

# ROAD MAP FOR THE DIGITAL CITY

ACHIEVING  
NEW YORK  
CITY'S  
DIGITAL  
FUTURE





# **ROAD MAP FOR THE DIGITAL CITY**

**ACHIEVING NEW YORK CITY'S DIGITAL FUTURE**

**THE CITY OF NEW YORK**



## **Mayor Michael R. Bloomberg**

**MAYOR'S OFFICE OF MEDIA AND ENTERTAINMENT**

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This report would not have been possible without the extensive contributions of individuals across New York City government.

### *Special Thanks To*

The Mayor's Office

#### **DOITT**

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*Road Map for the Digital City*

*Achieving New York City's Digital Future*

2011 The City of New York

A digital edition of the Road Map is available on [nyc.gov](http://nyc.gov).

Design by The Letter Office

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## EXECUTIVE SUMMARY

NEW YORK CITY IS ONE of the world's leading digital metropolises. As *Part I: State of the Digital City* illustrates, New York City government engages over 25 million people a year through more than 200 digital channels including nyc.gov, mobile applications, and social media. As a pioneer in Open Government, New York City government has unlocked thousands of public records, enabling technologists to build tools that help New Yorkers everyday, from finding parking spaces to listening to audio tours of Central Park. One of the nation's most connected municipalities, New York City's digital sector growth propelled it to rank second in venture capital funding last year. By every digital index, the City of New York is thriving.

But we can do more. *Road Map for the Digital City* outlines a path to build on New York City's successes and establish it as the world's top-ranked Digital City, based on indices of Internet access, Open Government, citizen engagement, and digital industry growth.

*Part II: Digital Input* is informed by 90 days of research and over 4,000 points of engagement from residents, City employees, and technologists who shared insights and ideas. Chief among public interests were calls for expanded Internet access, a refreshed nyc.gov interface, real-time information, and more digital 311 tools. Businesses and technologists sought greater broadband connectivity, a deeper engineering employment pool, and read/write API access to City information. Finally, City employees proposed ideas for next-generation strategy, new coordination tools, and shared resources to enhance digital communications efforts.

# four million

DIGITAL MEDIA AUDIENCE

# 202,000,000

PAGEVIEWS OF NYC.GOV IN 2010

# 52 AGENCIES

# 4,000 POINTS OF ENGAGEMENT

# 98%

RESIDENTIAL BROADBAND ACCESS

# 200 SOCIAL MEDIA CHANNELS

# 1 PLAN FOR NYC'S DIGITAL FUTURE

*Part III: The Road Map*, highlights New York City government's commitment to technology in the public service, and presents a comprehensive plan to achieve New York City's digital potential. An overview of the Road Map's four core areas of Access, Open Government, Engagement, and Industry is provided in the following pages.

Looking forward, this report will be conducted again in one year to provide an update on efforts and evaluate progress.

## THE ROAD MAP

### 1. Access

The City of New York ensures that all New Yorkers can access the Internet and take advantage of public training sessions to use it effectively. It will support more vendor choices to New Yorkers, and introduce Wi-Fi in more public areas.

1. Connect high needs individuals through federally funded NYC Connected initiatives
2. Launch outreach and education efforts to increase broadband Internet adoption
3. Support more broadband choices citywide
4. Introduce Wi-Fi in more public spaces, including parks

### 2. Open Government

By unlocking important public information and supporting policies of Open Government, New York City will further expand access to services, enable innovation that improves the lives of New Yorkers, and increase transparency and efficiency.

1. Develop NYC Platform, an Open Government framework featuring APIs for City data
2. Launch a central hub for engaging and cultivating feedback from the developer community
3. Introduce visualization tools that make data more accessible to the public
4. Launch App Wishlists to support a needs-based ecosystem of innovation
5. Launch an official New York City Apps hub

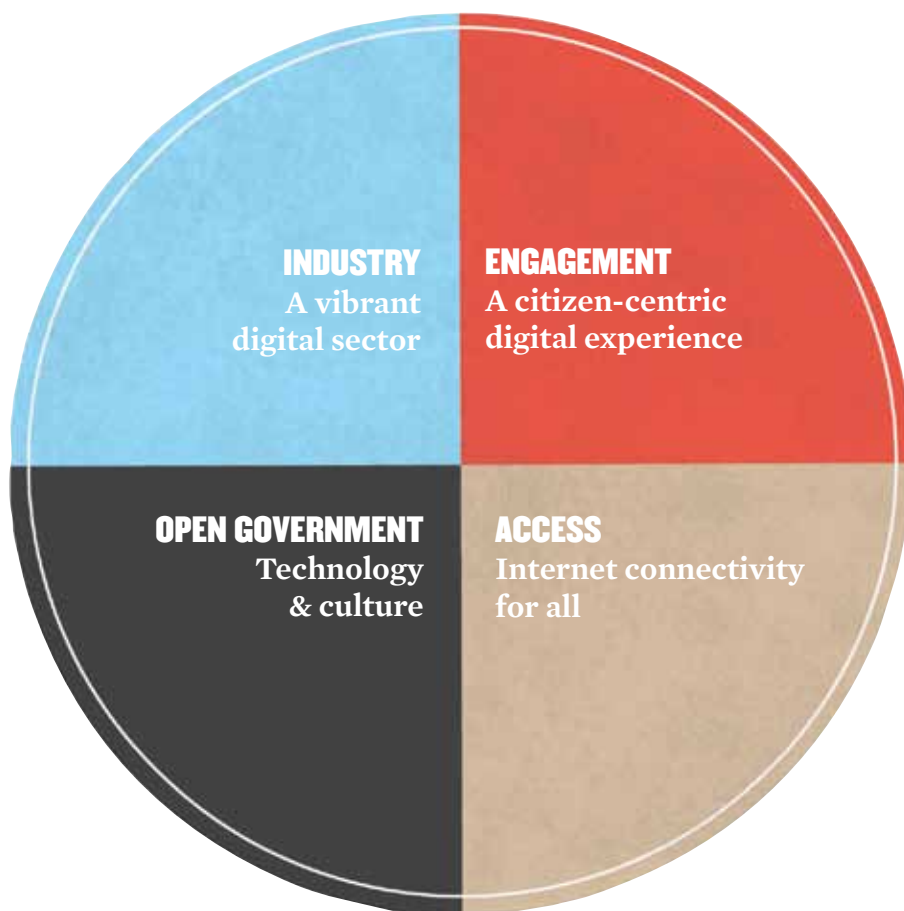
### 3. Engagement

The City will improve digital tools including nyc.gov and 311 online to streamline service and enable citizen-centric, collaborative government. It will expand social media engagement, implement new internal coordination measures, and continue to solicit community input in the following ways:

1. Relaunch nyc.gov to make the City's website more usable, accessible, and intuitive
2. Expand 311 Online through smartphone apps, Twitter and live chat
3. Implement a custom bit.ly url redirection service on nyc.gov to encourage sharing and transparency
4. Launch official Facebook presence to engage New Yorkers and customize experience
5. Launch @nycgov, a central Twitter account and one-stop shop of crucial news and services
6. Launch a New York City Tumblr vertical, featuring content and commentary on City stories
7. Launch a Foursquare badge that encourages use of New York City's free public places
8. Integrate crowdsourcing tools for emergency situations
9. Introduce digital Citizen Toolkits for engaging with New York City government online
10. Introduce **SMART**, a team of the City's social media leaders
11. Host New York City's first hackathon: Reinventing nyc.gov
12. Launch an ongoing listening sessions across the five boroughs to encourage input



## PRIORITIES FOR ACHIEVING NEW YORK CITY'S DIGITAL POTENTIAL



### 4. Industry

New York City government, led by the New York City Economic Development Corporation, will continue to support a vibrant digital media sector through a wide array of programs, including workforce development, the establishment of a new engineering institution, and a more streamlined path to do business.

1. Expand workforce development programs to support growth and diversity in the digital sector
2. Support technology startup infrastructure needs
3. Continue to recruit more engineering talent and teams to New York City
4. Promote and celebrate NYC's digital sector through events and awards
5. Pursue a new .nyc top-level domain, led by DOITT

### Thought Leadership

Establish an index for digital achievement in partnership with major international cities.



## APPROACH

IN JULY 2010, MAYOR MICHAEL R. Bloomberg and Commissioner Katherine Oliver of the Mayor's Office of Media and Entertainment introduced NYC Digital, a new entity for citywide digital strategy that engages, serves, and connects the public, making government more efficient and citizen-centric. Its first task was the development of a report that assesses the state of the digital City, solicits feedback from public and private sectors, and outlines a Digital Road Map aligned with Mayoral priorities of efficiency, customer service, transparency, economic growth, and job creation.

NYC Digital is grateful for the support of numerous City offices and agencies, including but not limited to the Mayor's Office, the Department of Information Technology and Telecommunications (DOITT), and the New York City Economic Development Corporation (NYCEDC). DOITT was instrumental in providing information related to nyc.gov, social media management, analytics, open data strategy, 311, and GIS.

In this report, NYC Digital details the findings of its investigation, and provides a comprehensive, strategic plan for New York City's digital future, presenting both current and upcoming initiatives of City agencies and entities that will help to realize that potential.



## ABOUT NYC DIGITAL

**THE MISSION OF NYC DIGITAL** is to create a healthier civil society and stronger democracy through the use of technology that engages, serves, and connects New Yorkers.

To this end, it coordinates digital citywide initiatives that support the efficient exchange of information and services between the public and the City of New York government. This includes the user experience and content of [nyc.gov](http://nyc.gov), 311 online, crowdsourcing and participatory media initiatives, and the coordination of social media efforts. It is responsible for ensuring that social media policies are up-to-date and followed by all managers, and that design, style, and engagement quality is consistent across the digital experience.

In collaboration with **DOITT** and **EDC**, NYC Digital also supports the development of public-private partnerships and developer community relations in the digital media sector and advises on the City's Open Government strategy. NYC Digital works closely with **DOITT** and **EDC** to support their efforts, and advises citywide on digital strategy, policies, and tools. NYC Digital was established by Mayor Michael R. Bloomberg in July 2010 within the newly formed Mayor's Office of Media and Entertainment.

# Part I: State of the Digital City

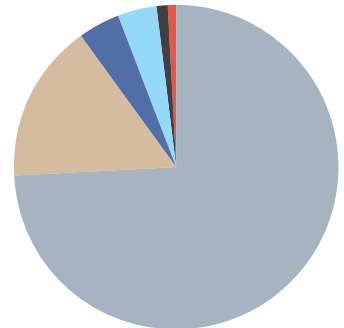




TODAY NEW YORK CITY’S GOVERNMENT is a leader in digital engagement, hosting nyc.gov, 311 online, and over 200 social media channels, blogs, newsletters, and mobile applications that reach over 25 million residents, businesses, and visitors a year. Of the 4 million individuals reached every month by New York City’s digital government, 1.2 million, or 30%, engage with the City through social media such as Facebook, Twitter or digital newsletters.

NYC’S DIGITAL REACH

nyc.gov	74.4%
Newsletter	15.8%
Facebook	4%
Twitter	4%
SMS	1%
iPhone	.8%



New York City runs the most advanced municipal Open Data initiative on the globe, with over 350 government data sets that serve as the backbone for independently created applications that attracted over \$6 million in private investment.

New York City’s digital initiatives are redefining the nature of government by enabling unprecedented transparency, communication, and collaborative community development. These digital initiatives are the shared successes of DOITT, the City’s resourceful digital media managers, and engaged New Yorkers.

NYC GOV METRICS AT A GLANCE

YEARLY UNIQUE VISITORS TO NYC.GOV  
**24,000,000**

**2.8**  
MILLION  
MONTHLY VISITORS  
TO NYC.GOV

**1.2**  
MILLION  
REACHED MONTHLY BY  
NYC GOV SOCIAL MEDIA

NYC.GOV WEB PAGES

**500,000+**

**FOUR MILLION**  
REACHED EVERY MONTH

Source: DOITT, Google Analytics, Facebook, Twitter, YouTube, Agency Feedback

Photo: Trey Ratcliff. Available under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic License (<http://creativecommons.org/licenses/by-nc-sa/2.0/>)

## NYC.GOV A Gateway to New York City Government

NEW YORK CITY'S WEBSITE NYC.GOV consolidates thousands of municipal resources to serve over 33 million visitors and 66 million visits a year to more than 500,000 City-run web pages. Managing this enormous effort is a formidable task. First launched in 2000, the website is powered by an Oracle/UNIX architecture running Interwoven's Content Management Platform. DoITT is responsible for ensuring the scalability and security of nyc.gov, and maintained a 99.99% up-time record in 2010.

### NYC.GOV APPLICATIONS

Nyc.gov goes far beyond presenting information to New Yorkers. The City has developed over 100 original public applications that streamline municipal processes that would otherwise be cumbersome and confusing, such as learning about social services benefits, starting a new business, or accessing property records.

Popular applications include:

#### ACCESS NYC<sup>1</sup>

A tool that allows New Yorkers to quickly and easily identify government-administered public benefits programs<sup>2</sup> for which they are eligible, such as Head Start, Food Stamps, Medicaid, or Summer Meals.

#### ACRIS (Automated City Register Information System)

An interactive database that allows users to search property records from 1966 to the present, create tax forms, and calculate property transfer taxes.

#### Business Express<sup>3</sup>

A tool intended to streamline the permitting process for new businesses by consolidating all required applications and permits by industry in one place.

#### NYC Service

A frequently updated database of hundreds of volunteer opportunities and organizations, matches individuals with nonprofit programs. Volunteers can sign up for email updates of new opportunities, or browse listings at will. [nycservice.org](http://nycservice.org)

#### Bill Payments<sup>4</sup>

Currently New Yorkers can pay for dozens of City-issued bills and fees online, including water bills and property taxes. New Yorkers are also able to pay or contest parking violations online, saving them time, hassle, and money from late fees.

#### Permits and Applications<sup>5</sup>

New Yorkers can currently file for dozens of City-issued permits and applications online, from Street Festivals to bicycle racks.

#### NYCulture Calendar

The Department of Cultural Affairs provides this robust directory of thousands of City events. This interactive resource enables New Yorkers and visitors to search by date, borough, and category, such as "Free" or "Kid Friendly." Individuals can also submit their own events for inclusion.



1. [https://a858-ihss.nyc.gov/ihss1/en\\_US/ihss\\_homePage.do](https://a858-ihss.nyc.gov/ihss1/en_US/ihss_homePage.do)
2. [https://a858-ihss.nyc.gov/ihss1/en\\_US/ihss\\_S054\\_programsPage.do?sequenceNumber=4&\\_o3rpu=IHSS\\_homePage.do](https://a858-ihss.nyc.gov/ihss1/en_US/ihss_S054_programsPage.do?sequenceNumber=4&_o3rpu=IHSS_homePage.do)
3. <http://www.nyc.gov/portal/site/businessexpress/>
4. <http://www.nyc.gov/portal/site/nycgov/menuitem.0ae64c3f822632bca455e1289da0>
5. <http://www.nyc.gov/portal/site/nycgov/menuitem.9490f0709cc049e334b8a71046a09da0/>



ACCESSIBILITY

New York City’s multiculturalism is one of its strengths, and Mayor Bloomberg has made it a priority to make New York City government accessible to all New Yorkers, signing Executive Order 120 to create a language access policy for the City. As part of this initiative, on nyc.gov the NYC Language Gateway offers access to New York City services and programs in English, Spanish, Chinese, and Russian, including 160 documents from 17 agencies. In addition, 311 Call Center Representatives together offer phone assistance in an impressive 180 languages. Content on nyc.gov is presented in a format compatible with most screen readers for the seeing impaired.

