CITY COUNCIL
CITY OF NEW YORK

------------------------ X

TRANSCRIPT OF THE MINUTES

Of the

Committee on Technology

------------------------ X

                         April 23rd, 2014
                         Start: 10:00 a.m.
                         Recess: 11:15 a.m.

HELD AT: Committee Room
                   City Hall
B E F O R E:
                   James Vacca
                   Chairperson

COUNCIL MEMBERS:
                   Annabel Palma
                   Mark S. Weprin
                   David G. Greenfield
                   Steven Matteo

A P P E A R A N C E S

Nicholas O'Brien
Mayor Office of Data and Analytics

Edward Baggott
Assistant Chief FDNY

Jeff Roth
FDNY Assistant Commissioner for Management
Initiatives

Joel Golub

Deputy Commissioner of FDNY

Dominic Mauro
ReInvent Albany

Noel Hidalgo
Beta New York City

Dara Adams
SAS Institute

Don McMorrow
ReInvent Albany

Good morning everyone, thank you for coming. My name is James Vacca and I'm chair of the committee of Technology. Today we here to discuss the topic how we may use data and technology to proactively address health and safety issues in New York City. Particularly we will examine how the Mayor's office of Data Analytics utilizes data to make our government more efficient and transparent. The members of this committee and I are extremely familiar with the issue that effect our city. Particularly on the ground in our own districts. We all strive to make New York City a cleaner, safer and more livable place to live. At this moment our government has the technological tools to not only identify what the issues are as they are happening but also has found ways to predict the types of problems that may arise and address them before they even become problems. Over the past years, our government has become more technological driven than ever before. Everyday New York City collects and immense amount of data about issues that affect our everyday lives, such as 311 calls made about an unsafe construction site or the time it took for an ambulance to responded to the scene of an accident.

With the help of testimony from the Mayor's Office of

Data and Analytic and other interested stakeholders.

I hope to initiate a productive discussion today on

how we may use this data to improve the safety of New

Yorkers and make government services more efficient.

While MODA only came into existence approximately a

year ago. This office has become the creative engine

for energy driven data projects. Agency data driven

projects. MODA takes the lead on coordinating data

sharing data sharing among agencies. Identifying how

that data can be analyzed and how data analyst can be

applied to solve real issues. Examples of such

projects include an analyst of 911 response times,

FDYN risk based inspection system to identify where

fires are likely to occur and the department of

buildings B+ program to identify truly dangerous

illegally converted units. We hope to hear more

about these programs in depth today. A citywide data

platform known as Databridge, enables these kinds of

analysis and predictive modeling. Acting as a shared

store house of interagency data. Real time automated

data sharing between agencies and between the city

and external vendors. Such as LIPA and ConEd have

recently be implemented in this committee would like

to know what types of data are shared and what

entities are actively participating. While the

aforementioned analysis are incredible forward

thinking and useful, there are many more issues to

tackle. For example, we must find ways to identify

and address aging info structure. Such as, warn out

gas pipes and water mains to prevent future

catastrophic events. Additionally MODA may be able

to use data analysis to collect outstanding fines and

fees owed to the city by businesses and individuals.

Or prevent businesses that are bad actors from being

able to contract with the city in the future. These

often overlooked behind the scene analysis is

integral to moving our city forward. And I hope the

administration continues to build upon MODA's

innovative work. I look forward to today's

testimony. Ok. Thank you all for coming and let me

introduce the first panel. We have Nicholas O'Brien,

Mayor Office of Data and Analytics. Edward Baggott,

Assistant Chief FDNY. Jeff Roth, FDNY Assistant

Commissioner for Management Initiatives. And Joel

Golub, Deputy Commissioner of FDNY. Ok, who would

like to lead off? Sir, could you identify yourself

for the record and proceed.

2   NICHOLAS O'BRIEN: Thank you. Good

3   morning chairperson Vacca, members of the city

4   council committee on technology and government. My

5   name is Nicholas O'Brien I'm the Chief of Staff at

6   the Mayor's Office of Data Analytics. Thank you for

7   the opportunity to testify today. I'm also joined,

8   also joining me today from the fire department our

9   Fire Operations Assistant Chief, Edward Baggott,

10 Deputy Commissioner and Chief Information Officer,

11 Joel Golub and Assistant Commissioner from Management

12 Initiative, Jeff Roth. The Mayor's office of data

13 analytics works with agencies to develop and

14 implement data driven solution to city service

15 delivery issues. We enable the city to aggregate and

16 analyze data from across city agencies and other

17 sources to more effectively address crime, public

18 safety and quality of life issues. To facilitate

19 this work MODA works closely with the department of

20 information technology and telecommunications or Do

21 It to develop and maintain a city wide data platform

22 and data exchange architecture collectively known as

23 Databridge. MODA is also responsible for ensuring

24 compliance by city agencies with the New York City

25 open data law. Local law 11 of 2012 which is

1

2 designed to increase access, accountability and

3 transparency in government. I'm here today to

4 discuss specifically the MODA projects that use data

5 to proactively address health and safety issues. I'd

6 like to highlight 2 in particular that MODA is

7 involved in. The fire department risked based

8 inspection system and the multi-agency illegal

9 conversion task force. Additionally I'd like to

10 discuss the city open data initiative and how were

11 engaging with the civic technology community to

12 address health and safety issues. This is certainly

13 not intended to be an exhausted inventory of all the

14 uses of technology to address these issues. There

15 are numerous other initiatives that agencies

16 undertake on their own to proactively address health

17 and safety concerns. The first initiative I would

18 like to highlight is the fire department risk based

19 inspection system. FDNY proactively conducts 50,000

20 building inspections per year. These inspections are

21 primarily focused on building with commercial

22 activity such as retail stores and restaurants, high

23 occupancy towers, dency populated apartment complexes

24 and facilities like schools and senior centers.

25 Building where large groups of people live and work

2 and where a single fire could cause many causalities.

3 MODA partnered with the fire department in the

4 development of a system that enable fire companies to

5 prioritize inspection on the building that pose the

6 greatest fire risk. The result was the risked based

7 inspection system or ARBIS, launched in May 2013.

8 ARBIS has changed how each of the city's 341 fire

9 units, engines and latters conduct daily building

10 inspections. Fire units are responsible for

11 inspecting buildings with in their immediate response

12 area. This work was previously performed on

13 essentially a cyclical basis. With limited

14 information about each structure. ARBIS accesses

15 data on building and past inspections. Individual

16 building information is also accessed from several

17 other city agencies through the databridge data

18 warehouse including the department of city planning,

19 the department of buildings, department of

20 environmental protection and the department of

21 finance. ARBIS uses this data to score, prioritize

22 and automatically schedule building for inspection.

23 The core of this system is the fire cast risk model

24 that allows the FDNY to prioritize buildings for

25 inspections based on specific risk criteria. By

combing FDNY fire incident data with building

characteristics data from across the city. Fire cast

leverages is sophicated statistically algorithm to

access fire risk on a daily basis. The algorithm is

trained to identify building that resemble other

buildings that have previously experienced fire by

examining a 13 structural risk factors including

location within the city, age of the building,

principal use of the building and history of previous

fire incidents among other factors. The system also

captures and tracks violations history and then

reschedules follow-up inspection when necessary.

Since its launch, Arbis has increased inspections

target accuracy more than 8 fold. During the process

of developing and validating Arbis, FDNY allocating

funding to stand up and in house analytics unit. The

FDNY analytics unit has now assumed full

responsibility for Arbis and is currently planning

for an expansion of the model with additional data

sources including fire history and fire code

enforcement actions. The model will continue to grow

overtime through inclusion of additional data and

risk factors and would be shaped and refined through

ongoing monitoring and evaluation. Another way we

1

2 are addressing dangerous health and safety conditions

3 is through the illegal conversion task force.

