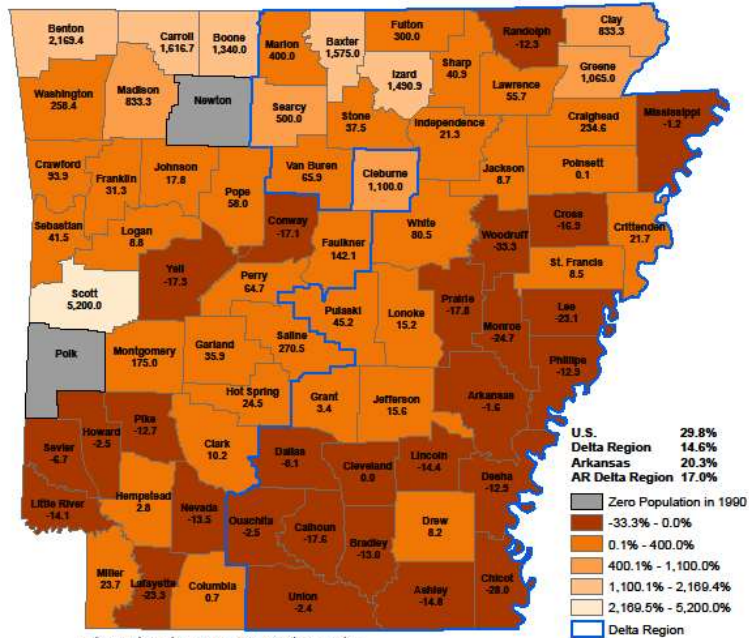
## County Annualized Populatiopn Growth 1980-2014

| Population Growth Rates |               | Annualized Growth Rate |       |       |       |       |
|-------------------------|---------------|------------------------|-------|-------|-------|-------|
|                         |               | 80-89                  | 90-99 | 00-09 | 10-14 | 80-14 |
| Eastern Arkansas        |               |                        |       |       |       |       |
| Crittenden              | North Central | 0.1%                   | 0.1%  | -0.1% | -0.3% | 0.0%  |
| Cross                   | North Central | -0.6%                  | 0.2%  | -0.2% | -0.4% | -0.5% |
| St. Francis             | North Central | -0.7%                  | 0.3%  | -0.3% | -0.5% | -0.4% |
| Woodruff                | North Central | -1.6%                  | -0.8% | 0.8%  | -0.5% | -1.5% |
| Clay                    | Northeast     | -1.3%                  | -0.2% | 0.2%  | -0.7% | -0.9% |
| Craighead               | Northeast     | 0.8%                   | 1.7%  | -1.7% | 0.6%  | 1.5%  |
| Greene                  | Northeast     | 0.3%                   | 1.6%  | -1.6% | 0.4%  | 1.1%  |
| Jackson                 | Northeast     | -1.4%                  | -0.2% | 0.2%  | -0.3% | -0.6% |
| Mississippi             | Northeast     | -0.3%                  | -1.1% | 1.1%  | -0.5% | -0.9% |
| Poinsett                | Northeast     | -0.9%                  | 0.4%  | -0.4% | -0.1% | -0.3% |
| Arkansas                | South Central | -1.2%                  | -0.4% | 0.4%  | -0.2% | -0.8% |
| Jefferson               | South Central | -0.5%                  | -0.2% | 0.2%  | -0.7% | -0.7% |
| Lee                     | South Central | -1.7%                  | -0.2% | 0.2%  | -0.6% | -1.4% |
| Lonoke                  | South Central | 1.3%                   | 3.1%  | -3.0% | 0.5%  | 2.2%  |
| Monroe                  | South Central | -2.2%                  | -1.0% | 1.0%  | -0.8% | -1.9% |
| Phillips                | South Central | -1.9%                  | -0.8% | 0.8%  | -0.9% | -1.7% |
| Prairie                 | South Central | -0.6%                  | 0.1%  | -0.1% | -0.5% | -0.6% |
| Ashley                  | Southeast     | -0.8%                  | 0.0%  | 0.0%  | -0.5% | -0.7% |
| Chicot                  | Southeast     | -1.2%                  | -1.0% | 1.0%  | -0.6% | -1.4% |
| Desha                   | Southeast     | -1.6%                  | -1.0% | 1.0%  | -0.6% | -1.4% |
| Drew                    | Southeast     | -0.2%                  | 0.8%  | -0.8% | 0.0%  | 0.1%  |
| Lincoln                 | Southeast     | 0.2%                   | 0.6%  | -0.6% | -0.1% | 0.1%  |
| Eastern Arkansas        |               | -0.5%                  | 0.3%  | -0.3% | -0.1% | -0.1% |
| Arkansas State Total    |               | 0.3%                   | 1.3%  | -1.3% | 0.2%  | 0.8%  |

Data Source: U.S. Census Bureau

## Percent Change in Black Population\*; Arkansas by County: 1990-2010

\*(one race only)



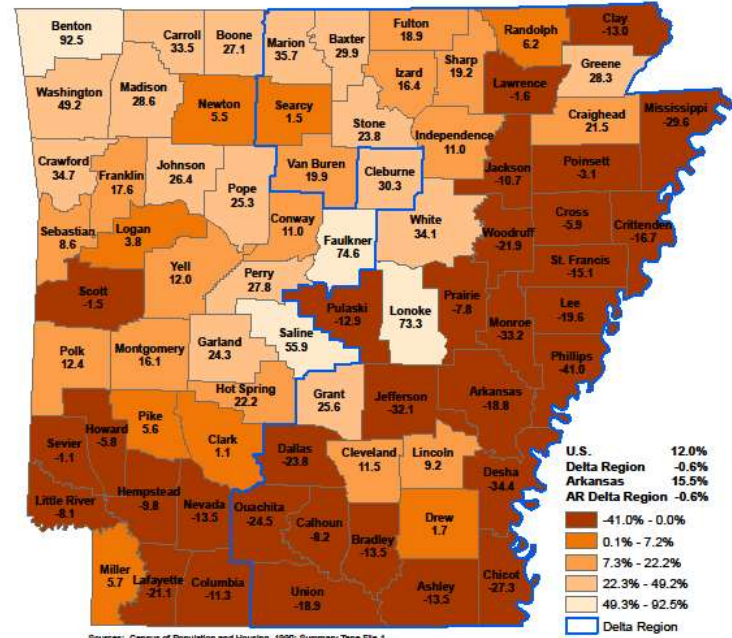
Note: In most cases the large 1990 - 2010 percent change in the Black population is attributed to a low 1990 base population.

