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Cleveland's Talent Landscape

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Cleveland's Talent Landscape

By Richey Piiparinen, Director, Urban Theory & Analytics

Key Findings

- The Cleveland metro's college educational attainment rate (31.9%) ranks nearly 200th out of 1,000 urban areas nationally.
- Cleveland ranks 4th among urban areas in Ohio behind Columbus (37.4%, Cincinnati (34.5%) and Akron (32.1%).
- Among the largest 40 metros, Cleveland ranks 35th. The top four are San Jose, CA (52.5%), Washington, D.C (51.7%), San Francisco (50.7%), and Boston (48.9%).
- From 2010 to 2020, the educational attainment rate in Cleveland increased from 27.1% to 31.9%, with its 4.8 percent point gain ranking it 29th out of the largest 40 metros. The top three in percent point gains were: San Jose (8%), Nashville (7.6%), and Pittsburgh (7.6%).
- The retention rate for Cleveland State grads 5 years after graduation is much higher (82.4%) than it is for Ohio State University grads (66.7%), suggesting something else, beyond retention, is key to talent accumulation.
- Among the largest 40 metros, Cleveland ranks 18th in per capita higher ed R&D (HERD) funding, while Pittsburgh is 3rd and Columbus 6th.
- Among higher ed institutions nationally, Case Western Reserve University ranks 13th with nearly 5% of graduates designated as entrepreneurs. First is Cal Tech (14%) and 2nd is MIT (12.1%).
- Policy-wise, Cleveland must focus on both the supply- and demand-side factors of talent accumulation.



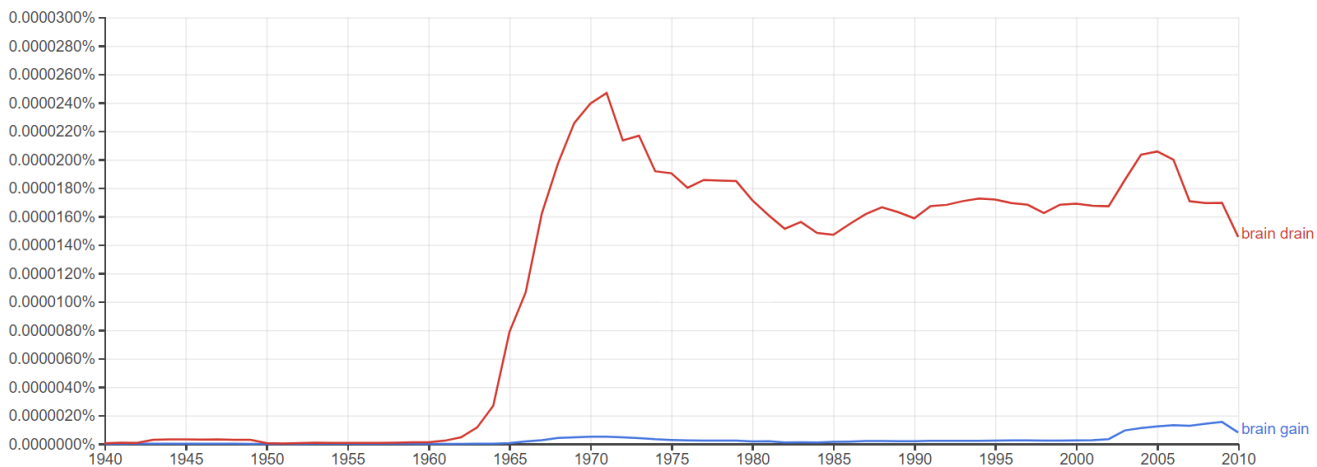
Introduction

The term “brain drain” implies a region’s talent pool fading out, with the “best and brightest” leaving for greener pastures. Plugging the brain drain has become a cottage industry for consultants and non-profits alike. It is arguably the modus operandi of the new Cleveland Talent Alliance, a consortium of economic development agencies whose goal is to grow the region’s talent pool¹. “It’s important we measure progress and not just activity,” explains one of its leaders².