4 Illegally converted units pose an acute risk to

5 residents, neighbors and first responders. They

6 often lack a second means of egress and may be

7 equipped with illegal unpermitted gas and electric

8 lines. After 2 deadly fires in illegally converted

9 units in the springs of 2011, in which 5 New Yorkers

10 died. The city established the illegal conversions

11 task force. This multi-agency initiative involves

12 the department of building, the fire department, the

13 department of house preservation and development and

14 the Mayor's office of data analytics. Department

15 buildings receives roughly 18,000 illegal conversion

16 complaints a year and is required to inspect them

17 within 40 days. Some of these illegal conversions

18 present a significantly higher risk of catching fire

19 in resulting in injury or death. A risk analysis

20 model was developed by MODA, using historically data

21 from past fires and building with illegally converted

22 units to determine which of these complaints pointed

23 to the most dangerous conditions. The model

24 evaluates all legal conversions and single room

25 occupancy complaints based on 20 metrics which have

historically correlated with dangerous fires. High-

risk complaints are inspected by a joint inspection

team within 48 hours of being identified by MODA.

Joint inspections are designed to increase the rate

of access. The joint task force gains access on 57%

of inspections compared to a roughly 41.6 access rate

for routine inspections. If after gaining access the

joint inspections team determines the building is a

risk to health and safety a full or partial vacate

order is ordered. In the event that a vacate order

is imposed, the tenants are offered relocation

services through a HPD client services team. Since

the inception of the task force in June 2011, 15.57%

of buildings inspected have been issued vacate orders

and 41.8 have been issued 1 or more violations. This

is marked improvement over the rates of routine

inspections which see 7% vacated and 19% issued

violations. To facilitate these types of initiatives

the city has been focused on developing technology

solutions, especially interagency data sharing to

improve operation and performance of city services.

One incident particular that highlighted a need for

better data sharing was a fire that incurred in the

Dorcha Bank Building at 130 Liberty Street in

1

2   Manhattan on August 18th, 2007. The fire tragically

3   took the lives of 2 New York City Fire Fighters,

4   Robert Padia and Joseph Grafinino. One of the

5   recommendations coming out of the review of this

6   deadly incident was that the city should implement a

7   system to share relevant results of inspections

8   between department of buildings, fire and

9   environmental protections. This recommendation

10   resulted in the creation of DataShare. Which is

11   implemented by deep team as noted in your summary.

12   DataShare enables the sharing of inspections

13   information called for in the Dorcha Bank fire

14   report. The system has been extended beyond this

15   initial use case to cover more than 118 exchanges

16   between 21 city entities and external partners

17   including ConEdison and National Grib. Before

18   datashare many city agencies had express the need to

19   share information but exchanges where manual,

20   inefficient and unreliable resulting in delayed

21   customer service and enforcement issues. DataShare

22   maintains exchanges between entities and a

23   standardized format. These automated exchanges

24   ensure that data is validated, sent in a timely

25   manner and enable data transparency and integrity.

To maximize the city's invest in the data share

program and the Do It analytic system, MODA partnered

with the Mayor's office of data analytics to create

databridge. A central repository for city

operational data. Access to much of this data is

available to city employees on their desktop

computers via request. The data has been modeled

into a sweep of powerful tools to enable deeper

analysis. The analytic system currently has over 600

active agent users across 47 agencies and

organizations. Were also liberating the state to

fund the desktop and putting it in the hand of

inspectors in the field. MODA has partnered with the

Mayor's office of special enforcement OSC. A multi-

agency teams of inspectors who respond to various

health and safety complaints. OSC has worked over

the last 8 months to pilot a development of the city

first mobile data platform for enforcement in the

field. The tablet based solution promotes more

efficient field enforcement by using geo coded mapped

based interfaces and proving accessibly to

information previously unavailable. It give

inspectors real time report generation, submission

and analytics from the field. During the first

months of the pilot, OSC did more inspections in then

in any other previous month, completing 191. This

marks a 52% increase from their highest inspection

count in previous months before the use of the mobile

tablets. Moving forward, there is an opportunity to

leverage the lessons learned through the pilot and

take mobile tablets to other agencies that perform

routine inspections in the field to increase

efficiencies, collect more data and better ensure the

safety and health of New Yorkers. While 311, 911 and

inspections are highly valuable sources of

information the city get about current conditions.

The city proactively gathers information about

hazardous conditions through the street condition

observation unit or SCOUT. SCOUT is a team of

inspections based in the Mayor's office of

operations. The mission is to drive every city

street once per month and report conditions that

negatively impact the quality of life and may pose a

risk to safety. SCOUT inspectors sends reports of

conditions they observe to the relevant agency for

appropriate corrective action. The goal of SCOUT

program is to improve the street level quality of

life and address dangerous conditions in city

1

2   neighborhoods while enhancing the responsiveness to

3   city government to these issues. The SCOUT unit has

4   partnered with the department of transportation, the

5   department of parks and recreations, department of

6   sanitation, department of citywide administrative

7   services and the lower Manhattan constructions

8   command center and tailored field inspections and

9   validated reporting conditions citywide. SCOUT has

10 also been effectively deployed in the aftermath of

11 Hurricane Sandy and other major storms to gather on

12 the ground intelligence to assist aide see with

13 addressing street conditions. This demonstrated the

14 flexibility and ability the team to address change

15 and conditions and target different hazards. In

16 addition to the efforts of the Mayor's office and

17 data analytics and city agencies are undertaking to

18 improve the use technology to directly address health

19 and safety. We're also working to activate the

20 public in a particular civic technology community to

21 assist in developing solutions. The lifeblood of

22 these efforts is the public date released under New

23 York City open data law. The law passed by city

24 council in 2011 is widely considered the most

25 progressive open data legislation in the nation. The

2   law requires all public data to be posted on NYC.gov

3   by the end 2018. As of this month we have already

4   released over 1,100 data set including many that

5   address health and safety including fire codes,

6   department building vacates and violations. The law

7   aims to make city government operations more

8   transparent, effective and accountable to the public.

9   It permits the public to assist identifying efficient

10 solutions for government and promotes innovative

11 strategies for social progress. The technology

12 community in New York City has been working hard to

13 make this reality. In February, Beta NYC, a local

14 civic technology group posted a crime and public

15 safety data hack night to start building tools based

16 on the data the city has released in this area. This

17 is one of many events the community holds to work on

18 a variety of issues. MODA works closely with this

19 community to connect them to subject matter experts

20 and look for ways the city can use the insight of

21 these dedicated individuals to improve city services.

22 I provided a summary of just a few of the initiatives

23 the and programs the Mayors of data analytics

24 undertakes. MODA continues to work towards its

25 mission of assisting agencies in leveraging city data

2 more for more effective, efficient and transparent

3 government. Analytics will continue to be a resource

4 that helps leaders make complex decision and

5 ultimately improve the quality of life for New

6 Yorkers. We've seen growing interest in creating

7 dedicated analytics units within agency. MODA works

8 closely with FDNY in development of their analytics

9 unit and continues to coordinate with them to share

10 best practices and technologies. Another example of

11 this growth is the department of building which also

12 created an in-house analytics unit. The growth of

13 in-house analytics units allow city agencies to

14 execute an analytics projects faster and cheaper. As

15 these analytics efforts grows, MODA will continue to

16 work to facilitate access to city and external data

17 into consult on interagency products and projects.

18 For additional information on the work we do, please

19 visit our website at NYC.gov/analytics where you

20 could find our annual report and further detail on

21 other initiatives. Thank you for the opportunity to

22 testify today and I'm happy to answer any questions

23 you may have.

24

25

1

2   CHAIRPERSON VACCA: Thank you, Thank you

3   very much. How many, let me ask some questions. How

4   many people are in the SCOUT unit?

5   NICHOLAS O'BRIEN: The SCOUT unit, it

6   varies because many of them are on assignment from

7   different agencies, so they ramp and they ramp down.

8   The administrative staff is 3 folks, and as I said,

9   it will ramp up depending on the agency availability.

10   They will ramp up significantly during the storm

11   event.

12   CHAIRPERSON VACCA: But I would speculate

13   to say it's a very small amount.

