

eLeadership: efforts to make New York a hi tech hub

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Abstract

New York State and New York City have several ingredients that make them suitable to become hi tech hubs, first the presence of top class educational institutions and thus of the human resources needed, second the presence of several hi tech companies and third the leadership of the current NYS Governor and NYC Mayor. There are several government entities at the state and local level already playing spearheading roles and several steps have already been taken with more on the way. The US has been playing a lead role in the world in technological development for several decades judging by inventions and business applications and it seems that this trend will continue and even intensify in the years ahead. eLeadership is at work in IT itself and IT as applied to the industry, business and government sectors.

Note: a compilation paper is to a conventional paper what a reader is to a book. In the computer era that we are, it is possible to compile a wide range of documents several of which are primary sources, often important when policy statements are concerned; having the whole content rather than a condensed version is also significant; also important in this context is the fact that many documents open up to other resources through links. Also having different perspective on the same subject can be a plus factor.

Introduction

The Silicon Valley is well known for being a hi-tech hub i.e. an area which attracts a large number of hi-tech companies based upon several factors one of which is proximity of the companies. Availability of venture capital is another determining factor. Generally also, it is an area of intense experimentation with substantial number of breakthroughs.

“**Silicon Valley** is the [southern region](#) of the [San Francisco Bay Area](#) in [Northern California](#), in the [United States](#). The region, whose name derives from the [Santa Clara Valley](#) in which it is centered, is home to many of the world's largest technology corporations as well as thousands of small startups.^[1] The term originally referred to the region's large number of [silicon chip](#) innovators and manufacturers, but eventually came to refer to all the [high-tech](#) businesses in the area; it is now generally used as a [metonym](#) for the American high-tech sector.

Despite the development of other high-tech economic centers throughout the [United States](#) and the [world](#), Silicon Valley continues to be the leading hub for high-tech innovation and development, accounting for one-third (1/3) of all of the [venture capital](#) investment in the United States.^[2] Geographically, Silicon Valley encompasses all of the [Santa Clara Valley](#) including the

city of [San Jose](#) (and adjacent communities), the southern [Peninsula Valley](#), and the southern [East Bay](#). However, with the rapid growth of technology jobs in the San Francisco metropolitan area, the traditional boundaries of Silicon Valley have expanded north to include the rest of San Mateo County and the City and County of [San Francisco](#), as well as parts of [Marin County](#)” (Source: http://en.wikipedia.org/wiki/Silicon_Valley)

Several similar areas have emerged in the recent years (see Appendix below). New York has always been an area attracting companies with its availability of human resources and of capital and also being a major market. The current Governor of New York State as well as the current Mayor of New York City are taking several bold steps to build up New York as a hi tech hub exercising what could be called decisive eLeadership. The efforts seem to be working judging by several indicators including the growing number of hi-tech start ups. It is experimentation worth looking into, in particular asking whether similar efforts in another area could bring about a hi-tech hub; in another words what do we need to do to develop an ‘incubator’.

Silicon Alley is a nickname for an area with a concentration of [Internet](#) and [new media](#) companies in [Manhattan, New York City](#). Originally, the term referred to the cluster of such companies extending from the [Flatiron District](#) down to [SoHo](#) and [TriBeCa](#) along the Broadway corridor, but as the location of these companies spread out, it became a general term referring to the [dot com industry](#) in [New York City](#) as a whole. The name derives from [Silicon Valley](#) in California.

Silicon Alley has also been a term used to refer to [Dumbo](#), a neighborhood in Brooklyn. Companies that reside in Dumbo range from [Web liquid](#), a digital marketing agency, to [Wireless Generation](#), an education technology company.

The first publication to cover Silicon Alley was @NY, an online newsletter founded in the summer of 1995 by [Tom Watson](#) and [Jason Chervokas](#). The first magazine to focus on the venture capital opportunities in Silicon Alley, AlleyCat News co-founded by Anna Copeland Wheatley and Janet Stites, was launched in the fall of 1996. Courtney Pulitzer branched off from her @The Scene column with @NY and created Courtney Pulitzer's Cyber Scene and her popular networking events [Cocktails with Courtney](#). [First Tuesday](#), co-founded by [Vincent Grimaldi de Puget](#) and [John Grossbart](#), became the largest gathering of Silicon Alley, welcoming 500 to 1000 venture capitalists and entrepreneurs every month. It was an initiative of law firm [Sonnenschein](#) and the [Kellogg School of Management](#), as well as other corporate founders, including [Accenture](#) (then Andersen Consulting), AlleyCat News and [Merrill Lynch](#). [Silicon Alley Reporter](#) started publishing in October 1996. It was founded by [Jason Calacanis](#) and was in business from 1996-2001. @NY, print magazines, and the attending media coverage by the larger New York press helped to popularize both the name, and the idea of New York City as a [dot-com](#) center.

In 1997, over 200 members and leaders of Silicon Alley joined NYC entrepreneurs, Andrew Rasiej and Cecilia Pagkalinawan to help wire [Washington Irving High School](#) to the internet. This response and the Department of Education's growing need for technology integration marked the birth of [MOUSE](#), an organization that today serves tens of thousands of underserved youth in schools in five states and over 20 countries. After the bubble burst, *Silicon Alley Reporter* was rebranded as *Venture Reporter* in

September 2001 and sold to Dow Jones. Self-financed AlleyCat News ceased publication in October 2001.

A couple of years after the internet bust, Silicon Alley began making its comeback with the help of NY Tech meetup and NextNY. Since 2003 Silicon Alley has seen a steady growth in the number of start-ups and has joined the ranks of Boston and San Francisco as one of the three leading technology centers in the United States. As of 2007 Google's second largest office is located in New York. And, as of 2009, New York's Silicon Alley has become the startup leader in advertising, new media, financial technologies such as MediaMind, [DoubleClick](#), Roo, [IAC](#), [meetup.com](#) and a slew of web 2.0 companies. According to the [National Venture Capital Association](#), 247 venture capital deals worth \$1.4 billion closed in New York in 2009, despite the recession and rocky market. [New York](#) still ranks third behind [Silicon Valley](#) and [Boston](#) in the number of deals and overall investment rates, but New York is holding its own against the other big hubs and possibly beginning to increase its share.^[1]

A similar area of concentration in London is called [Tech City, or Silicon Roundabout](#), centered around the Old Street Roundabout in Shoreditch in East London.

(Source: http://en.wikipedia.org/wiki/Silicon_Alley)

1. New Tech City (Center for an Urban Future) by Jonathan Bowles and David Giles (May 2012)

Ever since his initial year in office, Mayor Bloomberg has been sounding the alarm that New York City is overly dependent on Wall Street and needs to diversify its economy. But finding that new engine of job growth has proved difficult.

Until now.

In just a few short years, New York's tech sector has emerged as an increasingly powerful economic driver for the city. At a time when few other industries were growing in New York, more than a thousand new tech start-ups were formed in the city. This burst of tech company formation has created thousands of good paying jobs in the five boroughs, attracted large amounts of capital from outside the city, pumped new life in the city's entrepreneurial economy, and lured some of the world's smartest and most innovative people to New York at a time when the most competitive cities are the ones with the best human capital and greatest capacity for innovation.

The flood of digital start-ups in recent years has also transformed the city from a second-rate tech center to literally the nation's second leading hub for technology companies. And as this report shows, there is ample evidence that what's happening in New York's tech scene today is no flash in the pan. Though a number of the recent Internet

start-ups will ultimately fail, New York appears to be building a sustainable tech sector—one that is benefiting from a much stronger local tech ecosystem than existed in the city's first wave of tech growth in the 1990s and taking advantage of several big technology trends that play to New York's natural strengths.

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28

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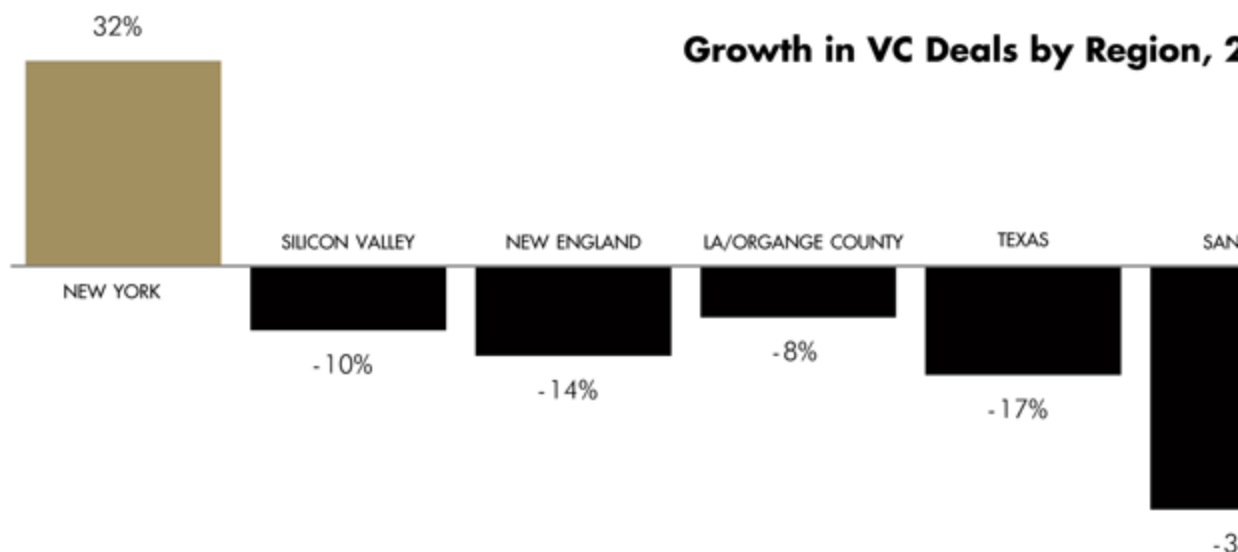
Center *for an*
Urban
Future

www.nycfuture.org

New Tech City

Riding a wave of start-ups, New York has emerged as a national leader in fields that leverage the Internet and mobile technologies, a development that has provided a key economic boost and left the city well positioned for future tech growth

Funded by:



82

of NYC start-ups
founded since 2007 that
have raised at least
\$10million in financing

23,300

members of NY Tech
Meetup, more than
twice the number of
members in Dec. 2009
and nearly **triple** the
figure from Oct. 2008

47%

of the 298 tech start-ups
on NY Tech Meetup's
"Made in New York
City" list indicated that
they are currently hiring

as of May 1, 2012

The latest in a long line of Center for an Urban Future reports focusing on opportunities to grow and diversify the city's economy, this study provides a comprehensive examination of New York's fast-growing tech sector, focusing on the companies in the city that are enabled by the rapid evolution of the Internet and mobile platforms. The report documents the size and scope of this sector, details the growth that has taken place in the past few years, assesses what factors have fostered this rapid expansion, analyzes which tech subsectors in New York are strongest and offer the most potential for future growth, identifies critical challenges that should be addressed if the city is to keep the momentum going. Based on an extensive data analysis and interviews with more than 50 start-up founders, veteran tech executives, investors, academics, local economic development officials and leaders from the city's business and real estate communities, the report also makes recommendations on what should be done to support the continued growth of this sector.

The report is accompanied by a New York City Digital Start-up Index, an analysis of tech businesses formed in the city since 2007 which have received some form of outside investment from angel investors, seed funders or venture capital firms. We also break down these businesses by subsector, level of funding, employment and geographic location within the five boroughs.

What's clear from our research is that New York City's tech sector has come a long way in the last few years. A decade after the bust of the dot com bubble left most serious venture capitalists and entrepreneurs highly skeptical that New York could ever become a major hub of tech activity, the city has produced a wave of wildly successful start-ups, attracted entrepreneurs that previously would have almost certainly bypassed New York for Boston and the West Coast, and positioned itself at the vanguard of the fast-growing digital media, Internet and social networking sectors.

