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The Creative Density of Cities

Cities like Toronto, Ontario, and Portland, Oregon, are already encouraging more density to cut down on sprawl and pollution, and protect green space. But researchers at the Martin Prosperity Institute argue that there's another reason to encourage people, especially creative people, to live near each other in cities: it makes them more likely to innovate and develop new ideas that lead to growth and prosperity.

Many geographers and social scientists have already made the case that dense cities produce more innovations – as measured by patents – than spread-out ones. But it turns out that cities with a lot of people who think for a living – what Richard Florida calls the creative class – produce more patents than those with fewer creative people.

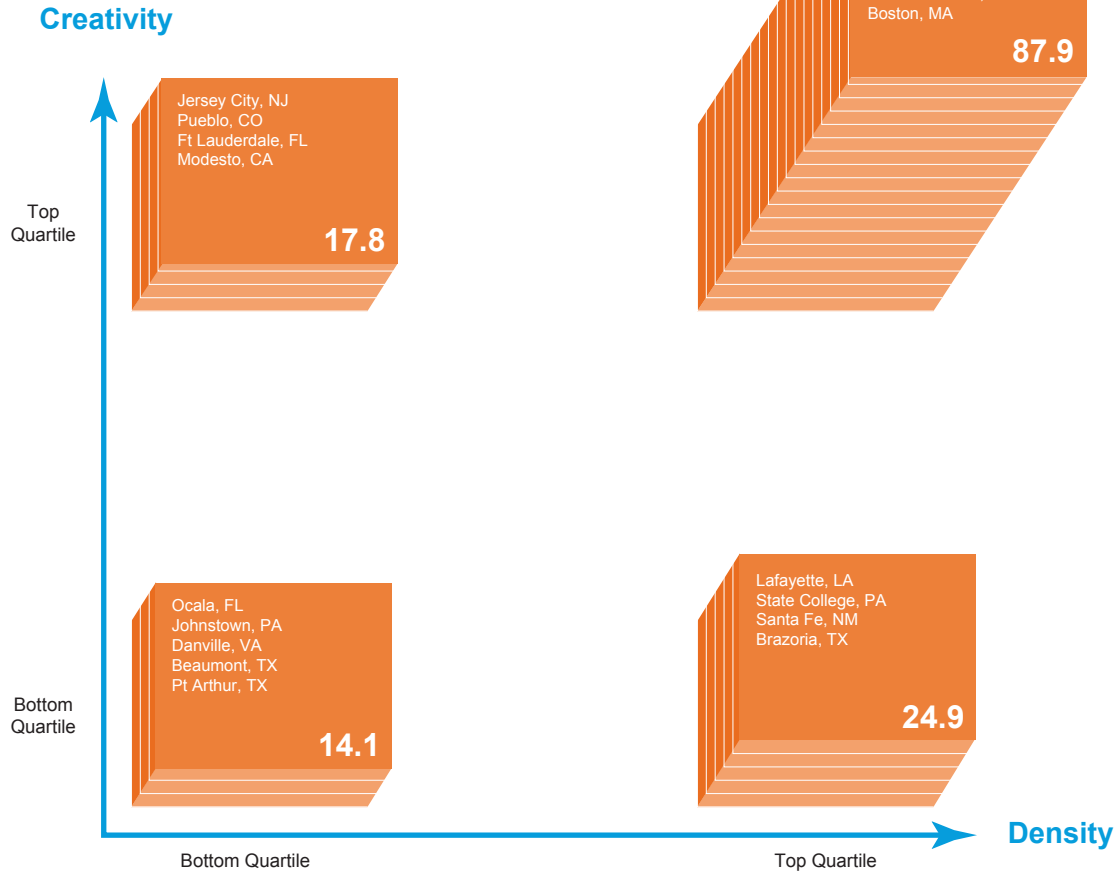
What's more, cities that are not only dense but have a high concentration of the creative class produce more innovations than any of the others. This creative density accounts for 31.7% of the difference between patent-rich cities and patent-poor ones. This insight provides a new reason for planners to encourage more people to live in dense cities, rather than in widely-spaced suburbs.

Our research aims to show the link between tolerance, talent, innovation and growth. Places that are open to artistic innovators will be more likely to produce, retain and attract other kinds of innovators, including technological ones. Cities that attract technological innovators are more likely to generate new businesses and industries which will make them grow.

One key link in this chain is the conditions that promote innovation. What effect does geographic concentration or density have on innovation? Other experts have observed that dense cities produce more innovations than spread-out ones – perhaps because people living in dense cities bump into each other more often, at business gatherings but also at the fitness centre, in the store, on the street, in the pub. These serendipitous meetings can spark ideas that lead to innovation.

But what happens if a city has a high concentration of people who think for a living? To explore this question, researchers studied conditions in 240 metropolitan areas in the U.S. First, they developed a new measure of density – one that creates a more accurate picture than existing measures of how closely people live together in a city. Then, using employment statistics from the U.S. Bureau of Labor, they assessed each city's creative class – including artists, teachers, scientists, engineers, and architects. Innovation was evaluated by checking the number of patents each area produced. Some might wonder why. It's true that a great many innovations are not patented. Yet the production of patents is today a widely used and accepted proxy for innovation.

U.S. patents per 100,000 residents, 2000



Source: Knudsen, Florida, Stolarick and Gates, "Density and Creativity in US Regions" available at <http://martinprosperity.org/research-and-publications/publication/density-and-creativity-in-us-regions>

Note: Los Angeles and Oakland are in the top 10 of high creativity and high density but are not listed to provide geographic diversity.

They discovered that cities with the highest density and the highest concentration of creative people produced over 6 times more patents than spread-out cities with the fewest creative people. This finding helps to build the case that attracting creative thinkers and building dense cities is beneficial for a very practical reason: it promotes new ideas and growth.

For more information, please see "Density and Creativity in US Regions", by Brian Knudsen, Richard Florida, Kevin Stolarick, and Gary Gates. Their paper, first published in the Annals of the Association of American Geographers, can be found on the Martin Prosperity Institute website.

The Martin Prosperity Institute (martinprosperity.org) at the University of Toronto's Rotman School of Management is the world's leading think-tank on the role of sub-national factors – location, place and city-regions – in global economic prosperity. Led by Director Richard Florida, we take an integrated view of prosperity, looking beyond economic measures to include the importance of quality of place and the development of people's creative potential.