

Metroversities:

A 2012 Ranking of Metroversity-Impacted Urban Areas

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Introduction

The responses to the *Saviors of Our Cities: Survey of Best College and University Civic Partnerships* ranking released at the Annual Meeting of the Coalition of Urban and Metropolitan Universities in Fall 2009 demonstrate the relationship between institutions of higher education and larger metropolitan areas is evolving according to several new dynamics. These factors are transforming larger metropolitan areas and even regions into today's "college towns." The effects of higher education engagement have begun to determine, on a metropolitan level, what had previously been the economic, social, and cultural symbiosis between colleges and universities and their smaller and more traditional surrounding communities.

Metropolitan areas now look to and depend upon colleges and universities for various types of fiscal infusions. They wrestle with these institutions over building projects and how these ventures challenge land use regulations and affect property taxes. They demand that their colleges and universities design and implement new off-campus student housing agendas that are relevant to non-student residents. Technological advances on campus now often dictate off-campus retail and commercial activities. Professional development initiatives sponsored by higher educational institutions for PK-12 teachers can now help enhance the quality of instruction within the largest of metropolitan school divisions. All of these effects have assumed the grand scale of a metropolitan context and this new urban reality is being driven by "Metroversities."

"Metroversities" designates colleges and universities within metropolitan areas that are positively impacting the quality of life for all who work, live, and study in these areas. These institutions are important in shaping the economic, social, and cultural environment of the cities in which they reside.

This ranking of America's top 10 Metroversity-impacted urban areas assesses the top 10 (including ties) Metropolitan Statistical Areas (MSA) and/or Metropolitan Divisions (MDs) most positively impacted by their residing institutions of higher education.

Methodology

Increasingly, policy experts are examining and analyzing the economic effects of higher education on the nation's largest metropolitan regions. Such examination emanates from differing perspectives and methodologies. Some focus exclusively on the economic effects of higher education through the compiling and assessment of total institutional expenditures, research expenditures, awarded federal grants and contracts, and the

employment of faculty and staff in a given MSA or MD.¹ Some at Northeastern University, Columbia University and the University of California-Berkeley calculate the expense of not funding higher education – with their projections of the corollary demonstrating an increased cost to taxpayers in the social welfare and criminal justice systems. Others exclusively evaluate higher education employment in metropolitan areas through the computation of a “location quotient” which compares the concentration of such employment within a given MSA to that of the nation as a whole.² This “location quotient” methodology is proving particularly useful to such entities as the Metropolitan Policy Program of the Brookings Institution in regards to their study of the combined economic impact of higher education as well as hospitals on metropolitan economies. This perspective seems especially relevant considering that a great many metropolitan higher education institutions own and operate hospitals. Bruce Katz, Vice President and Director of the Metropolitan Policy Program at Brookings refers to “skilled anchor” metropolitan areas that have made a transition from manufacturing and shipping to service-based economies. Medical and educational institutions have often driven this transformation.³ Brookings experts also contend that the potential and real MSA economic positives generated by higher education include, “export-base demand stimulus, human capital development, amenity improvements, R&D spillovers, entrepreneurship increase...and economic development leadership.”⁴

Brookings analysts also contend that metropolitan areas with highly educated populations experienced more modest declines in employment during the latest recession than other metropolitan areas. Among the 20 metro areas with the highest rates of bachelor’s degree attainment, only four registered declines in their overall employment-to-population ratio from 2007 to 2009 that exceeded the national

¹ A good example of a thorough and particularly useful economic study is Atlanta Regional Council for Higher Education, *Higher Education in America’s Metropolitan Areas*. Released in 2008, the ARCHE report analyzes 2005 economic data pertaining to higher education institutions and their respective MSAs. See <http://www.atlantahighered.org/default.aspx?tabid=627&Report=4&xmid=579>.

² These “location quotient” studies are usually drawn from United States Department of Labor, Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*. See for example, The Editor’s Desk, Bureau of Labor Statistics, “Concentration of Employment in Higher Education in Metropolitan Areas,” February 13, 2009.