“In 2006, I wouldn't have put New York anywhere on the map [of leading tech hubs]. Now it is literally number two.”

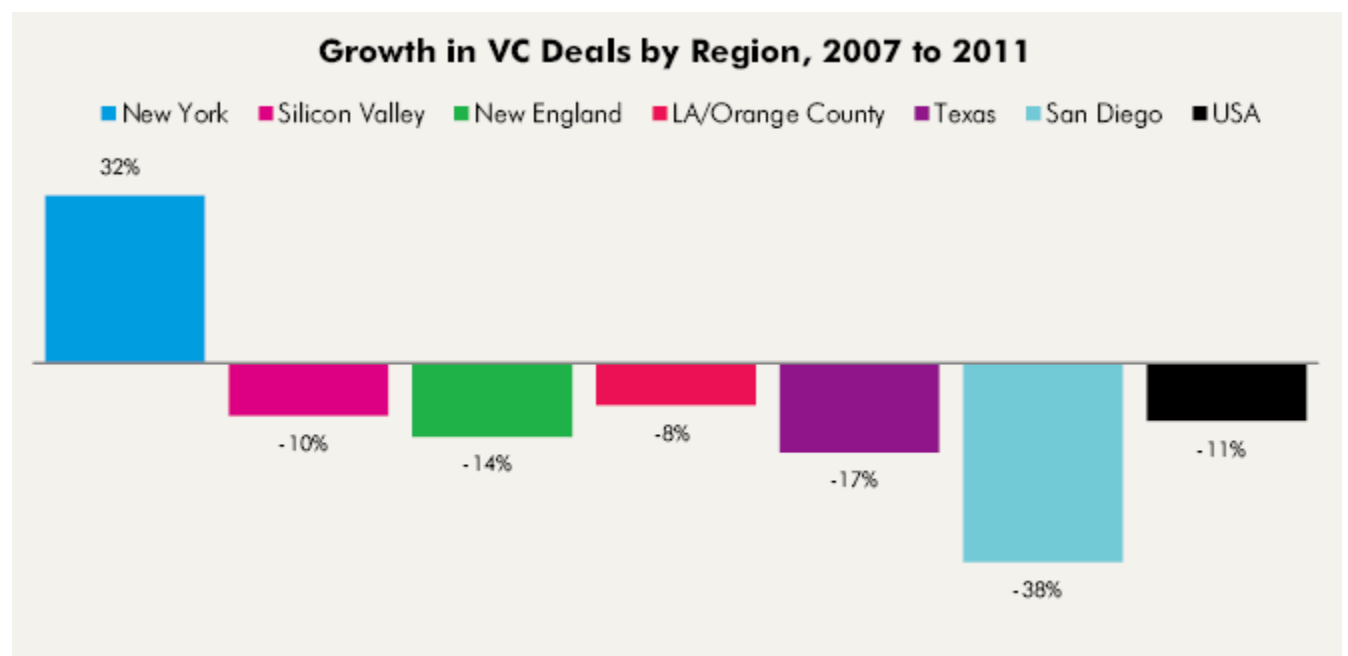
As recently as five or six years ago, New York was very much considered an also-ran in the pantheon of tech hubs. Although there were pockets of excellence here, few of the nation's pre-eminent tech entrepreneurs or investors spoke about New York in the same breath as Silicon Valley or the Greater Boston area, the nation's two longstanding tech hotbeds. The city was not producing a steady stream of tech start-ups, there were huge gaps in the investment community and there was no meaningful tech ecosystem. “In 2004 or 2005, we were still very much a

distant third in terms of dollars invested in the start-up economies,” says Jim Robinson IV, a principal with RRE Ventures, the New York City-based venture capital firm. “Silicon Valley was obviously first, Boston the pretty clear second and New York was a distant third, a pretty big step down from number two. That was true in every measure: it was true in capital formation, in commitments, in bodies and in company launches.”

“In 2006, I wouldn’t have put New York anywhere on the map [of leading tech hubs],” adds Vivek Wadhwa, a national expert on tech entrepreneurship. “Now it is literally number two. If there is any second to Silicon Valley, it’s now New York, not Boston.” Even prominent Silicon Valley entrepreneurs like Paul Graham now acknowledge that New York has surpassed Boston.

It’s not that tech start-ups magically appeared on the scene in New York in the past few years. The roots of today’s tech boom were firmly planted in the early and mid-1990s, when the rise of dot com companies and digital media firms provided the first indication that New York could become a legitimate tech hub.

But in the last three to five years, New York has clearly taken things to a new level. Any way you measure it—companies, jobs, investment or community—New York has experienced stunning growth and appears well on its way to developing a sustainable digital economy.



Our digital start-up index identifies 486 tech start-ups formed in the city since 2007 that have received some investment from angels, VC firms or other private investors.

While this is itself a remarkable figure, it only scratches the surface of tech start-up activity in recent years. After all, we didn't count tech start-ups that didn't receive funding. Since new start-ups here seem to emerge every other day, it is difficult to get a complete picture of the number of tech firms based in New York today. Based on our data analysis and interviews with entrepreneurs and investors in the city, we estimate that well over 1,000 tech start-ups have been created in the past five years.

Even this is likely a gross undercount. Just look at the number of applications to TechStars New York, the start-up accelerator program that came to New York a little more than a year ago. According to David Tisch, managing director of the program, there were about 1,600 applicants to its most recent program, which started in March 2012. This is nearly triple the 600 applicants TechStars had for its initial New York program in January 2011 and significantly more than the 1,100 applications for its second class in July 2011.

And TechStars is just one of at least a dozen accelerator programs for tech start-ups in New York today. Prior to 2009, there were no accelerators in the city. At least two of these accelerators focus solely on start-ups in the relatively small but growing health tech field. StartUp Health, one of those programs, has received 600 applications to its health tech academy in the last nine months, according to co-founder Unity Stoakes, who says that roughly half of those are from the New York City area.

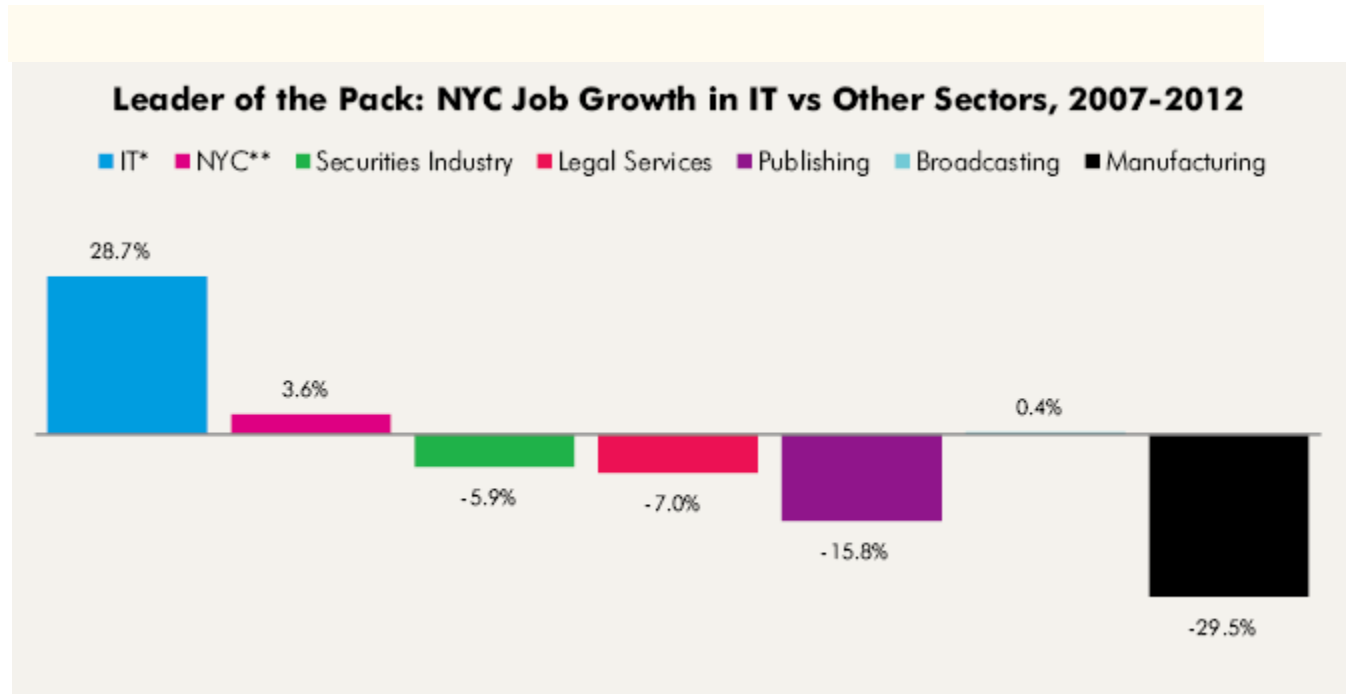
"It's not being hyperbolic to say that the early stage business formation in the tech sector in New York has exploded," says Thatcher Bell, a principal at Manhattan-based VC firm DFJ Gotham Ventures.

And while most of these early stage companies remain fairly small today, an increasing number of tech start-ups in New York have begun to achieve significant growth—including Foursquare, Gilt Groupe, Kickstarter, Tumblr, ZocDoc and Etsy. Of the tech start-ups founded in New York since 2007, 15 have raised more than \$50 million in investments, 27 have investments of at least \$25 million and 81 have raised at least \$10 million.

All of this has led to a fairly dramatic increase in local employment, much of which occurred during a period when few other parts of the city's economy were adding jobs.

There has never been a widely accepted barometer for measuring employment in the city's tech sector, but no matter how you look at it, it's clear that New York has experienced considerable job growth in this area. Data we analyzed from the New York State Department of Labor shows that the number of information technology jobs in the five

boroughs has risen from 33,000 in February 2003 to 52,900 in February 2012—a remarkable 60 percent increase. Even in the last two years, a period of sluggish growth in the city, this sector added 7,900 jobs—an 18 percent spike. Using a more expansive definition of the tech sector, data from the New York City Economic Development Corporation (EDC) reveals that there were 90,273 people working at 7,147 “high-tech” companies in 2010, a 30 percent gain in employment from 2005. Notably, this sector grew ten times faster than the overall change in city employment in the same period.



There are many other indications of New York’s stunning gains in tech.

There are now more than 23,000 members of New York Tech Meetup, the membership organization for those involved in the city’s tech community. This is double the number of members in December 2009 (11,500) and nearly triple the figure from October 2008 (7,500).

Of the seven leading technology regions in the United States, New York was the only one to see an increase in the number of VC deals between 2007 and 2011, according to data from the MoneyTree report published by PricewaterhouseCoopers and the National Venture Capital Association. Amazingly, the number of deals shot up by 32 percent in New York during this period. In contrast, venture activity was down significantly in every other

region, including Silicon Valley (-10 percent), New England (-14 percent), LA/Orange County (-8 percent), Texas (-17 percent) and San Diego (-38 percent). Nationally, there was an 11 percent decline in VC deals.

There were almost as many tech-related VC deals in New York City in 2011 (165) as in 2006 and 2007 combined (172), according to data from SeedTable. And the number of digital companies in New York that exited, or got acquired by other firms, was actually larger in 2011 (55) than in 2008 and 2009 combined (54).

