

Here Are the Most Innovative States in America

The Boston area’s Route 128 eked out a victory over Silicon Valley, as Bloomberg’s ranking of the most innovative states in the U.S. illustrates how universities can juice local economies.

Massachusetts is the most innovative state, with California scoring a close second and Washington, New Jersey and Connecticut rounding out the top five states, according to the data compiled by Bloomberg. Mississippi, West Virginia and South Dakota are the three least innovative states.

“You’ve got these major, world-ranked institutions that have played a big role in terms of churning out some very, very well-qualified, bright people,” feeding an innovative atmosphere, said Nariman Behravesh, chief economist at IHS Inc. in Lexington, Massachusetts.

The Massachusetts Institute of Technology, Behravesh’s alma mater, is one such school that’s provided a ripple effect for the local economy, he said. MIT graduates have produced around 400 startup businesses over the past few decades, including Framingham, Massachusetts-based electronics maker Bose Corp., which then creates a “cluster” of companies that are

attracted to the strong business environment and in turn propel the labor market and growth, he said.

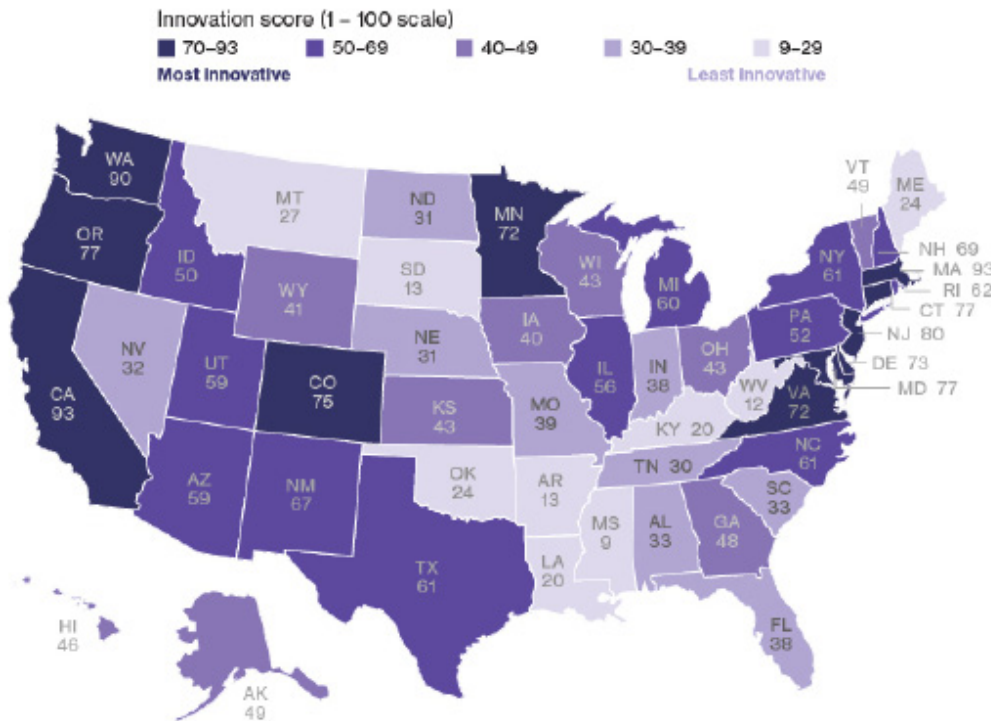
“Innovation usually leads to job creation, and high-skilled job creation, mostly,” Behravesh said. “But there are other jobs that come with it, namely, that as the labor force grows, they need haircuts, they need landscapers, all that stuff — so it does tend to have linkages to other parts of the economy.”

Massachusetts was able to edge out California by 0.03 point, perhaps in part because high-tech density was measured via number of companies, rather than market capital. That meant that the world’s most valuable company, Cupertino, California-based Apple Inc., couldn’t lift the state to the top spot in the ranking.

No. 40 North Dakota, however, illustrates what happens when economic growth is concentrated in one industry. The crash in oil prices has hobbled the state and soured the business environment, which might have otherwise attracted more companies from other industries, Behravesh said. But states at the bottom of the ladder aren’t doomed to weak growth and a lack of economic vitality.

Most Innovative States

Massachusetts and California ranked as the most innovative states in 2015, Mississippi the least



“There are some things that state governments can do to make their states more attractive to research and development,” including R&D tax credits, he said. “State governments — if they carefully target areas where they think they have a bit of a competitive advantage — they could develop a cluster around their universities, as well.”

The Bloomberg U.S. Innovation Index scored each of the 50 states on a 0–100 scale across six equally weighted metrics: R&D intensity; productivity; high-tech density; concentration of science, technology, engineering and mathematics (STEM) employment; science and engineering degree holders; and patent activity.