Measuring progress entails getting a baseline. This Levin Policy Brief—the third in a running series—investigates. The first brief examined Cleveland’s potential to be a hub of healthcare worker training³, and the second analyzed mortality rate shifts post-Covid⁴. We move on to talent, or human capital, which is an upstream factor to innovation which, in itself, is an upstream factor to industry composition, firm formation, employment, and income.

Note the *Google* Ngram chart below. It shows the term “brain drain” appears more frequently beginning in the 1960’s. The timing is no coincidence. It’s when the global economy was restructuring from a labor- to knowledge-intensive. Where a city resides in this transition depends on its ability to do “knowledge work”—a term coined by Peter Drucker in 1959⁵. That, in turn, is tied to both the supply (of) and demand (for) a city’s “knowledge workers”⁶.

Figure 1: Google Ngram chart for term “brain drain” and “brain gain”. Source: Google



The most accepted way of gauging a talent pool is via educational attainment, or whether or not a person has a bachelor’s degree (BA) or higher. Educational attainment at the metropolitan statistical area (MSA) is associated with advanced, prosperous economies. Figure 2 shows the percent of the population aged 25 and over with a BA or higher plotted against per capita income for the nation’s MSAs. Their correlation is high ($R^2 = 0.75$).

¹ <https://www.thisiscleveland.com/media/news-releases/cleveland-talent-alliance-forms-to-attract-talent>

² <https://www.cleveland.com/business/2022/03/think-you-know-how-to-reverse-regions-population-problem-destination-cleveland-has-a-job-for-you.html>

³ https://engagedscholarship.csuohio.edu/urban_facpub/1754/

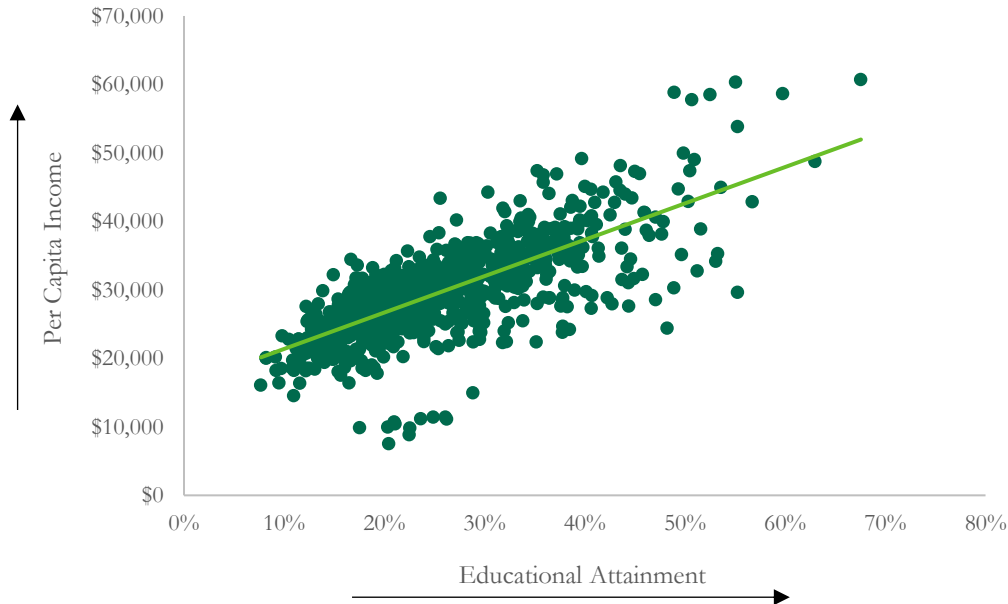
⁴ https://engagedscholarship.csuohio.edu/urban_facpub/1763/

⁵ Drucker, P. F. (1959). *The Landmarks of Tomorrow* New York: Harper and Row

⁶ Drucker, Peter F. (1967). *The Effective Executive*. New York, NY.: Harper & Row, Publishers, Inc.