Most of the nation's largest tech companies are now planting roots in New York, something that didn't seem likely five or six years ago but has lent legitimacy to the city's upstart tech industry. Google opened a major office in New York in 2006, and made a deeper commitment in 2010 when it purchased its office building, 111 Eighth Avenue, for \$1.8 billion. But even more recently, Facebook has committed to building an engineering campus near Grand Central while Twitter, eBay, LinkedIn, and Yelp have all announced plans to develop major offices here.

Importantly, start-ups are also relocating here. We identified well over a dozen established tech start-ups that have moved to New York in recent years from the San Francisco Bay Area, Boston and other locations. James Wahba, founder of Projective Space, says that "a good 30 percent" of the start-up founders working out of his coworking facilities moved to New York to create their company. And at least 28 New York-based tech start-ups were founded by students from Harvard Business School. This is noteworthy because even a few years ago, HBS graduates who moved to New York were mainly doing so to work on Wall Street. And those who were opting to go the entrepreneurial route were often doing so in Boston or on the West Coast. Now they are literally flocking to New York to become tech entrepreneurs. Indeed, in April, Boston-based venture capitalist Jeff Bussgang said that about a third of students surveyed in his Harvard Business School entrepreneurship class expect to relocate to the Big Apple.

Of the seven leading technology regions in the U.S., New York was the only one to see an increase in the number of VC deals between 2007 and 2011.

The flood of tech start-ups in New York is on display at the dozen or so incubators and coworking spaces that have opened in the city in the past few years. By our count, these shared spaces have already housed nearly 500 tech start-ups. General Assembly, perhaps the city's best known tech incubator, opened its New York campus in January 2011. A little more than a year later, GA has 350 members, representing upwards of 100 early stage start-ups. Already, 16 of its dedicated member start-ups have graduated from the space over the past year. GA also attracts

3,000 attendees each month for classes, events and other events. “People move to New York to take our classes,” says Brad Hargreaves, one of GA’s founders.

Five or six years ago, New York-based entrepreneurs routinely complained about the difficulty attracting financing, whether from venture capital firms or angel investors. Early stage financing was particularly lacking in the city. Indeed, in June 2008, Mayor Bloomberg noted that “many smaller start-up companies have difficulty accessing seed capital to get off the ground.”

But today, the city is awash in capital for startups. “There was no structured institutional seed capital in the city pre-2008,” says Owen Davis, managing director of NYCSeed, which was created in 2008 to provide seed-stage funding. “By 2010 there was more capital than ever for seed investing in the city.”

Local angels and venture funds have greatly increased their level of funding for local start-ups. Robinson says that 70 to 75 percent of the investments made by RRE Ventures today are in New York, compared to under 50 percent in 2004 and 15 to 20 percent in the mid-1990s. The same has happened with New York Angels, the most prominent angel investment group in the city. “Several years ago we were doing probably 40 percent of our deals in New York,” says David Rose, founder of New York Angels. “Now, I think it is closer to 70 or 80 percent.”

While the availability of capital has been crucial to the growth of the city’s tech economy, the strides New York has made in developing a tech “community” or ecosystem have arguably been even more important. Indeed, this was one of the critical missing pieces in New York during the go-go days of Silicon Alley in the late 1990s. “The New York New Media Association had 8,000 members at the height of the boom,” says Rose, speaking of the major industry association for the city’s dot com companies. “But the problem was that there was no ecosystem. It was like grass that was growing on concrete.”

Even in the mid-2000s, New York still lacked a robust tech ecosystem. A 2007 article about the city’s tech scene concluded that “finding tech culture in New York in 2006 took a little bit of digging.”

That’s all changed. There is a growing community of technologists in the city, in part because entrepreneurs, developers and engineers are moving here in droves. Amazingly, about half of Tumblr’s 103 employees are “relos,” according to David Karp, the company’s founder. All of these techies are now finding a welcoming and supportive ecosystem at every turn. There are routinely more than a dozen tech-related meetups a day, in addition to

hackathons, start-up weekends and tech-related events. Meanwhile, a growing number of organizations provide aspiring entrepreneurs with advice, connections and the opportunity to pitch ideas to investors. At the same time, the number of successful tech entrepreneurs in New York has multiplied in recent years, and many of them are making angel investments in other start-ups and serving as mentors.

“It’s a very vibrant community that’s growing and multiplying rapidly,” says DivyaGugnani, the founder of fashion tech company Send the Trend. “What’s so amazing is that there are networks of entrepreneurs in New York now. In 2008, I knew five entrepreneurs in New York that I could call and have a conversation with. Now, I can call 500 people in New York. Literally, from 2008 to 2012, that’s how much my network has grown on the tech side, because there just so many more companies and so many more people starting businesses.”

From an economic perspective, the best news for New York is that this does not appear to be a temporary blip. While it’s likely that a good number of the recent start-up companies in New York will not succeed, virtually everyone interviewed for this report—including several people based outside the city—believes that New York is extremely well-positioned for even more tech sector growth in the future.

“New York is well suited to where tech is going,” says JalakJobanputra, managing director for venture firm RTP Ventures. “Maybe Silicon Valley will continue to build the next chip sets, hardware, and certain types of apps, but the expertise we have in New York is well-suited to the next generation of tech companies.”

The future is bright for New York in part because of the ecosystem that has developed here in recent years, which has left the city with much stronger foundation to build upon than was the case in the late 1990s. But more importantly, so many trends in the tech world today play to New York’s strengths.

The early days of technology growth was driven by semiconductors and computer hardware, products that depended on a deep roster of engineering talent and required large amounts of physical space to develop—neither of which favored New York. In contrast, today’s growth is being fueled by the Internet and smart phones, and the creation of new ways of taking advantage of these now widely used platforms to deliver content, sell products, deliver services, play games and simplify life for individuals and businesses. New York’s rich pool of creative, marketing and business talent is well-suited for creating and running these new businesses, all of which can be built with comparatively few engineers. At the same time, today’s technology revolution is much less about creating the infrastructure and plumbing for the Internet, but about applying technology to traditional industries like advertising,

media, finance, fashion and health. New York is natural for this wave of technology growth because it is a market leader in most if not all of these sectors, and boasts an unmatched concentration of talent in each of these fields.

On top of these advantages, New York's startup boom has benefited from a precipitous decline in the cost of developing an Internet business and the availability of new platforms where entrepreneurs who aren't coders can go to get a Website built for a small amount of money.

Our research suggests that there is considerable room for additional growth in the years ahead. On one level, individual consumers and businesses are still in the earliest stages of using and adopting the innovative Internet and mobile technologies being created in New York and elsewhere. Most analysts expect that demand will only increase, especially as the use of smart phones explodes in the coming years. Some technology sub-sectors that are strong here, like financial technology and social media, still have a lot of growth ahead of them. Meanwhile, other traditional industries like health care and energy have only begun to be disrupted by technology. Many of those interviewed for this report believe that health tech could be next to take off, and New York is already positioning itself as one of the two or three leading regions in this field. Others say that media applications using video have real potential for growth here.

Moreover, the proliferation of successful tech start-ups, the emergence of serial entrepreneurs and creation of a sustainable ecosystem in New York is likely to feed on itself in the coming years, just as Silicon Valley evolved and grew over decades—not years—when successful tech entrepreneurs started second and third companies, became angel investors in other start-ups and even started VC firms. With every successive generation, the city is building up more of a critical mass of experienced technology entrepreneurs and talent, more mentors and more capital. And with each success, the city is building buzz and creating an impression among investors, entrepreneurs and engineers based elsewhere that this is one of the leading places to build a tech company.

While there is clear cause for optimism, there is also a lot that New York's tech sector hasn't yet achieved. None of the major tech IPOs in the last couple of years—including Facebook, LinkedIn, Groupon and Angie's List—involved New York companies. Even the Boston region has about 30 tech companies with billion dollar market capitalizations, while New York has just a few.

In addition, some of the highest flying tech companies in the city have recently hit some rough patches. Gilt Groupe, arguably the largest Internet start-up in the city with about 900 employees, trimmed 10 percent of its staff earlier this

year. SecondMarket, the online private equity market, recently announced it would lay off 15 of its 130 jobs. Lot18, the high-flying online wine and gourmet food seller, cut its workforce by 15 percent in January after growing from six employees to 90 in about a year.² Flash sales aggregator MyNines shut down last year.

There are also a number of challenges that could inhibit this sector's future growth. Chief among them is a shortage of talent: every entrepreneur we spoke to for this report says that hiring the engineers they need is exceedingly difficult. Though far more engineers are moving to New York today than even a few years ago, it is still not enough to meet the demand as so many tech start-ups here look to add employees and large companies like Facebook and Twitter plan to greatly expand their engineering presence in the city. Connected to this is the difficulty that individuals from abroad with tech expertise have in getting the visas needed to move to the U.S. or to stay here after attending college in this country. No other city is as well positioned as New York to attract engineers or entrepreneurs from abroad, but the nation's backwards immigration and visa policies are greatly hampering New York's tech sector and making the companies that are here spend too much of their time and energy on immigration lawyers and filling out visa applications.

Though entrepreneurs in most parts of the city can access a fast broadband connection today, many of those we interviewed said that New York's telecom infrastructure is well behind where it should be for a city vying to be one of the nation's two leading technology hubs. Some start-ups that have looked for affordable space in former industrial districts outside of Manhattan have had to abandon those plans after discovering that high-speed Internet connections weren't possible.

With every successive generation, the city is building up more of a critical mass of experienced technology entrepreneurs and talent, more mentors and more capital.

While real estate is not generally a problem today, especially given the number of incubators and accelerators offering inexpensive space, that could change quickly. Much of the tech sector's growth has occurred in the last few years when the rest of city's economy was barely growing; when other sectors start clicking again, space may become much harder to come by, especially for firms that are graduating from incubators. This was a major problem at the height of the last tech boom in New York City.

The good news is that Mayor Bloomberg has championed the city's tech sector at every turn and his administration has launched an array of ambitious programs and policies to support its growth, from the creation of a new applied sciences campus on Roosevelt Island and the development of several incubators to the hiring of a chief digital officer.

There is still much work to be done to ensure that the tech sector continues on the upward trajectory of the past few years. But this report concludes that there is ample reason to be bullish about New York.

Even tech experts from the West Coast are optimistic about what's happening here. "It's a very opportune moment for New York," says Anna Lee Saxenian, dean of U.C. Berkeley's School of Information and the author of the definitive book about the development of tech clusters and the what led to Silicon Valley long-term success. "New York is extremely well positioned. The web has really opened up the door."

Key Findings

In the past few years, there has been an explosion of tech start-ups in New York City, most of which are companies that leverage the Internet and mobile technologies.

- We identified 486 digital start-ups formed in the city since 2007 that have received angel, seed or VC funding.
- Overall, there are well over 1,000 Web-based technology start-ups in the city, most of which have not secured investment capital.
- As one indication of the growth in early stage companies, roughly 1,600 start-ups applied to TechStars New York for its most recent program in March 2012—up from 600 applicants in the initial class, in January 2011.
- We identified well over a dozen established tech start-ups that have moved to New York in recent years from the San Francisco Bay Area, Boston and other locations.
- At least 28 New York-based tech start-ups were founded by students from Harvard Business School.

Although it is still well behind Silicon Valley as a tech hub, New York City has the nation's fastest growing tech sector and has surpassed Boston as the number two tech center in the U.S.

- Of the seven leading technology regions in the United States, New York City was the only one to see an increase in the number of VC deals between 2007 and 2011, according to data from the MoneyTree report published by PricewaterhouseCoopers and the National Venture Capital Association.
- The number of deals shot up by 32 percent in New York during this period whereas venture activity was down significantly in every other region, including Silicon Valley (-10 percent), New England (-14 percent), LA/Orange County (-8 percent), Texas (-17 percent) and San Diego (-38 percent). Nationally, there was an 11 percent decline in VC deals.
- New York is either the clear leader or one of the leading centers of activity in several tech subsectors that are growing today, including ad tech, fashion tech, fin tech, digital media, ed tech and health tech.