³ Bruce Katz, Vice President and Director, Metropolitan Policy Program and Julie Rodin, President, Rockefeller Foundation, “What American Cities Need,” *State of Metropolitan America Series*, Number 8, June 4, 2010.

⁴ See Timothy J. Bartik and George Erickcek, “Higher Education, the Health Care Industry, and Metropolitan Regional Economic Development: What Can “Eds & Meds” Do for the Economic Fortunes of a Metro Area’s Residents?” Upjohn Institute Staff Working Paper No. 08-140, February 7, 2007, pp. 5-6. See also, Timothy J. Bartik and George Erickcek, “The Local Economic Impact of “Eds & Meds”: How Policies to Expand Universities and Hospitals Affect Metropolitan Economies.” Metro Economy Series for the Metropolitan Policy Program at Brookings, December 2008.

average. Additionally, employment for workers without a high school diploma was also less impacted in these highly educated metropolitan areas than in other markets.⁵

At the same time, Brookings Metropolitan Policy Program experts continue to consider how higher educational institutions can support a new, post-recession, metropolitan economy which they describe as being, “innovative, knowledge-based, sustainable, global, and possessing a reduced carbon footprint.”⁶ Brookings Institution Metropolitan Policy experts regard the economic generation of higher education as particularly important for metropolitan areas that have suffered disproportionately during the past recession and that are attempting to rebuild and diversify their economies. Detroit serves as a good example. John Austin, a non-resident senior fellow at the Brookings Institution and Vice President of the Michigan State Board of Education regards higher education in that city as one of its “...significant assets that matter.” He states that the collapse of the automobile industry exposed the economic importance of both incoming immigrants and higher education, referring to them as “huge drivers of our economy.” Responsible for starting more than 33% of new technology companies, Austin describes both Detroit-area immigrants and universities as “our biggest engines of innovations.”⁷

The importance of the above quantifiable data is readily apparent and the metropolitan ranking takes into account these studies and their ultimate findings. As a result, this “*Ranking of Metroversity-Impacted Urban Areas*” is based upon a thorough understanding of the economic impact, existing or potential, of metropolitan higher education institutions. Each ranked metropolitan area and division is among the 40 largest (by population and total higher education institution expenditures) in the nation and is economically strengthened, at least in part, toward the post-recession outcomes stipulated by the Brookings Institution.

These metroversity economic effects can be designated in several ways:

Top Five Ranking by Total Higher Educational Economic Expenditures

1. New York-White Plains-Wayne, NY-NJ Metropolitan District.
2. Los Angeles-Long Beach-Glendale, CA Metropolitan District
3. Boston-Quincy and Cambridge-Newton-Framingham, MA Metropolitan Districts

⁵ Andrew Berube, Senior Fellow, Research Director, Metropolitan Policy Program, “Degrees of Separation: Education, Employment, and the Great Recession in Metropolitan America,” *State of Metropolitan America Series*, Number 20, December 13, 2010.

⁶ Personal Interview, Jennifer Vey, Brookings Institution Metropolitan Policy Program Fellow, January 20, 2010.

⁷ Marti Benedetti, “Michigan Economic Forecasters: Glass is Half Full,” *Crain’s Detroit Business*, October 19, 2010.

4. Chicago-Naperville-Joliet, IL Metropolitan District
5. Philadelphia, PA Metropolitan District

Top Five Ranking by Total Faculty and Staff Employees

1. New York-White Plains-Wayne, NY-NJ Metropolitan District
2. Chicago-Naperville-Joliet, IL Metropolitan District
3. Los Angeles-Long Beach-Glendale, CA Metropolitan District
4. Boston-Quincy and Cambridge-Newton-Framingham, MA Metropolitan Districts
5. Philadelphia, PA Metropolitan District

