

# Education, Human Capital, and Economic Development in the Louisville Area



by

Paul Coomes, Ph.D.

Professor of Economics, and  
National City Research Fellow

*Downtown Rotary Club*

*February 2, 2006*

**National City**<sup>®</sup>

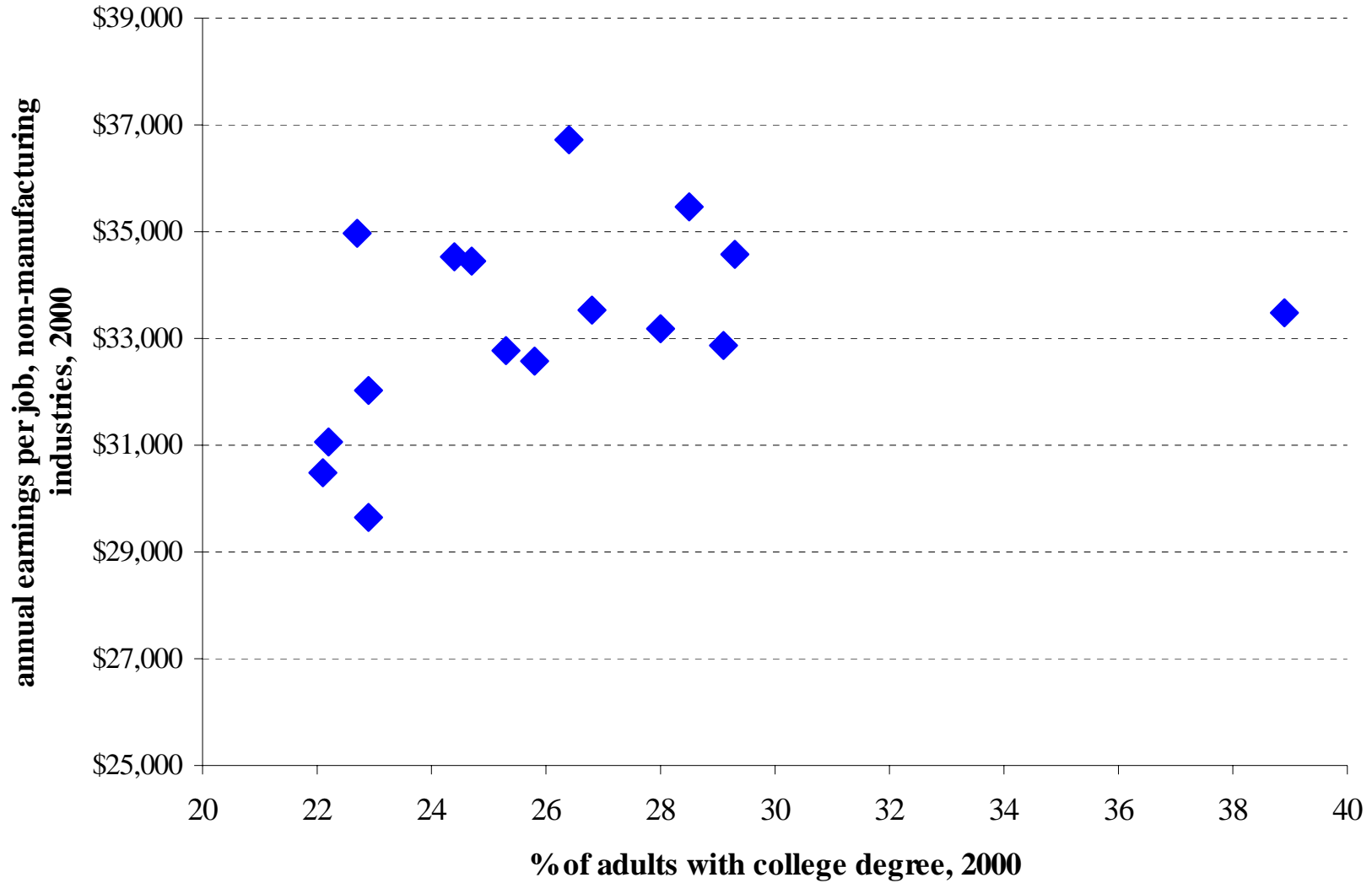
UNIVERSITY of LOUISVILLE  
*dare to be great*

# Topics Today

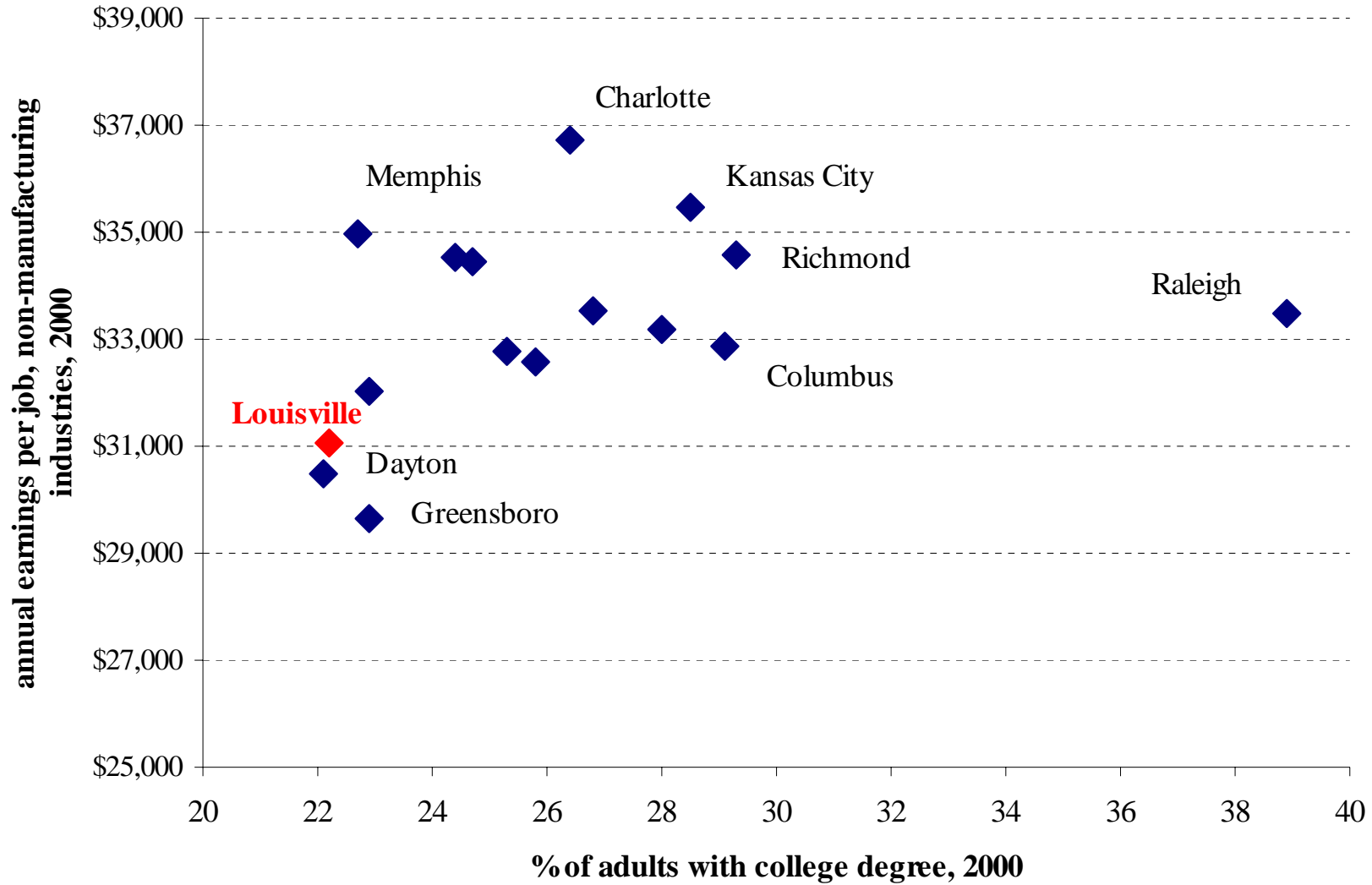
- Louisville lags its peers in most measures of education...
- and consequently has relatively low wages and salaries.
- New economic opportunities are in the office industries, not in manufacturing.
- Louisville now ranks low in office activity.
- Local colleges are expanding, but so are the colleges in most of our competitor markets.