More and more New York-based tech start-ups are achieving significant growth.

- Of the tech start-ups founded in New York since 2007, 15 have raised more than \$50 million in investments, 27 have investments of at least \$25 million and 81 have raised at least \$10 million.
- More of the city's digital companies got acquired by other firms in 2011 (55) than in 2008 and 2009 combined (54).

The city's tech sector has created thousands of jobs in the past few years, giving New York's economy a much-needed boost at a time when few other industries have been growing.

- In the last five years, information technology jobs in the city have increased by 28.7 percent, from 41,100 to 52,900.
- During the same period, private sector jobs in the five boroughs grew by just 3.6 percent while employment was down considerably in several of the city's traditionally-strong industries, including the securities industry (down 5.9 percent), publishing (down 15.8 percent), legal services (down 7.0 percent) and manufacturing (down 29.5 percent).
- Nearly half (47 percent) of the 298 tech start-ups on New York Tech Meetup's "Made in New York City" list indicated that they are currently hiring in April 2012.

Unlike the fleeting dot com boom in the 1990s, New York now appears to be building a sustainable tech sector that has significant potential for future growth

- Today's tech start-ups are less about building new technology than applying technology to traditional industries like advertising, media, fashion, finance and health care—all of which New York excel in.
- Dramatic increases in people using the Internet and mobile devices have created huge demand for companies that create content, sell products and provide services online—all of which play to the city's strengths.

The city lacked a strong tech ecosystem during Silicon Alley's first wave of tech growth in the 1990s, but that couldn't be more different today.

- There are now more than 23,300 members of New York Tech Meetup, more than twice the number of members in December 2009 (11,500) and nearly triple the figure from October 2008 (7,500).
- There are more than 12 incubators and coworking spaces that house digital start-ups today, up from only a few prior to 2009. By our count, these shared spaces have already housed nearly 500 tech start-ups.
- Prior to 2009, there were no accelerator programs for tech start-ups in New York. Today, there are at least a dozen accelerator programs in the city.

Until four or five years ago, tech entrepreneurs in New York struggled mightily to access investment capital, but that has changed in a big way, particularly for early stage companies.

- There were almost as many tech-related VC deals in New York City in 2011 (165) as in 2006 and 2007 combined (172), according to data from SeedTable.

The analysis shown above is an excerpt. [Click here to read the full report \(PDF\).](#)

2. Education as a key ingredient

2a. New York Vying To Be Next Global High-Tech Hub

By VERENA DOBNIK 05/28/12 **AP**

Just as a trench dug in the 1800s created a shortcut to the nation's interior and helped make New York a global trading hub, the city is now hoping for another "Erie Canal moment" with a high-tech research complex to be built on an island in the East River.

The idea is to create an applied-sciences university where engineers are also trained as entrepreneurs from day one. Proponents say New York, home to powerful global companies and now exploding with technological startups, could shift this sector into top gear if the latest findings went straight into new businesses.

"Today we're second only to Silicon Valley as a tech center, and we don't like to be second to anybody," Mayor Michael Bloomberg said.

The \$2 billion, 10-acre campus planned for Roosevelt Island is being called CornellNYC Tech and is a partnership between the Technion-Israel Institute of Technology and Cornell University, which has its main site in the upstate town of Ithaca but also has a major presence in New York City with its medical school.

CornellNYC Tech expects to generate \$1 billion or more in tax revenue over several decades, plus tens of thousands of construction jobs.

Graduate students will start working in September, using 22,000 square feet of Manhattan space loaned free of charge by Google. The island campus is set to open in 2017, with construction beginning after a half-abandoned, rust-tinged hospital is demolished in early 2014 to make room for the gleaming new community.

Roosevelt Island, a relatively placid oasis facing the United Nations on the Manhattan side and Queens on the other, is home to high-rise residential buildings and an aging hospital complex. The little automobile traffic is courtesy of one road connected to the mainland, and most residents get back and forth on the subway or on a sky tram over the river.

Patients are still getting care at a public hospital built in 1939 that includes a nursing home and long-term rehabilitation center. Plans are in the works to move the patients to facilities elsewhere in the city.

Officials are reassuring residents that their lives won't be disrupted.

"We're going to use our expertise to try to minimize the number of cars on the island," Cornell President David Skorton told concerned residents at a recent town hall meeting.

The land for the project belongs to the city, which is also providing \$100 million in public money for infrastructure. Another \$350 million comes from 81-year-old Cornell alumnus Charles F. Feeney, who made his fortune from duty-free shops.

With academic brains linked to business brawn and the initial injection of money, CornellNYC Tech is expected to be different from other academic endeavors.

At most graduate research centers, practical applications follow academic results – hoping for a connection that's profitable.

But at this school, students will develop software and hardware for three core industries that already are the city's strength: medical technology and environmental and green energy systems, plus digital media being used in fields from fashion and financial services to advertising.

Mentors from various industries will work directly with students, so innovative ideas and business develop side by side and any patents belong to those involved, with a minimum of middlemen. Students can then immediately help grow startup companies with interested investors.

"We hope to bootstrap quicker," said Craig Gotsman, a computer science professor at Technion-Israel in Haifa, Israel, who was named director of the Technion-Cornell Innovation Institute within CornellNYC.

"We will involve industry right away, on campus, to develop entrepreneurial skills in the students," he said.

The idea for the school was born after the attacks of Sept. 11, 2001, which put many businesses near the World Trade Center on the brink of collapse.

"We went to hundreds of the smartest people we could think of – academics, business leaders, community groups, entrepreneurs – and we asked them, 'If there were one thing about New York you could change, that would have a significant impact on the economy, what would it be?'" said Seth Pinsky, president of the city's Economic Development Corp.

The Technion won over dozens of other institutions competing to partner with Cornell because Israel's high-tech community is the best model for New York, Gotsman said.

Haifa has for decades spawned a stream of companies drawn to its research community. Students and staff at the IBM Haifa Research Lab are working on innovations in everything from health care to chip design, but it's the thousands of small ventures mushrooming around research all over Israel that mirror New York's ambitions.

New York's technology industry has likewise exploded, with almost 500 new companies popping up since 2007, making the area the fastest-growing digital hub after California's Silicon Valley, according to Jonathan Bowles, director of the Center for an Urban Future, a public policy think tank.

In early May, the organization released a study called "New Tech City," which shows that technological businesses have kept the city from drowning in tough economic waters.

Current demand for engineers far outstrips supply, "in large part because so many tech startups are growing and looking for more engineering talent," Bowles said, adding that giants like Facebook and Twitter also are building large engineering teams in New York.

Pinsky introduced the "Erie Canal" concept.

"This major investment by a combination of private and public sectors is going to create infrastructure that will set New York on a different course for the 21st century," he said. "This is New York's Erie Canal moment."

The 360-mile-long waterway was completed in 1825 as the first commercial link between the East Coast and the Great Lakes. It was used for more than 130 years as essential transport for goods from the heartland to the world, helping New York become more influential as a trade and financial center than competing cities such as Baltimore, Boston and New Orleans.

Gotsman, a native of England who grew up in South Africa, will move to New York next year to set up a curriculum pairing industrial and intellectual efforts. Projections for coming years include thousands of students and hundreds of faculty culled from top institutions.

Another high-power member of the team is Greg Pass, Twitter's former chief technology officer, who was just hired as the "entrepreneurial officer" in charge of tethering business to academic activities.

Developing the campus will be a challenge, Bowles said, but it is "incredibly important because it will create a new pipeline of engineering talent that could help address this growing talent gap."

Online: Cornell NYC Tech: <http://www.cornell.edu/nyc>

2b. Wiring New York City School Kids

By [Kristen Meriwether](#) On February 25, 2013 @ 2:49 pm In [Special Section](#) The Epoch Times

Starting in September, students in 20 New York City schools will participate in a new computer science and software engineering curriculum pilot.

The program is designed to address a lack of computer and technical education—skills the city will need with its growing technology sector.

“It is central to expand New York’s role as the global tech hub. Having access to great talent is one of the most important factors in making that happen,” Mayor Michael Bloomberg said from the High School of Telecommunication Arts and Technology in Brooklyn, one of the schools selected, on Monday.

The first year, 1,000 students in grades six through nine will add courses such as computer programming, embedded electronics, web design and programming, e-textiles, robotics, and mobile computing to their core courses. Elective classes will include digital fabrication, 3-D printing, and animation.

Beginning next month, 40 teachers, two from each of the schools selected, will begin training to teach the new courses. As the program expands to 3,500 students by 2016, the Mayor said the city will look to private and philanthropic groups to fund further training.

The new courses will expand on the city’s Applied Sciences NYC initiative, which has brought 21 career and technical education schools to the city, with a plan to open seven additional ones this fall.

Mike Nolet, co-founder and CEO of AppNexus, a New York City tech company, said his company has struggled to fill engineering spots for the last five years. “As the entire economy has gone digital, every company in the world is looking to hire software engineers,” Nolet said. He hopes this program will start to seed talent locally.

Schools Chancellor Dennis Walcott said the Department of Education was working to upgrade the computer systems throughout the school district. The DOE will be working with private funders to help speed up the process in particular schools, similar to the partnership of PTECH and IBM two years ago.

Source: <http://www.theepochtimes.com/n2/world/wiring-new-york-city-school-kids-352749-print.html>

2c. MAYOR BLOOMBERG AND SCHOOLS CHANCELLOR WALCOTT ANNOUNCE THE 20 SCHOOLS SELECTED FOR THE NEW SOFTWARE ENGINEERING PILOT PROGRAM (Feb 25, 2013)

Initiative to Expand Computer Science and Software Engineering Classes - First Announced in the State of the City - to Launch Next Fall

Program to Help Prepare Students for College and Careers in Growing Tech Sector

Mayor Michael R. Bloomberg and Schools Chancellor Dennis M. Walcott today announced the 20 schools selected for the new Software Engineering Pilot program to begin at the start of the next school year. The schools will receive comprehensive computer science and software engineering curriculum for the 1,000 students expected to participate this fall. By 2016, the program will grow to 3,500 students. Mayor Bloomberg first announced the Software Engineering Pilot in his State of the City address earlier this month, and the program is a part of the City's work to prepare students for college and careers in the technology sector. The Mayor and Chancellor Walcott made the announcement at the High School of Telecommunication Arts and Technology in Brooklyn, one of the 20 schools selected for the Software Engineering Pilot, and were joined by Deputy Mayor for Economic Development Robert K. Steel, AppNexus Cofounder and Chief Technology Officer Mike Nolet and Principal Philip Weinberg.

"We know it's vital to prepare our children to succeed in an increasingly technology-centered economy and the Software Engineering Pilot will help us do just that," said Mayor Bloomberg. "This groundbreaking program will ensure that more students receive computer science and software engineering instruction so that they can compete for the tech jobs that are increasingly becoming a part of our city's economy. We're creating the home-grown workforce our city needs and teaching our students skills that will open up new doors for them and their future."

"The tech industry in New York City continues to expand significantly under Mayor Bloomberg's leadership, and our public schools are rising to meet the challenge," said Chancellor Walcott. "The Software Engineering Pilot will provide students with the foundational skills they need to compete for high-paying, career track jobs in a variety of professional fields. I would like to thank the educators at our 20 pilot schools who are working hard to make this wonderful opportunity a reality for their students."