WHY PEOPLE VISIT NYC.GOV

Reflecting the breadth of its resources, visitors access nyc.gov for a wide range of reasons. Search query analysis reveals a broad distribution across multiple keywords. After consolidating duplicate queries, the following ranking represents the top keyword inquiries that drive traffic to nyc.gov:

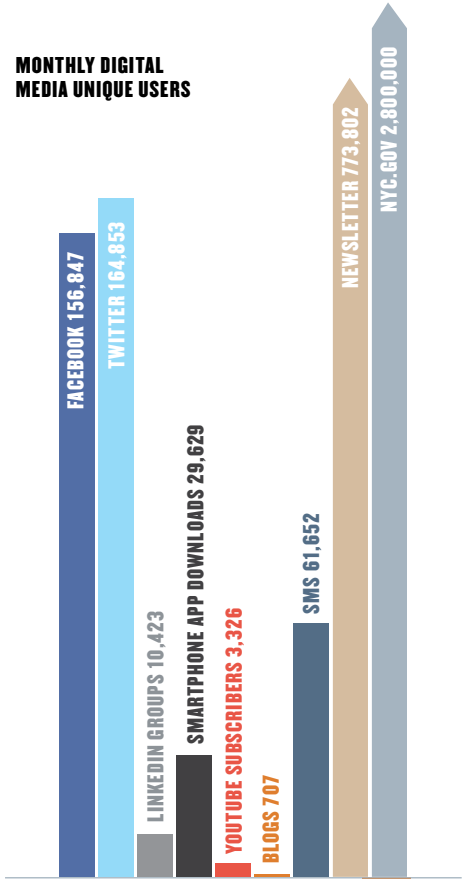
- 1. Schools, Department of Education
- 2. Department of Buildings, ACRIS (Automated City Register Information System), and Buildings Information System (BIS)
- 3. Parking Violations, Taxes, Department of Finance
- 4. Affordable Housing
- 5. Job Listings, Summer Youth Employment Program (SYEP)
- 6. Hospital, Health
- 7. Alternate Side Parking
- 8. New York Police Department
- 9. 311
- 10. Water Bills

Sources: Google Analytics, Compete, Alexa

Seasonal or emergency events often cause changes in trends as web visitors search for new services and information. Elements of nyc.gov and 311 online, such as the Most Requested and NYC Right Now boxes, have been customized to address trending and persistent concerns including alternate side parking rules, schools, and sanitation.

Sources: Google Analytics, Compete, Alexa

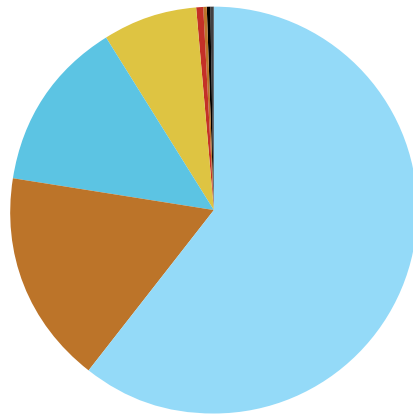
MONTHLY DIGITAL MEDIA UNIQUE USERS



Sources: Facebook, Twitter, YouTube, LinkedIn, DoITT

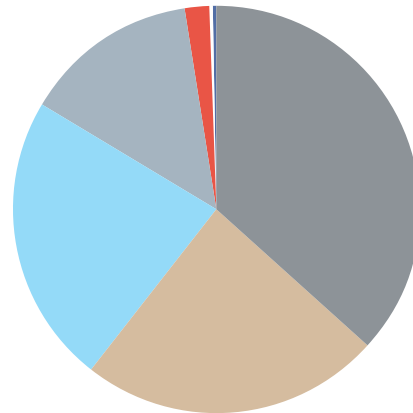
## HOW PEOPLE ACCESS NYC.GOV

About half of the traffic to nyc.gov originates from search engines such as Google and Bing, and about 40% of traffic comes directly to the website. Around 10% of traffic originates from referring sites that link to nyc.gov.



Internet Explorer	3,404,840	60.32%
Firefox	954,285	16.91%
Safari	766,969	13.59%
Chrome	426,738	7.56%
Opera	17,305	.31%
Mozilla Compatible Ag	13,737	.24%
BlackBerry8530	12,568	.22%
BlackBerry9700	10,729	.19%
BlackBerry9630	4,649	.08%
Mozilla	4,116	.07%

Most nyc.gov visitors (60%) use the Internet Explorer browser, followed by Firefox (17%),



Cable	24,514,606	36.8%
Unknown	15,982,249	23.99%
T1	15,207,207	22.83%
DSL	9,306,443	13.97%
Dialup	1,307,357	1.96%
OC3	280,589	.42%
ISDN	9,233	.01%

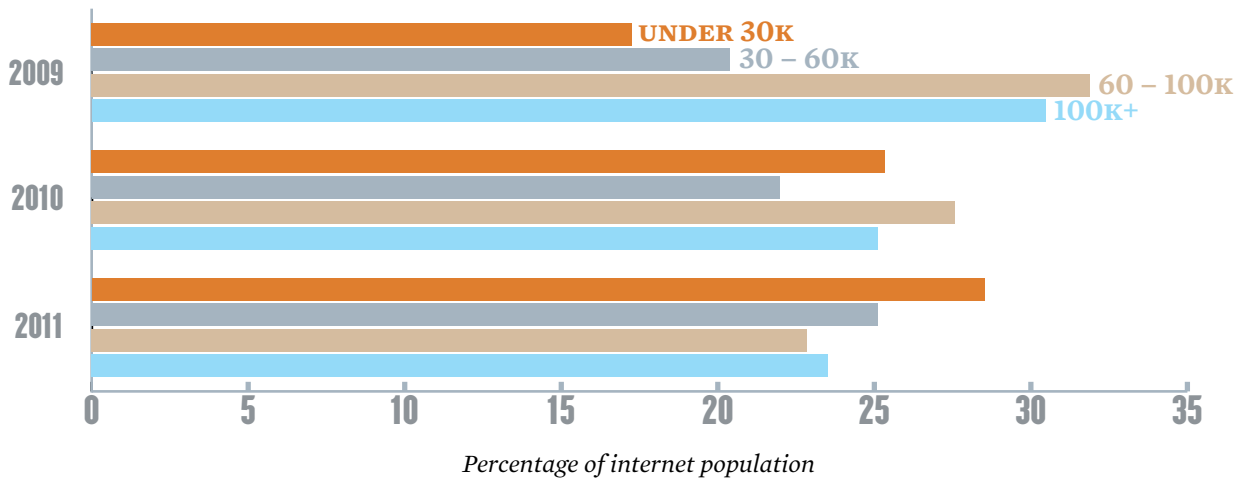
Safari (14%), and Chrome (8%).

While a significant portion of user connection modes is unknown, the majority of visitors to nyc.gov appear to access using cable connections, followed by T1 and DSL. A small but important subset of visitors use a dialup connection.

Source: Google



### Demographic by income



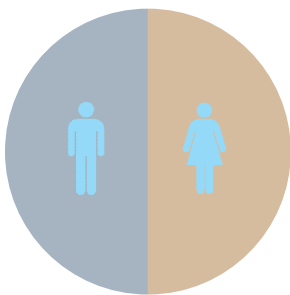
Source: Compete.com

### WHO ACCESSES NYC.GOV

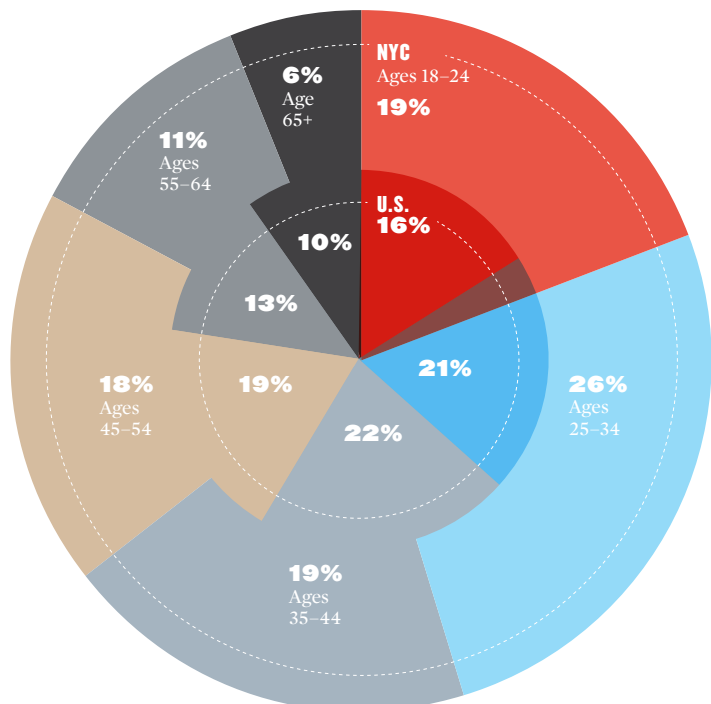
Like the City itself, visitors to nyc.gov represent a diverse cross section of society. Over the past two years, the demographics of visitors to nyc.gov have evolved to be virtually equal in distribution across different socioeconomic groups. For example, visitors from the lowest socioeconomic bracket have increased more than 10% in the past ten years, illustrating an expansion of broadband connectivity and technology literacy in the group.

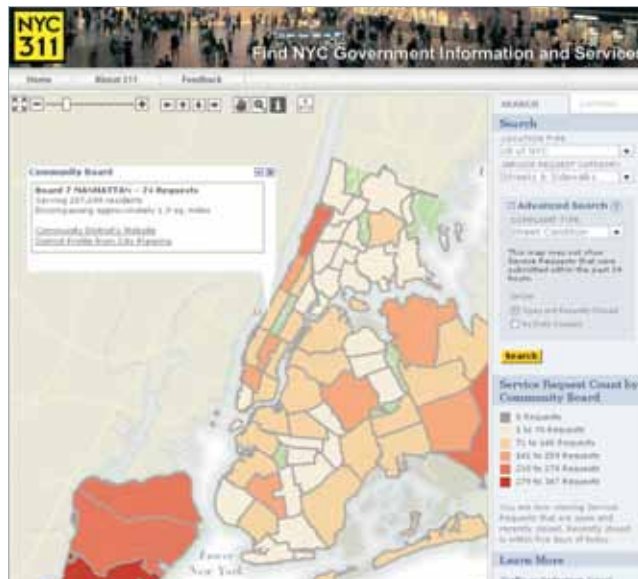
Visitors to nyc.gov echo national distribution averages for gender and age. Traffic to nyc.gov is evenly divided between men (50%) and women (50%). Compared to the US average, traffic to nyc.gov skews slightly younger, with 26% percent of visitors 25-34, followed by 19% 35-44, and 19% for visitors 18-24.

### AN EVEN DIVISION OF VISITORS BY GENDER



### AGE DEMOGRAPHICS OF NYC.GOV VISITORS VS. U.S. INTERNET POPULATION >





Right:  
311 Service Map  
Far Right:  
NYCity Map

### 311 Digital Access and Efficiency

CURRENTLY, 311 ENABLES CITIZENS TO report issues via phone, 311 Online, and 311 smart-phone application. In addition, 311 offers growing support for information via Twitter, Skype, and text message at shortcode 311-692. The 311 team, social media managers, and NYC Digital are working to establish protocols for processing service requests presented outside of official 311 channels, such as on a Facebook page or blog comment.

311 Online recently introduced an updated home page<sup>1</sup> with dynamic feeds that present the real-time status of alternate side parking rules, public schools, and garbage removal—three of the most frequent information requests to 311 and nyc.gov. This feed is available in RSS format<sup>2</sup>, enabling developers and technology platforms to integrate this real-time information into their products and services. In addition to tools for reporting and the dynamic RSS feed, the new 311 Online homepage features recently announced City programs and public service campaigns. 311 Online has garnered numerous awards, including honors from the Center for Digital Government.

In February 2011, 311 unveiled its 311 Service Request Map, an unparalleled tool for government transparency that visually presents geotagged 311 service requests in 15 categories including Noise and Snow on the NYCityMap. Colin Reilly, the head of the City's Geospatial Information Systems (GIS) team at DOITT, describes the impressive application on the NYCityMap Blog<sup>3</sup>:

*The service requests are geocoded on intake at 311 and are presented on a map for presentation and search capabilities and ostensibly ease of use. The data is updated every twenty-four hours. One year's worth of data represents over 4 million records (i.e., points on a map). Service requests at the same location (e.g., address, intersection) are aggregated and the size is graduated by the number of service requests at the location. Therefore, locations with greater service requests will have points of a larger size.*

Citizens can visit the map and search for recent reports by location or community board, and find requests that were opened or closed in the past five days. By clicking on each visual data point, users access additional information about the number of requests, status, and date filed.

1. <http://www.nyc.gov/apps/311/>
2. <http://www.nyc.gov/apps/311/311Today.rss>
3. <http://nycitymap.wordpress.com/2011/02/18/nyc-311-service-request-map/>
4. [http://gis.nyc.gov/doitt/nycitymap/template?applicationName=GREEN\\_INFRA](http://gis.nyc.gov/doitt/nycitymap/template?applicationName=GREEN_INFRA)
5. <http://gis.nyc.gov/moo/scout/index.htm>
6. <https://gis.nyc.gov/moei/speed/login.jsp>
7. <http://gis.nyc.gov/doitt/nycitymap/template?applicationName=DOT>

14,012  
TWITTER FOLLOWERS TO @311NYC

**19.7**  
MILLION  
311 REQUESTS  
PER YEAR

**16,879**  
iPhone App  
DOWNLOADS

**20,000**  
NUMBER OF NEW YORKERS  
A 311 CALL CENTER  
REPRESENTATIVE SPEAKS  
TO EVERY YEAR

**180**  
LANGUAGES  
SPOKEN

HIGHEST VOLUME  
IN A SINGLE DAY  
**276,827**  
JANUARY 27, 2011

300 AVERAGE DAILY STAFF • 4% OF SERVICE REQUESTS ARE MADE ONLINE • 60,000 AVERAGE DAILY CALLS

## NYCITYMAP Robust Geographic Resources

THE GEOSPATIAL INFORMATION SERVICES (GIS) team within DOITT maintains a base map of New York City, which has its public facing presence here: <http://gis.nyc.gov/doitt/nycitymap/>. Internally, City agencies use an API to share and integrate location-based information with the map. For the public, NYCityMap<sup>3</sup> provides a wealth of geographic information about nearly every address in New York City, including resources on local Community Boards, elected officials, and building and property records. It allows users to reveal over 150 additional geographical elements, from green markets to Wi-Fi hotspots. This information-rich map is also an incredible historic resource, and offers the ability to toggle to an aerial photographic map setting, with views from 1924, 1951, 1996, 2006, and 2008.

