

The 10 TRAITS of GLOBALLY FLUENT METRO AREAS

GLOBAL CITIES INITIATIVE
A JOINT PROJECT OF BROOKINGS AND JPMORGAN CHASE

BOSTON

GDP (country rank), 2012 ¹	Share National GDP, 2012 ²	GDP/Capita, 2012 ³	Population, 2012 (country rank) ⁴	Share National Pop., 2012 ⁵	GaWC Global City Ranking, 2010 ⁶	# Global 2000 HQs, 2012 ⁷	GDP/c Growth 1993-2012 ⁸
\$320,730,798,380 (8)	2.04%	\$ 69,307.50	4,627,645 (10)	1.47%	36	12	2.48%

1) Benchmarks — what is the city’s recent ranking performance in terms of global firms, connectivity, diversity, range of cultural assets, immigrants, visitors?

A long tradition in Boston of dedication to higher education continues to bear fruit. Boston hosts more foreign students (29,000 in 2011) than any other U.S. city except New York and Los Angeles, and it ranks eighth in the country in number of undergraduate (or higher) degree holders.⁹ The city’s appeal can be traced to its internationally renowned academic institutions, such as Harvard University, the Massachusetts Institute of Technology (MIT), Boston University, and Boston College, which contribute more than \$1 billion to Boston’s economy each year.¹⁰

Since 2002, the city of Boston has been ranked number 1 in the world in science and technology¹¹ and number 4 in patent applications.¹² The city’s specialization in sectors such as computers and electronics, business services, chemicals, and royalties enabled it to increase its exports by 12 percent between 2009 and 2010 and to climb from 83rd to 25th place in the ranking of top-exporting U.S. cities. Since 2009, Boston’s economy has grown at a rate of 4.8 percent, the highest among all major U.S. metropolitan areas. Though approximately 10 percent of the population of Massachusetts lives in Boston, the city is home to 18 percent of all jobs in the state.¹³

In 2011, Boston was ranked the most innovative city in the world,¹⁴ as the U.S. city with the best Internet connectivity¹⁵, and as the third-best U.S. city in terms of quality of life, after Honolulu and San Francisco.

Boston's international tourism statistics are also showing a positive trend. With 1.3 million visitors in 2011 – an 11 percent increase from the previous year – Boston is the ninth-most-visited city in the United States.¹⁶

2) Narrative – the city's journey into and through globalization. What kind of economic and development trajectory has it taken? What has changed over time?

Boston's global position originated through happenstance. In 1647, famine struck the sugar-rich colonies of the West Indies. Planters sent ships to the north in search of food, and one found its way to Boston Harbor, which had been founded 17 years earlier by Puritan colonists from England. Thus began Boston's colonial-era position as one corner of a commercial triangle linking New England, the West Indies, and Africa.

This strategic position would not last forever. Nearby New York had a better river and was closer to the South. Philadelphia was surrounded by fertile farmland. This loss of leadership forced Boston to reinvent itself in the 19th century. Improvements in sailing technology enabled New York to establish itself as the hub for transatlantic travel, but they also allowed Bostonian sailors to create a worldwide trade network. The city was home to top-tier sailors and merchants who set up commercial networks that stretched as far as China and South Africa.

This human capital became less important with the advent of the steamboat, which forced Boston to reinvent itself once again in the second half of the 19th century, this time as a manufacturing center. The economic revival of the 19th century was followed by a burst of intellectual output and a vibrant and religious mosaic that led to the founding of new colleges and institutions dedicated to transmitting technical expertise, including the Lawrence Scientific School at Harvard and the Massachusetts Institute of Technology.

In the 20th century, the advantages of urban and railway factories evaporated in many cities. By the 1970s, Boston had once again been plunged into crisis, with real estate valued well below construction costs and with significant ethnic tensions. Boston managed to reinvent itself yet again, relying this time on educational institutions built over the course of centuries. These institutions enabled Boston to make a successful transition from a manufacturing economy to a knowledge-based economy.¹⁷

3) Elements of international and global orientation - In what ways is the city globally connected and relevant? What sort of trade patterns does it exhibit?