"The Software Engineering Pilot is the latest component of our comprehensive strategy to position New York City to outperform in the knowledge economy of the future," said Deputy Mayor Steel. "From our work with the tech industry, we know that these companies need skilled employees at every level of their organization. The training we're providing through this program, the Academy for Software Engineering in Manhattan and the *Applied Sciences NYC* initiative will prepare our students for the jobs of today and tomorrow."

"Hiring programmers and engineers is one of the biggest challenges facing AppNexus today and is critical to our success and growth," said Mike Nolet, Cofounder and Chief Technology Officer. "We applaud Mayor Bloomberg's leadership in preparing students for the jobs of the future. These students will surely benefit from learning computer science, and we will be hiring them as soon as possible!"

"New York's future will be defined by the steps we take today to shape our diverse students into the programmers, engineers and designers that will fill 21st century tech jobs of tomorrow," said Reshma Saujani, founder of the nonprofit Girls Who Code. "The SEP Program is an innovative step forward in making that future brighter, and Girls Who Code is excited to partner with them to close the skills gap to give more minorities and young women opportunities they are currently being denied."

"Giving students an opportunity for a bright future is the goal of every educator, and opportunity is what students will get when exposed to rigorous and engaging computer science education," said Cameron Wilson, Director of Public Policy for the Association for Computing Machinery. "The question we face is whether students will have access to this critical discipline because far too often they do not. New York City's Software Engineering Pilot's strategy to expand student access to high-quality computer science curriculum coupled with professional development for teachers, will give students knowledge and skills they can use to create new computing technologies and exposure to a field driving high-demand, high-paying jobs across numerous industries."

In September, the Software Engineering Pilot will launch in 20 middle and high schools, bringing computer science and software engineering classes to students in grades 6 through 12. In the first year, the core topics to be taught include computer programming, embedded electronics, web design and programming, e-textiles, robotics and mobile computing. The Pilot will also offer elective classes, including digital fabrication, 3-D printing and animation.

The 20 schools were selected through a competitive application process that evaluated the schools' current technology offerings and how the program could help grow and sustain the programming. They include:

- High School of Telecommunication Arts and Technology
- Brooklyn Technical High School
- The Bronx Compass High School
- The Renaissance Charter High School for Innovation
- Urban Assembly Gateway School for Technology
- Queens Vocational & Technical High School
- Cambria Heights Academy
- Ralph McKee High School
- New Dorp High School
- Ditmas Intermediate School 62
- I.S. 30 Mary White Ovington

- Mark Twain I.S. 239 for the Gifted and Talented
- Bronx Park Middle School
- M.S. 223 The Laboratory School of Finance and Technology
- Tompkins Square Middle School
- Nathaniel Hawthorne Middle School 74
- J.H.S. 185 Edward Bleeker
- Pathways College Preparatory School
- J.H.S. 157 Stephen A. Halsey
- Eagle Academy for Young Men

The Software Engineering Pilot will also provide teacher training for the instructors leading the classes. Schools will use rigorous academic curriculum and have access to technology resources to support program instruction. Participating high schools will also receive support in applying for New York State Education Department approval, which can award a Career and Technical Education endorsement to graduating students who complete the program.

The Software Engineering Pilot aligns to Common Core Learning Standards by developing students' higher order thinking skills through the incorporation of industry-informed learning experiences. By emphasizing the analysis of complex text and mathematical modeling, participating students will extend their preparation in English Language Arts & Literacy and Mathematics while leveraging cutting-edge technology and curricula to develop the academic and personal behaviors that are a benchmark of college and career readiness.

The program also builds on the *Applied Sciences NYC* initiative that the Bloomberg Administration launched to capitalize on the considerable growth in the city's science, technology and research fields. In the technology sector, employment in New York grew by nearly 30 percent between 2005 and 2010, with total employment now at nearly 120,000. The City has established three partnerships expected to create more than 48,000 jobs and 1,000 new companies and will be led by: Cornell and the Technion, which is developing a campus on Roosevelt Island; the NYU-led consortium, which will build the Center for Urban Science and Progress in Downtown Brooklyn; and Columbia University, which will establish the new Institute for Data Sciences and Engineering, to be located at Columbia's Morningside Heights and Washington Heights campuses.

Source: <http://www.nyc.gov/cgi-bin/misc/pfprinter.cgi?action=print&sitename=OM&p=1362584344000>

3. How New York City can corner up the start-up market Neha Prakash Dec 11, 2012

Manhattan Borough President Scott M. Stringer released a report Tuesday that addresses New York City's "thriving entrepreneurial economy" and how he believes that economy can be pipelined to the middle class.

This year, New York City replaced Boston as the number two hub for tech expansion and growth in the country — yet Stringer says that success has yet to encourage growth in the job sector for the middle class. Stringer says economies ranging from finance to food to fashion are areas from which the middle class can benefit, but only if the city works to provide the appropriate education and infrastructure to boost start-up economy.

“New York City is in the midst of an entrepreneurial revolution, but the benefits of this revolution are not reaching all New Yorkers,” Stringer said at a press conference.

“Employment in tech and other emerging industries can be a ticket to the middle class, but only if New York City makes significant investments in expanding this economy into all five boroughs.”

SEE ALSO: [Why Startups Choose New York City Over Silicon Valley](#)

The report, "[Start-Up City: Growing the Entrepreneurial Ecosystem for All](#)," lists several recommendations which the city should use to further absorb the middle class into the start-up scene.

Stringer's ideas include having the Department of Education expand school curriculum to offer a heavier load of computer science courses. In that vein, Stringer also believes the city should launch a joint City-State financial aid program for students majoring in engineering and who promise to work in New York City or State for at least five years after graduation.

To aid in quickly filling emerging coding or local tech industry jobs, Stringer said the City University of New York should develop a two-year STEM degree and enroll a wide array of high school graduates in science and math courses.

The borough president also adds that New York City should look into municipal fiber networks to help spark competition among Internet service providers.

Stringer also said he believes in making it easier for mid-sized startups and entrepreneurs to find workspace in the city, and is pushing for crowd-sourced office areas through a platform called NYC Sharespace. He added that zoning laws and building codes should be updated in an effort to provide affordable housing that attracts more young professionals in the tech sector to the city.

The report was received positively from the entrepreneurial community, with many observers noting Stringer is one of few government officials to recognize the need to develop a solid foundation that can make technology an economic mainstay of the city.

“Start-Up City is the most comprehensive report on the impact of technology ever produced by a New York City public official,” said Andrew Rasiej, founder of Personal Democracy Media. “This report clearly articulates that government must invest in education, infrastructure, and connectivity, while streamlining the permitting process for new businesses, in order to help all entrepreneurs succeed and create a globally competitive 21st century New York.”

What do you think New York City needs to do to advance the economy of the tech industry? Share in the comment below.

Source: <http://mashable.com/2012/12/11/nyc-entrepreneur-economy/>

4. GIGAOM New York Tech Boosters by Jeff John Roberts (February 21, 2013)

New York City doesn't need a Google or Facebook-type public offering to show the world it's a major technology hub. That's the view, anyways, of a group of city boosters and entrepreneurs engaged in Gotham's [latest PR blitz](#) to burnish its tech creds. Speaking at Bloomberg LLC headquarters, Alan Patricof of Greycroft Partners rejected the idea that New York needs a “big win” to show it can be a real rival to Silicon Valley. Patricof noted that New York companies like Buddy Media could have gone public but were acquired instead; he added that tech giants like Facebook, Google and AOL all employ thousands in the city. Other speakers touted New York's recent climb in relation to other cities.

“New York has surpassed Boston as the clear number two,” said Jonathan Bowles of the Center for an Urban Future. Others said that, outside of biotech, Boston has “lost luster” as a tech hub.

Ann Li, an economic advocate for the city, added that, unlike Silicon Valley, New York is not just about “tech” but instead “dash tech” — for example, “ad tech,” “fit tech” and “fashion tech.”

The boosters did concede, however, that New York still doesn't offer the same financial support for tech as the west coast.

“There’s a dearth of B-round funding,” said Patricof. “There’s not enough \$10 million or \$15 million rounds.”

Patricof attributed the money deficit to the presence of too many angel investors and too many copycat startups. But he noted that, unlike venture capitalist Fred Wilson, who famously [didn’t make a “single new investment”](#) last year, Greycroft invested in 18 companies. Patricof also predicted that several New York ad tech companies would go public in 2013.

As for whether New York will ultimately displace Silicon Valley as the pre-eminent tech hub, that seems unlikely — and it’s not just a question of venture capital or talent. Like Hollywood, which other cities have tried to replicate for decades, the Valley has an intangible people quality that defies duplication.

Source: <http://gigaom.com/2013/02/21/nyc-tech-boosters-say-city-doesnt-need-a-big-ipo-beating-boston-is-enough/>

5. The 10 Hottest Startups to Watch in NYC in 2013

Heather Huhman (03/06/2013)

Each year, startups head to New York City, where they work to connect the world and transform it with innovative new ideas. As NYC becomes home to more and more startups positioned to significantly impact the world, let’s take a look at the 10 most exciting Big Apple startups to watch in 2013:

1. [Kaltura](#)

Kaltura is paving the way for businesses, schools, and media companies to spread their messages, connect with audiences, and organize their operations with open-source, online video. The company offers a platform that essentially allows organizations to make their own internal YouTube. Businesses can use Kaltura’s innovative platform for internal communication purposes -- like sending out newsletters or new product demonstrations -- or for external marketing and promotions.

Founded in 2006, Kaltura has already won numerous awards for its innovative platform, including TechCrunch40 People’s Choice award, Mashable’s ‘Open Web’ award, and Microsoft’s 2009 ‘Most Promising Israeli Web Startup’ award. With a whopping \$68.1 million in venture funding, Kaltura stands to significantly impact the future of communications within business, education and media consumption.

2. [StartApp](#)

Today, mobile app developers face a unique dilemma: customers just aren't willing to pull out their credit cards to purchase apps. But NYC-based StartApp is paving the way for mobile app developers to monetize their Android applications more creatively. Founded in 2010, the company landed \$4.3 million in venture funding to help developers profit from their mobile applications.

Here's how it works: any time users download a mobile app integrated with StartApp's technology, a new search icon appears on their home screen. When they use that new icon to generate a search, both the developer and StartApp receive a share of the profit. This technology is set to impact the way developers monetize their mobile creations for years to come.

3. Young Entrepreneur Council

Today's entrepreneurs are leading the world in new ways, and the Young Entrepreneur Council is one organization that aims to bring their ideas together. The invite-only, membership organization is comprised of hundreds of America's most promising entrepreneurs, helping them to connect with each other and share ideas.

NASDAQ and The White House have already formally honored the organization, helping to further its mission to retain today's brightest entrepreneurs and learners by empowering them with the resources they need to succeed, helping them to grow their businesses faster, and create more jobs in the process.

4. GetTaxi

GetTaxi offers users simple tools for ordering taxis with their mobile devices. Without making a call, users can easily order a taxi, pay instantly, and watch their taxis on a GPS-enabled map in real time.

The company has raised a total of \$10 million in venture funding, and the app has already gained a significant following in the U.S. and abroad. As more and more users turn to mobile devices to organize their daily lives, this app stands to significantly change the pace of public transportation in the years to come.

5. Pontiflex

Pontiflex has created "Signup Ads," a simple way for mobile device users to opt-in for advertisements from brands they like. Users can sign up for ads without leaving the website or app they're using, and advertisers only pay for signups and app installations.

With an impressive \$16.5 million in venture funding, Pontiflex stands to significantly transform the way mobile app users glean information from their favorite brands.

6. Noodle

The education technology industry is booming, and this startup is helping students and their families to easily navigate today's challenging educational landscape. The search engine is the first of its kind to focus specifically on aggregating information for students and families looking for information on anything from tutors to summer camps to master's programs.