NYCityMap also offers five additional themes that augment the basic map with additional information layers:

### 1. 311 Service Requests

Presents 15 types of 311 service requests, such as sanitation or noise, opened or closed in the past five days.

### 2. Green Infrastructure

Overlays 10 types of green infrastructure, including green roofs, pervious pavement, and rainwater reuse systems.<sup>4</sup>

### 3. SCOUT (Street Conditions Observations Unit)

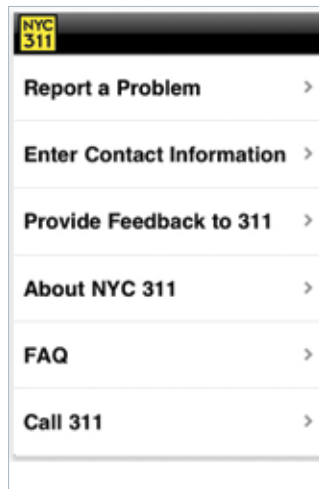
Reveals the number of days since the last investigation by the SCOUT team in every Community Board district. SCOUT surveys streets and reports visually-identifiable quality of life conditions.<sup>5</sup>

### 4. SPEED (Searchable Property Environmental E-Database Portal)

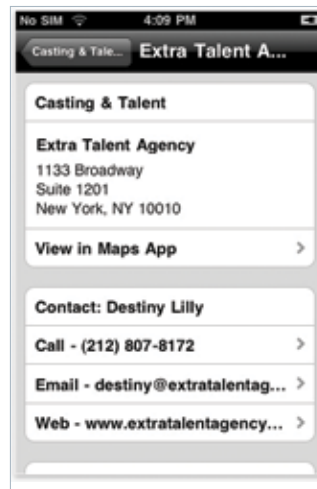
Using the Vacant Property Database, this map presents environmental data on certain sites in government environmental remediation programs, as well as historical information including prior uses of unimproved vacant properties.<sup>6</sup>

### 5. Transportation

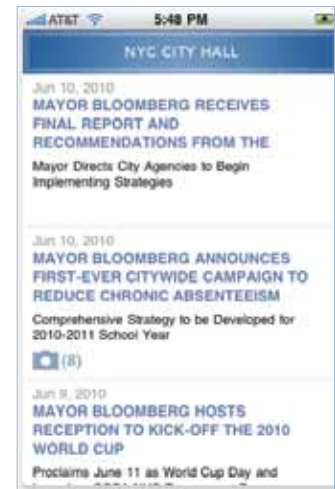
The Department of Transportation's map displays 19 different map features, including bicycle paths, truck routes, and ferry terminals.<sup>7</sup>



311 App



Made in NY App



NYC City Hall App

## MOBILE Information On The Go

THE CITY OF NEW YORK actively leverages mobile technology to engage the public. Mobile initiatives include the construction permit integration of web-linked QR codes by the Department of Buildings, and SMS tools, such as 311 service requests via 311-692 and alerts through the NYC Notify system operated by the Office of Emergency Management.

DOITT, NYC Media and partners have also developed six official New York City smartphone applications that help residents and businesses by providing them with real-time information and services. Several agencies have begun to introduce mobile versions of their websites to enable greater access. Finally, through the **NYC Big Apps** Competition that provides City data to developers, the City has enabled the creation of over 100 independent applications.



### 311 IPHONE APPLICATION

In June 2009, New York became the first city in the world to launch a 311 iPhone Application<sup>1</sup>. The app, developed in-house by DOITT, enables New Yorkers to submit service requests using Apple iPhones, with the option to add location tagging via GPS and photos to requests. The app currently supports a select number of service request types including:

1. Cable television & public pay phones
2. Consumer complaints, such as damaged/defective goods, false advertising, & prices/rates not posted
3. Graffiti
4. Restaurant complaints
5. Street or sidewalk conditions, such as potholes, street signs, street lights, parking meter problems, and damaged bus stop shelters
6. Public park conditions, such as animals, maintenance or facility issues, and rules violations
7. Tree damage
8. Dirty vacant lots
9. Taxi complaints, including lost property

1. <http://itunes.apple.com/us/app/nyc-311/id324897619?mt=8#>  
 2. <http://itunes.apple.com/us/app/minny-discount-vendors/id372448233?mt=8>  
 3. <http://itunes.apple.com/us/app/nyc-city-hall/id375398827?mt=8>  
 4. <http://itunes.apple.com/app/nyc-condom-finder-by-nyc-health/id418902795#>  
 5. <http://itunes.apple.com/us/app/nyc-media-app/id433177943?mt=8&ls=1#>  
 6. <http://itunes.apple.com/us/app/you-the-man/id386961259?mt=8>



*NYC Condom Finder App*



*NYC Media App*



*You The Man App*

### **MADE IN NY IPHONE APPLICATION**

The Made in New York app<sup>2</sup> from the Mayor's Office of Media and Entertainment supports the film and broadcasting industry by presenting approximately 1,000 geographically tagged vendor discounts for projects based in New York City.

### **NYC CITY HALL IPHONE AND ANDROID APPLICATIONS**

The Mayor's Office City Hall application<sup>3</sup> provides a real-time news feed of the latest press releases, announcements, and photos from Mayor Bloomberg. Users can also link directly to the 311 iPhone App or make calls to 311 regarding service requests.

### **NYC CONDOM FINDER IPHONE APPLICATION**

Launched by the Department of Health and Mental Hygiene, the NYC Condom Finder<sup>4</sup> encourages safe sex by enabling any New Yorker to find free NYC condoms in one of over 3,000 nearby locations, based on GPS location. It also provides information about the NYC Condom program and guidelines for usage. The NYC Condom Finder currently has a 5-star rating in the Apple iTunes Store.

### **NYC MEDIA IPHONE APPLICATION**

Launched by the Mayor's Office of Media and Entertainment, this application<sup>5</sup> features hundreds of hours of NYC Media programming, schedules for upcoming shows, and a GPS-enabled map that reveals videos about the places near you, from restaurants to parks.

### **YOU THE MAN IPHONE APPLICATION**

Developed by the Department of Transportation, the You The Man app<sup>6</sup> features quizzes on sobriety, Twitter integration to praise designated drivers, and a geo-based search tool for finding nearby taxi and limousine services.

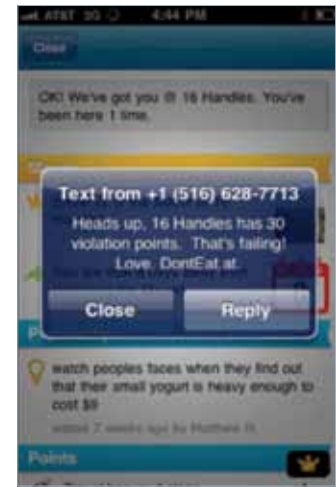




Roadify



Roadify



DontEat.At

## DATAMINE, NYC BIG APPS AND NYCSTAT Innovation Built on Public Information

THE CITY OF NEW YORK DataMine<sup>1</sup> is a repository of over 350 machine-readable public data sets, maintained by DOITT, and provided to technologists interested in developing applications that use public information. NYCStat<sup>2</sup> is a separate resource that provides a wide range of public information in a non-technical, data visualization format that anyone can access and use.

The NYC Big Apps contest, hosted by the Economic Development Corporation (EDC), DOITT and founding partner ChallengePost, is a pioneering competition to promote and incentivize the creation of innovative mobile applications built using the public data found on the DataMine. It is one of the first of its kind in the government arena, and has been replicated by other municipalities who recognize its effectiveness in developing new technology at marginal cost. <http://nycbigapps.com>

In 2011 the contest featured over 350 data sets from across the City, and awarded \$50,000 in prizes from private partners. Last year's winner, MyCityWay, recently closed a \$5 million second round. The competition is renowned and shows the Return on Investment for organizations that open their data to the public in a machine readable format. This year's winners included social transport app Roadify and location-based restaurant grade mashup DontEat.At.

### 2011 NYC BIG APPS 2.0 WINNERS

#### Roadify

Roadify is a social transportation app that aggregates input supplied by the DOT, MTA and commuters on traffic, vacant parking spots, and public transit delays - leveraging the eyes and ears of the crowd to provide real-time updates. Roadify has enormous potential to reduce congestion by suggesting alternate routes before it's too late, make commuters more efficient with more information, and improve the quality of life of New Yorkers.

#### DontEat.At

Donteat.At adds value to another New York-based platform: Foursquare. People use Foursquare to share their location with others by "checking in" to the application. When they use Donteat.at, users receive instant SMS warnings when they check into a New York City restaurant that is in danger of being closed because of health violations.

1. <http://www.nyc.gov/html/datamine/html/home/home.shtml>  
 2. <http://www.nyc.gov/html/ops/nycstat/html/home/home.shtml>  
 3. <https://a858-nycnotify.nyc.gov/notifynyc/>  
 4. <http://twitter.com/#!/311nyc>  
 5. <https://twitter.com/#!/NYCMayorsOffice>

## CULTURAL DATA PROJECT

The Department of Cultural Affairs is a participant in the Cultural Data Project of Pew Charitable Trusts. The Cultural Data Project provides a free, web-based management platform that allows cultural organizations to track and share their programmatic and financial performance, supporting greater efficiency for funders and institutions.

## SOCIAL MEDIA Participation and Engagement

CITY AGENCIES MANAGE OVER 200 social media channels that reach an audience of more than 1.2 million. Channels include Facebook, Twitter, WordPress, Flickr, Tumblr, Vimeo, and YouTube, which has garnered over 1.3 million views alone. Digital communications managers recognize social media as a way to form a deeper relationship with their constituents, gain valuable feedback, and share information about services. Many of the most effective social media initiatives provide a space for community-led discussion, with the City playing an informative, supporting role in the background.

Using social media in the public sector comes with unique challenges; privacy and sensitivity concerns mean that public forums are not always ideal. As in the private sector, the City's most successful social media strategies are goal-based, aligning with agency objectives from the start, and employing social media channels appropriate to their audience and desired outcomes.

### CHARACTERISTICS OF EFFECTIVE PUBLIC SERVICE SOCIAL MEDIA:

1. Provides clear value to the user. Answers the question: Why would a citizen want to use this? What do they gain?
2. Citizen-centric, not agency-centric. Communicates on the terms of the individual.
3. Agency social media managers actively contribute, supporting a dynamic community.
4. Aligns with agency goals, improving the City's ability to serve New Yorkers and ensuring adequate resource commitment.

The following successful social media examples demonstrate these features and prove the value of strategic public service social media.

### SOCIAL MEDIA HIGHLIGHTS

#### 1. Notify NYC via SMS and Twitter<sup>3</sup>

The Office of Emergency Management uses the simple, ubiquitous formats of SMS and email to transmit short messages when urgent situations arise that might impact New Yorkers. Messages are also rebroadcast across Twitter.

#### 2. @311NYC on Twitter<sup>4</sup>

311 has a tremendous reputation for helping citizens by creating a streamlined customer service experience on top of complicated internal City interactions. 311's digital team has begun to address complaints and service requests via Twitter. While they do not yet have the capability to issue tracking numbers, 311 directs users to the specific agencies and online resources that can help resolve citizen issues.

Unlike a private, person-to-person 311 transaction via telephone, a public transaction conducted over Twitter has the potential to educate citizens, establishing a record that enters the collective digital consciousness and can be discovered through search.

#### 3. @NYCMayorsOffice on Twitter<sup>5</sup>

Twitter's ability to establish a direct line to elected officials is one of its most empowering features. Mayor Bloomberg's office has embraced this opportunity to connect with its



Work Permits



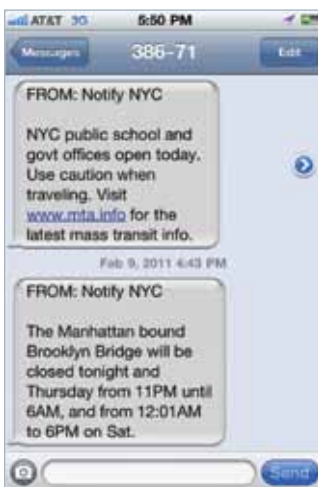
@NYCMayorsOffice on Twitter



The Daily Pothole



NYC Quits Smoking on Facebook



Notify NYC



Broadcastr



@nycmayorsoffice Twitter feed, and a variety of compelling Twitter-based contests and calls-to-action.

With the creation of the #askmike hashtag, the Mayor's Office solicits public questions for the Mayor via Twitter, which he addresses on his Friday radio show. And in April's #poetweet contest, @nycmayorsoffice called for poems in 140 characters or less, and selected five winners for publication in *Metro* newspaper.

In a city as vast as New York, creating personal connections and reducing barriers to engagement—via initiatives like these—help to foster communication and community.

#### 4. NYC Quits Smoking on Facebook<sup>1</sup>

An excellent example of public health information, the NYC Quits Smoking Facebook page, launched by the Department of Health and Mental Hygiene, shows the value of creating a forum for community discussion focused on issues, rather than agencies. The page has become a support group for individuals trying to quit, and features apps that allow users to apply for free nicotine patches and other cessation aids.

#### 5. NYC Schools on Facebook<sup>2</sup>

The Department of Education has strategically branded their Facebook page as NYC Schools, and now hosts one of the City's largest and most vibrant communities online with over 14,000 fans and engaging contests, news, and discussions with parents and educators.

#### 6. QR Codes on Construction Permits

Earlier this year, Mayor Bloomberg and Buildings Commissioner LiMandri announced the introduction of QR codes, a type of mobile tag, on all future DOB permits. An exercise in transparency and augmented reality, the permits enable individuals to scan a QR code with their phones and instantly access more information about the site manager or approving party.

#### 7. The Daily Pothole on Tumblr

A Department of Transportation channel, The Daily Pothole Tumblr blog has transformed an inevitable consequence of inclement weather - the pothole - into an object of civic activity, by recognizing the thousands of hard working City employees repairing potholes every day, and supporting transparency through mapping. <http://thedailypothole.tumblr.com/>

#### 8. Broadcastr and Parks

Broadcastr, a platform for audio content tied to places, partnered with the Department of Parks and Recreation to produce audio tours of parks across New York City. Park visitors can enable broadcastr to play seamlessly as they explore the grounds, prompting, for example, a talk by expert Eloise Hirsch recounting the historic and cultural significance of Strawberry Fields. The effect is not unlike a personalized museum audio tour. The app and all City of New York tours are free of charge. <http://beta.broadcastr.com/>

#### 9. NYC Service<sup>3</sup>

As part of their "Use Your Blank" campaign, NYCService launched an interactive platform that matches volunteers with service organizations and opportunities based on highly personalized settings including location and interest. Volunteers can register to get alerts and embed the widget.

#### 10. 311 iPhone Application

The 311 iPhone app allows citizens to report problems like graffiti or potholes instantly, adding photos and location tags if desired. The iPhone app enables a faster, more efficient experience, and helps to lessen the burden on 311's traditional call center.

1. <http://www.facebook.com/nycquits>  
2. <http://www.facebook.com/NYCSchools>  
3. [http://www.nycservice.org/nyc\\_service\\_report.php](http://www.nycservice.org/nyc_service_report.php)

## **VIDEO** Sharing New York City's Story

### **VIDEO ON DEMAND**

**NYC MEDIA DEVELOPS AND PRODUCES** the majority of the City's digital video content, creating both original series tied to public interest subjects and providing coverage of official events. NYC Media's extensive Video-On-Demand library currently offers 929 videos from NYC Life, an NYC Media-operated television channel, and enables social sharing and embedding through its custom player.

