



**United States – East Coast
Software Development Centre**

FDI Proposition



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Software Development Centre

	Florida	Georgia	Massachusetts	New York	North Carolina	Pennsylvania	South Carolina	Virginia
GDP per Capita (Int \$)	36,643	41,066	56,170	58,721	43,393	44,448	34,909	51,103
Labour Force (millions)	9.19	4.73	3.44	9.73	4.53	6.37	2.17	4.14
Unemployment Rate (%)	11.2	10.2	9.3	8.8	10.4	8.3	11.7	6.6
No. of FDI Projects in Software	46	39	62	111	44	24	4	34
Total Patents	24,176	13,585	35,947	54,056	18,647	28,781	5,402	11,325
Average Salary for a Software Programmer (\$)	47,450	48,458	58,826	58,666	46,361	50,073	44,183	52,414

Software Development

Why the East Coast?

- As one of the US's major centres for R&D, the East Coast states offer some of the highest industrial and academic R&D expenditures in the country
- With seven of the top ten US states for companies in software development, the East Coast offers the most intensive industrial cluster in the field

Track Record

- The leading location for inward investment in the software development sector is New York having receiving 111 projects between 2003 and Jan 2010 and a capital expenditure of USD2.3 billion ¹

Access to Labour

- With more than 180,000 employees, Virginia's ICT services workforce is the region's largest
- The sheer size of New York guarantees its position as the regional leader for labour force size and graduate pool
- New York's education system is the best funded of the selected locations with expenditure in excess of USD17,500 per person

¹ All FDI data refers to the period between Jan 2003 and Jan 2010 unless otherwise specified

Software Development

Industrial Presence

- Massachusetts is the regional centre for R&D with the highest spending on research as well as the most extensive record of software patent registration
- Virginia's commercial sector is the most specialised in software design with 240 companies per 100,000 people

Economic Performance

- With an economy comparable to some of the world's most populous countries, New York state's absolute and per capita GDP is the largest in the region
- Georgia and North Carolina's legal system allows the greatest freedom to determine where to place financial assets

Cost Analysis

- The regional cost leader is North Carolina, offering substantially lower prices than New York and Massachusetts for rent and utilities.
- Among the higher quality locations, Florida is overwhelmingly the most affordable with significant savings available for utilities, rent and salary.

Major Investments in Software Development

Yahoo into New York (May 2009)

Yahoo are investing in the construction of a new data centre in the Lockport Industrial Park, Buffalo, New York. The company is investing at least \$150m in building the 17,651 sq m data centre which will generate between 50 and 100 new high-tech jobs in the area. The facility will go online in January 2011.

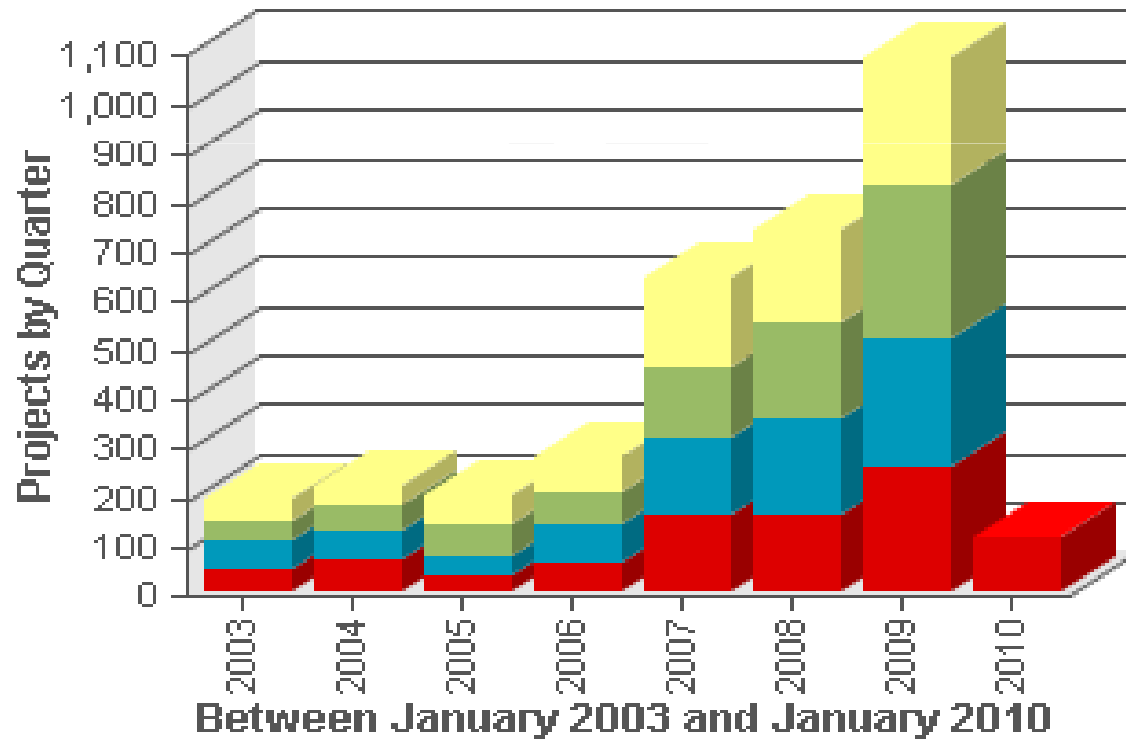
IBM into Massachusetts (Nov 2008)

IBM has opened a software laboratory in Littleton, Massachusetts that will focus on the development of IBM software for industries including biotech, finance, healthcare, retail, transportation, and energy. Approximately 1,200 IBM employees will move to the new laboratory but the centre will employ 3,400 employees after its completion in 2010.

Hewlett Packard into North Carolina (Oct 2008)

Hewlett-Packard (HP) and SAS have announced the opening of the HP SAS Customer Intelligence Excellence Centre in Cary, North Carolina. The centre provides an environment for clients to understand the benefits they can gain through the integration of the SAS suite of Customer Intelligence solutions with the HP Neoview enterprise data warehouse.

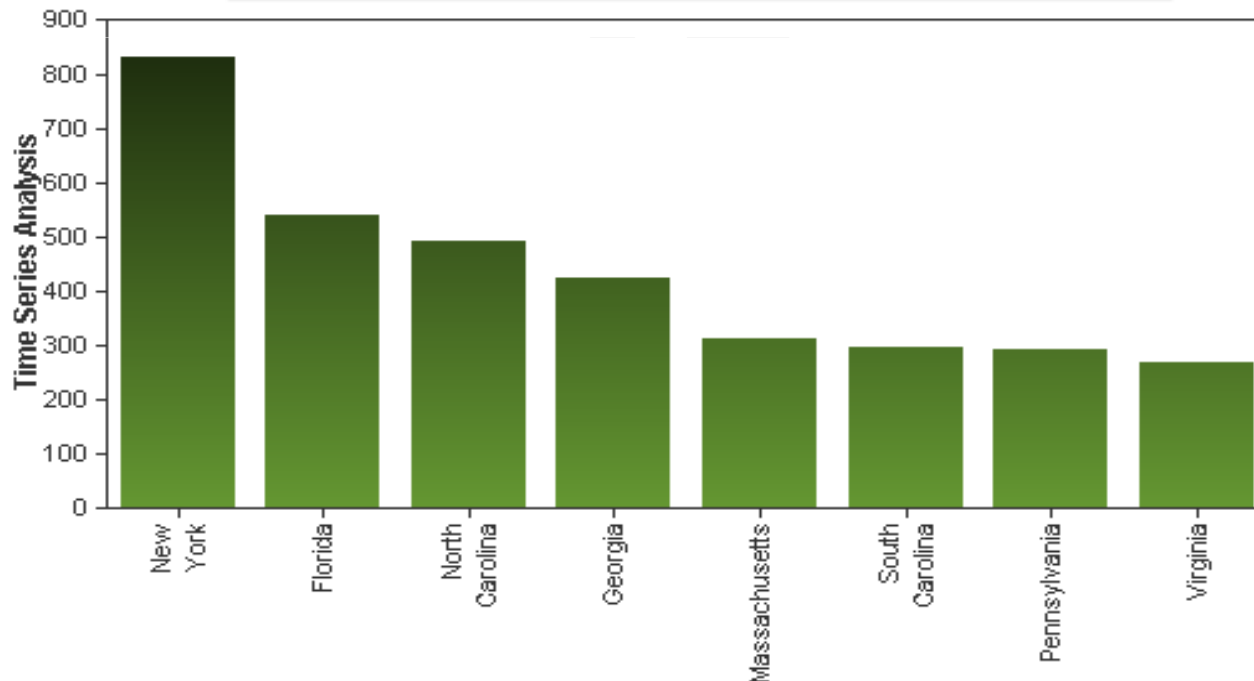
With a steady receipt of projects over the four years 2003 to 2006 and a considerable period of growth between 2007 and 2009, the selected states have benefitted from considerable international interest. This interest culminated in the receipt of almost 1,100 projects during financially turbulent 2009 creating a capital investment of more than USD34 billion.



Source: fDi Markets from the Financial Times Ltd

At state level, the largest recipient of inward investment is New York, having received 832 projects over the seven year period and a total capital expenditure of more than USD32 billion. Florida has also demonstrated significant competitiveness with 540 investments between Jan 2003 and Jan 2010 and a capital expenditure of USD16 billion.