Founded by the creator of the *Princeton Review*, Noodle is creating an innovative platform that will help to manage the [3.7 billion](#) educational searches conducted each month. Keep your eye on this startup as it paves the way to revolutionize the way we find educational information.

7. RecycleBank

Founded in 2004, Recyclebank is helping to drive the sustainability movement by rewarding those who take everyday green actions. The platform offers deals from more than 3,000 local and national businesses dedicated to rewarding users who recycle their household garbage, take steps to use energy efficiently, reduce water usage, or buy environmentally-friendly products.

The startup has raised \$85.1 million in venture funding. This innovative new platform revolutionizes the green movement, making it easier than ever to participate in eco-friendly actions in our daily lives.

8. RentTheRunway

Launched in 2009, RentTheRunway hopes to democratize the eCommerce business by allowing anyone, anywhere to rent designer dresses, accessories, and jewelry at a fraction of the price. Prices range from \$50-\$400 for a four-day dress rental. The company sends users two sizes of the dress, and for an extra \$25, users can purchase a “backup dress” in a different style.

The startup is gaining steam quickly, with many calling it “the Netflix for designer clothes.” With \$50 million in venture funding, 170 brands, and more than 3 million members, the startup is already significantly impacting how men and women do fashion.

9. CafeMom

Founded in 2006, CafeMom is a social networking site targeted at mothers and mothers-to-be. The platform allows mothers to easily connect with one another to discuss all things pregnancy and motherhood.

The site receives more than 8 million unique visitors each month. It has raised a total of \$17 million in venture funding, and is valued at over \$150 million. Keep your eye on this startup as it continues to impact the way mothers keep in touch.

10. LocalVox

In today’s technological landscape, businesses often struggle to keep up a well-maintained Internet presence, across social media, websites, and other online platforms. LocalVox’s one-stop-shop solution allows small-to-medium-sized businesses to easily navigate what can often be an overwhelming marketing process.

The local online marketing industry is booming, with analysts predicting it to grow from \$27.1 billion in 2011 to \$42.5 billion in 2015. LocalVox recently raised \$7.4 million in Series A funding for its comprehensive solution, money it will use to expand from New York to the top 20 markets nationwide. With so many promising startups making their way in the Big Apple, 2013 stands to be a big year for innovative ideas that will change the way all of us -- not just New Yorkers -- live.

Follow Heather Huhman on Twitter: www.twitter.com/heatherhuhman Source: http://www.huffingtonpost.com/heather-huhman/the-10-hottest-startups-t_b_2792776.html

6. Time Inc. Reveals Its 2013 List of the “10 NYC Startups to Watch”

Companies on third annual list to be honored during Internet Week New York on May 22nd

NEW YORK--(BUSINESS WIRE)--Time Inc. today unveiled its third annual list of the **10 NYC Startups to Watch** for 2013. The ten ventures will be recognized at Time Inc.'s Internet Week cocktail event on Wednesday, May 22nd.

“Each year, the temperature of NYC’s start-up scene seems to get turned up another five degrees, with 2013 yielding by far the largest number and widest spectrum of companies for our judging committee to consider”

Each Spring, editors from Time Inc. brands, including TIME, FORTUNE, CNNMoney.com, PEOPLE, Sports Illustrated, Entertainment Weekly, InStyle and Real Simple, comb New York’s technology scene to discover the ten most promising startups of the past year. This year’s diverse list spotlights New York City-based companies with the most potential to transform areas from shopping, personal health and dating to customer service, social media, and data analysis.

Past honorees that have experienced considerable success include the curated design shop Fab (2012), which now has 10 million members and is reportedly valued at \$1 billion; eyewear designer and retailer Warby Parker (2011), which recently opened its first flagship retail store in New York City, and Stamped (2012), which was Marissa Mayer’s first acquisition at Yahoo!

“Each year, the temperature of NYC’s start-up scene seems to get turned up another five degrees, with 2013 yielding by far the largest number and widest spectrum of companies for our judging committee to consider,” says Time Inc. Style & Entertainment Group Editor Mark Golin. “As journalists, it’s our job to bring news of the latest digital products, services and trends to our audiences. But, as a media company looking to lead in a rapidly evolving industry, Time Inc. ends up winning every bit as much as the companies that made this list by allowing ourselves to be inspired by their innovative example.”

Time Inc.’s “10 NYC Startups to Watch” in 2013 are:

- **ARCHETYPEME:** ArchetypeMe redefines ‘personal’ search and discovery by placing users within a community of like-minded people where they’ll receive original, relevant content and videos.
- **CUSTORA:** Custora is a marketing analytics platform that helps leading online retailers like Birchbox, Etsy, and LivingSocial identify and keep valuable customers.
- **FIFTYTHREE:** FiftyThree builds tools for creativity - they crafted the breakthrough app, Paper, named Apple’s App of the Year. Users who have relied on traditional journals and notebooks now have a professional-quality app for drawing, graphing and coloring on a tablet.
- **FITOCRACY:** With more than 1 million users, Fitocracy is a workout tracker and social network that empowers users to succeed at fitness by connecting them to communities just like them and providing guidance to help reach their goals.

- **GROUPER:** A dating site with a twist, Grouper matches two groups of friends together based on information pulled from their Facebook profiles and then arranges a destination for an offline blind group date.
- **HUKKSTER:** Hukkster is a digital platform that allows shoppers to track products at more than 1000 popular online stores – from Asos to Zappos – and get notified when those products go on sale.
- **IMRSV:** A breakthrough in real-world, real-time data analysis, IMRSV's Cara software transforms web cameras into intelligent sensors that capture data including age, gender and attention time.
- **KLOOFF:** A smartphone app for pet owners who love their pets, Klooff lets users share photos, meet people with similar animals, create customized products and much more.
- **QWIKI:** Qwiki, already a leader in automated video production, recently released an iPhone app that automatically creates beautiful movies from the events captured on your iPhone.
- **UPWORTHY:** Upworthy's mission is to lift up things that matter using irresistible social media - to make really important issues as shareable as a video of a guy jumping on his bed and falling out the window.

For more information on Time Inc.'s 10 NYC Startups To Watch, you can find it [here](#), on [Facebook](#) and [Twitter](#): [#TimeInc10Startups](#).

The honorees will be feted at what has become one of the flagship events of Internet Week New York. Time Inc.'s evening brings together the most buzz-worthy innovators and entrepreneurs driving New York City's digital renaissance and prominent members of the media.

Taking place from May 20th – 27th, Internet Week New York has become one of the world's top events where business, technology, and culture meet. This year, more than 45,000 people are expected to attend.

About Time Inc.

Time Inc., a division of Time Warner, is one of the largest branded media companies in the world. The company's magazines reach more than 130 million Americans each month, and its websites attract nearly 50 million unique visitors each month. With influential brands such as TIME, PEOPLE, SPORTS ILLUSTRATED, InStyle, and REAL SIMPLE, Time Inc. is home to celebrated events and franchises including the FORTUNE 500, TIME 100, PEOPLE's Most Beautiful and SPORTS ILLUSTRATED'S Sportsman of the Year.

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7. **Schumer Pushes Plan to Make Rochester a High-Tech Hub** By: Mike Hedeem (Feb 21, 2013)

New York Senator Charles Schumer is crafting a bill that could bring one of 15 potential national manufacturing hubs to Rochester. Schumer used Eastman Business Park as the backdrop for announcing his plan. This proposal could bring more high-tech job opportunities to the Flower City.

Eastman Business Park is home to cutting edge, high-tech companies looking for advanced research support in the manufacturing technologies of tomorrow.

Senator Schumer believes photonic and optic firms already operating at the Park give it an edge to land one of his proposed national hubs.

"They're going to choose different areas for different types of manufacturing activity. Photonics and optics is one of the new cutting edge areas where it's involved with anything you look at, so to speak, whether you're looking at your smartphone or looking at a computer screen or whatever else, so we have a real advantage there," said Schumer, (D).

A lot of the technologies that could be incorporated in a national manufacturing hub at Eastman Business Park have yet to be developed. That's where partnerships with RIT and the University of Rochester come into play.

"U of R, of course, is the eminent institution in optics and has actually spawned a lot of the optics industries in the region. RIT is actually a big player in sustainable manufacturing, so I think there's a real opportunity actually to join forces and support a very aggressive program," said RIT president Bill Destler.

If Schumer's legislation passes and Eastman Business Park is awarded one of the 15 national hubs, it could result in thousands of jobs for the Rochester area.

What the Park offers is the ability to do manufacturing innovation of products. Technology and infrastructure previously used by Eastman Kodak Company could help persuade photonic and optic companies from other parts of the country to relocate here.

"Just having this as a national center is going to attract companies here. When they see everything we have, I think you get them here, I can sell the park and the community because we just have so many things to offer, so I think you're talking hundreds or thousands of jobs," said Mike Alt, Eastman Business Park.

Besides companies and workers, Schumer says his plan could help funnel money and tax incentives to the Rochester area, which would help boost the local economy.

Source: http://rochester.ynn.com/content/top_stories/641269/schumer-pushes-plan-to-make-rochester-a-high-tech-hub/

8. Technology Industry Seen Growing Fastest in New York

Chang W. Lee/The New York Times; Inside the office of Tumblr, a 2007 digital start-up in the Flatiron district of Manhattan By PATRICK McGEEHAN (Published: May 9, 2012)

New York City's budding technology industry is growing rapidly by attracting investors and engineering talent despite spotty access to a reliable broadband network, according to a study released on Wednesday.

The study, "New Tech City," conducted by the Center for an Urban Future, concluded that the technology industry is growing faster in New York City than anywhere else in America and that the city now trails only Silicon Valley as a hub for the development of new technology companies. The study's authors, Jonathan Bowles and David Giles, identified 486 technology companies that had been founded in the city since 2007 and determined that the financial crisis and the recession that followed did not slow the industry's growth.

Mr. Bowles said the technology investors he interviewed agreed that in the last few years, New York had eclipsed the Boston area as the second-leading breeding ground for tech companies in the country. Silicon Valley, around San Jose, Calif., is still by far the dominant center of the industry, but New York was the only place where the number of deals to finance tech start-ups rose between 2007 and 2011, Mr. Bowles said.

The number of venture capital deals in New York rose by 32 percent in that period, while it fell by more than 10 percent across the nation, the report said.

The report attributes some of the growth to the efforts of the administration of Mayor Michael R. Bloomberg to reduce the city's dependence on Wall Street as an economic engine. The push to build up the industry has been much more successful than previous efforts to establish the city as a hub for biotechnology or environmental technology, which Mr. Bowles calls clean tech.

"It's important to understand that New York has not passed Boston in biotech or in clean tech," he said.

One reason that the development of digital technology seems to be taking root in the city is that the current wave of innovation is not about designing computers or chips or building infrastructure for the Internet, but about devising creative applications of mobile technology for various industries. New York's dominant positions in industries like finance and advertising have made it a natural place for those seeking to invent digital services in those fields.

One company the city has spawned is Tumblr, an online platform for sharing photos and other media. Founded in 2007 and based in the Flatiron district of Manhattan, Tumblr now has more than 100 employees.

Tumblr is one of 10 start-ups in the city that each have attracted more than \$50 million from investors, according to the report. The others, mostly digital media and e-commerce companies, include Gilt Groupe, Foursquare and Fab.

Mr. Bowles said it was difficult to tally just how many people work in the city's tech areas, but he said it was clear that the number had been growing at a "phenomenal clip." In the last five years, the number of information technology jobs in the city increased by almost 29 percent, or about eight times as fast as the city's total employment grew.

