# Testimony of Nicholas O'Brien – Director of Public Affairs for the Mayor's Office of Data Analytics and Acting Open Platform Officer – before the New York City Council – Committee on Technology

#### October 27, 2014

Good afternoon. My name is Nicholas O'Brien. I am the Director of Public Affairs for the Mayor's Office of Data Analytics and the Acting Open Platform Officer for the City of New York. In my role as the Open Platform Officer, I am responsible for the implementation of Local Law 11 of 2012, the New York City Open Data Law. Here with me is Albert Webber of the Department of Information Technology and Telecommunications' Office of Advanced Technologies. The Mayor's Office of Data Analytics is housed within the Mayor's Office of Operations, and works with the Department of Information Technology and Telecommunications or DoITT to fulfill the requirements of the Open Data Law. The law has the full support of the administration and we are working tirelessly to ensure it is fully implemented.

The New York City Open Data Law was signed into law on March 7, 2012. The law was the product of a collaborative effort including the City's technology community, the nonprofit sector, the Council, City agencies, and the Mayor's Office. It has served as the basis for a number of other Open Data and Transparency policies and initiatives throughout the country and established New York City as the leader in the field. I'm here today to testify on the progress of the implementation of the Open Data Law and highlight some of the successes we've had since the last hearing on this topic in November of 2013.

The primary vehicle for delivering data to New Yorkers is the Open Data Portal accessible at nyc.gov/data. To date we have released 1,268 unique data sets on the portal, up from 350 in 2011 when the portal was first launched. 99 of those sets have been fully automated and new automations are coming online every month. In July, we released the 2014 edition of the New York City Open Data Plan, which catalogues 345 unreleased datasets covered under the law and their planned release dates. When combined with the 1,268 already released, we have a total of 1,613 data sets which comprises the known universe of Open Data sets maintained by the City of New York. The 2015 edition of the Open Data Plan will be released to the Council on July 15 of 2015. Between now and the release of the 2015 plan we will publish an additional 100 data sets.

In addition to these activities, which are mandated under the law, we are undertaking numerous initiatives beyond what is required by the law to increase transparency and facilitate the use of City data to provide meaningful insight.

Just last week, we launched significant enhancements to the search and browse functionality which Mr. Webber will detail in his testimony. These enhancements were the result of a collaborative process undertaken by the Mayor's Office, DoITT, Open Data advocates and the larger civic tech community.

In August, the Mayor signed two bills into law, Local Laws 37 and 38 of 2014, designed to create a more transparent and effective City government. Local Law 37 requires the Law Department to publish the City Charter, the Administrative Code, and the Rules of the City of New York online and update the compilation of laws within 30 days of any change. Local Law 38 requires the City to post the City Record

online within 24 hours of publication. At a public hearing preceding the signing of those bills, the Mayor also announced an innovative public-private partnership to transform 4,000 publications of the City Record, currently stored in PDFs, into machine readable format to ensure they can be used to understand trends and patterns surrounding City operations.

In September, the Mayor announced the winners of the 5<sup>th</sup> annual New York City BigApps competition. This year's competition, hosted by DoITT and the Economic Development Corporation, was designed to use City data to make New York a better place to live, work, play and learn. The winner of the live category, Heat Seek uses 311 data and thermometers placed in tenant's apartments to help ensure that New Yorker's apartments are kept at or above the minimum temperature during the heating season. BigApps also is a driving force in creating good technology jobs based on Open Data. Two examples, MyCityWay which received \$6 million dollars in venture capital funding and Embark NYC which was acquired by Apple in 2013 are early examples of viable businesses driven by Open Data.

These initiatives are just the latest embodiment of the Mayor's long standing commitment to openness and transparency in government. This administration believes this commitment is essential to creating an equitable City and ensuring every New Yorker is well served by its government.

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With regards to the data itself, we know the City's data is complex and we provide extensive background information on featured datasets to increase awareness and usability of the most frequently viewed datasets on the portal. We are currently featuring the newly released restaurant inspection data which was never before directly available on the portal. We are also using the Open Data Portal to show visualizations built with public data. These visualizations make the information contained in the portal more accessible as New Yorker's seek to understand their City.

Our work to improve usability and access to City data includes engaging with agencies on an ongoing basis to enhance the public's ability to access, consume, map, and visualize New York City's geographic data. By leveraging the City's GIS expertise, we have enabled users to create different types of maps of more than 165 datasets through the Open Data portal, including hurricane evacuation zones, wifi hotspot locations, parks, and building footprints. This map data is not covered in the law but we feel that it is an important component of Open Data.

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One of the benefits of Open Data we are working to quantify is the improvement in fulfilling FOIL requests. Last year, the Environmental Control Board, or ECB, received two FOIL requests that they were able to respond to by directing the requestors to the Open Data portal. This not only makes it easier for agencies to respond to requests, it also provides faster, easier, and cheaper access to the data, potentially reducing the need for the public to submit lengthy FOIL requests to gain access to information.

We are also focusing on measuring the economic benefit of Open Data. We are tracking aggregate usage and have begun to catalogue the applications built on top of the data; this is the first step in our effort to rigorously quantify the economic impact of Open Data. These benefits come in many forms, ranging from improving agency efficiency and cost avoidance, to the creation of new jobs and businesses made possible by the release of this data. We are confident that this analysis will demonstrate that the City's investment in Open Data makes economic sense and look forward to presenting the result of this effort the next time we have the opportunity to testify.

I would like to thank the Council Technology Committee for providing me the opportunity to testify today. At this point I'd like to turn it over to Albert Webber from the Department of Information Technology and Telecommunications to walk you through some of the finer details of the implementation and the new enhancements we have released in response to feedback from the community. After Mr. Webber's testimony we will be happy to answer any questions you may have.

# TESTIMONY OF ALBERT WEBBER, DEPERTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS BEFORE THE NEW YORK CITY COUNCIL – COMMITTEE ON TECHNOLOGY

#### **OCTOBER 27, 2014**

Good afternoon, my name is Albert Webber of the Department of Information Technology and Telecommunications (DoITT). On behalf of Commissioner Anne Roest, I'd like to thank Chairman Vacca and the members of the City Council Committee on Technology for convening this hearing on the implementation of Local Law 11 of 2012, the Open Data Law. Open Data is a major priority for DoITT, and I am here today to share our progress to date, highlight the recent enhancements we have made to the NYC OpenData portal and to discuss our strategic plan going forward.

Mr. O'Brien already articulated the de Blasio Administration's strong support for government transparency and their efforts to ensure the Open Data Law is implemented fully. DoITT works closely with the Mayor's Office of Data Analytics in the implementation of this law.

Local Law 11 of 2012 requires that all public data sets maintained by New York City agencies or departments be made available on the Internet through a single web portal. DoITT maintains this portal, NYC Open Data, at nyc.gov/data. We currently have 1,268 unique datasets available via the portal. Each year, all agencies and departments are required to submit an inventory of public data sets that they have not yet made public along with the dates that they intend to publish them. This inventory is compiled by my office and published as the New York City Open Data Plan. The latest edition of the plan, published on July 15th of this year includes 345 data sets scheduled for future release. Since July 15th, 60 of the data sets on the plan have come due and I'm happy to report that we have successfully published 57 of them or 95%. We are on track to publish an additional 100 before the next edition of the plan, which is scheduled for submission to the Council on July 15, 2015. As per the law, all public data sets maintained by City agencies and departments must be published by December 31st, 2018 or a reason must be given as to why the data set cannot be released and when it is expected to be released.

To enable the Council and the public to track the progress we've made, we included listings of all the data sets which we published since the inaugural release of the plan, as well as any data sets that were removed from the plan and the specific reason why they were removed, for example, being merged with existing data into a combined data set. We also provide a dashboard of available data sets which is updated monthly and provides a concise listing of data sets currently available on the portal and those scheduled for future release.