In addition, City press releases often link to official video of Mayoral events and announcements, provided in Windows Media Player format in high and low bandwidth formats.

### **YOUTUBE AND VIMEO**

City agencies also leverage third-party social video platforms to power their video content, including YouTube and Vimeo. The City's original content on YouTube has been viewed more than 1.3 million times, with Mayor Bloomberg's regularly refreshed YouTube channel garnering over 174,000 views to date, and the New York Police Department attracting over 800,000 views.

### **LIVE VIDEO**

The City of New York regularly produces live video coverage of important Mayoral and citywide announcements. Live video is promoted on nyc.gov, and Windows Media Player software is required for viewing. It is offered in both high (500 kbps) and low (100 kbps) bandwidth. The City Council also provides live video coverage of Stated Meetings, made available through an in-browser live streaming player.

## **NEWSLETTERS** Engaging Digital Communication

**THE LARGEST SOCIAL MEDIA IMPRINT** belongs to the City's over 100 newsletters. More than 700,000 New Yorkers currently receive email updates from City agencies, with the City's apartment rental and sales newsletter reaching the largest audience at over 240,000 active subscribers.

The City's employment opportunities newsletter, administered by DCAS and DOITT, is the second largest newsletter, and reaches over 125,000. The interest in Buildings and Jobs are consistent with search trends to nyc.gov. A prominent link on the homepage of nyc.gov drives traffic and new registrations.

1. <http://www.nyc.gov/html/nycmg/nyctvod/html/home/home.html>
2. <http://www.youtube.com/mayorblloomberg>



NYC Media

YOUTUBE REACH

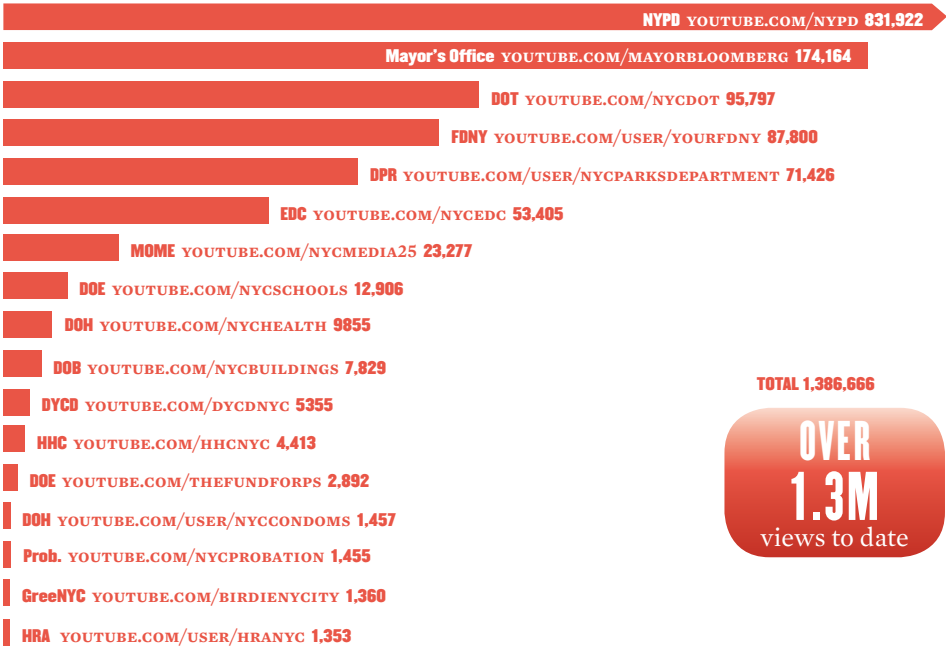


image courtesy youtube



Cover design competition



Taxi of Tomorrow

## CROWDSOURCING AND CONTESTS Cultivating Public Participation

**PUBLIC CHALLENGES AND CONTESTS CULTIVATE** creativity, involve New Yorkers in City projects, and introduce fresh thinking into government. City agencies have seen great success leveraging crowdsourcing competitions. In addition to the NYC Big Apps challenge, notable recent initiatives include Taxi of Tomorrow, urbancanvas, and the Department of Education's Cover Design Competition.

### COVER DESIGN COMPETITION<sup>1</sup>

This year, the Department of Education crowdsourced the cover design for its High Schools Directory by turning to its community. It invited public high school students to submit their best visual work, judged entries in partnership with experts from Cooper-Hewitt, and publishing the winning design on the thousands of editions distributed across New York City.

### TAXI OF TOMORROW<sup>1</sup>

To gain insights from New Yorkers into their preferred taxi models, the Taxi and Limousine Commission introduced the Taxi of Tomorrow initiative, showcasing three environmentally conscious, accessible new models and inviting the public to complete a survey on their preferences. To incentivize and reward New Yorkers, the Commission awarded one New Yorker a year of free taxi rides.

### URBANCANVAS<sup>2</sup>

Launched by the Department of Buildings and the Department of Cultural Affairs, the urbancanvas competition invited the public to vote on eight design candidates to beautify City scaffoldings. The four winning designs are available to building owners, who can apply online to download the designs.

1. <http://schools.nyc.gov/ChoicesEnrollment/High/CoverDesignHome.htm>  
 2. <http://www.nyc.gov/html/media/totweb/totweb/taxi of tomorrow.html>  
 3. <http://www.nyc.gov/html/urban canvas/html/building/artwork.shtml>

## DIGITAL LEARNING

### IZONE

The Department of Education has embraced opportunities to integrate technology into the classroom, both strategically and tactically. Their flagship program is the iZone initiative, a community of schools committed to improving the education experience organizing school around the needs, strengths and motivations of each and every child. iZone provides teachers with new technologies and other tools and the supports to maximize them, enabling collaborative learning, cultural exchange, and real-world lesson plans. For example, students might use Skype technology to connect with classrooms and professional experts around the globe, learn about the earth's atmosphere from a NASA scientist, and share thoughts with peers in the Gulf Coast on 9/11 and Hurricane Katrina.

Through iZone tools, teachers track progress in real-time and can tailor programs to offer extra help or more challenging material. And digital resources also allow students to take classes not currently offered in their schools, such as college-level courses, credit recovery, electives, and languages. iZone benefits from the support of technology leaders including Cisco and Google, who are program partners.

### HUDSON HIGHSCHOOL OF LEARNING TECHNOLOGIES

One school that exemplifies the potential of the iZone is Hudson High School of Learning Technologies. Hudson is a unique, visionary institution that has fully embraced digital learning. In this print textbook-free school, every student has a laptop and every teacher a website. Technology is intrinsic to every lesson plan. In addition, nonprofit partner MOUSE has added to the students' programming through the MOUSESQUAD program, which teaches volunteer students to become the school's in-house Information Technology specialists, and assist their teachers and peers. In exchange, they are equipped with valuable skills, a sense of pride, and their own tools, such as individual iPads.

## SUMMARY

**NEW YORK CITY GOVERNMENT** is a pioneer in digital government, engaging over 4 million people every month through the combined online reach of nyc.gov, 311 Online, NYCity-Map, social media such as Facebook and Twitter, mobile apps, open data initiatives, video, newsletters, and crowdsourcing. These technologies enable New York City government to provide a more streamlined, rewarding experience of engaging with the City, by helping citizens through digital channels that are most accessible and relevant to their daily lives. Digital media expands the potential of each agency's ability to serve and communicate with its constituency, and the City's digital leaders are embracing this opportunity with skill and enthusiasm.

# Part II:

## Digital Input





OVER THE COURSE OF ITS initial 90 days, NYC Digital undertook an extensive investigatory process in both digital and physical environments, welcoming input from the public via in-person workshops, listening sessions, brownbag lunches, Question and Answer sessions, interviews, Meetups, and through digital media tools such as Twitter, Quora, Facebook, Google surveys, and email.

Internally, NYC Digital met with dozens of agencies, learning about their successes and challenges, and providing social media managers with a forum to express their digital needs. The Office also conducted a survey of social media activity among digital communications managers, providing invaluable insights.

The following is a breakdown of input, which amounted to over 4,000 points of engagement across the public and private sectors.

DIGITAL ENVIRONMENTS

669	Tumblr
195	Quora
1690	nyc.govSurvey
175	Open Data Survey
480	City Agency Survey
200	By The City
256	Twitter
160	Open NY Meetup
19	Facebook Questions
87	Social Media Week
42	SXSW
72	Startup Brownbag Lunch
36	PSFK
8	RPA

4089 TOTAL POINTS OF INSIGHT



## PUBLIC INPUT

THE MOST FREQUENT REQUESTS FROM the public were for public Wi-Fi, realtime public transportation information, updates to nyc.gov, 311 mobile applications, and centralized social media.

### PUBLIC NEEDS:

1. Public Wi-Fi and Broader Internet Access
2. Real-time Public Information
3. nyc.gov
4. 311 Apps
5. Streamlined Social Media

### Public Wi-Fi

Wireless Internet access in public spaces and underground subway Internet stations was one of the leading requests from citizens. Residents shared widely ranging suggestions and reasons, excerpted below:

*Free public Wi-Fi across the board. Not just in Bryant Park. Up here in the Bronx too...*

*Ubiquitous Wi-Fi with the help of 4G/WiMAX capable technologies 2. Create a public cloud using the city's existing IT infrastructure*

*More public Wi-Fi so businesses can grow and move*

And Wi-Fi in subways:

*City-wide (including subway) wi-fi network would help to not only bring entrepreneurs to NY, but also to spread high speed internet access to historically underserved communities.*





## NYC.GOV

THE CITY'S WEBSITE, NYC.GOV, was the focus of significant public input. While some praised its information and content, many New Yorkers expressed that it could be confusing and in need of a redesign. Comments included "unwieldy," "hard to navigate," "confusing to navigate," and "overcomplicated." A sample of public feedback:

*nyc.gov is a little hard to navigate/ search*

*nyc.gov could use a refresh.*

*I wish nyc.gov was a little easier to navigate, better organized. If you could make the online experience closer to the phone experience (and I hate using the phone), you'd really have something there*

*The search function within the different departments of nyc.gov could be a little better. also, it seems like some depts are cooperating with nyc.gov and others are not, especially when it comes to job openings*

*Nyc.gov is just too unwieldy. Not sure every NYC gov service or business unit needs to be present. Some services probably need a dedicated site.*

*Some parts of nyc.gov are confusing to navigate, but I appreciate all the information that is on it. The contact forms are great.*

*NYC.gov is overcomplicated and lacks consistency between departments, agencies and services. I'm not suggesting that a cohesive visual brand needs to be developed and extended to each agency, but the website itself could be improved to quickly provide the correct path(s) depending on what the readers are looking for.*

## REAL-TIME TRANSIT UPDATES AND APPLICATIONS

While the Metropolitan Transportation Authority (MTA) does not reside within municipal government, a desire for timely updates via mobile devices was one of the most common public requests.

*Accurate, real-time info on public transit would be awesome! Would make for a great mobile app.*

## MOBILE PAYMENTS

Many New Yorkers requested mobile payment methods for bills and fees associated with the City, such as parking violations and water bills. Suggestions ranged from smartphone applications to QR code scanners that link to mobile sites. Some also praised existing services to pay bills online.

*You are getting stuff online quickly—I LOVE getting my water bill online and seeing my daily use. Just keep doing it!*

## 311 VIA TWITTER AND MOBILE APP

Although 311 already offers an iPhone application, many citizens were not aware of this and requested the creation of an app for uploading service requests with images and location tagging. Others requested 311 service via Twitter, an avenue that 311 has begun to explore by routing individuals to the correct online resource.

*I like the 311 phone app for reporting problems like potholes w location and picture - I'd like the App expanded to cover more options. It seems like a super efficient tool.*

*Geo-location app and 311 seems like a natural. Allow me pick need (service, event or opportunity) and serve information based on my location or serve me information about services, events or opportunities based on my location.*

## CENTRALIZED SOCIAL MEDIA AND INFO: TWITTER, FACEBOOK, TUMBLR

Reflecting the growing importance of social media, many New Yorkers requested a curated version of the City's information and social media activity.

*While i used to get most of my information from the nyc.gov website, these days i get most from twitter and facebook accts of various agencies.*

## GET THE BASICS RIGHT—ACCESS

Finally, many citizens reinforced the importance of achieving the basics before launching more glamorous but potentially less accessible technologies.

*Dont try to do anything crazy, dont hold tweet-ups, or hashtag the Mayor's YouTube's, just make government IT work, just make the web-site not a Byzantine maze, just make it so that people actually reply to emails, just make 1990 technology actually work before you integrate the latest greatest fad.*

*One key thing we need to do as technologists is stop trying to answer these questions with 'we need an iPhone app!' or 'we need an Android app!' or 'let's use Twitter!' Because most New Yorkers don't have access to any of these devices or platforms, and even SMS is limited in its reach. We need to create solutions that are much more about empowering those who \*don't\* live with the latest cutting-edge tech all the time, for the good of the entire city.*

### Other public input ideas included:

1. QR Codes on Restaurant Inspections
2. Phone Chargers in Cabs
3. One-Stop Shop for Tech Startups, Filing and Intellectual Property
4. Kiva for Government Projects
5. Access
6. Timely News Updates and Press Releases
7. Digitize and Stream Community Boards
8. Google Maps instead of CityMap.

*Please make sure you add captioning to all your videos so they are accessible to all.  
Thanks.*

*We need phone chargers in the back of cabs.*

*Digitize community boards, and stream meetings. Impossible for parents to attend those things.*

## ENTREPRENEUR AND DEVELOPER COMMUNITY

**THE TOP NEED EXPRESSED BY** the entrepreneur and startup community was for a greater engineering talent pool, followed by improved broadband connectivity and dialogue with vendors. The developer community was nearly uniform in their highest priority request for the City's digital future: An Application Programming Interface, or API, to unlock the City's vast stores of data. Following this, developers expressed a desire to simplify the vendor procurement process for small development firms and to increase the visibility of Requests for Proposal.

### PRIVATE SECTOR AND TECHNOLOGIST INPUT:

1. Engineering Talent
2. Broadband Connectivity
3. Real-time API of NYC Data and Services
4. Faster Procurement Process
5. Visibility of RFPs

*NYC is filled with really smart people.  
So NYC should provide them the tools to best serve themselves and fellow citizens,  
Example: good APIs*

### ENGINEERING TALENT

Technology startups cited the need for a stronger engineering workforce as their most prominent need, reflecting the NYC Media 2020 report produced by the Economic Development Corporation. Entrepreneurs suggested that competition for engineers with the West Coast and the financial sector, as well as the need for an anchor engineering institution, were key influences. Many asked for support in sourcing current and projected engineering roles in New York City.

## OPEN DATA API<sup>1</sup>

The single greatest request from the developer community was nearly uniform: a RESTful Read/Write API, or Application Programming Interface, for public data and services. Some commentators added that open source software will ensure that data is easily, lawfully extractable and processable. Developers also advocated for a secure, cloud-based infrastructure to ensure scalability. An API enables different software programs to communicate with each other, supporting an ecosystem of tools and features powered by an application.

