



Cornell University
Center for Regional Economic Advancement

Center for Regional Economic Advancement

Master Deck





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Ithaca, NY: A Regional Overview





Ithaca, NY is a college town. About 1 in 5 workers in the county are employed by Cornell University. Thirty percent of the population are full-time college students.

Despite being one of the smallest metros in the state, the Ithaca metro area has continued to grow its jobs and population over the past decade while other cities in Upstate NY have struggled.



Ithaca is centrally located near many mid-sized metropolitan areas, including:

Syracuse, NY MSA: pop. 650,502 (2018)

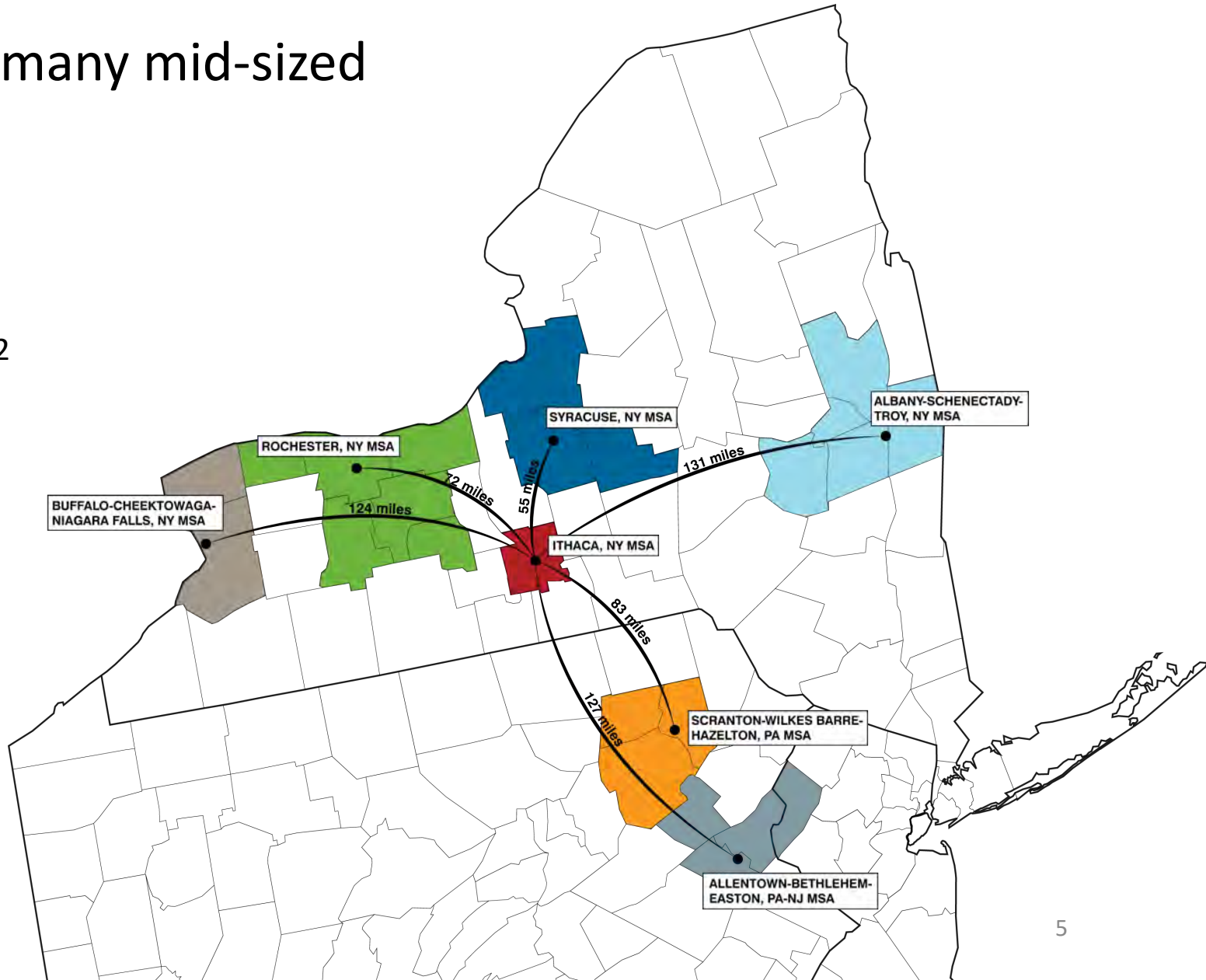
Rochester, NY MSA: 1,071,082

Scranton-Wilkes Barre-Hazleton, PA MSA: 555,485

Buffalo-Cheektowaga-Niagara Falls, NY MSA: 1,130,152

Allentown-Bethlehem-Easton, PA-NJ MSA: 842,913

Albany-Schenectady-Troy, NY MSA: 883,169



NEAREST MSAs WITH POPULATION > 500,000
U.S. Census Bureau – American Community Survey



Ithaca is also close to several large metropolitan areas, including:

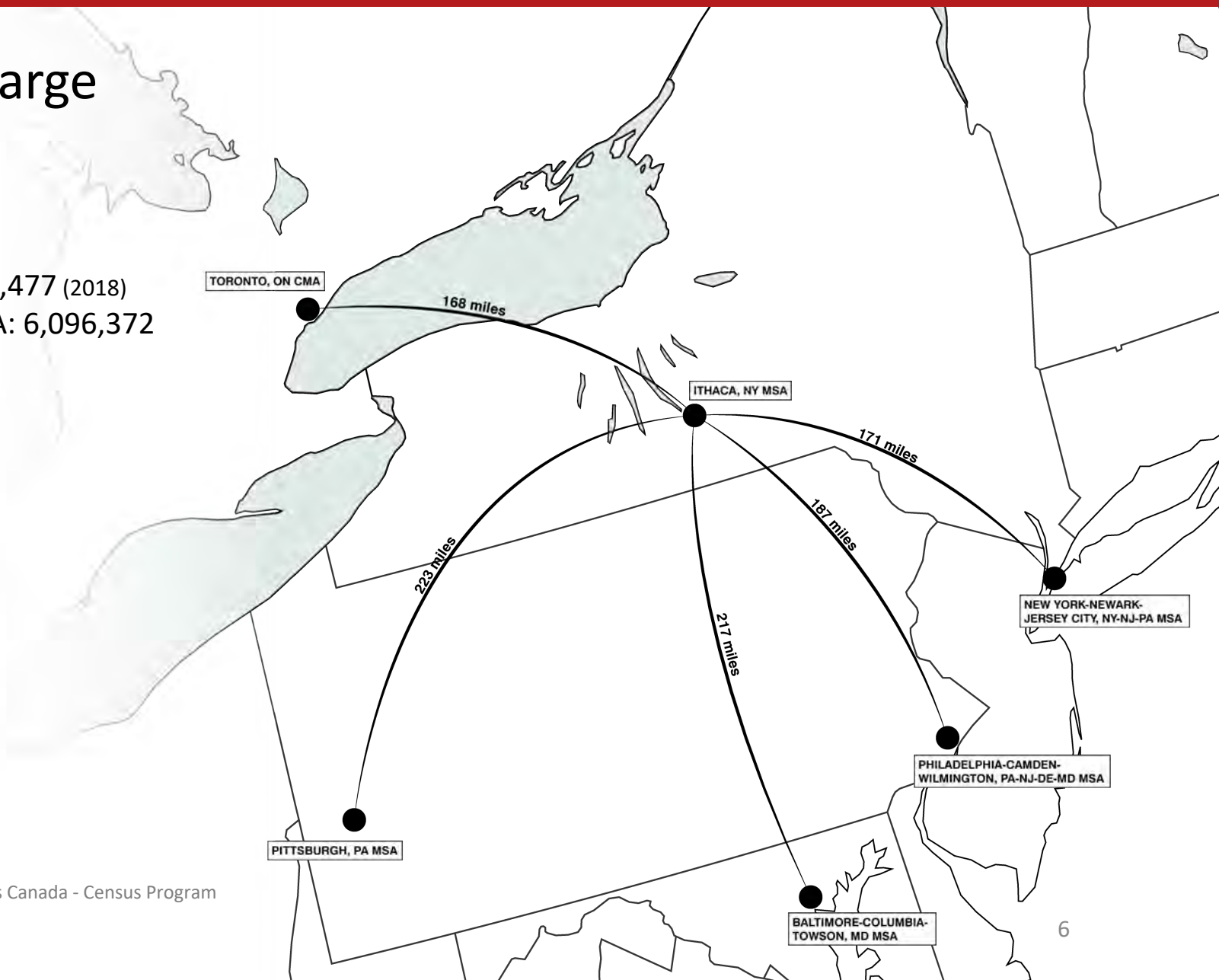
Toronto, ON CMA: pop. 5,928,040 (2016)

New York-Newark-Jersey City, NY-NJ-PA MSA: 19,979,477 (2018)

Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA: 6,096,372

Baltimore-Columbia-Towson, MD MSA: 2,802,789

Pittsburgh, PA MSA: 2,324,743



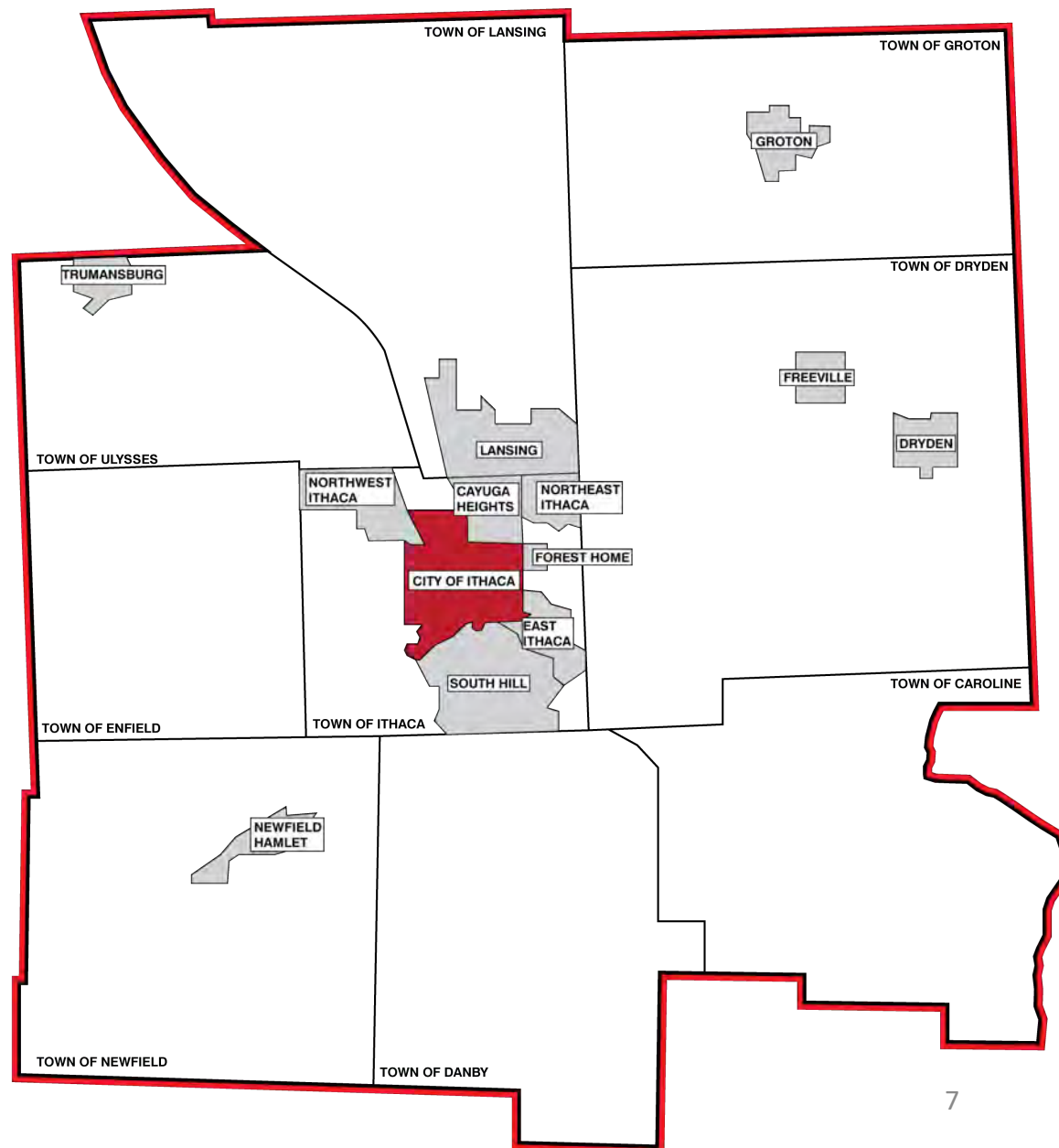
NEAREST MSAs WITH POPULATION > 2,000,000

U.S. Census Bureau - American Community Survey; Statistics Canada - Census Program



The Ithaca, NY metropolitan statistical area (MSA) covers all of Tompkins County.