Sources: Census of Population and Housing, 1990: Summary Tape File 1 on CD-ROM prepared by the Bureau of the Census, 1991; and 2010 Census Summary File 1 prepared by the U.S. Census Bureau, 2011

Prepared by the University of Arkansas at Little Rock GIS Applications Laboratory, Institute for Economic Advancement.

## Percent Change in White Population\*; Arkansas by County: 1990-2010

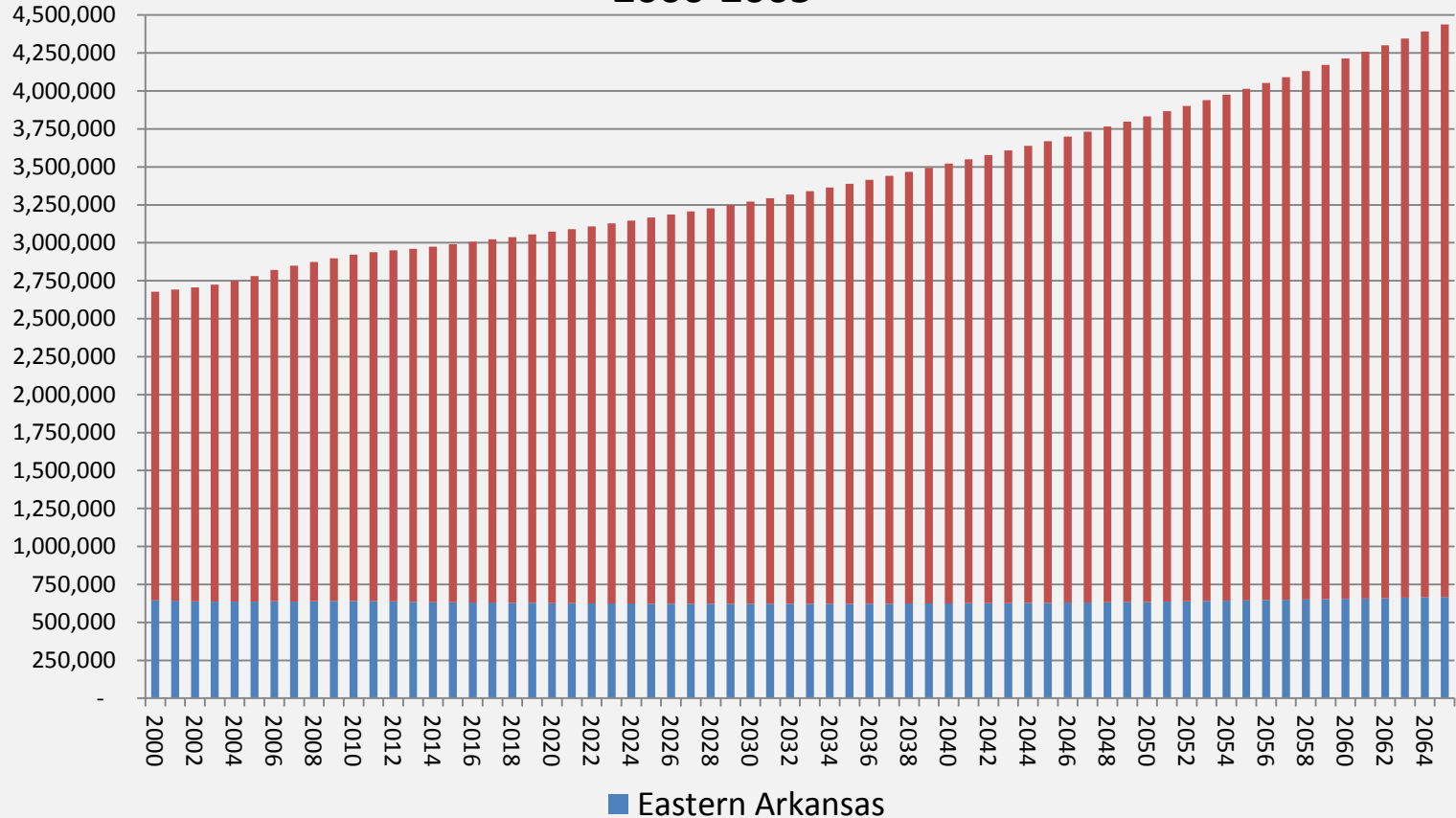
\*(one race only)



Sources: Census of Population and Housing, 1990: Summary Tape File 1 on CD-ROM prepared by the Bureau of the Census, 1991; and 2010 Census Summary File 1 prepared by the U.S. Census Bureau, 2011