The study found that the tech start-ups were concentrated in about 10 ZIP codes in Lower Manhattan and Midtown, in part because attractive locations in Brooklyn and other boroughs lacked adequate broadband access. A significant problem is that many of these technology companies need a backup source of Internet access but usually cannot arrange affordable redundancy, Mr. Bowles said.

New York's broadband infrastructure deserved a grade of "B or B-minus," he said. "For a city that's trying to be a tech powerhouse, we need to have an A."

He recounted a previous effort by the city to address the problem by creating a telecommunications task force and hiring consultants. But in the end, he said, "it went nowhere; they really didn't do anything."

The study was financed by AT&T and the Association for a Better New York, a group of business and labor leaders.

Source: http://www.nytimes.com/2012/05/10/nyregion/new-yorks-tech-industry-tops-us-in-growth-study-finds.html?_r=0

9. Making New York a World Class Tech Community

February 20, 2013

What do BuzzFeed, Foursquare, Etsy, Fab, Gilt, Kickstarter, Makerbot, PaperlessPost, Songza and Tumblr have in common? Like the world's best pizza pies, they were all made in New York City.

New York is now home to the country's fastest-growing and most exciting tech communities, with more and more entrepreneurs choosing to locate their start-ups here. Between 2007 and 2011, the number of New Yorkers working at digital media companies grew by 80%. Our metro area is now number one in job growth in the \$20 billion mobile app industry, and we were the only region in the nation – not Silicon Valley, and not Boston or Austin – to have an increase in venture capital funding to tech companies between 2007 and 2011.

New York's tech sector is bigger, more diverse and more innovative than ever. And it's no accident. New York City has a deeper concentration of the tech industry's most valuable assets – creativity and capital – than any place on earth. And as a mayor who created a tech start-up in the early 1980s (long before the phrase “tech start-up” existed), I've worked hard to make New York City as tech-friendly as possible.

For instance, we've established a network of business incubators to help entrepreneurs kick-start their plans. The sites provide affordable office space to more than 500 companies, which together have raised over \$90 million in private capital. We've also set up a public-private fund to provide tech start-ups with early-stage capital, the first such fund outside of Silicon Valley. And we're partnering with Cornell, Columbia, NYU and other institutions to increase graduate programs in science, engineering and math. We expect these university investments will double the number of graduate engineering students and faculty in NYC, who will help launch and support the next wave of tech start-ups.

Yesterday we took another step to encourage tech start-ups to make New York City their home: we are extending our [“Made in New York” program](#), which has helped our film and television industry reach record heights, to the tech community. The program provides resources and promotional opportunities for tech start-ups that choose to make New York City their home.

The campaign also encourages New Yorkers – and people from across the country – to explore employment opportunities with the more than 900 local startups that are currently hiring for 3,000 jobs. Those jobs are highlighted on [an interactive map that shows which tech firms are hiring, and where](#). The map also highlights many diverse and growing Made in NY companies through a series of creative advertising materials appearing throughout the City. Companies with at least 75% of their development in New York City are encouraged to join the campaign and add the logo to their website.

The new Made in NY program is just our latest effort to strengthen the tech industry here and position our City to grow as a global tech hub. In my recent State of the City speech, I announced that we'll launch a new competition to install Wi-Fi in more of our business improvement districts. We'll work with companies and schools to create a computer science training program for adults interested in gaining IT skills. And we'll open our second Academy for Software Engineering high school and bring computer science classes to 20 more schools in the next academic year. This will bring computer science education to thousands of our students, and prepare them for the jobs of the future.

We're doing all this because the health of New York's tech industry is key to the City's economic success. Despite the national economic downturn, we've been leading the nation in job growth—with the majority of new jobs paying good, middle class salaries -- in part because of the tremendous growth in the City's digital media and tech companies.

Our goal is to make New York City the global leader in technological innovation – and we're doing everything possible to help and support those who can make it happen.

Source: <http://www.linkedin.com/today/post/article/20130220164152-32503052-making-new-york-a-world-class-tech-community>

10. Governor Cuomo Announces Tech Valley High School® and SUNY Nanocollege Form Educational Partnership, Including Co-Location at CNSE, to Prepare Students for High-Tech Future

Location of TVHS at CNSE's Albany NanoTech Complex will enable collaborative education, training, and outreach programs to support New York's growing nanotechnology industry

Governor Andrew M. Cuomo (Albany, NY) announced on February 13, 2013 a new innovative partnership between Tech Valley High School® (TVHS) and the SUNY College of Nanoscale Science and Engineering (CNSE) to better prepares students for New York's growing nanotechnology industry and building a world-class nanotechnology workforce to support the growing industry in New York. Under the new partnership, TVHS will locate at CNSE's Albany NanoTech Complex at the conclusion of its current lease and collaborate with CNSE on coordinated educational, training, and outreach initiatives targeting the 21st century disciplines of nanoscale science and engineering.

"As the State continues to grow its nanotechnology industry, it is important that we educate and train the future generation of engineers and visionaries to keep New York at the forefront of this field," Governor Cuomo. "That is why this partnership between Tech Valley High School and the SUNY College of Nanoscale Science and Engineering is so important. It will give New York students a well-rounded, high quality education with a major focus on science, mathematics, engineering and technology so that they are prepared for college and the workforce. These are the types of creative partnerships that will move the Empire State forward."

Lt. Governor Robert Duffy said, "I am pleased about this partnership between the SUNY College of Nanoscale Science and Engineering and Tech Valley High School, which will continue to give New York students a world-class education in an increasingly emerging, prominent field. I applaud Governor Cuomo for his leadership in developing New York State, and especially our youth, toward innovation and economic growth, which further positions our State at the center of the global nanotechnology industry."

“As Governor Andrew Cuomo has championed New York’s rise as a global leader in nanotechnology education, innovation, and economic growth, this partnership between Tech Valley High School and the NanoCollege is both timely and essential in helping to prepare our next generation of innovators,” said Dr. Alain E. Kaloyeros, Senior Vice President and CEO of CNSE. “We are delighted to work with the pioneering leadership of Tech Valley High School to develop groundbreaking educational and training programs for students, and excited with the synergy that will be realized by locating the visionary Tech Valley High School together with CNSE in a one-of-a-kind hub for nanoscale learning and discovery.”

“This game-changing partnership with the College of Nanoscale Science and Engineering is an exciting and important step forward on a new journey that will further identify Tech Valley High School as an educational institution for the 21st century,” said Dr. James N. Baldwin, District Superintendent of Questar III BOCES. “This opportunity to co-locate and collaborate with CNSE, recognized globally as the world leader in nanotechnology education, research, and economic growth, will open new doors for our students while enhancing our ability to provide a one-of-a-kind high school education.”

“The true beneficiaries of this innovative partnership with the College of Nanoscale Science and Engineering are the *120,000 students of the Tech Valley Region*,” said Dr. Charles S. Dedrick, District Superintendent of Capital Region BOCES. “This is an incredible opportunity to uniquely prepare our students for higher education and high-tech careers, as they engage in cutting-edge nanoscale education and research, together with the world’s premier college of nanotechnology and alongside the industry’s corporate giants. We are thrilled with this collaboration and can’t wait to get started.”

TVHS is expected to relocate to CNSE’s Albany NanoTech Complex by September 2014, in time for the start of the 2014-2015 academic year. TVHS will lease more than 22,000 square feet of state-of-the-art space – larger than its current location in Rensselaer – in which it will set up modern classrooms and high-tech laboratories to be used by its students and teachers. In addition, TVHS will have access to common space at CNSE, such as technology-equipped auditoriums, to enable opportunities for interactive long-distance learning and collaboration.

The partnership between CNSE and TVHS will leverage CNSE's global leadership in nanotechnology education to integrate foundational nanoscale science and engineering principles into TVHS' nationally-recognized, project-based, high-school science curriculum. This integration will also serve as a one-of-a-kind development platform for expanding nanoscale science and engineering project modules into introductory, university-level nanotech curricula. It will enable a seamless transition of TVHS students to university study in the fields of science, technology, engineering, and mathematics (STEM), including the groundbreaking nanoscience and nanoengineering baccalaureate programs at CNSE.

Additionally, as K-12 education and outreach to local communities is a central feature of both institutions, the co-location-based partnership between CNSE and TVHS will create a new and powerful conduit for providing high-impact, cutting-edge science and technology content to a broader audience of regional, state, and national educators. This will include innovative nanotechnology-based project modules for middle and high schools across New York; pioneering K-12 teacher training and development programs; and exciting new opportunities for STEM engagement for groups typically underrepresented in science and engineering.

Tech Valley High School was created in 2007 through a unique collaboration between two regional BOCES, Capital Region and Questar III, and the resources they will bring to the alliance will offer additional opportunities to impact education in New York State. *In its six years of existence, Tech Valley High School has provided professional development training in STEM, project-based learning, and other innovative education practices to approximately 3,000 teachers, education professionals, and business leaders.* TVHS aims to provide today's students with the skills necessary to be successful in college and in tomorrow's workforce. The theme of the school is a strong emphasis on math, science and technology. However, students receive a well-rounded education that will prepare them to compete in the growing high-tech and global economy that is emerging in the Capital Region's Tech Valley.

During the current school year, approximately 125 students attend TVHS. As it grows, an estimated 40 students are expected to join the school each year. This allows students to receive individualized attention, yet work collaboratively with their peers.

CNSE is the first college in the world dedicated to education, research, development and deployment in the emerging disciplines of nanoscience, nanoengineering, nanobioscience and nanoeconomics. With more than \$14 billion in high-tech investments, CNSE represents the world's most advanced university-driven research enterprise, offering students a one-of-a-kind academic experience and providing over 300 corporate partners access to an unmatched ecosystem for leading-edge R&D and commercialization of nanotechnology innovations. CNSE's footprint spans upstate New York, including its Albany NanoTech Complex, an 800,000-square-foot megaplex with the only fully-integrated, 300mm wafer, computer chip pilot prototyping and demonstration line within 85,000 square feet of Class 1 capable cleanrooms. More than 3,100 scientists, researchers, engineers, students and faculty work here, from companies including IBM, Intel, GlobalFoundries, SEMATECH, Samsung, TSMC, Applied Materials, Tokyo Electron, ASML and Lam Research. An expansion, part of which will house the world's first Global 450mm Consortium, will add nearly 500,000 square feet of next-generation infrastructure, 50,000 square feet of cleanrooms, and over 1,000 scientists, researchers and engineers from CNSE and global corporations. CNSE's Solar Energy Development Center in Halfmoon provides a prototyping and demonstration line for CIGS solar cells, supporting its leadership of the U.S. Photovoltaic Manufacturing Consortium (PVMC). CNSE's Smart System Technology and Commercialization Center of Excellence (STC) in Rochester offers world-class capabilities for MEMS fabrication and packaging. CNSE co-founded and manages operations at the Computer Chip Commercialization Center at SUNYIT in Utica and is co-founder of the Nanotechnology Innovation and Commercialization Excelsior in Syracuse. For information, visit www.cnse.albany.edu.

Tech Valley High School provides a unique and innovative student-centered educational opportunity, engages students in current emerging technologies and supports the growth and economy of the region. For information, visit www.techvalleyhigh.org.

Source: <http://www.governor.ny.gov/press/02132013cuomo-announces-techvalleyhigh-sunynanno-form-edu-partnership>

11. New York Tech Scene Rising

(Steve Rosenbaum)

There's lots of evidence that New York is moving fast to become the center of the content / software universe. Just last week I hosted the New York Video Meetup and was able to present 5 extraordinary stories that support my sense of just how fast New York is moving. With presentations from Conde Nast,

Gander.TV, entrepreneur Cesar Kuriyama's One Second Every Day app, Long Tail Video, and WayWire - this group of rock stars wowed the standing room only crowd at Columbia University. Amazing to see the video community growing.