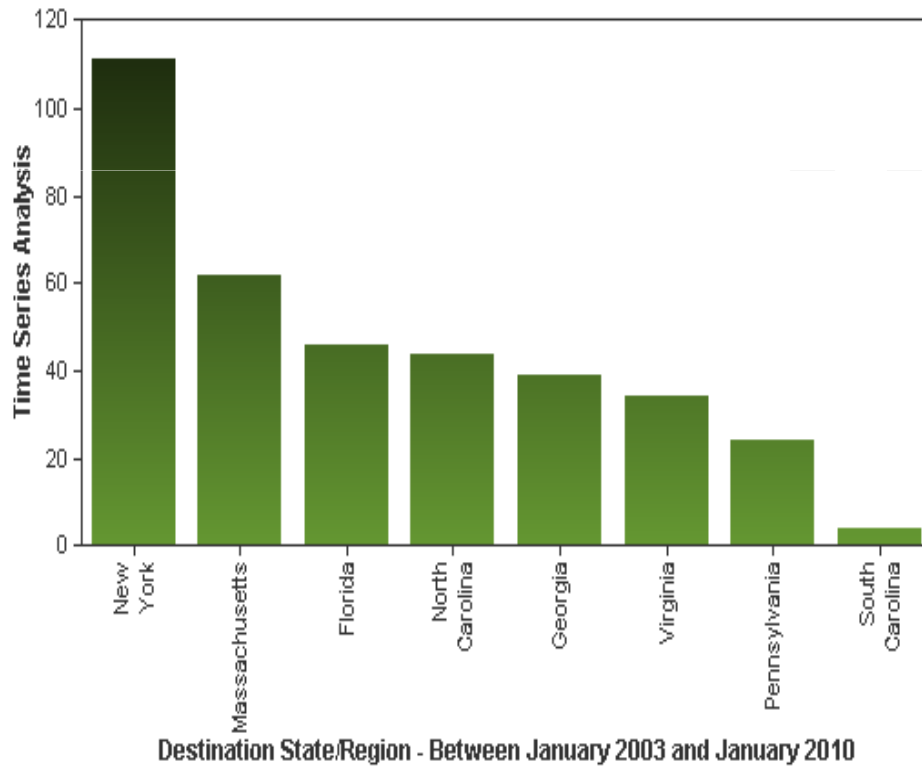
**fDi Markets – Leading destination states
 [2010]**



Destination State/Region - Between January 2003 and January 2010

Source: fDi Markets from the Financial Times Ltd

fDi Markets – ‘Leading destination states in software development’ [2010]



Source: fDi Markets from the Financial Times Ltd

- The regional leader for inward investment in the software development sector is New York with 111 projects and a total investment value of more than USD2.3 billion.

- Massachusetts has achieved significant success in the sector with investment levels roughly 56% of New York’s despite its much smaller scale.

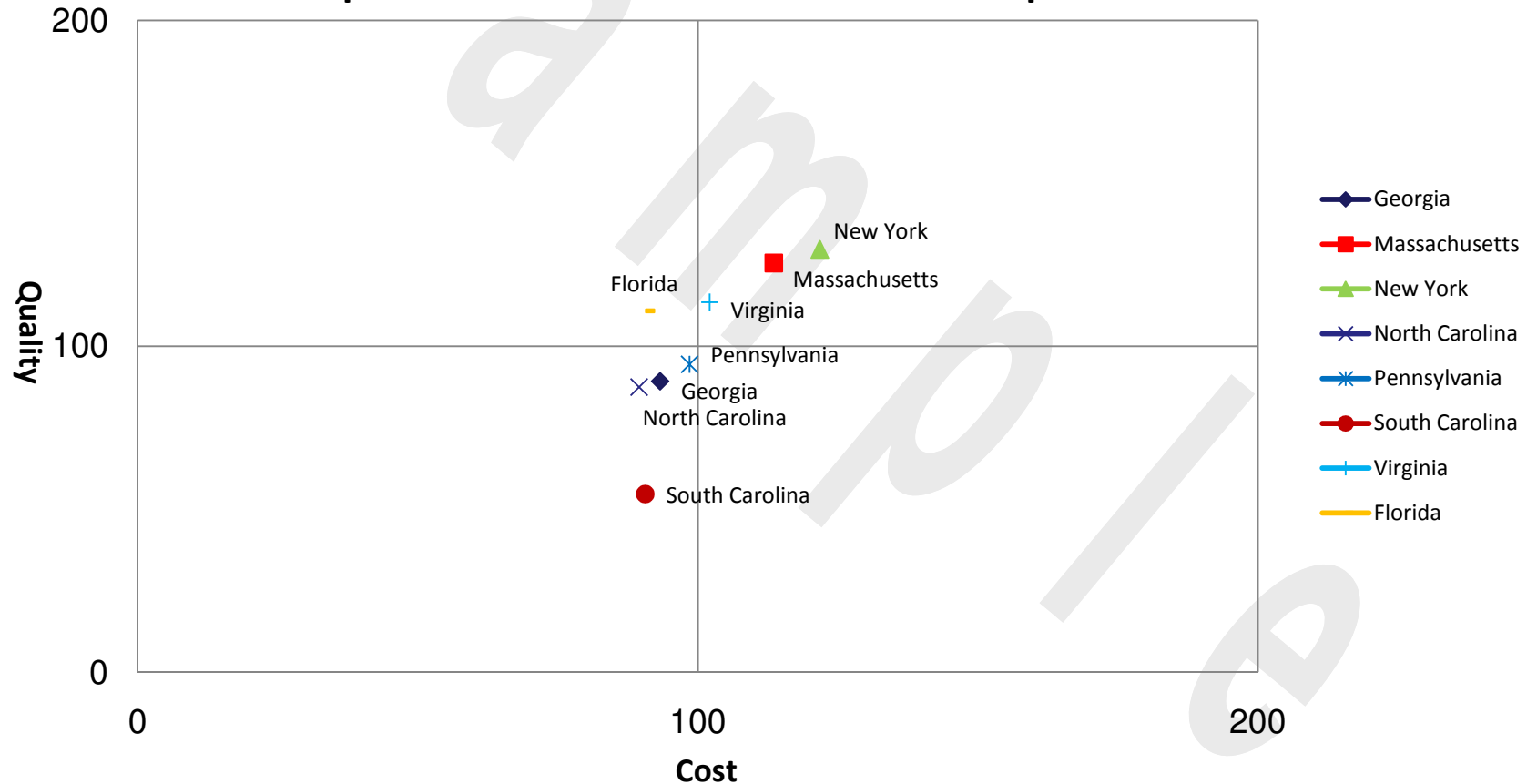
- Virginia received the largest per capita capital expenditure with USD205,000 invested for each resident of the commonwealth.

Benchmarking Study

- The following analysis is based on fDi Benchmark, an online location benchmarking tool provided by the Financial Times.
- fDi Benchmark compared key US States for software development based on an analysis of over 55 quality factors and 10 cost factors.
- A key emphasis was placed on:
 - ***Labour availability - the size of the labour market, size of employment in business services and tightness in the labour market.***
 - ***Presence of Industrial Cluster – the size, competitiveness and track record of the domestic industry.***
 - ***Infrastructure and Accessibility – the quality of the location’s transport, ICT and energy infrastructures.***
- Other factors including general business environment, the living environment and costs were also assessed.

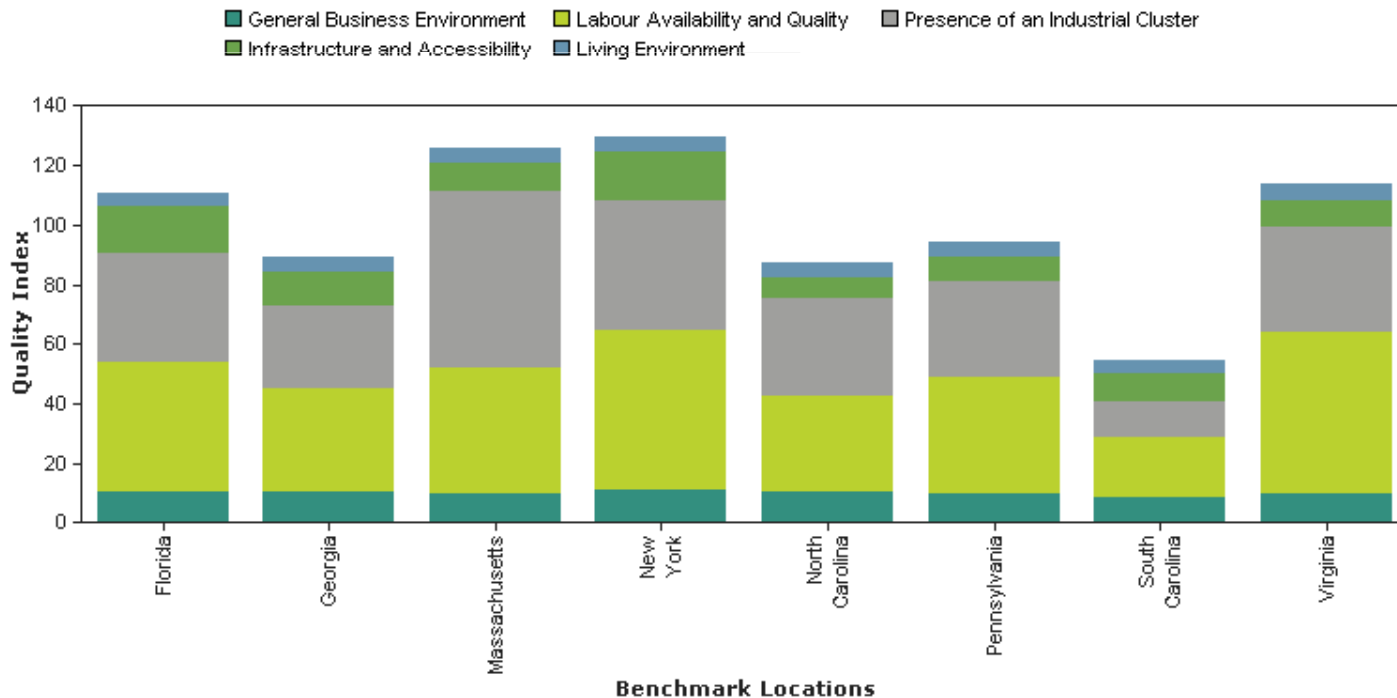
With the best cost quality ratio, fDi Benchmark identifies Florida as the strongest overall option for companies interested in investing in the East Coast's software development sector.

Competitiveness Matrix - Software Development Centre



New York's large and vibrant economy, its vast labour force and its excellent ICT infrastructure enables the state to boast the highest quality rating for a software development project.