The data also show the limits of measuring healthy innovation. For example, the migration of talent across state lines can be difficult to measure and often captured only on delay, such as through U.S. Census bureau figures.

UNEMPLOYMENT

Region	December 2014	November 2015	December 2015	Percentage Point Change	
				1 month	12 months
San José MSA	4.5%	3.9%	3.8%	- 0.1	- 0.7
San Francisco MD	3.6%	3.2%	3.2%	0.0	- 0.4
California	6.8%	5.7%	5.8%	+ 0.1	- 1.0
United States	5.4%	4.8%	4.8%	0.0	- 0.6

INDUSTRY EMPLOYMENT

Sector (December 2015)	San Jose MSA	San Francisco MD	Combined Region	Percentage Change (Combined Region)	
				1 month	12 months
Total Nonfarm	1,083,300	1,081,000	2,164,300	+ 0.2%	+ 4.1%
Construction	44,200	38,000	82,200	- 0.7%	+ 9.2%
Manufacturing	163,800	36,300	200,100	- 0.2%	+ 1.1%
Retail Trade	91,400	89,500	180,900	+ 1.1%	+ 3.0%
Information	78,100	58,300	136,400	+ 0.8%	+ 7.5%
Professional & Business Services	231,900	276,800	508,700	+ 0.5%	+ 7.6%
Educational Services	45,900	29,200	75,100	- 1.2%	+ 4.0%
Health Care & Social Assistance	116,400	106,700	223,100	+ 0.2%	+ 4.8%
Leisure & Hospitality	94,400	135,300	229,700	+ 0.4%	+ 0.3%
Government	97,500	126,100	223,600	- 0.6%	+ 1.7%

NOTE: San José MSA (San José-Sunnyvale-Santa Clara Metropolitan Statistical Area) = Santa Clara and San Benito Counties
 San Francisco MD (San Francisco-Redwood City-South San Francisco Metropolitan Division) = San Mateo and San Francisco Counties

Source: California Employment Development Department, LMID

LABOR FORCE & ANNUAL CHANGE

Labor Force by Metropolitan Statistical Area (U.S. High-Tech Regions)

	Labor Force			Unemployment			Unemployment Rate		
	December 2014	December 2015	Change	December 2014	December 2015	Change	December 2014	December 2015	Change
United States	155,521,000	157,245,000	+ 1.1%	8,331,000	7,542,000	- 9.5%	5.4%	4.8%	- 0.6
California	18,855,700	18,934,500	+ 0.4%	1,277,500	1,091,600	- 14.6%	6.8%	5.8%	- 1.0
San Diego	1,551,700	1,568,300	+ 1.1%	84,600	74,400	- 12.1%	5.5%	4.7%	- 0.8
San Francisco	977,400	999,500	+ 2.3%	35,200	31,900	- 9.4%	3.6%	3.2%	- 0.4
San José	1,039,200	1,068,400	+ 2.8%	46,400	40,900	- 11.9%	4.5%	3.8%	- 0.7
Austin, TX	1,052,087	1,059,421	+ 0.7%	35,414	32,335	- 8.7%	3.4%	3.1%	- 0.3
Boston, MA	2,627,900	2,607,376	- 0.8%	115,460	106,970	- 7.4%	4.4%	4.1%	- 0.3
Portland, OR	1,212,800	1,239,300	+ 2.2%	70,600	58,000	- 17.8%	5.8%	4.7%	- 1.1
Seattle, WA	1,556,437	1,571,753	+ 1.0%	66,633	73,272	+ 10.0%	4.3%	4.7%	+ 0.4
NOVA Workforce Area	753,800	773,000	+ 2.5%	26,800	23,800	- 11.2%	3.6%	3.1%	- 0.5

NOTE: Totals may not add correctly due to rounding

Source: California Employment Development Department, LMID

REGIONAL LAYOFF ACTIVITY

December 2015 Events

Company	Location	# Affected
Abbott Vascular	Redwood City	144
E2open	Foster City	54
Marvell Semiconductor	Santa Clara	12
Onyx Pharmaceuticals	South San Francisco	377
Total:		587

WARN SUMMARY

Events YTD [†] :	43
Individuals Affected YTD [‡] :	3,028
Individuals Previous YTD [‡] :	3,088

* **WARN: Worker Adjustment and Retraining Notification** (notice of mass layoff or closure)
[†] **YTD: Year to Date** (Program year: July 1-June 30)
[‡] **Previous YTD:** No data available for San Mateo County, FY2014/15

NOTE: Layoff data are preliminary and should be considered an estimate of monthly regional activity

Source: NOVA's internal Rapid Response database