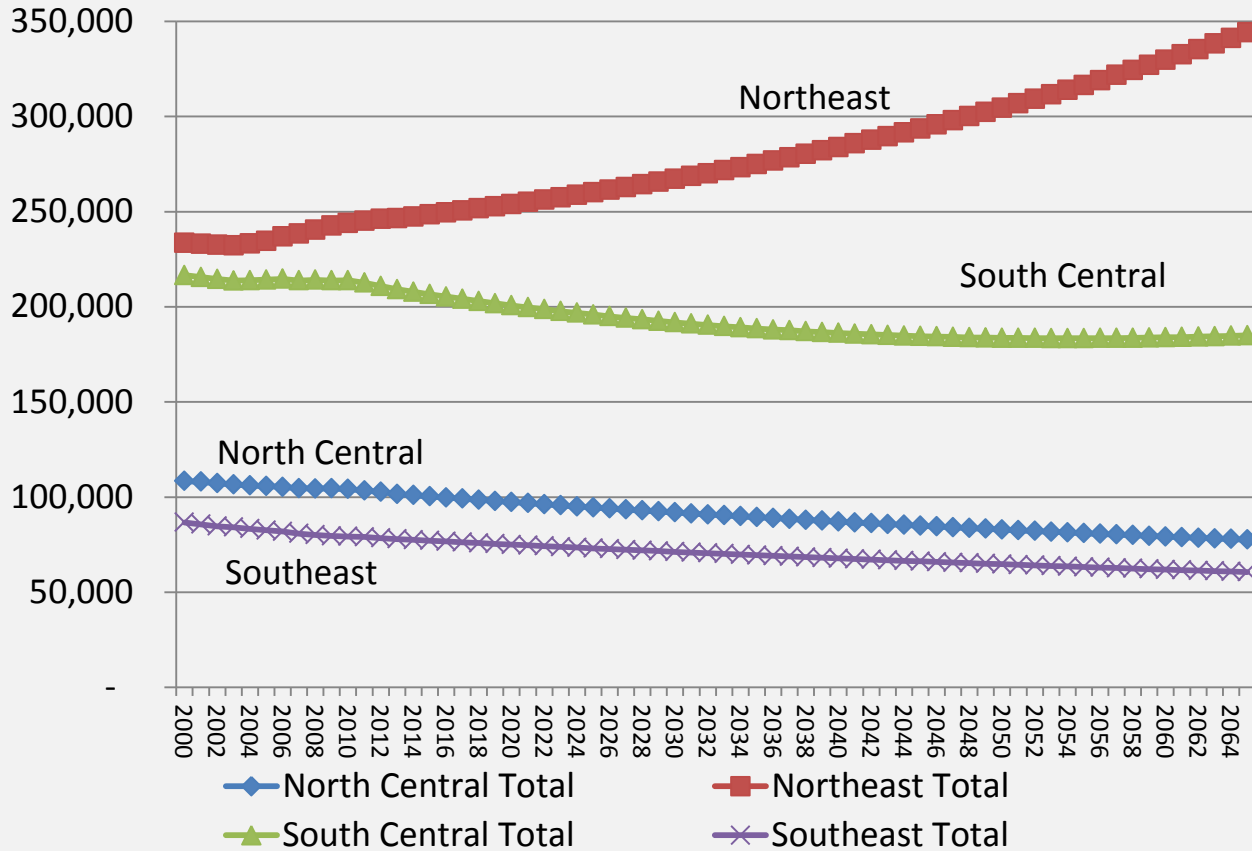
Prepared by the University of Arkansas at Little Rock GIS Applications Laboratory, Institute for Economic Advancement.

# Population Projections Arkansas and Eastern Arkansas 2000-2065



Source: IEA Projections

# Eastern Arkansas Population Projections by Region 2014-2065





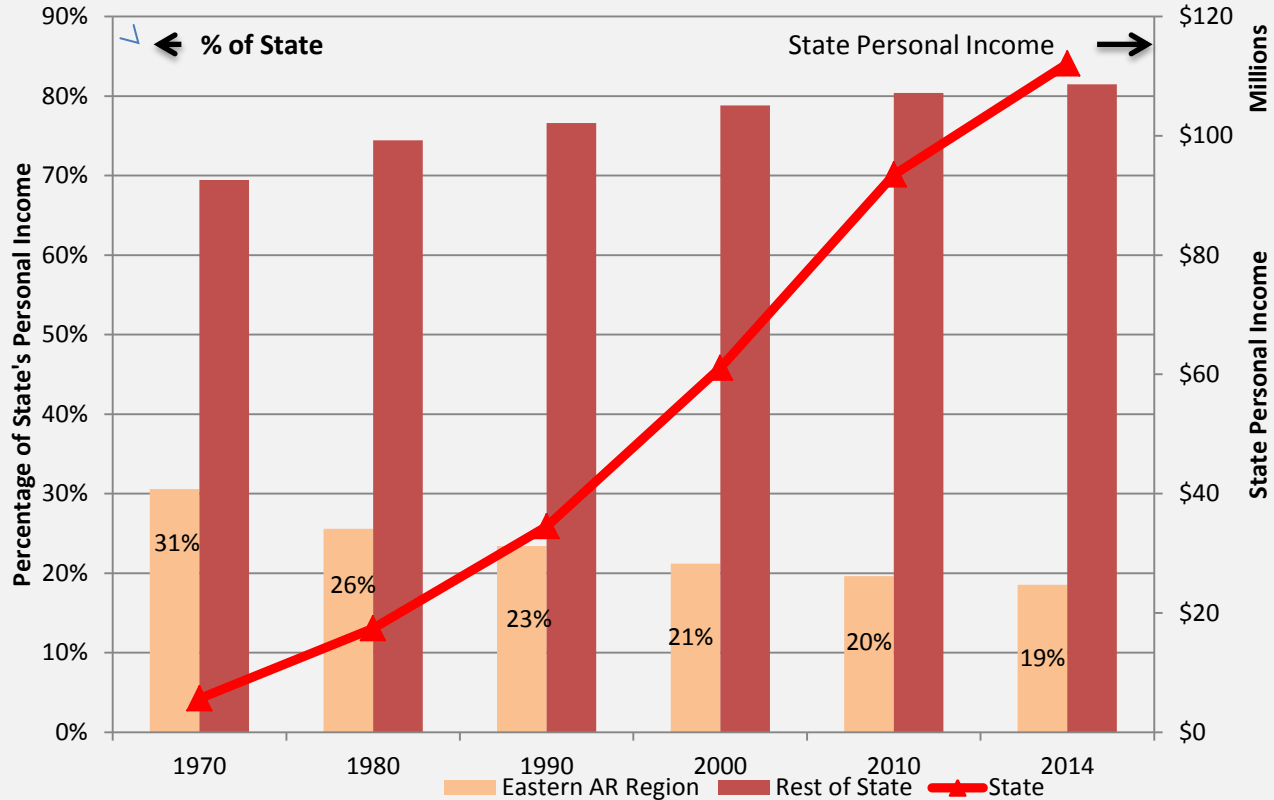
# Personal Income is a measure of:

The income received by the households.

The sum of wage and salary disbursements, supplements to wages and salaries, proprietors' income, rental income of persons, personal dividend income, personal interest income, and personal current transfer receipts, less contributions for government social insurance.