Software development centre (NEW) (Head Count: 100) - Total Quality Index Breakdown

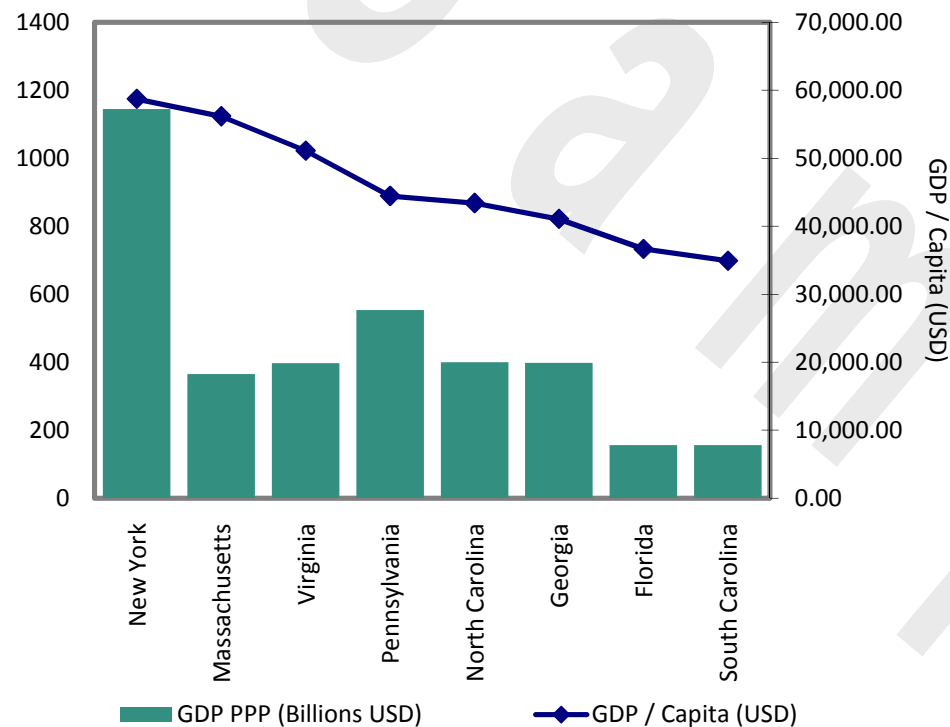


General Business Environment

As the centre of the North American financial services industry and one of the worlds leading commercial centres, New York offers a business environment unparalleled along the east coast of the United States.

- New York's GDP of Int\$1.14 billion is larger than the economies of Turkey, Indonesia or Australia
- As the wealthiest location benchmarked, New York maintains a GDP per Capita of almost Int\$60,000
- Georgia and North Carolina offer a regulatory system conducive to individual and corporate economic freedom
- Georgia's overall tax system provides the greatest freedom from the burden of restrictive tax policies
- South Carolina's combined federal and state corporate tax rate is 38.3% - the lowest of the selected locations

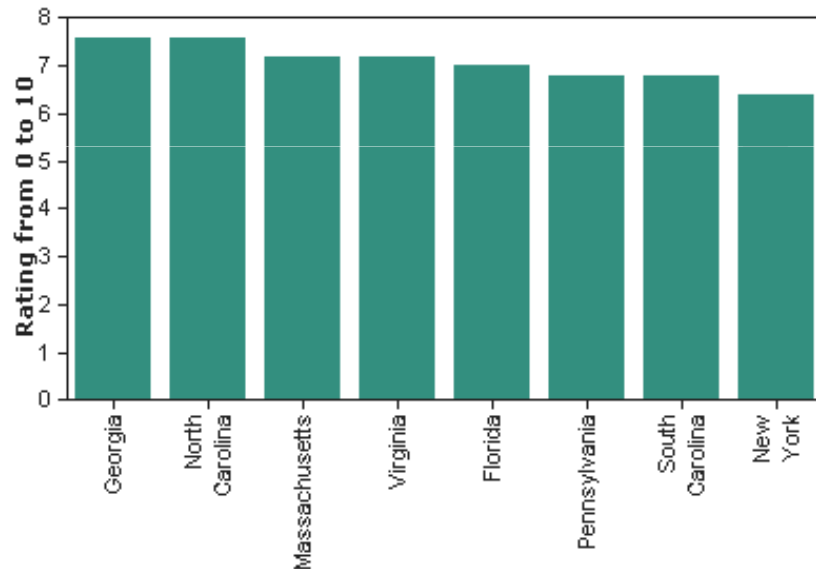
fDi Benchmark - 'GDP and GDP per Capita (PPP) [2008]



Source: US Bureau of Economic Analysis; fDi Intelligence from the Financial Times Ltd

- Home to many of the worlds largest banks and multinational corporations and with a GDP (PPP) almost 50% larger than Australia’s, New York state is one of the globe’s major commercial centres.
- Despite its large population, the power of New York’s economy ensures that it maintains the 5th highest GDP per capita of the 50 states and the District of Columbia.
- The economies of Massachusetts and Virginia generate per capita GDP figures above Int\$50,000, warranting comparison with wealthy locations like Norway and Singapore.

fDi Benchmark - 'Economic Freedom Index' [2005]



Source: Fraser Institute - Economic Freedom of North America: 2008 Annual Report

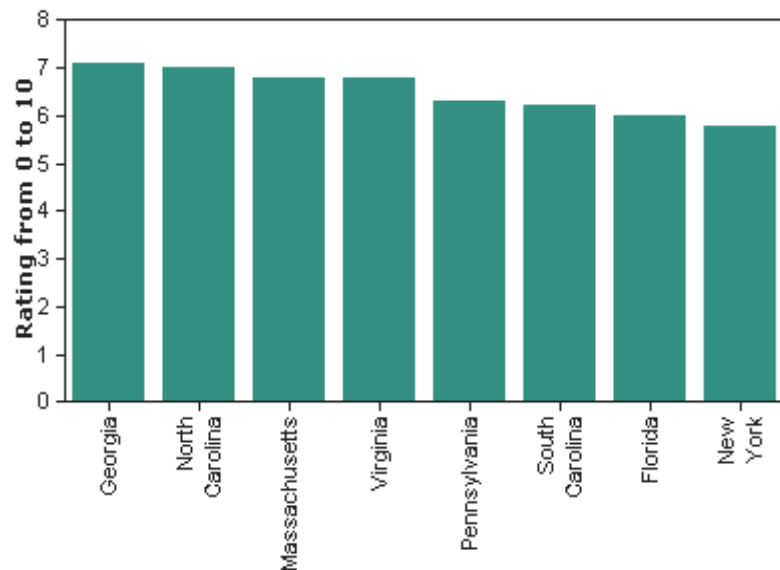
- The Freedom Index ranks locations on their relative independence from the burdens of taxation and restrictions on the control of capital and your own labour.

- Although the American states are quite free from limitations on the individual or corporations ability to act under their own prerogative, disparities between the states still exist.

- Georgia and North Carolina provide incoming investors with the greatest flexibility among the selected locations when determining how best to allocate their available capital.

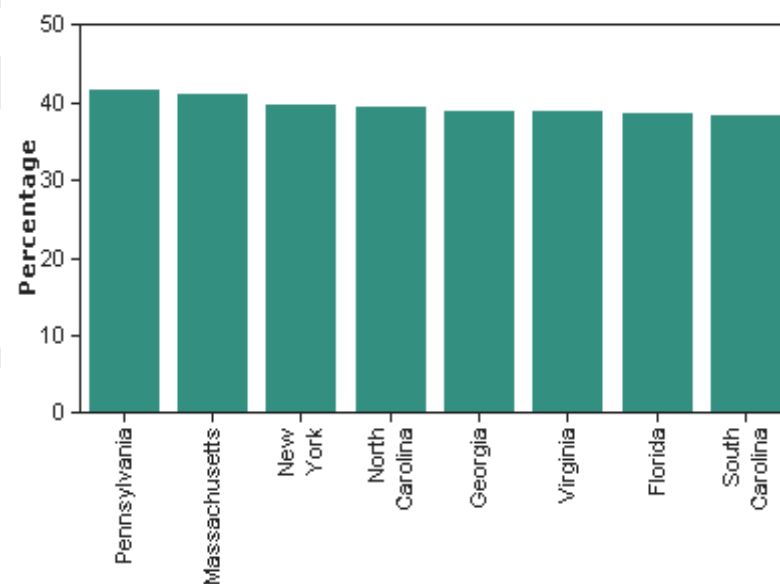
The lowest state imposed corporate tax rate available among the selected locations can be found in South Carolina, however, as indicated in the takings and discriminatory taxation index, additional taxes imposed in the state reduce its competitiveness. Complementing its strong economic freedom the most tax competitive location is Georgia.

fDi Benchmark - 'Takings and Discriminatory Taxation Index' [2005]



Source: Fraser Institute - Economic Freedom of North America: 2008 Annual Report

fDi Benchmark - 'Total tax payable by businesses' [2009]



Source: World Bank World Development Indicators; US Federal State

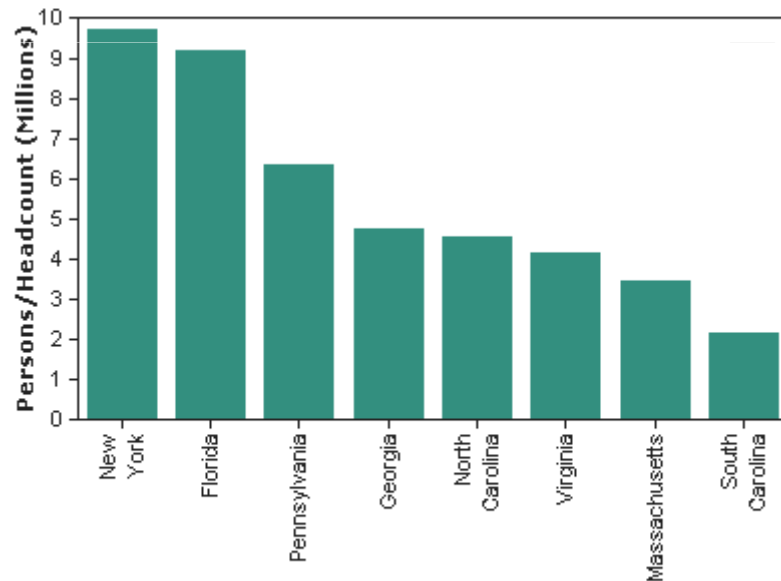
Labour Availability and Quality

The Virginia workforce's specialisation within the field of IT services and software development provide a competitive edge by offering investing companies a wider range of experienced and qualified individuals from which to draw their future workforce.

