NEW YORK CITY'S
DIGITAL ROADMAP

PROGRESS & INNOVATION

New York City's
Digital Roadmap:
Progress and Innovation

NYC Digital

Mayor Michael R. Bloomberg
Deputy Mayor Robert K. Steel

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Download the full 2011 and 2012 Digital Roadmaps at www.nyc.gov

Special Thanks To

The Mayor's Office
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Brooklyn Public Library
New York Public Library
Queens Library
Aaron Walker

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"There has never been a more exciting time for New York City tech."

New York City Mayor Michael R. Bloomberg

You might expect the Mayor to say that, but those are the words of Fred Wilson, a venture capitalist whose partnership with the Department of Education helped launch the Academy for Software Engineering, a new public high school that will train students for careers in our city's growing technology industry. Leaders such as Fred represent the tremendous momentum our tech sector has right now. Civically active and committed to giving back, New York's tech community is both leading our digital evolution and ensuring our city's preeminence as a capital of innovation.

To build on this progress, our Administration introduced the Road Map for the Digital City in 2011. Outlining our plans for becoming the world's premier digital city, we were the first city to prepare such a strategy. Now, New York City's Digital Road Map: Progress and Innovation demonstrates the strides we have made to date, propelled by a vibrant technology industry, a strong social media presence, infrastructure improvements, and historic investments in education.

As the 2012 Digital Road Map shows, in just one year, we have already realized 75 percent of the engagement, access, open government, and industry goals we set, with the remainder well underway. City government is engaging more than two million people every month through social media and mobile applications. We are providing more broadband choices and more Wi-Fi in public spaces, for the benefit of all New Yorkers. We are improving our digital service delivery, even in emergencies, with the help of developers and our powerful open data platform. Finally, we are partnering with the public and private sectors on groundbreaking new initiatives, including the Cornell-Technion Innovation Institute, an applied sciences campus on Roosevelt Island that will create thousands of jobs, hundreds of new startups, and billions of dollars in economic activity.

This really is an exciting moment in New York City's continuing digital growth. Established companies are locating and expanding in the five boroughs. New companies are forming and growing here, and we are determined to do everything we can to help them thrive. New York is a capital of media, finance, fashion, and many other industries, and more than ever, we are capitalizing on the opportunities that our tech sector offers to our schools, businesses, and entrepreneurs. I invite you to learn more about these innovations in this important report.

Michael R. Bloomberg
Mayor

Progress Report

	Achieved	In Progress	Early Stage
1. ACCESS			
Connect high-needs individuals through federally funded NYC Connected initiatives		◼	
Launch outreach and education efforts to increase broadband Internet adoption		◼	
Support more broadband choices citywide	◼		
Introduce Wi-Fi in more public spaces, including parks	◼		
2. EDUCATION			
Introduce Applied Sciences NYC, the initiative to bring more STEM institutions to New York City*	◼		
Introduce Cornell-Technion Innovation Institute on Roosevelt Island*	◼		
Introduce Center for Urban Science and Progress, led by NYU and NYU-Poly*	◼		
Introduce Academy for Software Engineering, a high school that teaches development and design*	◼		
Increase number of participants in Innovation Zone from 80 schools to over 250*		◼	
3. OPEN GOVERNMENT			
Develop NYC OpenData, an Open Government framework featuring APIs for City data	◼		
Launch a central hub for engaging and cultivating feedback from the developer community	◼		
Introduce visualization tools that make data more accessible to the public	◼		
Launch app wishlists to support a needs-based ecosystem of innovation	◼		
Launch an official New York City apps hub	◼		
Host New York City's first hackathon: Reinvent NYC.gov	◼		
Host New York City's first sustainability hackathon: Reinvent Green*	◼		
4. ENGAGEMENT			
Expand 311 Online through smartphone apps, Twitter and live chat		◼	
Implement a custom bit.ly url redirection service on NYC.gov to encourage sharing	◼		
Launch official Facebook presence to engage New Yorkers and customize experience	◼		
Launch @NYCgov, a central Twitter account and one-stop shop of crucial news and services	◼		
Launch a New York City Tumblr vertical, featuring content and commentary on City stories	◼		
Launch a Foursquare badge that encourages use of New York City's free public places	◼		
Integrate crowdsourcing tools for emergency situations	◼		
Introduce digital Citizen Toolkits for engaging with New York City government online		◼	
Introduce SMART, a team of the City's social media leaders	◼		
Launch ongoing listening sessions across the five boroughs to encourage input	◼		
Relaunch NYC.gov to make the City's website more usable, accessible and intuitive		◼	
5. INDUSTRY			
Expand workforce development programs to support diversity in the digital sector		◼	
Support technology startup infrastructure needs	◼		
Support small businesses through streamlined online resources and digital training*		◼	
Continue to recruit more engineering talent and teams to New York City	◼		
Promote and celebrate NYC's digital sector through events and awards	◼		
Pursue a new .NYC top-level domain	◼		

New additions to the City of New York's Digital Roadmap

The Digital Roadmap

Year in Review

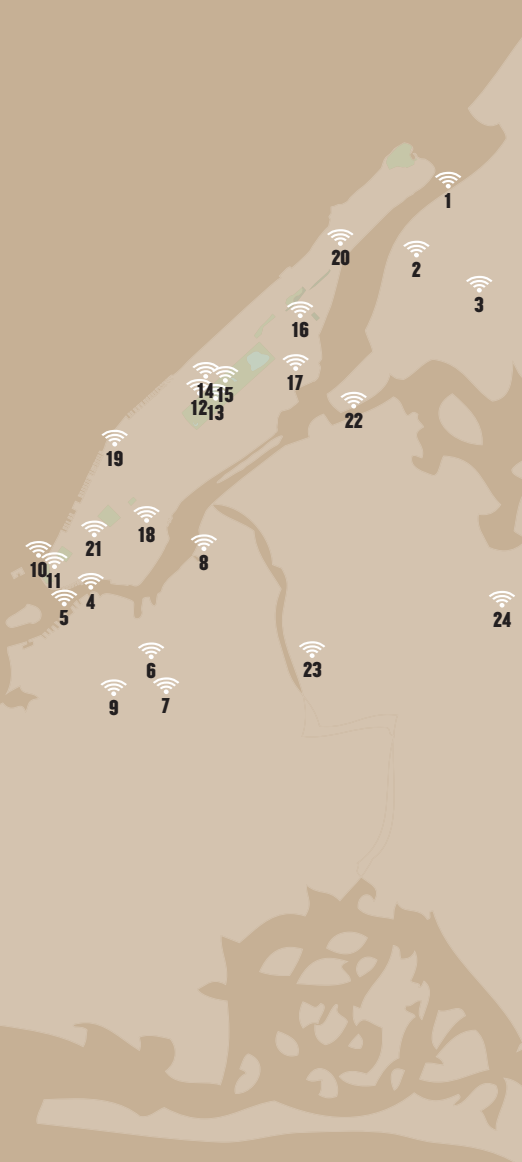PRIORITIES FOR ACHIEVING NEW YORK CITY'S DIGITAL POTENTIAL

INDUSTRY
A vibrant digital sector

ENGAGEMENT
A user-centric experience

EDUCATION
Investing in the future

ACCESS
Internet connectivity for all

OPEN GOVERNMENT
Innovation and transparency

Access:

Connecting All New Yorkers

26

Parks served by
AT&T WiFi

1
20
2
3
16
17
22
14 15
12 13
19
21
18
10 11
8
5 4
24
6
23
9 7
25
26

61

NUMBER OF CENTERS NYC
CONNECTED COMMUNITIES
GRANTS HAVE ALLOWED
TO BE OPENED OR UPDATED

Verizon FiOS will be available to **79%** of residential house-holds by the end of 2012, **93%** by the end of 2013, and **100%** by the end of 2014.

NYC CONNECTED LEARNING GRANTS HAVE SERVED **72** SCHOOLS AND OVER **16,000** STUDENTS.

$6,000,000
+ $4,000,000

Time Warner Cable's and Cablevision's
respective commitments to install
Wi-Fi hotspots in City parks by
September 2013

Universal access to the internet is the foundation of a truly connected city and an essential part of New York's digital roadmap. With a focus on bridging the digital divide to serve all New Yorkers, Mayor Bloomberg is committed to expanding the reach of high-speed internet across the five boroughs. Over the past year, the City of New York has created more Wi-Fi hotspots in public spaces; upgraded technology infrastructure in schools, libraries and community centers; increased high-speed broadband adoption and provided more vendor options to residences and businesses.

Introducing Wi-Fi in More Public Spaces

WI-FI IN CITY PARKS

To enable New Yorkers to stay more connected in more places, the City continues to work with private sector partners to bring Wi-Fi to more public places at no cost to taxpayers.

In June 2011, Mayor Bloomberg and AT&T CEO Randall Stephenson announced a public-private partnership that would bring unlimited free public Wi-Fi to 20 City parks across the five boroughs. When the $5 million project is complete, New Yorkers will be able to choose from Wi-Fi hotspots at 26 locations in 20 City parks.

> Wiley Cerilli @wileycerilli
> **"@nycgov @NYCParks @att So excited for free wifi in Fort Greene park. Thank you!"**
> 5:33 PM - 16 Dec 11

In addition, the City will provide Wi-Fi access in at least 32 additional parks and public spaces as part of a $10 million commitment by Time Warner Cable and Cablevision, included in the City's cable franchise agreements. Access is free for up to 30 minutes per month, $.99 per day thereafter and free at all times to Time Warner Cable and Cablevision broadband subscribers. The Wi-Fi installations are underway, and the City expects to finish over 30 installations in all by the end of the year. In addition, dozens of privately operated public parks have entered into independent agreements. For a complete listing of current Wi-Fi access in City parks, visit *nycgovparks.org/highlights/places-to-go/wi-fi.*

CELL SERVICE IN SUBWAYS

In the summer of 2011, the MTA launched a pilot program with Transit Wireless to equip subway stations along the 14th Street corridor with 3G connectivity for cell phones and Wi-Fi. From June 25 through September 7, 2012, Google Offers sponsored free Wi-Fi connectivity for subway riders in six subway stations in Manhattan's Chelsea neighborhood.

With a franchise from the Department of Information Technology & Telecommunications (DoITT), 30 more stations will have 3G connectivity by the end of 2012, mostly in the Midtown West area. Currently, AT&T and T-Mobile are participating in the program, and Transit Wireless is negotiating with other carriers to expand service and is partnering with Boingo for Wi-Fi installations in stations.

Free Community Technology Centers

Police Athletic League –
Harlem Center
441 Manhattan Avenue
Manhattan

Sunnyside Community Center
43-31 39th Street
Queens

Jewish Community Center
of Staten Island
230 Broad Street
Staten Island

James Weldon Johnson
Community Center
1833 Lexington Avenue
Manhattan

Wireless services ultimately will be available to 1.6 billion annual riders at more than 270 underground stations throughout Manhattan, Brooklyn, the Bronx and Queens. The subway system would become New York City's largest Wi-Fi hotzone and each underground station will serve as a digital oasis where riders can find reliable, easy-to-use Internet access.

Bridging the Digital Divide and Increasing Broadband Adoption

BTOP AND NYC CONNECTED LEARNING INITIATIVES

With its mission to expand technology accessibility, the federally funded Broadband Technology Opportunities Program (BTOP) provides resources to establish or upgrade computer facilities across U.S. communities. The City's Department of Information Technology & Telecommunications secured $42 million in BTOP funding, more than any other state or municipality, to fund three programs: NYC Connected Learning, NYC Connected Communities and NYC Connected Foundations. To learn more about these programs, visit *http://www2.ntia.doc.gov/grantees/NYCDeptITT*.

Top left: NYC Connected Foundations. Image provided by DoITT. Top right: ©2012 Kenji Mori. #LoveNYC contest finalist.

NYC Connected Learning

The largest of the federally funded BTOP initiatives in New York City, NYC Connected Learning will serve 18,000 low-income sixth graders and their immediate families, ultimately benefiting 40,000 New Yorkers who will receive free computers, discounted broadband service and digital literacy training. As part of this program's comprehensive approach, students will participate in a school curriculum that encourages the educational use of technology. To date, this program, funded by $22 million in federal grants, has served 72 schools and more than 16,000 students over the course of nearly two academic years.

NYC Connected Communities

In addition, the City has allocated $14 million of BTOP funding to NYC Connected Communities, a program that expands the scope and capacity of public technology centers in high poverty areas through investments in libraries, public housing computer labs, senior centers and community centers. These efforts provide digital literacy training, employment services, community outreach and other critical resources and will serve 40,000 new users each week with 1,000 additional work stations. Already, 61 centers have opened or benefited from upgrades of new or improved connectivity, hardware, software, training programs or outreach efforts.

NYC Connected Foundations

Finally, the City will serve at-risk students at 43 public high schools with free computers, access to discounted broadband service and comprehensive digital literacy training via "Connected Foundations," a credited course that aims to facilitate long-term adoption of broadband and support a successful transition out of secondary school. Through this program, 36 locations and 506 students have been served to date, over nearly one academic year.

Community Technology Centers

As part of its franchise contract renewal with the City of New York announced last summer, Time Warner Cable will create a total of 40 Community Technology Centers, in partnership with local non-profit organizations, to provide free broadband access in low-income communities in its service footprint. These facilities are in addition to the approximately 100 public computing centers being enhanced through NYC Connected Communities.

The first four Community Technology Centers opened in 2011, with another four to open by the end of 2012.