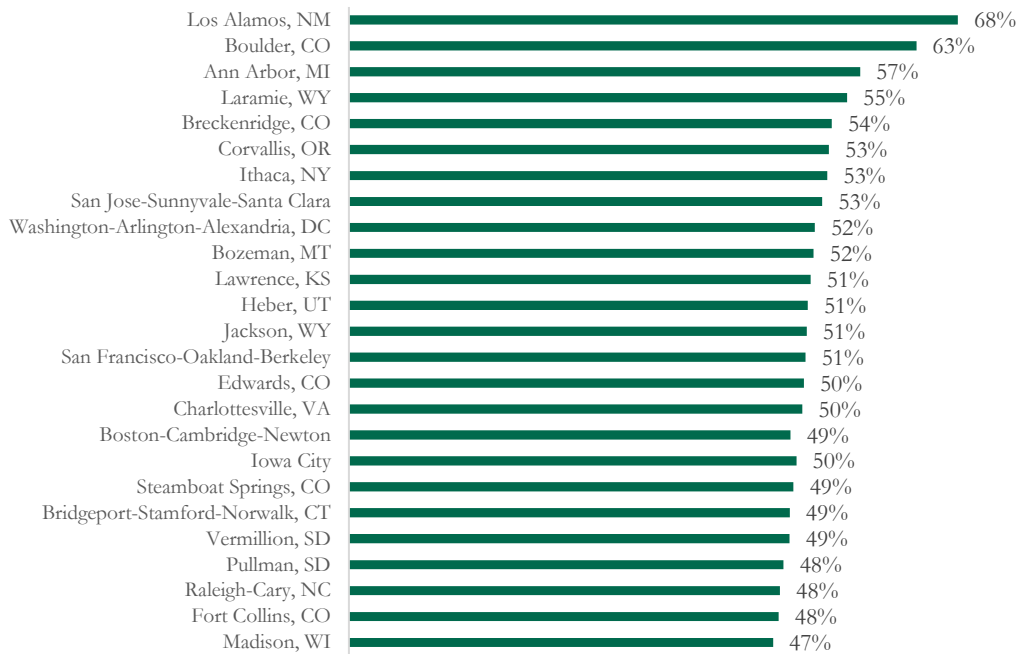
Figure 2: Per Capita Income vs. Educational Attainment for All MSAs. Source: ACS 5-Year 2020



Talent Rankings

Figure 3 ranks the top 25 urban areas, or metropolitan and micropolitan statistical areas, out of a sample of about 1,10 in the percent of residents with a BA or higher. The leader list can be categorized as made up of large urban tech hubs (e.g., Washington, D.C., San Jose, CA, San Francisco, Boston), college towns (e.g., Ann Arbor, MI Ithaca, NY Lawrence, KS) and lifestyle centers, mostly in the Mountain West (e.g., Boulder, CO, Heber UT, and Breckenridge, CO).

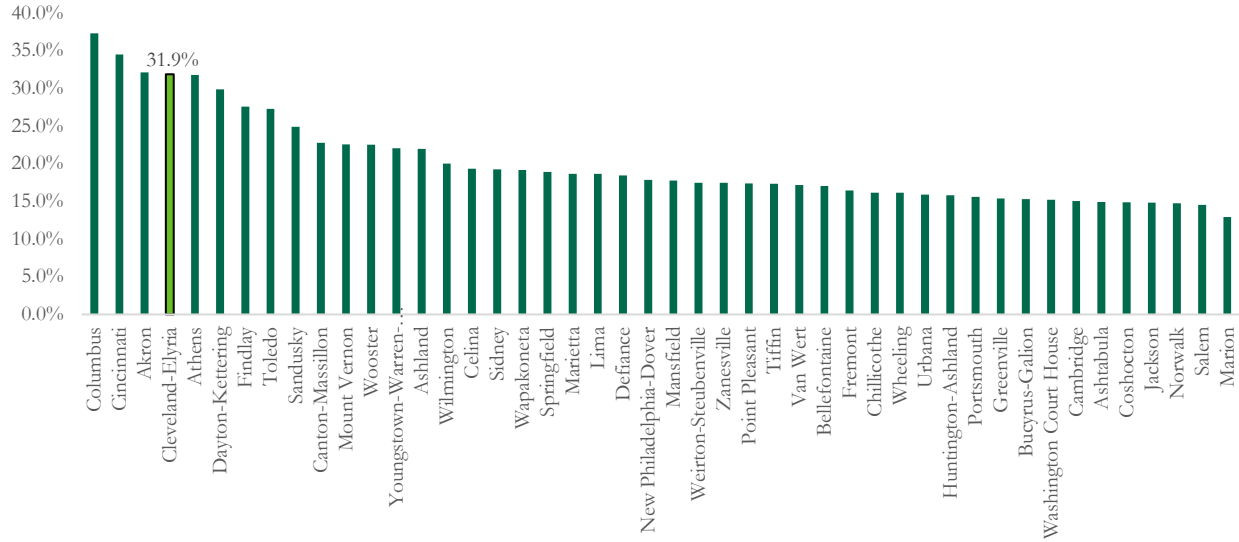
Figure 3: Top 25 Highest Rates of Educational Attainment Among All Urban Areas. Source: ACS 5-Year, 2020