- Both New York and Florida offer a labour force in excess of 9 million
- South Carolina's 2009 unemployment rate is almost 12%, offering unparalleled flexibility within the labour market
- More than 180,000 employees in ICT services ensure Virginia maintains the largest relevant qualified workforce
- With 5% of Virginia's workforce composed of ICT services professionals, the commonwealth offers specialisation within the niche sector
- New York's student population numbers above 850,000, providing investing companies with a vast graduate pool to meet their requirements for new talent
- While South Carolina's spending on education is proportionately the largest, New York's huge economy ensures that in absolute terms it is the major regional investor in education
- North Carolina's labour laws provide employers with the greatest flexibility

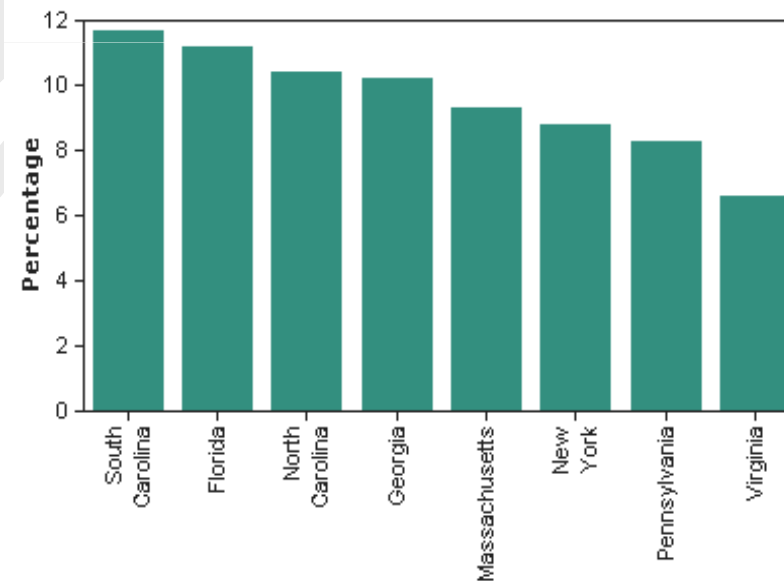
For companies seeking access to a large and available workforce, Florida's substantial labour force and double digit unemployment rate create an immediately available labour pool of over 1 million people. Similarly, New York offers a large and flexible labour force.

fDi Benchmark - 'Labour force' [2009]



Source: Economic Intelligence Unit; CIA The World Factbook

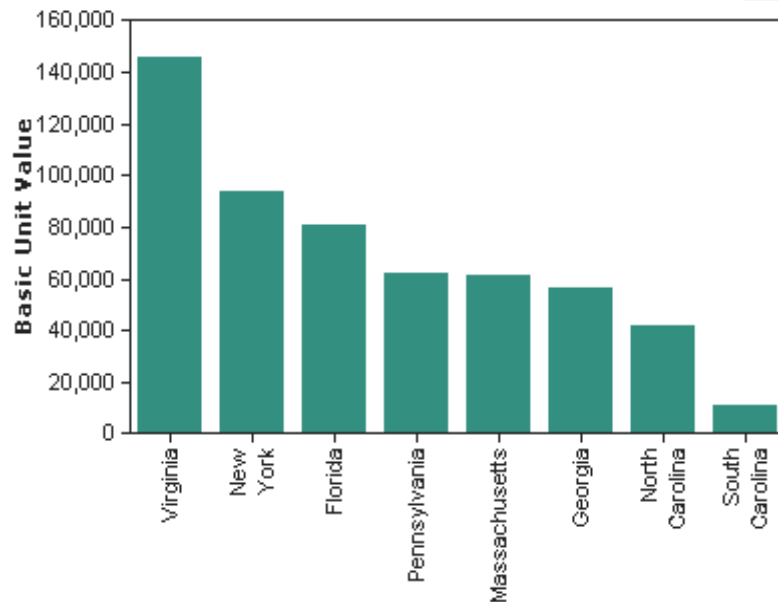
fDi Benchmark - 'Unemployment rate' [2009]



Source: World Bank World Development Indicators; Eurostat; Economic Intelligence Unit; fDi Intelligence from the Financial Times

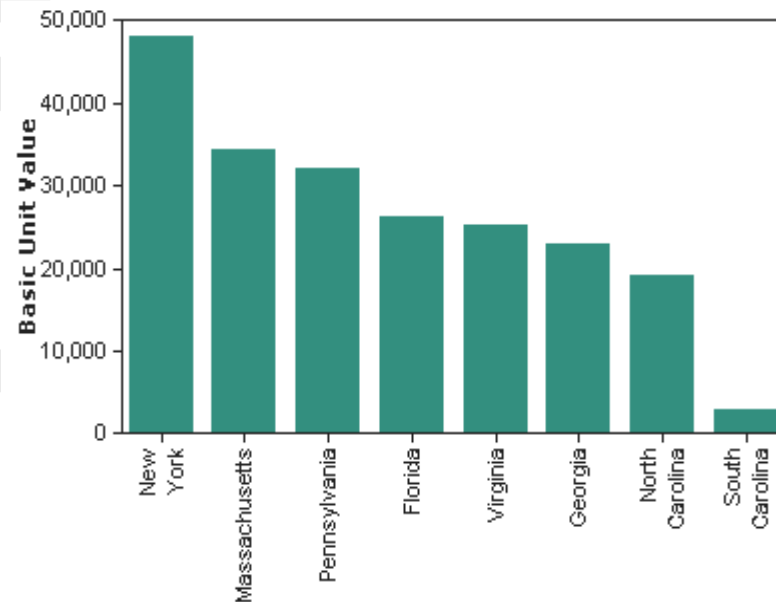
With more than 140,000 people employed in computer activities, Virginia offers a wealth of experience in the software development sector. Virginia's computer activities workforce is the country's 2nd largest and provides a significant edge on regional rivals New York and Florida. However, for research and development New York is unmatched among the selected locations with almost 50,000 people employed within the research community.

fDi Benchmark - 'Employment in Computer Activities' [2008]



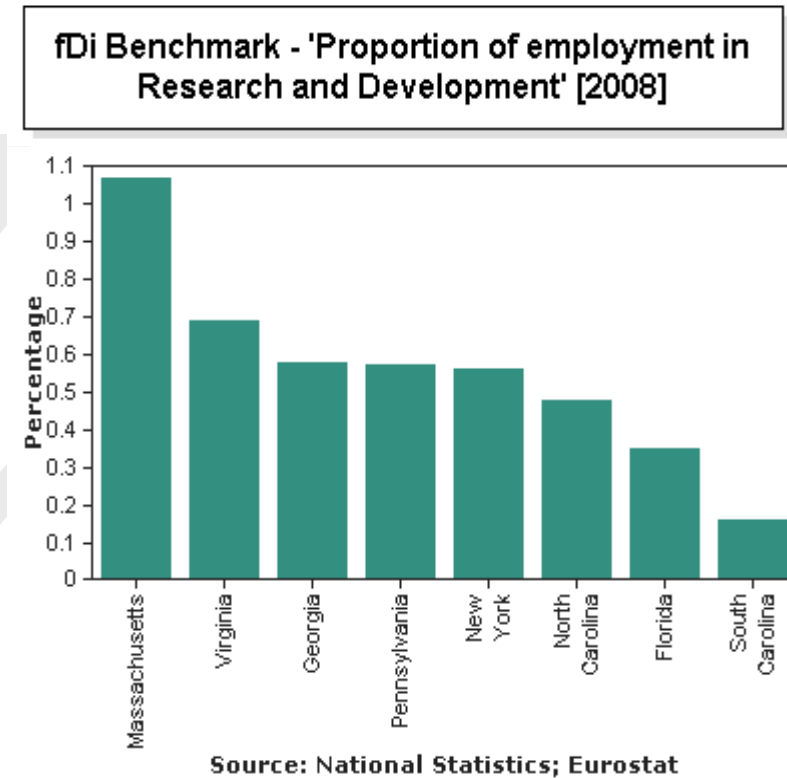
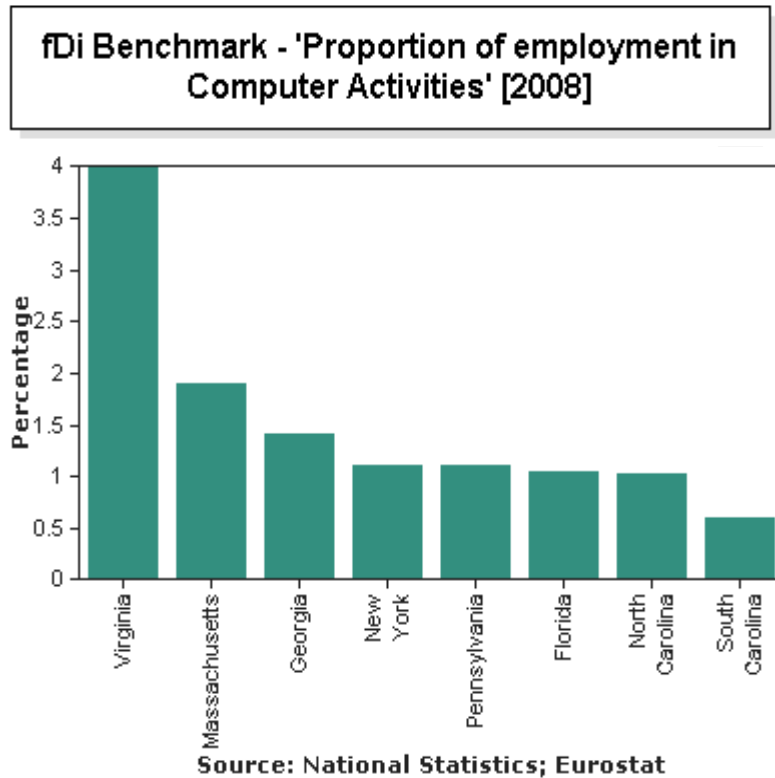
Source: National Statistics; Eurostat

fDi Benchmark - 'Employment in Research and Development' [2008]