Supporting More Broadband Vendor Choices for New Yorkers

VERIZON FIOS

To provide New Yorkers with more cable television broadband options, the City has partnered with Verizon to expand fiber optic internet service (FiOS) throughout the five boroughs. FiOS ensures greater competition among internet providers and gives New Yorkers more choices when it comes to picking a provider, encouraging greater capacity and lower rates. Today, approximately two-thirds of New York City households have access to FiOS (with access for at least 60% of homes in all boroughs), and the franchise agreement requires FiOS service to be available to 79% of residential households by the end of 2012, 93% by the end of 2013, and 100% by the end of 2014.
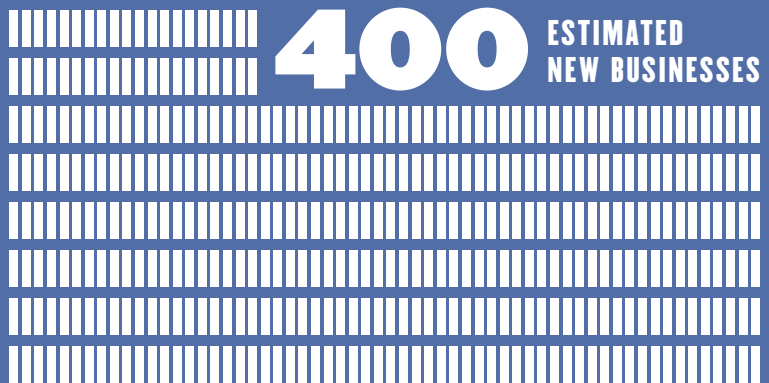
Education:

Investing in the Future

Impact of New York City's engineering school initiative, Applied Sciences NYC

MORE THAN

$2B

IN PRIVATE CAPITAL
INVESTMENT ON THE SITE

400 ESTIMATED
NEW BUSINESSES

NEARLY
22,000
CONSTRUCTION **JOBS**

2,200,000 SQUARE FEET OF NEW DEVELOPMENT

8:1 APPLICANTS PER SEAT AT ACADEMY
FOR SOFTWARE ENGINEERING

Building on a strong foundation of broadband access, education is key to the City's innovation potential, and ensures that New Yorkers are able to successfully leverage technology. Through game-changing City investments in science, technology, engineering and mathematics education, New Yorkers will benefit from schools and programs that equip them to learn and innovate in the technology ecosystem.

Milestones that took place over the past year include: the historic announcement of the Cornell-Technion Innovation Institute on Roosevelt Island, the Academy for Software Engineering and the new NYU/NYU-Poly Center for Urban Science and Progress. The developments underscore Mayor Bloomberg's commitments to education and investment in a vibrant, skilled workforce that meets the demands of a growing technology industry.

Applied Sciences NYC:
World-Class Engineering in NYC

Introduced in 2010, Applied Sciences NYC is the City's initiative to build and expand world-class applied sciences and engineering campuses in the five boroughs. Led by Deputy Mayor Robert K. Steel and New York City Economic Development Corporation (NYCEDC) President Seth Pinsky, the program aims to strengthen New York City's workforce and economy through the significant growth in the applied sciences sector.

The program was inspired by the input of hundreds of local entrepreneurs, academics and community organizations. Asked to identify groundbreaking but attainable steps that the City could take to spark economic development, a consistent theme emerged: the demand for top engineering talent.

In early 2011, the City formally launched Applied Sciences NYC, welcoming leading global institutions to submit proposals for a new or expanded applied sciences and engineering campus in New York City. To support institutional participation, the City offered to provide municipally owned land, a seed investment of City capital and the administrative support necessary to realize the monumental program. The results of NYCEDC's Request for Expressions of Interest surpassed expectations: the City received *18 proposals from 27 outstanding institutions* across six states and eight countries—a testament to the enormous potential of Applied Sciences NYC.

Above: Rendering of planned Cornell-Technion Innovation Institute campus on Roosevelt Island.

In the summer of 2011, the City released the formal Request for Proposals, and Mayor Bloomberg announced the two partnerships resulting from the Applied Sciences NYC initiative: the Cornell-Technion Innovation Institute on Roosevelt Island and the Center for Urban Science and Progress (CUSP) in Downtown Brooklyn, a consortium led by NYU and NYU-Poly. Read more about the City's game-changing plans with Cornell University, the Technion-Israel Institute of Technology, NYU and NYU-Poly in the section *Next Steps for New York City*.

iZone

The Innovation Zone (iZone), a Department of Education program that supports a community of innovative New York City schools committed to personalizing learning, has grown significantly over the past year, expanding from 81 schools across all five boroughs to nearly 250 schools. By meeting the needs, motivations and strengths of each child, students are better prepared for success in grades K-12, college and career. Across the iZone, schools achieve personalization in a variety of ways based on those ideas, technology and tools that work best for their school community. In iZone schools:

- Real-time information is used to support each student, evaluating their level at the start of a lesson and charting their progress, so teachers may provide extra help or new challenging opportunities as needed.

- Teachers are equipped to provide collaborative learning and cultural exchange opportunities, and students are exposed to the real-world through guest lectures, internships and externships.

- Digital resources supplement a teacher's instruction, allowing students to take interesting online courses (under the guidance and support of a classroom teacher) that meet their needs, such as college level, credit recovery, elective or language courses.

- Teachers have more time to plan lessons alone and with fellow teachers to collectively address each student's needs and create engaging curricula that will adhere to college and career readiness standards.

Image courtesy of S.O.M.

The City of New York

The iZone started with 81 schools across all five boroughs of New York City in school year 2010-2011. Over two years, that number has almost tripled to nearly 250 schools. By 2014, the iZone community will grow to 400 schools. You can learn more about iZone at *schools.nyc.gov/community/innovation/izone/default.htm.*

MOUSE

Mouse is an innovative youth development organization that empowers underserved students to provide technology support and leadership in their schools, supporting their technology careers in more than 300 locations in the United States, including New York City, Chicago, California and Texas.

Mouse Squads improve a school's ability to use technology to enhance learning, while also providing a powerful, hands-on 21st century learning experience for students. In partnership with the New York City Department of Education, Mouse has established Mouse Squads in all five boroughs across the city. Starting with a pilot of three NYC schools in 2000, this program has grown to involve thousands of New York City public school students providing a valued tech support role in their schools.

Mouse Corps is a youth-centered design and technology program which develops emerging leadership, professional and technical skills of select high school students from Mouse Squads Citywide. After participating in several professionalism activities and building digital portfolios, students are placed in after-school "shadowships" and summer internships at partnering organizations including the City's Department of Information Technology & Telecommunications (DoITT). *mouse.org/resources/partners*

Mouse is also one of several DoITT partners participating in the federally funded NYC Connected Learning initiative to promote sustainable broadband adoption, as described above. The Mouse Squads program has significantly grown its presence in New York City as part of the Connected Learning Program, providing new opportunities for hundreds of middle school students to become technology leaders in their schools and communities.

Open Government:

Enabling Innovation and Transparency

900
350
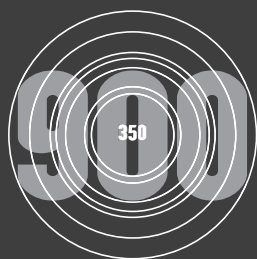
Data sets available on the NYC Open Data platform have increased from just over 350 to nearly 900.

15 **HACKATHONS that featured the City of New York API's**

200 Participants in the City of New York's first two hackathons

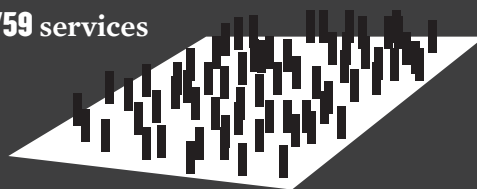**5K** Approximate person-hours dedicated to solving urban challenges in City of New York hackathons

96 submissions to NYC BigApps 3.0, **600 ideas submitted** to NYC BigApps Ideas Challenge

311 INQUIRY API LISTS:
6,612 different facilities
1,759 services

The City of New York is committed to constant innovation and transparency, and an Open Government approach enables the City to collaborate with developers to better serve New Yorkers through technology. Open Government systems apply the successful models of technology companies such as Facebook or Foursquare, whose open Application Programming Interfaces (APIs) enable them to exponentially scale services and compound the "network effects" of their platform.

In the same way, the City of New York aims to serve as a platform for technology innovation by opening its data resources to spark ideas and tools that serve New Yorkers. Over the past year, led by the Department of Information Technology & Telecommunications (DoITT), the City of New York's Open Government achievements have been unprecedented, including landmark open data legislation; the release of hundreds of new, real-time data sets and the biggest year yet for NYC BigApps, the City's developer contest co-hosted by the New York City Economic Development Corporation (NYEDC).

Develop NYC Open Data, an Open Government Framework Featuring APIs for City Data

In the fall of 2011, in tandem with NYC BigApps, DoITT unveiled the new NYC Open Data platform (*nyc.gov/data*) now running on the Socrata platform. The site features a series of new tools to improve usability, including:

- Data sets in a variety of machine-readable formats and as application programming interfaces (APIs) for direct connectivity to data feeds
- Enhanced browsing and search capabilities allowing users to search by full dataset or by datum within datasets
- Visualization tools such as maps, charts and graphs
- Discussion forums for user feedback and suggestions
- Regular refreshes of data sets, with metadata informing users how often particular data sets will be updated
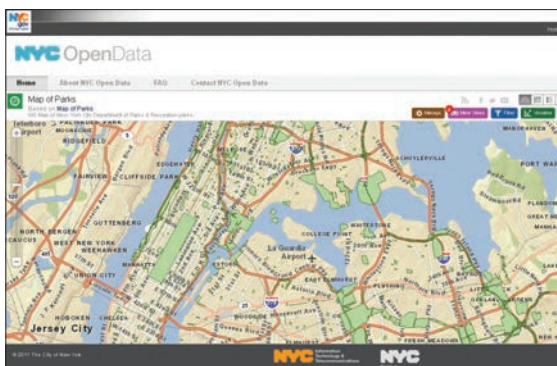
Users can find datasets, including GIS maps of public City parks, on the NYC Open Data platform.

Reflecting Mayor Bloomberg's commitment to transparency and innovation and the efforts by dozens of agencies through NYC Open Data, nearly 900 data sets are now available via APIs to developers and data scientists, enabling real-time integration with apps and up-to-the-minute analysis. The repository contains a variety of datasets, including restaurant inspection ratings, 311 requests and school test scores. In addition, users can view maps or download shape-files of a range of location-linked information, from subway entrances to Wi-Fi hotspots. Charts and graphs visually showcase data from birth rates to energy consumption.

NYC LOCAL LAW 11 OF 2012: A NATIONAL MILESTONE IN OPEN DATA LEGISLATION

A significant milestone in New York City's open government strategy was the passage of NYC Local Law 11, the most ambitious and comprehensive open data legislation in the country. The law outlines a three-step plan for opening all of the City's data by 2018:

1. To begin, DoITT will post a technical standards manual online, providing City agencies with a playbook for gathering, structuring and automating their public data.
2. Following the manual publication, each City agency will convert all public data from "locked" (e.g. PDF) to open formats within one year. Open formats will enable computer programmers to build data-powered apps and allow data scientists to analyze City resources.
3. Finally, DoITT will work with each agency to develop and publish a compliance plan that includes a description of each agency's public data. These steps form the basis for the City's strategy to open all public data by the end of 2018.

311 API

Another major achievement in the City's open government roadmap was the introduction of the **311 Inquiry API** in conjunction with the Reinvent NYC.gov Hackathon, enabling participants to develop functional, realistic prototypes. This "Read" API provides developers with access to the same helpful information that 311 call center representatives use to answer more than 22 million calls annually. Currently, the 311 Inquiry API lists 6,612 different facilities and 1,759 services offered by the City. While the API is currently read-only and thus cannot process service request transactions, more than 70% of calls to 311 are resolved by providing information alone, showing that the 311 Inquiry API has the ability to handle a majority of customer concerns.

Mayor Bloomberg at NYC BigApps 3.0

NYC BIGAPPS

New data sets, prizes and resources helped attract a record-setting 96 app submissions in the City's third annual NYC BigApps contest, a software competition developed by NYCEDC and DoITT that challenges developers to create online and mobile applications using NYC Open Data. NYC BigApps continued its strategic partnership with BMW iVentures and ChallengePost and secured new partnerships with over 20 leading NYC startups that provided APIs for the new "NYC Mashup." This year, Tech-Stars and NY Tech Meetup provided prizing for the winners. In addition, NYC BigApps hosted its first hackathon, a weekend-long event generating 10 demos eligible for $2500 in additional prizes; a Developer Day for teams to meet and work on their apps; and an Ideas Challenge, which crowd-sourced application ideas from the public. NYC Big Apps and NYC Open Data together demonstrate the power Open Government initiatives have in increasing transparency and accountability and sparking innovation and cultivating entrepreneurship.

Launch a Central Platform for Cultivating Feedback from the Developer Community

To engage the New York City developer community in the future of open data platform and policies, DoITT has partnered with BigApps 3.0 Grand Prize winner **NYC Facets** to provide a public wiki for drafting standards and encouraging feedback: *nyc.gov/datastandards.* The newly launched platform has garnered accolades and active involvement from good government groups and technologists alike, with Next American City describing it as a "double leap into the future of open government." *americancity. org/daily/entry/tktk1*

Select NYC BigApps Winners

Appetition

Best Parking

Bookzee

CultureNOW

Embark NYC

NYC Way (by MyCityWay)

NextStop

Roadify

Sportaneous

Trees Near You

UpNext 3D NYC

WayFinder NYC

Weeels

Work+

Introduce Visualization Tools that Make Data More Accessible to the Public

In addition to providing developers with powerful resources, the City of New York is committed to ensuring that nontechnical New Yorkers can take advantage of open data advances. Leveraging the enhanced data visualizations tools available on the new NYC Open Data platform as well as external applications, the NYC Open Data Tumblr (*nycopendata.tumblr.com/*) showcases thought-provoking NYC Open Data visualizations of information that matters most to New Yorkers. While the NYC Open Data repository on Socrata is geared to developers, the Tumblr allows researchers, academics, journalists and other non-technical New Yorkers to explore featured datasets in an accessible format while further encouraging public submissions.

DoITT hosted NYC Open Data Policy Hack Day at Pivotal Labs

Launch App Wishlists to Support a Needs-Based Ecosystem of Innovation

In 2011, New York City challenged the public to share ideas for apps for residents, businesses and visitors. Participants submitted over 600 ideas to the **NYC BigApps Ideas Challenge** and cast more than 1,600 votes of support. The 25 application ideas with the most votes were named as finalists, and each was awarded $100. The 25 finalists were then evaluated by a panel of judges, who selected the 10 best overall ideas, each of which received an additional $250 for their winning idea.

Image courtesy of DoITT.

Host New York City's First Hackathon: Reinvent NYC.gov

In July 2011, the City partnered with General Assembly to host its first official hackathon, welcoming over 100 participants to collaboratively build prototypes that will guide the future development of NYC.gov, the public's primary digital gateway to City government. The event, titled Reinvent NYC.gov, was supported by access to leading technology APIs and City data, and participants generated 14 proposals for the upcoming redesign of NYC.gov. A panel of judges from the public and private sectors, including Meetup's Chief Executive Officer Scott Heiferman, General Assembly's Mimi Chun and TechStars' David Tisch, selected five winners based on innovation, usability, social integration, location technology and ingenuity.