14   NICHOLAS O'BRIEN: Its relatively small,

15   they do try to cover every major street in the city

16   on a monthly basis.

17   CHAIRPERSON VACCA: They don't report to

18   your agency?

19   NICHOLAS O'BRIEN: They report to the

20   Mayor's office for operations.

21   CHAIRPERSON VACCA: They report to the

22   Mayor's office of operations. They oversee the SCOUT

23   program?

24   NICHOLAS O'BRIEN: Yes

25

2   CHAIRPERSON VACCA: But then they have

3   people from that agency that are assigned, they have

4   SCOUTS that are assigned to individual city agencies?

5   NICHOLAS O'BRIEN: The SCOUT members are

6   employees of individual city agencies and there put

7   on assignment to the SCOUT program. Many of them are

8   cross-trained so they can detect different conditions

9   that are in the jurisdiction of other agencies. So

10   for example, a somebody on assignment on the

11   department of buildings can note and record and

12   report a DOT a violations that would be in DOT

13   preview.

14   CHAIRPERSON VACCA: I have to tell that

15   when the program was first initiated I was excited

16   about it and I thought that it was a great idea, and

17   but I accompanied a team one day and I think that it

18   needs a lot of work. They were basically reporting

19   potholes and stuff like that. And I think pot holes

20   are important don't get me wrong you know we all

21   think there not important until your car falls into

22   one or you walk into one. And in Staten Island, my

23   colleagues just arrived councilman Matteo. But if we

24   talking about emergences, I don't know where the

25

2   SCOUT program, I don't know the role of the SCOUT

3   program would play.

4   NICHOLAS O'BRIEN: So in the list of

5   things that they do collect one of the important ones

6   is building pihsod damage or any structural damage

7   that they note that is apparent from the street. And

8   those conditions I think can play a role in building

9   collapses if you have pihsod damage that is apparent.

10   CHAIRPERSON VACCA: Ok. One thing I

11 wanted to mention before I get to list of questions.

12 I always felt that if were looking toward the future

13 and what may be happening so that we can be proactive

14 rather than reactive. I think that we have to have a

15 buildings department policy review, because the

16 buildings department is basically a reactive agency.

17 It reacts to 311 complaints or reacts to a letter

18 they get, or email. Buildings is not proactive at

19 all. Yet buildings have knowledge based on their

20 records of chronically problematic buildings.

21 Building that use to have, that once had a vacate.

22 Building that have civil penalties based on their

23 refusal to comply with zoning. They have this in

24 their database. Yet there's nothing at the buildings

25 department that's proactive entity and if were

2   looking at using technology that's how they can use

3   technology and they should have a unit in that agency

4   that is proactive. When you vacant a house that is a

5   legal 3 family but was a 6 family and you vacant that

6   house maybe a year later somebody should go back to

7   see what was done. Was the 6 family reconverted back

8   to a 3? There's no such unit in the buildings

9   department that does that. So I'm I know you're not

10   the buildings department but I come back to how the

11   purpose of this hearing mainly what can our city do a

12   little wiser and I think that is one area.

13   NICHOLAS O'BRIEN: And I think the very

14   strong first step was the establishment of the

15   department of buildings analytics unit. I can't

16   speak to the details of their initiatives and what

17   they are doing in the in the proactive space. But I

18   believe if you spoke with them they could point to

19   some of the initiatives that they that are underway.

20   CHAIRPERSON VACCA: Well I will tell you

21   when you speak about transparency, the buildings

22   department website is very transparent. The BIS

23   System, Building Information System. Is very

24   transparent, it is user friendly, you can easily

25   navigate it and find out what going on based on what

you want to know. I think other agencies should

model some transparency after their's. When you go

to 311 when you go I read when you go to

newyourcity.gov I think that that is a model. Now,

it allows citizens like myself many times to go into

that system and I find mistakes and I have questions

and I call the buildings departments and I will see

on that website there's a vacant order but the place

is operating. So why is there a vacate order? So a

lot of but that's what transparency is all about.

But I do think that that's a model that we should be

looking to replicate for other agencies. On one hand

think that we have to do better, but on the other

hand I think that buildings from a transparency point

of view has done ok. Yes councilman Matteo.

COUNCILMAN MATTEO: Thank you Mr. Chair,

I appreciate you having this hearing. And to rebut

the chairman point, I'm talking about the SCOUT team

and technology and being most agencies are reactive,

you know we just had an issue with the buildings

department thought that you know we believe they were

building a 2 family can only do one family they went

out there they were building a 2 family but it took

us and the community to figure that out. And its has

to be a way for DOB to be a little bit more proactive

in doing more inspections or using technology. But

the same can go for curbside weeds and lots, vacant

city lots. Each year my office we have to send

sanitation health back to the same spots each year.

When I could probably give you list of 50 properties

and curbsides that getting need weed trimming and

debris pick-up and this is where we can use

technology to have a database that says last year we

cleaned this city property 3 times maybe we should

start going back out there and May instead of waiting

for councilman's office or 311 to report and then it

takes 30 to 40 days to do it. And then we get maybe

1 or 2 cleanings. So in being proactive you using

technology somehow we can get some sort of catalog

when we can the city can just yes it's going to be

scheduled and I know resources are an issue and we've

talked about that with the sanitation department.

But in my district quality of life issues where it

seems that the agencies are only going to react when

we request it. I'd like to see that the SCOUT

program or other technology use to be so that we can

plan ahead and come springtime all these new quality

2   of life issues arise that where dealing with them

3   instead of reacting to them.

4   CHAIPERSON VACCA: And the information

5   that the SCOUT's find we don't know what they found.

6   The council, people the community boards. Is there a

7   is there a there should be a transparency aspect to

8   that also. Do you agree? Is that something we can

9   talk about?

10   NICHOLAS O'BRIEN: Absolutely, the triage

11   they send most of their things through the 311 system

12   so that is available through open data on the 311

13   service request list. And also on the service

14   request map that is provided by Do It.

15   CHAIRPERSON VACCA: Ok. I may want to

16   look into having a separate hearing on that. On that

17   program. Ok. Let me ask some questions. 911

18   analytics reports breaks down response time by

19   incident type but not by location. It's is widely

20   known that they 911 response times are better in some

21   areas of the city then others. And we just had this

22   major incident as you know in the Rockaways. And I

23   know that in my Borough of the Bronx there's also

24   been variations that have concerned me in response

25   time. How can data analytics help improve response

2   times in all Boroughs and neighborhoods not just

3   average response time around the city. So my point

4   is we may be looking at a citywide response time.

5   But we still have neighborhoods in our city that fall

6   below the average response time. Or I should say

7   above the average response time. So what are we

8   doing to address those particular neighborhoods that

9   maybe in the outs maybe in the out skirts or may have

10   issues, transportation issues, access issues?

11   JOEL GOLUB: Thank you councilman.

12   CHAIRPERSON VACCA: Identify yourself sir

13   first.

14   JOEL GOLUB: My name is Joel Golub, I am

15   the CIO of for the Fire Department. And right now

16   there is a and active study being undertaken by the

17   OCEC group. Which is the Mayor's office for

18   emergency communications to look at methods of

19   reducing call processing time. That an active

20   project that's underway. We would need someone from

21   OCEC to represent. We can get some information to

22   you on it. But they are looking at ways of reducing

23   the call processing time. When someone calls 911.

24   CHAIRPERSON VACCA: Where is that

25   commission form sir?

2   JOEL GOLUB: This was just initiate this

3   past month to look for ways of reducing call

4   processing times.

5   CHAIRPERSON VACCA: Now this is a multi-

6   agency task force?

7   JOEL GOLUB: It is. There're working

8   with NYPD and FDNY to analyze the data and look for

9   opportunities to reduce call processing times from

10 the point that someone calls 911 to the point where

11 that call is handled and processed through the 911

12 center.

13   CHAIRPERSON VACCA: We're looking at

14 technology?

15   JOEL GOLUB: Yes, they we're looking at

16 technology and opportunities on methods of handling

17 the call to get it processed faster.