Personal income is a place of residence measure and provides a measure of fiscal capacity. (The size of an economic pie for households)

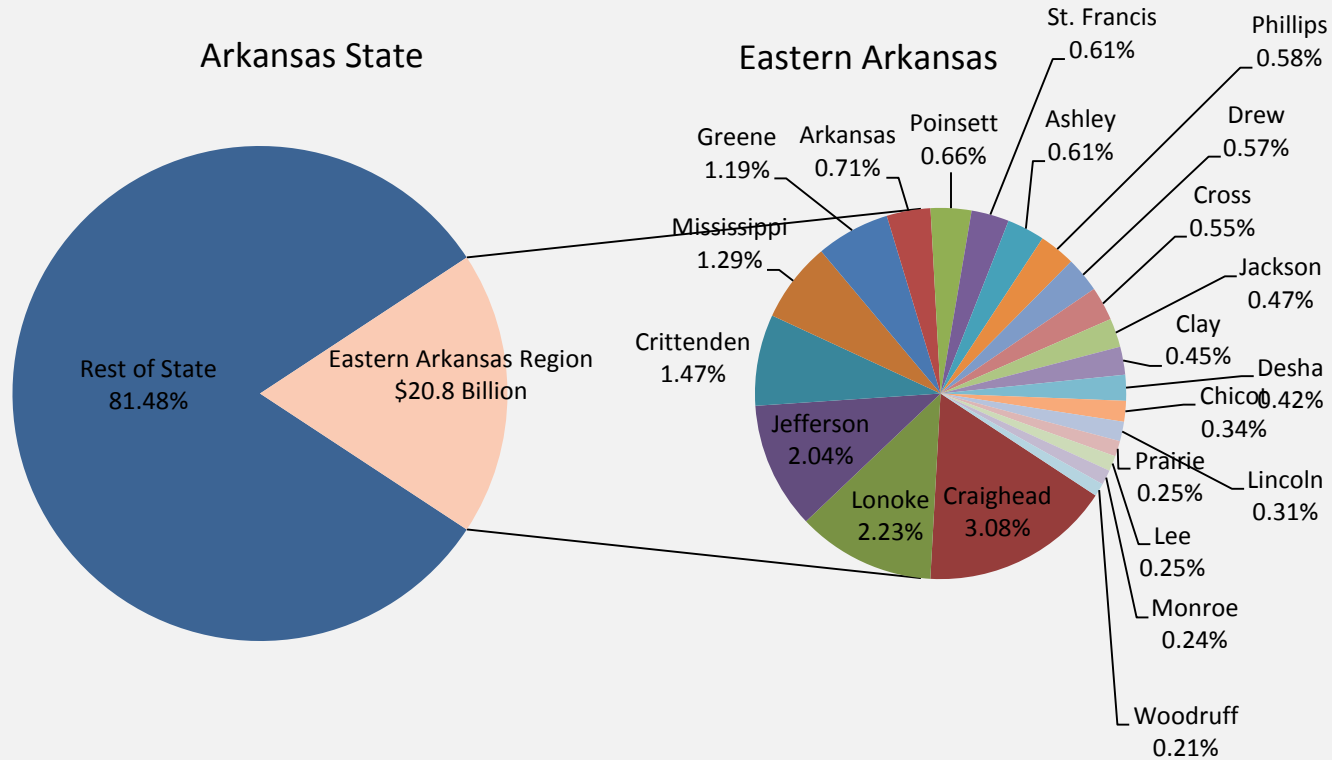
## State Personal Income and Percentage Share by Region (Selected years)



Data: Source: Bureau of Economic Analysis

# Distribution of Arkansas' Personal Income: 2014

## (State Personal Income \$112 Billion)



Source: Bureau of Economic Analysis

## Per Capita Personal Income & Economic Development



Lower Per Capita Personal Income

What happened to  
Per Capita Personal  
Income?



Higher Per Capita Personal Income



Per Capita Personal Income Growth = Personal Income Growth Less Population Growth

## Demographic and Economic Indicators of Economic Development Matrix of Possible Outcomes

| Indicators: Personal Income Growth & Population Growth | State population growth less than region | State population growth greater than region | Regional population growth negative |
|--|--|---|-------------------------------------|
| State Personal Income growing faster than region       | x  | Moderate Performance                        | Population in decline               |
| State Personal Income growing slower than region       | x  | x   | x                                   |

### Economic Development Indicators

Languishing: Per Capita Personal Income growth less than state

Thriving: Per Capita Personal Income growth greater than state

| Demographic and Economic Indicators For Economic Development |                             |                        |  |                                   |  |
|--|-----------------------------|------------------------|--|-----------------------------------|--|
| 1970-1980  | Annualized Growth Rates     |                        |  | Indicators Relative to the State  |  |
| Region   | Personal Income Growth Rate | Population Growth Rate | Per Capita Personal Income Growth Rate | Demographic & Economic Indicators | PCPI Performance Relave to State Indicator |
| Eastern AR   | 9.9%                        | 0.4%                   | 9.5%                                   | Moderate Performance              | Languishing                                |
| State  | 11.9%                       | 1.7%                   | 10.2%                                  |                                   |  |
| 1980-1990  |                             |                        |  |                                   |  |
| Northeast  | 6.7%                        | -0.2%                  | 6.9%                                   | Population in Decline             | Thriving                                   |
| North Central  | 6.3%                        | -0.4%                  | 6.7%                                   | Population in Decline             | Languishing                                |
| South Central  | 5.7%                        | -0.7%                  | 6.4%                                   | Population in Decline             | Languishing                                |
| Southeast  | 5.5%                        | -0.8%                  | 6.4%                                   | Population in Decline             | Languishing                                |
| Eastern AR   | 6.1%                        | -0.5%                  | 6.6%                                   | Population in Decline             | Languishing                                |
| State  | 7.1%                        | 0.3%                   | 6.8%                                   |                                   |  |
| 1990-2000  |                             |                        |  |                                   |  |
| Northeast  | 4.8%                        | 0.4%                   | 4.4%                                   | Moderate Performance              | Languishing                                |
| North Central  | 4.5%                        | 0.1%                   | 4.4%                                   | Moderate Performance              | Languishing                                |
| South Central  | 4.7%                        | 0.3%                   | 4.3%                                   | Moderate Performance              | Languishing                                |
| Southeast  | 5.1%                        | -0.1%                  | 5.2%                                   | Population in Decline             | Thriving                                   |
| Eastern AR   | 4.7%                        | 0.2%                   | 4.5%                                   | Population in Decline             | Languishing                                |
| State  | 5.9%                        | 1.3%                   | 4.6%                                   |                                   |  |
| 2000-2010  |                             |                        |  |                                   |  |
| Northeast  | 3.6%                        | 0.3%                   | 3.3%                                   | Moderate Performance              | Languishing                                |
| North Central  | 3.2%                        | -0.4%                  | 3.6%                                   | Population in Decline             | Thriving                                   |
| South Central  | 3.7%                        | -0.1%                  | 3.8%                                   | Population in Decline             | Thriving                                   |
| Southeast  | 3.1%                        | -0.9%                  | 3.9%                                   | Population in Decline             | Thriving                                   |
| Eastern AR   | 3.5%                        | -0.1%                  | 3.6%                                   | Population in Decline             | Thriving                                   |
| State  | 4.3%                        | 0.9%                   | 3.5%                                   |                                   |  |
| 2010-14  |                             |                        |  |                                   |  |
| Northeast  | 1.5%                        | 0.1%                   | 1.4%                                   | Moderate Performance              | Languishing                                |
| North Central  | 1.2%                        | -0.4%                  | 1.5%                                   | Population in Decline             | Languishing                                |
| South Central  | 1.1%                        | -0.3%                  | 1.3%                                   | Population in Decline             | Languishing                                |
| Southeast  | 1.0%                        | -0.3%                  | 1.3%                                   | Population in Decline             | Languishing                                |
| Eastern AR   | 1.2%                        | -0.2%                  | 1.4%                                   | Population in Decline             | Languishing                                |
| State  | 1.8%                        | 0.1%                   | 1.7%                                   |                                   |  |