# College Attainment and Earnings per Job

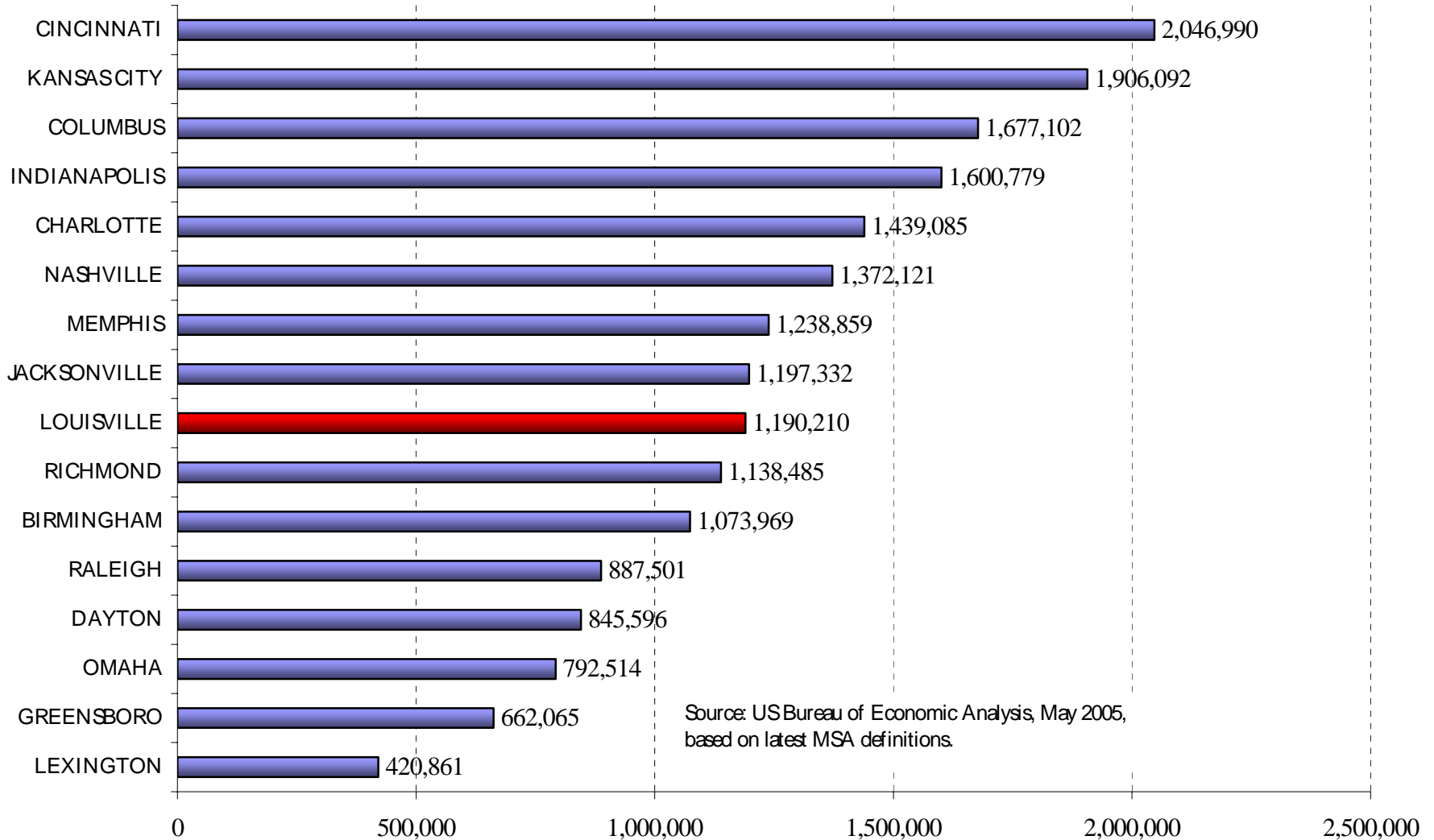
## Louisville and 14 Comparison Metro Areas, 2000



# College Attainment and Earnings per Job Louisville and 14 Comparison Metro Areas, 2000



## Population of 16 Comparison Metropolitan Areas, 2003



## Louisville and Fourteen Comparison Metropolitan Areas

| Metropolitan Areas                  | Population<br>2003 | Growth, 1993 to<br>2003 |             |
|-------------------------------------|--------------------|-------------------------|-------------|
| Cincinnati-Middletown, OH-KY-IN     | 2,046,990          | 134,230                 | 7.0%        |
| Kansas City, MO-KS                  | 1,906,092          | 209,158                 | 12.3%       |
| Columbus, OH                        | 1,677,102          | 195,822                 | 13.2%       |
| Indianapolis, IN                    | 1,600,779          | 227,904                 | 16.6%       |
| Charlotte-Gastonia-Concord, NC-SC   | 1,439,085          | 338,116                 | 30.7%       |
| Nashville-Davidson-Murfreesboro, TN | 1,372,121          | 246,987                 | 22.0%       |
| Memphis, TN-MS-AR                   | 1,238,859          | 129,475                 | 11.7%       |
| Jacksonville, FL                    | 1,197,332          | 206,812                 | 20.9%       |
| <b>Louisville, KY-IN</b>            | <b>1,190,210</b>   | <b>98,831</b>           | <b>9.1%</b> |
| Richmond, VA                        | 1,138,485          | 136,436                 | 13.6%       |
| Birmingham-Hoover, AL               | 1,073,969          | 82,085                  | 8.3%        |
| Raleigh-Cary, NC                    | 887,501            | 274,925                 | 44.9%       |
| Dayton, OH                          | 845,596            | -12,091                 | -1.4%       |
| Omaha-Council Bluffs, NE-IA         | 792,514            | 84,437                  | 11.9%       |
| Greensboro-High Point, NC           | 662,065            | 90,784                  | 15.9%       |

Source: US Bureau of Economic Analysis, May 2005. Metropolitan area definitions as of 2004. The Louisville MSA includes thirteen counties.

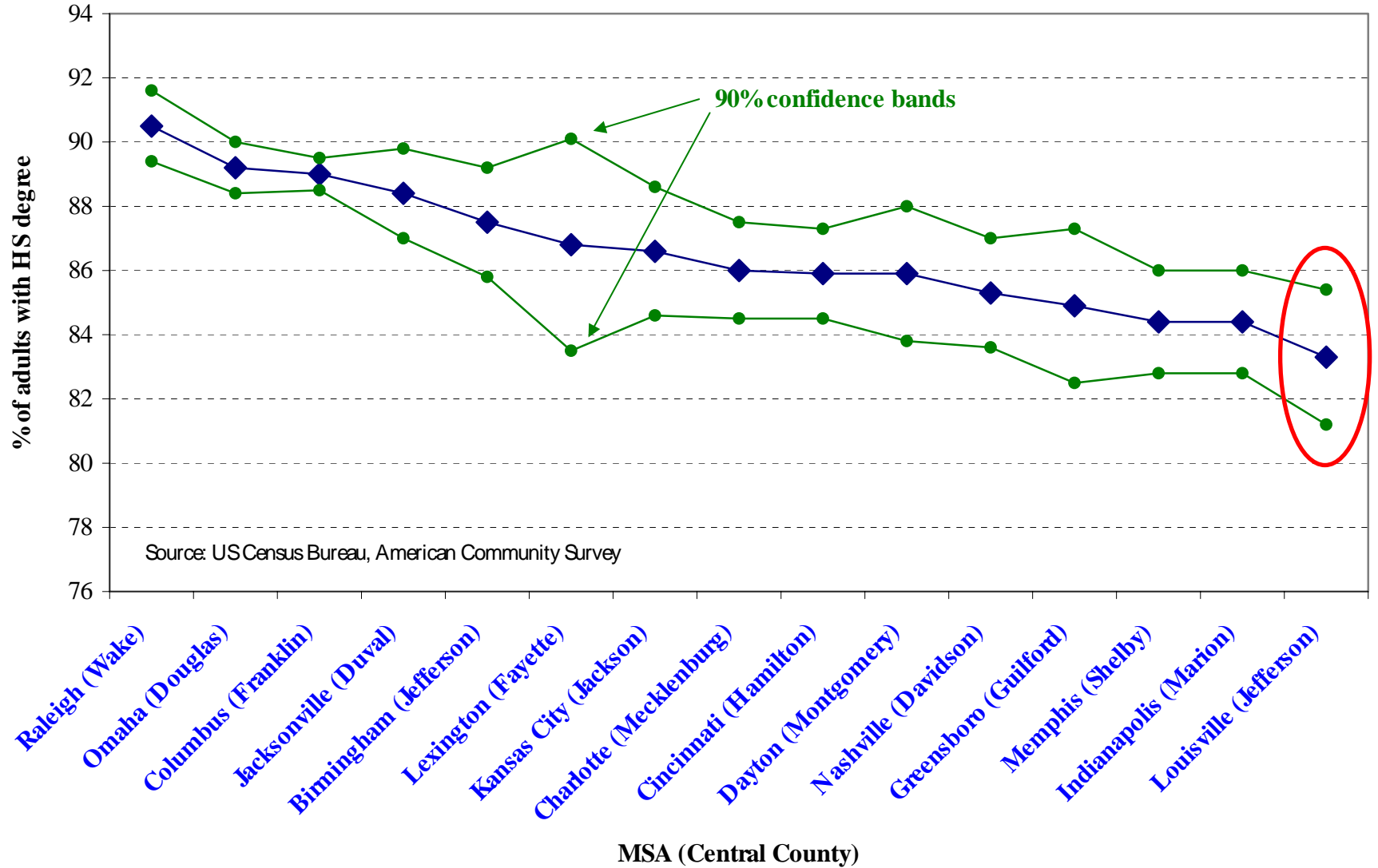
### Comparison Metros: Population Size and Growth