The goal of the Reinvent NYC.gov hackathon was to bridge government and technology sectors, kick off the NYC.gov redesign process with transparency and bring fresh eyes and innovation to the challenge of updating the City's website. Winning proposals demonstrated innovative approaches to civic engagement and communication. The five themes consistently demonstrated were search, crowdsourced question & answer platforms, location-based customization, social media integration and gaming mechanics. Winners were invited to demonstrate their prototypes to Mayor Bloomberg during a breakfast at which the Mayor personally thanked the winners and discussed the future of NYC.gov.

The Reinvent NYC.gov Hackathon, one of the first of its kind in government, established an effective template for sparking innovation, accelerating development and encouraging greater civic collaboration. The formal redesign process for NYC.gov was initiated in January 2012, when the City released a Request for Proposals to identify a design and front-end development vendor. The results of the Reinvent NYC.gov Hackathon will help the City to work with the winning vendor to develop a functional, well-designed user experience of NYC.gov, which is expected to be completed in 2013.

In addition to the Reinvent NYC.gov Hackathon, DoITT has introduced the NYC Open Data Platform to thousands of developers through presentations at numerous events including hackathons hosted by Spotify, Cleanweb, NYC BigApps, Foursquare, General Assembly and HackNY.
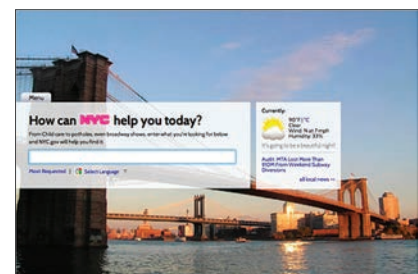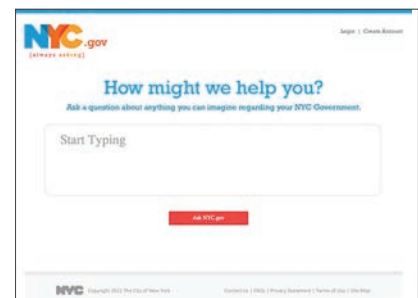
Top left: Winning teams celebrated their victory
Top to bottom: Best User Interface • Best Local • Most Innovative • Best Social • Judges' Pick

Reinvent Green

Inspired by the success of the City's first hackathon, Reinvent NYC.gov, the City announced in April 2012 its first sustainability hackathon: Reinvent Green, a joint initiative of NYC Digital and the Mayor's Office of Long-term Planning and Sustainability. Hosted at NYU-Poly in Downtown Brooklyn over the weekend of Saturday, June 30 and Sunday, July 1, 2012, the hackathon rallied and incentivized the City's best technology talent to create digital tools, web and mobile applications that encouraged a greener, greater New York City. To this end, a number of City agencies released new data sets around information on City-owned infrastructure, energy usage, public spaces data, as well as updated information on the City's sustainability indicators. The City partnered with two established Brooklyn technology institutions on this initiative–NYU-Poly and Brooklyn Beta, and was proud to team up once again with the talented technology community, as well as prominent API and technical partners, to collaboratively address the City's most important sustainability challenges.

Over one weekend, more than 100 developers and designers gathered to create digital tools and apps using the City's open data sets that focus on encouraging sustainability. A panel of judges evaluated 13 team projects and selected the five winning apps in the pre-determined categories.

BEST APP FOR CITY CROWDSOURCING: REBOUNTY

rebounty.com

ReBounty is an easy way to find and list curb alerts in an effort to reduce the amount of unwanted waste that is thrown out in urban areas every year.

Apo J. Bordin @Apopotamus
"@rachelsterne Show how much your neighborhood is recycling. When you recycle, 'check-in' and get points for the neighborhood #reinventgreen"
1:26 PM - 13 Jun 12

BEST APP FOR PARKS AND PUBLIC SPACES: FRESHFIXNYC

freshfixnyc.com

Enabling New Yorkers to have better and easier access to Farmers Markets.

BEST APP FOR RECYCLING/WASTE REDUCTION: GREENCAN

green-can.com

GreenCan will let users locate their nearest public recycling trash can, provide information for recycling organics and electronics and provide valuable feedback to NYC for future recycling can placement.

BEST APP FOR TRANSPORTATION: BIKE POOLING

bikepool.co

Car pooling for bikes. Find people who commute on the same path as you and start riding with them every morning and evening.

JUDGES' PICK: GREEN, GREENER, GREENEST!

greenerneighbor.com

Competition between each neighborhood as to who is the greenest. Shows what the neighborhood should do to beat the one above it in the league table.

After the winners were selected, fans of the City of New York's Facebook page voted for their favorite app among the five—choosing the winner of the sixth prize category—the Popular Choice award. At the end, the Popular Choice Award went to FreshFixNYC.com.

The winning team in the Best App for Parks and Public Spaces category created FreshFixNYC.

MapBox, a technology partner at the Reinvent Green hackathon, presented data visualizations like the one shown here of one million building footprints of the City.

Below, clockwise: Best App for Transportation • Best App for Parks and Public Spaces • Best App for Recycling/Waste Reduction • Best App for City Crowdsourcing • Judges' Pick • Developer and designer participants worked a combined 1,000 hours over the weekend.
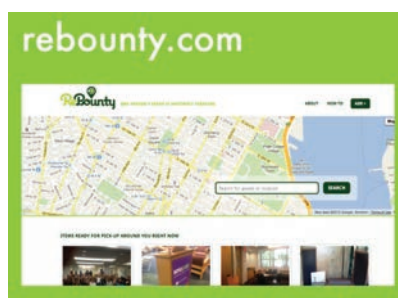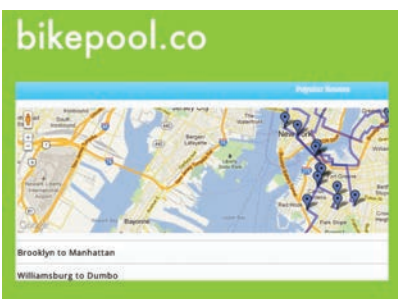
MapBox image courtesy of MapBox.com

Engagement:

New Ways to Connect with NYC Government

THE CITY OF NEW YORK REACHES **5,483,640** INDIVIDUALS DIGITALLY EACH MONTH THROUGH:

280 SOCIAL MEDIA CHANNELS

2,750 UPDATES MONTHLY

10 SMART PHONE APPS

44 NEWSLETTERS

3 SMS PROGRAMS

& nyc.gov

7,286 YouTube subscribers

32,648 LinkedIn group members

52,262 Tumblr followers

54,100 SMS Subscribers

63,874 Foursquare followers

77,335 Smartphone App Downloads

469,343 Facebook likes

488,924 Twitter followers

1,137,868 Newsletter subscribers

3,100,100 NYC.gov unique visitors

The City of New York
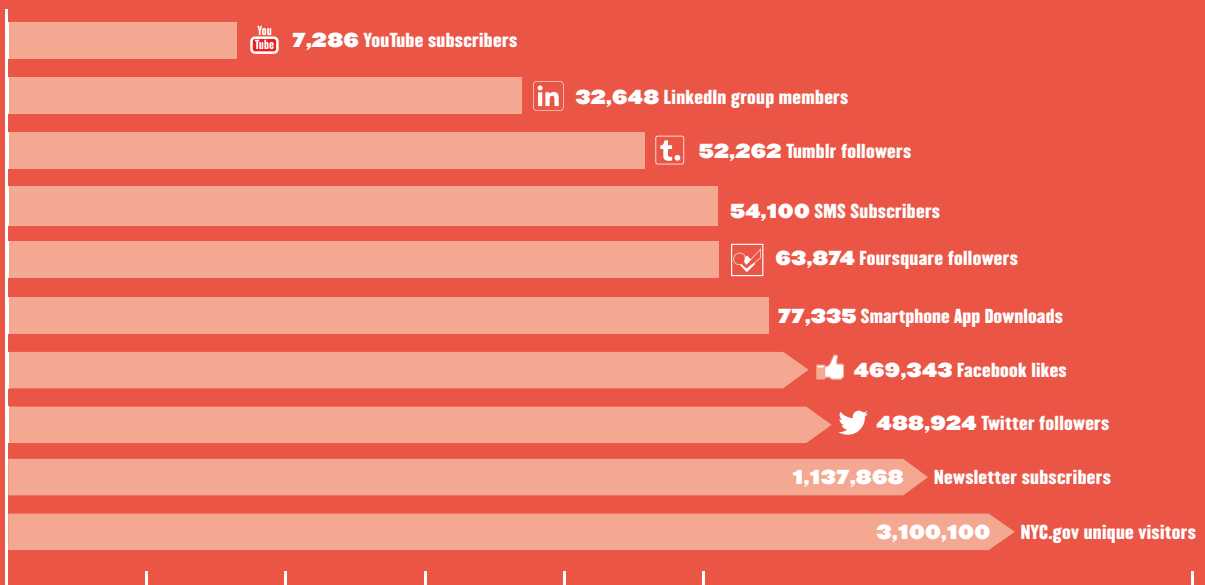
NYC Gov's Facebook reaches 221,000 fans weekly and has the potential to reach 7.4 million Facebook users when content is shared by fans

Like · Comment

NYC Gov's Foursquare account has over **26,220** followers with **21,697** Big Apple Badge downloads

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NYC GOV'S tumblr HAS MORE THAN 14,000 FOLLOWERS

Twitter followers mention @NYCGov in over **1,000** TWEETS MONTHLY

#loveNYC contest
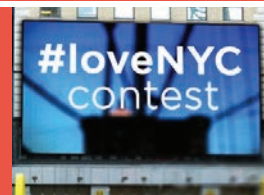
2,000 photos submitted to the City's first Facebook photo contest

Numbers reported as of August 2012

The ways through which New Yorkers communicate, find information and connect with friends and family are changing rapidly as a result of the explosive growth of social media. In order to serve and inform New Yorkers in a way that is accessible, convenient and rewarding, the City of New York is committed to enhancing its digital media presence, from NYC.gov to social media. Fueled by enthusiastic agency engagement, the City's social media reach has expanded to over 2.4 million followers across more than 280 channels, including existing channels such as Facebook, Twitter and iOS apps and new adoptions of Foursquare, Instagram, Pinterest, Soundcloud, Tumblr and the Android mobile operating system.

Mayor Bloomberg accepting the "Foursquare Mayor of the Year" Award at the Shorty Awards.

The public success of the City's digital media efforts has been recognized over the past year by several awards and studies, including New York City's first time ranking as No. 1 for civic engagement online by the University of Chicago at Illinois and O'Reilly Media's GovFresh City of the Year award[1]. The Webby Awards presented Mayor Bloomberg with a Webby Award for Lifetime Achievement. And at this year's Shorty Awards, the Mayor was honored by Dennis Crowley with the "Foursquare Mayor of the Year" Award.

Other City agencies won awards in social media including the FDNY, which won a Shorty Award for the #LifeSavingHero category. The Department of Transportation's Daily Pothole Tumblr was named one of "The 100 Best Tumblrs of All Time" by Complex Magazine while NYC & Company received a Webby Award in the tourism website category.

1. http://www.uic.edu/cuppa/ipce/interior/research%20partnership.html

Official Apps from the City of New York

ABCEats*

MiNY Discount Vendors

NYC 311*

NYC City Hall

NYC Condom*

NYC Media*

NYCrecycles*

NYC Stuff Exchange*

WaterontheGo.NYC*

You the Man*

New, Updated, or Expanded to Android OS

Above: @311nyc on Twitter

Lara @LaraIsNatasha
"I used an NYC 311 related app a few weeks ago and am impressed at the entire experience. Great work- love how digital NYC is!"
9:12 AM 30 - Apr - 12

Launch an Official New York City Apps Hub

Shortly after the *Digital Roadmap* was released in 2011, the City launched its first App Hub, featuring the City's ten official apps and selected winners from NYC BigApps. Since the introduction of the Digital Roadmap, the City of New York has launched or updated five new apps, including ABCEats, which enables New Yorkers to instantly look up the health inspection grades of restaurants nearby; NYC Stuff Exchange, which helps users donate, buy or sell gently used goods; and NYC Media, which provides on-the-go, location-aware access to short videos about interesting restaurants and cultural venues across the five boroughs. Visit *nyc.gov/html/digital/html/apps/apps. shtml* to see the available apps, which are all free of charge.

Expand 311 Online through Smartphone Apps, Twitter and Live Chat

Today, users can connect with 311 to access New York City government services and information through telephone, 311 Online, a smartphone app, text messaging, Skype or Twitter, where @311NYC has over 30,000 followers. And to make government services more accessible to non-English speakers, 311Online is available in over 50 languages.

With the 311 iPhone app, users can report problems, tag locations using GPS, take a photo and access frequently asked questions regarding City services. The City also introduced 311 via SMS on mobile phones, allowing New Yorkers to simply text service requests to 311692.

COMING NEXT FROM 311:

In 2012, 311 will continue to expand 311 Online through the addition of Frequently Asked Questions and creating a new interaction experience by incorporating customer-generated questions and 311-provided answers as part of the 311 Online offering.

- 311 will also increase customer self-service options for submitting service requests via 311 Online by integrating with existing systems and leveraging the existing 311 Inquiry API as source information for other self-service options.

- 311 will scale its one-to-many approach by expanding customer channels, including moving the text program from pilot to production, re-launching a robust mobile app for iPhone and Android users and implementing a trial program for an online chat feature.

- 311 will expand its social media presence by re-launching the NYC311 Facebook page, enhancing its Twitter presence and exploring an NYC311 presence in other sites based on customer needs and interests.

Implement a Custom Bit.ly URL for NYC.gov to Encourage Sharing

The City has partnered with Bit.ly to provide a custom link-shortener that shortens any NYC.gov webpage link to begin with *on.nyc.gov*. With the NYC Gov Bit.ly shortlink, users know that anytime they see a custom on.nyc.gov link, it will direct them to an official New York City government webpage. To date, thousands of on.nyc.gov links have been generated, providing valuable insights to agencies on the most widely shared and visited content available to the public.

NYC Gov Streamlines Social

Independent research with New York City's digital partners reveals that New York City engages in social media more than any other region in the country. In February 2012, Mayor Bloomberg launched five central digital media channels for City information as part of Social Media Week. In response, the NYC Gov social media channels—on Twitter, Facebook, Tumblr, Foursquare and YouTube—allow the City to effectively engage residents by providing instant access to relevant and useful information about life in the City. NYC Digital maintains each of the pages, as outlined in the first *Digital Roadmap*.

The Citywide accounts provide a one-stop shop for New Yorkers to stay tuned into City news and services, and help them discover interesting information curated from across the City's agency-specific channels.