I would now like to turn to some of the enhancements we have made to the portal. These improvements were made in response to feedback received from users of the portal and were developed in close collaboration with the Open Data community.

The portal has been improved to enhance search functionality. Initially, the portal relied on industry-standard technology, but it was unfortunately not sufficient to navigate the thousands of Official City Data Sets and Community Generated Views available on the portal. Working with

the Open Data community and our technology vendor we were able to refine the search function to provide much more relevant results. For example, a search for "311," which is one of our most popular data sets, using the old search technology, returned the official 311 data set on the 9th page as the 214 data set in the list. A user would then have to click through pages of community generated views to find the actual data set. With the new technology released just last week, a search for "311" now yields the entire 311 Service Request data set as the first result.

While discussing the search enhancement I mentioned two types of data sets: "Official City Data Sets" and "Community Generated Views." I'd like to take a moment to explain the difference. One of the NYC Open Data portal's most useful features is that it allows users to create a specific view or filter of a data set and save it for future use. For example, a user may only be interested in the Department of Housing Preservation and Development's complaints in his or her zip code and create a filtered view with only this information. We feel this is important functionality to allow users to access relevant information. However there was so much user activity on the portal that it became difficult to find the original data set among all the Community Generated Views. Therefore, our release last week created a feature that allows for searching or browsing of only the original Official City published data sets. While all the Community Generated Views are still available to users of the portal, users should now have a much easier experience locating the original City data sets.

In addition to the enhanced search functionality and the ability to look at only official City data sets, we have also created the ability to search or browse by specific City agency or department. For example, users can now browse and see all the data sets available from the Administration for Children's Services or Taxi and Limousine Commission or any other agency with data on the portal.

I would now like to discuss where we are going next with the Open Data initiative. There are four areas we are focused on in the coming year: automations of older data sets; increased community partnerships and interaction; deployment of a new Open Data interface; and quantifying the impact of the Open Data initiative overall.

**Automation:** When we first launched New York City Open Data portal in 2009, then known as the NYC DataMine, the Open Data law had not yet been passed, and all the data posted to it was done so on a voluntary basis. We will be focusing on automating these older datasets to ensure they remain updated and relevant.

Partnerships: There is a vibrant Open Data community in New York City. The improvements we made to the Open Data portal described earlier would not have been possible without the input and spirit of collaboration embodied by the New York City Open Data community. We value the feedback we receive both on what data sets should be prioritized and the technology used to deliver them and view our relationship as a true partnership. The publication of these data sets is useless unless we have users who use it to make positive change for New Yorkers. There are events nearly every weekend and evening, and we receive hundreds of comments from users about City data and strive to answer every one of them. To that end, we are in the process of adding a new staff member to ensure that all comments and data set nominations receive a prompt reply, and that the City is well represented at community events and that we remain engaged with this

community. This representation will allows us to deepen the communication channels between the City and Open Data users, enabling us not only to be more responsive but also to communicate new data and features we have deployed or that are under development.

Innovation: Last week our Open Data portal vendor, Socrata, unveiled the next generation of its platform. This week we are working with the vendor and members of the New York City Open Data Community to conduct usability testing on the new site to ensure that it meets all the needs of the City and our users. This will give us the chance to give feedback to the vendor and to customize the product to fit our specific needs. The new interface will offer New Yorkers a host of new features:

- A new online experience focused on allowing non-technical New Yorkers, to easily access information in a way that's meaningful for them, including intelligent and automatically-created data visualizations based on the data being analyzed. For example, when New Yorkers search for 311 data, the tool will automatically create data visualizations showing Service Requests by Agency, a map of data by Community Districts, and a chart showing Service Requests created over time.
- Every dataset that includes location-based information can automatically be visualized by those attributes and by custom boundaries, for example by borough, community board, or zip code.
- Technical users can embed NYC data and visualizations in their own web sites and access them via tools of their choice.
- Significantly improved performance, allowing users to easily and quickly access and analyze millions of rows of data.
- Ability to query data based on location, for example how many pothole requests have been submitted within a specific Community Board.
- Pre-built tools to allow technologists to easily access Open Data based on the technology
  of their choice like iPhone or Android.
- Improved data automation tools, which will simplify agency Open Data automations going forward.

Impact: Finally, we are in the process of measuring the impact of our Open Data efforts. These benefits come in many forms, including better service delivery, government transparency, and increased economic activity. We are now working to take the next step and comprehensively quantify the impact of Open Data for New Yorkers and will be working closely with the Mayor's Office of Data Analytics in this effort.

In closing, DoITT strives not only to comply with the Open Data Law but to excel in creating an open and transparent government. We are working diligently to ensure New York City remains a national leader in the Open Data space.

I would like to thank you for the opportunity to testify this afternoon. Mr. O'Brien and I are happy to answer any questions you may have.



Testimony of
Gene Russianoff
Senior Attorney
New York Public Interest Research Group
before the
Committee on Technology
of the
New York City Council
hearing on
NEW YORK CITY OPEN DATA PORTAL
October 27, 2014

My name is Gene Russianoff and I am senior attorney for the New York Public Interest Research Group. I serve as Co-Chair of the New York City Transparency Working Group (NYCTWG). The organizations in NYCTWG have been working to support local efforts to make City data more accessible to the public.

Local 11 of 2012 – the Open Data Law – greatly helps this goal. As its declaration of legislative findings and intent notes: "It is in the best interest of New York city that its agencies make their data available online ... It will streamline intra-governmental and inter-governmental communication and interoperability, permit the public to assist in identifying efficient solutions for government, promote innovative strategies for social progress, and create economic opportunities."

I would like to make four points today.

- 1. I want to express my appreciation to the Council Committee on Technology its Chairman Jimmy Vacca and its members for holding this oversight hearing. Such hearings are extremely important for the future of the New York City Open Data Law. An oversight hearing, and the scrutiny it brings, is the main tool that the public, and the Council, have to ensure that the Open Data Law is being complied with. The vast majority of laws do not get oversight hearings. That this one does is a testament to the Council's commitment to the Open Data Law, and recognition of the laws importance and promise.
- 2. **DOITT** is meeting the spirit of the Open Data Law, but its efforts have been hobbled by inadequate staffing. We applaud their efforts, and appreciate the fact that for the first time, the Open Data program will be fully staffed thanks to the Mayor's budget. Inadequate staffing has slowed adoption of the Open Data Law, and public use.

- 3. In NYCTWG's view, City agencies could be better following the intent and spirit of the Law, which was enacted in 2012. Few have recognized that the Open Data Law is an opportunity for them to get more information to the public at a lower cost, reduce the number of FOIL and 311 requests for information, and share information more effectively within their own agency and with other agencies. There are vast opportunities for agencies to do more with this law.
- 4. **DOITT must make sure the Open Data Portal does not suffer from fundamental usability problems for long periods.** For two years, our groups, the Council and the public complained about severe problems with the search function on the data portal. It simply should not take that long to fix a problem that severely impairs the implementation of the Open Data Law. If DOITT cannot get a problem fixed by a vendor, that vendor should be fired. We strongly recommend that DOITT begin vetting other vendors so it is not locked into a non-responsive vendor that treats New Yorkers with such contempt.

We think very highly of DOITT's staff and their earnestness. We hope these bumps in the road are past and we can move towards realizing more of the promise offered by this law.

#### **Committee on Technology Testimony**

I am David McCreery. A resident of Manhattan and a hacker. This year, I took part in the NYC BigApps competition. One team I led won a grand prize. A second team I created is still waiting for data from the city. We requested it over six months ago and were eventually outright denied by the city agency.

The data in question is not controversial. Its release will not embarrass anyone. In fact, it's something that could prove essential to the city's goal of economic development in the outer boroughs. I'm speaking about the WalkNYC mapping data. This is the data used to create the 5 minute walk radius maps found in CitiBike stations, subway stops and bus shelters.

The data should be fully available on the city's open data portal. Rather than open the data up, I've been informed that the Department of Transportation is taking steps to close it off. The DOT is seeking protection under copyright law to prevent anyone from making anything similar to the WalkNYC maps.