Top Five Ranking by Total Research Expenditures

1. Boston-Quincy and Cambridge-Newton-Framingham, MA Metropolitan Districts
2. New York-White Plains-Wayne, NY-NJ Metropolitan District
3. Baltimore-Towson, MD Metropolitan Statistical Area
4. Los Angeles-Long Beach-Glendale, CA Metropolitan District
5. Atlanta-Sandy Springs-Marietta, GA Metropolitan Statistical Area

Top Five Ranking by Federal Appropriations, Grants, and Contracts

1. Boston-Quincy and Cambridge-Newton-Framingham, MA Metropolitan Districts
2. New York-White Plains-Wayne, NY-NJ Metropolitan District
3. Los Angeles-Long Beach-Glendale, CA Metropolitan District
4. Chicago-Naperville-Joliet, IL Metropolitan District
5. Baltimore-Towson, MD Metropolitan Statistical Area.⁸

This survey, however, designates these metroversity economic effects in ANNUAL PER CAPITA higher education expenditures in a given MSA or MD and the economic multiplier effect of these expenditures. The per capita per year expenditures illustrate the higher education economic impact upon these MSAs and MDs to scale. Such a perspective makes clear how typical urbanites benefit from the economic presence and endeavors of their resident metroversities. In essence, it provides a general sense of the “bang” these metropolitan area residents are receiving for their higher educational “buck.” The economic multiplier effect factors the Marginal Propensity to Consume in a given MSA or MD. This MPC reflects the effect of higher education expenditures as they work through a metropolitan economy and make clear that metroversities serve to not only provide urban populations with educational opportunities but also support the

⁸ Atlanta Regional Council for Higher Education, *Higher Education in America’s Metropolitan Areas*, pp. 19-22.

financial well-being of newly emerging manufacturing, research and development, and commercial pursuits.⁹ It stimulates development of start-up companies, expands existing ones and creates jobs.

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Ranking of Top 10 Metroversity-Impacted Urban Areas

(Selected From Among the Forty Largest U.S. MSAs and MDs)

- 1. Boston-Cambridge-Quincy:** Nearly 230,000 full-time students are enrolled in Boston-Cambridge-Quincy metropolitan area colleges and universities. The total higher education expenditures in New England's largest MSA total over \$2300 *per capita* per year and provide an economic multiplier effect of over \$31 billion. Higher education has created and sustains 147,745 jobs, which comprise 8.76 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$3375 and from production occupations totaling \$1249. (196 determinant ranking points)
- 2. Raleigh-Cary-Durham:** Over 130,000 full-time students are enrolled in Raleigh-Cary-Durham metropolitan area colleges and universities. These combined MSAs are supported by higher education institution expenditures *per capita* per year totaling \$4820 and from an economic multiplier effect of over \$18 billion. Higher education has created and sustains 73,415 jobs, which comprise 9.5 percent of the metropolitan area's workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1477 and from production occupations totaling \$751. (189 determinant ranking points)
- 3. Baltimore-Towson:** Close to 110,000 full-time students are enrolled in Baltimore-Towson metropolitan area colleges and universities. This MSA ranks tenth in total higher education institution expenditures, third in research expenditures, fifth in federal grants and contracts, and tenth in faculty/staff employment. These expenditures translate to over \$1900 *per capita* per year and an economic multiplier effect of \$15.3 billion. Higher education has

⁹ The Marginal Propensity to Consume (MPC) makes clear what portion of a dollar earned will be spent, not saved. The multiplier effect demonstrates the final impact of that additional spent money on an economy. If we estimate the MPC to be .5 and you are given another \$1, you will spend \$.50. The multiplier effect will then be 2. If the government spent \$1million on a bridge in a community, we would say that the income in that community would go up by that amount initially. Then the construction workers would spend half of that (MPC=.5) in the second round. When they make purchases, the income of other workers in the community's economy goes up again by that \$500,000. Then again, these workers make purchases of \$250,000 and the process goes on until the \$1 million is gone. The final impact of the \$1 million bridge is \$2million in economic activity. In the case of a college or university, we can think of the multiplier effect in the same way. Any time an institution creates a job or otherwise income for someone or for a community, that money will work its way through the economy according to the multiplier and the MPC. A representative MPC for most colleges and universities is between .5 and .75. If .75, then the multiplier is 4. A safe, conservative multiplier effect would estimate that anything the institution spends in its community can be multiplied by three.