In 2018, the Ithaca metro area was home to just over 100,000 people.
The City of Ithaca was home to 31,000 people (2018).



ITHACA, NY MSA
U.S. Census Bureau



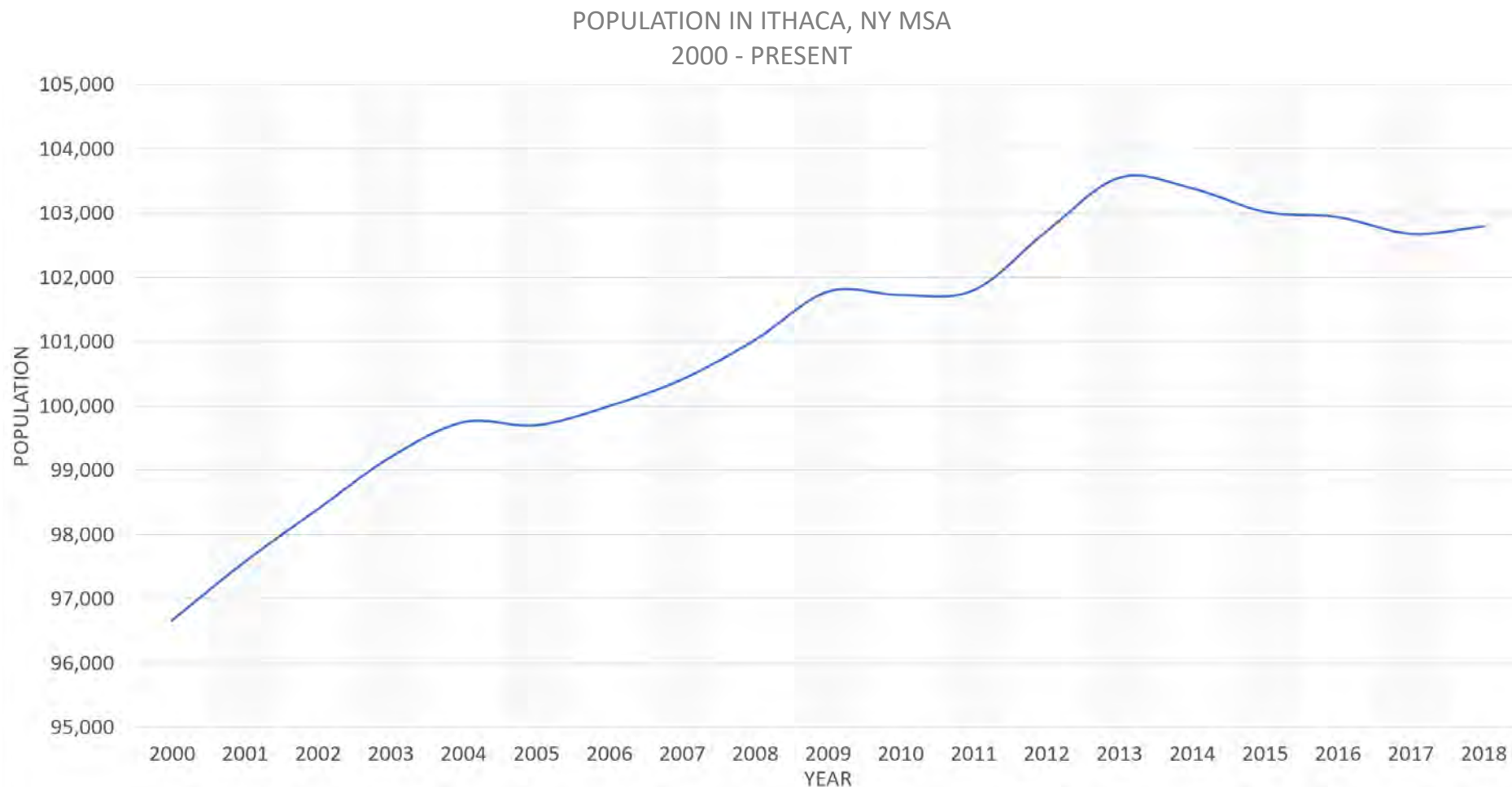
Although Ithaca has proved resilient during economic downturns and performs better than most of Upstate, it still falls short of New York state's benchmarks for income and job growth. Downstate NY and the Capitol region (Albany) outperform Ithaca in income and job growth.



UPSTATE NEW YORK	ALBANY METRO AREA	BINGHAMTON METRO AREA	BUFFALO METRO AREA	ELMIRA METRO AREA	GLENS FALLS METRO AREA	ITHACA METRO AREA	NORTH COUNTRY	ROCHESTER METRO AREA	SYRACUSE METRO AREA	UTICA METRO AREA	WATERTOWN METRO AREA	NEW YORK STATE	USA
Population (2018)	883,000	240,000	1,130,000	84,000	125,000	103,000	307,000	1,071,000	651,000	291,000	112,000	19,542,000	327,167,000
Pop growth, 10-year change (2017)	1.9%	-4.9%	-0.5%	-4.8%	-2.8%	2.4%	-3.1%	-0.4%	-1.3%	-2.5%	-2.8%	1.7%	7.6%
GDP, billions (2017)	\$54	\$10	\$60	\$5	\$5	\$5	\$11	\$57	\$34	\$11	\$6	\$1,598	\$19,485
Job growth, 5-year change (2018)	5.8%	-1.5%	3.5%	-3.5%	1.6%	3.9%	3.2%	3.5%	2.4%	1.3%	-0.2%	8.0%	9.3%
Median household income (2018)	\$68,000	\$50,000	\$56,000	\$50,000	\$56,000	\$57,000	\$52,000	\$56,000	\$56,000	\$50,000	\$50,000	\$64,000	\$60,000
Median home price (2017)	\$200,000	\$109,000	\$140,000	\$100,000	\$169,000	\$200,000	\$110,000	\$140,000	\$130,000	\$120,000	\$140,000	\$300,000	\$200,000
Pop share age 25+ with BA+ (2017)	37.2%	26.8%	34.1%	23.9%	25.5%	52.2%	21.9%	34.1%	31.8%	22.5%	21.2%	36.0%	32.0%



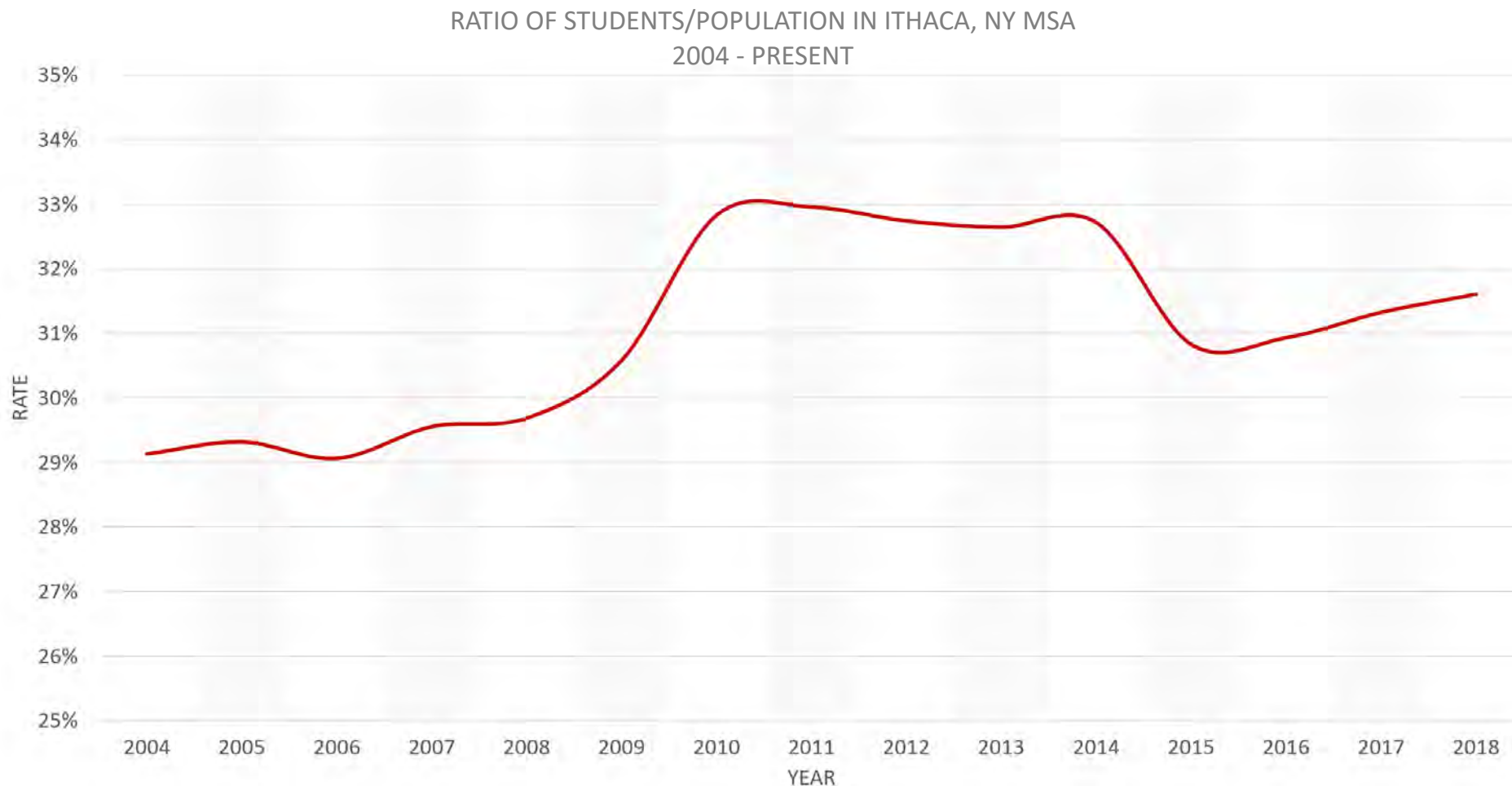
Population has plateaued after reaching a historic high in 2013...



U.S. Census Bureau – American Community Survey



...with approximately 1 college student enrolled for every 3 residents.