I am especially concerned because the WalkNYC program itself incorporates locations from open data maps created by DoITT and other city agencies. We may face a situation where the DOT uses copyright law to shut down hackers who are creating innovative apps using copyright free DOITT data.

As a matter of public policy, it is better for the city to encourage entrepreneurship and job creation around open data instead of looking for ways to restrict and license its data. I hope that the officials here today will fully consider my concerns and will remain focused on creating the greatest amount of openness possible for city data.

Testimony by CHEKPEDS Hearing of the Committee on Technology - October 27, 2014 Open Data

Dear Chair Vacca and Committee members.

Thank you for holding this important hearing. CHEKPEDS is an advocacy group for pedestrian safety in Manhattan.

The Vision Zero initiative is attempting to focus on the root causes of the crashes and fix them in order of priority. Unfortunately the data collected and reported by NYPD is so incomplete that it will not help Vision Zero.

First 45% of all collisions are "untagged" which means that each borough has inaccurate information. How is it possible? The police officers are so confused they do not know in which borough they are?

Second for 60% of all city collisions "Contributing factors" which is short hand for "categorizing what happened" are NOT reported by NYPD. So we are making decision with less than half the proper data.

In Manhattan for example, NYPD captures contributing factors only in 42% of crashes with pedestrian injuries, but for motorists injured,, the information capture increases to 54% of the cases. One wonders why such a discrepancy.

We urge you to direct NYPD to tag 100% of the collisions by borough and to report contributing factors in 100% of crashes with injuries or deaths. After all those only represent 20% of all collisions but they are the critical ones to achieve Vision Zero.

At the same time NYPD could reduce their involvement with the 273,000 monthly collisions with vehicular damage only where they collect contributing factors in 49% of the cases. Why should we spend our tax money on minor fender benders?

The city Council and Mayor Di Blasio have voted stronger laws for drivers who injure or kill pedestrians. I would also recommend that for each collision with injury or death, the police collect and publish new information: the summonses or penalties meted out to the responsible party.

Thank you for holding this hearing.

#### Open Data Oversight Hearing - Oct 27, 2014 - Ontodia Testimony

Honorable Chairperson, I am Joel Natividad, co-founder of Ontodia, an open data startup born out of open data ourselves after winning NYCBigApps. I'm also a member of BetaNYC, the largest Code for America Brigade in the nation. I strongly support the City's Open Data efforts, and acknowledge that the City has made great progress thus far. But I know we must do more to realize the full economic potential of open data.

In a study released last October, the McKinsey Global Institute estimates that Open Data has the potential to unlock \$3-\$5 trillion dollars in economic value, per year, in the US alone. In New York, much focus has been placed on hackathons to unlock that potential, but beyond that, there is limited operational usage of this great resource that some have called the "New Oil of the Information Age."

Last year, as an experiment with DOE's iZone, we helped them release open data about the high school handbook. We refined the data, taking spreadsheets primarily used to produce the PDF and the printed version of the handbook to produce clean, ready-to-use data, supplemented with additional data, called metadata, making it immediately useful to software developers with an Application Programming Interface (API).

Since then, several organizations have independently built high school choice engines, with WNYC's schoolbook project just releasing one earlier this month.

Even then, WNYC's datanews team had to spend several days manually rekeying in some data even with this great resource, as most of City's open data is still in the form of PDFs and raw data dumps.

What if these other datasets had an API and additional metadata? Will it make the process of updating the Handbook much easier? Will it make the data more current, allowing parents and their children to choose high schools in the same way they do everything else online?

We believe that this is achievable and NYC is uniquely poised to achieve the vision of "Government as a Platform." As it is, NYC is the center of several information-centric, data-driven industries, and we feel that we can become the center of this API-driven innovation with your support.

Right now, as part of the City Record Online Working group made possible by the City Record Online law passed by the council this August, we are working shoulder-to-shoulder with DCAS in a landmark public-private partnership to unlock this City Record.

At the moment, the scope of our involvement is limited to making sure that the data be machinereadable and available for bulk download by August of next year.

We believe we have a golden opportunity to create something more than "machine-readable

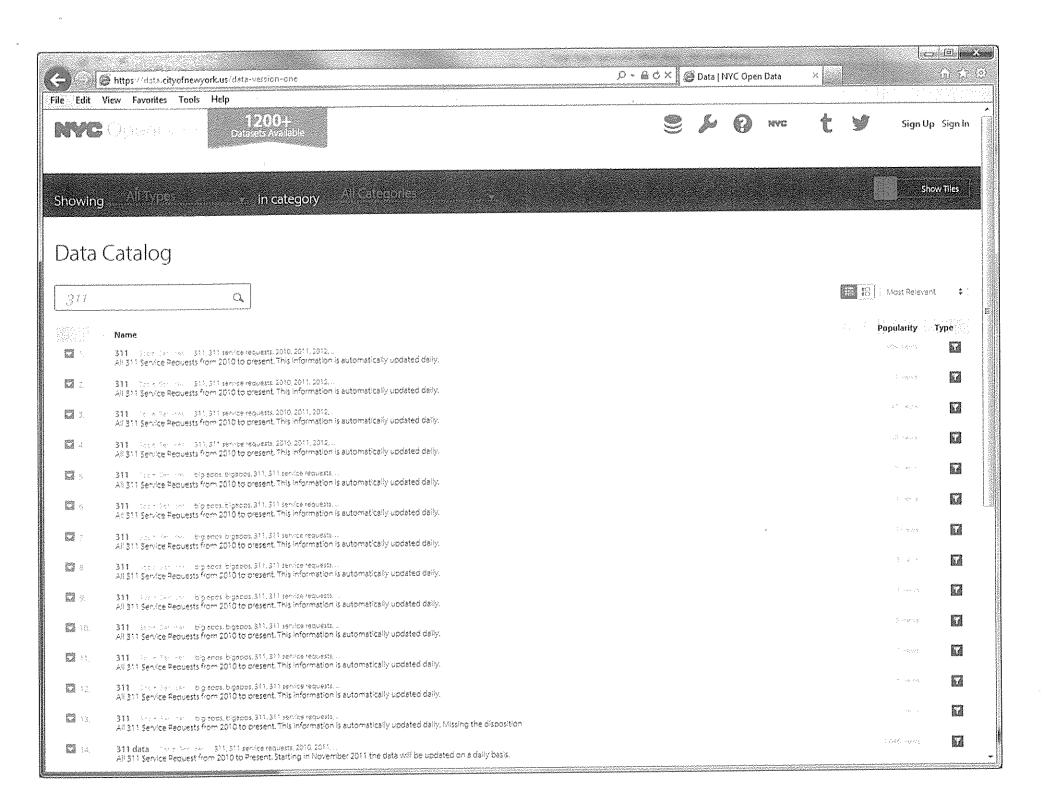
data available for bulk download" as the law prescribes. If we took the added step of creating a City Record API, we're convinced that not only will we fulfill the goal of the law, it will create a foundation for high-impact innovation that will truly set NYC's open data program apart.