# Labor Force Characteristics

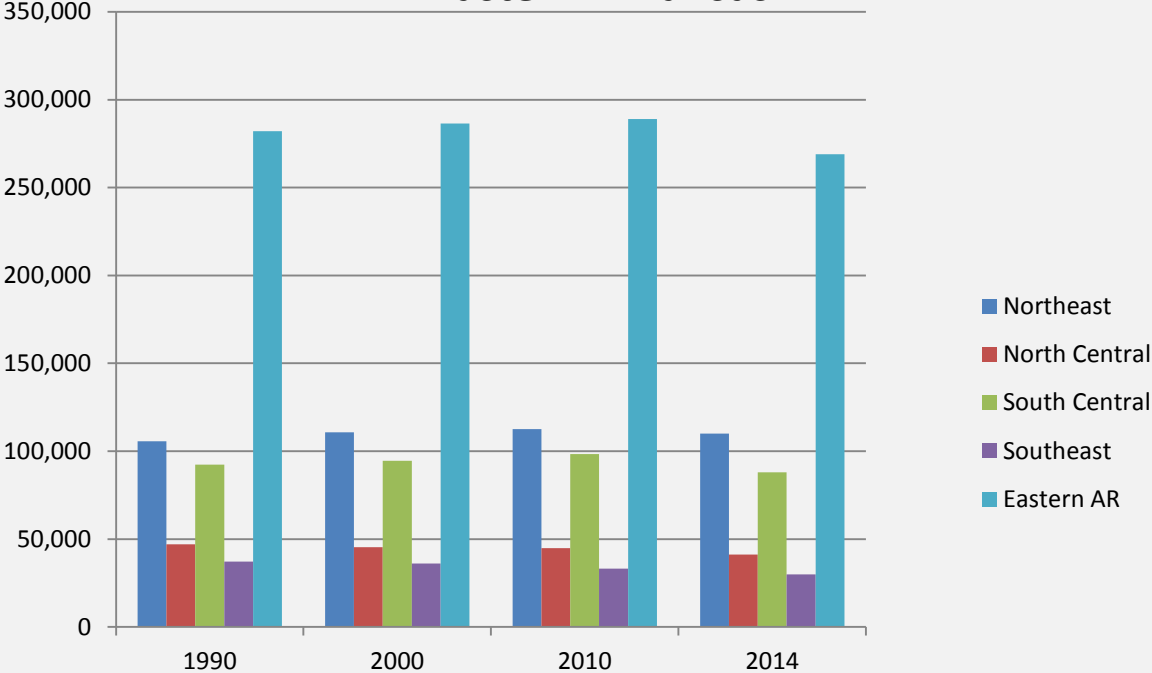
Civilian Labor Force is

Noninstitutionalized civilian  
population 16 years or older

employed or

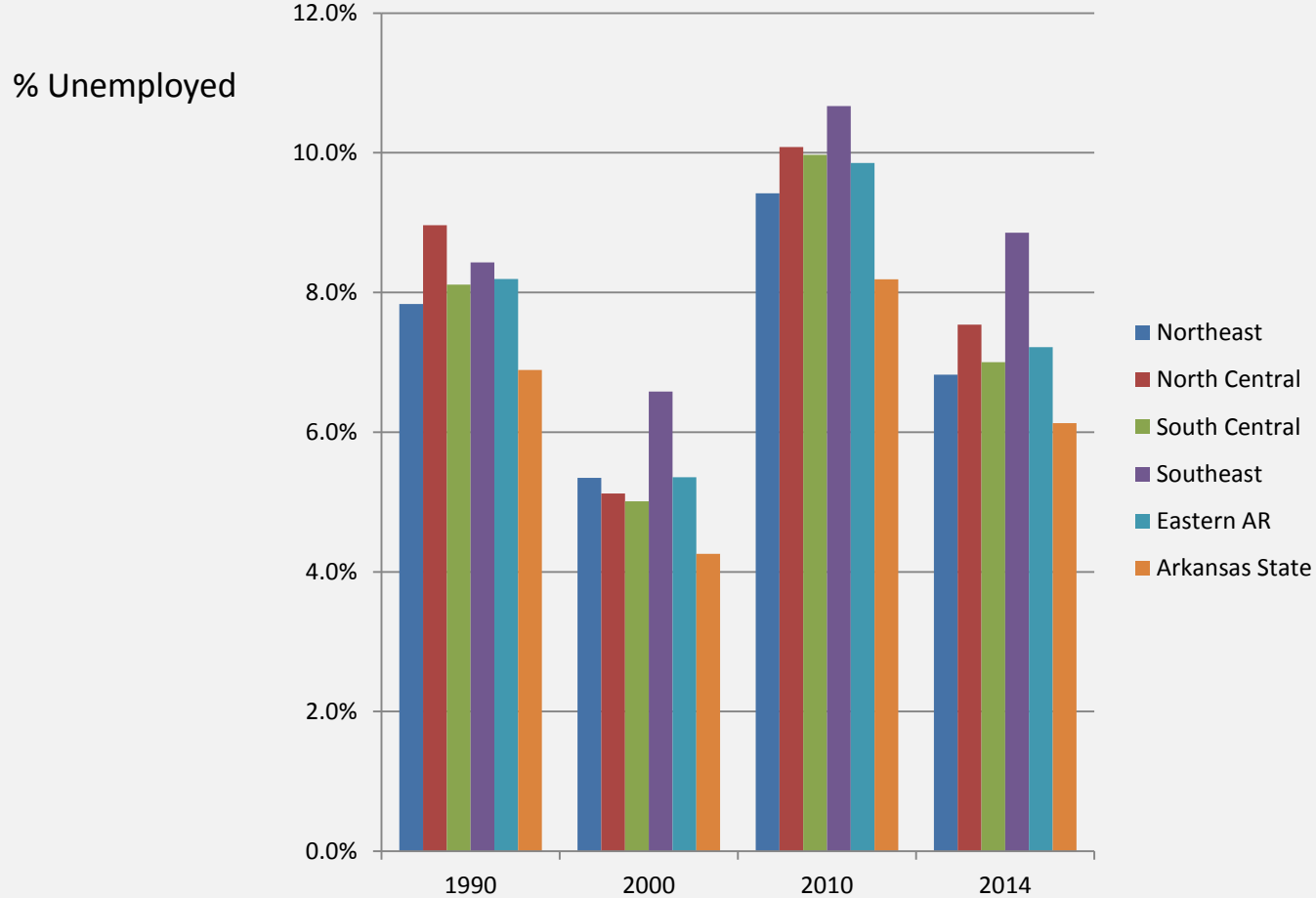
actively seeking employment

## Labor Force Estimates Eastern Arkansas



Data Source: Bureau of Labor Statistics

# Regional Unemployment Rates





# Employment Bright Spots

Degree of industrial specialization indicated by a LQ.

LQ greater than one implies specialization in the industry relative to Eastern AR.

| Location Quotient for Industry Jobs Relative to Eastern Arkansas         |      |      |      |      |      |      |      |      |      |      |      |      |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
|  | 2001 | 2010 | 2015 | 2001 | 2010 | 2015 | 2001 | 2010 | 2015 | 2001 | 2010 | 2015 |
| Description  | SE   | SE   | SE   | SC   | SC   | SC   | NE   | NE   | NE   | NC   | NC   | NC   |
| Crop and Animal Production   | 1.79 | 1.76 | 1.90 | 1.03 | 0.98 | 0.99 | 0.71 | 0.81 | 0.78 | 1.02 | 0.97 | 0.98 |
| Mining, Quarrying, Oil, and Gas Extraction                               | 1.96 | 2.23 | 0.40 | 0.00 | 2.23 | 0.72 | 1.21 | 0.50 | 1.22 | 1.71 | 0.30 | 1.36 |
| Utilities  | 0.87 | 1.22 | 1.26 | 1.32 | 1.22 | 1.23 | 0.75 | 0.86 | 0.82 | 1.10 | 0.84 | 0.87 |
| Construction   | 1.24 | 1.09 | 1.18 | 0.95 | 1.09 | 0.97 | 1.01 | 0.99 | 1.07 | 0.88 | 0.76 | 0.74 |
| Manufacturing  | 1.10 | 0.88 | 0.90 | 0.86 | 0.88 | 0.93 | 1.18 | 1.23 | 1.22 | 0.70 | 0.60 | 0.56 |
| Wholesale Trade  | 0.74 | 0.94 | 0.73 | 1.00 | 0.94 | 0.91 | 0.94 | 0.99 | 0.99 | 1.39 | 1.45 | 1.43 |
| Retail Trade   | 0.92 | 0.97 | 0.90 | 1.04 | 0.97 | 0.99 | 0.97 | 1.03 | 1.02 | 1.07 | 1.05 | 1.03 |