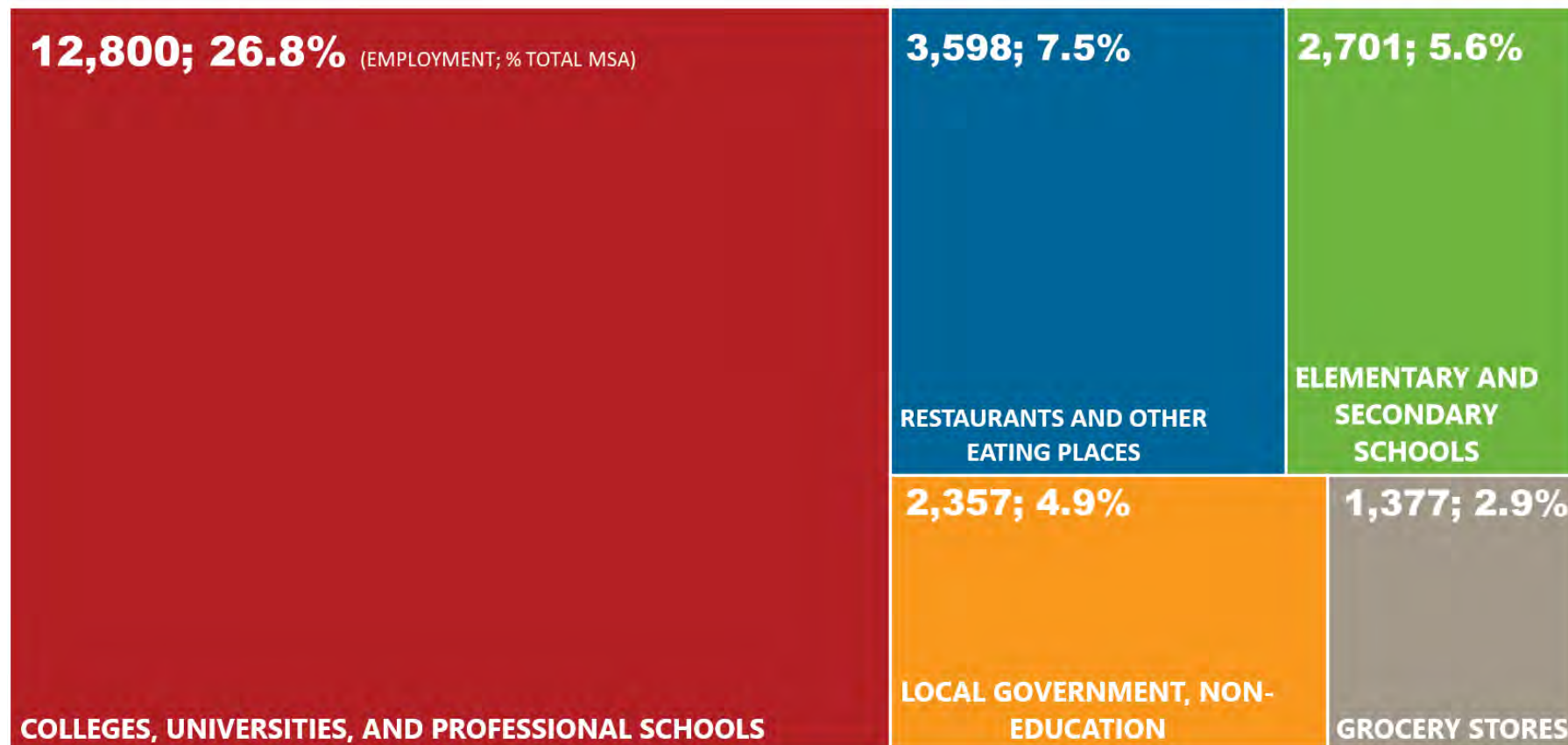


U.S. Census Bureau - American Community Survey; Institute for Education Sciences - Integrated Postsecondary Education Data System



Employment is dominated by education, food service, and local government.

MAJOR INDUSTRY GROUPS BY EMPLOYMENT IN ITHACA, NY MSA
2017



U.S. Census Bureau - County Business Patterns; Institute for Education Sciences - Integrated Postsecondary Education Data System



Meanwhile unemployment rates continue to rest around 3.5%.



U.S. Bureau of Labor Statistics - Smoothed Seasonally Adjusted Metropolitan Area Estimates



Cornell University: An Overview





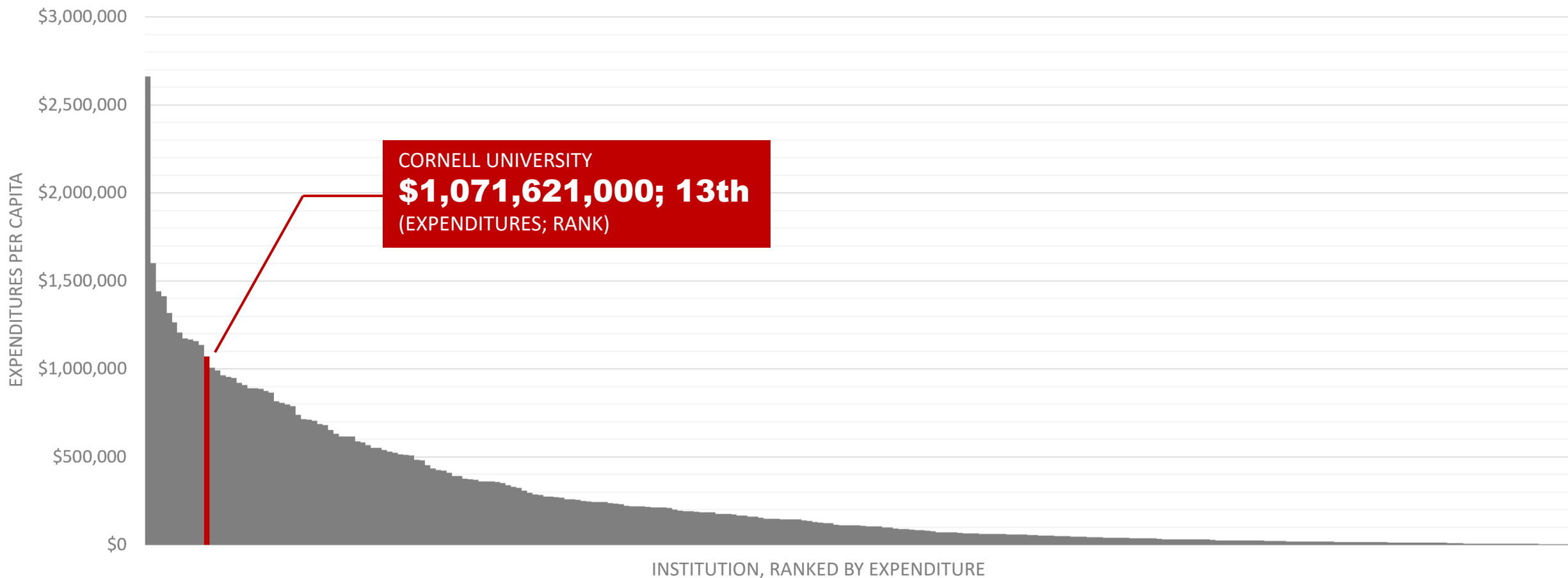
- Cornell is a critical player in Ithaca's economy.
- Cornell alone accounts for nearly 1 in 5 jobs in the Ithaca metro area.
- As a land-grant institution and rural university, Cornell is unique among the Ivy League. Its resources are a critical innovation asset to the Ithaca area, and Upstate NY in general.

Let's take a closer look:



Cornell has the 13th largest higher education R&D expenditure in the nation...

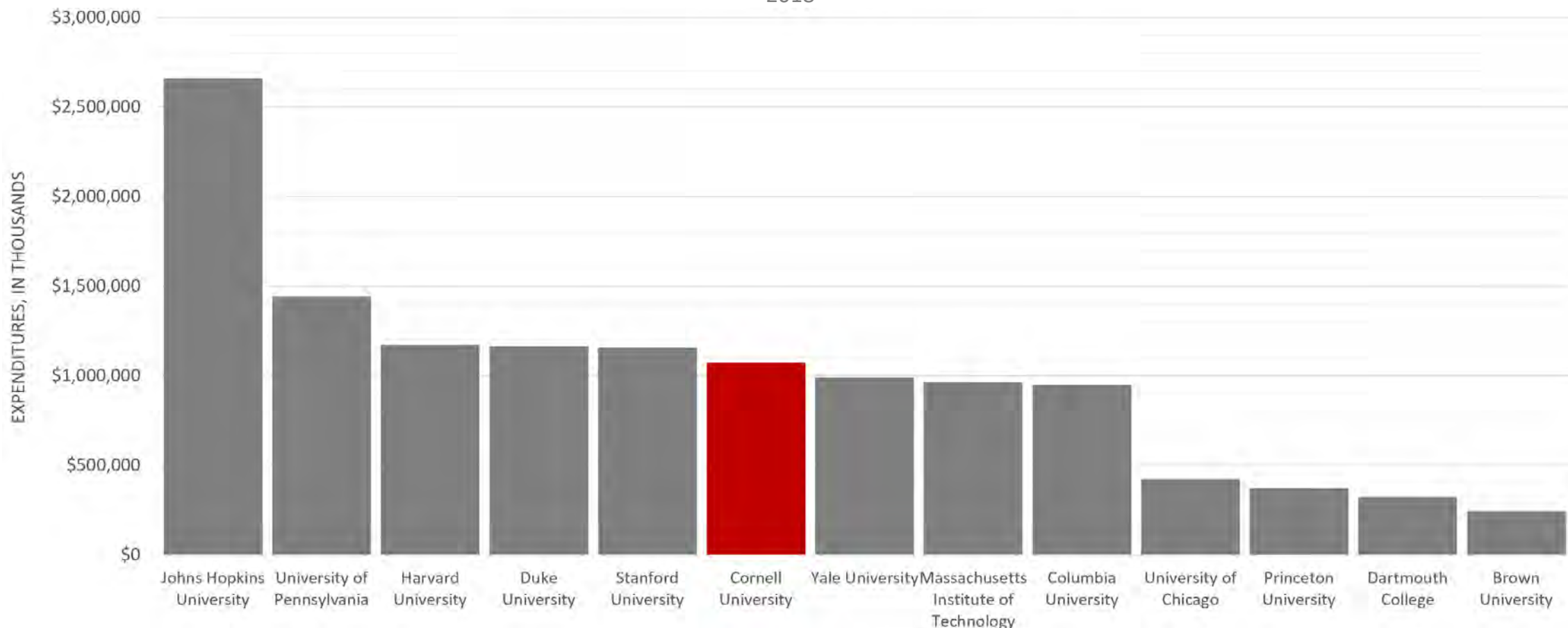
HIGHER EDUCATION R&D EXPENDITURES, ALL SURVEYED INSTITUTIONS
2018





...and ranks 6th in expenditure among Ivy League+ institutions.

HIGHER EDUCATION R&D EXPENDITURES OF IVY LEAGUE+ INSTITUTIONS
2018

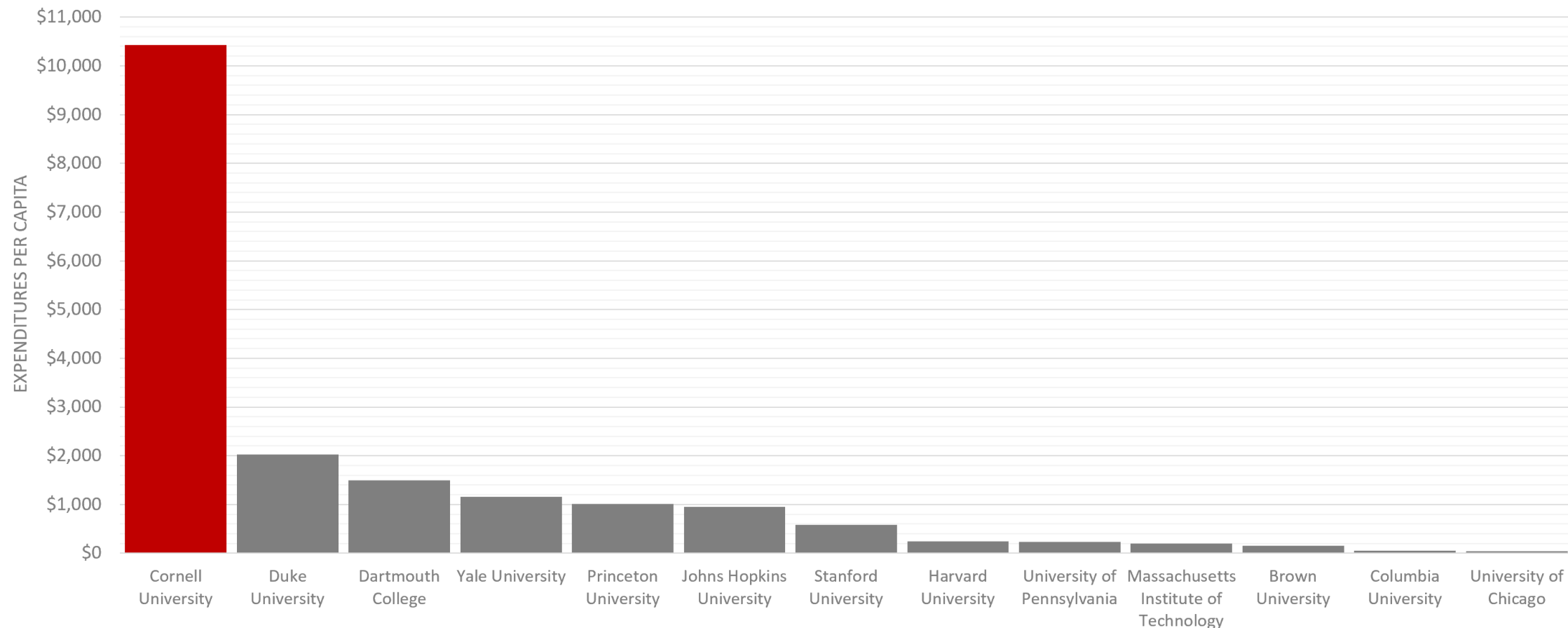


*Johns Hopkins University includes the Applied Physics Laboratory, with \$1,521,443,000 in total R&D expenditures in FY 2018.
National Science Foundation - Higher Education Research and Development Survey



But per capita, Cornell's R&D spending is 5x greater than the next institution.