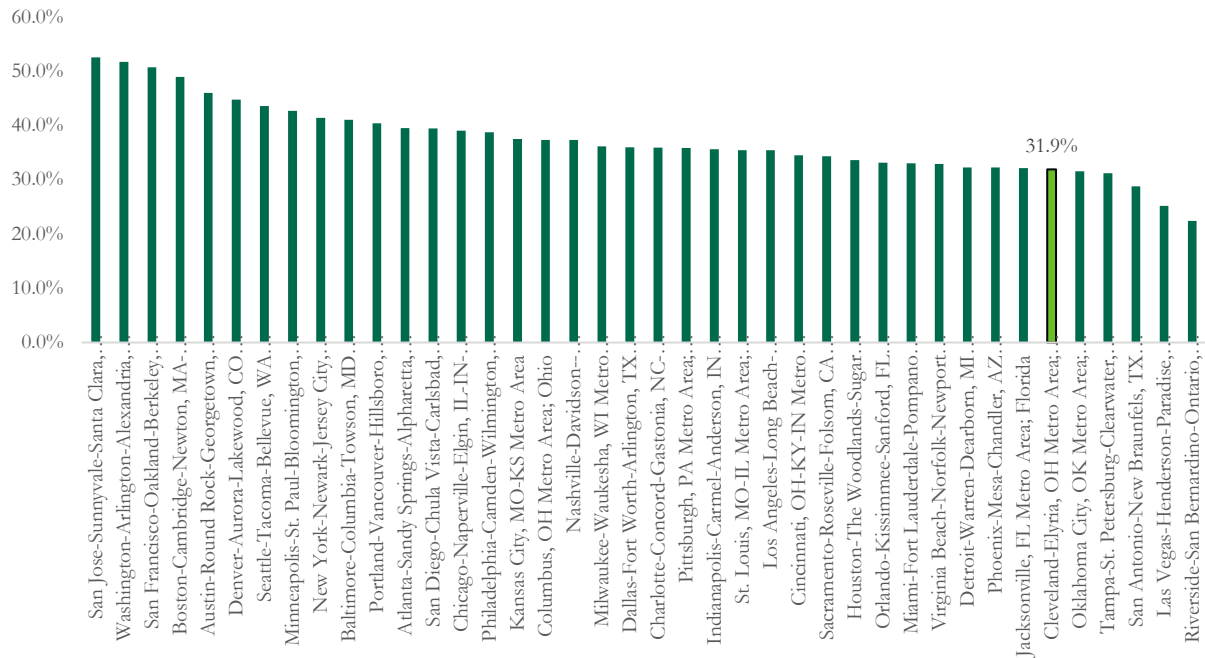
The Cleveland metro, with an educational attainment rate of 31.9% ranks nearly 200th out of 1,000 urban areas nationally. Or in the top 25%. Figure 4 ranks Cleveland against the urban areas in Ohio. It's 4th, behind Columbus (37.3%), Cincinnati (34.5%), and Akron (32.1%).

Figure 4: Highest Rates of Educational Attainment Among Ohio Urban Areas. Source: ACS 5-Year, 2020



A more sobering stat arises when comparing Cleveland against other large metros nationally (See Figure 5). Cleveland ranks 35th out of the largest 40 metros in educational attainment. The top four are San Jose, CA (52.5%), Washington, D.C (51.7%), San Francisco (50.7%), and Boston (48.9%).