Launch Official Facebook Presence to Engage New Yorkers and Customize Experience

THE CITY OF NEW YORK ON FACEBOOK

NYC Gov's Facebook page, which has over 30,000 likes, enables New Yorkers to get all the information they need in one place and share it with friends. NYC Gov's Facebook includes videos, new City initiatives, interactive features such as polls and contests and a Citywide events calendar, allowing residents to engage with the City of New York and other New Yorkers on NYC Gov's Facebook wall. Visit *facebook.com/nycgov*.

#LOVENYC

To kick off the new Facebook presence, the City hosted its inaugural Facebook photo contest #loveNYC in March of 2012, encouraging New Yorkers to submit photos showing why they love their city. Fans submitted nearly 2,000 photos, from snapshots of local neighborhoods and parks to favorite NYC moments. A panel of digitally creative judges, which included Jen Bekman, founder of 20x200, and @Fashion Instagram photographer, Malachy Sherlock, picked the top 10 photos to post to Facebook for public voting. The winning photo was featured on the City's Facebook, Twitter and YouTube pages and displayed in Times Square, and the winning photographer was NYC's official Instagrammer for a day.

©2012 Milton Washington. #LoveNYC contest winner.

TOP ACCOUNTS

Reaching more than 2.3 million individuals through 280+ social media channels, the City of New York keeps New Yorkers informed on all topics, news and alerts related to life in the City, while celebrating their NYC stories. Here is a list of the City's top Facebook and Twitter accounts with the largest following as of August 2012:

"Like" the Top 10 Facebook Pages

1. NEW YORK CITY FIRE DEPARTMENT: 88,501

Stories and news from the New York City Fire Department

2. NYPD: 64,524

Latest news, information and crime prevention tips from the New York City Police Department.

3. NYC: THE OFFICIAL GUIDE: 47,306

Find tips on events, things to do and places to eat in the City.

4. EATING HEALTHY: 39,816

Where New Yorkers discuss healthy eating and active living.

5. CITY OF NEW YORK: 28,667

One-stop-shop for all the vital information on living in New York City.

6. NEW YORK CITY DEPARTMENT OF EDUCATION: 22,141

Stay informed on New York City public schools.

7. NYC CONDOM – GET SOME!: 18,940

Discuss safe sex.

8. NEW YORK CITY DEPARTMENT OF PARKS & RECREATION: 17,286

Find free events, activities and tips for public parks and spaces in the City.

9. NYC OFFICE OF EMERGENCY MANAGEMENT: 14,637

Plans for, responds to, and informs New Yorkers about emergencies in the City.

10. NYC MAYOR'S CUP: 12,484

A series of 12 sporting events that determines the Best in the City.

#FF the Top 10 Twitter Accounts

1. @NYCMAYORSOFFICE: 69,204

Updates straight from the Mayor's office.

2. @NYCGO: 61,188

The official guide to New York City.

3. @NOTIFYNYC: 41,398

Emergency notifications and alerts from the Office of Emergency Management.

4. @NYPDNEWS: 37,899

News from the New York City Police Department.

5. @FDNY: 32,535

Updates from the New York City Fire Deparment.

6. @311NYC: 30,807

New Yorkers' source for City government services.

7. @NYCGOV: 30,407

Official New York City government Twitter feed.

8. @NYCPARKS: 27,477

The latest on public parks, beaches and spaces.

9. @NYCSCHOOLS: 24,739

School information from the New York City Department of Education.

10. @NYC_DOT: 17,006

Posts updates and vital information for the City's transportation services and roads.

Left: Proclamation for Social Media Week; Right: @NYCgov on Twitter

Launch @NYCgov, a Central Twitter Account and One-stop Shop of Crucial News and Services

Reaching over 31,000 followers, @nycgov captures the pulse of New York City government with tweets about news and services that affect their lives. Residents can find out if alternate side parking rules are in effect and whether schools are in session, read about free events in their neighborhood, receive emergency notifications, watch live video broadcasts from Mayor Bloomberg and learn about new City programs as soon as they launch. *twitter.com/nycgov*.

Launch a New York City Tumblr Blog Featuring City Stories

NYC Gov's Tumblr is a microblog with over 13,200 followers that publishes frequent updates on the topics that matter most to New Yorkers, like schools, jobs, getting around the City and more. The NYC Gov Tumblr features up-to-the-minute announcements, exclusive photos from City events and Mayoral visits, as well as quick videos that answer frequently asked questions on City services. The Tumblr also regularly "reblogs," or features, photos by Tumblr users showing life in the City through the eyes of New Yorkers. Users can browse posts by major themes, share them by reblogging, and even submit a question to Mayor Bloomberg with the #AskMike feature. The innovative design theme is unique to the City of New York and features a dynamic city skyline graphic that reflects changes in the color of the sky based on real-time feeds from the NSKYC project managed by Mike Bodge. *nycgov.tumblr.com*

Launch a Foursquare Badge that Encourages Use of New York City's Free Public Places

The NYC Gov Four-square badge

NYC Gov's Foursquare presence includes a custom Big Apple Badge, lists and tips for a range of public City spaces across the five boroughs. Whether New Yorkers are riding the Staten Island Ferry or walking in Central Park and interested in finding out about more to do in the area, NYC Gov's Foursquare account, which has nearly 25,000 followers, brings them fun, helpful facts each time they check in to City places—all while they earn a Foursquare badge. *foursquare.com/nycgov*.

Clockwise from top left: NYC Gov on Tumblr • At night, the NYC Gov Tumblr background changes color • NYC Gov Foursqure Tips and Lists •@NYCgov on Twitter engages New Yorkers with vital City information on a daily basis • Custom on.nyc.gov bitly stats for the month of May 2012 • City of New York Facebook fans voted for their favorite app in the Reinvent Green Popular Choice award • City of New York Fans were encouraged to submit photos on Facebook showing why they love New York City in the #LoveNYC photo contest • City of New York on Facebook • Center: NYC Gov Foursqure badge

INTEGRATE CROWDSOURCING TOOLS FOR EMERGENCY SITUATIONS

In August 2011, when Hurricane Irene threatened to batter the East Coast and the City issued an evacuation order for certain areas, New Yorkers needed to know if they were at risk of flooding or other damage. To keep the public informed and monitor the situation digitally, the City leveraged a range of social media and crowdsourcing tools online. The results demonstrated the potential of these technologies to assist emergency preparedness and response efforts.

The City published evacuation maps and updates on Facebook, and at several press conferences, Mayor Bloomberg encouraged New Yorkers to follow updates on @nycmayorsoffice. Twitter also partnered with the City to support communication, featuring tweets from @nycmayorsoffice prominently to users who self-identified as based in the boroughs. Over the course of that weekend in late August, the City's Twitter follower count soared from 24,000 to over 54,000, and over 400,000 tweets, resulting in more than two million impressions that included the @nycmayorsoffice handle.

On the video front, all nine press conferences were streamed live online to web, iPhone and iPad devices. The videos were added to YouTube and garnered more than 60,000 views during the weekend.

In open data, NYC Digital reached out via Meetup to the data analysis community in the early days of Hurricane Irene's trajectory, encouraging expert designers and developers to take advantage of the geographic shape-files corresponding to hurricane evacuation zones, available free of charge on the NYC Open Data platform.

Several major media outlets ultimately used the NYC Open Data platform to launch their own versions of the hurricane evacuation zone maps, helping crucial, official City data reach an estimated 1500% more New Yorkers. This development illustrates the potential for open data to help the City of New York scale its reach and serve individuals at little to no cost.

Public response to the social media engagement was overwhelmingly positive, with New Yorkers stating —on Twitter—that they felt secure, informed and connected to New York City government throughout the incident.

*The NYC Severe Weather site featured images collected based on user-submitted reports.*

Chelsea Orcutt @chelseaorcutt
Very impressed w/ how @MikeBloomberg & @ NYCMayorsOffice are handling #HurricaneIrene, esp on social media. Appreciate the frequent updates. 9:00 PM - 27 Aug 11

Image courtesy of the Office of Emergency Management.

Seamus Campbell
@SeamusCampbell

"@NYCMayorsOffice Could you release the evacuation finder source code so others can embed the widget & reduce traffic on nyc.gov?"
9:50 AM - 26 Aug 11

Clockwise from top left: WNYC.org and NYTimes.com used the evacuation zone dataset from the NYC Open Data platform to create their own versions of the Hurricane Evacuation Map, reaching even more New Yorkers at the most critical time and with the most accurate information. • A tweet to @NYCMayorsOffice • Mayor Bloomberg's press conferences were uploaded to YouTube, garnering 60,000 views; and was shared on social media by YouTube as well. • The infographic shows that social media and digital communications played an integral role in the City's public communications during Hurricane Irene.
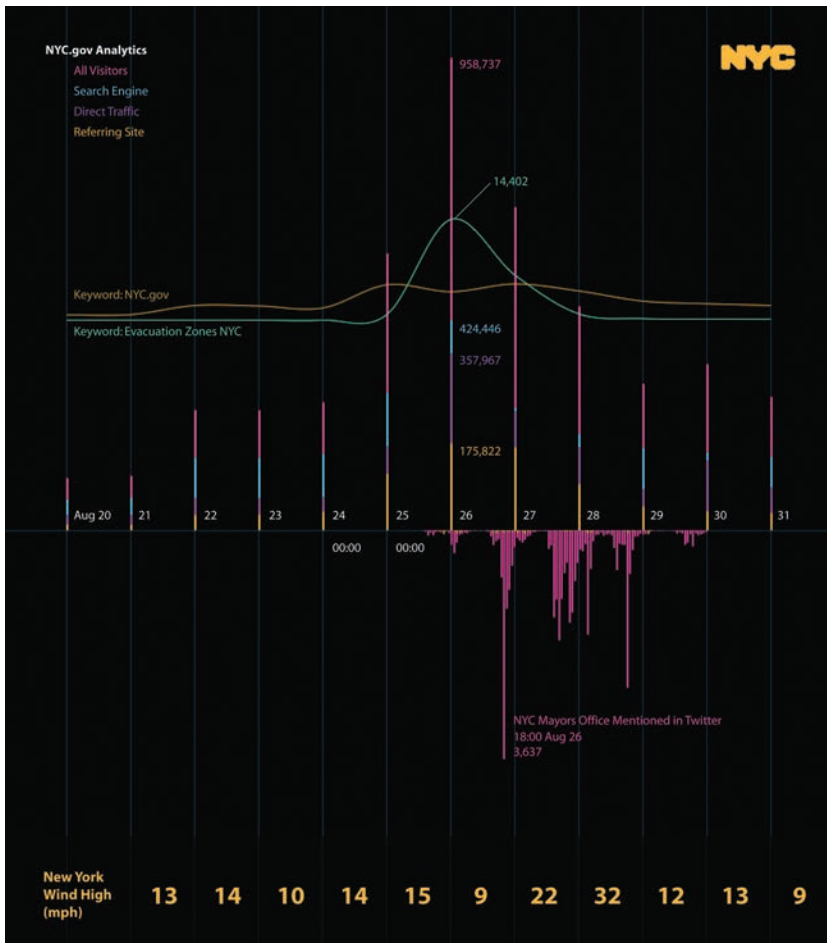
Introduce SMART, a Team of the City's Social Media Leaders

In June 2011, NYC Digital introduced SMART, the City of New York's Social Media Advisory and Research Taskforce. Members include leading social media managers across the City who help shape policy and identify new tools for adoption. SMART members meet monthly and participate in new product trials, evaluate emerging digital services, provide recommendations on social media guidelines and policies and advise the Mayor's Office.

Through SMART, the City has recommended a range of new social media platforms for agency use, including Bit.ly, Broadcastr, Foursquare, Instagram, SoundCloud and Tumblr. SMART has also been integral to the development of the NYC.gov redesign, Engage NYC, the #lovenyc photo contest and the .nyc TLD as well, offering input and feedback as all of these varied initiatives have progressed.

SMART Committee Members:

John LaDuca,
Department of Education

Tom Hughes,
Department of Parks and Recreation

Robin Lester Kenton,
Department of Transportation

Amanda Konstam,
Mayor's Office

Adam Kuban,
NYC & Company

Stephen Louis,
Law Department

Christopher Long,
Department of Information Technology & Telecommunications

Michael Flowers,
Office of Policy and Strategic Planning

Trista Sordillo,
New York City Economic Development Corporation

Jean Weinberg,
Department of Health and Mental Hygiene

Judith Graham Kane,
Office of Emergency Management

Margot Schloss,
Mayor's Office

Rachel Sterne,
NYC Digital

Ellis Whitman,
311

Katherine Winningham,
Law Department

Julie Wood,
Mayor's Office

ENGAGE NYC: SOCIAL MEDIA SUMMIT FOR CITY GOVERNMENT

Guided by SMART, the City hosted Engage NYC, its first annual social media summit, in September 2011. Held at the Paley Center for Media, the event welcomed over 100 people from across City government and featured presentations and strategic training on how to effectively use social media platforms to engage, inform and serve New Yorkers.

The morning kicked off with inspiring remarks by Deputy Mayor for Government Affairs and Communications Howard Wolfson and a surprise visit by Mayor Bloomberg, energizing the audience and conveying the importance of social media to the City's communications strategy.

Throughout the event, representatives from social media platforms including Bit.ly, Facebook, Foursquare, Tumblr and Twitter answered questions and presented best practices for leveraging their tools.

Image courtesy of Tumblr, YouTube, Department of Health and Department of Transportation.

Highlighted Digital Launches from 2011-2012

BIKE SHARE MAP

To help determine locations for the City's upcoming bike share program, the Department of Transportation partnered with local development firm OpenPlans to create a participatory website featuring a dynamic map that allows New Yorkers to pinpoint their desired bike share locations on a map of the five boroughs. So far, there have been over 9,900 submissions. To view the map, visit *nyc.gov/bikeshare/*.