HIGHER EDUCATION R&D EXPENDITURES PER CAPITA OF IVY LEAGUE+INSTITUTIONS BY MSA
2018

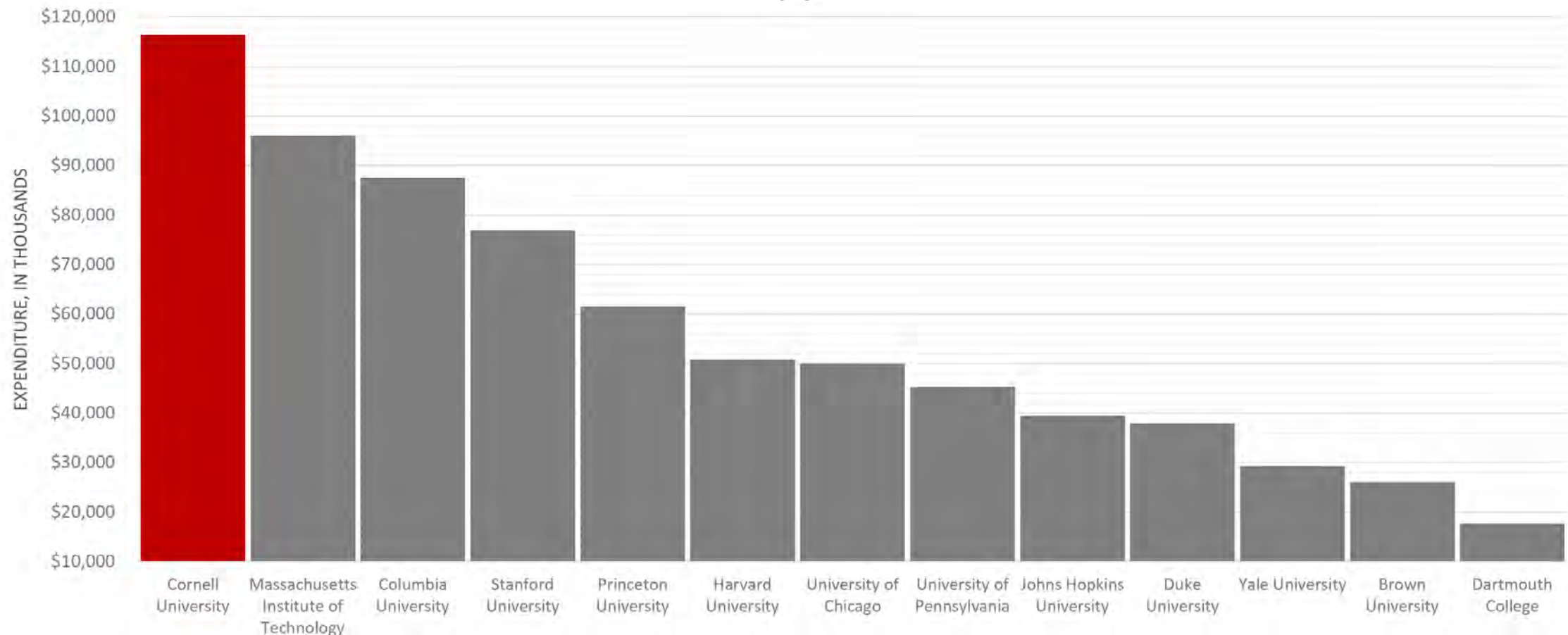


*Johns Hopkins University includes the Applied Physics Laboratory, with \$1,521,443,000 in total R&D expenditures in FY 2018.
National Science Foundation - Higher Education Research and Development Survey



Cornell outpaces other Ivy+ universities in R&D funding from the National Science Foundation...

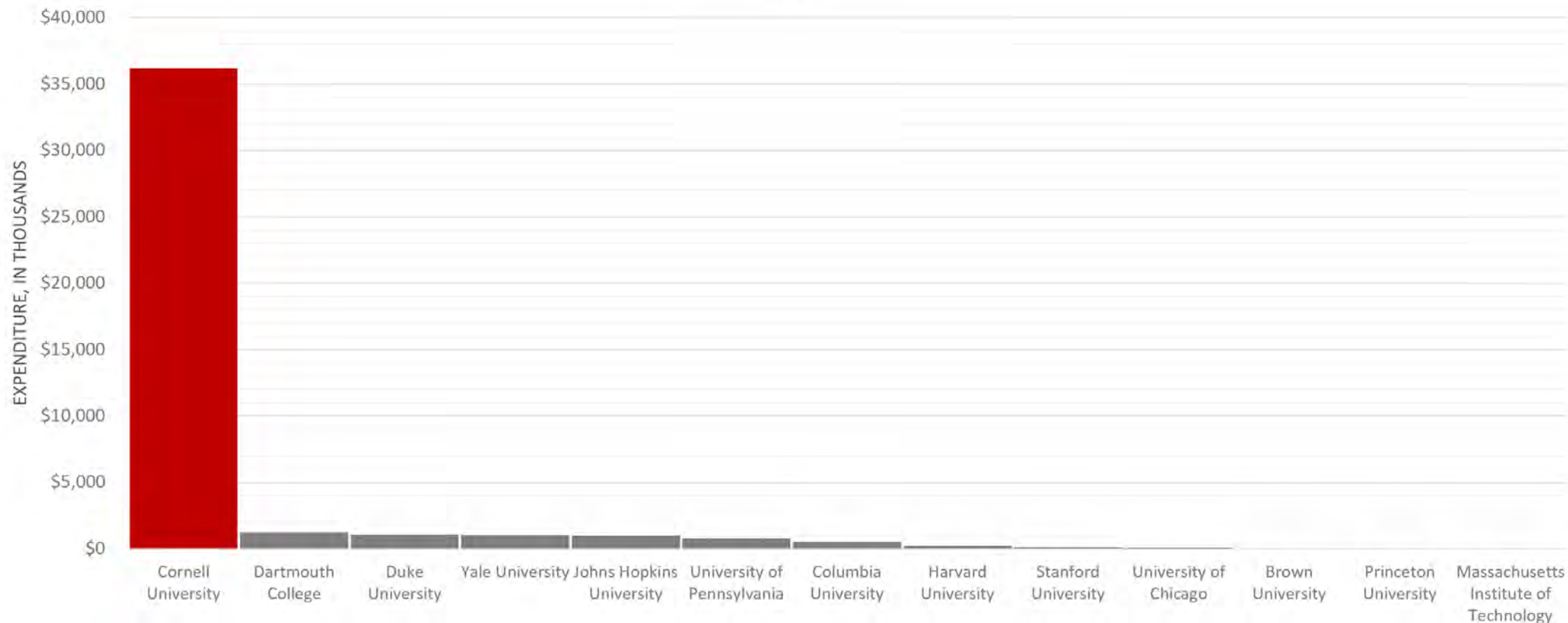
NSF FUNDING, BY INSTITUTION
2018





...and is the only Ivy+ institution to receive significant USDA funding.

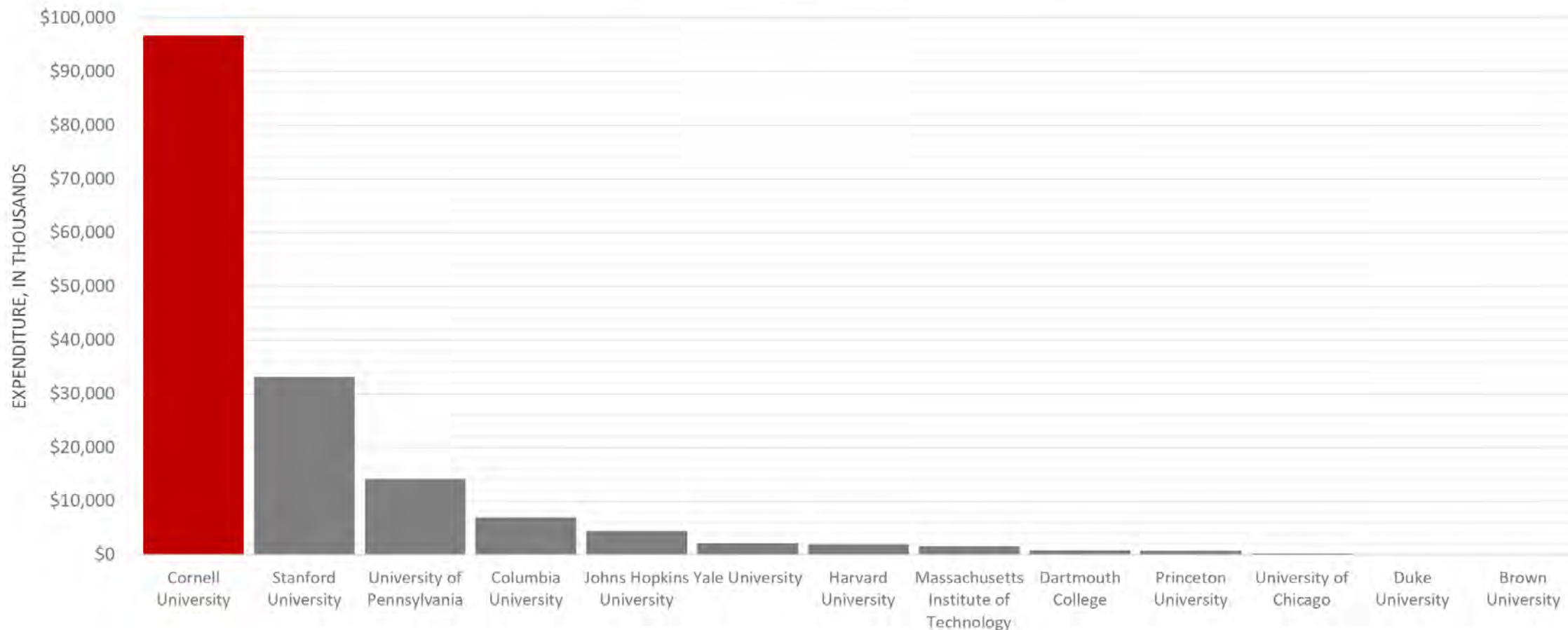
USDA FUNDING, BY INSTITUTION
2018





Cornell also has a unique R&D relationship with state and local governments.