➤ Louisville 9<sup>th</sup> largest among 15 comparison metros.

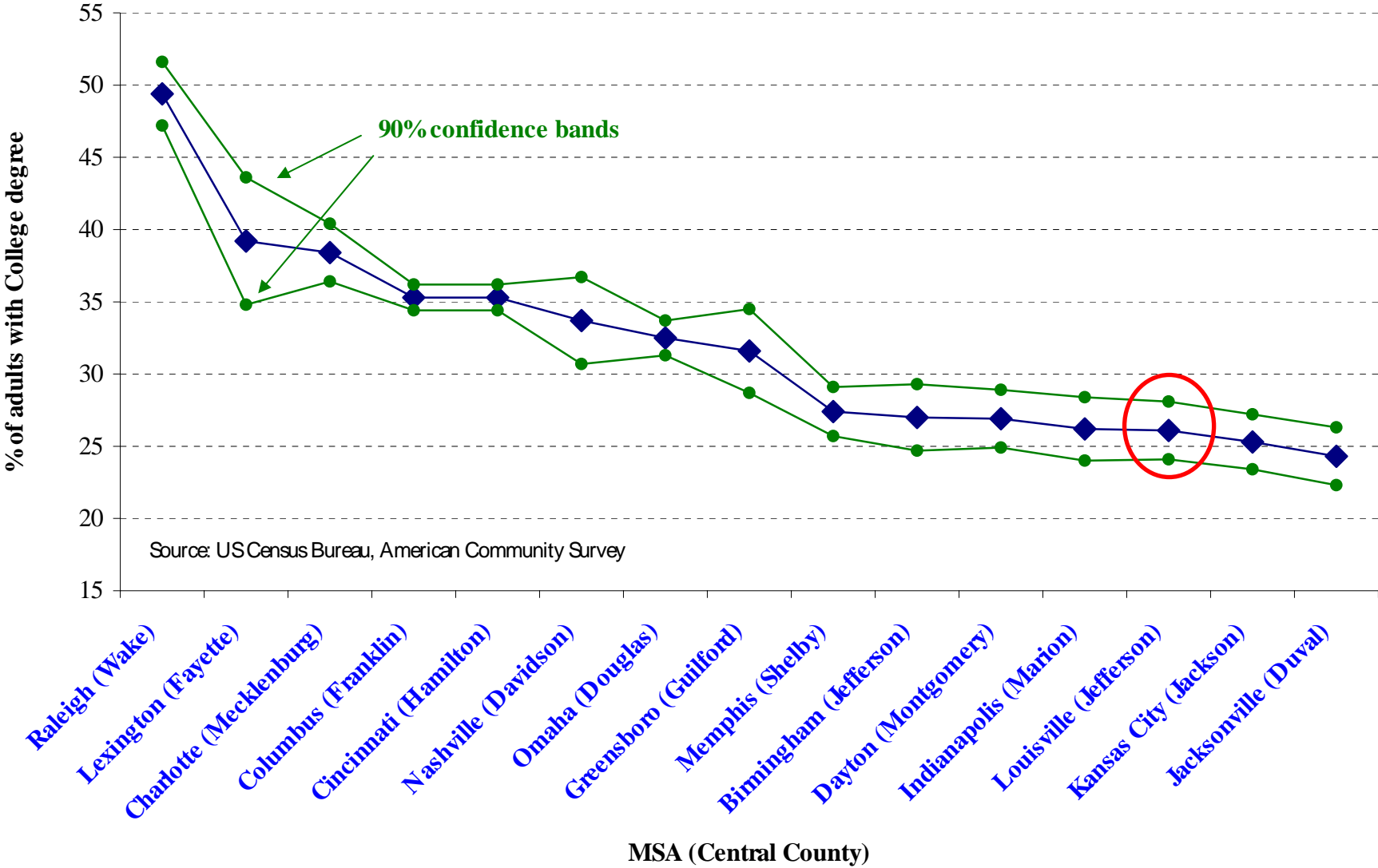
➤ only Dayton and Birmingham grew slower the last ten years.