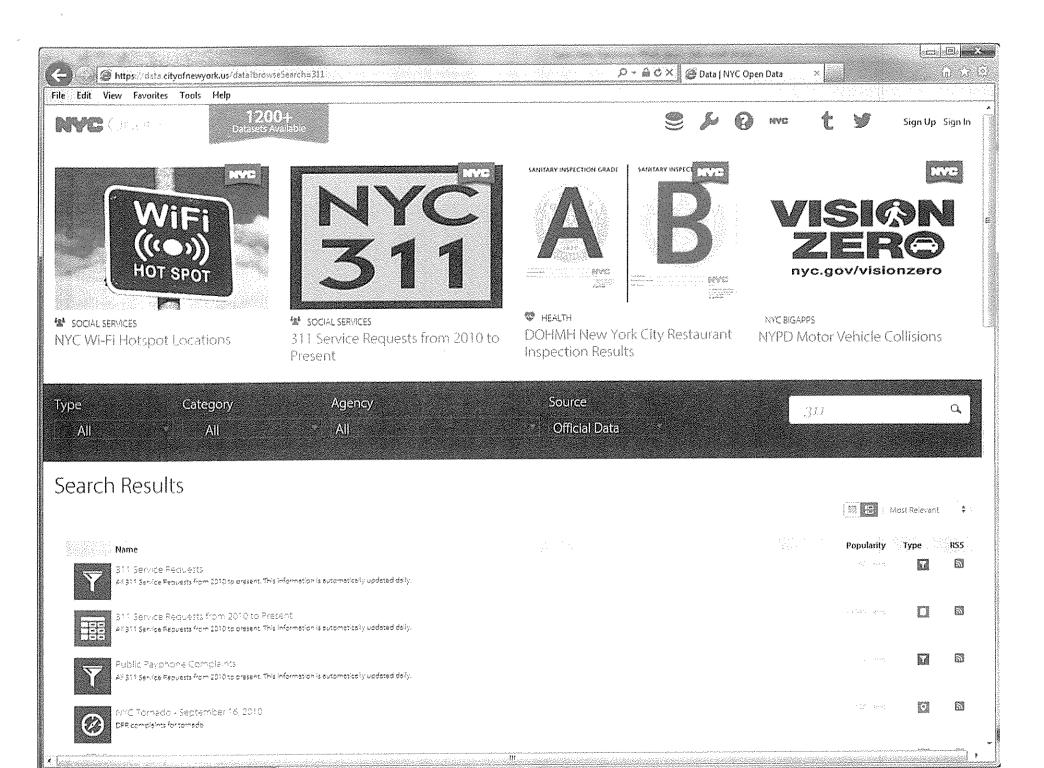
It will allow agencies to work with DCAS much more efficiently, it will allow BetaNYC to create applications that will proactively notify interested citizens of events happening in the City as BetaNYC is planning to do with Citygram, it will allow various organizations, public and private, to build all kinds of innovations.

My co-founder and I quit our jobs to work in this new field because we strongly believe that NYC only will create yet another data-driven industry and will be the center of CivicTech innovation - it will not create new jobs, it will also make way for a happier constituency as they see City government keep pace with all the private-sector, data-driven innovations that is now the norm in our daily lives.

I ask that the City Council expand the DCAS mandate to create this City Record API. You can be sure that Ontodia and BetaNYC will create unparalleled Civic Innovations by the City Record Law's 1st anniversarry next year if this is so.

Sincerely, Joel Natividad Co-founder, Ontodia PediaCities.com





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SOCIAL SERVICES

NYC Wi-Fi Hotspot Locations



SOCIAL SERVICES

311 Service Requests from 2010 to Present





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DOHMH New York City Restaurant Inspection Results

Source Category Agency Туре Official Data All All Αll All 311 Administration for Children's Services (ACS)

**Banking Commission** 

Board of Correction (BOC)

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Search Results

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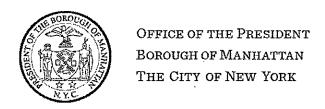
311 Service Requests

## Community NYC Data Wishlist

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### Community NYC Data Wishlist

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Gale A. Brewer, Borough President

### Testimony of Gale A. Brewer, Manhattan Borough President Regarding New York City's Open Data Portal New York City Council Committee on Technology October 27, 2014

My name is Gale Brewer, and I am the Manhattan Borough President. I would like to thank Chairman Vacca and the members of the Committee on Technology for holding this hearing today. As you may know, I was the Primary Sponsor of Local Law 11 of 2012, the Open Data Law. As Borough President, I am still paying close attention to the implementation of the Law, so I am very pleased that you have scheduled this oversight hearing today.

As the Committee knows, implementation of the law has been a major undertaking, and the Department of Information Technology and Telecommunications (DoITT) deserves tremendous credit for continuing implementation across two administrations. I am very pleased that the Mayor has announced the appointment of Dr. Amen Ra Mashariki as the City's new Chief Analytics Officer, and Minerva Tantoco as the City's Chief Technology Officer. With exceptional leadership at DoITT, the Mayor's Office of Data Analytics (MODA), and the Mayor's Office of Technology and Innovation, I am confident that New York City can continue to lead the nation in municipal data initiatives.

Now, this is not to say that implementation of the law has been perfect.

Understandably, some agencies have been slow to embrace a new way of doing business, one where the default setting for government data has switched to Open. For far too long, many agencies operated in their own silos, and were hesitant or outright hostile to sharing their data

with other agencies, much less with the public. I think most of us in government now realize the shortcomings of that attitude, but changing behavior is difficult. I know that it is not easy for agencies with limited resources to focus on open data. That is why it is contingent on leadership at DoITT and MODA to make it as easy as possible to share data, including automating data outputs, facilitating data mining and creating data visualization overlays whenever possible. To a get a sense of the paradigm shift, and how an agency can leapfrog others in relation to Open Data, one needs only to look at the New York City Police Department. After decades with a reputation for being closed off and hesitant to share public data, the NYPD is now looking at innovative ways to make their data publicly available and responsive to residents' needs, while balancing confidentiality issues and capturing operational efficiencies in the process. I am grateful that they have met with me, and members of the civic technology world on their plans, and I look forward to positive results. When Law Enforcement meets Civic Hacking, we will all be better off.

Outside of agency issues, a major concern is the primary topic of today's hearing: the Open Data portal itself. From the beginning, amateurs and experts alike have been frustrated by searchability and other functionality issues with Socrata's portal. One challenge during the past two years has been a difficulty in understanding if a search result is official city data or a filtered view saved by a user. This flaw has cluttered the portal with multiple views of the same underlying data. Again, I want to thank DoITT here, as they have recently made some simple fixes to the problem. To begin with, making the default search function "Official Data" only will eliminate much of the confusion, helping one query the most relevant datasets on the topic. I want to thank DoITT for responding to complaints, and making this change to the portal.

Another issue that must be addressed is a perceived lack of responsiveness to public requests for data from agencies and/or DoITT; the public has lots of questions about datasets.

Data integrity issues are a real concern, as are requests from the public for high-value datasets. When we negotiated this bill, we were lenient in our timeline for requiring agencies to publish all qualifying data. However, this leniency was due to assurances that requests from the public for high-value data would be taken seriously by agencies. My understanding is that this simply has not been the case thus far. This must be improved for this legislation to be successful. I know that there are ongoing discussions about how to improve interaction between agencies and the public, but I want to reiterate the importance we must place on this issue. If we want the technology sector, and the public at large, to use Open Data, we must listen to their questions and concerns, address them properly, and improve our performance. These are basic issues of competence and trust. Without them, people simply won't use the site, and neither government nor the public will benefit from the promise of Open Data to improve service delivery, accountability, transparency and performance.

In closing, I want to offer a positive report on what my office is doing with the data. As Borough President, one of my responsibilities is appointing members to, and providing oversight of, Manhattan's twelve Community Boards. Community Boards are New York's neighborhood City Halls, but due to their limited budgets and training they have been unable to do complex data analysis. Community Boards should be ideal consumers of city data sets on 311 and 911 trends in their neighborhood, construction permits, demographic shifts, zoning and more. For example, Community Boards play an important role in land use review. For far too long, they have been at a severe disadvantage when faced by complex development proposals. Community Boards have been forced to rely on anecdotal evidence to make decisions that really should be driven by data. In order to help equip Boards with the capacity to use city datasets for decision-making, my office is training interns from the CUNY Service Corps to work as Open Data Corp Members in all 12 Manhattan Community Board District offices. We expect to have them assigned soon, to work on discrete data projects involving

such pressing issues as UPK seats, Vision Zero, affordable housing, quality of life complaints, and more. In the near future, we hope to offer even more dedicated resources to the Boards so as to expand their mapping and GIS capabilities using this data. Additionally, we have launched a vigorous and robust training and technical assistance Community Board Leadership Series. On the data and mapping trainings offered, for example, we have partnered with the Department of City Planning to train 200 Community Board staff, chairs, committee chairs and members to use the community planning resources and tools the Department of City Planning has organized in one Community Portal website. My goal here is to provide the necessary training and technical assistance so that Community Boards can produce and submit the most data driven, visual, updated and supported Statement of District Needs using as much municipal open data as possible to make their case.