Figure 5: Highest Rates of Educational Attainment Among Largest 40 Metros. Source: ACS 5-Year, 2020

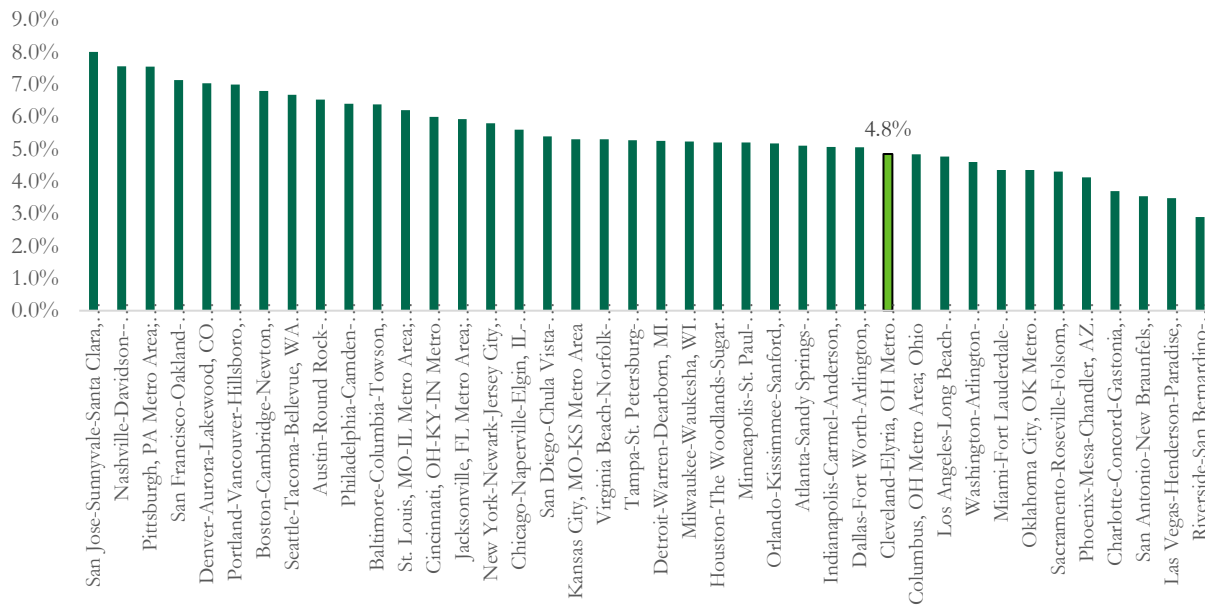




Cleveland performs slightly better when looking at gains in educational attainment across time. Figure 6 shows the growth in educational attainment rates for the nation’s largest 40 metros from 2010 to 2020. San Jose went from 44.5% of its population having a BA or higher in 2010 to 52.5% in 2020 for an 8 percent point increase, tops out of large metros. Rounding out of the top 5 for percent point gains were Nashville (7.6%), Pittsburgh (7.6%), San Francisco (7.1%), and Denver (7.0%). Cleveland’s educational attainment went from 27.0% to 31.9%, ranking it 29th in educational attainment gains, just ahead of Columbus and Los Angeles. Trailing are the Sun Belt metros of Riverside, Las Vegas, San Antonio, Charlotte, and Phoenix.

While Cleveland is making gains, it’s hard not to notice Cleveland’s sibling rival down the Ohio Turnpike, Pittsburgh, and not be envious of their improvements, with their 7.6% percent point increase trailing only the Rockstar metros of Silicon Valley and Nashville.

Figure 6: Percent Point Change in Educational Attainment for Largest 40 Metros. Source: ACS 5-Year,2010, 2020



Why Pittsburgh? With all due respect to the Allegheny’s, people aren’t exactly trekking to Pittsburgh for the skiing. Also, while Pittsburgh no doubt has culture and a signature lifestyle—i.e., polka, primantis, the cookie table, the “Pittsburgh potty”, or what this author has called “Rust Belt Chic”⁷, let’s just say it’s an acquired taste, unlike the ubiquity of cool that defines places like Nashville, Portland, and Austin. So, if Pittsburgh, then why not Cleveland? The cities, after all, share economic histories, geographic proximity, and legacy assets. This is a differentiating question that cannot be fully unpacked in this brief. Yet it’s a question that could guide Cleveland’s talent stokers.