STATE AND LOCAL GOVERNMENT FUNDING, BY INSTITUTION
2018





Cornell is an outlier among its peers, located in the smallest region of the group but performing highly in research funding and patent filings per capita.

	CORNELL	DARTMOUTH	PRINCETON	DUKE	YALE	BROWN	STANFORD	JOHNS HOPKINS	HARVARD	MIT	PENN	CHICAGO	COLUMBIA
CITY	ITHACA, NY	HANOVER, NH	PRINCETON, NJ	DURHAM, NC	NEW HAVEN, CT	PROVIDENCE, RI	STANFORD, CA	BALTIMORE, MD	CAMBRIDGE, MA	CAMBRIDGE, MA	PHILADELPHIA PA	CHICAGO, IL	NEW YORK, NY
MSA	ITHACA, NY MSA	CLAREMONT-LEBANON, NH-VT μ SA	TRENTON-PRINCETON, NJ MSA	DURHAM-CHAPEL HILL, NC MSA	NEW HAVEN-MILFORD, CT MSA	PROVIDENCE-WARWICK, RI-MA MSA	SAN JOSE-SUNNYVALE-SANTA CLARA, CA MSA	DALTIMORE-COLUMBIA-TOWSON, MD MSA	BOSTON-CAMBRIDGE-NEWTON, MA-NH MSA	BOSTON-CAMBRIDGE-NEWTON, MA-NH MSA	PHIADELPHIA-CAMDEN-WILMINGTON PA-NJ-DE MSA	CHICAGO-NAPERVILLE-ELGIN, IL-IN-WI MSA	NEW YORK-NEWARK-JERSEY CITY NY-NJ-PA MSA
POPULATION (2018 est.)	102,793	217,215	369,811	575,412	857,629	1,612,337	1,999,107	2,802,789	4,875,390	4,875,390	6,096,372	9,498,716	19,979,477
ENROLLMENT (2018)	23,600	6,572	8,374	16,606	13,344	10,257	17,381	26,152	31,566	11,574	25,860	17,002	31,077
%ENROLLMENT/MSA POP.	23.0%	3.0%	2.3%	2.9%	1.6%	0.6%	0.9%	0.9%	0.6%	0.2%	0.4%	0.2%	0.2%
HERD EXPENDITURE IN THOUSANDS (2018)	\$1,071,621	\$323,927	\$373,593	\$1,167,611	\$990,399	\$244,838	\$1,157,597	\$2,661,033	\$1,173,371	\$964,336	\$1,441,931	\$423,993	\$947,504
HERD PER CAPITA (2018)	\$10,425	\$1,491	\$1,010	\$2,029	\$1,155	\$151	\$579	\$949	\$241	\$198	\$237	\$45	\$48
PATENTS BY MSA (2000-2019)	1,839	261	15,994	25,135	16,128	8,990	223,029	28,536	213,357	213,357	133,998	304,252	540,576
PATENTS PER 1,000 PEOPLE (2000-2019)	1,789	120	4,325	4,368	1,881	554	11,156	1,018	4,376	4,376	2,198	3,203	2,706



The Rural College Town and the Economy





Rural college towns with a research university share unique assets:

- High levels of educational attainment
- Significant funds for STEM fields and research
- Innovation clusters



Ithaca's peer communities share similar research institutions, population size (<250,000), and proportion of enrolled students to total population (>20%).

	CORNELL	IOWA STATE	INDIANA UNIVERSITY	UNIVERSITY OF ILLINOIS	OREGON STATE	PURDUE UNIVERSITY	KANSAS STATE	UNIVERSITY OF MISSISSIPPI	WASHINGTON STATE	MISSISSIPPI STATE	PENN STATE	OKLAHOMA STATE
CITY	ITHACA, NY	AMES, IA	BLOOMINGTON IN	CHAMPAIGN, IL	CORVALLIS, OR	WEST LAFAYETTE, IN	MANHATTAN, KS	OXFORD, MS	PULLMAN, WA	STARKVILLE, MS	UNIVERSITY PARK, PA	STILLWATER OK
MSA	ITHACA, NY MSA	AMES, IA MSA	BLOOMINGTON IN MSA	CHAMPAIGN-URBANA, IL MSA	CORVALLIS, OR MSA	LAFAYETTE-W. LAFAYETTE IN MSA	MANHATTAN, KS MSA	OXFORD, MS μSA	PULLMAN, WA μSA	STARKVILLE, MS μSA	STATE COLLEGE, PA MSA	STILLWATER OK μSA
POPULATION (2018 est.)	102,793	98,105	167,762	239,643	92,101	221,828	97,980	54,793	49,791	49,599	162,805	82,040
ENROLLMENT (2018)	23,600	34,992	43,503	49,702	30,986	44,474	22,221	22,456	31,478	21,974	46,810	24,690
%ENROLLMENT/MSA POP.	23.0%	35.7%	25.9%	20.7%	33.6%	20.0%	22.7%	41.0%	63.2%	44.3%	28.8%	30.1%
R&D EXPENDITURE IN THOUSANDS (2018)	\$1,071,621	\$361,206	\$566,206	\$652,709	\$272,433	\$631,574	\$218,299	\$137,521	\$360,522	\$244,102	\$908,708	\$188,756
R&D PER CAPITA (2018)	\$10,425	\$3,682	\$3,379	\$2,724	\$2,958	\$2,847	\$2,228	\$2,510	\$7,241	\$4,922	\$5,582	\$2,301
PATENTS BY MSA (2000-2019)	1,839	301	115	72	528	1,491	32	11	387	3	304	6
PATENTS PER 1,000 PEOPLE	1,789	307	69	30	573	672	33	20	777	6	187	7
BA SHARE, 25+ (2018)	56.5%	54.6%	43.8%	44.0%	56.5%	36.5%	45.3%	46.1%	52.6%	47.1%	47.2%	40.0%



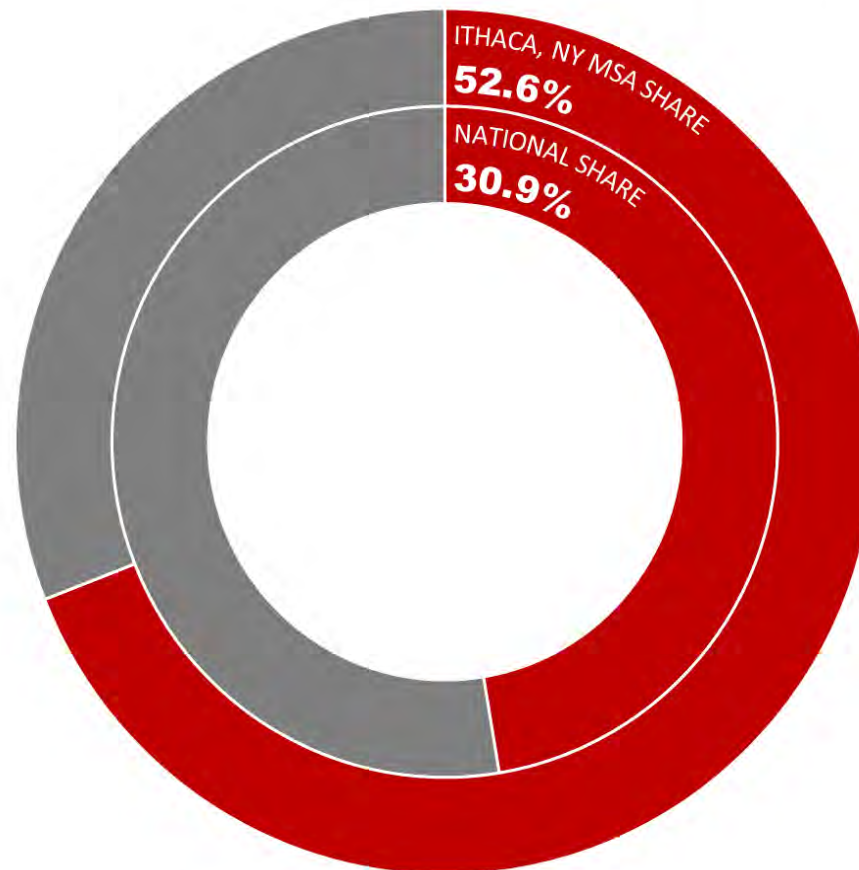
The relationship between Ithaca and Cornell University is similar to these communities, more so than the role Ivy League Plus universities play in their communities. This could be meaningful for regional economic development strategy.

Let's take a closer look at Ithaca.



52.6% of the Ithaca region's population has a bachelor's degree or higher.

SHARE OF ADULTS (25+) WITH BACHELOR'S DEGREE OR HIGHER IN ITHACA, NY MSA
2017

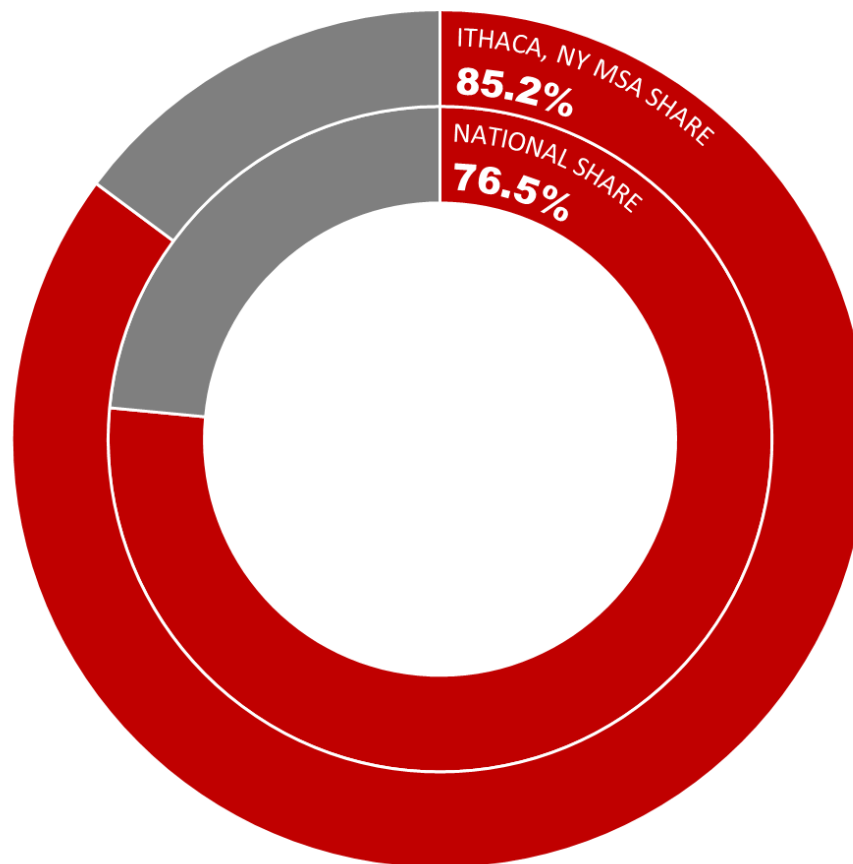


U.S. Census Bureau - American Community Survey 5-Year Estimates
Bachelor's degree or higher includes master's, professional degrees, and doctoral degrees



85.2% of doctoral degrees granted in the region are in STEM fields...