Have some fresh educational  
attainment data for large central  
counties

# High School Attainment Rates, 2004



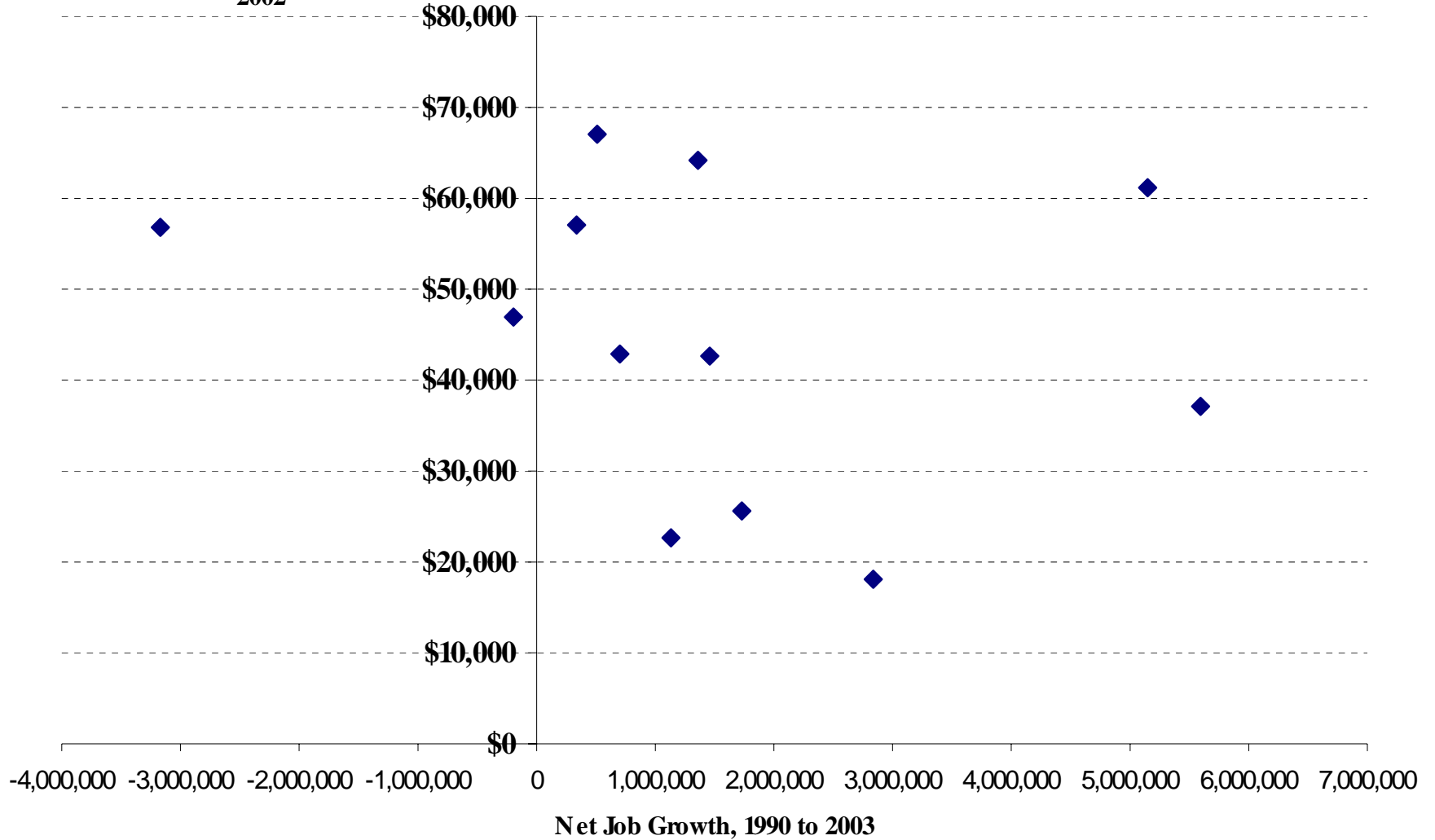
# College Attainment Rates, 2004



# Why education is so important to Louisville's economic development

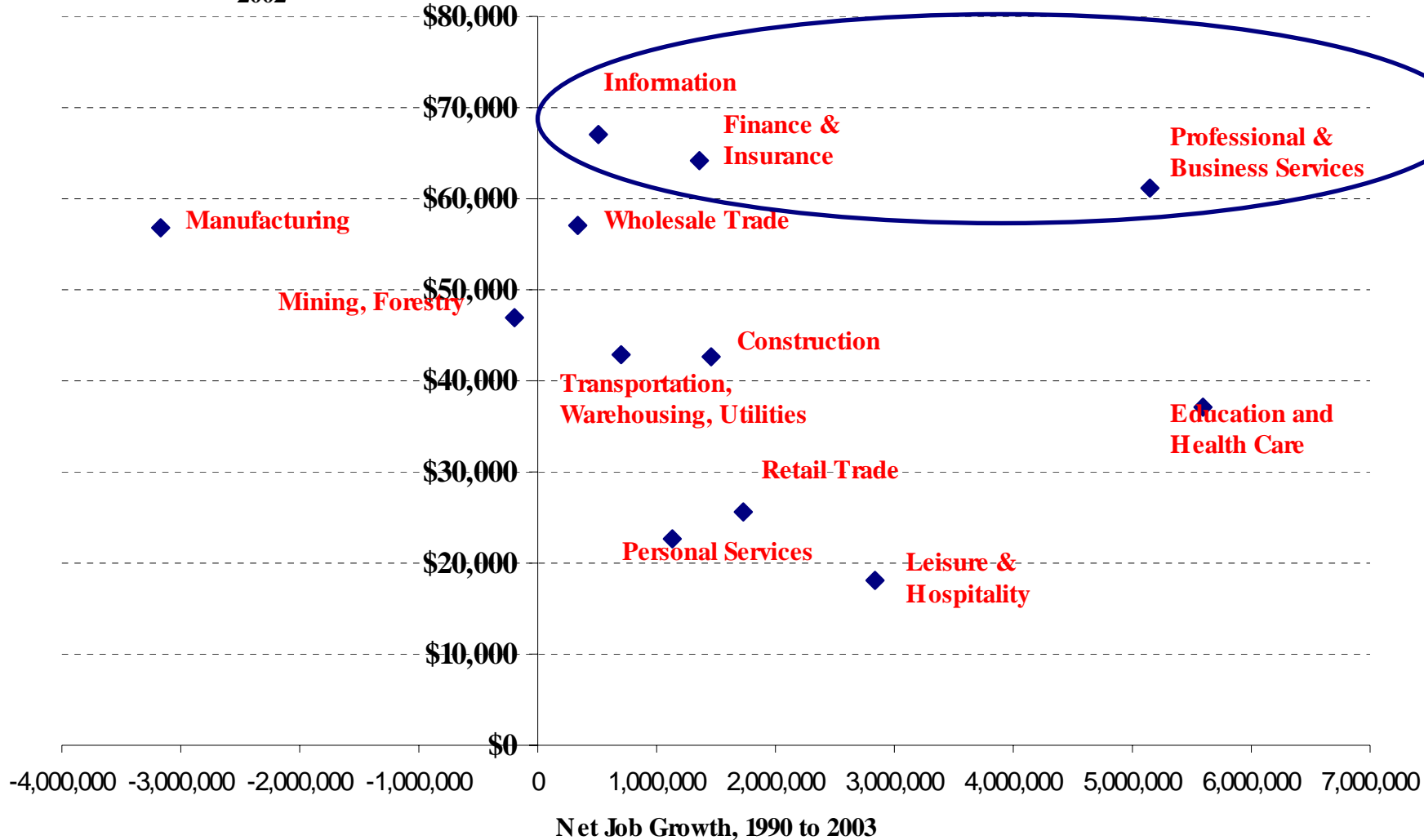
# US Job Growth by Sector Since 1990

Annual Earnings per Job,  
2002



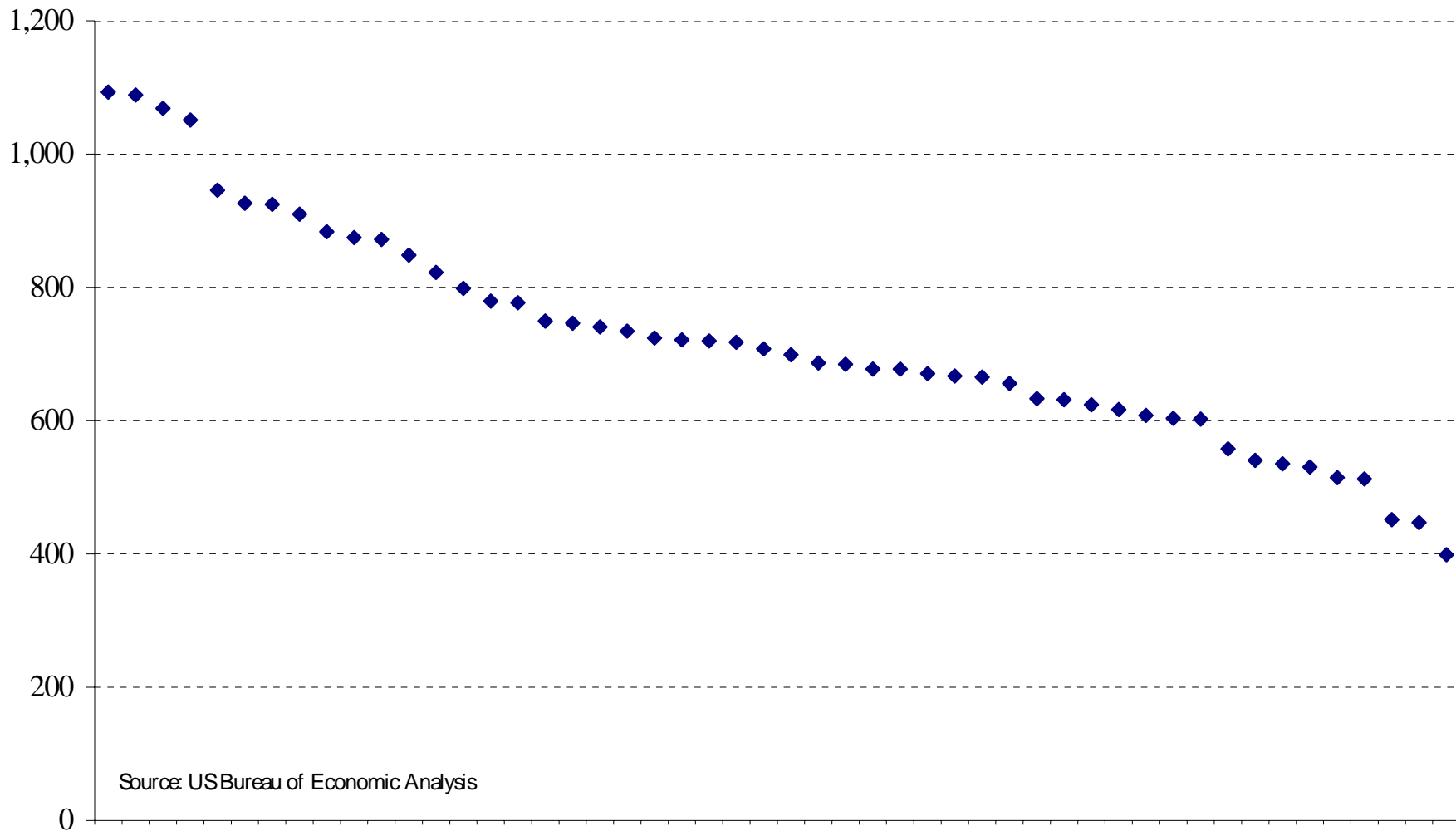
# US Job Growth by Sector Since 1990

Annual Earnings per Job,  
2002



# Number of Jobs per 10,000 Residents, 2002

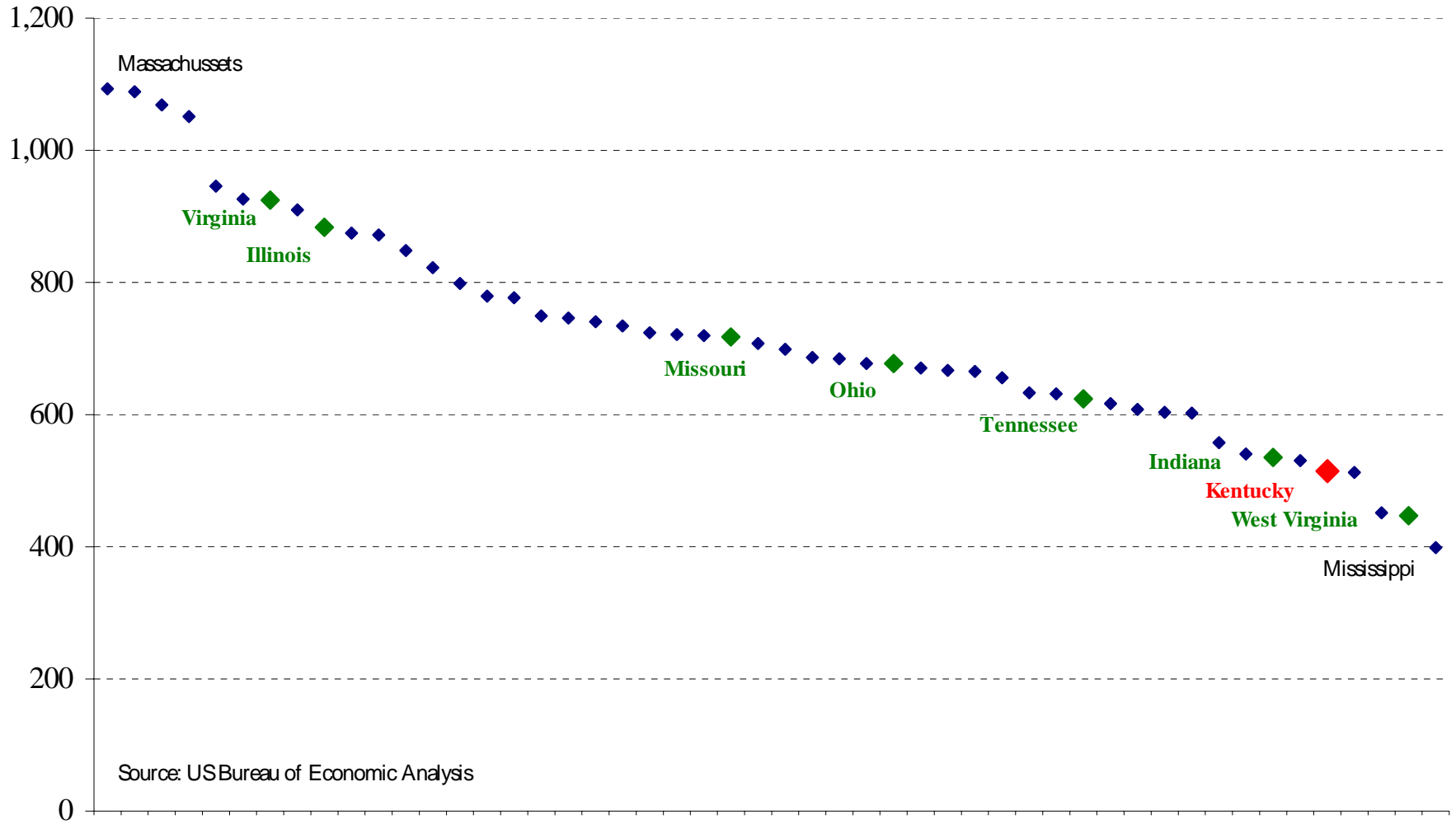
in Information, Professional & Technical Services, Finance and Insurance Industries



Source: US Bureau of Economic Analysis

# Number of Jobs per 10,000 Residents, 2002

in Information, Professional & Technical Services, Finance and Insurance Industries



## Professional and Technical Service Employment, 2003

| Metropolitan Areas                  | Jobs, 2003    | Jobs per<br>100<br>residents | Average<br>compensati<br>on per job |
|-------------------------------------|---------------|------------------------------|-------------------------------------|
| Kansas City, MO-KS                  | 81,721        | 4.3                          | \$48,652                            |
| Cincinnati-Middletown, OH-KY-IN     | 77,772        | 3.8                          | \$43,082                            |
| Columbus, OH                        | 71,700        | 4.3                          | \$46,034                            |
| Indianapolis, IN                    | 57,637        | 3.6                          | \$43,181                            |