| Transportation and Warehousing   | 0.76 | 1.00 | 0.89 | 0.92 | 1.00 | 1.08 | 0.69 | 0.74 | 0.73 | 2.21 | 1.98 | 1.72 |
| Information  | 0.49 | 0.86 | 0.72 | 0.52 | 0.86 | 0.87 | 1.73 | 1.26 | 1.22 | 0.48 | 0.72 | 0.84 |
| Finance and Insurance  | 1.09 | 1.06 | 1.08 | 1.06 | 1.06 | 1.13 | 0.99 | 0.94 | 0.94 | 0.81 | 0.93 | 0.86 |
| Real Estate and Rental and Leasing                                       | 0.80 | 0.80 | 0.86 | 1.00 | 0.80 | 0.89 | 1.01 | 1.05 | 1.01 | 1.17 | 1.47 | 1.30 |
| Professional, Scientific, and Technical Services                         | 0.78 | 1.07 | 0.73 | 1.09 | 1.07 | 1.05 | 1.06 | 1.08 | 1.08 | 0.84 | 0.85 | 0.87 |
| Management of Companies and Enterprises                                  | 0.53 | 1.02 | 0.61 | 1.28 | 1.02 | 0.90 | 0.97 | 1.06 | 1.04 | 0.88 | 1.07 | 1.37 |
| Administrative and Support and Waste Management and Remediation Services | 0.57 | 0.77 | 0.41 | 0.90 | 0.77 | 0.85 | 1.38 | 1.31 | 1.19 | 0.58 | 0.91 | 1.20 |
| Educational Services   | 0.73 | 1.40 | 0.93 | 1.19 | 1.40 | 1.46 | 0.81 | 0.65 | 0.73 | 1.35 | 0.82 | 0.95 |
| Health Care and Social Assistance  | 0.73 | 1.01 | 0.94 | 1.09 | 1.01 | 0.94 | 1.05 | 1.02 | 1.05 | 0.91 | 1.00 | 1.01 |
| Arts, Entertainment, and Recreation                                      | 0.55 | 0.81 | 0.50 | 0.84 | 0.81 | 0.77 | 0.87 | 0.81 | 0.79 | 2.06 | 2.29 | 2.45 |
| Accommodation and Food Services  | 0.81 | 0.92 | 0.86 | 0.92 | 0.92 | 0.90 | 1.05 | 1.08 | 1.07 | 1.20 | 1.08 | 1.09 |
| Other Services (except Public Administration)                            | 0.85 | 1.08 | 0.93 | 1.07 | 1.08 | 1.12 | 0.95 | 0.88 | 0.87 | 1.14 | 1.23 | 1.20 |
| Government   | 1.17 | 1.12 | 1.26 | 1.13 | 1.12 | 1.15 | 0.83 | 0.84 | 0.84 | 1.02 | 1.00 | 0.99 |