18   CHAIRPERSON VACCA: Is the Mayor's office

19 of analytics involved in that?

20   JOEL GOLUB: Yes [crosstalk]

21   CHAIRPERSON VACCA: To be apart of that

22 task force. When do you expect to have a report or a

23 complete your study?

24   JOEL GOLUB: I don't want to represent

25 the other agency, I'd have to go back and get some

1

2   information for you on that and I'd be happy to do

3   that for you.

4   CHAIRPERSON VACCA: Ok. Now, last year

5   MODA had a project to track 911 response times and I

6   wanted to know what those recommendations were and is

7   there a conclusion as, I thought that your agency

8   already did you agency do something similar to this?

9   Or is parallel?

10   NICHOLAS O'BRIEN: So we put together the

11   entire call processing time including the NYPD

12   processing time when they intake the call at via 911

13   call center that is available publicly at

14   nyc.gov/911reporting and you can view the breakdown

15   by incident and by segment of the different call

16   types.

17   CHAIRPERSON VACCA: So that reports

18   finished and is online?

19   NICHOLAS O'BRIEN: Yes.

20   CHAIRPERSON VACCA: Ok. Can you tell us

21   about the project that office did with FDNY to

22   implement a risk based inspection system? What were

23   the conclusions and how they were reached and what

24   have been implemented so far?

25

2   NICHOLAS O'BRIEN: We started the

3   process, we validated the process and then turn it

4   over to the FDNY analytics unit. I'd like to turn it

5   over to Jeff Roth for some specific details on the

6   ongoing Arbis system.

7   JEFF ROTH: I'm Jeff Roth the Assistant

8   Commissioner for Management Initiatives at the FDNY.

9   Arbis is the risk based inspection system is an

10   application that fire operation field units use to do

11   their building inspections. Every company in the

12   city is required to do 3 hours 3 times per week or 9

13   hours total of building inspection time. Where they

14   go out and proactively look at building that we think

15   are most at risk for fire activity. The risk based

16   inspection system has an engine, a statistical model

17   that runs in the background that looks at data from

18   various city agencies that Nick spoke about and

19   prioritizes those buildings for inspections based on

20   risk criteria. Those are then scheduled for building

21   inspection time and when the company goes out, they

22   have a list of building that we think are most likely

23   to have a fire activity and they prioritize those for

24   inspections. We have a current model that's out that

25   deployed in July last summer 2013 that includes 13

2   factors that we pulled from various city sources and

3   were building a new model 3.0, we call fire cast 3.0

4   that's looking at data sources from even additional

5   city's sources to make the model even stronger and

6   more predictive in terms of where go for building

7   inspections.

8   CHAIRPERSON VACCA: You identifying

9   building that are fire prone, fire dangerous, fire

10   tender boxes.

11   JEFF ROTH: Correct. We use historical

12   fire data to do coalition activities so we look at

13   the factors of building that historically had a fire

14   then we trim that forward, so yes were looking at

15   buildings that we think are prone to have a fire.

16   CHAIRPERSON VACCA: When you get that

17   information, what do you do with it? You go to the

18   buildings department, you go to HPD to seal? I know

19   were not demolishing but basically were not

20   demolishing in New York City anymore. Years ago you

21   use to get an unsafe building certification UB was

22   called and you would go ahead and demolish. But

23   there have been very demolitions to pass 8 years. So

24   my question to you is what do you do with that

25   information then?

2   JEFF ROTH: So the information itself

3   goes into our application, the risk based inspection

4   system. When the company is on their building

5   inspections time they access that application and it

6   gives them a list of building that they go out

7   inspect. [off mic] You want to answer about what

8   they do at the inspection.

9   ED BAGGETT: Yes, sure. Yes good morning

10   chairman Vacca my name is Assistant Chief Ed Boggatt,

11   I thank you for having us here today. I'm basically

12   like Jeff said the application is basically a

13   populates a risk of building in each units

14   administrative area. I'll say in your neighborhood

15   say City Island. And these are not vacant buildings,

16   these are building that are occupied today. These

17   could be commercial buildings, these can be multiple

18   residential buildings things like that. And based on

19   statistics that our analytics unit uses we have our

20   fire fighters enter those building and do

21   inspections. Ok. And hopefully our risk model

22   drives us to where we will find places when maybe

23   exits maybe locked, maybe there is accumulations of

24   rubbish. Other things that may bread to a fire

25   condition. And our goal is basically to reduce the

2   likelihood of a fire and also to reduce likelihood

3   there would be an injury or death as a result of

4   fire. Let say that we find that sprinkler system is

5   not working effectively or the standpipe system is

6   not working effectively. Violations would be issued

7   if it's very severe if is a condition iminate to life

8   maybe we vacate but that basically the corrupts of

9   how we do it. Then when the unit comes back, enter

10   that information into the computer and to risk based

11   system that is regenerated every night and then again

12   the next day. The system basically gives the units a

13   list of buildings to go out and inspect. In

14   addition, it's give us a better way to follow up on

15   violations that have been issued. Again,

16   historically like I like to add the fire department

17   has been it's a reactive agency but we've also been

18   proactive. We have inspected buildings for many

19   years. We use to do it on a paper based system that

20   was basically confined to that local unit. Now we

21   have this electronic Arbis system which brings you

22   informatiy and I think helps us better target these

23   places that maybe prone to fire. And we look

24   basically, as we move forward we hope to refine those

25

1

2 models and even make them better based on our

3 analysis.

4   CHAIRPERSON VACCA: A couple of things,

5 first of all when you said you issue violations, you

6 go in and inspect. You may find rubbish you may find

7 other fire issues. So you give a violations, do you

8 come back in 30 days or is there a time period when

9 you come back to make sure that that violation means

10 something rather than a piece of paper that somebody

11 will allow just be a another lien another lead on the

12 building basically?

13   ED BAGGETT: It all depends on the

14 severity of the we issue violations in 2 manors. One

15 is the I'm giving you a NOV a notice of violations,

16 those a adjudicated to ECB. Those are essentially

17 self certified or they have to go to ECB. For more

18 serious violations we issue a violations order.

19 Those we go back and re-inspect in possible 15 days,

20 30 days, or maybe if it's a 4th with, we'll come back

21 inspect in the next 24 hours.

22   CHAIRPERSON VACCA: So your officers or

23 your people in field their aware of these guidelines?

24   ED BAGGETT: That is correct.

25

1

2   CHAIRPERSON VACCA: They know where to

3 place each issue. That know what constitute what

4 basically?

5   ED BAGGETT: Right. We have a rather

6 robust manual, guidelines on building inspections.

7 In addition to this we have what we call our BSP

8 hotline. It basically to administrative union that

9 any company out doing VI, if they have a question can

10 refer to and its helps them through the process of

11 issuing these VO's interpreting some of these legal

12 issues regarding violations. So we have a rather

13 robust system I believe.

14   CHAIRPERSON VACCA: An issue that affects

15 the buildings department also affects you. What

16 happens if somebody denies you access to it house or

17 her house. If they deny, you're there to inspect.

18 Person doesn't answer the bell. Person says I'm not

19 letting anybody in my house.

20   ED BAGGETT: That is problematic we try

21 to go back up to 3 times. We will issue even put a

22 poster on a building saying that we tried to come and

23 ask them to call us. If we have I believe, if we

24 have good evidence that there maybe maybe and issue

25 in there that's affects life and safety we could go

1

2 and get a search warrant. It doesn't happen that

3 often but it does happen.

4   CHAIRPERSON VACCA: That happens very

5 seldom?

6   ED BAGGETT: That's correct.

7   CHAIRPERSON VACCA: Same thing with the

8 buildings department, very seldom? When you is there

9 any occasion where when you go to inspect a home you

10 call the resident first?

11   ED BAGGETT: No, we do not, first of all

12 we do not inspect 1 and 2 family homes and even when

13 we suspect multiply dwellings we do not enter the

14 living area. Our inspections are confined to the

15 public areas. In apartment buildings that would be

16 the lobby, the hallways, the roof area, the fire

17 escapes on the exterior, the basement area where the

18 heating plant is and electrical. We do not enter

19 each individual's living space.