SHARE OF STEM DOCTORAL DEGREES IN ITHACA, NY MSA
2018



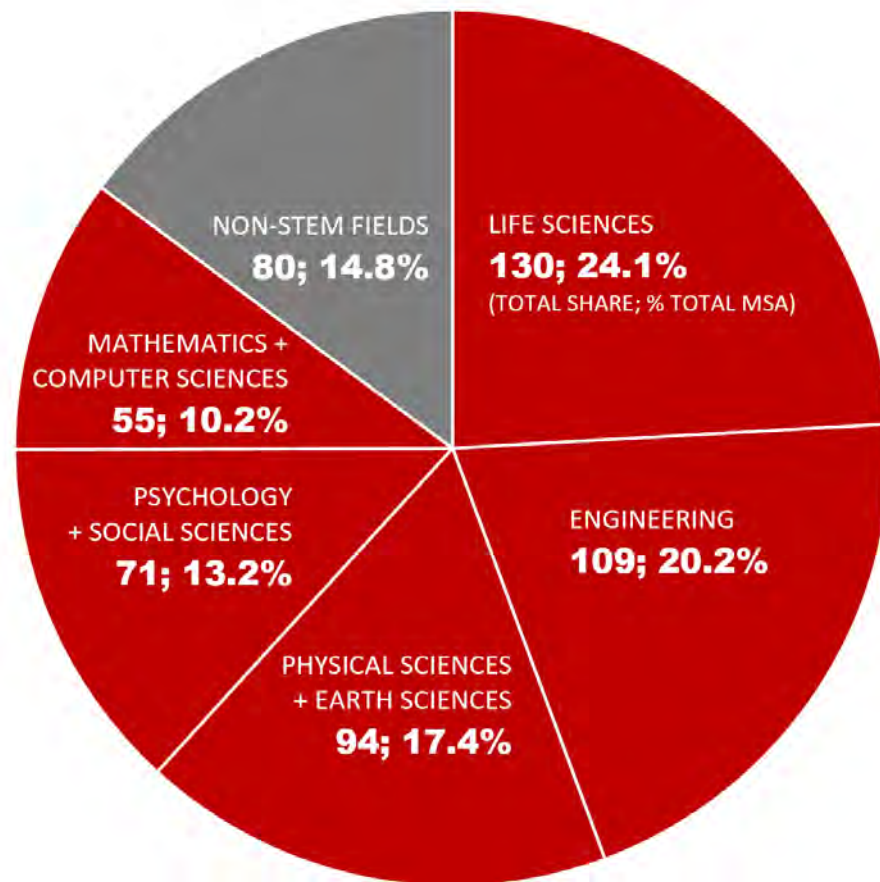
National Science Foundation - Survey of Earned Doctorates

*The NSF classifies STEM as including life sciences, physical sciences and earth sciences, mathematics and computer sciences, psychology and social sciences, and engineering.



...and among those doctoral degrees, almost a quarter are in the life sciences.

STEM DOCTORAL DEGREES BY FIELD IN ITHACA, NY MSA
2018

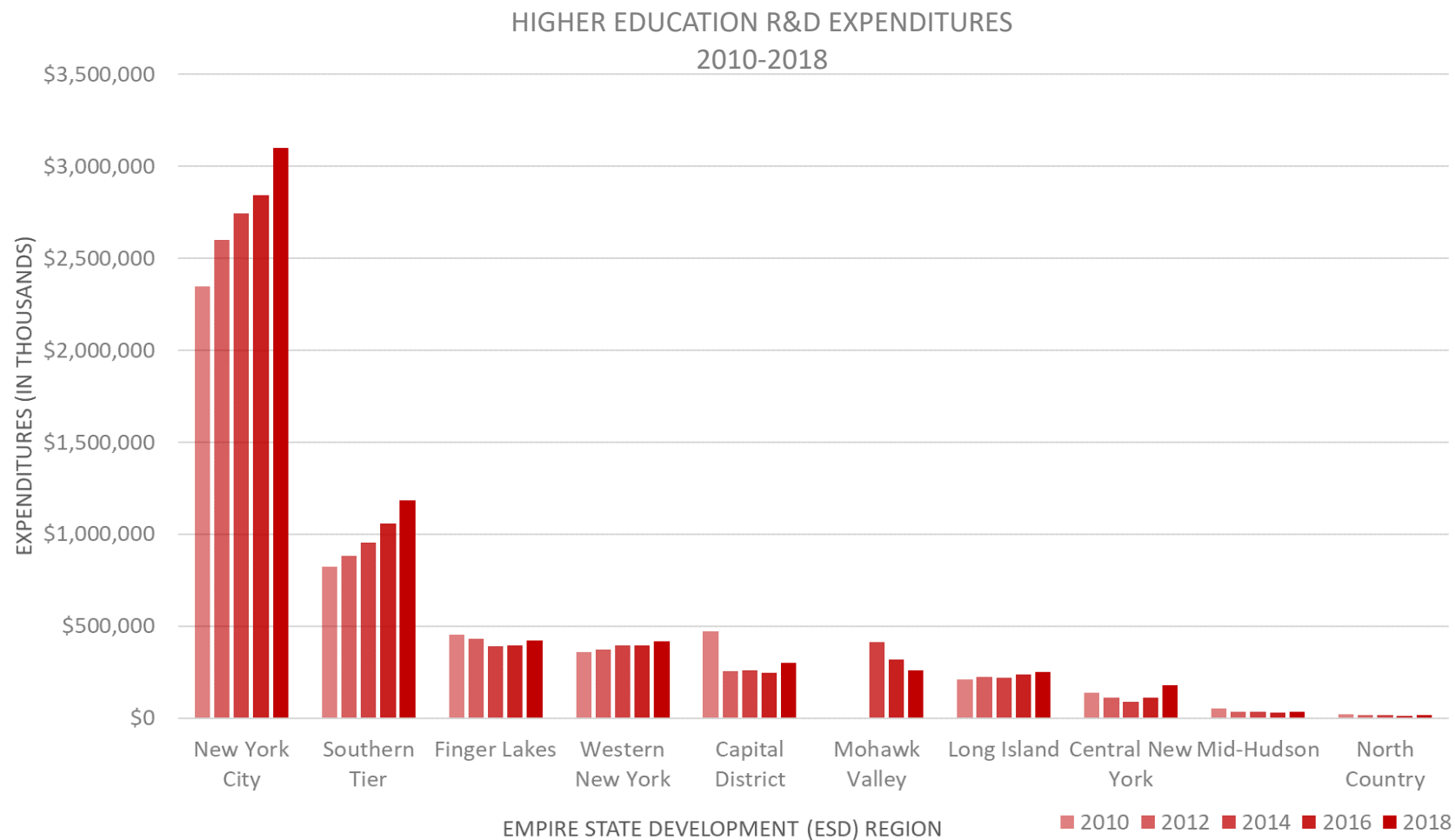


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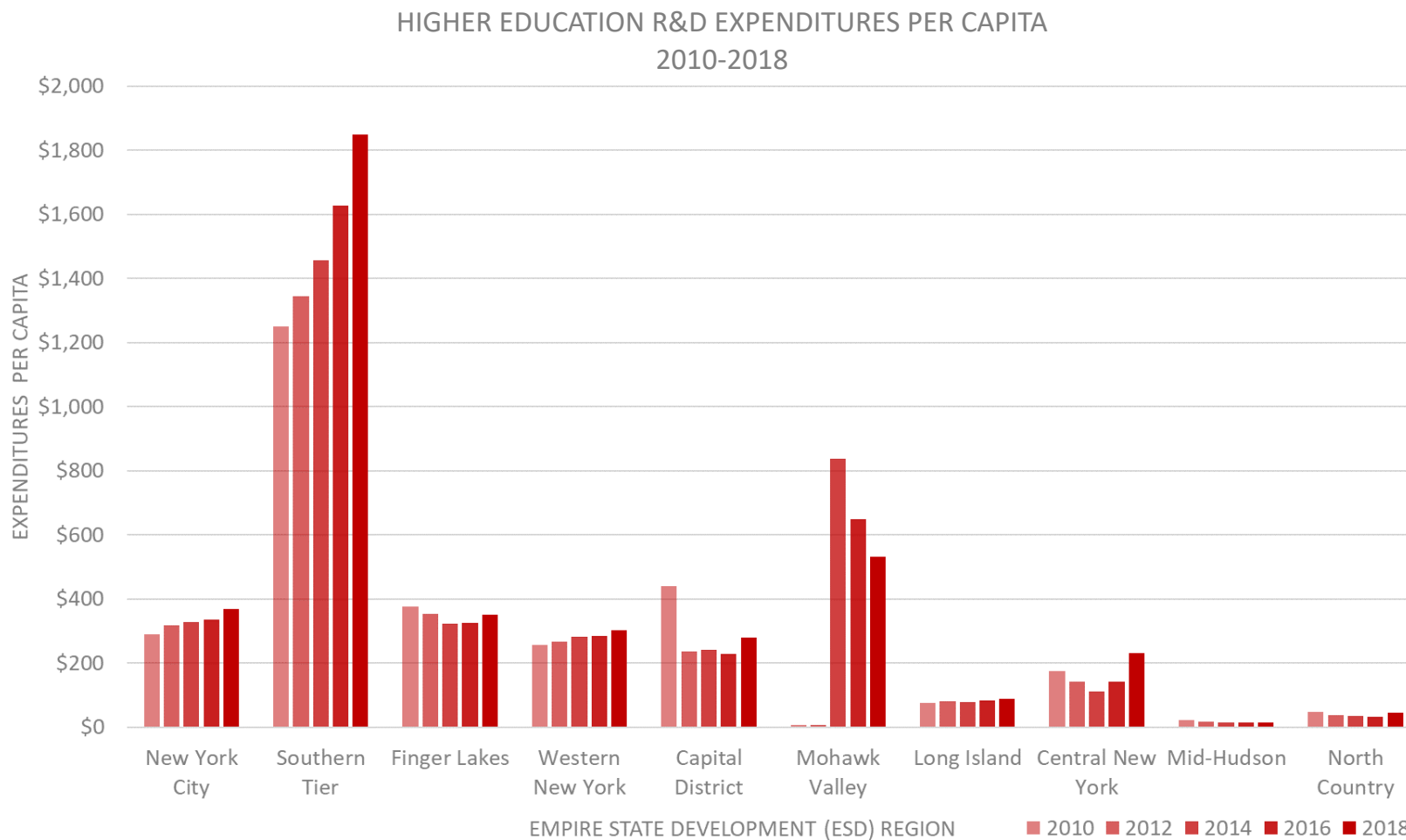
Higher education R&D expenditure in the Southern Tier ranks 2nd in NYS...



National Science Foundation - Higher Education Research and Development Survey



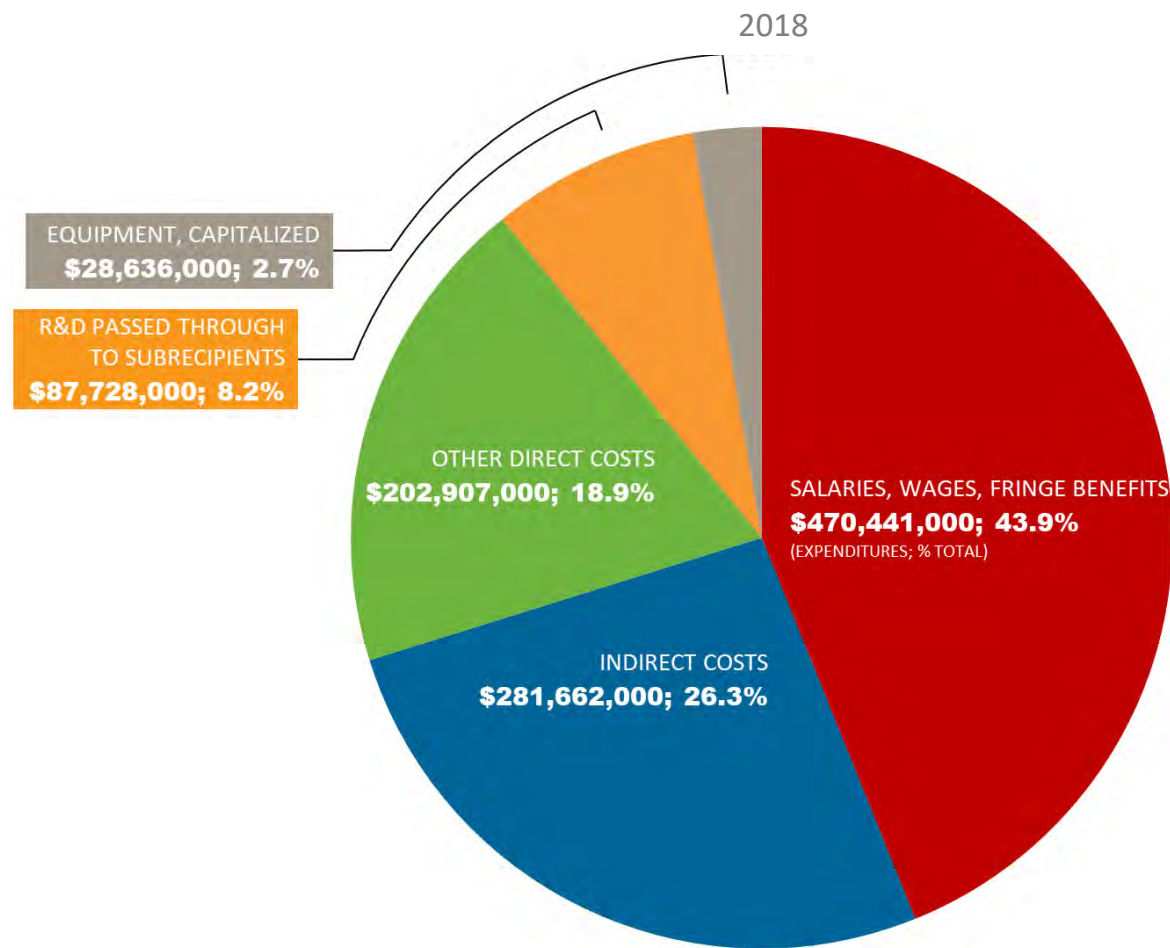
...and per capita expenditure dramatically outpaces the rest of the state.