*Defining a presentation framework that would allow developers to have easy access to public service's data*

*Instead of trying to anticipate our needs, work on building open APIs and databases and let us find our own uses for your data.*

## BROADBAND

While broadband connectivity in the City of New York reportedly reaches 98% of residences, many commercial and industrially zoned areas lack the infrastructure to support successful technology ventures. The venture capital and entrepreneur capital cited broadband connectivity as an impediment to growth, expansion, and productivity.

## AGENCY FEEDBACK

ACROSS THE CITY OF NEW YORK, dozens of resourceful, highly motivated social media managers are quietly evolving the way that New York City government engages with the public. Many launch and maintain vibrant social media channels on top of their core responsibilities, expanding efforts as they recognize the effectiveness of the tools in reaching constituents, providing information, and receiving crucial feedback.

*What struck me about the city APIs is that they're not really standardized: some are Excel spreadsheets, others are CSVs, others are in text format, others demand Access database usage (yikes), etc*

This group represents a glimpse of the future of civic engagement, and their ideas will help shape coordination and strategy.

### AGENCY INPUT:

1. Strategy
2. Coordination
3. Management and Analytics
4. Resources
5. Integration

## NEXT-GENERATION STRATEGY

Social media managers proposed unifying the City's various digital initiatives more closely within a cohesive strategic mission. To this end, agencies suggested expanding existing supports and increasing agency-to-agency consultation, shared best practices, and training from private sector leaders.

## NEW COORDINATION TOOLS

Agencies proposed the adoption of additional coordination measures among agencies to maximize the impact of social media engagement. Suggested measures included social media-specific shared calendars, mailing lists, and other collaboration tools.

*Social Media Week panel with Seth Pinsky, Commissioner Carole Post, and Rachel Sterne, moderated by Jeanette Moy of the Mayor's Office of Operations.*



## **POLICIES**

Social media managers proposed new citywide policies for digital communications, with the goal of more effectively providing information and directing citizens to resources.

## **MANAGEMENT AND ANALYTICS**

To enhance effectiveness of newsletters, many suggested the adoption of management tools (such as MailChimp or Constant Contact) that track engagement levels and allow managers to measure Key Performance Indicators and campaign success. In addition, many suggested that some form of a citywide Citizen Relationship Management system would improve efficiency. Lastly, social media managers widely proposed the use of Google Analytics in order to measure constituent traffic, analyze successful incoming campaigns, and learn from visitor traffic patterns.

## **MOBILE APPLICATIONS**

A growing number of City agencies seek mobile applications and SMS systems to help serve their constituencies, and are interested in guidance on how to develop concepts, outline specifications, and engage developers for implementation. As serving the greatest possible number of residents is the goal of any City agency, embracing mobile technology offers a unique opportunity to expand reach.

## **INTEGRATION**

Social media managers expressed ideas for more deeply integrating digital media into agency activities, to enable even greater alignment with goals and support growing the digital needs of constituents.

## **SHARED DEVELOPER EVALUATIONS**

As more City agencies work with developers to build digital tools, some suggested new means of sharing feedback on the experience, performance, and results of projects.

# Part III:

## The Road Map





NEW YORK CITY HAS LONG been a foundation for innovation, enabling entrepreneurs to grow, cultivating generations of students, creating world-class infrastructure, and providing an unparalleled quality of life.

This section outlines a path to embrace New York City’s potential as the world’s leading Digital City through commitments to Access, Open Government, Engagement, and Industry.

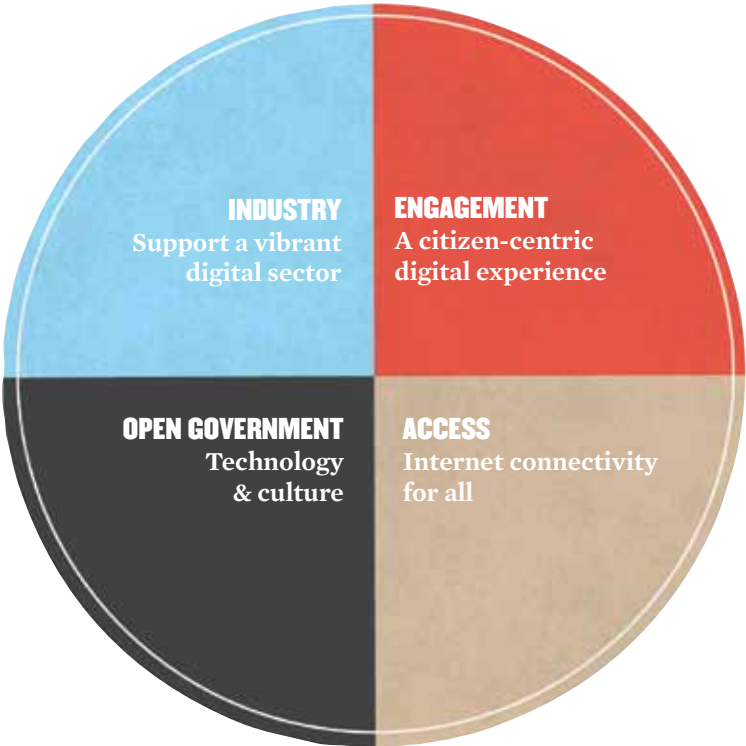


Photo: Adamina. Available under a Creative Commons Attribution 2.0 Generic License (<http://creativecommons.org/licenses/by/2.0/>)

## THE ROAD MAP

### 1. Access

The City of New York ensures that all New Yorkers can access the Internet and take advantage of public training sessions to use it effectively. It will support more vendor choices to New Yorkers, and introduce Wi-Fi in more public areas.

1. Connect high needs individuals through federally funded NYC Connected initiatives
2. Launch outreach and education efforts to increase broadband Internet adoption
3. Support more broadband choices citywide
4. Introduce Wi-Fi in more public spaces, including parks

### 2. Open Government

By unlocking important public information and supporting policies of Open Government, New York City will democratize access to services, enable innovation that improves the lives of New Yorkers, and increase transparency and efficiency.

1. Develop NYC Platform, an Open Government framework featuring APIs for City data.
2. Launch a central hub for engaging and cultivating feedback from the developer community.
3. Introduce visualization tools that make data more accessible to the public.
4. Launch App Wishlists to support a needs-based ecosystem of innovation.
5. Launch an official New York City Apps hub.

### 3. Engagement

The City will improve digital tools including nyc.gov and 311 online to streamline service and enable citizen-centric, collaborative government. It will expand social media engagement, implement new internal coordination measures, and continue to solicit community input in the following ways:

1. Relaunch nyc.gov to make the City's website more usable, accessible, and intuitive
2. Expand 311 Online through smartphone apps, Twitter and live chat
3. Implement a custom bit.ly url redirection service on nyc.gov to encourage sharing and transparency
4. Launch official Facebook presence to engage New Yorkers and customize experience
5. Launch @nycgov, a central Twitter account and one-stop shop of crucial news and services
6. Launch a New York City Tumblr vertical, featuring content and commentary on City stories
7. Launch a Foursquare badge that encourages use of New York City's free public places
8. Integrate crowdsourcing tools for emergency situations
9. Introduce digital Citizen Toolkits for engaging with New York City government online
10. Introduce SMART, a team of the City's social media leaders
11. Host New York City's first hackathon: Reinventing nyc.gov
12. Launch an ongoing listening sessions across the five boroughs to encourage input

### 4. Industry

New York City government, led by the New York City Economic Development Corporation, will continue to support a vibrant digital media sector through a wide array of programs, including workforce development, the establishment of a new engineering institution, and a more streamlined path to do business.

1. Expand workforce development programs to support growth and diversity in the digital sector
2. Support technology startup infrastructure needs
3. Continue to recruit more engineering talent and teams to New York City
4. Promote and celebrate NYC's digital sector through events and awards
5. Pursue a new .nyc top-level domain, led by DOITT



TRAIN as many as

**44,500**

RESIDENTS with up to

**350,000**

HOURS of teacher-led training annually.

### THE NYC CONNECTED LEARNING

program will provide computer training, desktop computers, technical support, educational software, and dramatically reduced broadband access five years to more than 18,000 low-income sixth-graders and their families, approximately 40,000 residents total, in 72 high-need public middle schools in New York City.

**98%**

RESIDENTIAL  
BROADBAND  
ACCESS

### UNDERGROUND

SUBWAY WI-FI &  
CELL SERVICE IN  
SIX STATIONS

**BUILD A PUBLIC COMPUTER CENTER THAT WILL PROVIDE TRAINING AND CAPACITY BUILDING FOR 24 SENIOR CENTERS ACROSS THE CITY.**

THE FOUNDATION OF A DIGITAL City is the connectivity of its citizens. Access to the Internet serves crucial functions in New York City. From a civic perspective, it exposes individuals to a wealth of information and new opportunities to participate in democracy, nurturing a more informed, engaged citizenry. From an academic perspective, it provides access to invaluable research sources and trains students to use tools throughout their careers. And from an economic perspective, as nearly every industry is touched by digital technology, it equips citizens to innovate, add value to their organizations, develop new companies, and create and fill jobs.

The City of New York is already one of the most connected cities on earth, with 98% broadband connectivity in residences. DOITT leads the City connectivity strategy, and is responsible for both private sector agreements and municipal programs to expand access. By working with public and private sector resources, DOITT will provide access and training to more than 85,000 high-needs New Yorkers, including students and seniors.

### PUBLIC SPACES

As a result of recent franchise agreements brokered by DOITT, private sector carriers have agreed to develop infrastructure to support wireless Internet access in selected public spaces such as parks.

### NETWORK CHOICE

Additionally, DOITT is working to ensure that all New Yorkers have vendor choice for their broadband carrier, enabled in part by the expansion of a citywide FIOS network.

### SUMMARY

The City will focus efforts strategically, making the best possible use of federal funds and private sector agreements to achieve the following:

- Access at home and in schools for 18,000 high needs sixth graders and their families—roughly 40,000 in total
- Enhanced senior centers
- Wi-Fi in City parks and other selected public places
- Citywide FIOS connectivity, ensuring all residents have choices for who provides their Internet access.
- Federally funded broadband connectivity in schools, libraries and recreation centers

## **CONNECTING STUDENTS—AT HOME AND AT SCHOOL**

To help connect more New Yorkers, the City will start by serving students from 72 high-need public middle schools in New York City. Led by **DOITT**, **DOE** and community partners, and funded by the Broadband Technologies Opportunity Program (**BTOP**), the **NYC Connected Learning** project will provide training, computers, technical support, educational software, and broadband access service for five years to more than 18,000 low-income sixth-graders and their families, serving approximately 40,000 New Yorkers altogether. The project will also work with teachers to integrate technology into their lesson plans in order to more deeply link classroom and home broadband technology adoption.

Separately, **DOITT** and **DOE**'s **Connected Foundations** project will serve over 5,000 transfer school students between the ages of 12 and 16 who are over-age and under-credited. Prior to re-engaging their education in a transfer school, these students struggled academically, were not on track to graduate, and may have been truant or thinking about dropping out of school. Students in this program will be required to complete a 54 hour postsecondary skills and broadband training curriculum before receiving a computer.

## **CONNECTING COMMUNITIES**

The **NYC Connected Communities** project managed by **DOITT** and a diverse group of anchor institutions, including the City's three public library systems, **NYCHA**, Parks & Recreation and Department for the Aging will provide access and training for individuals who lack digital literacy, including seniors and limited-English groups, with a focus on high-poverty areas such as Harlem and the South Bronx. The project plans to upgrade community centers and add new ones, supporting over 1,000 workstations. It will also increase training availability at centers around the City to provide basic skills and improve quality of life. The project will also increase broadband speeds at the public library systems, offer **NYCHA** residents broadband connections and increase connection at Parks locations as well as extended hours of coverage. In total, The City estimates over 44,500 individuals will be trained through **NYC Connected Communities**.

## **MTA**

The Metropolitan Transportation Authority, a public benefit corporation controlled by State government, has indicated it is developing infrastructure to provide wireless Internet and carrier neutral cellular service in six underground subway stations. Following the evaluation of this pilot program, it plans to expand service to all 277 underground stations. The initiative is at no cost to taxpayers and constituents.

## **PUBLIC-PRIVATE PARTNERSHIPS FOR CONNECTIVITY**

The City of New York will continue to explore partnerships with the private sector to help bridge the digital divide through broadband connectivity. Learning from the success of existing partnerships such as the Cornerstone Initiative in New York City Housing Authority residences supported by Time Warner Cable, the City will provide further opportunities for the private sector to invest in the City's future.

## **EDUCATION**

In order for New York City to remain a leader of innovation, students must have the opportunity not only to access the Internet, but to learn the languages and skills necessary to shape it. The Department of Education will continue to support educational programs and partnerships that teach technology skills that have transformative long-term results for our children, academic institutions, and economy.



## PUBLIC LIBRARIES

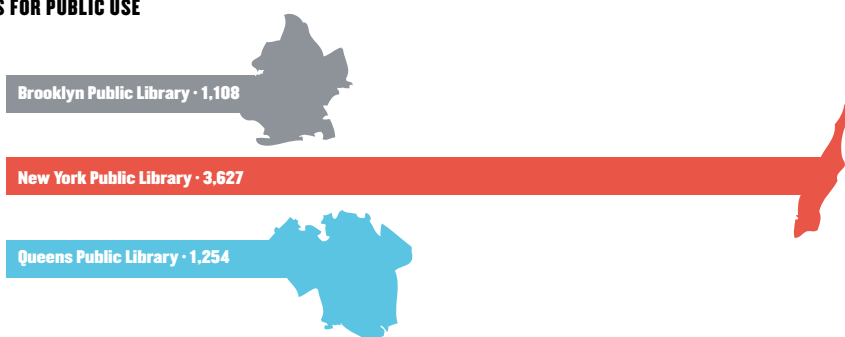
Public libraries play a vital role in providing Internet access and technology training to New Yorkers. Today, all locations of the Brooklyn Public Library, New York Public Library (NYPL), and Queens Library systems offer wireless Internet access.

Libraries are especially crucial in providing Internet access to low-income households, immigrants, and youths. The 2010 report “Opportunity for All,” by the Institute of Museum and Library Services and the Bill & Melinda Gates Foundation, found that 44% of people in households below the poverty line, and half of teenagers, used libraries to access the Internet and find information in 2009.

In addition, all New York City public library systems offer job search services and training to clients, such as “Computer Basics for Persons with Visual Impairment” at NYPL’s Hamilton Fish Public Library, BPL’s Skills Training & Employment Project (STEP), and English language classes in the Queens Library Adult Learner Program. NYPL has reported that its classes in computer basics for seniors—on how to conduct online searches, set up email accounts, even ‘Facebook 101’ courses—frequently fill to capacity.

The libraries also provide a wide array of digital media to clients. NYPL has indicated that its future digital offerings include access to its collections and content on mobile devices.

## COMPUTERS FOR PUBLIC USE



Source: Mayor’s Management Report

## OPEN GOVERNMENT: Technology and culture

DIGITAL TECHNOLOGY ENABLES UNPRECEDENTED TRANSPARENCY through its ability to open government information and processes to greater public participation. DOITT has long been a champion of transparency and Open Government, maintaining the NYC DataMine and partnering with EDC to launch the successful developer challenge, NYC Big Apps.