Turning the Open Data portal into everything we envisioned when we passed this law will require a lot more work. However, I am confident that we have the leaders within government, especially at DOITT, as well as from the private sector and non-profit community, notably the New York City Transparency Working Group, to ensure that the tool reaches its full potential. Thank you again for the opportunity to testify, and I'm happy to answer any questions.

Date: Monday, 27 October 2014

To: NYC Council - Committee on Technology

From: Noel Hidalgo, Executive Director

Re: BetaNYC's Testimony on Open Data Testimony

Good afternoon Chair and City Council members,

I'm Noel Hidalgo, and I am the Executive Director of BetaNYC. BetaNYC is a civic technology community group. Through our weekly meetings we exploring how to make the city's data useful to its neighbors. Our goal is to demystify technology, design, and data to city council members, community boards, community groups, and businesses alike. We are a community of developers, designers, mappers, and policymakers who volunteer our time to improve the digital city. We are New York City's civic hackers. We love open data and open government.

Because of the city's open data program and our advocacy for better data, our community has grown. In the last twelve months, we have grown to over 2,100 members. This year, three of the four NYC BigApps winners were community members. Forty five percent of NYC BigApps' semi-finalists were BetaNYC community members. As we discuss the city's data, we discover more and more individuals who are looking to solve problems with the City's data. That in turn leads us to more and more feedback about the City's open data program and the city's open government practices.

Today, I want to ask one simple question "how does the city, together with her constituents, build the right open data ecosystem?"

From BetaNYC's point of view, we need three things:

- · adequate human resources,
- meaningful data, and
- improved feedback infrastructure.

#### **Human Resources:**

First, thank you for allocating additional resources to run the city's open data program.

BetaNYC is excited to work with the new DoITT commissioner, CTO, and CAO. We want to thank the Mayor's Office for appointing such talented leadership to run the City's information technology and data infrastructure. We hope the three of them can staff up their teams as soon as possible. From BetaNYC's view, there is not a moment more to lose.

β

As we pointed out in last year's report, the *People's Roadmap to a Digital New York City*, this city's open data program is on the verge of revolutionizing how we access municipal, transactional data. We are at a point where public consumption of data is blossoming into a beautiful garden of data, utility, and stories.

#### Making Meaningful Data:

Second, the city's open data program is starting to breathe meaningful data into our lives. Over the last year, a few key datasets have been operationalized and placed online with daily updates. This operation allows the public to derive daily situation reports. This is a good start, but we need sub-daily reports.

Today, in partnership with Code for America, the City of Charlotte, North Carolina, and the City of Lexington, Kentucky, BetaNYC launches http://Citygram.NYC.

Citygram is a tool that converts municipal open data into meaningful notifications. Similar to the City's Notify NYC program, you can subscribe to topics and locations. These notifications will arrive via SMS or email.

As this is a free and open source tool, you can tell us what features are needed and we will add them in the coming months.

Today, Citygram.NYC starts with NYC 311 calls and the NYPD's crash database. We must note that the city's NYC 311 dataset is one of the best. NYC 311 provides an unparalleled and timely view of the city. We hope that many other datasets learn from 311. On the other hand, while the NYPD data is better than last year, it needs significant improvement. NYPD's data is wildly incomplete and contains notable discrepancies; more on this later. That being said, we are excited to work with these two data sets and make NYC's open data meaningful.

One year from now, we will live in a city where will receive push notifications about NYC's public meetings and procurement notices. Currently, BetaNYC and its members are working with Department of Citywide Administrative Services' City Record team to place their data into machine readable formats. For this to become a reality, we need sustained, open effort from DOITT and DCAS as we build a data format that maximizes utility.

For another example, you can visit Manhattan Community Board Six's website. CB6 has taken tools from the NYC open data portal and embedded them into their website. On the CB6 website we see contextualized NYC 311 reports of Road Repair Requests, Broken Parking Meters, and Noise Complaints. This contextualized data puts CB6's website as one of the top referrers to the City's open data portal and maximizes the public's understanding of issues related to Community Board Six's meetings.

If we can get more automatically geocoded data, community boards & city council members can quickly use the city's open data tools to digest and share relevant municipal data. When community data is easy to use and displayed within context, people love the data.

#### Improving Tools and Feedback Infrastructure:

Another iconic example of NYC's love for data is the "day in a life taxi" visualization. While not exactly an "open" data story, it is a prime example of an overwhelming desire for NYC's data stories.

This visualization drives you around 2013's yellow cab data. The original data include ~170 Million trips. The data is provided by the Taxi and Limousine Commission via a FOIL request. The intent is to analyze the NYC TLC 2013 taxi tripsheet data, to visualize running counts of fares, tips, and taxes, and to see how/when taxis move around New York.

This visualization has over a quarter of a million unique visitors and 6,500 Facebook likes. In the Facebook 'like' world, it is comparable to NYC 311 being liked on Facebook.

Our last story comes from the popular "I Quant NY" blog. Gothamist & Al Jazeera are the only other two news outlets that refer more traffic to the City's data portal. I Quant NY is the tenth highest referral to the city's open data portal and beats out the city's own open data success story blog. I Quant NY refers more traffic to the city's portal than other data friendly media outlets like WNYC and TechPresident. It should be noted that I Quant NY refers more traffic than Reddit, GitHub, & Facebook.

I Quant NY is so good at humanizing the City's open data that Mr. Wellington, its editor, has been featured on WNYC, New York Times, Gothamist, and the NY Post. Since launching in February, his site has received over half a million visitors unique visitors and 1,500+ Facebook likes. This is about as many Facebook likes as the New York City Department of Consumer Affairs.

Mr. Wellington recently gave an interview on how the city sees his analysis.

"There are two sides to the coin. Anytime you point out something, it could go either way. If you tell the Department of Health that there's something wrong with the rating system, they could either say, "Wow, let's look into that" or they could play defensive. Generally, agencies are defensive, but there's also not a good mechanism for them to take in information like this. They get caught off guard. I hope in the coming years they build in ways to reach out like this. If there were a liaison I could reach out to, maybe I would go that route. But right now, the only way to get attention is through the media. Unfortunately, that can create an adversarial relationship, which I think is the wrong way to look at open data. I really believe that if you empower people, you'll get much more out than you'll get criticism."

#### BetaNYC's Conclusion:

To effectively build the right open data ecosystem, the city and her constituents need to develop a shared understanding of possibilities and collaborate on shared outcomes. We need the city to finish hiring its open data team, and we need to have a shared view of the garden.

After two years of planting data seeds, it is time to harvest the garden and build the type of data ecosystem we all want. BetaNYC is honored to represent NYC's open government data users. We are ready to work with the city and build an equitable and just 21st century city. Attached to this written testimony, you will find nine recommendations, 60 dataset format changes, 13 questions from BetaNYC's Open Data Fidelity Workgroup, and a listing of 250 top referrers to NYC's open data portal.

Thank you.
Noel Hidalgo
Executive Director
BetaNYC

BetaNYC, New York City's Civic Technology, Design, and Data Community.

Noel Hidalgo • Executive Director • noel@beta.nyc • www.beta.nyc • @BetaNYC

BetaNYC's Testimony Bit.ly bundle: http://bit.ly/betanyc-20141027

#### **BetaNYC's Recommendations:**

The following has sourced from BetaNYC's experience and allies.