NYC HEALTHY RECIPES TUMBLR

New Yorkers can share and learn how to prepare healthy recipes on the NYC Healthy Recipes Tumblr, a crowdsourced digital cookbook that has garnered over 100 recipes from the public and nonprofit organizations such as City Harvest. Featuring recipes for herb-roasted chicken with broccoli, yogurt-cucumber dipping sauce, leek soup and many other dishes, the Tumblr was launched by the Food Policy Coordinator to encourage healthy eating for all New Yorkers. *nycfoodrecipes.tumblr.com*

NYC QUITS SMOKING SOCIAL MEDIA CAMPAIGN

In March 2012, the New York City Department of Health and Mental Hygiene launched a digital campaign to support the Health Department's Nicotine Patch and Gum Annual Giveaway. As part of their goal to create conversations and engagement around the Giveaway program, the agency identified and reached out to digitally savvy influencers, including Jeff Meltz, Jill Hanner, Jennifer Lee and many others in the NYC area to share what "Quitting is..." means to them. As the influencers shared their storylines through creative PSAs on the NYC Quits Facebook Page and on their own social networks, conversations started to rally around personal stories of overcoming smoking and built awareness for the Giveaway program. With a wide range of personal stories being shared on the NYC Quits Facebook Page, the Health Department also used Facebook ads and sponsored stories to drive increased social awareness to the campaign. *facebook.com/nycquits*

INFORM NYC

Creating useful, effective content goes hand-in-hand with developing a successful social distribution strategy. One of the City's priorities is to streamline information about City services, in line with New York's widely praised 311 customer service system. To help achieve that goal, the Mayor's Office of Media and Entertainment unveiled the 50-video series Inform NYC, providing New Yorkers with concise, useful shorts featuring information based on the most frequent questions asked of 311. The videos provide helpful tips on what to do for a variety of situations, including how to report street noise, request a birth certificate and locate an item left in a taxi, among others. Inform NYC is available on NYC.gov, the NYC Gov social media channels, on the City's television stations and in taxi cabs.

INNOVATIONS IN DIGITAL VIDEO

NYC Gov's newly launched YouTube channel features curated playlists of videos from all City agencies. Residents can find visual answers to the most common 311 questions through Inform NYC and enjoy entertaining videos on the history of the City. Viewers can also watch videos of Mayoral events, interviews with New Yorkers and videos from NYC Media, the City's official network. *youtube.com/nycgov.*

*Clockwise from top:
Charles Birnbaum,
Foursquare Business
Development, presenting
at the Engage NYC:
Social Media Summit.
• NYC DOT collected
10,000 station location
suggestions for the City's
Bike Share initiative •
Inform NYC • NYC Gov
on YouTube • Jill Hanner
tweets why she quit
smoking for the NYC
Quits Smoking campaign
• Crowdsourced recipes
submitted by New
Yorkers.*

NYC Parks on foursquare
Monday, July 2, 2012
1,090 check-ins
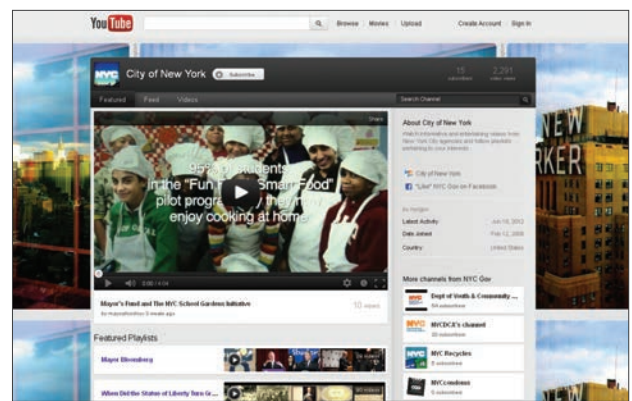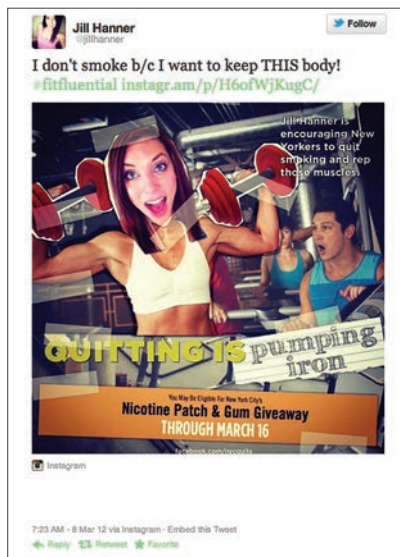
NYC Parks

See real-time Foursquare check-ins within NYC Parks' properties

NYC PARKS MAPS FOURSQUARE CHECK-INS

New York City Department of Parks & Recreation (NYCDPR) unveiled an interactive map, displaying markers for each time a visitor checks in using Foursquare to one of over 1,250 NYC Parks locations. These visitors can get tips on fun and interesting things to do as they explore the park or recreational facility and view "to-do" lists created by NYCDPR. The City expects to see more than one million Foursquare check-ins to public parks and spaces over the next year. *Nycgovparks.org/web/foursquare/map.php*

Public Library Digital Initiatives

Public libraries across the five boroughs are experiencing a renaissance thanks to their vital role in connecting New Yorkers to technology resources and the internet. Today, there is Wi-Fi in every branch of every library in the City's three library systems: Brooklyn Public Library, New York Public Library and Queens Library. To serve public demand, libraries are investing in infrastructure with federal broadband grants, expanding technology training and digitizing their offerings.

THE BROOKLYN PUBLIC LIBRARY

The Brooklyn Public Library (BPL) is Brooklyn's largest provider of free Wi-Fi and offers access to computers and the internet for tens of thousands of Brooklynites. System-wide, BPL offers approximately 1,300 public-access computers, and each year, on average, the Library provides 2.3 million personal computer sessions. Since 2010, BPL has expanded its broadband internet capacity by 77%, and last year, BPL significantly enhanced technology programs and resources at eight of its libraries located in underserved communities. These libraries now offer a total of 95 new lending laptops for use inside the library, roughly three times as many computer classes, and increased broadband internet speed. Since July 2011, these libraries have offered more than 40,000 laptop sessions, for a total of over 60,000 hours of laptop usage. In December 2011, BPL also opened a state-of-the-art, 50-seat Computer Center at the Central Library. The new Center is the largest technology hub in the Brooklyn Public Library system and features the first rollout of the Library's next generation of public computers.

The City of New York
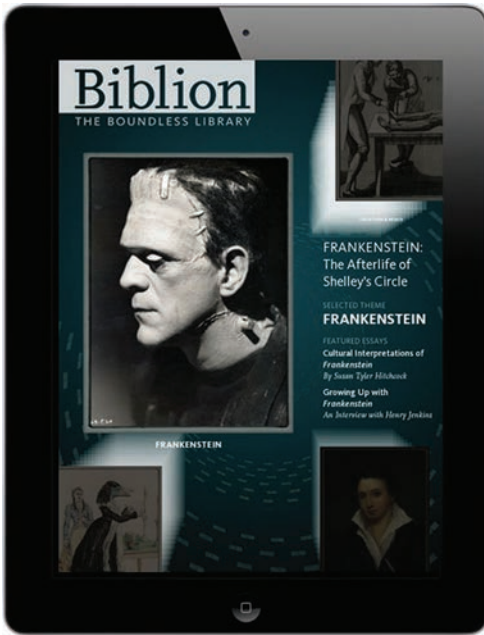
THE NEW YORK PUBLIC LIBRARY

Bibliocommons

Over the past year, the New York Public Library (NYPL) partnered with the company Bibliocommons to launch a new catalog that has quickly become the most popular page at nypl.org. The new catalog has better search functionality and interactive features such as user generated "lists" of recommended books. This interactive resource brings together patrons from NYPL and beyond, including all of Bibliocommons' participating libraries.

Biblion

To increase access to NYPL's materials and reach a wider group of individuals, NYPL partnered with design and technology firm Potion to transform its old collections magazine into the Library's first-ever iPad app. The first edition launched in May 2011 and highlighted the Library's 1939-1940 World's Fair collection. Through original essays, digitized photos and letters, video and audio and more, the app—which Apple Inc. named best education app of 2011—recreated the feel of exploring the Library's holdings at home, giving anyone the opportunity to research the World's Fair. A second edition of the app launched in spring 2012.

QUEENS LIBRARY

In Queens, more than three million library users access 1,550 public-use computers and 600 laptops, and many more use Wi-Fi with their own devices. Queens Library also offers courses to improve digital literacy and free computer workshops available in English, Spanish, Chinese and other languages. In addition to adult education at all levels, Queens Library offers a free, open portal for advanced online training and internationally-recognized certifications for high-value tech skills, such as Cisco certification, Six Sigma, CompTIA Strata and more. In total over 1,000 people are counseled every month on job-specific technology skills from resume writing to software training. Finally, the library reference service is now available via text, email or chat, and users have the option to borrow a Nook with their library card.

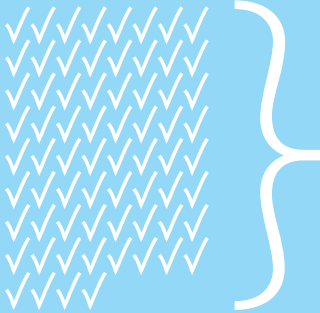# Industry:
Technology-Fueled Economic Growth

+32%

2007 — 2011

Growth in VC deals in New York from 2007 to 2011.

Source: Center for an Urban Future

In Q1 2012, New York State tech VC funding totaled

$264.65 M

OVER 68 DEALS,

while Massachusetts tech VC funding totaled $182M over 34 deals. *Source: CB Insights*

$378.3 M

75 DEALS

Total VC funding (for all sectors) in Q1 2012 in the New York metropolitan area.
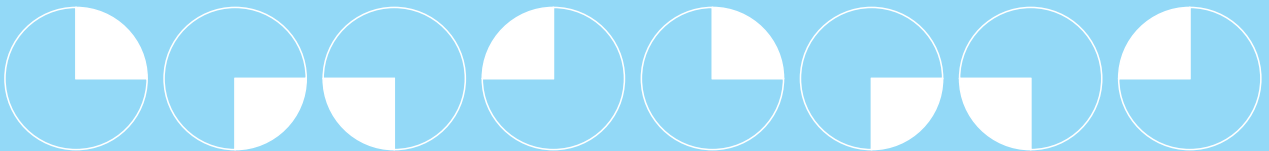*Source: PWC Moneytree*

$2.8 B

TOTAL VC FUNDING THE NEW YORK METROPOLITAN AREA RECEIVED IN 2011, A 41% INCREASE FROM 2010.

+41% *Source: PWC Moneytree*

For the past eight quarters beginning Q2 2010, New York State has surpassed Massachusetts in tech VC funding and deal count, second in the nation only to California. *Source: CB Insights Q2 2010*

As venture capitalist Fred Wilson remarked at the opening of the Academy for Software Engineering, "There has never been a more exciting time in New York City tech." New York City is where the best and brightest come to launch their world-changing ideas.

The past year has seen unprecedented growth in New York City's technology scene, with momentum bolstered by groundbreaking announcements of long-term investment in the City's future. New York City continues to surpass Boston as the top venture-funded area in the country after Silicon Valley. In addition, a recent Center for Urban Future study found that New York City was the only region in America to see a dramatic 32% increase in venture funding from 2007 – 2011, while all other regions surveyed, including Silicon Valley and Boston, experienced decreases.

Today, New York City Economic Development Corporation programs such as the NYC Tech Talent Draft, NYC Next Idea and NYC Venture Fellows continue to attract more engineers and entrepreneurs to make New York City their base. Mayoral visits to the growing New York City offices of technology companies including Etsy, Facebook, Foursquare, Tumblr and Twitter demonstrate the administration's commitment to supporting these pioneers and shining a light on their achievements. And new initiatives such as the digital expansion of youth employment programs are poised to increase diversity in the sector. Finally, this year New York became the nation's first city to apply for its own top-level domain, .nyc, a bold step toward embracing New York City's digital future.

Mayor Bloomberg visiting the offices of Seamless and Tumblr.

NYCEDC Technology and General Business Incubators

NYU-Poly Varick Street Incubator

NYU-Poly DUMBO Incubator

BMW.i Ventures Incubator

Hive @ 55

General Assembly

Sunshine Bronx

NYCEDC Other Incubators

La Marqueta

CFDA Fashion Incubator

Chashama

Entrepreneur Space

Continue to Recruit More Engineering and Entrepreneurial Talent to New York City

In addition to the landmark investments in engineering education institutions, the following New York City Economic Development Corporation (NYEDC) programs help attract and nurture engineers and entrepreneurs:

NYC TECH TALENT DRAFT

NYCEDC plans to expand its successful NYC Tech Talent Draft, a pilot series of on-campus information and networking sessions that provides top computer science and engineering students with a firsthand look at exciting tech start-up career opportunities. NYC Tech Talent Draft sessions feature founders, CEOs and CTOs from New York City's leading startups who spoke candidly about their entrepreneurial experiences, job opportunities and career advice. In spring 2012, NYCEDC conducted successful Tech Talent Draft recruiting events at Carnegie Mellon, Cornell, Harvard, MIT and Princeton.

NYC NEXT IDEA

In March, the City announced the winning teams of entrepreneurs for NYC Next Idea, the third annual global business plan competition that encourages innovative business ventures to launch and operate in New York City. Two winning teams, **Stylsize** and **TaxiTreats**, were selected from a highly competitive and diverse pool of applicants with more than 270 business ideas submitted from 62 countries. TaxiTreats is developing a vending machine to be used in taxicabs, and Stylsize is developing an app for online clothes shoppers to visualize how the clothing fits.

NYC VENTURE FELLOWS

NYC Venture Fellows is a selective program that provides 20-30 "rising star" entrepreneurs from around the world an opportunity to take their ventures to the next level. The program is designed to foster collaboration among startups and established businesses and to encourage national and international startups to locate and grow their businesses in New York City. Fellows benefit from mentorship from teams of industry leaders as well as networking opportunities through public-private dialogues and roundtable events.

NYCEDC INCUBATOR NETWORK

The City's network of ten incubators includes six that help tech startups grow and thrive by providing them comprehensive support when they are at their earliest stages. Incubated companies have attracted approximately $83 million in funding and currently support up to 500 jobs. The incubators have graduated more than 42 companies that are now strong enough to be independent. These graduates—which include some of NYC's hottest startups—have moved into market-rent office space and created dozens of jobs—doing their part to strengthen the City's economy.

Promote and Celebrate New York City's Digital Sector through Events and Awards

To put a spotlight on New York City's burgeoning technology industry, Mayor Bloomberg made several high profile visits to startups across the five boroughs. Increasing the visibility of these companies and shining a light on their successes helps illustrate the growth of the sector across the City and beyond. Building on his initial visit to **Foursquare** to officially proclaim Foursquare Day on April 16, 2011, over the past year Mayor Bloomberg has visited the offices of local success stories **Efficiency 2.0**, **Etsy**, **General Assembly**, **Seamless** and **Tumblr**. He has also welcomed with open arms the expansion of technology companies **Facebook**, **Twitter** and **Yelp**. As an entrepreneur who founded one of the world's largest information technology companies, the Mayor can testify personally to New York City's digital potential, helping to demonstrate why the technology industry is one of the top five sectors in the City.