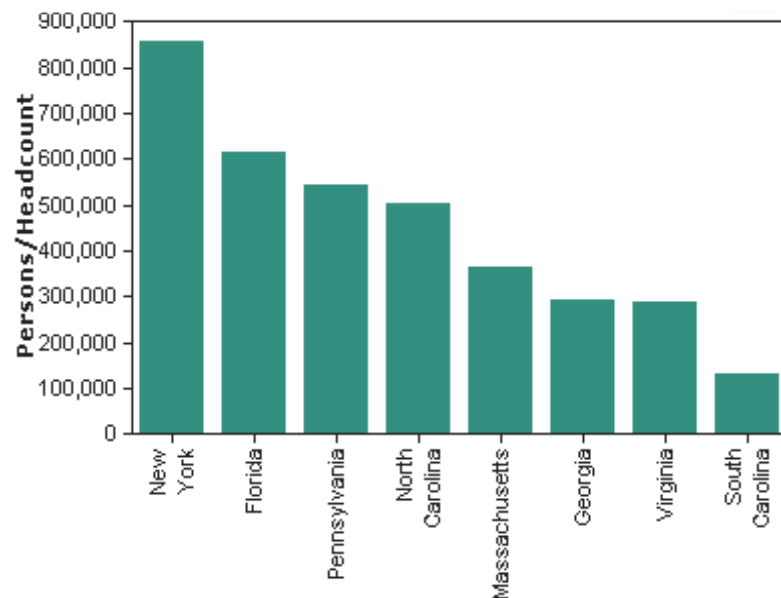
Source: National Statistics; Eurostat

Massachusetts jumps ahead of New York and Florida for both computer activities and R&D with almost 2% of its workforce pursuing a career in the former. Virginia maintains its position as the regional leader for computer activities with an impressive 4% of its workers holding positions within the field.



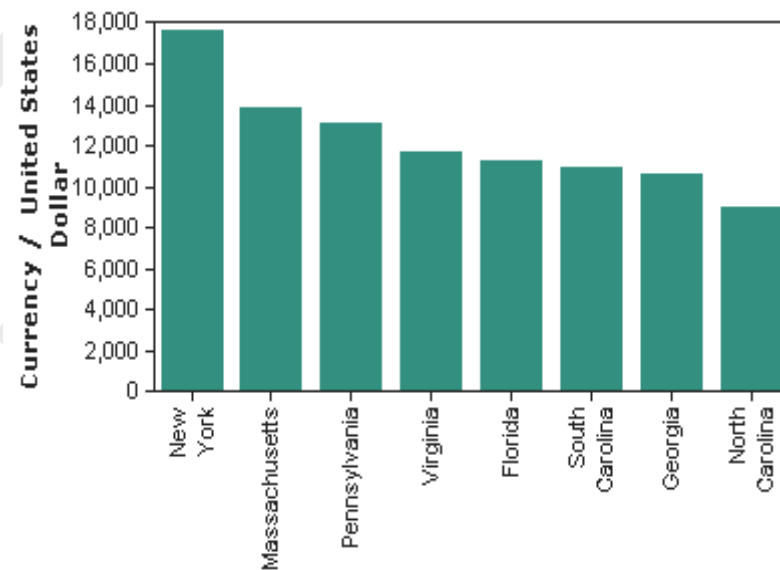
New York, as a major destination city for students worldwide, has more than 850,000 students enrolled in its various institutes of higher education, thereby offering incoming investors an abundance of fresh talent. Moreover, with public spending on education in excess of USD17,500 per student, investors can be confident that they will be employing staff who have received a high standard of education. New York's education system offers 14 of the world's top 500 universities, more than any other US state.

fDi Benchmark - 'Number of students' [2006]



Source: HESA (UK); NCES (US); fDi Intelligence from the Financial Times

fDi Benchmark - 'Public spending on education per student' [2007]



Source: US National Centre for Education Statistics (USA); Regional Education Sources (Canada)

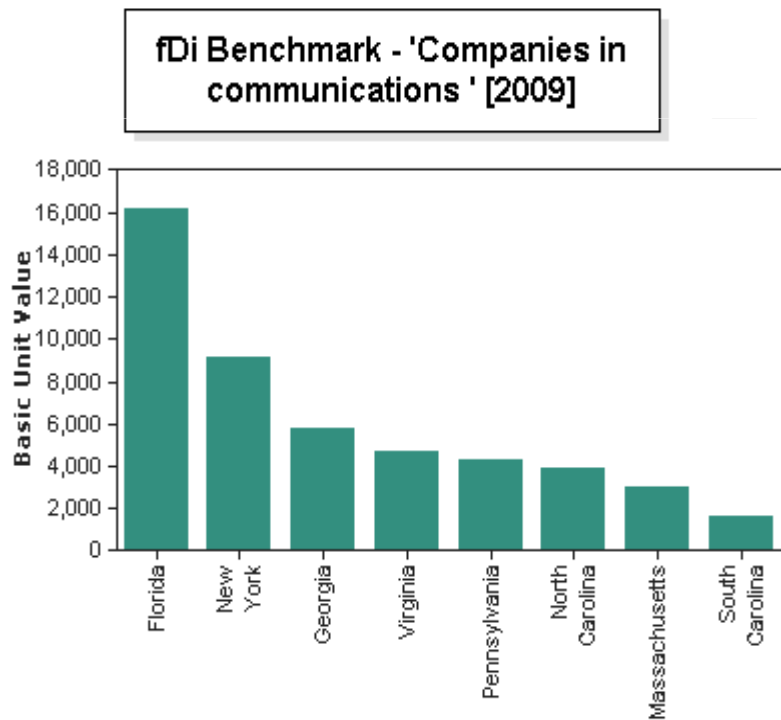
Presence of an Industrial Cluster

On almost every metric by which R&D quality and scale could be judged, Massachusetts' innovative and productive R&D community demonstrates abilities ahead of the regional curve. In this way Massachusetts offers the strongest industrial cluster of the selected states.

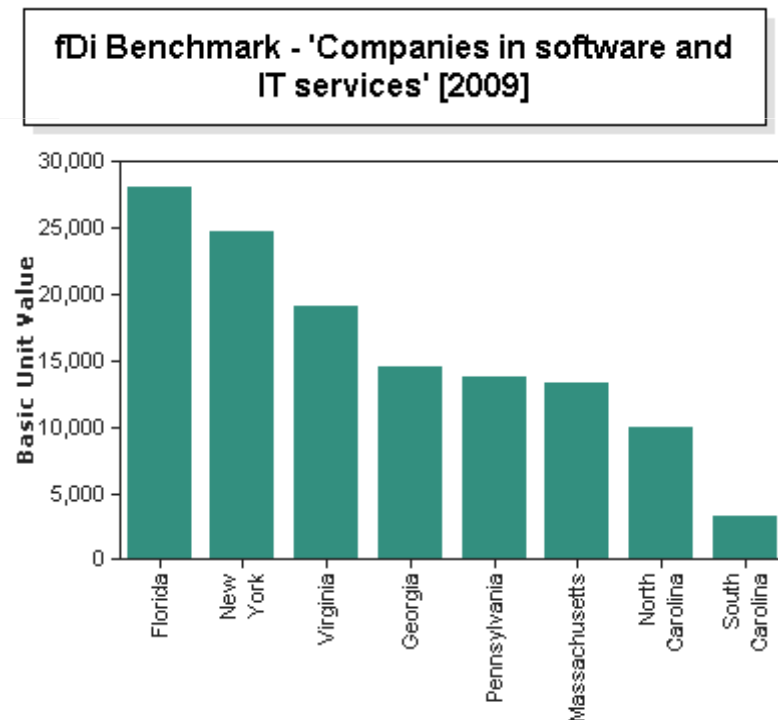
- Massachusetts is the largest per capita investor in both industrial and academic R&D
- With almost 50 companies in R&D per 100,000 people, Massachusetts' industry is particularly specialised within the knowledge sector
- Between 2003 and 2009, Massachusetts' residents have been responsible for more than twice as many software patents than their nearest competitor
- The largest collection of extant software companies is to be found in Florida with almost 30,000 within the business sector
- Virginia's industry offers the greatest specialisation in the software development sector with 240 companies per 100,000 people

Presence of an Industrial Cluster

Florida's IT industry currently contains a larger array of companies than the regional competition. Furthermore, Florida's software and IT services industry is the third largest in the US, placing behind only California and Texas. Both New York and Virginia maintain a large industrial presence within the field.

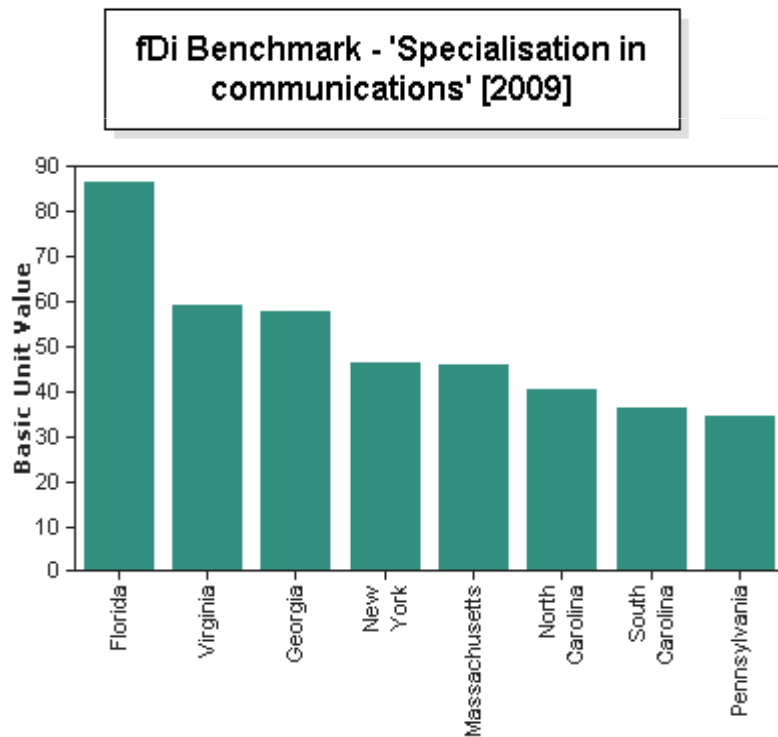


Source: Dun & Bradstreet (Sic 366, 482, 483, 484, 489)