created and sustains 84,660 jobs, which comprise 6.7 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1840 and from production occupations totaling \$641. (181 determinant ranking points)

4. **San Jose-Sunnyvale-Santa Clara:** Over 100,000 full-time students are enrolled in San Jose-Sunnyvale-Santa Clara metropolitan area colleges and universities. This MSA is supported by higher education institutional expenditures *per capita* per year totaling \$2000 and from an economic multiplier effect of nearly \$11 billion. Higher education has created and sustains 58,083 jobs, which comprise 6.5 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$2398 and from production occupations totaling \$1098. (174 determinant ranking points)
5. **Philadelphia:** Nearly 200,000 full-time students are enrolled in Philadelphia metropolitan area colleges and universities. Higher education institutions in this MD spend just over \$1500 *per capita* per year. The estimated economic multiplier effect of these total expenditures is roughly \$30 billion per year. Higher education has created and sustains 64,799 jobs, which comprise 3.5 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1873 and from production occupations totaling \$910. (172 determinant ranking points)
6. **San Francisco-San Mateo-Redwood City:** Close to 100,000 full-time students are enrolled in San Francisco-San Mateo-Redwood City metropolitan area colleges and universities. *Per capita* per year higher education institution expenditures in this MD total \$2300 and the related economic multiplier effect is over \$12 billion. Higher education has generated and sustains 42,286 jobs, which comprise 3.3 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$4129 and from production occupations totaling \$589. This compares to an annual *per capita* economic impact from business and finance totaling \$2514 and from production operations totaling \$589. (165 determinant ranking points)
7. **Seattle-Bellevue-Everett (tie):** Over 110,000 full-time students are enrolled in Seattle-Bellevue-Everett metropolitan area colleges and universities. Higher education *per capita* per year spending in this MD totals \$1382. The related economic multiplier effect of these expenditures exceeds \$10.5 billion. Higher education has created and sustains 51,674 jobs, which comprise 3.7 percent of the metropolitan area's total workforce. (157 determinant ranking points)
7. **Nashville-Davidson-Murfreesboro (tie):** Nearly 80,000 full-time students are enrolled in Nashville-Davidson-Murfreesboro metropolitan area colleges and universities. *Per capita* per year higher education institution expenditures in this MSA total \$2000 and the related economic multiplier effect surpasses \$9 billion. Higher education has created and sustains 29,799 jobs, which comprise 4.1 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1151 and from production occupations totaling \$1220. (157 determinant ranking points)
8. **Atlanta-Sandy Springs-Marietta:** Close to 200,000 full-time students are enrolled in Atlanta-Sandy Springs-Marietta metropolitan area colleges and universities. Higher

education institution expenditures in this MSA translate to over \$1100 per capita per year and an economic multiplier effect of nearly \$18 billion. Higher education has created and sustains 69,880 jobs, which comprise three percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1779 and from production occupations totaling \$649. (155 determinant ranking points)

9. **Pittsburgh:** 120,000 full-time students are enrolled in Pittsburgh metropolitan area colleges and universities. The Pittsburgh MSA ranks seventeenth in total yearly higher education institution expenditures, eleventh in faculty/staff employment, and eleventh in research expenditures. These total expenditures translate to over \$1300 per capita per year. The estimated economic multiplier effect of these total expenditures is over \$9 billion per year. All of this is most impressive when considering that the Pittsburgh MSA is only the twenty-second largest metropolitan area in terms of population. Higher education has created and sustains 55,488 jobs, which comprise almost five percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1248 and from production occupations totaling \$983. (154 determinant ranking points)
10. **Washington, D.C.-Arlington-Alexandria:** Well over 200,000 full-time students are enrolled in Washington, D.C.-Arlington-Alexandria metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD, totals \$1315 and its economic multiplier effect exceeds \$16 billion. Higher education has created and sustains 60,869 jobs, which comprise 2.1 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$4482 and from production occupations totaling \$379. (153 determinant ranking points)