- Improve the format of the following 60 datasets < <a href="http://bit.ly/1wtKn3u">http://bit.ly/1wtKn3u</a>>.
- By default, provide geospatial support for all datasets that have an address.
- Improve constituent feedback mechanisms.
  - Perform constituent user testing to see how the City's web portal works for them.
  - From data set requests, to in-dataset comments, to general usability issues, constituent comments need better visibility and connectivity to the data ecosystem. To start, we recomend joining our NYC Open Data Fidelity Workgroup < <a href="http://bit.lv/nyc-od-wq">http://bit.lv/nyc-od-wq</a>>.
  - Similar to GovLab's open data 500, look at who is consuming NYC's open data and how it can be improved. At a minimum, the city should see out its top 100 active users.
  - Similar to the Chicago's open data blog, the city should have a one stop shop on dataset updates and improvements.
- Use the Freedom of Information Law (FOIL) as a feedback mechanism.
  - We think that the proposed NYC Open FOIL legislation takes us in a direction that will
    update and modernize the City's FOIL practice. We call on the Mayor's office to work
    with the Council to pass this bill.
  - o In the meantime, all FOIL officers and the City's open data team should be looking at FOIL requests as a way to lower the burden of FOIL responses.
- Update the City's open data tech manual.
  - It has been two years since this document was written. Many open data practices have improved and we would love to ensure that the city's data policy is maintained for the 21st Century.
  - We would love to work with the city to review the City's open data tech manual and update it.
- Explore alternative tools that federate with the existing open data portal and enable large data set sharing.
  - o Explore open and safe data sharing protocols like bittorrent & pubsubhubbub
  - o Empower agencies to host more data and share data from within their walls.
- Dataset Documentation
  - A majority of the city's data is explanatory for someone who is a subject matter expert.
     For the City's data to be maximized, datasets must have better documentation.

#### Crash Data

- "From Transportation Alternatives We know the crash data is inaccurate and significantly under-reports crashes. For instance, earlier this month we pulled numbers for YTD fatalities getting 164 for this year compared to 189 last year. The City said it was actually 195 vs 209. We know the City is aware of the problem but hasn't told the public that the site under reports crashes."
- Need: Timeline for fixing data quality.
  - Many crashes have intersections but aren't geocoded.
  - Representation of deaths is inaccurate.
  - There is an overwhelming number of "unspecified" contributing factors. How can this be the case?
- Need: Add injury types in the event of an injury crash, add severity of injury.
- Need: Add if Collision Investigation Squad was called in injury crashes.
- Need: Add types of citations handed out to individuals.

#### NYCHA Data

- For an organization that houses the City of Oakland, it is shocking that NYCHA only produces <u>15 datasets</u>. There is very little transparency, and this needs to change.
- It is appalling to read stories of how our public housing programs are physically broken. While we don't feel that data will immediately improve the lives of those in public housing, we need the Mayor and the Council to lean on NYCHA and have them release their performance reports and data in machine readable formats. We should know how long it takes to fix elevators, doors, lights, and other fundamental quality of living issues.

#### Questions for the NYC open data team:

These questions were developed by the BetaNYC community and its NYC Open Data Fidelity Workgroup.

Responses can be submitted to BetaNYC via noel@beta.nyc or by joining the NYC Open Data Fidelity Workgroup. < <a href="http://bit.ly/nyc-od-wg">http://bit.ly/nyc-od-wg</a> >

#### Metrics:

- What are the City's open data success stories? Within the NYC tech ecosystem, who are the largest consumers of NYC's open data? - Noel Hidalgo, BetaNYC
- Both NYC.gov and the City's Open Data portal are the primary digital engagement mechanisms
  of the City and are often cited in the City's Digital Roadmap updates. Can traffic analytics of
  NYC websites also be released as Open Data? Joel Natividad, Ontodia

#### Intergovernmental use of NYC open data:

- What type of intergovernmental outreach, training, and education do you perform? Noel Hidalgo, BetaNYC
- Within government, how are agencies using the City's open data portal? Noel Hidalgo, BetaNYC
- Do you have any plans to use Open Data not only as a transparency program, but as a way to improve data exchange within and outside the City? If opendata is used more operationally, it will automatically ensure that the data is more current - Joel Natividad, Ontodia

#### Data releases and standards:

- Why can't all address data in the NYC Open Data Portal be GeoCoded? -Ben Wellington, I Quant NY
- Do you have a roadmap or any plans to adopt open data standards or schemas? Noel Hidalgo, BetaNYC
- What are your plans to update NYC's open data technical standard manual? Noel Hidalgo, BetaNYC

- The City Record Online Law is yet another landmark in NYC's Open Data leadership that will
  enable all kinds of innovations. Do you have any plans of mandating that all PDF-bound data
  resources published by the City follow the City Record lead? Joel Natividad, Ontodia
- With <u>DEP and DataBridge</u>, inter-agency data exchange is far more efficient. Could it be mandated that opendata export to the data portal be a native function of these systems? In that way, the data can be sanitized and updated in a timely manner more efficiently? - Joel Natividad, Ontodia
- What are the reasonable limits of invoking Homeland Security as a rationale for the withholding of environmental datasets by DEP? - Liz Barry, Public Lab
- Prior to the adoption of the Open Data Law, several city agencies had already taken the
  initiative to post their data sets online, and continue to do so today, such as City Planning's
  "Bytes of the Big Apple" website, Dept of Finance's property-related data sets, and Dept of
  Buildings permit data. These agencies often post data sets that are more current, updated
  more frequently, and include more extensive and understandable metadata about these data
  sets than what can be found via the Open Data Portal. What has DoITT done to foster and help
  sustain these individual agency efforts, and how will DoITT ensure that its work on the Open
  Data Portal will not undermine these agency efforts but instead help strengthen them? Steven
  Romalewski
- Will the City of New York pursue copyright claims against citizens that use Open Data records
  to create works similar to official ones? For example, the Department of Transportation
  is claiming ownership and copyright of the WalkNYC data and maps, even though they
  incorporate DoITT data available from the Open Data portal. -- David McCreery

### NYC's Open Data Portal Referrals (1 Jan 2014 - 24 Oct 2014)

A handful of referenced websites are bolded.

Rank	Website	Number of Referrals
1	http://www.nyc.gov	142831
2	https://nycopendata.socrata.com	135446
3	https://www.google.com	130102
4	http://www.google.com	9427
5	http://gothamist.com	6371
6	http://www.novaiorque-online.com	6013
7	http://www.dnainfo.com	4363
8	http://www.newyork-online.ru	4047
9	http://america.aljazeera.com	3680
10	http://iquantny.tumblr.com	3238
11	https://data.ny.gov	3199
12	http://www.nuevayork-online.com	3127
13	http://www.bing.com	3122
14	http://www.socrata.com	2998
15	http://nycopendata.tumblr.com	2407
16	http://nycfacets.com	2387
17	https://www.google.ca	2334
18	http://nycopendata.socrata.com	2266
19	http://ht.ly	2153
20	http://www1.nyc.gov	2121
21	https://www.google.co.in	2076
22	http://techpresident.com	2073
23	http://nycshare.org	2035
24	http://www.wnyc.org	1795
25	https://www.google.co.uk	1697
26	http://t.co	1663
27	http://www.reddit.com	1625
28	https://www.facebook.com	1571
29	https://www.mturkcontent.com	1436

30	https://t.co	1365
31	https://github.com	1313
32	https://www.google.fr	1248
33	http://bdon.org	1188
34	http://nbviewer.ipython.org	1171
35	https://mail.google.com	1024
36	https://www.google.de	985
37	https://cities-datagov.demo.socrata.com	965
38	http://cbsix.org	942
39	https://nycplatform.socrata.com	891
40	http://www.qgistutorials.com	826
41	https://www.google.com.au	793
42	http://www.thefunkyapple.com	779
43	http://nycbigapps.com	730
44	https://www.google.es	707
45	https://www.google.it	698
46	http://www.cs.columbia.edu	698
47	http://cs.nyu.edu	690
48	https://m.facebook.com	689
49	http://gizmodo.com	685
50	http://www.nycshare.org	679
51	http://www.newyork-online.fr	665
52	http://sunlightfoundation.com	595
53	http://search.aol.com	593
54	http://screens.office.theodi.org	573
55	https://www.google.com.hk	563
56	http://gulfoflexico.org	562
57	https://www.google.co.jp	554
58	http://library.columbia.edu	537
59	http://fivethirtyeight.com	531
60	http://semalt.com	531
61	http://chriswhong.com	520
62	http://www.greenthumbnyc.org	503
63	https://www.google.com.br	500
64	http://yandex.ru	465