Boston's constellation of higher education institutions not only attracts university students from all over the world but also plays a key role in anchoring the city's economy by developing innovation clusters and attracting research funds and venture capital to turn innovations into new business spinoffs.¹⁸

The success of post-industrial Boston, with its model oriented toward engineering, biotechnology, information technology, financial services, and management consulting, has transformed the city into one of the world's most potent and attractive knowledge economies.

As a result of the strides made by its education and innovation industry, 20- to 34-year-olds now account for a larger percentage of the population in Boston – around 32 percent¹⁹ – than in any other U.S. city. Thanks to its population profile, Boston's major cultural institutions have flourished, its theater district has been revitalized, and its Rose Kennedy Greenway has opened. Boston's vibrant, dynamic culture has had a positive effect on the city's tourism industry, which is expected to grow 5-6 percent by the end of 2012, a rate surpassed in the United States only by Las Vegas, which will grow by 15 percent.²⁰ International visitors to Boston come primarily from Canada (due to a traditional affinity for New England), the United Kingdom, and Germany. Other crucial factors include Boston's eight daily flights from London Heathrow, three daily flights in the summer from Germany, and 42 daily flights from Canada.

4) To what extent is the city's international dimension inherited or intentional?

Since its founding, Boston has seen education as essential. In a city and wider region that had little of value to export, human capital remained its critical comparative advantage. Today, investment in infrastructure and the combination of private investment and public initiatives – such as the Massachusetts Life Sciences Initiative, the Advanced Manufacturing Initiative, the MassChallenge venture fund, and support for the city’s life sciences sector – have kept the economy buoyant in difficult times. Boston has so far been able to cope with the expected cuts in federal spending on research, health care, and defense (which would mainly affect the city’s health care, biopharmaceutical, medical-devices, and financial-services clusters), not to mention the effects that the crisis in Europe – the destination of 40 percent of Boston’s exports – might have on the city’s economy.²¹

¹ Brookings analysis of Moody's Analytics and Oxford Economics data.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ “The World According to GaWC; Classification of Cities 2010,” September, 14, 2011.

⁷ The data were produced by G. Csomós and constitute Data Set 26 of the Globalization and World Cities (GaWC) Research Network (<http://www.lboro.ac.uk/gawc/>) publication of inter-city data.

⁸ Brookings analysis of Moody's Analytics and Oxford Economics data.

⁹ Danielle Kurtzleben, “The 10 Most Educated U.S. Cities,” *US News & World Report*, August 30, 2011.

¹⁰ Peter Schworm, “Foreign Students Flock to the US,” *Boston Globe*, July 5, 2008.

¹¹ Ross C. DeVol, Kevin Klowden, and Benjamin Yeo, “2010 State Technology and Science Index: Enduring Lessons for the Intangible Economy,” Milken Institute, January 2011.

¹² “Boston Patent Numbers Continue to Rise in Fourth Quarter, Finishing a Positive Year,” Hoffman Warnick Boston Patent Index, 2012.

¹³ Charlotte Kahn et al., “City of Ideas: Reinventing Boston’s Innovation Economy,” *Boston Indicators Report* (Boston Foundation, 2012).

¹⁴ Lisa DiCanio, “Boston Ranks #1 Most Innovative City in the World,” BostINNO, October 18, 2011.

¹⁵ “The State of the Internet,” Akamai, available at www.akamai.com/stateoftheinternet/.

¹⁶ “International Visitation to the United States: A Statistical Summary of U.S. Visitation (2011),” Office of Travel and Tourism Industries.

¹⁷ Edward Glaeser, *The Triumph of the City* (New York: Penguin Press, 2011).

¹⁸ Charlotte Kahn et al., “City of Ideas: Reinventing Boston’s Innovation Economy.”

¹⁹ Ayla Rosen, “Boston Leads U.S. in Youth Population: Is it Because of Innovation or Education?” BostINNO, July 7, 2011.

²⁰ Todd Larson, “Tourism Seeing Steady Growth,” *Boston Business Journal*, June 29, 2012.

²¹ Charlotte Kahn et al., “City of Ideas: Reinventing Boston’s Innovation Economy.”

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