New Species of City Discovered: The University City
Scott Shapiro

Do you live in a post-industrial city, a metropolis or a company town? What about a port city, a border town or a tourist mecca? Onto the list of urban typologies we can now place a newly discovered entrant: the University City.

Until now, the University City has not been thought of as a discrete species. But these cities appear to have a shared DNA that produces similar outcomes – high talent levels, outsized cultural offerings, innovation-driven economies, little violent crime and a low cost of living.

The idea that University Cities might be interesting has been suggested once before. Senator Daniel Patrick Moynihan said, "If you want to build a great city, create a great university and wait 200 years."

Was he right? Here in one University City – Lexington, Ky., a city of 300,000 that is home to the University of Kentucky – the Mayor's office has done some research to explore that question.

There are six metros that have leapt from college town status to become University Cities. Each has a diversified economy around a major research university in its urban core, has between 250,000 and one million people in its metro, and has college students making up at least 10 percent of its population. The data show that these cities are now large enough to leverage – in ways that are not always obvious – the talent, investment, innovation, ideas, openness, culture and entrepreneurialism that naturally surround large institutions of higher education.

As you might expect, educational achievement is extremely high in University Cities, and it is tied closely to economic growth. The share of adults 25 years and older with at least a Bachelor's degree is 42 percent in University Cities compared with 29 percent for the nation as a whole[1]. Edward Glaeser, the Harvard economist, has shown that educated cities grow far more rapidly than cities with less human capital, largely due to increased productivity levels.[2] Labor economist Enrico Moretti of Berkeley echoed the thought, writing, "Since 1980, data show that the economic success of a city has been increasingly defined by its number of highly educated workers."[3] That may be intuitive, but Moretti also finds that cities with more college graduates benefit from spillover effects that lead to higher productivity in other industries within the city, even manufacturing[4]. And he finds

[1] U.S. Census Bureau, 2011-2013 American community Survey 3-year estimates.
[2] Glaeser, Edward L. and Saiz, Albert Saiz. "The Rise of the Skilled City." Harvard Institute of Economic Research. December, 2003.
[3] Moretti, Enrico. "Where the Good Jobs Are—And Why. *The Wall Street Journal*. Sept. 17, 2013.
[4] Moretti, Enrico. "Education, Spillovers and Productivity." *American Economic Review*. June, 2004. pp 656-690.

that higher percentages of college-educated workers produce city-wide increases in average wages.[5]

In college towns graduates leave. In University Cities, a healthy number of them stay, bringing the average age of University City populations down to three years below the national average[6]. And as Austin routinely boasts, young talent attracts employers. That's one reason why unemployment rates in University Cities from 2009 to 2013 averaged 6.3 percent, compared with 8.7 percent in similar-sized cities and 8.8 percent in the nation's largest 15 cities[7]. Other contributors to low unemployment rates are the existence of major universities that tend to hold on to their employees during downturns, and the cities' disproportionate number of tech, finance, legal, engineering and other Creative Class jobs[8]. An analysis by Richard Florida found that unemployment among the Creative Class only went as high as five percent during the recession[9].

Another factor driving low unemployment and economic vibrancy is an entrepreneurial climate, fueled by talent and research. Though its impact is often overstated, commercialization at universities does fuel both local companies and start-ups.[10] Business starts in University Cities are 16.3 percent higher than other cities the same size[11], and slightly below the rate of the nation's 15 largest cities. In University Cities, patents per capita – which have been shown to drive patenting among area companies[12] – are more than double the national average and almost four times the average of other cities the same size cities[13].

But the existence of intellectual capital and a dynamic economy does not, by itself, make cities attractive to talent, investment and employers. Cities also need to be safe and fun. Here too, University Cities have distinctive numbers that confirm what residents already feel…that they live in a cool city. First, safety: When compared with the nation's largest cities, the violent crime rate in University Cities is, on average, 40 percent lower. Compared to other cities the same size, the violent crime rate in University Cities is 36 percent lower[14]. That's an enormous difference.

Those that have lived in one of the University Cities know that they are densely stocked with cultural options, but the numbers still pack a surprise. University Cities have 47.2 percent more arts, entertainment and recreation establishments per thousand than the

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[5] Moretti, Enrico. "Estimating the Social Return to Higher Education: Evidence from Longitudinal and Repeated Cross-Sectional Data." *Journal of Econometrics* 121. 2004. pp 175 – 212
[6] U.S. Census Bureau, 2011-2013 American community Survey 3-year Estimates.
[7] U.S. Department of Labor, Bureau of Labor Statistics, 2009-2013 annual unemployment rate.
[8] Florida, Richard. Rise of the Creative Class Revisited, 2012.
[9] Florida, Richard. Rise of the Creative Class Revisited, 2012.
[10] Florida, Richard. The University and the Creative Economy. 2006.
[11] U.S. Census Bureau, 2010-2011.
[12] Jaffe, Adam B. "Universities and Regional Patterns of Commercial Innovation" REI Review, 1989.
[13] U.S. Department of Commerce, U.S. Patent and Trademark Office, 2013. http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cls_cbsa/allcbsa_gd.htm
[14] U.S. Department of Justice, Federal Bureau of Investigation, 2013. http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/tables/6tabledatadecpdf/table-6

average of other cities the same size. And they have 25.7 percent *more* cultural establishments per thousand than the average of the nation's 15 largest cities.[15] The surprising pocket contemporary art gallery and unexpected philharmonic here in Lexington can be seen not as the product of ambitious local culture entrepreneurs, but the natural byproduct of a University City. The demand for them is in the air.