Policy Implications

As a researcher who has studied the issue of talent for some time, I’d be remiss if I didn’t offer a sketch to some strategic frame. It’s helpful to lay the issue bare. Knowledge workers are needed in a knowledge economy. There are various ways to measure this. The standard way is educational attainment. There are, then, two ways of increasing educational attainment. One is to matriculate and graduate more local residents and encourage them to stay local. This is what folks at the likes of the Cleveland Talent Alliance mean when they say they want to “retain” talent. The other is to get people who already have college degrees to move (or

⁷ https://www.salon.com/2012/05/12/rust_belt_chic_declining_midwest_cities_make_a_comeback/



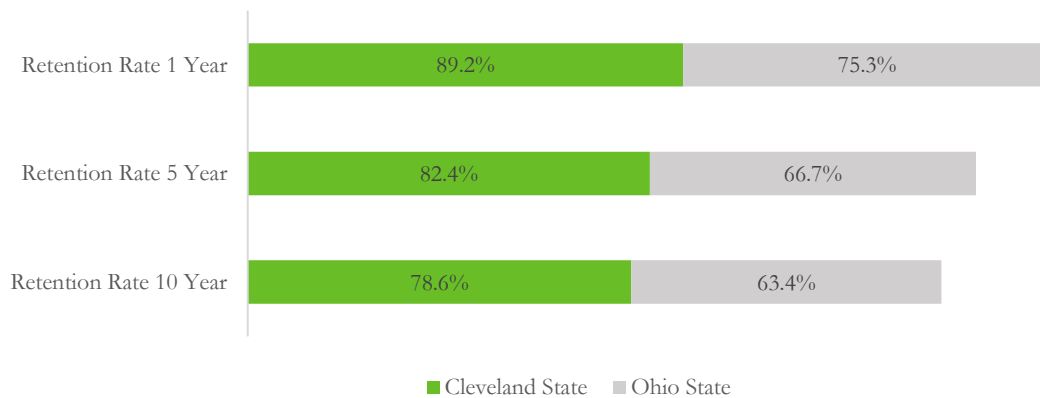
move back to) a region. This is what economic development brokers mean when they say they want to “attract” talent.

Embedded in a place’s ability to retain and attract talent are attributes that a place has that make it attractive. Why would people want to come? Or stay? Take San Jose, CA, home to Silicon Valley. Or Boston. These are cities with very high educational attainment rates. They also epitomize what we can call “the demand-side” theory of economic development. More advanced economies have higher *demand* for college-educated workers. Silicon Valley would not be Silicon Valley without the stockpile of talent pouring into Mountain View to meet industry demand. Same with Kendall Square in Boston. This is ultimately manifested as higher educational attainment in the population. The attraction, here, is simple: better career prospects for the knowledge working demographic. Hence, the clustering of talent.

When that attraction is lacking, like in Cleveland, what’s the pull? Sure, cost of living. But lots of places are affordable. Often, the talent strategy becomes a supply-side issue by stopping the brain drain, particularly via the retention of college graduates.

But can keeping more locals who graduate around juice Cleveland’s educational attainment rates? A new dataset called the Post-Secondary Employment Outcomes Explorer by the U.S. Census casts doubt. According to the figures, Cleveland already excels at retention. Figure 7 shows that 89% of Cleveland State graduates with a bachelor’s are employed in Ohio 1-year after graduation, and the retention remains high at 5- and 10-years post-grad. The retention rates in Cleveland are much higher than in Columbus when it comes to Ohio State University grads. This, despite Columbus having a higher educational attainment rate than Cleveland, suggesting something else, beyond retention, is at play.