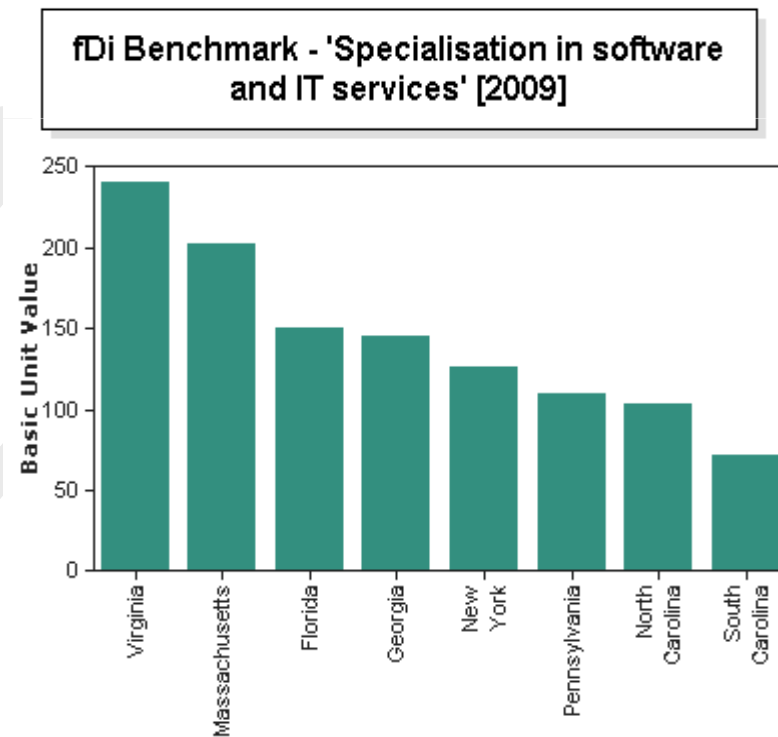


Source: Dun & Bradstreet (Sic 737)

Interestingly, when viewed relative to the population of the state, the ordering alters. Both Virginia and Massachusetts overtake Florida for their specialisation in software development with Virginia offering almost 250 companies per 100,000 people. Florida maintains its position as the regional leader for communications companies.



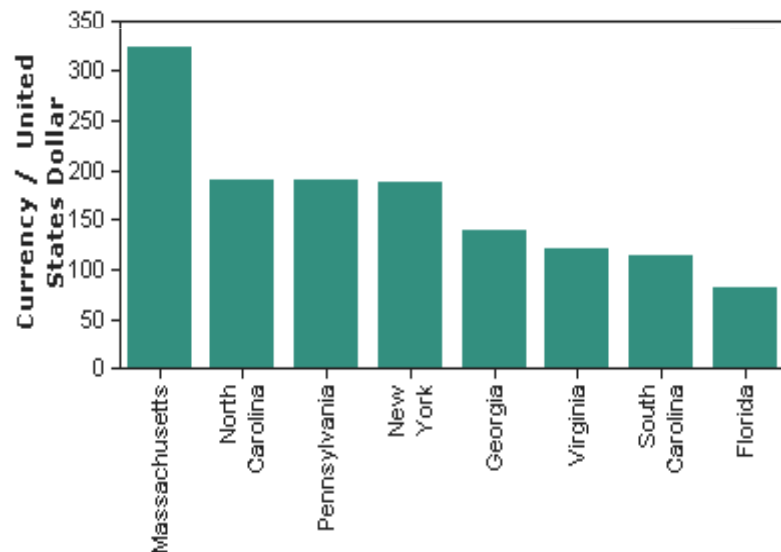
Source: fDi Intelligence



Source: fDi Intelligence

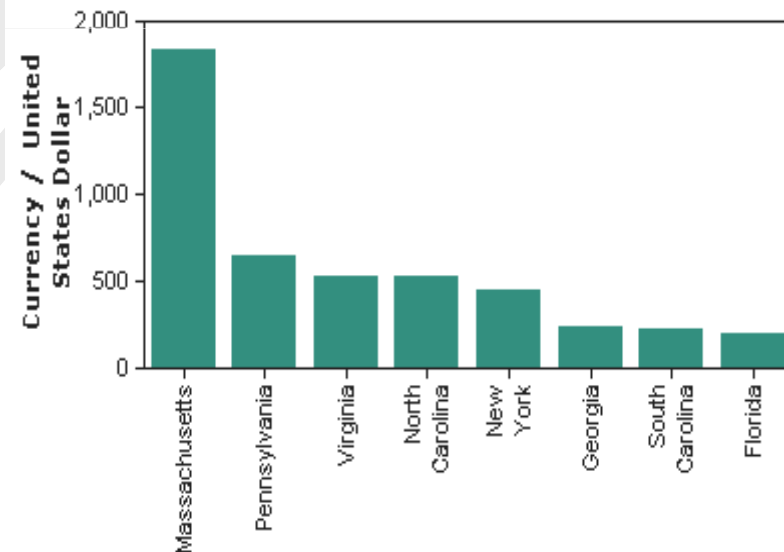
With its large presence of top quality higher education institutes and intellectual activity, Massachusetts is the regional leader in R&D. This translates into per capita industrial R&D spending roughly three times larger than in Pennsylvania and more than four times larger than in New York.

fDi Benchmark - 'Academic R&D per capita' [2008]



Source: Milken Institute - State Technology & Science Index (USA); fDi Intelligence from the Financial Times Ltd based on Institut de la Statistique Quebec (Canada)

fDi Benchmark - 'Industrial R&D per capita' [2008]



Source: Milken Institute - State Technology & Science Index (USA); fDi Intelligence from the Financial Times Ltd based on Institut de la Statistique Quebec (Canada)

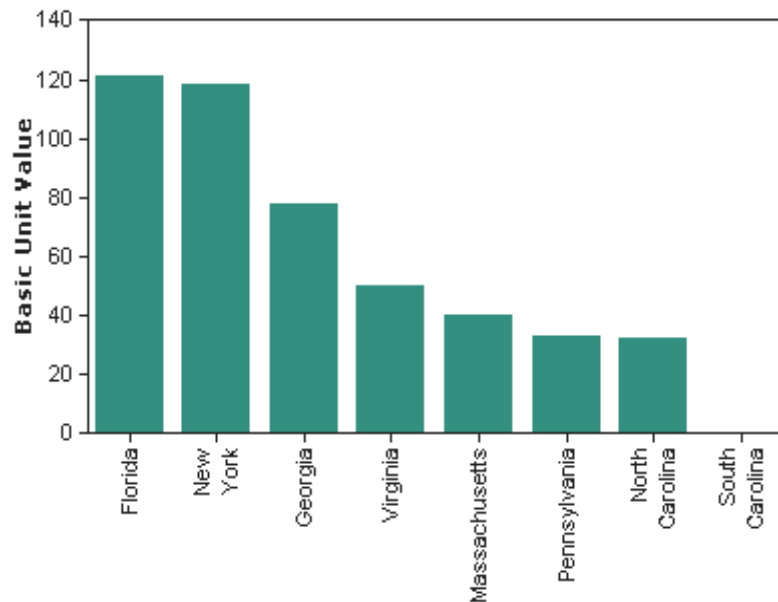
Infrastructure and Accessibility

The combination of New York's strong international transport services and its high quality ICT network provides investing companies with the strongest regional Infrastructure for the development of a successful software development company.

- Access to international destinations is easiest in New York and Florida with approximately 120 direct international flights available from each state
- South and North Carolina's internal transport infrastructure allows for an average commute time of less than 24 minutes
- New York's internet connection speeds are the fastest with the highest transfer rates for both uploading and downloading
- With more than 95% of New York residents using the internet, the state's population is the most internet literate

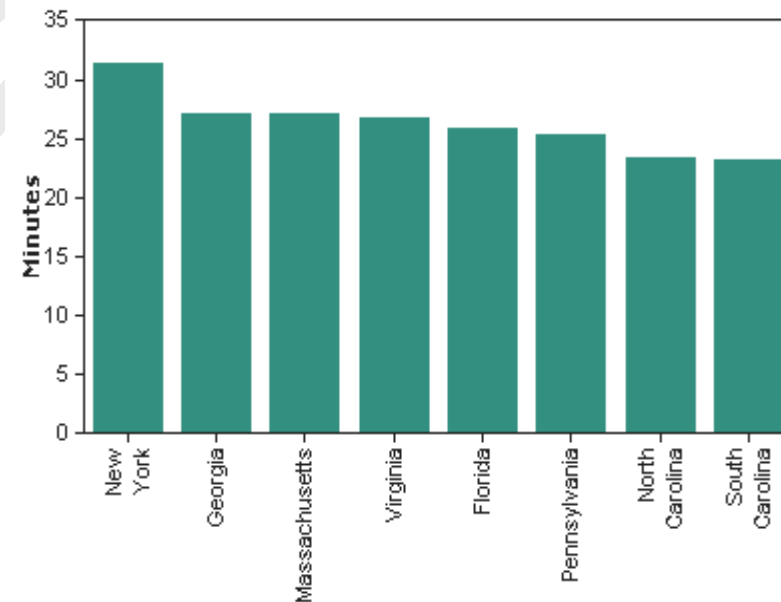
With two of the world's finest air transport infrastructures, both Florida and New York offer direct flights to approximately 120 international destinations. However, internally New York is slightly more difficult to navigate - resulting in a travel to work time much larger than its regional competitors. South and North Carolina offer the lowest average commute time.

fDi Benchmark - 'No. of international destinations served from airports' [2009]