20   CHAIRPERSON VACCA: You would enter the

21 basement?

22   ED BAGGETT: That is correct.

23   CHAIRPERSON VACCA: And you would inspect

24 the boiler, the electrical circuit breaker box?

25

ED BAGGETT: Right, we look for obvious signs of violations. Open wiring, things that are obvious to us. We look at the standpipe system, we make sure the OSNY to the standpipe and or sprinkler system is open. Things like that in multiple dwellings.

CHAIRPERSON VACCA: And you inspection are not necessarily complaint driven?

ED BAGGETT: No, not at all. Not at all. Some are complaint driven but others are done on a proactive basis, based on our risk model.

CHAIRPERON VACCA: Alright so if you are a homeowner in New York City, can you expect the fire department to come to your house once every 5 years, once every 6 years? If you're a homeowner with a house in means appears to be in good condition, nobody complained about anything.

ED BAGGETT: Are you talking about a 1 or 2 family house?

CHAIRPERSON VACCA: 1 and 2 family house.

ED BAGGETT: We would really not inspect that again. That is not in our prerogative. We do not inspect 1 and 2 family homes.

CHAIRPERSON VACCA: I want to see you after the meeting.

ED BAGGETT: Ok. Ok.

CHAIRPERSON VACCA: Thank you. Ok. Now what's the B+ program? You mentioned it a little bit. How does this program work and how has it improved DOB's abilities to fight illegal conversions? Is an issue in my district but it's an issue city wide.

NICHOLAS O'BRIEN: So the illegal conversion task force identifies what we believe to be the most dangerous complaints. Illegal conversion complaints coming into the system. The B+ is more broad, takes in more types of complaints and tags them when they come out at the Borough commands with a flag to indicate that they are an elevated risk. They do not get the same rigger of the 48 hour inspection turnaround, but they are flagged for priority over other inspections.

CHAIRPERSON VACCA: How many, how many B+ complaints you think buildings handles?

NICHOLAS O'BRIEN: I can get you that number. I don't know off the top of my head.

2   CHAIRPERSON VACCA: Yeah I'd like to know

3   in a year and how many that would worry me. I'd like

4   to know what the follow-up is on those dangerous

5   dangerous ones. How do you get external agencies to

6   share data? I'm thinking of ConEdison in particular.

7   But how do you get external agencies. Is there

8   cooperation here or is this something you always have

9   to always have to you know on what basis are they

10   cooperating with you if they are?

11   NICHOLAS O'BRIEN: From ConEdison the

12   data we get from them has to do with the outages. We

13   set up that data feed in the aftermath of Hurricane

14   Sandy when the city was experiencing widespread power

15   outages. So that the city had the most up to date

16   information about which neighborhood and which

17   individuals were affected.

18   CHAIRPERSON VACCA: How about underground

19   issues?

20   NICHOLAS O'BRIEN: We don't currently

21   receive a feed of that information on a regular

22   basis.

23   CHAIRPERSON VACCA: Shouldn't we? We had

24   a serious explosion in Harlem and we have an aging

25   info structure in this city.

1

2   NICHOLAS O'BRIEN: It's certainly

3 something that we'd be interested in looking into

4 but we have not as of yet.

5   CHAIRPERSON VACCA: Ok. I would suggest

6 we do that. I'm told that ConEdison has a van. I

7 don't know how many vans. But that these vans try to

8 detect what's going on underground. And I've tried

9 to get information on how many vans we have. But

10 there is there are vans that ConEdison has. So there

11 is information on what is going on down below. And I

12 think that we have to have information from ConEdison

13 on a regular basis about the concerns they have or

14 issues their addressing underground. And I say that

15 because without that information with an aging info

16 structure in this city. Parts of our city we have

17 piping installed in the 1800's still in place. I, I

18 don't think that our preparedness is gonna be all

19 inclusive unless we have that. I did we request in

20 the past? Is this something because what talking

21 talking ConEdison about when there's a blackout, I

22 mean I can find out when there's a blackout by going

23 by getting a notify New York City email. Although

24 that's something else I wanna go into. I'm not happy

25 with notifying New York City. But, I do get emails

2   telling me when there's a blackout in Staten Island.

3   I get an email. So I don't know if we need ConEdison

4   for that as much as we need for what's going on

5   underground.

6   NICHOLAS O'BRIEN: And I'm happy to

7   follow up with them and find what data might be

8   available and how how we could kick off of data

9   sharing agreement and will report back to you.

10   CHAIRPERSON VACCA: I think there has to

11 be a since of urgency about it you know. I mean here

12 in Harlem we had we had a situation where no one

13 called ConEdison. You know sometimes when smell gas,

14 your not sure your smelling gas. It's like people

15 didn't call because maybe they weren't absolutely

16 certain what that smell was. So I'd like I'd like

17 for them how about cable companies do you have a

18 relationship with cable companies? Is that something

19 you should have? Should you, shouldn't you have a

20 relationship with cable companies?

21   NICHOLAS O'BRIEN: We currently do not

22 get information from the cable utilities.

23   CHAIPERSON VACCA: But then what doing is

24 not inclusive of what we should be doing right?

25

Shouldn't cable companies have communication with us? And shouldn't they be a part of our discussion.

NICHOLAS O'BRIEN: Yeah and I think that we've made great strides in collecting a lot of the city information together in one place. It's an ongoing effort and we certainly are always looking for new sources of data so that we have the most comprehensive picture of the city.

CHAIPERSON VACCA: Let me ask you something. The MTA they have track work, signal work. They have signal stations both above ground and on street level. Should they be involved with us? Should they be at the table in some shape or form?

NICHOLAS O'BRIEN: They do release data on their turn style activity so we know the flows in and out of the system. They make that public and we do look at that. I certainly think there they are opportunities for greater data sharing going forward.

CHAIRPERSON VACCA: Ok. So the examples I've given I think are basically non-city agencies. But then we go into what is a non-city agency. So if were gonna make this all inclusive, you know I'm thinking of hybrids like; HHC and Nitcha. Now are

they technically not city agencies but they are

getting city money and I just see a roll from them,

I'm not in your agency so I don't have an idea what

the roll would be but I do think that what we doing

now is kind of restrictive in who we're involving.

It may not be all in one task force but you may wanna

have other task forces that deal with the roll of

non-governmental agencies, the hybrid agencies and

things like that. Ok. Is there anything from

preventing you from connecting all city agencies

through Databridge and automating all of the data

sharing functions in the near future?

NICHOLAS O'BRIEN: Just the size of the

city. And the amount of work that takes to do that.

As far as we know there are no structural limitation

to it expect for the resource constraints that we

have.

CHAIRPERSON VACCA: Alright, go into that

with me. What are your resources? How many people

are in the mayor's office of data anionic?

NICHOLAS O'BRIEN: Currently right now we

are staffed for 8 people.

2 CHAIRPERSON VACCA: You have 8 people

3 working in you agency, your divison? Alright you

4 report to who, who is the commissioner you report to?

5 NICHOLAS O'BRIEN: We report to the

6 director of operations Minni Tolar [phonetic].

7 CHAIRPERSON VACCA: Alright so you report

8 to the Mayor's Mayor's office of operations, so your

9 under them? Your agency was created when, was

10 recently but just tell me when for the record.

11 NICHOLAS O'BRIEN: It was in April of

12 last year.

13 CHAIPERSON VACCA: April of last year.

14 Did you start off with 8 people?

15 NICHOLAS O'BRIEN: Yes.

16 CHAIRERSON VACCA: So you started off

17 with 8 people and your still at 8 people.

18 NICHOLAS O'BRIEN: Yes.

19 CHAIRPERSON VACCA: It's seems to me that

20 as we expand the roll of your agency that we have to

21 look at manning up and getting more people in your

22 division. Is that something that your agency

23 requested? Is this something that's on the table?