So where are these University Cities? Beyond Lexington, there is Madison, Ann Arbor, Fort Collins, Durham-Chapel Hill, and Lincoln. University Cities are defined as a city and MSA between 250,000 and 1 million[16], with college students making up at least 10 percent of the population,[17] and with a major research university[18] in its urban center.

Exploiting yet another perk of living in a University City, we asked Arnold Stromberg, PhD, the chairman of the statistics department at the University of Kentucky, to conduct an analysis of all cities with a population and MSA between 250,000 and 1 million, across a range of data sets. The six University Cities clustered together, suggesting that they are more similar to each other than to other cities.

There are other cities that come close. Fantastic college towns like Ithaca and Athens match many of the statistical trends, but their size prevents them from having an economy large enough to absorb and leverage the talent from their research universities. Syracuse also tracks some (though not all) of the trends and criteria. Towns like Boulder and Bloomington could be well on their way to growing into University Cities. And Austin has become too large, creating a much-publicized traffic nightmare, but also shedding a crucial common trait of University Cities – an incredibly low cost of living.

That low cost of living in University Cities nearly perfectly compensates for the higher salaries in the nation's biggest cities. Put another way, if you adjust salaries[19] for cost of living[20], the median salary in a University City is $45,218[21] compared to $45,904 for New York, Boston and the nation's 15 largest cities. And if you believe the recent analysis from Nate Silver's FiveThirtyEight site, median incomes in college towns and university cities are dramatically underreported, with the outsized number of students classified by the Census Bureau as low-income households.[22] In Lexington, the article finds, the median income with students excluded would be $3,000 higher.

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[15] U.S. Department of Commerce, United States Census Bureau, 2012.
[16] U.S. Department of Commerce, U.S. Census Bureau, 2010.
[17] U.S. Department of Commerce, U.S. Census Bureau, 2010.
[18] Carnegie Classification for doctorate-granting universities of RU/VH, Research Universities (very high research activity).
[19] U.S. Department of Commerce, Bureau of Economic Analysis, 2011.
[20] U.S. Department of Housing and Urban Development, 2011.
[21] Formula: ((University City Median Salary/University City Cost of Living) / (National Median Salary/National Median Cost of Living)) x University City Median Salary.
[22] Casselman, Ben. "Inequality in College Towns." FiveThirtyEight. http://fivethirtyeight.com/features/inequality-in-college-towns/. April 28, 2014.

So it seems that University Cities offer big-city living in the ways that matter: culture, salary and economic vitality, but with low crime and a low cost of living. Sounds good, right?

But before University Cities pat themselves on the back too hard, they should be reminded that this was not part of some grand strategy for utopian city building. In fact, these cities were weak players in the industrial economy, with a general lack of extractable resources or access to navigable waters. And they may not be able to compete globally in whatever happens to be the next economy. But for right now, the existence of a major research university turns out to be the right stem cell with which to build a 21st Century knowledge-economy city.

Evidence that University Cities breed success beyond their size is already starting to come in. In "Rise of the Creative Class Cities Revisited," Richard Florida writes that "major research universities are key – if not *the* key – hubs of the Creative Economy… The surrounding community must also have the capacity to exploit the innovation and technologies that the university generates, and the will to put in place the broader lifestyle amenities and qualities of place the Creative Class seeks."[23]

And a recently published Op-Ed in *The New York Times*[24] from Seth Stephens-Davidowitz, PhD, a Google analyst and *Times* contributor, provided its own kind of confirmation that something interesting is happening in University Cities. Stephens-Davidowitz looked at the Wikipedia pages of the top 150,000 successful individuals and found that their counties of birth correlated with "university towns and urban areas." In fact, four of the six University Cities – Durham, Lexington, Madison and Ann Arbor -- are in his top 3 percent for churning out successful individuals per capita.

This new species of city is interesting in part because it is difficult, although not impossible, to replicate. The striking similarity of the data points among University Cities – and their distinction from other cities of similar size, larger cities and the nation as a whole – suggests that the outcomes naturally result from a city growing up around a major research university. Non University Cities can invest in, say, more police to lower the violent crime to University City levels. Or they can choose to fund a dramatic rise in the number of arts and cultural institutions to University City levels. Or they can focus on attracting young degreed talent. Or they can dial up their start-up culture. But it would be difficult to invest in more than one of these successfully.

So if University Cities are swirling cocktails of talent, ideas, culture and innovation, served at a discount and built just right for the knowledge economy, you may be thinking about moving your family or business to one. Already, population growth in University Cities is double the national average over the past decade[25]. If too many follow that path, the University Cities will start looking more like Austin, home of the University of Texas. More

[23] Florida, Richard. "Rise of the Creative Class Revisited" 2012. Pps. 194, 310, 311.
[24] Stephens-Davidowitz, Seth. "The Geography of Fame" March 22, 2014.
[25] U.S. Census Bureau, American Community Survey 2005-2013.

people moved to Austin than any other city between 2010 and 2013[26]. The result is one of the most robust economies in the country. But along with that comes too much traffic and too little affordable housing. If those are some of the trade-offs that may confront University Cities, it's time to start planning for them with a new degree of intentionality. Or perhaps some cities will want to head in a different direction to intentionally limit growth. But they will need to choose…and plan.

We are nearing Sen. Moynihan's 200-year mark for creating a great city. The average age is 173 for the University of Michigan, the University of Wisconsin-Madison, The University of Kentucky, Colorado State University, the University of Nebraska-Lincoln, Duke and the University of North Carolina-Chapel Hill. For the cities that surround those great universities, the next 30 years will be very interesting.

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[26] Florida, Richard. "America's Biggest Metros are Growing Much Faster Than Other Cities" March 28, 2014.