## Bright Spots-Top Employing Public Sector Industries

| Largest Industries by Number of Jobs: Public Sector |  |           |           |             |                             |
|---|--|-----------|-----------|-------------|-----------------------------|
| Region/<br>Rank                                     | Industry   | 2001 Jobs | 2015 Jobs | %<br>Change | 2015 Earnings<br>Per Worker |
| NE5   | Colleges, Universities, and Professional Schools (State) | 2,698     | 3,141     | 16%         | \$ 45,996.00                |
| SC10  | Colleges, Universities, and Professional Schools (State) | 1,676     | 1,941     | 16%         | \$ 40,374.00                |
| NC1   | Elementary and Secondary Schools (Local)                 | 3,064     | 2,414     | -21%        | \$ 52,786.00                |
| NE1   | Elementary and Secondary Schools (Local)                 | 5,819     | 6,246     | 7%          | \$ 45,499.00                |
| SC1   | Elementary and Secondary Schools (Local)                 | 5,894     | 4,866     | -17%        | \$ 47,987.00                |
| SE1   | Elementary and Secondary Schools (Local)                 | 2,627     | 2,176     | -17%        | \$ 45,610.00                |
| SC9   | Federal Government, Civilian, Excluding Postal Service   | 1,748     | 1,640     | -6%         | \$ 98,892.00                |
| NC2   | Local Government, Excluding Education and Hospitals      | 1,595     | 1,674     | 5%          | \$ 36,513.00                |
| NE3   | Local Government, Excluding Education and Hospitals      | 3,367     | 3,365     | 0%          | \$ 42,192.00                |
| SC3   | Local Government, Excluding Education and Hospitals      | 2,687     | 2,717     | 1%          | \$ 33,445.00                |
| SE5   | Local Government, Excluding Education and Hospitals      | 997       | 1,075     | 8%          | \$ 29,859.00                |
| NC7   | State Government, Excluding Education and Hospitals      | 899       | 830       | -8%         | \$ 43,353.00                |
| SC2   | State Government, Excluding Education and Hospitals      | 3,016     | 2,998     | -1%         | \$ 46,835.00                |
| SE2   | State Government, Excluding Education and Hospitals      | 1,729     | 1,626     | -6%         | \$ 45,454.00                |
|   | Public Sector Jobs                                       | 37,816    | 36,709    | -3%         |                             |
|   | Top Public Sector Jobs % of Region's Total               | 14.7%     | 14.8%     |             |                             |

# Bright Spot-Top Employing Private Industries

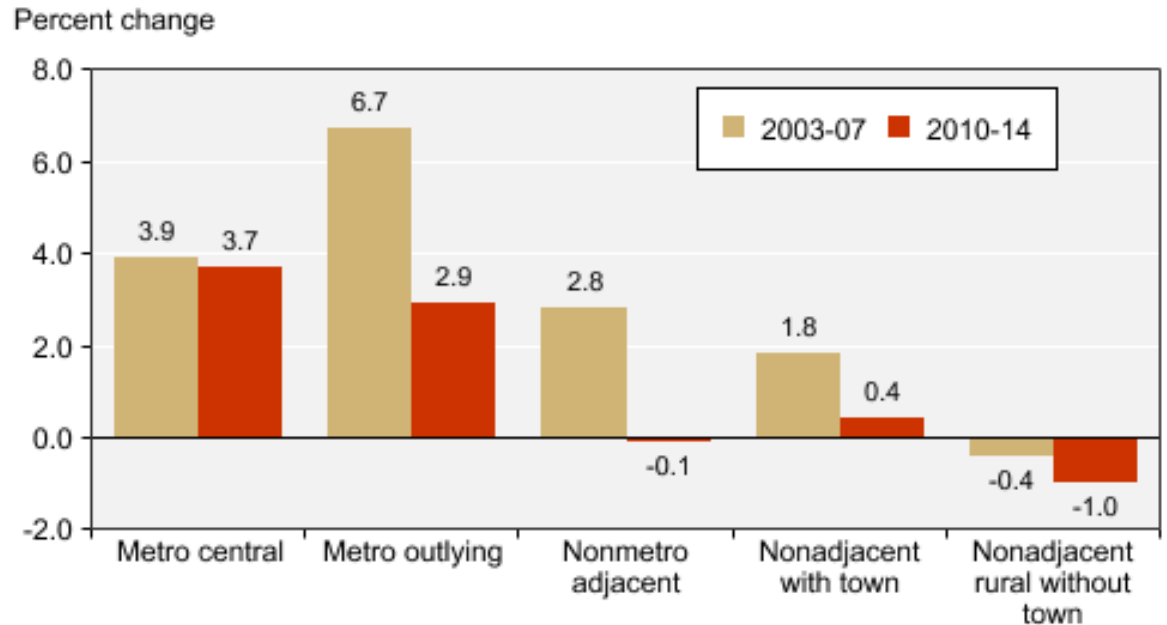
| Largest Industries by Number of Jobs: Private Sector |  |           |           |          |                          |
|--|--|-----------|-----------|----------|--------------------------|
| Region /Rank   | Industry   | 2001 Jobs | 2015 Jobs | % Change | 2015 Earnings Per Worker |
| NC3  | Crop Production  | 1,393     | 1,284     | -8%      | \$ 29,587                |
| NE6  | Crop Production  | 2,422     | 2,616     | 8%       | \$ 29,185                |
| SC6  | Crop Production  | 2,196     | 1,954     | -11%     | \$ 32,859                |
| SE4  | Crop Production  | 1,255     | 1,239     | -1%      | \$ 29,860                |
| SC7  | Poultry Processing   | 2,099     | 1,296     | -38%     | \$ 44,260                |
| NC8  | Meat Processed from Carcasses                                | 892       | 385       | -57%     | \$ 43,738                |
| NC5  | General Medical and Surgical Hospitals                       | 982       | 675       | -31%     | \$ 47,419                |
| NE2  | General Medical and Surgical Hospitals                       | 3,516     | 4,114     | 17%      | \$ 54,607                |
| SC5  | General Medical and Surgical Hospitals                       | 2,401     | 1,819     | -24%     | \$ 55,105                |
| SC8  | Nursing Care Facilities (Skilled Nursing Facilities)         | 1,853     | 1,885     | 2%       | \$ 28,055                |
| SE7  | Nursing Care Facilities (Skilled Nursing Facilities)         | 785       | 616       | -22%     | \$ 30,872                |
| NE9  | Offices of Physicians (except Mental Health Specialists)     | 1,783     | 2,215     | 24%      | \$ 97,144                |
| NE7  | Full-Service Restaurants                                     | 2,244     | 2,833     | 26%      | \$ 17,306                |
| NC4  | Limited-Service Restaurants                                  | 1,235     | 1,269     | 3%       | \$ 13,324                |
| NE4  | Limited-Service Restaurants                                  | 2,873     | 3,764     | 31%      | \$ 13,162                |
| SC4  | Limited-Service Restaurants                                  | 2,461     | 2,656     | 8%       | \$ 13,853                |
| SE6  | Limited-Service Restaurants                                  | 844       | 886       | 5%       | \$ 14,153                |
| NC9  | General Freight Trucking, Long-Distance, Less Than Truckload | 887       | 298       | -66%     | \$ 78,856                |
| NE10   | Motor and Generator Manufacturing                            | 1,728     | 432       | -75%     | \$ 65,680                |
| SE3  | Paper (except Newsprint) Mills                               | 1,625     | 940       | -42%     | \$ 100,147               |
| SE9  | Paperboard Mills   | 742       | 389       | -48%     | \$ 81,795                |
| SE8  | Softwood Veneer and Plywood Manufacturing                    | 751       | 84        | -89%     | \$ 57,027                |
| SE10   | Supermarkets and Other Grocery (except Convenience) Stores   | 605       | 440       | -27%     | \$ 19,159                |
| NC10   | Gasoline Stations with Convenience Stores                    | 850       | 562       | -34%     | \$ 19,505                |
| NE8  | Temporary Help Services                                      | 1,838     | 2,150     | 17%      | \$ 22,348                |
| NC6  | Warehouse Clubs and Supercenters                             | 909       | 927       | 2%       | \$ 26,855                |
|  | Total  | 41,169    | 37,728    | -8%      |                          |
|  | Region's Total   | 257,964   | 248,503   | -4%      |                          |
|  | Top Private Sector Jobs % of Region's Total                  | 16.0%     | 15.2%     |          |                          |