The next 15:

11. **San Diego-Carlsbad-San Marcos:** Nearly 200,000 full-time students are enrolled in San Diego-Carlsbad-San Marcos metropolitan area colleges and universities. This MSA ranks twelfth in total higher education institution expenditures, fifteenth in research expenditures, fourteenth in federal grants and contracts, and thirteenth in faculty/staff employment. These expenditures translate to over \$1300 *per capita* per year and an economic multiplier effect of over \$12 billion. Higher education has created and sustains 41,873 jobs, which comprise 3.2 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1568 and from production occupations totaling \$728. (150 determinant ranking points)
12. **Houston-Sugarland-Baytown:** Nearly 150,000 full-time students are enrolled in Houston-Sugarland-Baytown metropolitan area colleges and universities. This MSA ranks sixth in total higher education institution expenditures, sixth in research expenditures, eighth in federal grants and contracts, and sixth in faculty/staff employment. These total expenditures translate to just over \$1200 per capita per year and an economic multiplier effect of over \$20 billion. Higher education has created and sustains 71,760 jobs, which comprise 2.8 percent of the metropolitan area's total workforce. This compares to annual *per capita* economic impact from business and finance totaling \$1636 and from production occupations totaling \$2011. (149 determinant ranking points)

- 13. Columbus, OH:** Over 90,000 full-time students are enrolled in Columbus metropolitan area colleges and universities. Ohio's capital is supported by higher education institution expenditures *per capita* per year of \$1900 and an economic multiplier effect of \$10.2 billion. Higher education has created and sustains 24,488 jobs, which comprise 2.7 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1985 and from production occupations totaling \$1005. (142 determinant ranking points)
- 14. New York-White Plains-Wayne:** Close to 500,000 full-time students are enrolled in New York-White Plains-Wayne metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$368 with a with a total economic multiplier effect exceeding \$42 billion. Higher education has created and sustains 117,187 jobs, which comprise 2.3 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$2324 and from production occupations totaling \$438. (141 determinant ranking points.)
- 15. Sacramento-Arden-Arcade-Roseville:** Close to 120,000 full-time students are enrolled in Sacramento-Alden-Arcade-Roseville metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$1400 with a total economic multiplier effect approaching \$9 billion. Higher education has created and sustains 25,684 jobs, which comprise three percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1738 and from production occupations totaling \$1045. (137 determinant ranking points)
- 16. Los Angeles-Long Beach-Glendale:** Nearly 450,000 full-time students are enrolled in Los Angeles-Long Beach-Glendale metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$126 with an economic multiplier effect exceeding \$37 billion. Higher education has created and sustains 97,827 jobs, which comprise 2.3 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1504 and from production occupations totaling \$810. (132 determinant ranking points)
- 17. Chicago-Naperville-Joliet:** Well over 350,000 full-time students are enrolled in Chicago-Naperville-Joliet metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$327 and its economic multiplier effect is nearly \$31 billion. Higher education has created and sustains 78,311 jobs, which comprise nearly two percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1948 and from production occupations totaling \$1043. (131 determinant ranking points)
- 18. Minneapolis-St. Paul-Bloomington:** Close to 140,000 full-time students are enrolled in Minneapolis-St. Paul-Bloomington metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$1100 and its economic multiplier effect reaches \$10.4 billion. Higher education has created and sustains 32,865 jobs, which comprise nearly two percent of the metropolitan area's entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1692 and from production occupations totaling \$1803. (130 determinant ranking points)