The City of New York will build on this success by embracing the opportunity to become the world's most comprehensively Open Government. Using technology to enable even greater access to information and services, the City of New York, led by DOITT, will create a powerful NYC Platform that supports innovation, efficiency, and economic growth. This infrastructure will unlock the City's wealth of information resources and make them accessible to citizens, technologists, and government employees. As a result, NYC government will be more transparent, efficient, innovative, accessible, and citizen-centric.

Key to this platform will be open standards and taxonomies shared at the agency, local, State, Federal, and international levels, in order to maximize government interoperability and efficiency. The system will be developed in phases by DOITT's expert enterprise software team and private sectors partners, and will provide real-time, bidirectional information feeds through an Application Programming Interface, or API. An API is a set of programming instructions and rules for accessing web-based applications. An API enables different software programs to communicate with each other, supporting an ecosystem of tools and features powered by the application.

Software companies and public institutions alike typically release their APIs to the public so that other software developers can design products that are powered by its services, thus further leveraging the investment made in the service.

### THE TENETS OF NYC OPEN GOVERNMENT

ODC and DOITT have identified the following strategic goals that will guide our definition and implementation of open government in New York City:

1. Open Government democratizes the exchange of information and public services, inviting all citizens to participate and engage.
2. Open Government connects citizens to one another, supporting more efficient collaborative production of services over the traditional mode of citizen consumption of government-produced services.
3. Open Government information is more valuable when it is collected at the source, and published in near-real-time.
4. Open Government data is machine-processable.
5. Open Government invites all information consumers- inside and outside government - to correct, improve, and augment data.
6. Open Government uses open standards, formats, APIs, licenses, and taxonomies.
7. Open Government is accountable and transparent, perpetually self-evaluating, iterating, and exploring new ways to solve old problems.
8. Open Government makes as much information as possible available to as many actors as possible and is designed to minimize financial and technological barriers to accessibility.
9. Open Government enables efficiency, cost savings, and the streamlining of government services.
10. Open Government is compatible, nimble, and mashable, fostering collaboration, coordination, and innovation with other governments, academic institutions, and organizations.

## OVERVIEW

The City's information technology and telecommunications agency **DOITT** has already begun work to make agency data and 311 information available to technology developers through a set of **APIs**. In parallel with this effort, **DOITT** will continue its phased effort to help City agencies explore the feasibility of implementing compatible internal structures that seamlessly and securely share information using web services.

### Internal

Through its **CITIServ** initiative, **DOITT** has started to lay the groundwork to modernize and optimize the City's IT infrastructure environment, by consolidating disparate data centers and providing a unified set of shared services to a broad range of City entities. There are significant challenges to this process, as many agencies rely on legacy technology infrastructure to support their operations, and overhauling these systems will require significant investment. **DOITT** will continue development of its web services infrastructure and evaluate technology governance rules to ensure that going forward, agency data will be stored and shared in a manner consistent with the architecture.

### External: NYC Platform

**DOITT** and its partners will develop the **NYC Platform** in four stages to allow continuous deployment and iteration.

#### PHASE I

Implement a **DataMine API** that allows developers to access over 350 data sets provided on the **NYC DataMine**. These data sets include a range of raw and geographic data that is interesting and important to New Yorkers, such as the following:

- Alternate Side Parking, Schools, and Sanitation Collection Status
- Citywide Events and Festivals
- City News Feeds
- Parking Facilities
- Restaurant Inspection Results
- Privately Owned Public Spaces
- Active Building Jobs
- Property Assessments and Valuations
- 311 Taxi Complaints
- Directory of Dog Runs
- Fire and Police Geographic Districts
- Green Market Locations
- FDNY Monthly Response Times
- NYC Truck Routes
- Wi-Fi HotSpot Locations
- Map of Playgrounds
- Bicycle Parking Locations
- Tree Census
- Art Gallery Locations
- Subway Entrances

**DOITT** will also unveil data visualization tools as part of the first Phase of the **NYC Platform**. Finally, **DOITT** will establish new processes for receiving, evaluating, and integrating improved data from the public into the **NYC Platform**.

## PHASE II

Introduce a pilot 311 API that makes 311 information accessible to developers who can integrate 311 services into their products and offerings. Two-thirds of 311 requests are resolved by simply providing information or directing citizens to the correct resources to resolve their complaint. Expanding the reach of 311 information through API technology has the potential to enable faster resolution of service complaints at scale and generate cost savings.

The 311 API also aims to lessen the burden on the traditional call center, decreasing wait times. There are, of course, significant challenges to this effort, as porting a human process to a technological format will require extensive testing and customization. For these reasons, the 311 API will be a pilot program in its initial stage.

The specifications for this API will be open and shared, and DOITT will work with additional government and civic technology organizations to ensure interoperability with similar national efforts. A shared set of shared taxonomies and standards for 311 and other government data and services will support a growing ecosystem of independently developed applications that enable greater civic engagement.

## PHASE III

Augment the 311 API with both “Read” and “Write” capabilities, meaning that information can move in both directions: to the citizen (“read”) and from the citizen (“write”). This means that in addition to providing real-time information through the API and the ecosystem it supports, the City can receive service requests and input from any of the tools built using its API. The result will be significantly enhanced capacity to take in more citizen service requests, gaining valuable information that will be used to improve the City of New York.

## LOOKING FORWARD: FUTURE PHASES OF DEVELOPMENT

As DOITT progresses in its CITIServ consolidation process and continues to modernize individual agency data storage, it will evaluate the ability to integrate the NYC Platform more deeply with agency data, right at the source. Some of the concepts to be explored as part of this phase include the ability to directly access real-time agency data as well as the content of nyc.gov. Again, there are substantial hurdles to this effort, including but not limited to staffing constraints and costly legacy systems and infrastructure that must be carefully considered.

## COMMUNITY ENGAGEMENT

New York’s Open Government and entrepreneurial technology communities will play an important role in the development of the NYC Platform. NYC Digital and DOITT have already begun to engage local Open Government groups in fact-gathering processes to determine the most requested improvements to New York City’s Open Data initiatives.

Going forward, NYC Digital and DOITT will continue to work with developers and advocates to respond to needs and collaboratively craft a shared strategy. Specifically, the City will launch a NYC Platform hub for the software developer community, providing the ability to:

- Find sample code and clear NYC Platform API documentation
- Add to developer wishlists
- Review agency and citizen wishlists for ideas and challenge bounties
- Submit comments and feedback
- Participate in discussion forums
- Learn about upcoming workshops, developer days, and “code sprints”
- Discover existing “apps” built on New York City data





## BENEFITS

The launch of the NYC Platform API will have far-reaching impact, enabling innovation, transparency, economic growth, and improved service. As an illustration, the following are several of the benefits that the Open Government framework of NYC Platform will enable:

1. An ecosystem of tools and talent based on New York City public information
2. The creation of robust applications that serve New Yorkers and fulfill government service goals, at marginal cost to taxpayers
3. Incentives to launch new, data-driven startup businesses in New York City, supporting job and economic growth.
4. The ability for New Yorkers to more readily access and share New York City public information
5. The opportunity for City, State, Federal, and international government agencies to share data and improve intra-government efficiency
6. Greater potential for the NYC Big Apps contest, supporting developers in creating sustainable and marketable applications deeply integrated with New York City
7. A more responsive, robust, engaging City web presence that better serves the needs of New Yorkers

## OPEN GOVERNMENT IN AN OPEN AGE

BY: CAROLE POST,

NEW YORK CITY CIO / COMMISSIONER, DEPARTMENT OF INFORMATION TECHNOLOGY & TELECOMMUNICATIONS



FOR NEARLY A DECADE NOW, the Bloomberg Administration has been at the forefront of making New York City government more open and transparent than it has ever been. From the revolutionary Citywide Performance Reporting, 311 Service Request Map, and Enhanced 311 Reporting, to the award-winning NYCStat Stimulus Tracker, 311Online, and more, the amount of City information easily accessible via NYC.gov, today, far exceeds anything previously available in the City's long history—and compares favorably to that of any other city in the world. Now, as part of Deputy Mayor Goldsmith's Simplicity initiative, these and other enhancements continue to make City government more customer-focused, innovative, and efficient.

Over the past 18 months the City has entered the next phase of the open government movement—that of “open data.” Beginning in the summer of 2009, the Department of Information Technology and Telecommunications worked with and the City's Economic Development Corporation to establish the NYC BigApps program. Having just completed its second iteration with an award ceremony this spring, BigApps has made hundreds of raw City data sets publicly available, and challenged local entrepreneurs and developers to create new and unique tools for public use. The program has resulted in dozens of new applications developed by the public, for the public, at essentially no cost to taxpayers.

The nearly 400 datasets available as part of BigApps program are accessible for free, at any time via the NYC DataMine on NYC.gov. Today the DataMine represents datasets from nearly 40 City agencies, including public safety data, buildings complaints, restaurant inspections and real-time traffic numbers. This repository is a core component of the City's open data efforts, representing a revolutionary approach to storing and publishing City data in a searchable, sortable and customer-friendly manner.

But we can still do more. We're now working to institutionalize these accomplishments by working with the City Council and agencies citywide on open data legislation that will establish a common set of standards and guidelines for the City's ongoing open government efforts. By codifying open data standards in law, we'll ensure for future generations of New Yorkers a City government that is increasingly transparent and accountable.

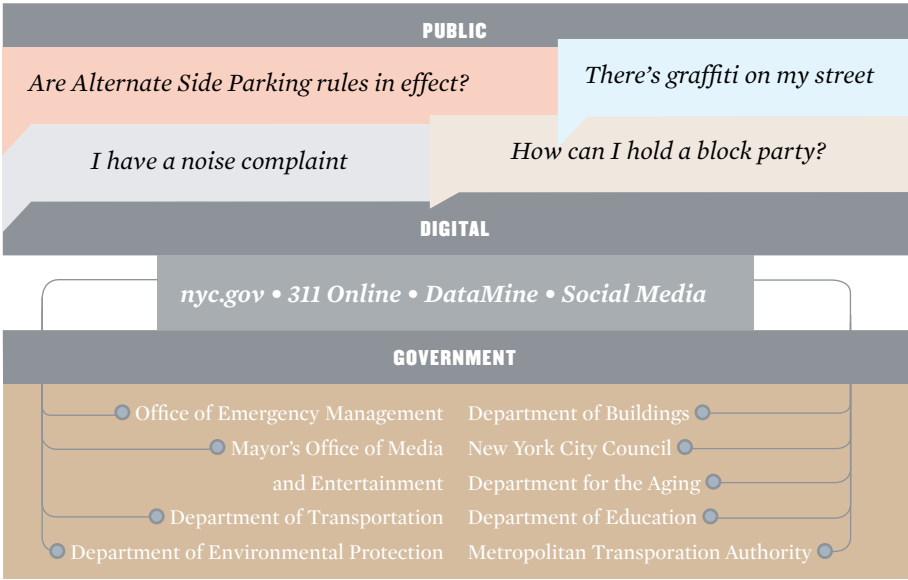
Our goal in all of this is simple: Beyond presenting information to the public in formats the City determines and through applications the City builds, we need to keep making the raw data underlying these applications open and available for developers, civic groups, and anyone else to build applications of their own. This is especially important as social networking technology continues to transform City government—and the way New Yorkers interact with it. And our approach is not only timely—it's smart. This is, after all, the public's information—and by making it available in as many ways as possible we can foster innovation and leverage talents beyond City government for creative solutions to tough problems.

In the end, there will always be certain types of data—privacy or security-related data especially—that the City, as steward, must safeguard. But given that, what the Bloomberg Administration has consistently done is work toward a new data paradigm. In the past the practice for most institutions, government or otherwise, has been to keep information closed save for those few exceptions that were made public. We have worked to turn that idea on its head, believing that data should be open by default unless there is a compelling reason to keep it closed. And we'll continue this important work for the benefit of all New Yorkers in an increasingly open age.

ENGAGEMENT: A citizen-centric digital experience

DIGITAL TECHNOLOGY HAS THE POTENTIAL to transform the experience of engaging with government by providing an accessible, citizen-centric customer service layer that helps to humanize and customize municipal functions around the individual. Digital engagement can act as a translation layer between public concerns and the agency processes that resolve them. And by leveraging widely used social media platforms, New York City government services can become seamlessly integrated into the lives of New Yorkers. As a result, government engages with members of the public on their terms and their most comfortable, native digital environment.

DIGITAL AS TRANSLATION LAYER



MAINTAINING OUR DIGITAL PUBLIC SPACES

Maintaining digital ‘public spaces’ such as nyc.gov or 311 Online is equally important as maintaining physical public spaces like Prospect Park or the New York Public Library. Both digital and physical should be welcoming, accessible, cared for, and easy to navigate. Both must provide value to New Yorkers. And for both, regular stewardship and improvements are a necessity.

To illustrate the vast audience to New York City’s significant digital public spaces, the following table compares traffic to Central Park and nyc.gov. Thirty-five million visit Central Park yearly, compared to a projected 33 million to nyc.gov. Soon traffic to nyc.gov will outpace Park traffic, illustrating the need to devote resources and community managers to our digital tools.

Digital technology enables a fundamental shift in the nature of government, from the consumption of services to the co-production of services with support from individuals, non-profits, and businesses. Digital technology also ensures that citizens are connected not only to government, but to each other, fostering vibrant communities of civic engagement.

The following efforts to improve nyc.gov, 311 online, social media channels, and mobile presences will not only serve New Yorkers but engage them collaboratively in the development of New York City’s future. Crucially, the City will also improve coordination across agencies and provide direction and training in the best practices of digital media engagement.

## NYC.GOV

NYC.GOV IS NEW YORK CITY government's face to the world. As the digital gateway to municipal government, the experience of using nyc.gov should be fast, intuitive, and effective, underscoring the City's commitment to customer service and efficiency. Public feedback and traffic patterns show that we can improve nyc.gov significantly through changes that organize information around user needs.

In partnership with DOITT, NYC Digital will design and execute enhancements that improve the nyc.gov user interface and make it more citizen-centric. It will also introduce an update plan to ensure that the website is able to deploy timely content changes, design conventions, and features on a regular basis.

CENTRAL PARK	NYC.GOV
35 million visitors a year	33 million* visitors a year
dozens of entrances	100,000s of entrances
limited space	infinite space
6:00am – 1:00am	24/7
public = consumer	public = consumer + producer
staff & stewards	community managers
FREE	FREE



*\*projected*

### REDESIGNING NYC.GOV

NYC Digital will work with usability experts, designers, and customer service professionals behind the world's most widely used platforms and mobile applications to develop a new, intuitive, citizen-centric user experience on nyc.gov. Top search queries, traffic patterns, external referring sites, and voluntary personalization will help to inform navigation elements.

