



The Knowledge Economy

America's Most Innovative Cities

Andy Greenberg, 05.24.10

A Silicon Valley city tops the list, of course. But the No. 2 hot spot may surprise you.

Turns out everything really is bigger in Texas. Including the brains.

Over the last year residents of Austin have patented inventions including a laser-guided nail clipper for dogs and cats, an electronic fishing reel system, a fertilizer that also functions as a pesticide, and a gadget that can detect explosive chemicals with microphones--along with about 2,900 other ideas, the second-most per-capita of any metro area in the U.S.

Silicon Valley still dominates the U.S. as a magnet for innovative companies and people. But in our first-ever ranking of America's Most Innovative Cities, the "Silicon Hills" of Austin were close on the Valley's heels.

For our ranking we started with the 100 largest metropolitan statistical areas in the U.S. and used data from the U.S. Patent and Trademark Office to determine number of patents per capita. Then we combined it with venture capital investment per capita from the National Venture Capital Association, along with those cities' ratios of high-tech, science and "creative" jobs from ZoomProspector.com and Payscale.com.

[In Pictures: America's Most Innovative Cities](#)

It's no surprise that Silicon Valley, specifically the city of San Jose and neighbors like Santa Clara, Sunnyvale, Mountain View and Cupertino, ranked first in all four of those categories. Those cities are home to some of the world's largest tech companies, from Cisco to Google to Apple. But less expected were the runners-up on our list: Austin and neighboring Round Rock, Texas, cities that produced an impressive average 1.7 patents for every thousand residents over the last 12 months.

Austin's culture of innovation may be boosted by well-known tech credentials like the South by Southwest (SXSW) Web startup and music festival held annually in March, as well as the nearby headquarters of hardware industry giants Dell and Freescale Semiconductor. But they also have two secret weapons in the innovation race: the University of Texas's Cockrell School of Engineering, and IBM's Austin research lab.

IBM produces more patents than any other company in the world, and for the last seven years Austin has produced more of those patents than any other IBM office. In total the lab produced 880 patents in 2009. That's just 30 less than all of Cisco, and 300 more than Sun Microsystems, Boeing, AT&T or Toyota. Six

of IBM's 25 top inventors live in Austin, including one with more patents to his name than any other IBMer, a chip-focused engineer named Ravi Arimilli. "For IBM, Austin has evolved into a real hotbed of innovation," says Tony Befi, the company's site manager.

Befi cites the University of Texas at Austin as a major source of the area's innovative workers. It ranks ninth on the U.S. News World and Report list of best engineering schools, but its size helps to distinguish it. Every year its Cockrell School of Engineering pumps out more than 1,000 undergraduates, far more than higher-ranked engineering schools like MIT, Caltech or Stanford. "Employers come to Austin because they can get quality and quantity," says Michael Powell, director of the school's career center.

Raleigh, N.C., which took the third-place spot on our list, has a similar mix of academia and industry. Raleigh placed first on our ranking this year of the country's [Most Wired Cities](#) and has drawn in tech powerhouses like Cisco, Lenovo and IBM with its neighboring Research Triangle Park, a science and business focused area between the city and neighboring Durham and Chapel Hill. Those companies are fed with fresh talent from schools in the surrounding area, including Duke, North Carolina State University and the University of North Carolina, Chapel Hill.

Al Lee, director of quantitative analysis at jobs site Payscale.com, points to big tech firms' support from local universities to explain most of the cities on our list. Provo, Utah, for instance, ranks ninth thanks in part to Brigham Young University; Madison, Wisc., ranks seventh due in part to the University of Wisconsin-Madison. Provo ranked second in the number of science and tech jobs per capita, and Madison ranked third in its proportion of creative jobs. "The lesson seems to be, if you don't have a strong university nearby, you can't be an innovative city," says Lee.

One city noticeably absent from our top-20 list: New York. Despite claims that so-called "Silicon Alley" is an up-and-coming scene for high-tech startups, its tech scene still composes only a tiny slice of the city's economy. New York placed 49th, just below Dayton, Ohio. Though it ranks 14th in venture capital investment per capita, it comes in 47th for high-tech jobs and 81st in patents per capita.

Payscale's Lee argues that instead of creative innovation, the majority of New York's brainpower is being funneled into creating new tricks in the financial industry, sometimes with less than beneficial results. "New Yorkers took all the intellectual vigor that goes into creating new technologies in Silicon Valley, and instead used it to destroy our economy," he says, referring to the fiascoes of subprime mortgage and collateralized debt obligations.

But if New York isn't a threat to Silicon Valley's dominance, then smaller cities like Austin and Raleigh may be. Aside from universities and tech companies, UT Austin Dean of Engineering Greg Fenves cites a less tangible culture of creativity. "We have a saying here: 'Keep Austin weird,'" says Fenves, who moved to the city from Berkeley, Calif., several years ago. "In a sense, all innovation is weird. We're creating things that the world has never seen before."

[In Pictures: America's Most Innovative Cities](#)

Courtesy of JB Goodwin