# Policy Implication for the Future

Economies are dynamic some grow while others decline.

- Decline into prosperity
- Efficient consolidation

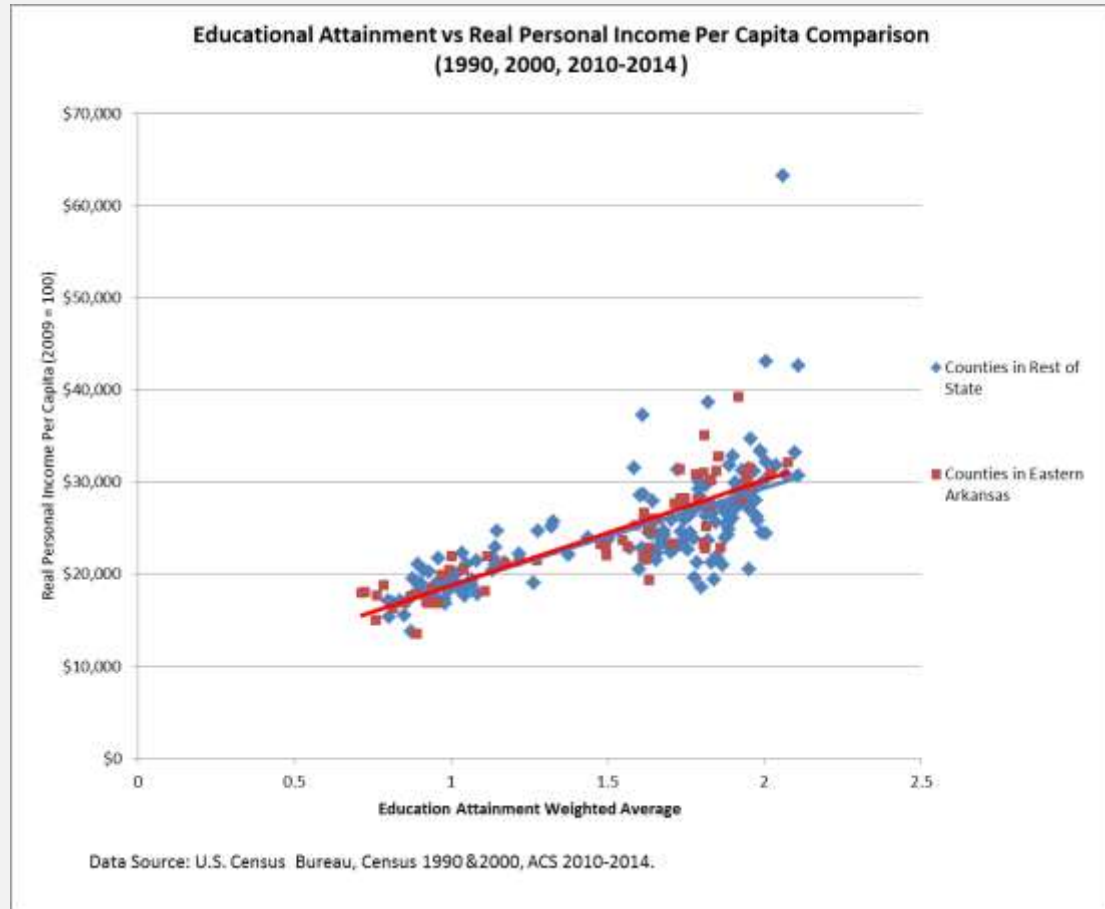
Population change by county's place on the rural-urban continuum, 2003-07 and 2010-14



Note: Categories are based on 2013 metro definitions. Metro central counties contain urbanized areas of 50,000 or more. Metro outlying counties are tied to central counties through high commuting levels (25% and higher). Nonmetro adjacent counties are both physically adjacent to a metro area and have 2-25 percent commuting to the central counties. Nonadjacent counties are divided into those with and without urban populations. Source: USDA, Economic Research Service using data from U.S. Census Bureau.

# People vs Place Prosperity

Education Attainment is important for sense of place and people prosperity





# Dr. Greg Hamilton

Senior Research Economist  
UALR Institute for  
Economic Development



**The Arkansas Delta**  
*Why It Still Matters*