### nyc.gov Redesign Priorities

#### USABILITY

- Improved, consistent search experience using Google Site Search
- Refreshed homepage and navigation
- Refreshed header and footer with ability to broadcast emergency messages
- Refreshed agency template
- Mobile-first design methodology
- Usability benchmark: What you're looking for in three clicks or less.
- Navigation based on high-interest search queries
- Surveys for grading page effectiveness

#### STREAMLINING RESOURCES

- Consolidated resources based on function/interest, not agency
- Forms and Applications Machine Readable
- Sample of Streamlined Resources:
  - » Single Consolidated NYC App Store
  - » Improved Social Media Directory
  - » Citizen, Business and Government Toolkits
  - » Revamped CityStore
  - » Revamped Calendar with RSS Feeds by Interest Area
  - » Google Maps integration with GIS
  - » Consolidated Jobs page
  - » Consolidated Bill Pay page

#### CUSTOMIZATION

- Internal keyword-based Public Service Announcement “ad” database, matching user search queries with relevant City programs
- Accessible to multiple ability levels and languages
- My NYC.gov: Single Sign-On for all applications and personalization of services
- Search Engine Optimization

#### SOCIAL MEDIA INTEGRATION

- Social Media Links to Representatives and Officials
- Revamp FAQs with Get Satisfaction
- Embedded live video streams and videos
- Social Media features to share useful pages

#### Creative Process

To mark the start of the process of reinvention, NYC Digital in partnership with DOITT, EDC, and leading digital campus General Assembly, will host a development and design day, known as a “hackathon,” titled Reinvent nyc.gov.

Reinvent nyc.gov will take place in early summer. The City invites user experience experts to apply for the event, which will feature two days of intensive design and development culminating in the launch of several functioning prototypes for the homepage of nyc.gov. Leading platforms including Google, Facebook, Foursquare and Twitter have committed to providing digital resources, such as API keys and onsite technical assistance, to support the development process.

#### The goals of Reinvent nyc.gov are threefold:

1. Encourage innovation in open, citizen-centric government
2. Leverage the world’s leading usability experts, with experience serving millions
3. Launch a design process based on usability and user needs, not government structure

All prototypes will launch with public analytics, allowing NYC government and the public to evaluate redesigns with full transparency.

Following the results of the initial competition, NYC Digital will identify highly performing models and work with an external usability team to design and develop a new interface, to be implemented in partnership with DOITT.



## **SOCIAL MEDIA**

AS PART OF ITS EXPANSION of citizen-centric digital resources, the City of New York will unveil new social media channels and platforms that support City goals of transparency, engagement, participation, and access to information.

### **DATA VISUALIZATION**

Leveraging the API developed as part of its Open Government architecture, the City of New York and partner Socrata will launch data visualization tools that make the City's vast stores of public data accessible through charts and graphs that are easy to build, read, and share.

### **FACEBOOK**

A new Facebook presence for the City of New York will be unveiled during Internet Week featuring applications and applets that support citizen engagement, transparency, crowd-sourcing, and public service initiatives. Over time, citizens will have the opportunity to voice their opinions, engage in discussions, ask questions, access 311 information, and participate in citywide polls. The Facebook presence will also serve to update New Yorkers on news, announcements, and emergency information, via text and live video streams.

Beyond Facebook, the City will explore the use of social sharing features on nyc.gov to help more Facebook users discover valuable links and to identify the best-performing City web pages.

### **TWITTER**

A streamlined Twitter feed for @nycgov that serves to aggregate all City info in a one-stop shop of high priority alerts, news and announcements. This feed will help to make it easier for New Yorkers to stay up-to-date on the most crucial New York City information, and to discover specialized Twitter feeds in the process.

### **BIT.LY**

The City will immediately introduce a custom link generator provided by Bit.ly that streamlines the sharing and shortening of nyc.gov links. Users can also see how nyc.gov links are being shared, and identify the most useful information on nyc.gov.

### **FOURSQUARE**

The City of New York will introduce a new Foursquare badge that incentivizes New Yorkers and visitors to go to New York City government public places, such as parks and cultural centers. In addition, agencies will provide tips on their locations spaces.

### **TUMBLR**

Recognizing the growth of New York-based microblogging platform Tumblr, the City of New York will unveil a new curated New York City government vertical that highlights stories, photos, videos, and more from New Yorkers and City agencies.



## NYC SIMPLICITY

NYC Simplicity is the City's plan to simplify NYC government for businesses, non-profits, City employees, and all New Yorkers. The following digital projects are a sample of NYC Simplicity's plan to support customer-focused, innovative, efficient government.

### CHANGE BY US NYC

Currently in beta, Change By Us is a collaborative platform for community projects that improve New York City. On Change By Us, New Yorkers suggest ideas, then join or form projects to make them a reality. Individuals can research the government and community organization resources they need to succeed, enabling a new model for crowdsourcing and innovation.

In partnership with PlaNYC, Change By Us will launch with sustainable development as its inaugural focus. Funded by the Rockefeller Foundation and Knight Foundation, and was developed by partners Local Projects and CEOs for Cities. <http://changeby.us/beta>

### NYC SIMPLICITY IDEA MARKET

The NYC Simplicity Idea Market is a digital platform that invites City employees to suggest their ideas for improving government customer service and efficiency. Employees comment and vote on suggestions, and the best ideas are implemented by the City..

### DATA ANALYTICS CENTER

The Mayor's Office of Operations plans to develop a Data Analytics Center that will leverage leading technology and New York City government data to improve the efficiency and effectiveness of service delivery and public resource allocation. The Data Analytics Center will achieve this by integrating a wide range of municipal information and analyzing performance.

## EMERGENCY MANAGEMENT AND DIGITAL MEDIA

### CROWDSOURCING AND EMERGENCY MANAGEMENT

The City's Office of Emergency Management (OEM) will continue to explore opportunities that expand its ability to leverage digital media in the event of an emergency, integrating social media channels and public input into its systems. First, the City of New York will introduce a geo-targeted mobile emergency notification service in late 2011 called Personal Localized Alerting Network, or PLAN. The service is able to reach citizens based on their actual, real-time location, will not be stalled by user congestion, and carries messages from the President, Amber Alerts, and imminent threats to safety of life.

In addition, OEM, DOITT, and NYC Digital will explore the ability to broadcast urgent updates across the City's 200 social media channels and 500,000 web pages.

To enable greater citizen input, the City will provide more channels that help citizens share crisis information and connect with officials and each other. To this end, crowdsourcing tools and projects under evaluation include Ushahidi, Google's People Finder, GroundCrew, Frontline SMS, and CrisisCommons. The City of New York and 311 will also explore the use of crowdsourcing initiatives for non-emergency special events, such as VoteReport for elections.

### CIVIC TECHNOLOGY TOOLS AND PARTNERSHIPS

The above list of social media platforms is far from exhaustive. There is a wide range of additional digital tools that the City of New York is currently evaluating for use by agencies, including platforms that support civic engagement, community, creativity, and sustainability, such as Catchafire, Kickstarter, Meetup, and SeeClickFix.

TODAY ONLY 4% OF REQUESTS to 311 are processed online. Resolving more 311 requests through the use of digital technology will lessen the burden on 311's traditional call center, improving customer service delivery for all New Yorkers through shorter 311 wait times, faster resolution of queries, and greater transparency.

#### EFFICIENCY

- **Expansion of 311 Online Service Request Processing.** While 311 Online enables citizens to report over 4,000 types of service requests digitally, there is a significant opportunity to expand this offering. For example, in the research component of this report, a frequent point of public feedback was the ability to submit noise complaints via digital channels, which is not currently supported. Other service request types that are not currently digitally supported include landlord complaints, sewer backup, illegal parking, and traffic signal defects. Typically, service requests are not digitally processable because of either policy or technology integration reasons at the agency level. Expanding digital functionality will require a joint effort to overcome these hurdles by both individual agencies and 311.
- **Introduction of 311 API.** 311 is currently developing an Application Programming Interface, or API, to enable the creation of newer tools and expand customer service. An API provides a set of directions that allow software applications to communicate with each other, enabling the development of a rich ecosystem of innovative applications, tools, and products that expand the reach and functionality of 311. The result of a widely used 311 API will be a more customized 311 experience, integrated into both new tools and the digital platforms that New Yorkers already use every day. Throughout its development process, 311 will continue to work with existing open API projects to share specifications and ensure interoperability.
- **Crowdsourcing and Heatmaps.** 311 will work with agency customer service representatives to explore ways to identify trending and recurring complaints, and develop stronger methods to identify duplicate complaints. This will ensure that the same site is not visited by multiple inspectors or multiple agencies.
- **311 and Citywide CRM.** 311 is currently developing a citywide Citizen Relationship Management (CRM) system that enables agencies to track the path of service requests across multiple communications channels such as email, nyc.gov forms, and faxes, up to their ultimate 311 or agency resolution. This will improve the efficiency, accountability and, efficacy of the City's customer service. In future phases, the City will explore integrating this offering with service requests communicated via social media platforms, such as Facebook and twitter. The City will also evaluate the opportunity to present citizens with a personalized dashboard of their current and previous service request statuses, integrated with my.nyc.gov.

#### ACCESSIBILITY

**Improved 311 Online Usability.** In order to improve the effectiveness and experience of using 311 Online, NYC Digital and DOITT will work together to improve the accuracy of search results and enhance the user interface to provide a more intuitive navigation.

**Expansion and Marketing of 311 Smartphone Applications.** One of the top citizen requests was for a 311 iPhone application, revealing that most New Yorkers do not realize that a robust app already exists. DOITT will enhance its existing iPhone application to enable the processing of additional 311 service request types and introduce a version for Android. In addition, NYC Digital and MOME will help to publicize the application to increase the number of downloads. Currently about 16,800 311 iPhone applications have been downloaded.

**Live Chat on 311 Online.** Leveraging the knowledge base of its call center and SMS services via shortcode 311-692, and drawing from the best practices of the private sector, 311 will explore piloting real-time chat windows on 311 Online that allow users to immediately access information and express concerns, for faster resolution.

**Expansion of @311nyc Twitter efforts.** Through support from 311 and NYC Digital, the City will expand its resolution of 311 service requests via Twitter, enabling greater information exchange and awareness through this social forum. As Twitter engagement is publicly available, the result will be the organic development of a public, social media knowledge base that is accessible and searchable by all.

## MOBILE Engagement Everywhere

**NEW YORK CITY GOVERNMENT RECOGNIZES** the powerful reach and ubiquity of mobile technology. According to web analytics, a constantly increasing percentage of New Yorkers access digital City resources through mobile devices. The Pew Internet and American Life Project found in 2010 that there is a relatively higher level of cell phone internet use among African Americans, Latinos, young adults and those with lower levels of income and education. For example, 54% of African Americans and 53% of Latinos use a mobile phone to access the internet, 18% and 16% exclusively. Expanding mobile technology capabilities will enable New York City to serve more New Yorkers, more easily, in more places.

As part of its digital strategy, the City of New York will implement the following measures:

- Strategic, phased launch of mobile versions of nyc.gov at m.nyc.gov, ensuring access to all New Yorkers, across multiple platforms. The mobile site will be designed and implemented by NYC Digital and DOITT.
- Expansion of 311 iPhone application and launch for Android, led by DOITT.
- Enhancements to 311 SMS services via 311-692.
- Mobile Video On-Demand and Live Video Streaming, supported by NYC Media and DOITT.
- Development of additional, official New York City mobile applications that serve and engage citizens by DOITT, agencies, and private partners.
- Launch of geo-targeted emergency mobile notification service by OEM, called Personal Localized Alerting Network, or plan, which alerts individuals to imminent threats based on their proximity to an emergency area.

## TAXIS

**THERE IS A GREAT OPPORTUNITY** to explore the technology interface available in our City's taxis as not just entertainment, but platforms for information exchange and co-creation. In the coming months, the City of New York will explore the opportunity to pilot tablet computer interfaces in taxis and announce a competition for featured applications, enabling developers to embrace the potential of this mobile, digital network.



In addition to its content platform, taxis will also provide mobile infrastructure to riders. Mobile charging stations equipped with 12V and USB ports will be one of the features of the Nissan NV200, which will become the exclusive City taxi in 2013.

## GAMES

GAMES OFFER THE OPPORTUNITY TO engage as they inform, providing compelling incentives to collaboratively craft civic solutions and learn about important public service initiatives. The City of New York recognizes this potential, and will introduce partnerships and contests for civic games that use the city for their platform. As an introductory step, in June 2011, NYC Digital will participate in the Games for Change summit, and announce new opportunities to the world-leading technologists there.

## LICENSES

IN ORDER TO SUPPORT CREATIVITY and transparency, the City of New York will explore the use where appropriate of Creative Commons licenses on content and information, enabling wider reach and engagement from the public.

## VIDEO Seamless Integration

DIGITAL VIDEO IS A CRUCIAL means of engaging and informing residents of important legislation, announcements, public service messages, and news. In order to make the experience of viewing and sharing video on nyc.gov faster and more accessible, DOITT will pilot free, third-party video players for video-on-demand and live video streaming. For maximum reach and convenience, the City will implement live video streaming and VOD solutions that broadcast via mobile devices and smartphones. In line with this, the City will broadcast live video over enabled social networks, such as Facebook.

By no longer requiring the download or use of third-party applications, viewing video will be simpler and more immediate, and will encourage the seamless, social sharing of content. By enabling mobile viewing, the City will continue to create a more citizen-centric experience of New York City government that reaches the individual on his or her own terms.

Finally, to make it easier to stay informed, the City will email and tweet announcements of the start of live video broadcasts to those who request notifications.

AGENCY COORDINATION

THROUGH THE FOLLOWING STEPS, NYC Digital will increase transparency, communication and collaboration across City agencies, improving the efficacy and strategic performance of the City’s digital efforts in line with agency goals.

INTERNAL COORDINATION

Chief among proposals from social media and communications managers was the suggestion of enhanced digital coordination. In light of this, NYC Digital will launch the following within the next 90 days:

- **Shared Calendars**, enabling social media managers to stagger scheduling and support mutually beneficial initiatives by other agencies.
- **Email Mailing List** for employees responsible for executing social media channels on a day-to-day basis, for advisory updates on breaking news and emergency developments.
- **Digital Toolkit—Best Practices Resources** for sharing effective strategies, methodologies, answers to Frequently Asked Questions, and social media policies.
- **Training Sessions** by representatives of leading social media platforms on how to effectively leverage their tools in the private sector.
- **Industry-leading Analytics Tools** that allow every agency to easily and simply track their own progress in serving constituents.

NYC Digital will also work with DOITT over the coming six months to explore:

- A citywide Customer Relations Management tool, currently in development by DOITT, that allows individual citizen requests to be tracked across agencies up to resolution.
- Citywide Social Media Dashboard for all agencies, supporting metrics-based strategies tied to agency Key Performance Indicators.
- Citywide Email Management tools that provide agencies with greater design flexibility, control and specific analytics on the response to their messages and campaigns. As expressed earlier, more than 700,000 New Yorkers receive newsletter. Enhanced tools will enable agencies to track their effectiveness and the performance of campaigns. Market-leading tools will provide creative flexibility, analytics, and goal-tracking opportunities.

INTRODUCING SMART

NYC Digital will introduce the Social Media Advisory and Research Taskforce, or **SMART**. This body consists of 10 members elected every six months by social media managers across the city. **SMART** members are responsible for helping to manage citywide social media feeds including facebook.com/nycgov and @nycgov on Twitter, providing recommendations on social media tools and strategies, assisting emerging City agencies on social media, evaluating new social media platforms, updating social media guidelines and policies, and liaising with technology and legal authorities in the City.