24 NICHOLAS O'BRIEN: I mean I certainly

25 think there is plenty of work to do. It is not my

2 decision to make in terms of the proper staffing

3 level.

4   CHAIRPERSON VACCA: Ok. That maybe

5 something we can look at at the council. To make

6 sure that your properly staffed. Everything today is

7 technology and to think of only 8 people in your unit

8 with the job that think we have ahead us is something

9 that I want to pursue. I want to recognize my

10 colleague Annabell Palmer who just arrived, welcome.

11 Ok. How many agencies have internal data analysis

12 like FDNY? How many agencies have a model that would

13 be similar to FDNY. We've heard building, we've

14 heard FDNY. Do other agencies have models like that,

15 that their where they have?

16   NICHOLAS O'BRIEN: They exist on

17 different levels and have different focuses. One

18 example is department of education instead of the

19 innovation zone. Which is similar. I think we're

20 attempting to figure out exactly what the perfect mix

21 is for an analytic units. Because some of these

22 fixes have are more based on operation, some of the

23 based on data. That has a lot to do with the I think

24 the savvy of the agency in terms of their progress in

25 standing up data systems. So ones that are more

2   advanced are would have more computer scientist and

3   statisticians required and ones assume more paper

4   based would have more operational people who would

5   figure out how to manage that change process from

6   those older methods to more modern methods.

7   CHAIRPERSON VACCA: Ok. The FDNY can you

8   describe your risked based inspection system? And how

9   have this assisted you in identifying dangerous

10   conditions?

11   JEFF ROTH: Sure, again Assistant

12   Commissioner for Management Initiatives, Jeff Roth.

13   That's what we talked about a little bit earlier in

14   just to kind of speak more to the model and how it

15   works. When we deployed the application in March of

16   2013 had a very simple model in the background that

17   looked at data that we had collect through building

18   cards which were the paper based system that the

19   chief Boggatt spoke of and as we stood up our on

20   analytic units we were able to do more rigorous data

21   analysis and we deployed a new model in the

22   background of the application in July. That model is

23   out there now it has a stronger predictive capability

24   then the previous model and currently we're looking

25   at data factors from across multiple city agencies

2 leveraging the databridge, data warehouse and we're

3 looking at multiple factors to make the prediction

4 model even stronger. We expect to deploy that

5 sometime this summer as well. So it will be our 3rd

6 generation of the risk model. And we think that'll

7 help us target even better and prioritize even better

8 buildings that we think are most at risk.

9   CHAIRPERSON VACCA: Do you have a full

10 time analytic person on staff?

11   JEFF ROTH: We have a team of 4 people in

12 our on analytics unit, yes.

13   CHAIRPERSON VACCA: Ok. And is there

14 information that would useful to you that you don't

15 have? Have you identified where you wanna go with

16 with advancing in the field?

17   JEFF ROTH: Yeah, we we been leveraging

18 the databridge and certainly you know Nick has spoken

19 to some of the constraints, resource constraints of

20 that. Certainly after the explosion in East Harlem

21 we were as interested as anybody in looking at data

22 from sources outside of city government. So the

23 extent that someday we could have access to those

24 databases would be would be fantastic and interesting

25

to see if there is coalition activity with fire and

risk.

CHAIPERSON VACCA: Ok. I have no further

questions. It's good having a 2 person committee

here. I get to dominate everything you know

[laughter].

JEFF ROTH: One thing I'd add to your

last question chairman V, 47 different agencies

currently access the analytic system and that is an

estimate of the number people who are looking at this

types of data. I can't speak to exactly what all of

those different agencies are doing with it, but that

is just a general sense of how many people are

utilizing it.

CHAIRPERSON VACCA: Ok. Any questions

Annabelle? No, ok. Ok I wanna thank the panel and

will go on. We have another panel now? Dominic

Mauro, ReInvent Albany, Joe Hadalgo, Beta New York

City and Dara Adams, SAS Institute.

[pause]

[off mic talking multiple people]

CHAIPERSON VACCA: Hello everybody,

that's a Bronx hello if I ever heard one before my

whole life. Hello everybody. Good morning, I should

1

2 say that, that's better. Why don't we start and let

3 me ask for the young lady please go first. Introduce

4 yourself and will take off ok.

5   DARA ADAMS: There we go. Good morning

6 Mr. Chairman and members of the committee thank you

7 for inviting me to present today. My name is Dara

8 Adams and I'm the Account Executive for New York City

9 Local Government SAS Institute. Prior to joining SAS

10 I spent 6 years in public service including my roles

11 as the Committee Affairs Director for the New York

12 City of the Department of Ed and as intercommerce to

13 Carolyn Mahoney. SAS is a 38 year old company based

14 in North Carolina. We're the industry leader in

15 advanced analytics and statistical software and

16 solutions. And the largest privately held software

17 company in the world. Recently we launched an

18 advance analytics labs with 200 researchers focused

19 exclusively on solving the most challenging problems

20 state and local governments. New York City partnered

21 with SAS for decades with close to 28 agencies

22 already relying on our solutions. Including the

23 Mayor's office of data and analytics which you just

24 heard from the fire department and center for

25 innovation of data intelligence. What is analytics

2   simply stating? Analytics involve applying advanced

3   math and statistics to data to reveal information not

4   just about what happened in the past but also about

5   what we can expect to happen in the future and how we

6   achieve the best outcomes going forward. While there

7   are limitless application for how analytics can be

8   used by government to solve problems and save live

9   and money. I'd like to focus to day on how analytics

10 can be applied to help protect and improve the lives

11 of some of most vulnerable New Yorkers, our children.

12 This past January here in New York City in 4 year old

13 Miles Dobson was starved, tortured and beaten to

14 death by his father's girlfriend while his father was

15 in jail. An investigation revealed that among other

16 red flags the administration for children services

17 wasn't aware that Miles's father was in jail or that

18 he been incarcerated for 6 months previously.

19 Despite ECS having made 9 visits to the home during

20 that time. I can say with confidence that tragedies

21 like this one can be avoided with better data

22 integration across agencies and the application of

23 advanced analytics. I know this because SAS is

24 engaged my state and local governments around the

25 nation to prevent tragedies like this from occurring.

Recently the Florida department childhood and family

services came under scrutiny for a rash of child

fatalities and turned to SAS to help make improvement

to child protect investigations. SAS analyzed DCF

data and used advanced analytics to give DCF the

knowledge it need to reform it policies, expand its

focus on the right issues and empower case workers to

make better decision relating to families in crisis.

LA County also use the SAS analytics to help protect

against child abuse within it foster care programs.

We have an obligation to protect our most precious

and defenseless new workers in analytics is an

extremely affective and underutilized tool in our

arsenal. Further, compared to other technology

initiatives, analytics are relatively low cost and

easily to implement and can provide benefits within

weeks rather than years. Having worked in city

government, I understand that there are challenges

and barriers to adopting analytics including

reluctance based that the agencies to share data and

an apprehension to change the way they operate. Many

city agencies are starting to realize the potential

of analytics but there is much much more that can and

should be done. New Yorkers have only just began to

2   see the benefits of analytics and I hope that you

3   will continue to encourage to discussion on how

4   agencies can better share, integrate and analyze

5   data. Thank you again for your time and attention

6   today and I'm happy to answer any questions. Thank

7   you.

8   CHAIRPERSON VACCA: Next witness.

9   NOEL HIDALGO: have to apologize, I had a

10 printer error so you actually don't have my testimony

11 in front of you.

12   CHAIRPERSON VACCA: See this technology

13 business what happens [laughter].

14   NOEL HIDALGO: I know.

15   CHAIRPERSON VACCA: I told you about

16 technology. You don't want to listen.

17   NOEL HIDALGO: I will if you had a CIO

18 that created a website that allowed me to digitally

19 submit testimony, I would have digitally submitted

20 the testimony. I hope that under this speaker that

21 and your leadership that that can change this year.