Source: OAG Flight Guide

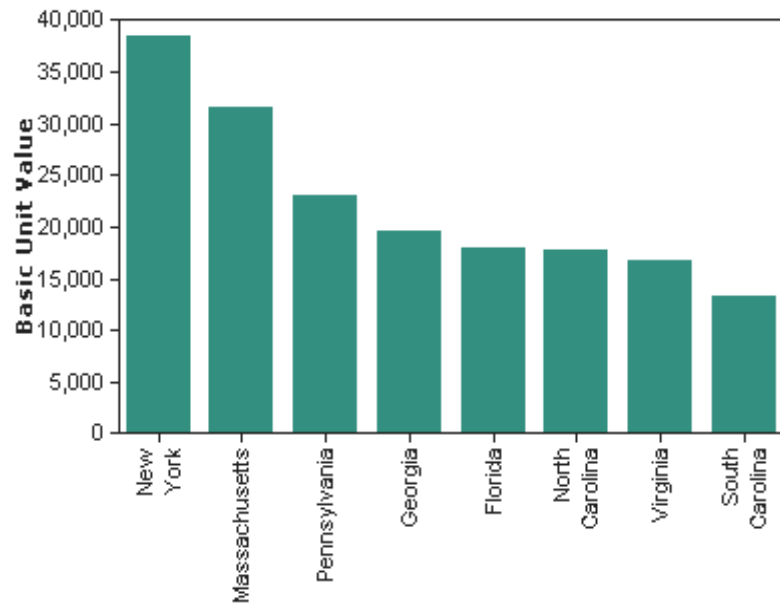
fDi Benchmark - 'Average time to travel to work' [2008]



Source: Urban Audit; National Statistics

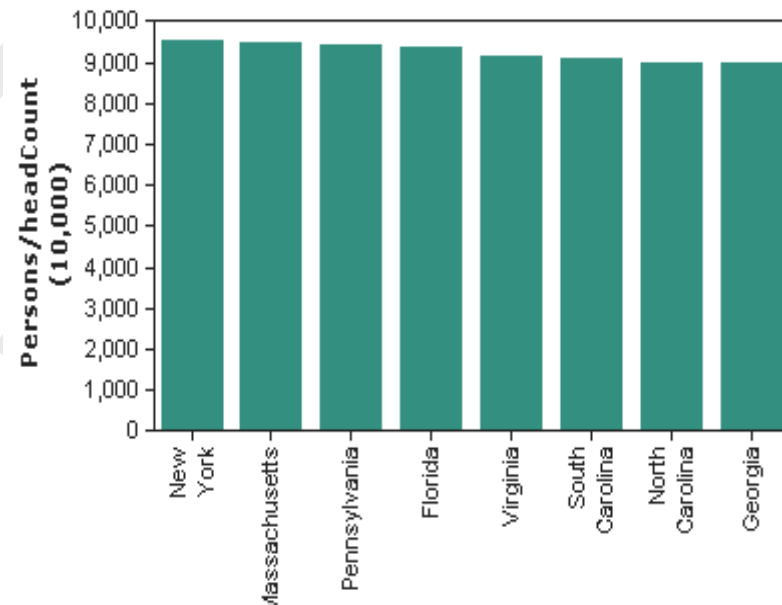
By providing its residents with internet download and upload speeds far faster than the competition, New York offers investors the finest ICT infrastructure within the selected locations. Similarly, New York leads the way in terms of the overall percentage of its occupants using the internet, with an internet penetration above 95%.

fDi Benchmark - 'Internet download speed (kb/s)' [2009]



Source: speedtest.net

fDi Benchmark - 'Internet penetration (users)' [2007]



Source: International Telecommunications Union; IMD World Competitiveness Report

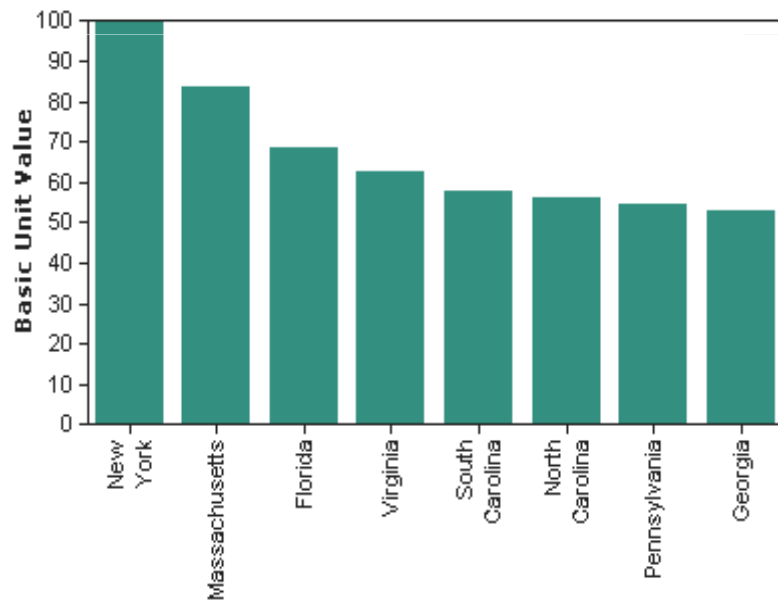
Living Environment

Low crime rates, a high life expectancy, an excellent quality of life and a competitive cost of living should provide investors with assurance that by investing in Virginia they are also investing in a strong living environment for themselves and their employees.

- The lowest cost of living is to be found in Georgia with relative costs considerably lower than the regional competitors
- Massachusetts and New York offer the highest quality of life with Virginia coming in a close 3rd
- New York's crime rate is considerably lower than the regional competition with wealthy Virginia and Pennsylvania in 2nd and 3rd place respectively
- For investors interested in ensuring their employee's children have access to an internationally competitive education, Florida has more than 100 IB qualified schools
- Massachusetts life expectancy is the regional standard at 78.4 years

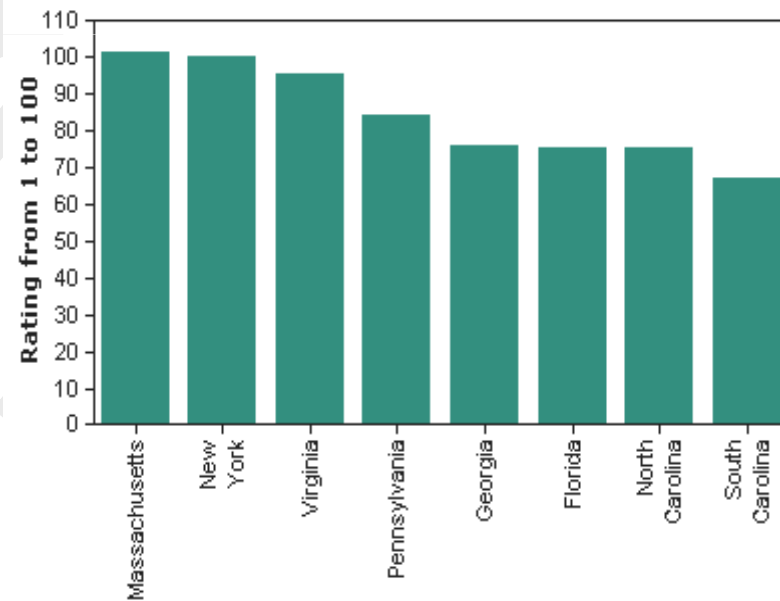
As two of the US's wealthiest states both Massachusetts and New York offer a high quality of life for investors and residents. However, this high standard comes with the burden of additional costs, on average Massachusetts offers the better deal with a lower cost and higher quality of life than New York.

fDi Benchmark - 'Cost of living Index' [2009]



Source: Economic Intelligence Unit;
www.internationalliving.com; fDi Intelligence from
the Financial Times

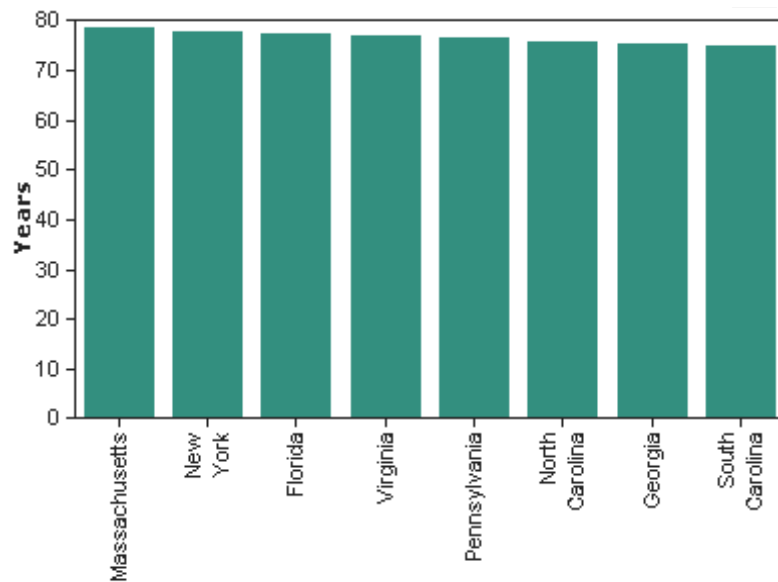
fDi Benchmark - 'Quality of living index' [2009]



Source: Mercer Global Quality of Living Report;
www.internationalliving.com; fDi Intelligence from
the Financial Times

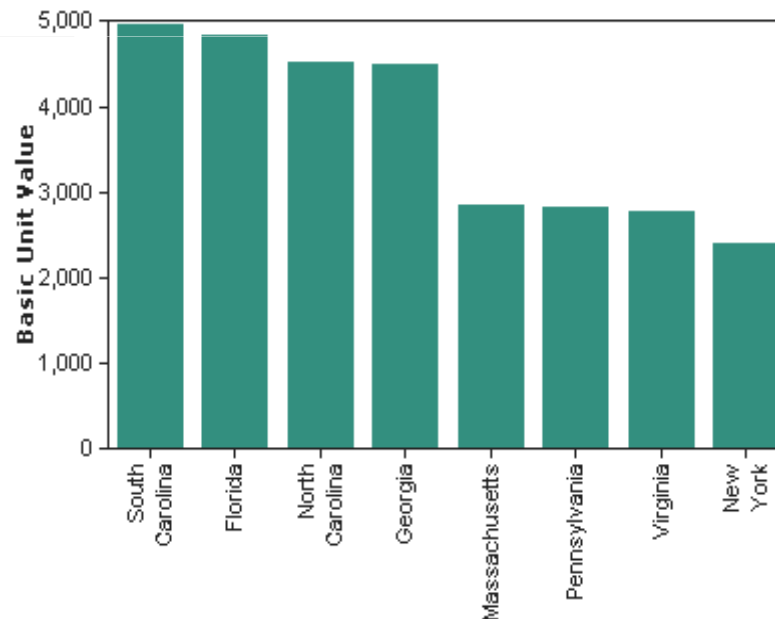
Life expectancy across the selected locations varies by more than three and a half years. Residents of Massachusetts, the first US state to offer universal healthcare, benefit from a life expectancy of 78.4 which is the fifth highest in the United States and the best in the region. For those interested in avoiding the perils of crime ridden areas, New York is the safest option with property and violent crime rates among the lowest in North America.