65	http://search.yahoo.com	440
66	http://www.cliquenovayork.com.usrfiles.com	420
67	http://www.streetsblog.org	412
68	http://r.search.yahoo.com	409
69	https://www.mapbox.com	408
70	https://www.google.nl	397
71	https://www.google.com.tw	394
72	https://duckduckgo.com	387
73	http://search.daum.net	379
74	http://www.askamanager.org	375
75	http://www.nowyjork-online.com	364
76	http://spatialityblog.com	361
77	http://www.citylab.com	346
78	http://retechny.challengepost.com	340
79	http://www.quora.com	333
80	https://translate.googleusercontent.com	319
81	http://bit.ly	318
82	https://developer.cityofnewyork.us	317
83	https://courseworks.columbia.edu	317
84	http://news.google.com	313
85	http://blog.agupieware.com	309
86	http://www.weblinkvalidator.com	308
87	http://www.itworld.com	307
88	http://www.food4rhino.com	299
89	http://www.propublica.org	294
90	http://techcrunch.com	290
91	https://www.google.co.il	289
92	http://www.ask.com	280
93	http://darkhorseanalytics.com	272
94	https://www.google.co.kr	272
95	http://moodle2.bths.edu	271
96	http://project.wnyc.org	264
97	http://google.org	261
98	http://newyorkparkingticket.com	259
99	https://catalog.data.gov	258

100	http://becomeanewyorker.com	257
101	http://www.ethossmart.com.usrfiles.com	255
102	https://www.google.com.sg	253
103	http://bagrow.com	252
104	https://www.google.ie	251
105	http://blogs.villagevoice.com	249
106	http://staging.test-socrata.com	246
107	http://weibo.com	244
108	http://longurl.org	241
109	http://stackoverflow.com	239
110	http://blog.kaggle.com	238
111	http://www.silive.com	230
112	http://simplystatistics.tumblr.com	230
113	http://jfxart.com	228
114	http://intersections.challengepost.com	226
115	http://rebelmouse.com	225
116	http://www.baidu.com	224
117	http://reinventpayphones.splashthat.com	223
118	http://webcache.googleusercontent.com	223
119	http://localhost	222
120	http://www.cloudred.com	216
121	https://www.google.ru	215
122	http://www.businessinsider.com	214
123	http://gis.stackexchange.com	209
124	http://us-city.census.okfn.org	207
125	https://www.google.pl	200
126	http://www.prismdecision.com	196
127	http://us.wow.com	195
128	http://nnlm.gov	194
129	http://nypd.openscrape.com	193
130	http://taxportal	193
131	http://www.programmableweb.com	191
132	https://encrypted.google.com	191
133	http://www.buzzfeed.com	190
134	http://www.bkmag.com	187

135	http://nyc.crashmapper.com	180
136	https://trello.com	177
137	http://wiki.openstreetmap.org	175
138	http://news.payphone-project.com	173
139	https://sites.google.com	173
140	https://www.google.com.mx	172
141	https://www.google.com.ph	171
142	https://data.cityofnewyork.us	171
143	http://catalog.data.gov	167
144	https://news.ycombinator.com	162
145	http://nycdata.tumblr.com	156
146	http://citibikefinder.splashthat.com	155
147	https://newclasses.nyu.edu	154
148	https://www.google.se	154
149	http://blog.noneck.org	151
150	http://nyc-parkingticket.com	148
151	https://www.google.dk	146
152	https://www.google.ch	144
153	http://www.kdnuggets.com	142
154	http://community.babycenter.com	139
155	https://srmpartners.squarespace.com	139
156	https://www.google.com.ng	139
157	http://semalt.semalt.com	137
158	https://www.google.be	136
159	http://comptrollernyc.com	136
160	https://www.google.gr	134
161	http://www.govtech.com	134
162	http://archinect.com	132
163	https://www.google.co.za	132
164	http://server.rlist.net	131
165	https://govspace.oregon.gov	130
166	http://www.meetup.com	128
167	http://www.stuycs.org	126
168	https://www.google.com.tr	125
169	https://socrata.atlassian.net	123

170	http://596acres.org	122
171	http://public.tableausoftware.com	122
172	http://www.google.com.hk	122
173	https://opendata.socrata.com	120
174	http://www.amny.com	119
175	http://feedly.com	118
176	https://www.google.com.co	118
177	https://www.google.fi	117
178	http://www.nytimes.com	117
179	https://www.google.com.ar	116
180	https://www.google.co.nz	115
181	https://www.google.at	114
182	http://nyc.pediacities.com	114
183	http://guides.lib.purdue.edu	114
184	http://qa-wp-datagov.reisys.com	113
185	https://bronx.lehman.cuny.edu	113
186	https://us-mg6.mail.yahoo.com	112
187	https://bbhosted.cuny.edu	111
188	http://www.pulse.me	110
189	http://www.google.co.uk	110
190	http://ukdataservice.ac.uk	110
191	http://www.udparty.com	110
192	http://coolculturegram.org	109
193	https://www.google.ro	109
194	http://r.duckduckgo.com	108
195	https://www.google.pt	107
196	http://www.nyctransitforums.com	107
197	http://www.inside-r.org	107
198	http://venturebeat.com	106
199	http://us.yhs4.search.yahoo.com	106
200	https://www.google.lt	105
201	https://moodle.stevens.edu	105
202	http://dmudrnyu.com	105
203	https://techpresident.com	103
204	https://health.data.ny.gov	103

205	http://scaliasdescent.tumblr.com	103
206	https://www.google.com.my	101
207	http://www.nycbigapps.com	100
208	http://www.google.co.in	100
209	http://mckenna- 2014.craft.journalism.cuny.edu	100
210	http://sugarstring.com	98
211	http://cooperthomas.net	98
212	https://piazza.com	98
213	https://docs.google.com	97
214	http://www.arch.columbia.edu	97
215	http://www.checkbooknyc.com	97
216	http://2013.nycbigapps.com	97
217	http://codeforgoodhackathon.com	96
218	http://www.digital.nyc	95
219	https://edge.edx.org	95
220	http://youngecon.com	95
221	http://ofti.org	94
222	http://blog.thedataincubator.com	93
223	http://openprism.thomaslevine.com	93
224	https://www.google.com.pk	93
225	https://startpage.com	93
226	http://www.newyork-online.us	92
227	http://blog.nodeknockout.com	91
228	https://us-mg5.mail.yahoo.com	91
229	http://aaronbare.com	90
230	http://google.com	90
231	https://www.google.com.vn	89
232	http://www.hamiltonterrace.org	89
233	http://api.twitter.com	88
234	http://www.oasisnyc.net	88
235	http://htmlcomponentservice.appspot.com	86
236	http://www.raeesmuqthar.com	85
237	http://semisignal.com	84
238	https://www.bing.com	83

239	http://visionzero.splashthat.com	83
240	http://ce.columbia.edu	82
241	http://home.nyc.gov	80
242	http://theblinker.com	80
243	http://www.google.fr	77
244	http://datacatalogs.org	76
245	https://basecamp.com	76
246	https://www.google.com.ua	76
247	http://io.morphocode.com	75
248	https://oc.okstate.edu	74
249	http://127.0.0.1	73
250	http://www.smalldatajournalism.com	72



## Open Data Law Oversight Hearing

## NYC Council Committee on Technology October 27, 2014

Good afternoon, Chairman Vacca and Members of the Technology Committee, my name is Dominic Mauro, Staff Attorney for Reinvent Albany. My organization co-chairs the NYC Transparency Working Group and is an active part of the broader civic coalition working on open data policy in New York City and New York State.