Mayor Bloomberg has even demonstrated his loyalty to the local technology scene—and his focus on engineering education—by publicly committing on Twitter to complete homegrown startup **Codecademy'**s Code Year program.

In addition, Mayor Bloomberg and Commissioner Katherine Oliver of the Mayor's Office of Media and Entertainment honored **Kickstarter** for supporting the creative ecosystem at the 2012 annual "Made in NY" Awards and will continue to highlight successful, locally-based tech companies.

MADE IN NY DIGITAL MAP

To further promote and celebrate the digital sector, at the fifth annual Internet Week New York festival, Mayor Bloomberg unveiled the Made In NY Digital Map, an online map that plots startups, investors and incubators across the five boroughs and shows the dramatic hiring numbers for a powerful representation of the thriving technology industry in New York City.

The Made In NY Digital Map is a visual testament to the vibrant state of New York's digital industry—showing a powerful constellation of over 1,800 homegrown startups, investors and incubators hiring for thousands of jobs across the five boroughs. Users can browse by neighborhood, review job postings or add their own startup to the digital landscape. The Made In NY Map is a living resource that reflects New York City's dynamic innovation ecosystem.

Led by Mayor Bloomberg's commitment to realize New York City's digital potential, the Made in NY Digital Map was created by the Mayor's Office of Media and Entertainment in partnership with Internet Week NY and New York Tech Meetup. In addition, a print version of the map, designed by The Letter Office, was made possible by a grant from the Association for a Better New York. Explore the map at *mappedinny.com*.

The interactive Made In NY Digital Map online highlights nearly 900 companies that are hiring. In addition, a print version of the map was made possible by a grant from the Association for a Better New York. The interactive Made In NY Digital Map online highlights nearly 900 companies that are hiring. A print version of the map is shown here. Design by The Letter Office.

Jovena Whatmoor @skillfer
"Wow, this map of hundreds of NYC #startups is great! http://ow.ly/aWcJF Thanks @nycgov for building this. #iwny" 9:05 AM - 17 May 12

The Digital Roadmap:

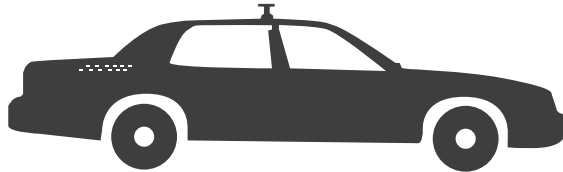New York City's Next Steps

"MADE IN NY" MEDIA CENTER

DIVERSITY IN THE TECH SECTOR

EXPAND BROADBAND CONNECTIVITY

wi-fi at 32 additional parks & public spaces

WI-FI AT PAYPHONE KIOSKS

DIGITAL TOOLKIT FOR SMALL BUSINESSES

@nycgov

AMPLIFY TWEETS FOR EMERGENCY NOTIFICATIONS

MOBILE PAYMENTS IN TAXIS

Introducing .nyc

LIVE COUNCIL HEARINGS

NEW NYC.GOV

NYC GOV MEETUP

INDUSTRY
A vibrant
digital sector

ENGAGEMENT
A user-centric
experience

EDUCATION
Investing in
the future

ACCESS
Internet connectivity
for all

OPEN GOVERNMENT
Innovation and
transparency
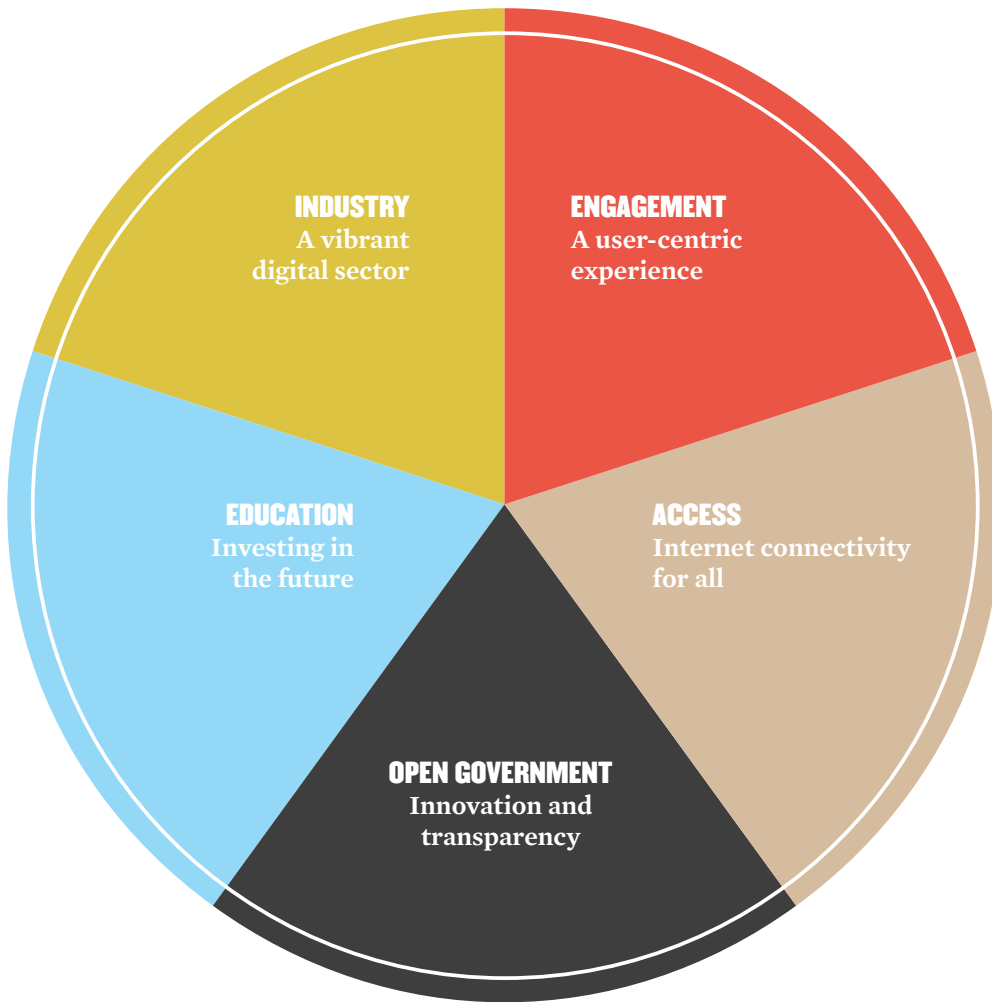
In March 2012, New York City was named the most economically competitive city in the world by the Economist Intelligence Unit. The distinction is a testament to the policies and focus of Mayor Bloomberg, and one that the administration knows must never be taken for granted. To maintain the City's competitiveness, the administration is committed to supporting the future of New York City's schools, economy and infrastructure with a significant expansion of the City's Digital Roadmap.

New York City's powerful strides have established a strong foundation for this future achievement. The following initiatives in the areas of access, education, open government, engagement and industry will accelerate the momentum of the City's digital initiatives.

Mayor Bloomberg announces the public-private partnership with AT&T to bring free public Wi-Fi to 20 City parks.

Next Steps for Access

To establish a truly connected city, the City of New York will continue to expand public Wi-Fi access through partnerships that pose no cost to taxpayers, responding to the top request from the public for technical innovation.

In June 2011, Mayor Bloomberg and AT&T CEO Randall Stephenson announced a public-private partnership that would bring unlimited free public Wi-Fi to City parks. Currently, 23 locations in New York City parks have Wi-Fi hotspots with work underway on the remaining three locations at Hunts Point Riverside, the High Line and Foley Square. When the $5 million project is complete, New Yorkers will be able to choose from 26 Wi-Fi hotspots locations in 20 City parks.

In addition, through a $10 million commitment by Time Warner Cable and Cablevision in the City's cable franchise agreements, Wi-Fi access will grow to an additional 32 public parks and spaces. Access is free for up to 30 minutes per month, $0.99 per day thereafter, and free at all times to Time Warner Cable and Cablevision broadband subscribers.

WI-FI HOTSPOTS AT PAYPHONE KIOSKS

The City is also exploring others ways to evolve existing public infrastructure—and connect more New Yorkers. To this end, the City is participating in two innovative pilots that transform payphone kiosks into Wi-Fi hotspots. Begun in April 2012, the pilots involve public pay telephone franchisees that operate more than 600 public pay telephones in the City, giving New Yorkers access to free Wi-Fi hotspots at 15 existing Van Wagner-franchised payphone kiosks for six months. Additionally, Titan, another public pay telephone franchisee, is currently deploying a Wi-Fi hotspot 11-month pilot at three kiosks in midtown Manhattan. The City will evaluate the Wi-Fi pilot programs to determine the long-term viability of free Wi-Fi as part of the next generation of payphone infrastructure.

Square Checker in-taxi technology system. Image provided by Square.

MOBILE PAYMENT SYSTEMS IN NYC TAXIS: SQUARE PILOT

The New York City Taxi and Limousine Commission (TLC) recently approved a pilot program to test alternatives to existing in-taxi technology systems. The TLC was approached by Square, Inc. with a viable proposal for a mobile, in-taxi technology system that allows customer to use their credit card swipe technology. Additionally, the TLC invited authorized providers of in-taxi technology system to submit proposals for similar alternative in-taxi technology systems.

Next Steps for Education

In order to maintain New York City's competitiveness and economic vitality for decades to come, Mayor Bloomberg continues to invest in a 21st Century education system that equips the City's children and workforce for a successful future.

The following programs and institutions provide science, technology, engineering and mathematics training for students from high school to the doctorate level, engaging local entrepreneurs and community at every opportunity to ensure the holistic development of a vibrant innovation ecosystem.

APPLIED SCIENCES NYC: CORNELL-TECHNION INNOVATION INSTITUTE

Perhaps nothing has captured the imagination of the technology community as powerfully as the landmark announcement of the new Cornell-Technion Innovation Institute, CornellNYC Tech, to be constructed on Roosevelt Island.

In December 2011, Mayor Bloomberg announced that the City would help develop the first initiative in Applied Sciences NYC, the Cornell-Technion Innovation Institute, an historic partnership of two of the world's top institutions in science, engineering, technology and research to build a two-million-square-foot applied science campus on Roosevelt Island in New York City.

Responding to resource needs expressed by the rapidly growing technology industry, the campus is expected to host thousands of faculty and students, and the NYCEDC projects that it will lead to the creation of hundreds of new technology companies, generate billions of dollars in new economic activity, spark expansion in under-developed neighborhoods and employ tens of thousands of New Yorkers in a variety of well-paying jobs.

The technology community has rallied around the school, which will be led by Dean Daniel Huttenlocher. Dean Huttenlocher has also begun to identify ways in which Cornell-Technion will connect with the local education and technology community. This includes an initiative that will train 200 public school teachers to teach math and science and a mentoring program that pairs local startup entrepreneurs with budding innovators in the Cornell-Technion campus. In addition, it will include a $150 milllion revolving financing fund for NYC-based startups.

Rendering of the Cornell/Technion Applied Sciences building on Roosevelt Island.

....

I am tremendously pleased that Google is giving Cornell the office space to get their new engineering university up and running in New York City."

—Larry Page, Chief Executive Officer of Google

While the University completes its campus on Roosevelt Island, Google Inc. announced that it would allocate 22,000 square feet of its New York headquarters to CornellNYC Tech, starting July 1, 2012. This donation marries one of the world's most innovative companies with one of the most innovative economic development strategies any city has undertaken.

APPLIED SCIENCES NYC: NYU/NYU-POLY CENTER FOR URBAN SCIENCE AND PROGRESS

Building on the success of the initial Cornell-Technion announcement, in April 2012, Mayor Bloomberg announced the NYU Center for Urban Science and Progress (CUSP), to be located in Downtown Brooklyn, following an agreement among the City, the Metropolitan Transit Authority (MTA) and a consortium of top institution and technology companies.

The Center for Urban Science and Progress will be a partnership of top global institution, led by NYU and NYU-Poly, and will focus on research and technology development that addresses urban challenges such as infrastructure, technology integration, energy efficiency, transportation congestion, public safety and public health. Other highly-regarded members of the consortium include: the City University of New York, Carnegie Mellon University, University of Toronto, University of Warwick, Indian Institute of Technology Bombay and technology leaders IBM and Cisco.

The school will seek to apply math and science to better the City of New York and serve as an urban innovation model for the world.

ACADEMY FOR SOFTWARE ENGINEERING

Finally, to prepare New York City's high school students for a successful future in a technology-driven world, in April 2012, Mayor Bloomberg announced the City would open the Academy for Software Engineering in September 2012. This new school, sited at Washington Irving High School, serves students in grades 9-12 and exposes them to innovative career options in technology and programming. In order to ensure that the school's curriculum is centered on skills in high demand by the internet industry, the board of the Academy for Software Engineering includes NYU Professor and hackNY co-founder Evan Korth, Facebook New York's head of engineering Serkan Piantino and venture capitalist Fred Wilson, who is also a major funder of the institution. In addition, the proposed program connects students with local entrepreneurs to expose them to professional work environments and opportunities for experiential learning.

Public response to the school has been overwhelming, and the City seeks to replicate its success throughout the five boroughs.
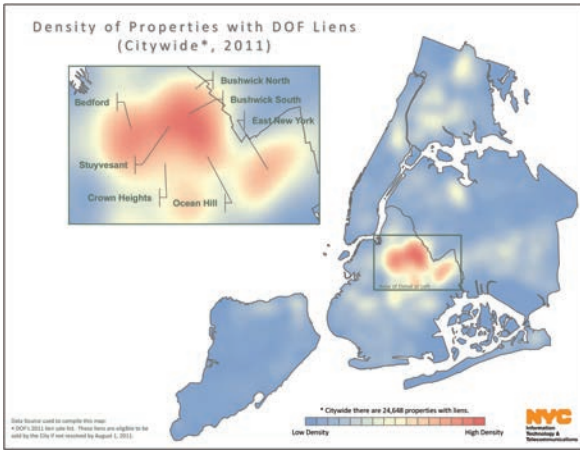
Left: By using strategic data analysis, the City has been able to identify a greater number of cigarette tax violators—hitting a rate of 77% using targeting methods compared to only 29% previously.

Right: Developers can view the 311 Content API documentation via the Open311 Wiki

Next Steps for Open Government

Open Government measures have demonstrated that by working together, the private sector and public sector can achieve far more to benefit society than ever before possible. Digital technology has exponentially increased the potential of the public-private partnership, and some of the most exciting initiatives of the past year, including the Reinvent NYC.gov hackathon and the Made in NY Digital Map have been the product of such partnerships.