- 19. Austin-Round Rock (tie):** Over 100,000 full-time students are enrolled in Austin-Round Rock metropolitan area colleges and universities. *Per capita* per year spending by higher education in this MSA totals \$1193 with an economic multiplier effect of just over \$6 billion. Higher education has created and sustains 26,995 jobs, which comprise 3.5 percent of the metropolitan area's total workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1781 and from production occupations totaling \$605. (128 determinant ranking points)
- 19. New Orleans-Metairie-Kenner (tie):** Close to 108,000 full-time students are enrolled in New Orleans-Metairie-Kenner metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$1472 with an economic multiplier effect exceeding \$5 billion. Higher education has created and sustains 19,692 jobs, which comprise 3.8 percent of the metropolitan area's entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$848 and from production occupations totaling \$939. (128 determinant ranking points)
- 20. Newark-Union:** Over 90,000 full-time students are enrolled in Newark-Union metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$1322 with an economic multiplier effect reaching \$8.5 billion. Higher education has created and sustains 19,034 jobs, which comprise nearly two percent of the metropolitan area's entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$2086 and from production occupations totaling \$736. (116 determinant ranking points)
- 21. St. Louis:** Close to 120,000 full-time students are enrolled in St. Louis metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$932 with an economic multiplier effect just under \$8 billion. Higher education has created and sustains 34,246 jobs, which comprise 2.6 percent of the entire metropolitan area's workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1458 and from production occupations totaling \$934. (114 determinant ranking points)
- 22. Oakland-Fremont-Hayward:** Well over 110,000 full-time students are enrolled in Oakland-Fremont-Hayward metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$987 with an economic multiplier effect reaching nearly \$7.3 billion. Higher education has created and sustains 29,061 jobs, which comprise 2.2 percent of the metropolitan area's entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1721 and from production occupations totaling \$746. (113 determinant ranking points)
- 23. Denver-Aurora:** Close to 100,000 full-time students are enrolled in Denver-Aurora metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$698 with an economic multiplier effect exceeding \$5.1 billion. Higher education has created and sustains 20,744 jobs, which comprise 1.7 percent of the metropolitan area's entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$2387 and from production occupations totaling \$613. (109 determinant ranking points)

- 24. Miami-Miami Beach-Kendall:** Well over 100,000 full-time students are enrolled in Miami-Miami Beach-Kendall metropolitan area colleges and universities. *Per capita* per year higher education spending in this MD totals \$1008 with an economic multiplier effect exceeding \$7.3 billion. Higher education has created and sustains 21,246 jobs, which comprise 2.2 percent of the metropolitan area’s entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1286 and from production occupations totaling \$384. (105 determinant ranking points)
- 25. Cleveland-Elyria-Mentor:** Over 60,000 full-time students are enrolled in Cleveland-Elyria-Mentor metropolitan area colleges and universities. *Per capita* per year higher education spending in this MSA totals \$610 with an economic multiplier effect of nearly \$5 billion. Higher education has created and sustains 26,939 jobs, which comprise 2.6 percent of the metropolitan area’s entire workforce. This compares to an annual *per capita* economic impact from business and finance totaling \$1442 and from production operations totaling \$1369. (96 determinant ranking points)

Additional Metropolitan Area Ranking

- 26. Dallas-Plano-Irving
- 27. Milwaukee-Waukesha-West Allis
- 28. Santa Anna-Anaheim-Irvine
- 29. Nassau-Suffolk
- 29. Providence-New Bedford-Fall River
- 30. Cincinnati-Middletown
- 31. San Antonio
- 32. Tampa-St. Petersburg-Clearwater
- 33. Detroit-Livonia-Dearborn
- 34. Edison NJ
- 35. Phoenix-Mesa-Scottsdale
- 35. Indianapolis-Carmel
- 36. Kansas City
- 37. Riverside-San Bernardino-Ontario
- 38. Orlando-Kissimmee
- 38. Portland-Vancouver-Beaverton
- 39. Virginia Beach-Norfolk-Newport News
- 40. Fort Worth-Arlington
- 41. West Palm Beach-Boca Raton
- 42. Charlotte-Gastonia-Concord
- 43. Las Vegas-Paradise
- 44. Fort Lauderdale-Pompano Beach-Deerfield Beach
- 45. Warren-Farmington-Troy