| Charlotte-Gastonia-Concord, NC-SC   | 53,484        | 3.7                          | \$48,283                            |
| Nashville-Davidson-Murfreesboro, TN | 52,931        | 3.9                          | \$42,480                            |
| Raleigh-Cary, NC                    | 45,616        | 5.1                          | \$49,592                            |
| Jacksonville, FL                    | 42,420        | 3.5                          | \$41,735                            |
| Birmingham-Hoover, AL               | 40,145        | 3.7                          | \$47,148                            |
| Richmond, VA                        | 38,577        | 3.4                          | \$48,543                            |
| <b>Louisville, KY-IN</b>            | <b>36,078</b> | <b>3.0</b>                   | <b>\$38,839</b>                     |
| Memphis, TN-MS-AR                   | 30,928        | 2.5                          | \$33,212                            |
| Omaha-Council Bluffs, NE-IA         | 28,747        | 3.6                          | \$44,068                            |
| Dayton, OH                          | 28,039        | 3.3                          | \$45,973                            |
| Greensboro-High Point, NC           | 19,632        | 3.0                          | \$36,979                            |

Source: US Bureau of Economic Analysis, May 2005. Metropolitan area definitions as of 2004. The Louisville MSA includes thirteen counties.

### Comparison Metros: Professional & Technical Services

➤ Louisville, 11<sup>th</sup> highest overall, 13<sup>th</sup> highest per capita, beating only Memphis and Greensboro.

➤ and 13<sup>th</sup> highest in pay per job.