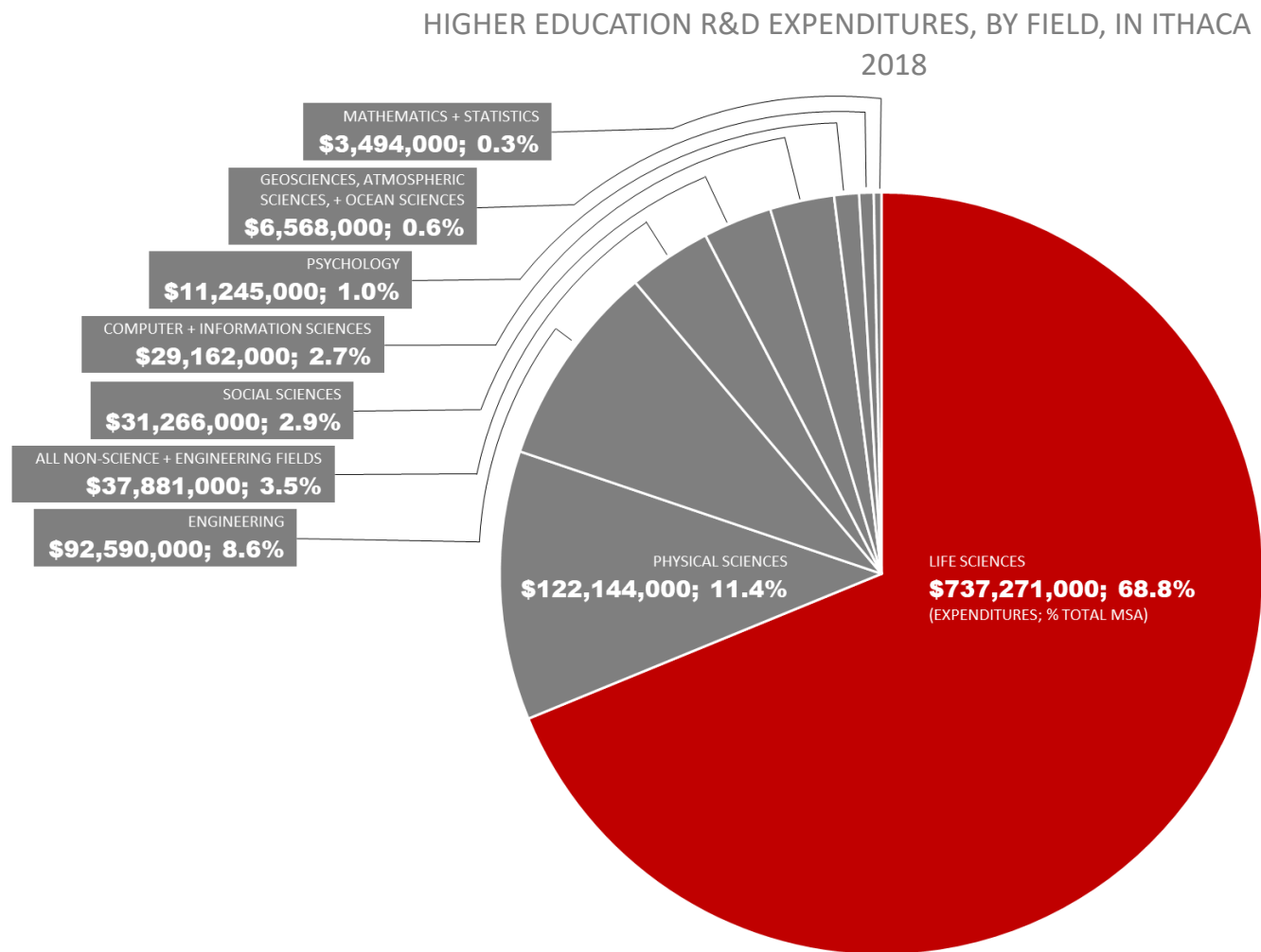
Cornell contributes almost half a billion dollars annually in salaries, wages, and benefits from R&D jobs.

CORNELL UNIVERSITY HIGHER EDUCATION R&D COSTS, BY SOURCE





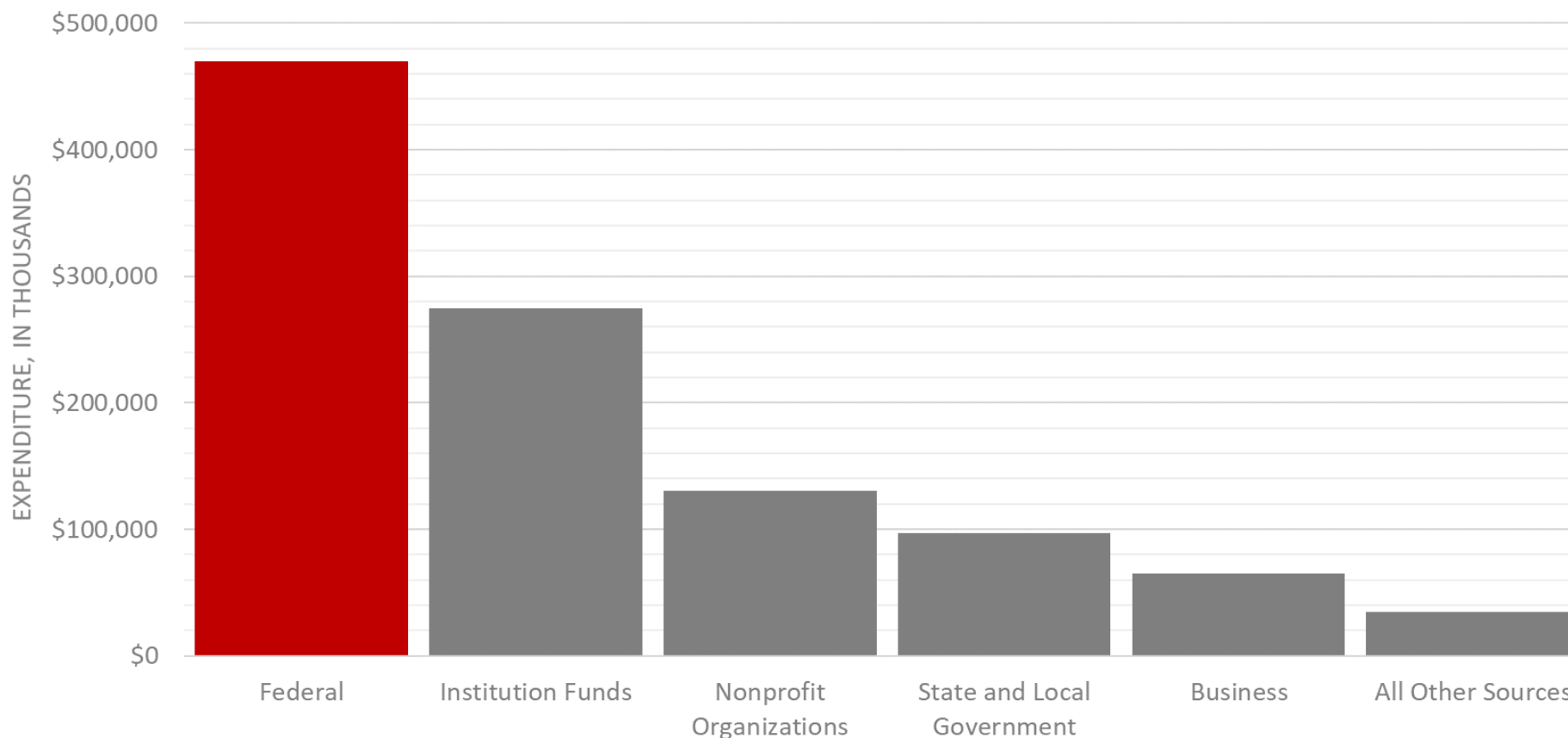
Life sciences research accounts for 68.8% of the region's expenditure.





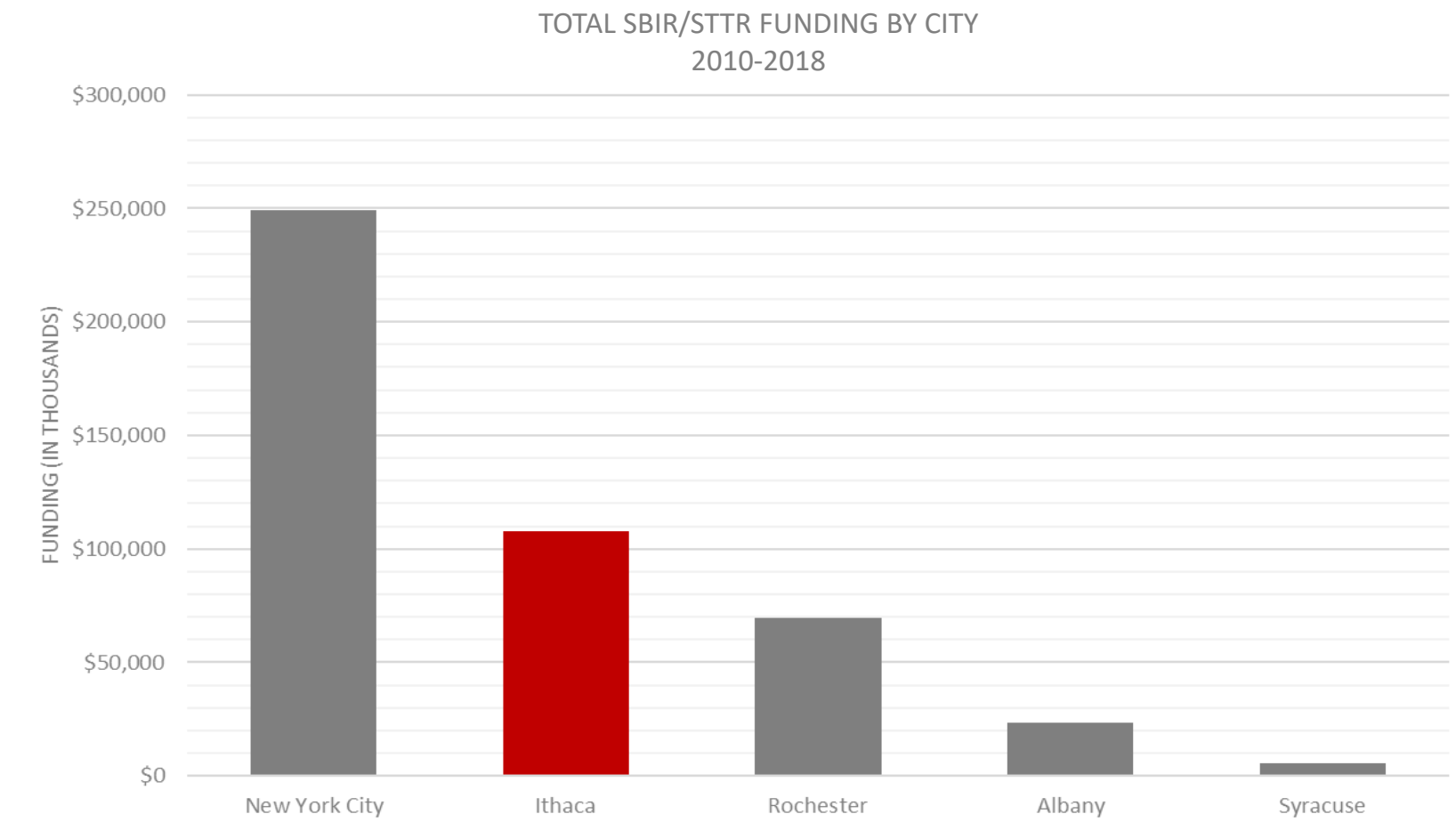
The federal government is the largest source of R&D funds at Cornell.