THE FUTURE OF 311

Building on the launch of the expanded NYC Open Data Platform and the 311 Inquiry API, 311 will pursue a phased 311 "Write" API, allowing external applications to send service requests to 311. This architecture stands to dramatically increase the scale, reach and efficiency of 311. Much like the open API structures of Facebook and Twitter, which have sparked the development of hundreds of thousands of applications and entire industry verticals, the 311 Write API will start to complete the process of truly opening City data to developers.

TRANSPARENCY IN REAL-TIME: LIVE ONLINE NEW YORK CITY COUNCIL HEARINGS

A key element of the City's Open Government plan is greater transparency, and to engage New Yorkers more deeply in civic life, City Council Speaker Christine Quinn and the Mayor's Office of Media and Entertainment (MOME) announced in April 2012 that live coverage of City Council hearings are now available online at *council.nyc.gov*. This development makes New York City the largest municipality to carry live legislative hearings. Additionally, NYC Media, part of MOME, has worked to rebrand and redesign many of the aspects of the NYC Gov channel to now include government facts, informative City Council maps and committee profiles of each member.

EFFICIENCY THROUGH STRATEGIC DATA ANALYSIS

Performance data shines a bright light on how well cities are addressing the public's diverse concerns—from potholes to playgrounds. And the best data efforts draw not just on agency records and systems, but also on New Yorkers themselves, including questions they ask of and complaints they file with 311. Combined, this information helps agencies manage workloads, leverage strengths and close gaps.

To this end, New York City is moving beyond mere performance measurement; the City is weaving together data from sources across local, state and federal agencies to gain unprecedented insight into public conditions and trends, and it is applying the latest technology and predictive analyses to get ahead of the difficult issues facing our communities.
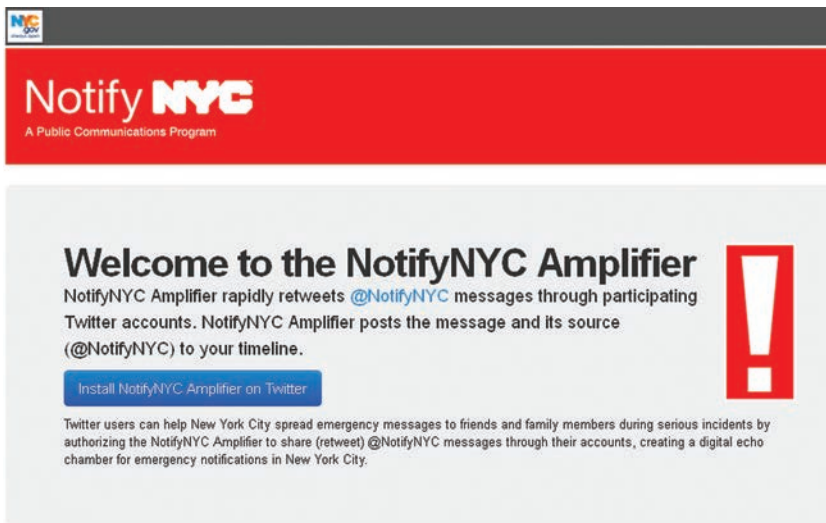
Clockwise from left: NotifyNYC Amplifier Twitter application used for Citywide emergency messaging. •@nycgob, the City's Spanish-language Twitter account. • A view of the City's HootSuite dashboard.

Mayor Bloomberg has assembled an expert analytics team in his Office of Policy and Strategic Planning to lead the City into this new era of data-centered innovation. The team conducts the kind of aggressive data mining and analysis that brings the complete "digital fingerprint" of just about any complex urban problem into focus—and helps determine which tools of government, across agency boundaries, can best address it.

That includes some of the trickiest problems—those that do not fit neatly within agency portfolios and that seem insurmountable given the strain on existing resources.

For example, illegal conversions, apartments that unscrupulous landlords have illegally subdivided to cram tenants in for greater profit, continue to be a problem. Every year, the City receives thousands of complaints about these properties, which are often unmonitored and unsafe for the families who live in them. For a long time, City agencies had no way to hone in on the properties that posed the greatest risk of fire where residents could be hurt or killed. Then analysts began looking at several previously unexamined sources of data about fires across the city—and a pattern emerged. The data used, including the property owner's financial condition, the building's history of complaints, the construction date and neighborhood demographics all showed a link to fire risk. Strategic data targeting allowed building inspectors to prioritize properties that required immediate investigation and streamline the process for examining complaints. As a result of this efficiency, high priority complaints were addressed faster, resources were strategically deployed, and the rate for vacating illegal conversions jumped from 13% to 70% with no increase in the operating budget.

Another example of the benefits of strategic data targeting concerns cigarette tax violations. By examining pertinent data points, the City has been able to identify a greater number of cigarette tax violators—hitting a rate of 77% using targeting methods compared to only 29% previously.

Finally, data analysis is sharpening more than just enforcement. The City is improving health and human services delivery by employing information across agencies to deliver care and benefits better tailored to each individual citizen's needs—while also cutting costs, and the City is finding new efficiencies using data analytics to examine operational challenges that range from routing garbage trucks to defending against tort litigation.

Next Steps for Engagement

The City of New York's digital media audience has doubled over the past year thanks to the strategic efforts of agency social media managers, and the launch of the central NYC Gov channels in February 2012. In addition, the City was ranked #1 in a national study of digital engagement performed by the University of Illinois at Chicago.

Plans for digital media engagement add to these achievements with steps to overhaul New York City's website and programs to leverage social media in emergency scenarios.

LAUNCH @NYCGOB

To build on the success of the citywide @nycgov Twitter account and to engage the Latino community via social media, the City of New York launched @nycgob, a Spanish-language feed of crucial City government news, services and announcements.

Among the estimated 200 languages that are spoken in New York City, Spanish is the second most prevalent language after English, and the 2009 U.S. Census Bureau reported that over 1.8 million Spanish speakers live in New York City. In addition, the most recent Pew Internet Report on Twitter Use found that 14% of Hispanic adult internet users use Twitter in general and that Hispanic cell phone owners are almost twice as likely to use Twitter as white, non-Hispanics (12% and 7% respectively). With @nycgob, the City of New York is able to serve and engage more Spanish-speaking New Yorkers via social media.

SOCIAL MEDIA SAVING LIVES: EMERGENCY MANAGEMENT

Powerful Tools for Greater Efficiency

For the first time, the City of New York will implement a Citywide social media management platform, a decision motivated by the effectiveness of the tool during Hurricane Irene in informing and engaging with millions. Leveraging the platform Hootsuite, the City will be able to do more with less—increasing productivity, measuring impact and engaging with New Yorkers to help them utilize City services.

Most crucially, Hootsuite provides the capability for centralized messaging in the event of an emergency—ensuring that the widest possible audience benefits from a consistent message. During Hurricane Irene, the results of City broadcasting on social media were staggering: there were over two million impressions of City tweets, and the City of New York doubled its following, rising to over 54,000 followers on @nycmayorsoffice. Importantly, the City implemented policies to make sure that during the course of the emergency situation, City social media managers maintained absolute accuracy, ensuring an informed, connected public.

With Hootsuite, the City will be able to send a single tweet from over 70 City Twitter accounts and reach hundreds of thousands of followers with a consistent message. The City will also be able to field questions and concerns, enabling two-way dialogue with millions to better allocate resources and respond to needs.

Introducing Amplify: A Crowd-Powered Twitter Application
for Emergency Messaging

In addition to tools for agency social media managers, the City of New York will introduce a new Twitter application called Amplify that engages the public to increase the reach of information

in an emergency. With Amplify, the public is able to register to retweet messages from the Office of Emergency Management (OEM) in the event of a "severe and imminent" danger.

The application has the potential to exponentially increase the distribution of key information from the City as it gains users. As with any Twitter application, users are able to remove the application at any time.

Amplify was developed by students of Professor Evan Korth from New York University's computer science program, in partnership with the Office of Emergency Management and the Department of Information Technology & Telecommunications.

RELAUNCH NYC.GOV TO MAKE THE CITY'S WEBSITE MORE USABLE, ACCESSIBLE AND INTUITIVE

The City's website, NYC.gov, is the digital face of New York City government to the world, and the City is committed to enhancing it to best serve the needs of the public. Using the valuable insights gleaned from the Reinvent NYC.gov Hackathon in January 2012, the City of New York issued a Request for Proposals (RFP) from vendors to provide design and front-end development for the relaunch of NYC.gov. The RFP was a vital step in the Reinvent NYC.gov initiative to re-architect and redesign the user experience of the City's website, which attracts over 25 million visitors a year.

The Reinvent NYC.gov strategy is guided by design references from the Reinvent NYC.gov Hackathon, and is centered on three core goals:

Usability
Help the user find what he or she wants, as quickly as possible, without specialized or internal government knowledge—in the model of 311.

Engagement
Provide information and media that inform New Yorkers of services and spark engagement.

Accessibility
Make NYC.gov more accessible to more people through search and mobile optimization.

To achieve these aims, the City will pursue a five-part, user-centric content strategy to:

Anticipate needs with navigation and most requested links based on common search terms.
Respond to needs with vastly improved search.
Approximate needs with personalization.
Inform with user-tailored content creation and curation.
Engage users with dynamic social and mobile features.

The City of New York received a large number of RFP responses and held a public hearing in June 2012 to announce the selected vendor, Brooklyn based design firm HUGE. The re-architecture is underway, and the full website relaunch is planned for 2013.

The new NYC.gov website will be more intuitive, usable and efficient than ever before, demonstrating the administration's commitment to customer service and transparency. In addition, a

data-driven model will be used to determine navigation and taxonomy, helping to ensure that resources are deployed where they are most needed. Finally, the new NYC.gov will operate as browser-agnostic mobile website to serve the fast growing number of mobile users accessing NYC.gov. Wherever possible, the content presented on NYC.gov will be also be made available to the public via API or RSS Feed.

LAUNCH ONGOING LISTENING SESSIONS ACROSS THE FIVE BOROUGHS TO ENCOURAGE INPUT

To ensure the success of public-private partnerships and constantly evaluate engagement efforts, NYC Digital, in partnership with the Department of Information Technology & Telecommunications, will conduct listening sessions with local communities and partners with the aim of collecting feedback concerning the main areas of focus of the digital roadmap: access, education, open government, engagement and industry. Through these sessions, the City will share updates with the public and encourage feedback and suggestions to make improvements that serve New Yorkers.

To facilitate these listening sessions, the City, in partnership with the New York Tech Meetup, launched an NYC Gov Meetup, leveraging the homegrown startup's format used widely within the tech community. New Yorkers interested in participating in the first listening session in fall 2012 are encouraged to sign up for the NYC Gov Meetup: *meetup.com/nycgov*

THE NEW YORK PUBLIC LIBRARY
Digitization of Historical Documents
Today libraries serve a crucial role in connecting the public to information online and offline, and thanks to upcoming developments, their scope will expand dramatically. Thousands of historical documents, including handwritten material by George Washington and Thomas Jefferson and papers from authors such as Mark Twain, will soon be accessible to the public online, thanks in large part to a generous gift of $500,000 from The Polonsky Foundation to the New York Public Library. The project, which began in January 2012, and continues through 2014, will digitize approximately 11,000 manuscripts from the Thomas Addis Emmet Collection, located within the Manuscripts and Archives Division, and almost all the papers of several major American authors in the Henry W. and Albert A. Berg Collection of English and American Literature at The New York Public Library. The Emmet Collection documents the founding and early years of the United States—the move toward independence, the Revolutionary War and the establishment of the federal government. The Berg Collection's holdings of Nathaniel Hawthorne, his wife Sophia Peabody Hawthorne, Henry David Thoreau, Mark Twain and Walt Whitman will also all be digitized. An estimated 35,000 pages will be scheduled for digitization beginning in January 2013 and will be made available through the Library's website.

THE BROOKLYN PUBLIC LIBRARY
In addition, in 2013, the Brooklyn Public Library will open the Leon Levy Information Commons, a physical space with powerful digital infrastructure to meet the evolving needs of library users. The facility will be a flexible, technology-rich center offering a 30-seat wireless training space; seven private meeting rooms featuring electronic whiteboards; bar-style seating for laptop users; 25 PCs featuring standard software and advanced editing programs; and a help desk providing reference and information services and on-demand training. This groundbreaking new space will further enable patrons to exchange ideas, learn new skills and access information in a digital context.

Next Steps for Industry

PROGRAM OVERVIEW

In April 2012, the City of New York convened its first Youth Employment Symposium with the aim of connecting New York City's technology industry with public programs that provide employment and professional development to tens of thousands of young New Yorkers. Hosted by NYC Digital and the Mayor's Fund to Advance New York City, the technology community responded with strong interest in civic partnerships to support diversity, and early sector commitments include involvement from Buddy Media, Facebook, Huge, Shapeways and others.

To build on the positive response to the Symposium, NYC Digital and the Mayor's Fund to Advance New York City will introduce a new initiative that seeks to realize the City's technology potential, primarily through two programs:

- Diversity and Workforce Development: Increase diversity in the technology sector through professional placement and development programs for minorities and women.
- Innovation Pipeline: Match students and volunteers with digital projects at no cost to taxpayers.

Increasing Diversity

The program will begin by placing the inaugural class of minority and female students in jobs at technology companies. In addition to work opportunities, the students will attend courses at partnering technology companies and education institutions to learn HTML and CSS. In total, the program aims to place 100 students by the end of 2013.

Adopt-an-App Innovation Pipeline:
Matching Private and Academic Sectors with Civic Projects

The new initiative will introduce a digital project matching program, partnering with the private sector as well as academic. Students in the program will complete one technology or design class, where they will develop and launch a new project in partnership with a City entity over the course of a semester. The success of the City's apps wish-list, first piloted during the Reinvent Green hackathon, will serve as a model for Innovation Pipeline in matching civic volunteers with existing City needs.

NYC Generation Tech

In addition, the New York City Economic Development Corporation is developing several groundbreaking technology programs that seek to train New York City's workforce and students. One of the pilot programs, NYC Generation Tech, which launched in summer 2012 and will include opportunities for students to build mobile apps, learn about the fundamentals of entrepreneurship, participate in a business plan competition and receive mentorship from NYC tech firms.