But at the same time - there's a cloud on the horizon. And that cloud is nature of the city's fragile and some would say woefully behind wired internet infrastructure. Just how serious a problem does NY have when it comes to being a digitally connected city?

Well, two events last week may provide a glimpse into both the process of wiring NYC and the relative pace of change that may darken our hopes as a startup city.

NYC Public Advocate Bill de Blasio blasted both Verizon and New York's Department of Information Technology and Telecommunications (DoITT) for allowing Verizon to rake in the dollars with its city franchise agreement while providing little progress in providing FiOS to the city as required under its contract with the city. At last week's Democratic mayoral candidate, panel hosted by Scott Stringer - De Blasio waved a letter he'd sent to DoITT claiming that the city has reached a paltry 51 percent of its goal. deBlasio said neighborhoods such as Washington Heights, High Bridge, Astoria, Woodside, Bedford-Stuyvesant and Bushwick are without FiOS service. "Verizon was supposed to have provided affordable high speed internet access through fiber to almost 80 percent of city by now," de Blasio told the audience. "Verizon needs to have it's feet held to the fire." But DoITT representatives debated the claim, saying "Virtually all New York City households have access to broadband connectivity today, and the ongoing, on-schedule deployment of Verizon fiber (known as FiOS), now estimated at 80% across the five boroughs, will bring additional competition to the broadband market," said DoITT. Verizon signed an agreement with the city in 2008 to provide access to its FiOS network to all New Yorkers by June 30, 2014. With a little more than a year to go, it seems unlikely they'll make that goal. Candidate and City Counsel President Christine Quinn suggested that a review of Verizon's contract and goals was in order, and that the city might have to consider building it's own municipal wireless.

At the same time - the City has been heralding the free service that is coming to the subways, announcing 30 more stations had been added to the underground project. But this too seems to be more of a headline than a fact. While the MTA switched on wireless connectivity in 30 underground subway stations around Manhattan last week, and says it's on schedule to expand to all of the MTA's 277 subway stations by 2017 - in reality, the service is far from ideal. While usage is being presented as 'free' via the Boingo Wireless' platform, sponsorship means the SSID name is tied to the sponsor in this case - "FreeWifiByHTCONE", and that means it shows you a fifteen second HTC One ad every time you log in. The ad is annoying as heck, and repetitive - and given the limited time you have on the platform, often by the time you find the right network name, log in, and watch the ad, you've missed your opportunity to check email.

The system is built and maintained by Transit Wireless (<http://www.transitwireless.com>) which is a private company that is building the underground network and negotiating with carriers. One has to wonder if letting a 3rd party private company own such a key piece of New York cities vital infrastructure is wise, and given the experience so far, idea. In fact, as this was originally brought up in 2007, it's been five years to build and light up the first piece of the network. One wonders, if the company can't sell ads to support the network, will it go dark? Transit Wireless is now in large part owned by BAI - an Australian

private Broadcaster. Imagine if New York's subways, or bridges, or street lights, or water filtration was privately held? Shouldn't city connectivity be something we pay for out of our tax dollars, rather than some ad network deal that is likely to be driven by profits rather than customer satisfaction.

So, is tech growing in NY? Yes for sure. But are we keeping up to the needs of our growing tech sector with an infrastructure to meet its needs? That answer is far less certain.

Source: http://www.huffingtonpost.com/steve-rosenbaum/ny-tech-scene-rising_b_3177242.html

12. Big happens here

New York State is creating an environment conducive to business development. This is a place with a whole new approach to business development with the fastest-growing tech sector in the US, with one of the best educated workforces in America and over \$1 Billion in incentives and tax breaks. It is not surprising that New York State launched over 50,000 new businesses last year alone.

For more details, click on the following link: <http://bighappenshere.com/>

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- **Below are a few examples of how New York is helping businesses across the State thrive.**
 - [Raymour & Flanigan to Establish Regional Distribution Center in Rockland County](#)
 - [U.S. Chamber of Commerce Report that Found New York in Top 10 States for Growth, Productivity, and Livability](#)
 - [NYSERDA "Proof of Concept" Centers to Connect Energy Innovators with Business Investors](#)
 - [Currier Plastics to Expand Manufacturing Operations in Central New York](#)
 - [\\$35 Million to be Invested to Upgrade North-South Arterial in Utica](#)
 - [New York State Announces \\$600 Million MTA Investment in Upstate Manufacturing](#)
 - [Governor Andrew Cuomo Announces Statewide Small Business Outreach Initiative](#)
 - [New York State MAKES \\$82 Million In Construction Contracts AVAILABLE For Minority—And Women—Owned Business Enterprises](#)

See more [stories and videos](#).

13. Not to overlook: Despite being a high-tech hub, many New Yorkers work in low-wage jobs

by [Alex Dalenberg](#), Upstart Business Journal contributor (April 12, 2013)

New York City has good reason to be proud of its startup boom—at last count, the [Made in NY Digital Map](#) showed that some 1,233 tech companies are hiring—but a hard truth is that those jobs are out of reach for many New Yorkers.

[New data](#) released by the Center for an Urban Future—a think tank that studies economic policy—shows that the percentage of workers in low-wage jobs in the city has steadily increased over the last five years.

In 2012, 35 percent of New Yorkers worked in low wage jobs, defined as earning \$12.89 per hour or \$26,818.06 per year. In the Bronx, nearly half of workers were in low wage jobs, followed by 40 percent in Brooklyn.

The Center for an Urban Future writes that many New Yorkers simply don't have the skills or education to participate in the tech economy that's growing up around them.

The Center writes:

The growth in the number of New Yorkers working in low-wage jobs likely reflects the increased polarization of New York City's job market. A growing share of the decent-paying jobs being created in New York require at least a Bachelor's degree.

The report goes on to say that middle class jobs such as manufacturing and secretarial services that once required a high school diploma are no as longer common. But that's been true for a long time. And yet, U.S. cities—New York is no exception—continue struggling to adjust.

The study is yet another reminder of the growing gap between rich and poor in the nation's tech hubs. Last week, the New York City comptroller [released a report](#) showing that nearly a quarter of city households are without a computer. And [various news reports](#) have highlighted the growing problem of homelessness in Silicon Valley.

Tech startups need workers, but they can't hire workers who don't meet their needs. The city recently announced that it will be opening a [new high school in the Bronx](#), focused on STEM subjects such as programming and health care.

It's a start, but 35 percent is a big, big number.

(Source: <http://upstart.bizjournals.com/news/technology/2013/04/12/many-nyers-shut-out-of-tech-economy.html?page=all>)

14. Cuomo Creating Tax-Free Zones at SUNY Campuses to Boost Economy

(By Freeman Klopott - May 22, 2013)

New York Governor Andrew Cuomo said he will create 120 million square feet of tax-free zones at 64 public university campuses outside of New York City to bolster the upstate economy.

Companies and employees who work in the zones, which Cuomo said will have more square footage than the commercial space in San Francisco and Philadelphia combined, won't have to pay income, corporate, sales or property taxes. State University of New York campuses include Binghamton, Oneonta, Cortland, Oswego and Buffalo. The program will also cover 3 million square feet (279,000 square meters) at private universities north of Westchester County.

The proposal is meant to bring economic development to upstate New York, a former industrial region that's been in decline for decades, by tying the SUNY system to companies that could benefit from its research, Cuomo said. The plan builds on Cuomo's wider effort to counter New York's image as a high-tax state unfriendly to businesses.

"We have been in our own way," Cuomo said today on the campus of SUNY Albany. "This is about getting out of our own way."

From Nebraska to Louisiana, Republican governors are calling for the elimination of state income taxes. The tax-free zones will make it "so no state in this nation can offer any advantage that the state of New York isn't offering," said Cuomo, a 55-year-old Democrat and a potential candidate in the 2016 presidential race.

Yogurt Summit

Cuomo has taken several initiatives to help upstate New York, where he said the population fell 1.4 percent as the cost of government rose 47 percent from 2000 to 2010. In August, he held a meeting of state officials and business groups in Albany to find ways to make it easier for the yogurt industry to thrive among the region's dairy farms. He's since held similar summits on the alcoholic-beverage and tourism industries.

Meanwhile, landowners in the Southern Tier along the Pennsylvania border have criticized the governor for not moving forward with hydraulic fracturing, a drilling process that could tap the natural gas trapped in the Marcellus Shale. The rock formation stretches to West Virginia and may hold enough natural gas to supply the U.S. for about six years, according to the federal Energy Department.

Fracking Debate

In Pennsylvania, fracking on the Marcellus Shale added almost 24,000 jobs, \$1.2 billion in income associated with drilling and \$1.9 billion to the state's economy in 2009, according to a 2011 study by Timothy Kelsey, a Pennsylvania State University professor of agricultural economics. Environmentalists say fracking, in which water and chemicals are injected into rock at high volume, could damage water supplies and make farmland unusable.

The tax-free zones will bring new businesses and jobs to every corner of the state, Cuomo said today. All New York residents live within 30 miles of a SUNY campus, he said.

Cuomo said businesses moving to the zones will return New York to the days when leaders dreamed up the Erie Canal, the waterway built in the 19th century that connected New York Harbor to the Midwest and became the lifeblood of the upstate economy.

"We are dreamers and we are a state of dreamers, but we also have the courage and capacity to turn those dreams into reality," he said. "That's what this generation has to do for this state once again."

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(Source: <http://www.bloomberg.com/news/2013-05-22/cuomo-creating-tax-free-zones-at-suny-campuses-to-boost-economy.html>)

Conclusion

There is no doubt that New York is emerging as a hi-tech hub despite the setback pointed out above. New York City itself is playing a crucial role in this context and eLeadership is proving to be a decisive factor. The following news clip is worthy of attention:

What a difference a decade makes. New York's share of venture capital dollars has doubled over the last ten years while its rival, Silicon Valley, has grown at a much slower pace and New England has sputtered, a new study from the Center for an Urban Future shows. Between the first quarter of 2003 to the first quarter of this year, the New York area's share of VC investments surged to 11.4% from 5.3%. Silicon Valley's share

rose to 31.7% from 28.6% over the same period while New England's share fell to 10.2% from 14.8%. "This is more evidence of how far New York has come as a tech hub," Jonathan Bowles, executive director of the Center for an Urban Future. "New York has become the clear tech leader on the East Coast." The New York metro area went from having just 38 venture capital deals at the beginning of 2003 to 98 deals at the beginning of this year. The region took off in a really big way over the last five years. Between the first quarter of 2008 and the first quarter of 2013, the New York area saw a 24% gain in the number of VC deals, while Silicon Valley dropped by 21% and New England fell by 31%. As the Internet has exploded over the last decade, the Big Apple has capitalized on its power base in the worlds of fashion, retailing, media and advertising, Bowles said. "A lot of trends play to New York's strengths," he said. Bowles noted a number of New York-based companies that have risen over the last few years and have cumulatively pulled in hundreds of millions of dollars in venture capital dollars. The list includes Gilt Groupe, ZocDoc, Tumblr, Etsy and AppNexus. The city has pushed to foster the growth of the tech sector. Total tech employment, which includes high tech, bio and health sciences, and other types of tech was close to 123,000 in 2011, according to the New York City Economic Development Corp. Between 2009 and 2011, the high tech sector grew at an average rate of 7.2% a year to 95,000. "Mayor Bloomberg has been all in on tech," Bowles said. "He has rolled out more than a dozen initiatives to support the tech sector."

Source: <http://www.nydailynews.com/new-york/new-york-venture-capital-share-doubled-decade-new-england-faded-report-article-1.1344018>

Appendix: Other hi tech hubs worthy of attention

http://epubs.democratprinting.com/display_article.php?id=1197313