SMART Committee Inaugural Members

Ryan Brack, DOE	John LaDuca, DOHMH
Graham Buck, Mayor’s Office	Robin Lestor Kenton, DOT
Chenda Fruchter, 311	Christopher Long, DOITT
Tom Hughes, DPR	Trista Sordillo, EDC
Amanda Konstam, Mayor’s Office	Chris Varley, OEM

## **DIGITAL MEDIA AND BLOGGER OUTREACH**

Communications Directors across the City recognize that while some constituents still receive news from traditional outlets such as newspapers and radio, many citizens are now accessing news via digital media outlets including blogs and online publications. NYC Digital will work with the Mayor's Office to help Communications Directors develop their own digital media database of online outlets, as well as a digital toolkit to accompany news announcements.

## **DIGITAL ADVERTISING**

Today, the City of New York spends just 5% of its advertising budget on digital advertising. NYC Digital will work to increase that percentages to 25% over the next three years, leveraging banner advertisements and social media advertisements to measure effectiveness through metrics, and reach more New Yorkers with public service messages.

## **COMMUNITY ENGAGEMENT**

THE COMMUNITY-FOCUSED FACT-FINDING mission that informed this report will continue, through input sessions both online and in-person. Our shared digital future in New York City will succeed only with support, input, and constructive direction from across society. To that end, the City of New York will continue the following community engagement efforts:

### **NYC DIGITAL MEETUP**

NYC Digital and DOITT will host focused community workshops in different boroughs, addressing urgent needs and helping to develop solutions in collaboration with citizens.

### **TWITTER**

The City will continue to field feedback using the #nycgov hashtag.

### **QUORA**

The City of New York will be present on Quora, answering questions relevant to the City's digital strategy.

### **TUMBLR**

NYC Digital will actively engage the Tumblr community through the [nycgov.tumblr.com](http://nycgov.tumblr.com) blog, showcasing updates on the City's digital strategy and soliciting feedback.

## **POLLS, SURVEYS, AND BLOG INTERACTION**

The City will continue to conduct surveys and polls to gather information.



## INDUSTRY: Support a vibrant digital sector

A GROWING DIGITAL SECTOR IS crucial to a healthy economy, informed citizenry, and fertile environment for innovation. In line with this, the support of technology entrepreneurs and a strong industry is a major New York City government priority.

At the helm of this focus is the New York City Economic Development Corporation (NYCEDC), which leads a range of initiatives to help equip startup technology companies with the tools, services, and infrastructure they need to grow and thrive. The NYCEDC studies the sector extensively, and recently introduced the **NYCEDC Innovation Index**, a method for measuring innovation using six dimensions: Research & Development, Finance, Human Capital, Intellectual Property, High-tech Gross City Product, and Entrepreneurship and Employment Dynamic.



NYCEDC is a powerful advocate and supporter of the entrepreneurial community, providing information, training, investment, and competition-based incentives to entrepreneurs at every stage.

In addition to NYCEDC, the Department of Small Business Services (SBS), Department of Information Technology and Telecommunications (DOITT), and Mayor's Office of Media and Entertainment (MOME) manage initiatives to support economic growth and workforce development.

The following plans illustrate upcoming measures to realize the potential of New York City's digital sector through measures to streamline the process of starting a new business, encourage a stronger engineering talent pool, attract more technology startups to the City, provide affordable workspace, and introduce the .nyc top-level domain to the world.

## INTERNAL EFFICIENCY

### STREAMLINING NEW BUSINESS CREATION

The Mayor's Office of Operations is currently exploring new ways to further streamline the process of starting a new business in New York City, whether digital or analog in nature. This activity will build on initiatives including the Business Express wizard for starting new businesses, and the New Business Acceleration Team, a taskforce that supports new businesses as they navigate the process of incorporating and securing necessary permits and licenses. The Mayor's Office of Operations is also focused on digitizing City-issued permits and licenses, and converting processes that require in-person registration to online formats, saving time and money for businesses and City employees.

## WORKING WITH NEW YORK CITY

Responding to industry needs, the City of New York is working to lessen the hurdles and time required to work with the City while maintaining the standards and integrity of its process. One example of this focus is **DOITT's SPARK** (Speedy Procurement and Rapid Contracts) procurement initiative, developed with input from members of New York City's technology community. The program pre-approves vendors to shorten the duration of the vendor approval process, and tailors requirements to small developers. As the initiative is introduced to the private sector, **DOITT** will continue to meet with the developer community to solicit feedback and collaboratively shape the program.

In addition, the Department of Small Business Services (SBS) currently runs a range of initiatives that help small businesses navigate government contracting, including several devoted to minority- and women-owned companies. This year SBS will hold its fifth annual Procurement Fair, featuring workshops that help small business owners maximize return on investment from social media marketing.

## CONTRACT VISIBILITY

In line with this, the City will also make new Requests for Proposals more visible via **RSS** feeds, email alerts, and publicity. **RFPs** identify upcoming funded City projects that require external development for implementation. Making them more visible will enable newer entrants to compete for contracts and allow for fresh innovation and development.

## INDUSTRY ENGAGEMENT

### ATTRACTING ENGINEERING TALENT

A strong engineering talent pool is integral to digital sector growth. As part of that goal, in December 2010, **NYCEDC** on behalf of Mayor Bloomberg invited leading institutions around the world to explore the opportunity to build or expand an applied sciences facility in New York City, leveraging City-owned property and a potential capital investment to augment their own. Twenty-seven academic institutions submitted 18 formal proposals in response to the Request for Expression of Interest.

As a next step, the City will issue a Request for Proposals in summer 2011, with the aim to select a proposal by the end of 2011. Equipping New York City's future industry and workforce with an institution to cultivate expertise will help to fuel the City's innovation and economic growth.



## INDUSTRY

BY: SETH W. PINSKY, PRESIDENT,  
NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION



Today, New York City remains the leader in many major industries—from finance to fashion to media. But New York’s role as the world capital of commerce cannot be taken for granted. As technology lowers barriers to entry, emerging cities are making significant investments in their economy, and, the competitive landscape is being remade on an almost daily basis. In order to compete internationally, therefore, we must adapt. That is why NYCEDC is so focused on supporting New York City businesses to help them compete in a world in which the only certainty is change. In so doing, we believe that we are positioning New York as the place for innovation—the business capital of the 21st Century.

When governments set out to attract the “next big thing” in business, they often end up chasing the “last big thing.” As such, a crucial component of our innovation strategy is to make New York City the best place to form a new business, regardless of industry. Through targeted programs, we are equipping motivated New Yorkers with the tools they need to start and expand their enterprises, putting the ability to find the “next big thing” in their own hands.

The Center for Economic Transformation at NYCEDC is at the heart of our efforts to change the City’s economy. CET conceives and implements policy and programmatic initiatives that address the complex challenges faced by the City’s industries. During the past three years, the Bloomberg Administration and CET have launched more than 60 initiatives to encourage entrepreneurship across all sectors.

For instance, through our City network of eight incubators, the Administration is providing access to low-cost office space, as well as training and networking opportunities, to hundreds of startups and small businesses. To date, these incubators have raised more than \$20 million in venture funding and created or sustained over 500 jobs. In 2010, we launched the New York City Entrepreneurial Fund, the first City-sponsored seed and early-stage investment fund located outside of Silicon Valley. In partnership with FirstMark Capital, the fund makes up to \$22 million available to New York City-based technology startups. This year, the Mayor announced the winners of the second annual NYC BigApps competition. And as part of our larger effort to grow the technology sector in the City, Mayor Bloomberg challenged academic institutions from New York and around the world to build an applied sciences research facility within the five boroughs. In response, the Administration received 18 proposals from 27 different universities and institutions—evidence of New York City’s enduring attractiveness. This summer, NYCEDC will issue a formal Request for Proposals to these and other universities and we expect substantive work to begin before the end of this term.

New York City is undergoing significant transformation. It is impossible to tell today what the City will look like in the future. But as home to one of the world’s most productive, most creative and most entrepreneurial populations, one thing is certain—the City’s future will be bright.

## WORKFORCE DEVELOPMENT

NYCEDC will continue to expand FastTrac and JumpStart, innovative business training programs with tracks for both emerging and existing entrepreneurs interested in launching and growing their ventures. FastTrac and JumpStart provides this training at no cost, with support from the Department of Small Business Services, SUNY's Levin Institute, and the Kaufmann Foundation.

MOME will expand its Workforce Development programs, introducing new training and mentorship initiatives that increase diversity in the digital industry and connect trainees with employment opportunities.

DOITT will also help to expand diversity in the sector, through a partnership with the MOUSE Shadowship Program. This initiative matches high needs students with DOITT professionals, exposing them to a technology-based professional environment and future.



## RECRUITING

NYCEDC will continue to expand efforts that encourage more engineers to join New York City startups, and recruit more startup technology companies to headquarter and open additional offices in New York City. This initiative is already underway, and recently NYCEDC and a handful of local technology companies organized a successful recruiting visit to Boston. A keystone of this initiative will be ongoing

outreach and listening sessions with private sector stakeholders including entrepreneurs, engineering institutions, and investors to analyze needs and evaluate progress.

## .NYC

The City of New York is currently pursuing the introduction of the .nyc top-level domain, a global milestone that will enable innovation and digital services for residents, and economic advantages for businesses. New York City could be one of the world's first cities to operate its own top-level domain, presenting enormous opportunities. The .nyc domain will be administered by a private vendor to be selected by DOITT. The City is currently reviewing vendor candidates that responded to the City's initial Request for Proposals (RFP), and plans to submit its application for the .nyc top-level domain when the International Corporation for Assigned Names and Numbers (ICANN) opens the application process. ICANN's timeline is expected to be finalized after its official June 21, 2011 meeting, and the City of New York plans to apply when the application period opens. Only the vendor selected by New York City government will have the legal right to administer the .nyc domain.

## ADVOCACY

Supporting and promoting New York City's digital sector has long been a City priority, and it will continue to celebrate thriving local digital companies.

To further support the industry, MOME will introduce a panel series featuring discussion and debate by digital thought leaders. MOME will also continue its involvement as a partner in Internet Week New York, a festival celebrating the Internet industry and community, which MOME has supported since its inception four years ago.



## AFFORDABLE WORKSPACE

NYCEDC currently operates a number of affordable shared workspaces including **HIVE** at 55 for digital media professionals and 160 Varick Street Incubator. **HIVE** at 55 can accommodate 50 media professionals, while the Varick Street Incubator, at a starting rate of \$200 per person per month, supports 35 startups. Both are equipped with Wi-Fi, conference rooms, and basic business services, at a rate accessible to emerging startups. **NYCEDC** will shortly open the Sunshine Bronx Business Incubator in partnership with shared office space provider Sunshine Suites, and has plans to open additional affordable workspaces in the coming months in Brooklyn.

**NYCEDC** also supports independent incubators and workspaces and has provided grant funding to General Assembly, a successful “urban campus” for digital entrepreneurs.

In addition, as part of a new incentive program, **MOME** will create a digital media incubator and media center to support emerging digital media ventures. The incubator will provide workspace, infrastructure, and services to up to 200 digital media professionals. In the same facility, **MOME** will develop a media center for events, presentations, panels, lectures, and training in the digital sector.

## INDUSTRY EVENTS AND COMPETITIONS

**NYCEDC** hosts a range of industry networking events for the digital sector such as the Startup Exchange. To encourage friendly competition and reward innovation, **NYCEDC** runs the highly successful **NYC Big Apps** contest and business plan competition **NYC Next Idea**. **NYC Big Apps** fulfills multiple City goals by incentivizing developers with \$40,000 in prizes to create digital tools that serve New Yorkers using New York City government data provided by **DOITT**'s **NYC DataMine**. **NYC Big Apps** is partly funded by **NYCEDC** partner **BMW i-venture**, which recently announced it will headquarter a \$100 million investment fund in New York City.

## FUNDING

To support early stage technology startups, **NYCEDC** recently partnered with FirstMark capital to create the \$22 million New York City Entrepreneurial Fund. Mayor Bloomberg announced the fund's first investment in 2010 at TechCrunch Disrupt, investing in MyCityWay, the winner of the 2009 **NYC Big Apps** Competition.

Top left:

Mayor Bloomberg and Chief Digital Officer Rachel Sterne join Foursquare founders Dennis Crowley and Naveen Selvadurai at Foursquare headquarters for the proclamation of April 16 as Foursquare Day

# Conclusion





## **COLLABORATIVE LEADERSHIP** Measuring Progress for all Digital Cities

ACROSS THE GLOBE, CITIES FACE unique challenges and opportunities. But we all share the common goal of serving our citizens.

New York City recognizes that the success of its fellow municipalities is important to its own. Its commitment to Open Government is a commitment to support the collective potential of digital cities, through the sharing of tools, technologies, standards, and best practices that have the potential to benefit all people, everywhere.

An integral part of New York City's digital road map is a policy and strategy to collaborate with other cities in the United States and abroad. In partnership, cities have a unique opportunity to join efforts and benefit from their combined achievements.

Specifically, the City of New York will work with other cities to support the development of compatible, interoperable systems that enable the smooth transfer of information and the development of an ecosystem of tools and applications that benefit citizens in every City. Nationally, the City of New York will coordinate with state and federal governments with the goal of creating a unified, integrated system for providing services and information.

To measure these efforts, and the initiatives highlighted in the report, the City of New York seeks to explore the creation of the Digital City Index (DCI), which will evaluate the digital progress of municipalities based on the four core areas identified in this investigation, measured by four corresponding criteria (exact method and weighting to be developed).

### **DIGITAL CITY INDEX CRITERIA**

**Access** Broadband Internet Adoption

**Open Government** API-enabled Public Data

**Engagement** Individuals Using Digital Services

**Industry** NYCEDC Innovation Index

The City of New York would like to participate with cities around the world in creating an environment of openness and transparency.



**THIS REPORT HIGHLIGHTS NEW YORK** City's longstanding commitment to embrace technology in the public service and continue to realize the City's digital potential. Today the City of New York is a leader in digital civic engagement, but we can, and will, do more to embrace this revolutionary medium. This report celebrates the digital achievements of public and public sector alike, and outlines a path to realize New York City's potential as the No. 1 Digital City in the world.

Digital technology enables unprecedented transparency, innovation, access, public input, and participation in the democratic process. By connecting all New Yorkers, developing a platform for Open Government, enhancing our digital resources, and supporting a vibrant technology sector, the City of New York will pursue a holistic strategy to become the greatest digital city on Earth.

The process of fulfilling our digital potential will be open and collaborative, reflecting the nature of the medium itself. It will feature ongoing listening sessions across the five boroughs discussing the technology needs unique to different New Yorkers. It will invite public input through digital channels including [nyc.gov](http://nyc.gov) and social media platforms. And finally, as it pursues the goals of the Digital Road Map, NYC Digital will document its progress with full transparency via its website, blog, and public presentations.

In closing, the City of New York celebrates the digital contributions of its citizens, thanks them for cultivating a vibrant civic society, and looks forward to their participation in the pursuit of our shared digital future.



*Road Map for the Digital City* outlines a path to build on New York City's successes and establish it as the world's top-ranked Digital City, based on indices of Internet access, Open Government, citizen engagement, and digital industry growth. The report is informed by 90 days of research and over 4,000 points of engagement from residents, City employees, and technologists who shared insights and ideas.



## *Road Map for the Digital City*

Achieving New York City's Digital Future

SPRING 2011