## Louisville and Fourteen Comparison Metropolitan Areas

**Comparison  
Metros:  
Average Pay –  
all industries**

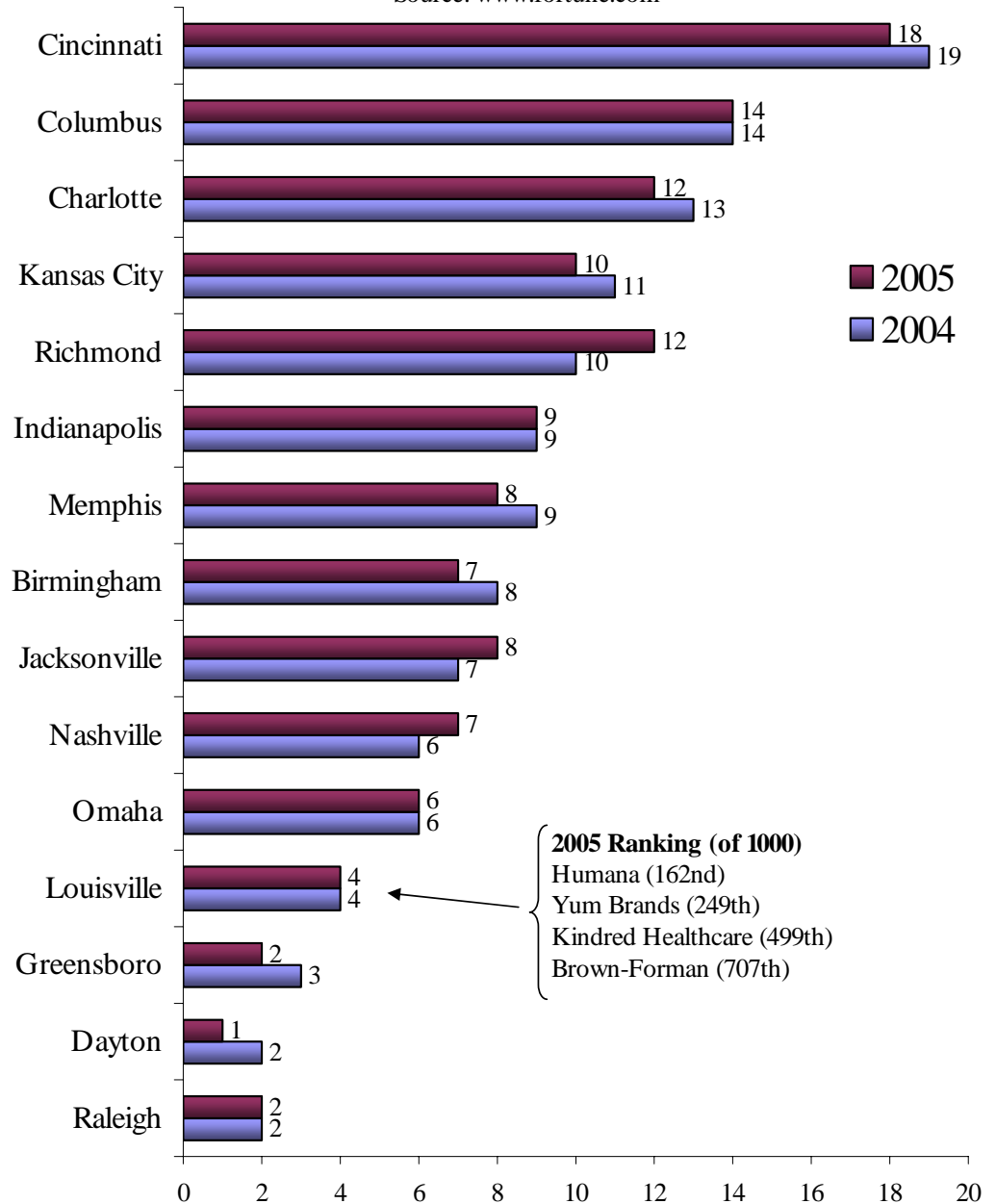
➤ Louisville  
13<sup>th</sup> largest  
among 15  
comparison  
metros, beating  
only Omaha  
and Greensboro

| Metropolitan Areas                  | Average Wages<br>and Salaries per<br>Job, 2003 | Growth, 1993 to 2003 |              |
|-------------------------------------|--|----------------------|--------------|
| Charlotte-Gastonia-Concord, NC-SC   | \$39,805                                       | \$13,795             | 53.0%        |
| Cincinnati-Middletown, OH-KY-IN     | \$37,065                                       | \$11,092             | 42.7%        |
| Kansas City, MO-KS                  | \$37,055                                       | \$11,598             | 45.6%        |
| Richmond, VA                        | \$36,986                                       | \$11,402             | 44.6%        |
| Raleigh-Cary, NC                    | \$36,980                                       | \$12,849             | 53.2%        |
| Indianapolis, IN                    | \$36,805                                       | \$10,810             | 41.6%        |
| Columbus, OH                        | \$36,473                                       | \$11,197             | 44.3%        |
| Birmingham-Hoover, AL               | \$35,979                                       | \$11,435             | 46.6%        |
| Memphis, TN-MS-AR                   | \$35,978                                       | \$11,488             | 46.9%        |
| Dayton, OH                          | \$35,576                                       | \$9,402              | 35.9%        |
| Nashville-Davidson-Murfreesboro, TN | \$35,449                                       | \$10,736             | 43.4%        |
| Jacksonville, FL                    | \$35,302                                       | \$10,797             | 44.1%        |
| <b>Louisville, KY-IN</b>            | <b>\$34,252</b>                                | <b>\$10,621</b>      | <b>44.9%</b> |
| Omaha-Council Bluffs, NE-IA         | \$34,145                                       | \$11,049             | 47.8%        |
| Greensboro-High Point, NC           | \$32,873                                       | \$9,494              | 40.6%        |

Source: US Bureau of Economic Analysis, May 2005. Metropolitan area definitions as of 2004. The Louisville MSA includes thirteen counties.

## Number of *Fortune 1000* Headquarters Louisville and 14 Comparison Metropolitan Areas

Source: www.fortune.com



### Major Corporate Headquarters

➤ Louisville remains in 12<sup>th</sup> place among the 15 comparison cities.

➤ Three smaller markets have more headquarters: Richmond, Birmingham, Omaha.

## Manufacturing Employment, 2003

| Metropolitan Areas                  | Jobs, 2003    | Jobs per<br>100<br>residents | Average<br>compensati<br>on per job |
|-------------------------------------|---------------|------------------------------|-------------------------------------|
| Indianapolis, IN                    | 104,254       | 6.5                          | \$73,965                            |
| Dayton, OH                          | 64,669        | 7.6                          | \$68,139                            |
| Cincinnati-Middletown, OH-KY-IN     | 130,667       | 6.4                          | \$66,533                            |
| Columbus, OH                        | 87,220        | 5.2                          | \$65,041                            |
| <b>Louisville, KY-IN</b>            | <b>83,690</b> | <b>7.0</b>                   | <b>\$62,844</b>                     |
| Richmond, VA                        | 50,243        | 4.4                          | \$61,768                            |
| Kansas City, MO-KS                  | 85,276        | 4.5                          | \$61,157                            |
| Raleigh-Cary, NC                    | 32,575        | 3.7                          | \$60,783                            |
| Memphis, TN-MS-AR                   | 55,063        | 4.4                          | \$59,041                            |
| Charlotte-Gastonia-Concord, NC-SC   | 94,124        | 6.5                          | \$57,175                            |
| Nashville-Davidson-Murfreesboro, TN | 84,803        | 6.2                          | \$56,747                            |
| Jacksonville, FL                    | 35,209        | 2.9                          | \$56,186                            |
| Greensboro-High Point, NC           | 71,437        | 10.8                         | \$49,719                            |
| Birmingham-Hoover, AL               | 45,514        | 4.2                          | \$49,321                            |
| Omaha-Council Bluffs, NE-IA         | 34,063        | 4.3                          | \$46,917                            |

Source: US Bureau of Economic Analysis, May 2005. Metropolitan area definitions as of 2004. The Louisville MSA includes thirteen counties.

### Comparison Metros: Manufacturing

➤ Louisville 7<sup>th</sup> highest in number of jobs, 3<sup>rd</sup> highest per capita....