fDi Benchmark - 'Life expectancy at birth' [2005]



Source: www.worldlifeexpectancy.com

fDi Benchmark - 'Crime' [2008]



Source: Federal Bureau of Investigation - Crime in the United States 2008; Statistics Canada

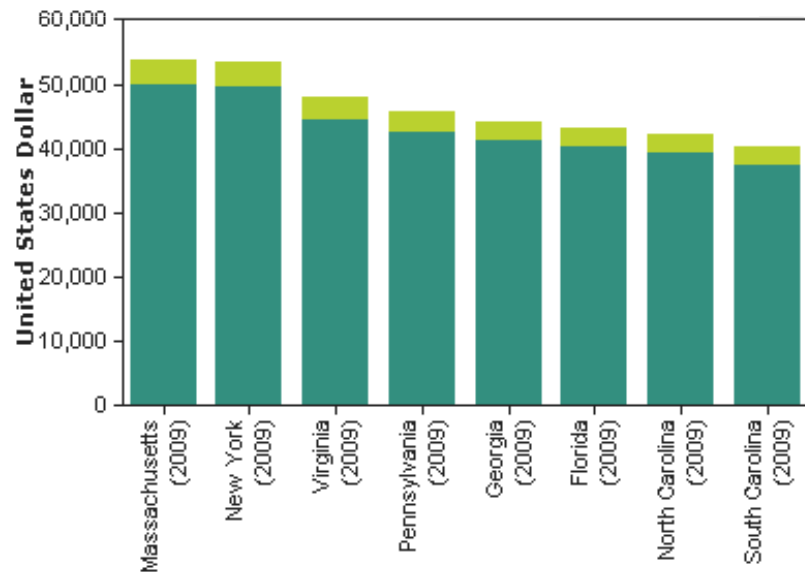
Cost Analysis

North Carolina offers considerably lower costs for utilities, labour and rent than the wealthier east coast locations of New York and Massachusetts. Similarly Florida can provide investors with a cost competitive environment in which to establish a business.

- At USD143 per m³ Florida's class A rental market is the most cost effective of the selected locations
- South Carolina's labour costs offer 25% cost savings on the expensive states of New York and Massachusetts
- Both Florida and North Carolina also offer significant savings on the regional competition
- For both commercial electricity and industrial gas Florida is the most affordable location

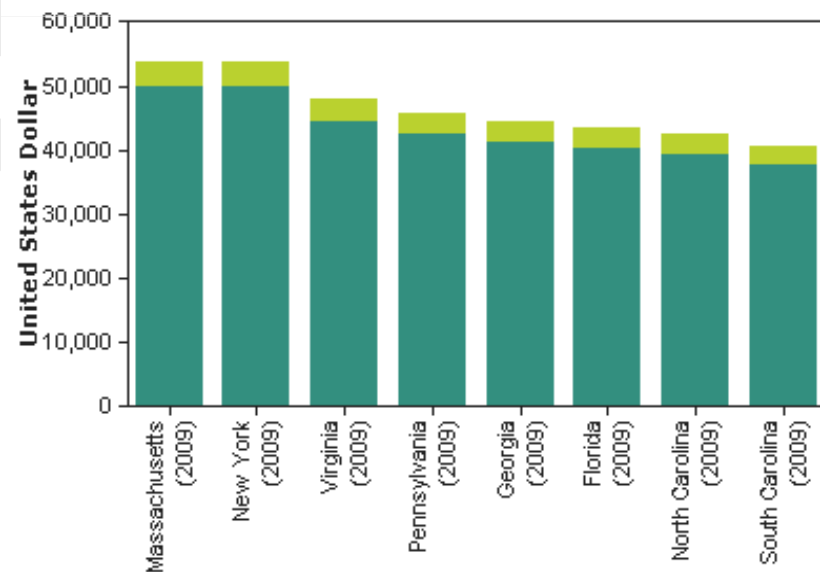
State level salaries are highest in Massachusetts and New York and most affordable in North and South Carolina. Interestingly this follows perfectly the pattern laid out in the quality of living graph earlier with residents of the higher quality locations demanding greater compensation for their work.

fDi Benchmark - 'Software Development Engineer' Total Cost [2009]



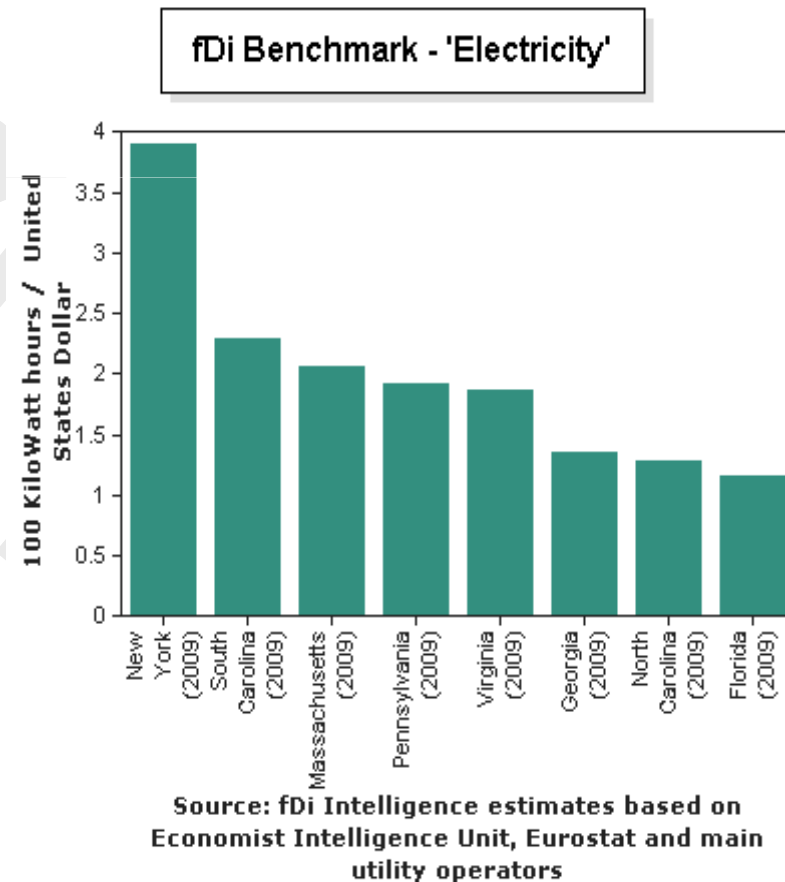
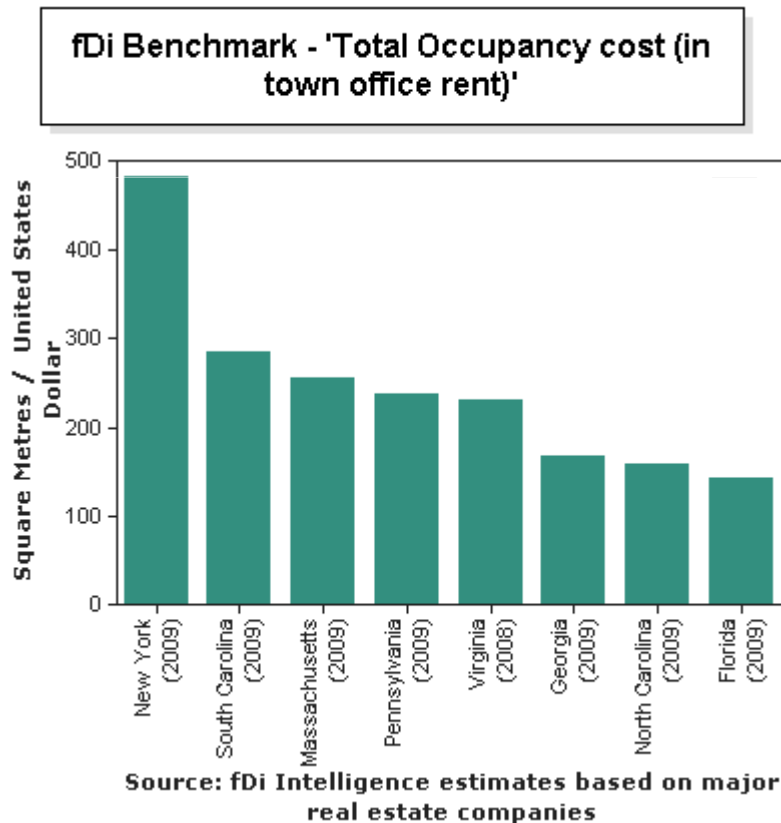
Source: fDi Intelligence estimates based on National Statistics, Economist Intelligence Unit, and Watson Wyatt [All Years]

fDi Benchmark - 'Software Programmer' Total Cost [2009]



Source: fDi Intelligence estimates based on National Statistics, Economist Intelligence Unit, and Watson Wyatt [All Years]

Florida is the least expensive location with affordable property costs and electricity prices. New York's large and prestigious office market is the most expensive in the continent with occupancy costs of USD480 per square meter.



Summary

Despite both New York and Massachusetts providing a stronger offering to potential investors, the cost advantages of investing in Florida outweigh the additional perks available in the more expensive states.

- The leading investment location in the software sector is New York with a record of 111 projects in the sector between Jan 2003 and Jan 2010
- With one of the world's largest and most dynamic economies, New York's business environment offers much more than the regional competition
- With a large percentage of the workforce concentrated in the ICT sector, Virginia can provide incoming investors with the most experienced pool of labour
- The calibre of Massachusetts' R&D community differentiates it from the competition for industries which require innovation and development
- The ICT infrastructure available in New York offers faster download speeds and a more extensive network of internet users
- The most cost competitive locations are North and South Carolina and Florida

Who's already harnessing the East Coast's potential..