We join with our colleagues in thanking you very much for holding this oversight hearing. Council oversight is extremely important for ensuring that the hard won Open Data Law is complied with by city agencies.

Overall, we are excited about the progress of the Open Data Law, which is still in its early days. We believe the City's open data efforts are robust, healthy, and improving. The implementation of the Open Data Law is fundamentally strong, though much work remains. First, here's what's working:

- 1. The City has five fully funded, dedicated open data staff. This is probably more than any state or local government, and gives the City the capacity to rapidly improve and expand its open data efforts.
- 2. Open data has strong support from the Mayor and City Council and has a synergistic relationship with the Mayor's Office of Data Analysis (MODA) which ensure it is sustainable.
- 3. Open data has an expanding group of public stakeholders, including businesses, academics, advocates and government who use the data.
- 4. The quantity and quality of the data available continues to expand, and with it, so does use of that data.

We especially applaud DOITT for its sincere and energetic efforts to get agency data published. DOITT is clearly meeting the spirit of the Open Data Law, and their staff has strived to make it work.

The Open Data Law calls for a new way for government to share information with the public, going forward, forever. One way to think about it is that we

are in year three of a permanent change lasting for centuries. Every year, the City needs to get a bit better at Open Data – and fortunately, we have the resources and commitment to succeed.

In the next year, we hope the de Blasio administration advances open data in four key ways:

First, the Mayor's Office of Operations needs to get agencies to put the most frequently FOILed and requested data on the Open Data Portal. Most agencies still do not understand that the Open Data Law is intended to help them reduce FOIL requests, reduce 311 requests for information, and help them get information to the public at a lower cost with less hassle.

Second, DOITT needs to create a public feedback process for the Open Data Portal which results in more and better city data being put online. When data errors are discovered and reported by the public, the responsible agency should correct those problems. DOITT should ensure that the public can track the progress of those corrections.

Third, the severe problems with the search function of the Open Data Portal have to be completely fixed. Despite repeated, emphatic, requests from the Transparency Working Group and other many open data stakeholders, it took DOITT more than two years to correct crippling flaws with the search function – flaws that severely reduced the usefulness of the Open Data Platform, and undoubtedly kept people from using the data on it. This kind of fundamental usability problem, cannot be repeated, and cannot take so long to fix in the future.

Four, DOITT needs to clearly show the status of data sets to be published, or which have been delayed or removed from the open data plan. Overall, it's hard for the public to tell if the City is meeting its own data release targets. For example, a dataset essentially disappears from view if it was scheduled for release in the 2013 plan, delayed, and then not included in the 2014 plan.

DOITT and City Hall are easily capable of achieving these goals, and we look forward to assessing their progress with you at the 2015 oversight hearing.

Thank You.



To: NYC Council - Committee on Technology

From: Arnaud Sahuguet, Chief Technology Officer & John Krauss, Research Fellow, The Governance Lab @NYU

Good afternoon.

#### Who we are

We represent the Governance Lab (aka GovLab) at NYU Poly, whose mission is to "improve people's lives by changing how we govern." <sup>1</sup> Founded in 2012, with funding from the <u>MacArthur</u> and <u>Knight</u> Foundations, GovLab brings together thinkers and doers who design, implement, and study technology enabled solutions that advance a collaborative, networked approach to reinvent institutions of governance.

#### GovLab's expertise on open data

We think that open data is a critical element for improved governance.<sup>2</sup> The current director of GovLab, Beth Noveck, was co-architect of <u>data.gov</u> and co-author of the US open data policy and advisor to NYC on this law.<sup>3</sup> In April 2014, we released the first comprehensive study of companies that use open government data, the Open Data 500.

#### Community engagement

From our experience and research, we can say that an engaged community is a key element of a successful open data strategy. The community can provide **capacity**, **feedback** and also **data itself**, back to the city. <sup>4</sup>

#### **Deficiencies**

In our view, it is difficult for the NYC open data community to have their questions about NYC data answered, or track the progress of those requests within the city's open data plan. We understand that this is a hard problem, but we have ideas about how the city could improve its facilities, leverage the community, and maximize the value of its open data.

#### **Fixes**

A successful community engagement strategy comprises active involvement in both physical and online communities from city open data officers, in addition to improved idea exchange and accountability mechanisms:

<sup>&</sup>lt;sup>1</sup> The Governance Lab @ NYU

<sup>&</sup>lt;sup>2</sup> Open data: Unlocking innovation and performance with liquid information, McKinsey report, Oct 2013.

<sup>&</sup>lt;sup>3</sup> Open Data Policy and Practice, Beth Noveck and Dominic Mauro, New York Law School, June 2011.

<sup>&</sup>lt;sup>4</sup> City of Philadelphia, Open Data Guide Book, "engaging users in the data community".

- 1. A solid tool where it is easy to find datasets, easy to report feedback/issue on datasets, and easy to suggest a dataset. Right now, it can be difficult to quickly query for existing data sets, sestablish whether or not the city is even publishing the queried-for data, or to understand whether returned data is relevant to the search. Often doing a Google search restricted to the portal leads to faster, more relevant results than the built-in search feature.
- 2. A clear and transparent process to report issues, track progress, and understand outcome and timelines<sup>8</sup>. The city removed many data sets in the 2014 updated Open Data Plan with minimal explanation, and without tools for tracking changes. There are free open source tools available to facilitate tracking changes and comments.
- 3. A real human being you can talk to, accessible (e.g. via direct email<sup>9</sup> or during face to meetings<sup>10</sup>) and accountable. *Open data officers in Chicago attend hack nights regularly, which facilitates communication with the community.*
- 4. Conversation tools for the various parties (city, business, civic hackers, community at large) to ask the community questions. Such forums already exist (e.g. opendata.stackexchange) or could be created for free using open source tools<sup>11</sup>.
- 5. A feedback loop mechanism for open data "consumers" to report successes, which would motivate city personnel doing some hard work on open data. The current system imposes a wall between the agency producers of open data and their consumers.

#### Contributions

GovLab can draft a report on best practices for community engagement around open data. We are located on the same floor of Brooklyn Metrotech as DoITT. Our door is always open, and we are happy to walk across the hall and share some of our research and expertise with the city.

<sup>&</sup>lt;sup>5</sup> To find the locations of FDNY firehouses, one must search for "FDNY firehouses" on the portal. Other similar searches (like "fire department locations") will not return the relevant dataset.

<sup>&</sup>lt;sup>6</sup> The portal does not publish the location of NYPD station houses, but determining this involves paging through many irrelevant datasets.

<sup>&</sup>lt;sup>7</sup> Querying for "mortgage records" will bring up the appropriate dataset, which is called "ACRIS - Real Property Master". Without domain expertise it would be difficult to know this is actually relevant to mortgages.

<sup>&</sup>lt;sup>8</sup> NYC Open data portal does not provide any sense of a timeline, e.g. <u>here</u>. This is to be compared with what the <u>City of Philadelphia had to track progress</u>. Chicago has a <u>dedicated blog</u> to provide open data updates. So has <u>San Francisco</u>.

<sup>&</sup>lt;sup>9</sup> The City of Chicago has a dedicated <u>page</u> for the community to "ask anything".

<sup>&</sup>lt;sup>10</sup> e.g. in Chicago where a representant from the open data portal attends <u>Civic Hack Nights</u> at least once a month to report on progress and listen to requests from the community.

<sup>&</sup>lt;sup>11</sup> discourse.org, by the creator of StackExchange.

## THE COUNCIL THE CITY OF NEW YORK

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# THE COUNCIL THE CITY OF NEW YORK

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# THE COUNCIL THE CITY OF NEW YORK

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