➤ behind only Greensboro and Dayton

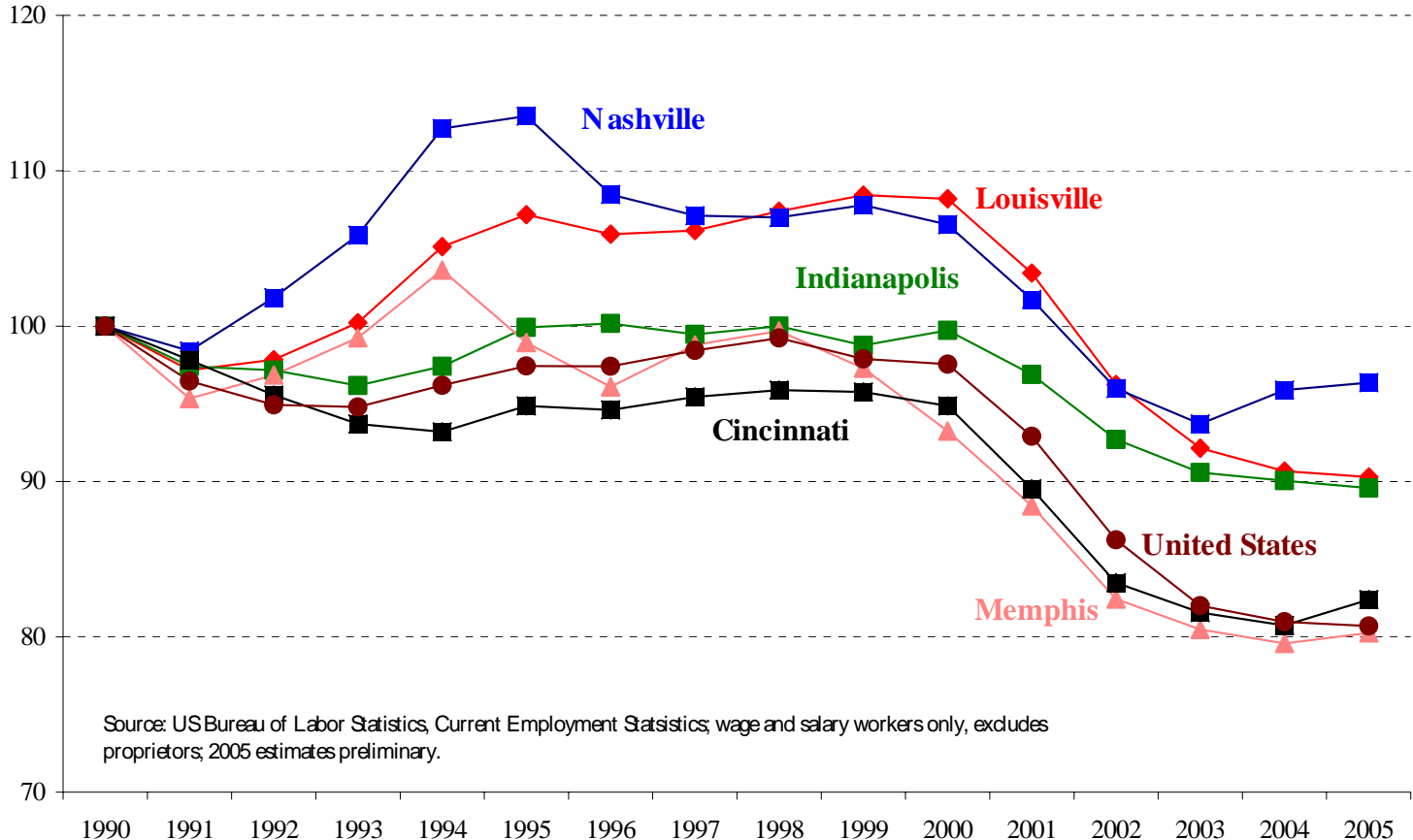
➤ 5<sup>th</sup> highest in pay per job.

## Manufacturing Employment Growth Louisville and Nearby Competitor Metropolitan Areas

index 1990 = 100

**Manufacturing and Last Recession**

- now have 10% less manufacturing jobs than in 1990
- Louisville hit hard by 2001 recession...
- but so were competitors...



# Back to Education

## ENROLLMENTS – 18 Louisville Area Institutions

### Enrollments and Awards, Louisville MSA Postsecondary Institutions

| Postsecondary Enrollments, Fall semester     | 2000          | 2001          | 2002          | 2003          | 2004          |
|--|---------------|---------------|---------------|---------------|---------------|
| BELLARMINE UNIVERSITY                        | 2,848         | 2,982         | 3,294         | 3,134         | 2,888         |
| DAYMAR COLLEGE-LOUISVILLE                    | 97            | 86            | 113           | 227           | 296           |
| INDIANA UNIVERSITY-SOUTHEAST                 | 6,427         | 6,557         | 6,716         | 6,408         | 6,238         |
| ITT TECHNICAL INSTITUTE                      | 354           | 358           | 402           | 495           | 686           |
| IVY TECH STATE COLLEGE-SOUTH CENTRAL         | 1,933         | 2,035         | 2,716         | 2,917         | 3,050         |
| JEFFERSON COMMUNITY COLLEGE                  | 9,520         | 9,227         | 9,390         | 9,645         | 10,106        |
| JEFFERSON TECHNICAL COLLEGE                  | 1,512         | 3,246         | 3,582         | 3,697         | 3,694         |
| LOUISVILLE BIBLE COLLEGE                     | 130           | 0             | 0             | 0             | 0             |
| LOUISVILLE PRESBYTERIAN THEOLOGICAL SEMINARY | 250           | 235           | 227           | 193           | 184           |
| LOUISVILLE TECHNICAL INSTITUTE               | 612           | 623           | 624           | 670           | 645           |
| OTTAWA UNIVERSITY-JEFFERSONVILLE             | 0             | 0             | 0             | 48            | 76            |
| RETS INSTITUTE OF TECHNOLOGY                 | 365           | 411           | 327           | 350           | 68            |
| SPALDING UNIVERSITY                          | 1,632         | 1,670         | 1,702         | 1,658         | 1,698         |
| SPENCERIAN COLLEGE                           | 201           | 584           | 928           | 1,326         | 1,254         |
| SULLIVAN UNIVERSITY                          | 3,212         | 4,402         | 4,646         | 4,962         | 4,860         |
| THE SOUTHERN BAPTIST THEOLOGICAL SEMINARY    | 2,320         | 2,443         | 2,716         | 2,904         | 2,983         |
| UNIVERSITY OF LOUISVILLE                     | 19,771        | 19,682        | 20,416        | 20,605        | 20,729        |
| UNIVERSITY OF PHOENIX-LOUISVILLE CAMPUS      | 0             | 0             | 0             | 0             | 116           |
| <b>Total, Louisville Metropolitan Area</b>   | <b>51,184</b> | <b>54,541</b> | <b>57,799</b> | <b>59,239</b> | <b>59,571</b> |

## DEGREES AWARDED

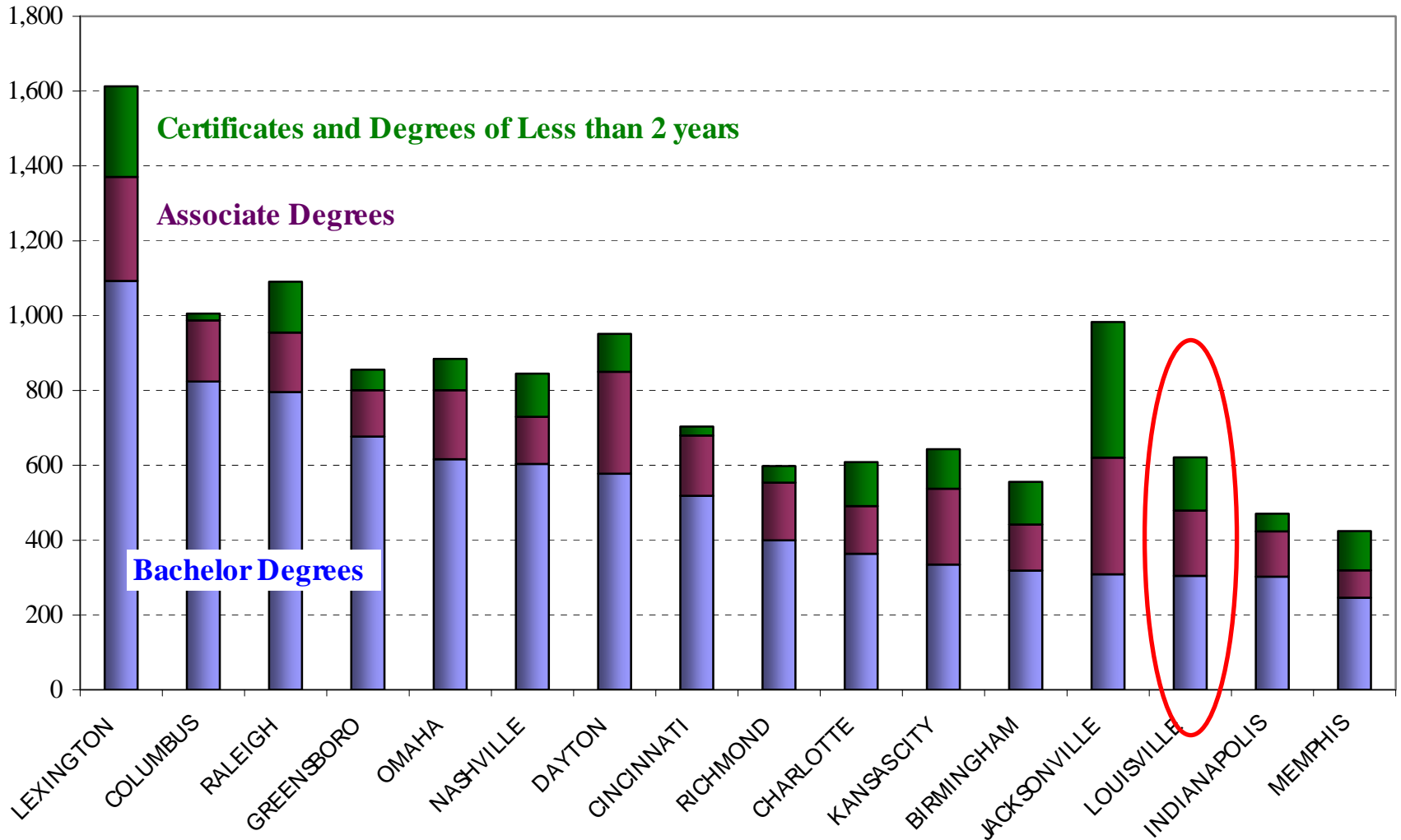
| Awards below Associate level, Academic Year ending Spring | 2001         | 2002         | 2003         | 2004         |
|---|--------------|--------------|--------------|--------------|
| DAYMAR COLLEGE-LOUISVILLE                                 | 4            | 3            | 9            | 15           |
| INDIANA UNIVERSITY-SOUTHEAST                              | 10           | 5            | 16           | 41           |
| IVY TECH STATE COLLEGE-SOUTH CENTRAL                      | 67           | 61           | 70           | 110          |
| JEFFERSON COMMUNITY COLLEGE                               | 2            | 23           | 41           | 90           |
| JEFFERSON TECHNICAL COLLEGE                               | 251          | 268          | 545          | 661          |
| LOUISVILLE BIBLE COLLEGE                                  | 1            | 1            | 0            | 5            |
| LOUISVILLE TECHNICAL INSTITUTE                            | 109          | 122          | 114          | 130          |
| RETS ELECTRONIC INSTITUTE                                 | 16           | 36           | 9            | 5            |
| SPENCERIAN COLLEGE  | 215          | 211          | 335          | 403          |
| SULLIVAN UNIVERSITY                                       | 228          | 182          | 99           | 117          |
| UNIVERSITY OF LOUISVILLE                                  | 117          | 118          | 117          | 112          |
| <b>Total, Louisville Metropolitan Area</b>                | <b>1,020</b> | <b>1,030</b> | <b>1,355</b> | <b>1,689</b> |