22   CHAIRPERSON VACCA: Alright, but don't

23 get to carried away. [laughter]

24   NOEL HIDALGO: One shoe at a time. My

25 name is Noel Hidalgo and it's a great honor to

2   address you and represent the New York City

3   technology community, particularly a rather active

4   group of technologist the Civic Hackers. We are over

5   1,700 members and Beta NYC mission is to build a city

6   for the people by the people for the 21st century.

7   Last fall we published the people's road map to a

8   digital New York City where we outlined the digital

9   road map for the people. We're a member driven

10 organization and members of the New York City

11 transparency working group. A coalition of good

12 government groups that supported the city's

13 transformative open data law. While they're many

14 specifics that I could point out I will focus on 3

15 points of government. Leadership, data standards and

16 quality and citizen centric design. During the last

17 3 years of the Bloomberg administration, New Yorkers

18 were turned on to a well oiled analytic analytical

19 machine. Championed by the city chief analytics

20 officer executive order 306 of 2013 and the city's

21 open data, law citizen were able to see the value of

22 interlocking 21st century components. 4 months into

23 the DeBalscio administration the city is missing a

24 sweet of leaders who store technology data and a

25 progressive vision. Currently the city's missing a

2 chief information officer at Do It. The city's is

3 missing a chief analytics officer at the MODA. The

4 chief digital officer has yet to be appointed at NYC

5 Digital. And there's no executive director at the

6 NYC technology development corporation. This

7 leadership gap affects all agencies. We need

8 coordination across each agency. The city needs CIO

9 and CTO within agency's who can properly value

10 internal and external data collaboration. Systems

11 like 311 and westie [sic] datashare and databridge

12 are fundamental underpinning to a fully integrated

13 and efficient government. We need the Mayor's office

14 to hire a progressive technology leadership team.

15 These leaders will set the tone for data and

16 coordination without them were unable to collect if

17 we build a progressive technology agenda that maps to

18 the city needs. The 2nd issue when it comes down to

19 data quality. Currently the city isn't maximizing

20 its return on data sharing. 1st the city's GIS

21 department is unique. They're the first line of

22 attack in making the city's data useful. There maps,

23 while helpful often obscure access to the data. The

24 city's rap information portal (RIP) contains unified

25 rap inspection data under a complicated and sometimes

2   frustrating map interface. I can't find this data on

3   the city's data portal. A month or so ago one of our

4   members needed to find a childcare center. The data

5   provided on the health and mental hygiene look up

6   tool was inaccurate nor could she find this data on

7   the city data catalog. Several of our members saw

8   this as a notable challenge, scraped the data and

9   produced a usable map. Sadly this is just a snapshot

10 of data and needs a partnership with HNH to keep this

11 map alive. These are just 2 examples of city data

12 being locked behind frustrating interfaces. This

13 year the council needs to update its open data law to

14 ensure that these curated and sanitized data sets are

15 accessible to the general public. We need the city's

16 open data law to be expanded and enforced. Data

17 standards. Over the last 10 years technologist have

18 worked to build commonly defined data environments.

19 These data environments have created commonly defined

20 schemers. In a broader since these are

21 internationally recognized words, sentences and

22 shared narratives. More or less a structured

23 language for computer for computer applications. In

24 2012 YELP, the city of San Francisco, the city of New

25 York and Code for America announced the formation of

the live standard. A unified standard for restaurant

inspection scores. When the standard was launched

New York City was suspiciously absent. I mentioned

this because the city 4 year old restaurants

inspection score data continues to be riddle with

data errors and not compliant with the live standard.

We have complained and no one seems to care. Again

the city has produced its own restaurant inspection

website and app. Both have frustrating interfaces.

These are 3 examples of useful data being rooked away

behind a glass wall. Health and Mental Hygiene

Housing Authority, Department of Transportation,

NYPD, Department of Buildings, 311, Consumer Affairs

all have health and safety data pulls that should be

opened and shared in common data standards. We need

the city to adopt data standards to maximize our

collective data sharing investment. Now this comes

down to citizens centric design. Once we get the

better data quality, we can build better notification

tools. A guiding principal of citizens centric

design places data and information for citizens need

the data most. If I'm going out to eat, I'm not

going to walk around to look at restaurant inspection

scores. They're countless data flows that citizens,

1

2 parents, consumers, eaters, motorcyclist, bicyclist,

3 transit riders, etc. should have. Without placing

4 good data into the hands of civic technologist and

5 civic hackers. The city is not maximizing its

6 judiciary duty. Imagine a parent subscribe to their

7 child's daycare center sanitation alerts. Imagine a

8 restaurant owner subscribe to street construction

9 alerts. Imagine your constitutes getting personalize

10 notification on assaults and thief's in the

11 neighborhood. These system are possible if agencies

12 constantly share data via consistent data standards.

13 The city must invest in an interagency and public

14 sharing, public data sharing. If the city's going to

15 invest in a regulatory process to protect it's

16 constituents its need to share that information by

17 physical and digital means. Access to information is

18 a fundamental human right and in the 21st century

19 access to good, clean, health and safety data is a

20 fundamental right. Thank you.

21   CHAIRPERSON VACCA: Sir

22   DON MCMORROW: Good morning and thank you

23 chairman Vacca and other member of the technology

24 committee for holding this timely hearing. My Don

25 McMorrow and I'm testifying today on behalf of

2   ReInvent Albany, I am the Staff Attorney. ReInvent

3   Albany also co-chairs the New York City Transparency

4   working group and our organization coalition strongly

5   support the application for statistical modeling and

6   predictive analytics. And we would like to see a

7   Mayor's office of data analytics with the resources

8   to effectively preform such an analysis and share the

9   results with the public. So were here to make 2

10 points. The Mayor's office of data analytics should

11 be robustly funded and staffed. It's an extremely

12 powerful tool for the sound and efficient management

13 of the city. And 2nd whenever possible data produced

14 by MODA and city agencies should be available to the

15 public by the city open data portal. In some cases

16 concerns about the privacy of individuals and

17 concerns about security preclude making data open.

18 However, a significant share of the data used by MODA

19 and assembled in the city's data bridge database as

20 well as data used in agency stats performance

21 management by agency executives. Does not affect

22 security or impinge on individual privacy. This data

23 should be public. Currently the city has a small

24 public data universe and very large internal data

25 universe that the public cannot see. This is not in

2   the spirit of the open data law and does not get the

3   best value from the data the city is collecting and

4   analyzing at great taxpayer expense. MODA was

5   formally established about a year ago, although New

6   York City has saved tremendous amounts of taxpayer

7   money and employee time over the last decade, thanks

8   to the previous administration investment in data

9   driven government. We strongly urge the city to

10 continue to support a large and robust MODA with a

11 least a dozen analysts. We believe the city would

12 see enormous savings from the kind of insight that

13 MODA can provide with data analytics. The

14 comprehensive agency data the city has access to via

15 its data bridge data management system is among most

16 valuable the city has. The data is highly

17 scrutinized and refined and expensively collected.

18 Policy decisions for the entire city should be

19 informed and driven by MODA and its team of data

20 analysis. We heard about the MODA and its

21 collaboration with the fire departments and other

22 agencies should make their data available to MODA for

23 this kind of analysis and predictions. The saving

24 will be staggering. However, this status should not

25 just live on databridge for MODA private use. These

2   data sets and analytics should be shared with the

3   public. If the health department were to find naval

4   connection between environmental conditions and risk

5   of disease or infections, they should put it online.

6   If the police department finds a connection between

7   crime and some local indicator, that should be put

8   online. The collection and analysis of this data was

9   paid for by the public and it belongs to the public.

10   Borrowing some secret, specific infringement of

11   personal privacy this data should not be secret.

12   Likewise, the information in which agencies are

13   already collecting and analyzing about their own

14   performance, collectively known as agency stat.

15   Should be made available as open data. New York City

16   should not have a 2 tiered system with public data

17   sets for the public to use and private data sets for

18   the MODA's use only. To realize the maximum value of

19   this data, it needs to be shared with the public.

20   Thank you very much for the opportunity to speak

21   today.