EQUIP SMALL BUSINESSES FOR SUCCESS THROUGH DIGITAL TRAINING

Building on its success in assisting small business owners through training and workshops, the Mayor's Office of Small Business Services (SBS), together with NYC Digital, will introduce Digital Toolkit, a new program to equip small businesses with the tools and training they need to grow online. Through NYC Business Solutions Centers, the Digital Toolkit program will leverage partnerships with technology companies throughout the City, including founding partners Mashable,

Youth Employment Symposium aims to connect New York's technology industry with public programs that provide employment and professional development to tens of thousands of young New Yorkers.

Mark Murphy @murphmarkd
"Enjoyed attending Mayor @MikeBloomberg's Youth Employment Symposium with@rachelsterne. Lots of interesting opps for city kids. #nyctech" 2:59 PM - 16 Apr 12

Tumblr and Google that are committed to creating curriculum and training materials that meet the digital needs of small businesses. Mashable will develop a "how-to" curriculum for building an Internet presence and leveraging social media, which will be made available online and in workshops led by NYC Business Solutions instructors. In addition, Tumblr will provide out-of-the-box Tumblr themes for small, New York City-based businesses, specifically designed for the Digital Toolkit. The goal of the program is to provide business owners with the training and resources they need to grow in a modern economy.

Supporting the City's Film Industry through Technology Training

Recognizing that digital technology is significantly impacting the media industry, the Mayor's Office of Media and Entertainment (MOME) plans to introduce new programs to further the goal of a diverse and well-trained workforce. Partnering with the Mayor's Office of Small Business Services (SBS), MOME will introduce industry training grants that will support media companies who train their employees in new technologies and software. The City will also expand the SBS Strategic Steps Program to media and entertainment sectors. Through this nine-month executive education program geared towards women and minority owned businesses, media and entertainment entrepreneurs will learn from a comprehensive curriculum and engage in networking opportunities to help their businesses grow.

PROVIDE ACCESSIBILITY AND TRANSPARENCY IN OPENING AND OPERATING BUSINESSES IN NEW YORK CITY

In June 2012, the Mayor appointed Tokumbo Shobowale as the City's first Chief Business Operations Officer to lead a concerted initiative in making government more responsive and efficient when working with New York City businesses. A primary focus of the initiative is to provide a more efficient and transparent online experience at NYC.gov for businesses to meet the City's permitting, licensing and other regulatory requirements. Businesses will be able to access clear information for operating in the city, apply and pay online for licenses, permits and other credentials and follow the status of their applications, plans and inspections.

Present Clear and Simple Information Online

The City will provide straightforward information about government requirements for starting and operating a business by providing new guides, online how-to videos, and a more unified customer experience on NYC.gov, including the Business Express site and 311 Online.

Apply and Pay Online

Businesses will be able to apply online for licenses, permits and credentials they need to open their doors and operate legally and safely in the city—with the goal of processing 80% of new business applications and renewals online by the end of 2013. In addition, business owners will be able to make payments for licenses, permits and other fees online at NYC.gov.

Check Status Online

Over the next year, business owners will be able to check on the status of their licenses, permits, dates and results of scheduled inspections and plan exams online, providing them with immediate insight and transparency in their transactions with the City at every step in the process.

"MADE IN NY" MEDIA CENTER

To further support the rapidly transforming media industry, MOME recently announced plans for the "Made in NY" Media Center, which will provide an opportunity for established media and entertainment industry firms in the city to interact with emerging ones, with the goal of shared innovation and mutual learning. Informative panels, lectures, training and events will bring industry subsectors together and provide a focal point for the growing community. The Center will also provide affordable workspace to emerging media entrepreneurs and companies, including a well-designed space for educational programming that serves the media community.

In addition, NYC Digital will explore public-private partnerships with media center participants by helping them gain access to City programs and identifying potential points of collaboration. The Center will provide a space to connect the expertise of the digital media community with the City's resources and services. In partnership with NYCEDC, MOME issued a Request for Proposals for organizations or companies to develop, market and manage the "Made in NY" Media Center, and will review applications in the summer of 2012.

SUPPORT TECHNOLOGY STARTUP INFRASTRUCTURE NEEDS

In order to serve the constantly evolving needs of the startup community, Mayor Bloomberg established The Mayor's Council on Technology and Innovation, a group of New York City-based leaders who identify new opportunities for the City and address areas of interest to the technology sector. Deputy Mayor Robert K. Steel chairs the Council, and members include:

Eric Hippeau @erichippeau
"Great update today at NYC Tech Council. NY making progress in tech edu, broadband, gvt social media @RobertKSteel @Sethpinsky @rachelsterne"
11:58 AM - 9 Apr 12

John Borthwick,
Betaworks, Founder & CEO

Marc Cenedella,
TheLadders, Founder & CEO

Perry Chen,
Kickstarter, Founder & CEO

Susan Crawford,
Cardozo School of Law, Professor, former Special Assistant to President Obama for Science, Technology, and Innovation Policy

Ntiedo Etuk,
DimensionU, Co-Founder & CEO

Jonah Goodhart,
Moat, Founder & co-CEO

Eric Hippeau,
Lerer Ventures, Partner

Mitch Jacobs,
On Deck Capital, Founder & CEO

Lawrence Lenihan,
FirstMark Capital, Managing Director

Susan Lyne,
Gilt Groupe, Chairman

Hilary Mason,
bit.ly, Chief Scientist

Barry Silbert,
SecondMarket, Founder & CEO

David Tisch,
TechStars NYC, Managing Director

The Council is currently exploring a number of public-private partnerships that incentivize the expansion of fiber connectivity for businesses, and welcomes additional input from the technology sector.

LAUNCH A SUITE OF NEW INITIATIVES TO EXPAND NEW YORK CITY'S BROADBAND CONNECTIVITY

After a series of conversations with the Council and leading businesses and technology entrepreneurs throughout New York City to determine the most critical issues as well as solutions that will ultimately allow the expansion of broadband connectivity, the Mayor's administration announced the following initiatives to be implemented over the course of 2012:

- **ConnectNYC:** a competition to build out fiber wiring for commercial and industrial buildings
- **WiredNYC:** a grading program for connectivity in New York City buildings
- **NYC Broadband Connect Map**: a crowd-sourced digital map highlighting wired buildings citywide
- **Broadband Express:** a streamlined process for broadband-related permitting as well as exploring the streamlining of regulatory issues
- **Digital Divide:** a competition to develop mobile applications to help residents access critical online services provided by the City and community based organizations

Potential Two-Year Broadband Program Impact

- 600 buildings
- 30 million sq. ft. of office space
- 6,000 companies
- 160,000 employees
- Up to 24,000 permits
- Thousands of buildings on the map
- 18,000 sixth graders
- 27,000 low-income family members
- 100,000 computers for households and programs
- Thousands of residents to online resources

PURSUE THE .NYC TOP-LEVEL DOMAIN: WWW.YOURNAME.NYC

Soon the prestige of a New York City address or area code will extend to the digital realm. With its application for .nyc in 2012, New York became one of the first cities in the world to pursue its own geographic top-level domain. A top-level domain, or TLD, is the last part of an Internet address, such as .com, .org or .edu. Following a public Request for Proposals, the City of New York entered into an agreement with NeuStar, which has assumed all upfront costs associated with the TLD, including marketing, promotion and over $185,000 in application and maintenance fees to the Internet Corporation of Assigned Names and Numbers (ICANN). ICANN will administer the allocation of TLDs. Following the public launch of .nyc (anticipated in 2013), the City of New York will receive 40% of revenue generated by sales of domain names in the .nyc TLD. The .nyc TLD will be made available to New York City individuals and organizations in strategic phases, beginning with public institutions and nonprofits, followed by locally licensed businesses and local residents, and finally entities providing a business or service specific to New York City.

With the historic launch of the .nyc TLD, the City will embrace its digital future in a powerful way and bring an unprecedented level of geographic authority to the digital sphere. In addition, the City will generate revenue, help residents locate government services, encourage local businesses to thrive, market and promote tourism, and spread the dynamic image of New York City around the world. Crucially, the City of New York will establish a community advisory board and convene public listening sessions to encourage meaningful input into the development of the .nyc strategy.
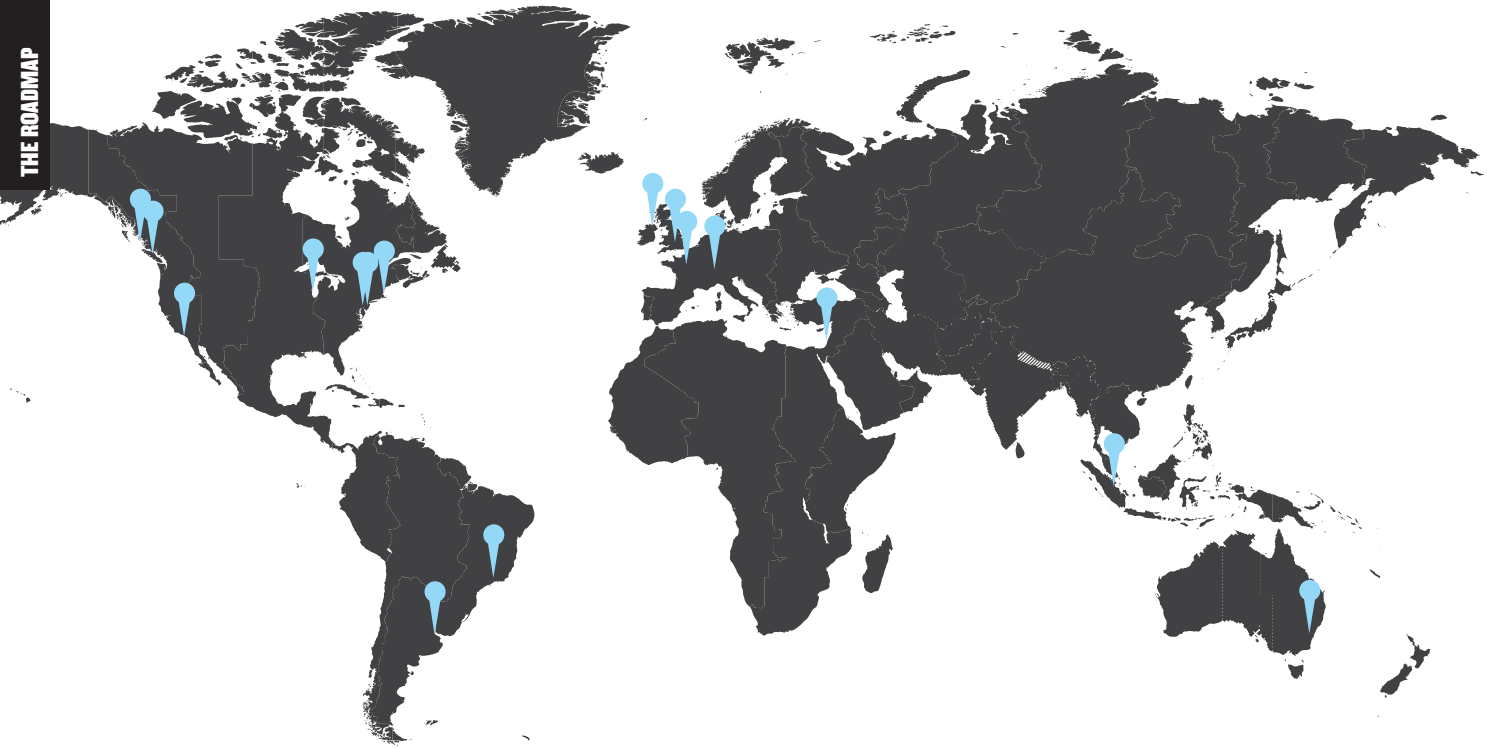
MEASURING SUCCESS

Tracking progress and sharing lessons learned is crucial to a city's ability to realize its digital goals. The City of New York will continue to drive innovation in partnership with municipalities around the world who share universal, urban challenges and opportunities.

Following the May 2011 release of New York City's Digital Roadmap, a number of cities expressed interest in developing an international digital index to track municipal progress across the globe, including:

- Belfast
- Boston
- Buenos Aires
- Canton of Geneva
- Chicago
- London
- Los Angeles

- Newark
- Philadelphia
- Rio de Janeiro
- San Francisco
- Singapore
- Tel Aviv
- Vancouver

To further explore the global potential of digital cities, the City of New York will convene a symposium in 2013 with interested city governments, focused on digital development. The symposium will aim to establish a versatile framework for measuring digital progress, and evaluate shared tools and approaches to innovation across the five pillars of Access, Education, Open Government, Engagement and Industry. The City of New York welcomes expressions of interest in the symposium and looks forward to collaborating with international partners to explore their shared digital future.

Glossary

API	Application Programming Interface
BPL	Brooklyn Public Library
BTOP	Broadband Technology Opportunities Program
CFDA	Council of Fashion Designers of America
CUSP	Center for Urban Science and Progress
DOE	Department of Education
DOHMH	Department of Health and Mental Hygiene
DOT	Department of Transportation
DoITT	Department of Information Technology & Telecommunications
DPR	Department of Parks & Recreation
DUMBO	Down Under the Manhattan Bridge Overpass
FiOS	Fiber Optic Service, internet service provided by Verizon
FDNY	New York City Fire Department
GPS	Global Positioning System
ICANN	Internet Corporation for Assigned Names and Numbers
iZone	Innovation Zone
#LoveNYC	Facebook photo contest hosted by NYC Digital and the Mayor's Office of Media and Entertainment
MINY	Made In New York
MOME	Mayor's Office of Media and Entertainment
MOUSE	Making Opportunities for Upgrading Schools and Education
MTA	Metropolitan Transportation Authority
NSKYC	The average color of the New York sky, updated every 5 minutes.
NYC 311	The City's main source of government information and non-emergency services.
NYC Digital	Mission is to realize New York City's potential as the world's leading digital city. NYC Digital is part of the Mayor's Office of Media and Entertainment
NYCEDC	New York City Economic Development Corporation
NYPL	New York Public Library
NYU	New York University
NYU-Poly	Polytechnic Institute of New York University
OEM	Office of Emergency Management
OLTPS	Mayor's Office of Long-Term Planning and Sustainability
OPSP	Mayor's Office of Policy and Strategic Planning
PlaNYC	Mayor Bloomberg's Plan to work toward the vision of a greener, greater New York. Operates under the Office of Long-Term Planning and Sustainability
SBS	Mayor's Office of Small Business Services
SMART	Social Media Advisory and Research Taskforce
SMS	Short Message Service
SVA	School of Visual Arts
TLC	New York City Taxi and Limousine Commission
TLD	Top-Level Domain
TWC	Time Warner Cable
VC	Venture Capital or Venture Capitalist

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Notes

NYC Digital

New York City's 2012 Digital Roadmap:
Progress and Innovation
August 2012