### Associate Degrees

|  |              |              |              |              |
|--|--------------|--------------|--------------|--------------|
| DAYMAR COLLEGE-LOUISVILLE                  | 26           | 28           | 14           | 22           |
| INDIANA UNIVERSITY-SOUTHEAST               | 130          | 125          | 140          | 145          |
| ITT TECHNICAL INSTITUTE                    | 119          | 129          | 102          | 120          |
| IVY TECH STATE COLLEGE-SOUTH CENTRAL       | 143          | 176          | 188          | 211          |
| JEFFERSON COMMUNITY COLLEGE                | 424          | 401          | 432          | 579          |
| JEFFERSON TECHNICAL COLLEGE                | 36           | 16           | 38           | 52           |
| LOUISVILLE BIBLE COLLEGE                   | 5            | 3            | 6            | 5            |
| LOUISVILLE TECHNICAL INSTITUTE             | 168          | 169          | 210          | 183          |
| RETS ELECTRONIC INSTITUTE                  | 122          | 99           | 109          | 136          |
| SOUTHERN BAPTIST THEOLOGICAL SEMINARY      | 14           | 15           | 4            | 10           |
| SPALDING UNIVERSITY                        | 6            | 8            | 12           | 5            |
| SPENCERIAN COLLEGE                         | 19           | 6            | 72           | 189          |
| SULLIVAN UNIVERSITY                        | 299          | 590          | 412          | 379          |
| UNIVERSITY OF LOUISVILLE                   | 63           | 70           | 38           | 45           |
| <b>Total, Louisville Metropolitan Area</b> | <b>1,574</b> | <b>1,835</b> | <b>1,777</b> | <b>2,081</b> |

| <b>Awards (cont), Academic Year ending Spring</b> | <b>2001</b>  | <b>2002</b>  | <b>2003</b>  | <b>2004</b>  |
|---|--------------|--------------|--------------|--------------|
| <b>Bachelors Degrees</b>                          |              |              |              |              |
| BELLARMINE UNIVERSITY                             | 390          | 393          | 467          | 401          |
| INDIANA UNIVERSITY-SOUTHEAST                      | 505          | 530          | 606          | 622          |
| LOUISVILLE BIBLE COLLEGE                          | 4            | 4            | 4            | 6            |
| LOUISVILLE PRESBYTERIAN THEOLOGICAL SEMINARY      | 1            | 0            | 0            | 0            |
| OTTAWA UNIVERSITY-JEFFERSONVILLE                  | 0            | 0            | 0            | 4            |
| SOUTHERN BAPTIST THEOLOGICAL SEMINARY             | 26           | 18           | 71           | 71           |
| SPALDING UNIVERSITY                               | 239          | 252          | 183          | 221          |
| SULLIVAN UNIVERSITY                               | 192          | 313          | 209          | 323          |
| UNIVERSITY OF LOUISVILLE                          | 1,880        | 1,928        | 1,905        | 1,975        |
| UNIVERSITY OF PHOENIX-LOUISVILLE CAMPUS           | 0            | 0            | 0            | 0            |
| <b>Total, Louisville Metropolitan Area</b>        | <b>3,237</b> | <b>3,438</b> | <b>3,445</b> | <b>3,623</b> |
| <b>Masters Degrees</b>                            |              |              |              |              |
| BELLARMINE UNIVERSITY                             | 177          | 254          | 205          | 228          |
| INDIANA UNIVERSITY-SOUTHEAST                      | 157          | 218          | 196          | 264          |
| LOUISVILLE BIBLE COLLEGE                          | 6            | 1            | 5            | 9            |
| LOUISVILLE PRESBYTERIAN THEOLOGICAL SEMINARY      | 12           | 10           | 15           | 12           |
| OTTAWA UNIVERSITY-JEFFERSONVILLE                  | 0            | 0            | 0            | 0            |
| SOUTHERN BAPTIST THEOLOGICAL SEMINARY             | 44           | 53           | 63           | 59           |
| SPALDING UNIVERSITY                               | 100          | 110          | 159          | 220          |
| SULLIVAN UNIVERSITY                               | 23           | 28           | 60           | 96           |
| UNIVERSITY OF LOUISVILLE                          | 1,134        | 1,139        | 1,061        | 1,175        |
| UNIVERSITY OF PHOENIX-LOUISVILLE CAMPUS           | 0            | 0            | 0            | 0            |
| <b>Total, Louisville Metropolitan Area</b>        | <b>1,653</b> | <b>1,813</b> | <b>1,764</b> | <b>2,063</b> |
| <b>Doctoral Degrees</b>                           |              |              |              |              |
| LOUISVILLE PRESBYTERIAN THEOLOGICAL SEMINARY      | 7            | 4            | 13           | 6            |
| SOUTHERN BAPTIST THEOLOGICAL SEMINARY             | 64           | 57           | 86           | 75           |
| SPALDING UNIVERSITY                               | 34           | 27           | 49           | 36           |
| UNIVERSITY OF LOUISVILLE                          | 65           | 90           | 89           | 106          |
| <b>Total, Louisville Metropolitan Area</b>        | <b>170</b>   | <b>178</b>   | <b>237</b>   | <b>223</b>   |
| <b>First Professional Degrees</b>                 |              |              |              |              |
| LOUISVILLE PRESBYTERIAN THEOLOGICAL SEMINARY      | 27           | 30           | 36           | 26           |
| SOUTHERN BAPTIST THEOLOGICAL SEMINARY             | 137          | 146          | 185          | 164          |
| UNIVERSITY OF LOUISVILLE                          | 315          | 321          | 323          | 330          |
| <b>Total, Louisville Metropolitan Area</b>        | <b>479</b>   | <b>497</b>   | <b>544</b>   | <b>520</b>   |

## Undergraduate Degrees Awarded per 100,000 Residents Louisville and 15 Comparison MSAs, 2003-04 Academic Year



for research reports, see

<http://monitor.louisville.edu>

**National City**<sup>®</sup>

UNIVERSITY of LOUISVILLE  
*dare to be great*