Figure 7: Percent of Graduates Employed in Ohio at 1, 5, 10 Years Post Grad: Source: PSEO



What is that “something else”? An analysis out of the Federal Reserve Bank of New York called “Do Colleges and Universities Increase Their Region’s Human Capital?” is helpful⁸. Its premise was to test the demand- versus supply-side theories of economic development. The supply-side factor was the number of college graduates local colleges and universities produce. The demand-side factor was a locale’s density of R&D expenditures: a validated upstream source of innovation that has been shown to spur firm formation and increased knowledge worker demand.

“Our research demonstrates that colleges and universities can raise local human capital levels by increasing both the supply of and demand for skill within metropolitan areas,” the authors conclude. “We find only a small positive relationship between a metropolitan area’s degree production and stock of human capital...At

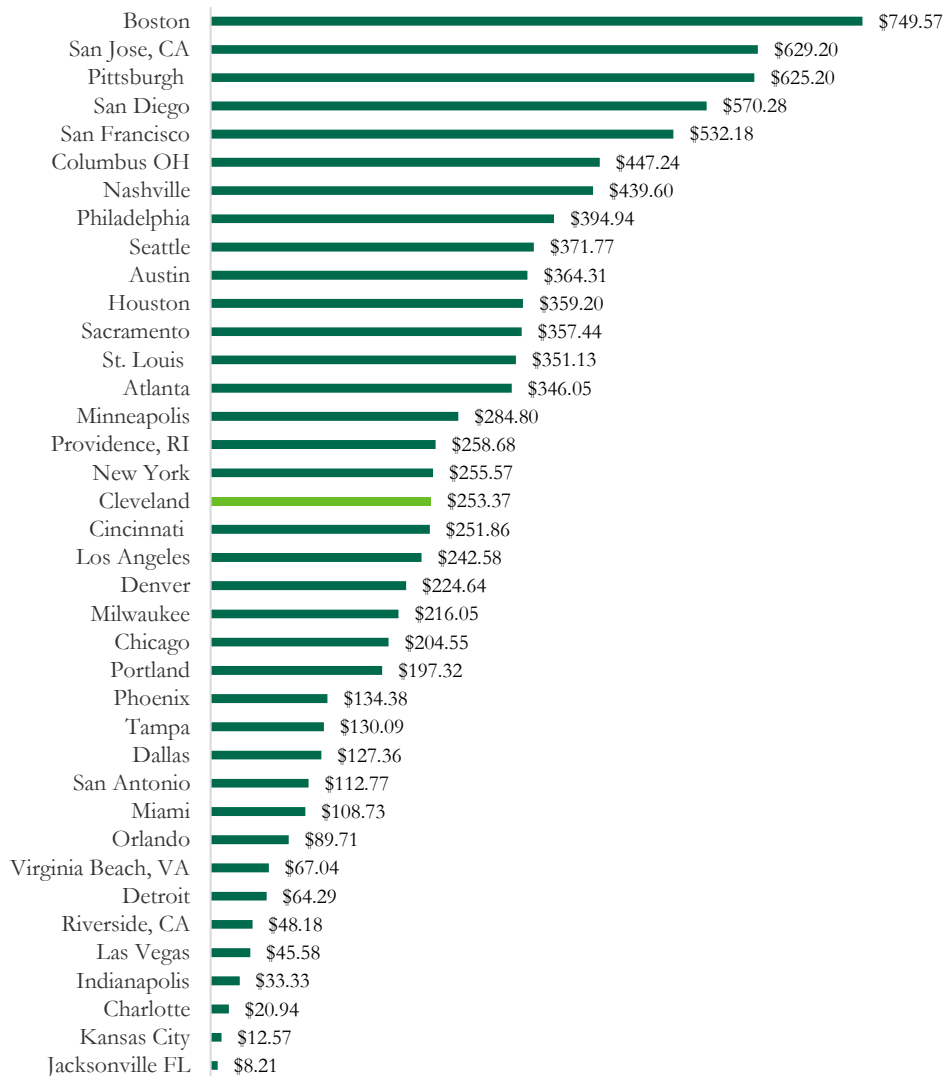
⁸ <https://academic.oup.com/joeg/article/12/3/667/984023>



the same time, we find that academic R&D activities act to increase a metropolitan area's local human capital stock, suggesting that spillovers into the local economy create demand for skilled workers.” In other words, the key metric to measure is R&D funding and not just educational attainment, as the former is a leading indicator, while the latter is a lagging indicator

Results from an upcoming Cleveland Foundation analysis called Disrupting Innovation teases out where Cleveland stands as far as R&D activity, measuring per capita higher ed R&D funding for the nation's largest 40 metros (excluding Baltimore and Washington, D.C. for data anomaly purposes.) The region ranks 18th. Again, note Boston, San Jose, CA, and, yes, Pittsburgh as being high up on the list.