CORNELL UNIVERSITY HIGHER EDUCATION R&D FUNDING, BY SOURCE
2018



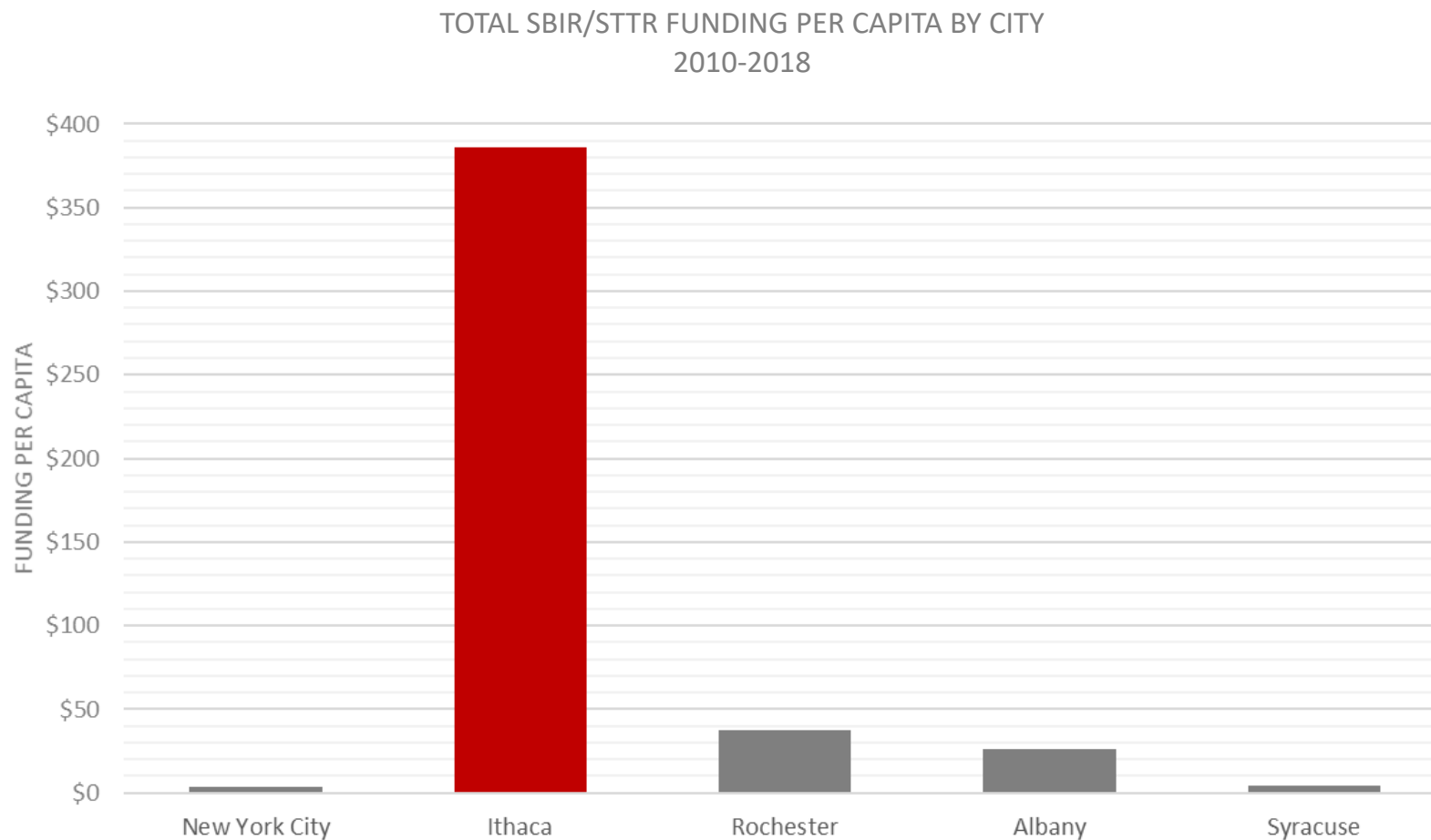


Ithaca's SBIR/STTR award funding ranks second in New York State...





...and is more than 10x greater than the nearest city per capita.

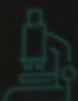




How does CREA support the regional economy?



WE ASKED REV MEMBERS WHY THEY CHOSE ITHACA. HERE ARE THEIR TOP RESPONSES:



1. Wealth of educated and skilled talent





We fuel economic growth and diversity in Upstate New York through entrepreneurship and innovation.

We support and empower people to start and grow new ventures.



- Connect campus and community
- Leverage Cornell's strengths in innovation and entrepreneurship
- Economies of scale



Director and Program Leads



Tom Schryver
Executive Director



Ken Rother
*Program Lead, Rev: Ithaca
Startup Works, eLab*



Brad Treat
Program Lead, STSA



Andrea Ippolito
Program Lead, W.E. Cornell and BET



Jenn Smith
Program Director, Grow-NY



Brian Bauer
Program Director, Competitions



Nate Cook
Program Director, Kessler Fellows



Functional Leads



Molly Israel
Marketing Director



Liane O'Brien
Finance and Operations Manager



Caitlin Schickel
Program Manager



Christine Mehta
Research and Development



Hope Spithaler
Events and Project Management



Entrepreneurs in Residence



Brandon Wright



Susan Fleming



Elisa Miller-Out



Justin Smithline



Steve Sauer



Nate Cook



Greg Thomson



Tony Frontera



Alex Hagen₄₆



Programs that CREA

Administers



76West



UNY-I-Corps Node

SOUTHERN TIER
Startup Alliance



Napkin-to-Prototype
HARDWARE ACCELERATOR

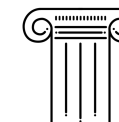


Prototype-to-Production
HARDWARE ACCELERATOR

Supports

eLab

Student Agencies
Entrepreneurship at Cornell



BET
INSPIRE. INFORM. INITIATE.

Cornell Engineering Commercialization Fellows

Cornell Engineering Entrepreneurs in Residence

Johnson Entrepreneurship Track

Kessler Fellows

The Center of Excellence for Food and Agriculture
at Cornell AgriTech



199 Startups applied from 23 U.S. states and represented North America, Europe, Central America, Africa, the Middle East, and the Asia Pacific.



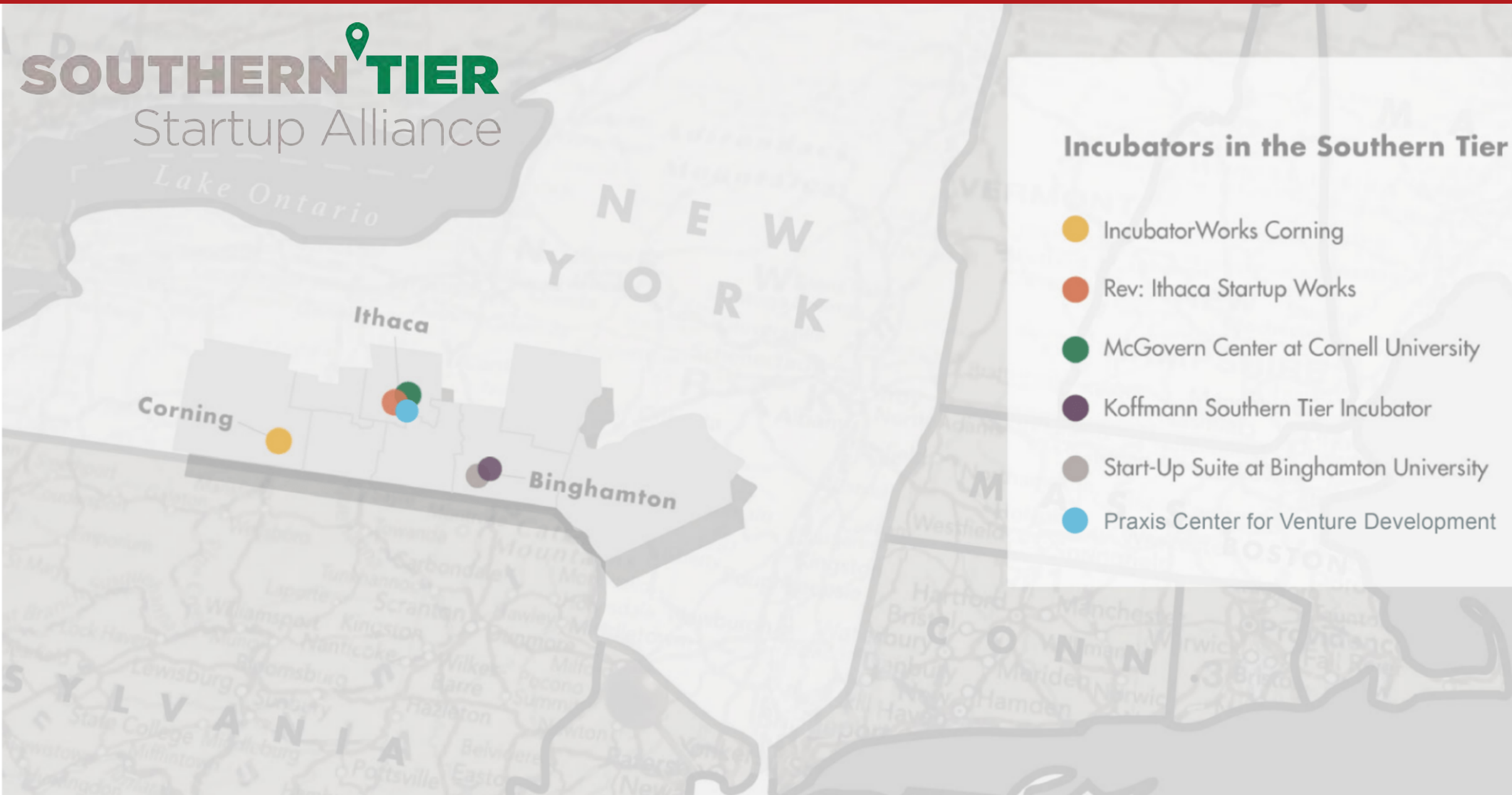


SOUTHERN TIER

Startup Alliance

Incubators in the Southern Tier

- IncubatorWorks Corning
- Rev: Ithaca Startup Works
- McGovern Center at Cornell University
- Koffmann Southern Tier Incubator
- Start-Up Suite at Binghamton University
- Praxis Center for Venture Development





REV MEMBERS IN 2019



\$21 M

\$20.7 M

136

**CAPITAL
RAISED**

**REVENUE
GENERATED**

**NEW
EMPLOYEES**