Figure 8 Higher Education (HERD) Funding Per Capita for Largest U.S. Metros. Source: NSF, Census, 2019.



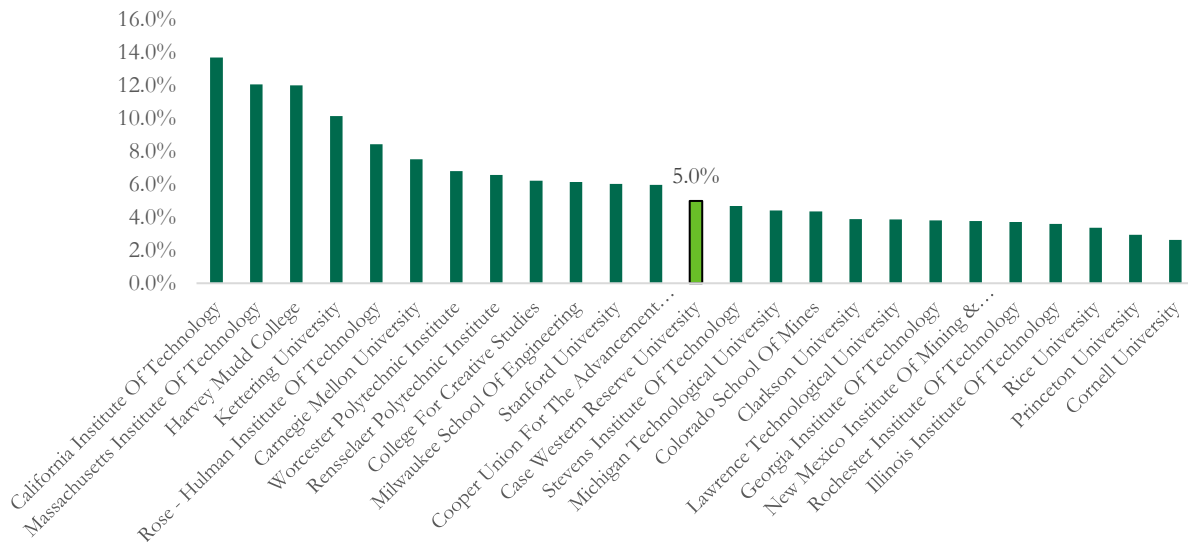


Final Thoughts

Knowledge work and knowledge workers are not created equal when it comes to creating multiplying effects in a region's economic and demographic profile. Researchers that disrupt a given industry's status quo are integral to fueling knowledge worker demand. But so is the talent that applies that knowledge and brings it closer to the market. These are the entrepreneurs. While Cleveland performs so-so when it comes to R&D funding, the leading indicator, and equally middling when it comes to educational attainment, the lagging indicator, the region ranks highly when it comes to the concentration of local graduates who become entrepreneurs. Consider entrepreneurship neither a leading nor lagging indicator but one that fits in between. In a newer dataset out of Harvard called Opportunity Insights that ranks higher ed institutions in the percent of their student body that become entrepreneurs, Case Western Reserve University ranks 13th out of some 400 plus institutions where data is available. Nearly 5% of graduates are designated as entrepreneurs⁹. First is Cal Tech (14%) and 2nd is MIT (12.1%).

Summing, if the likes of the Cleveland Talent Alliance can get a higher resolution of what researchers to attract and what entrepreneurs to retain, then that's a winning strategy in service of a sound policy.

Figure 9: Top 25 in Percent of Higher Ed Student Body that Become Entrepreneurs. Source: Opportunity Insights, 1996-2014.



⁹ <https://opportunityinsights.org/wp-content/uploads/2018/04/Inventors-Codebook-Table-2.pdf>