22   CHAIRPERSON VACCA: Thank you, thank you

23   everyone. I wanted to get back on something Mr.

24   Hilgaldo said and you talked about understanding the

25   technology and I think that many people may have

2   access to technology but the way it's its laid out is

3   very confusing to them. Very difficult for them to

4   access. If you had difficulty finding things on the

5   health department website. Just think what the

6   average person goes through. So isn't one of the

7   challenges were facing making the accessability of

8   technology a little more user friendly and easier to

9   access?

10   NOEL HIDALGO: Yes, so NYC digital ran a

11 great campaign I think in the first year to reinvent

12 NYC.gov. They looked, they did hacked-a-thon, they

13 solicited public improvement or a least ideas in

14 consideration on how to improve NYC.gov just the

15 landing page alone. But yet when we go to agency by

16 agency websites, you know department of consumer is

17 an excellent example of this. You get information

18 overload. In so you get information overload. If

19 you go to DCA website, your bombarded with with all

20 of the opportunities that you go to DCA that DCA

21 offers. Each agency through a combination of Do It

22 should be engaged with the general public to find out

23 how to lower the barriers to get access to that

24 information. How to simplify it. How to streamline

25 it and have a constant conversation. What Beta NYC

2	does is that were kind of we are the cities

3	technology community. And were here to help

4	government agencies understand how to better use

5	those information frameworks to deliver that

6	information in a simpler and easy to use format. We

7	have colleagues there's another group called civic

8	service forum which is also about trying to use

9	design to lower the barrier to information. A lot of

10	these websites as they've been crafted over the last

11	decade or so have have just had more and more lego

12	pieces attached to it. And so it sometimes can be

13	very complicated to navigate those websites and if

14	were properly if we're going to maximize our dollar

15	in technology, we need to evaluate each one of these

16	website using the CIO's and CTO's of the agencies and

17	the general public.

18	CHAIRPERSON VACCA: You really you really

19	went were I was going because I also find that the

20	DOE website is overloaded with stuff. And I I don't

21	think most parents are that technology savvy to

22	really get what they want out of the DOE website. So

23	my comment to you is what can we do, or what can your

24	organization or advocates all of you to rate the

25	various agency websites. I'd like them given an A

2   and a B like like like the coffee place I go to in

3   the morning. And why did it get and A and why did it

4   get a B and what can we do to improve it. I think a

5   rating system, not just for newyorkcity.gov as a

6   whole but for the agencies and their websites. Is

7   that something you've looked at?

8   NOEL HIDALGO: So the an international

9   organization called the Open Knowledge Foundation

10 currently has a census that's taking a look at every

11 single city, major city in the United States and

12 though kind of the data or information that their

13 providing and allows you to score it. New York City

14 so far hasn't done as good of a job of some of the

15 other cities. But technology is more for that

16 conversation, so we need to have a better

17 understanding of what New Yorkers need vs. kind of

18 what Chicagoans need. I agree that there should be a

19 active conversation about performance, information,

20 data, mapping capabilities and make sure that the

21 people have access to that. We can take that on as a

22 challenge and we would gladly like to work with you

23 to work on a report like that. So that way you can

24 hold agencies feet to the fire and hopefully we can

25 get some of these website designed in a way that

2   useful for all New Yorkers. Multilingual, low bow,

3   you know it has interfaces that easily get accessed

4   through search engines etc.

5   CHAIRPERSON VACCA: Well first, I would

6   think first we have to develop a rubric. The rubric

7   would have to be what do we look for in a measurement

8   tool.

9   DARA ADAMS: The analytics is also

10 available so that you could even understand what are

11 the analytics who's visiting the websites, how often,

12 what are the most clicked things. Think about when

13 you go on your Facebook page or any other ad site and

14 you see all these customized ads popping up, you know

15 I just bought a ticket, I'm going to Chicago and so

16 all of a sudden I go to my Facebook page and I see

17 all these things of what I could do in Chicago.

18 That's because Facebook capturing that data and is

19 able to apply analytics that their customizing there

20 user experience for me. There's no reason that any

21 other city agency couldn't apply this same technology

22 that SAS uses for Target, uses for all kinds of

23 private companies to city sites, so that when you go

24 in check the DOV website you're getting a

25 personalized experience of things that you most

2 visit, the things that you look at. So that your

3 user experience is better.

4   CHAIRPERSON VACCA: That very

5 interesting. Go ahead sir.

6   NOEL HIDALGO: Also if I may. And it

7 doesn't have to be about predictive to and you know

8 for years you know city websites have you know failed

9 to provide basic information like childcare centers

10 and you know the web analytics and the server logs

11 record all this information we can find out where

12 city websites and constituents have been talking past

13 each other. Where people go to these websites and

14 they don't find what their looking for. They type

15 into the search box, you know childcare centers and

16 nothing pops ups. We can find out where, what people

17 are interesting in instead of blinding pumping out

18 more data into the open data portal. And hoping that

19 they develop or find some information that people

20 wanted and turns it into a usable form for people.

21 Cause I, I mean I'm a lawyer, I have no practical

22 skills, I can't make any use of the data on the open

23 data portal. [laughter]

24   DARA ADAMS: The other thing I would say

25 is that a lot of people can't. I'm not a data

2   scientist either you know and amateur date anything

3   my background is in government, so I go on the open

4   data website I think it's awesome but there is

5   millions of rows of data and it doesn't mean anything

6   and I don't have the ability to make a visualization

7   and we are so grateful for the open data community

8   and that tech I mean I go to the hack-a-thons for

9   Noel and his group because they put together these

10   visualizations that help us to make sense of the

11   data. But this city should be doing more

12   visualization as well and the technology is out there

13   and available for them to be building their own

14   visualizations and to be creating dashboards instead

15   of giants spreadsheets worth of things to tabulate.

16   I went on Dicases website the other day then they

17   have a performance management site you can check the

18   performance. Maybe I'm just not that bright, I

19   couldn't make it work. I couldn't figure it out.

20   And I couldn't understand why it wasn't visual. Why

21   I had to click a box here and click a box there and

22   there's was even like and/or symbol and you know it

23   was very not intuitive. And there's no reason that I

24   shouldn't be able to a see how our city's performing.

25   Other cities are doing it.

2   NOEL HIDALGO: One last thing so, NYC

3   digital did a good job through their hack-a-thon of

4   reinventing NYC.gov to come up with some core

5   performance values. Things that should be integrated

6   in the Do It system that's provided to all different

7   agencies. That was a very early conversation of what

8   has then been extended by the UK's digital government

9   services GDS. Which is a, imagine our version of Do

10   It but a department within Do It, which is, their

11   soul mission is to look at technology construction

12   based upon design values, modern design values that

13   have been set forth by the technology communities

14   that really incorporate a broad spectrum of user

15   interfaces. It the federal government just put

16   together a team that grows out of some of their own

17   initiatives that is looking to modernize their own

18   web info structure and use these basic design

19   principals around that are used in every other major

20   website that you go to and to start applying them

21   exclusively to government. Several of us have gone

22   to the Mayor's office and said it would be great if

23   we had a similar department in Do It or whether it's

24   the New York City technology development corporation,

25   whether it's New York digital. But it would be great

if the city could take it's technology resources

higher from the best talents that we have here in

this digital city and really start to improve our

info structure. We testified at that rules committee,

talking about the value of open source. Most of

these agencies that are developing government website

are also using commonly standard open source tools to

lower the cost of deployment. We can do this here in

New York, but we need some leadership. We need to

kind of staff and hire not only MODA but also digital

teams that can build proper interfaces. And then we

need to have conversations with the constitutes. All

New Yorkers from the entire spectrum on how they

access information and how we can deliver and improve

that.

CHAIRPERSON VACCA: I I you are raising

some very good points. I'm concerned about the all

the vacancies we have as you ticked them off. We

also don't have Do It commissioner yet. So all of

these things way on me as well and I think the time

has come that we have to move on these things and we

gonna prod because it's already April and it would

good to have people in place. And in technology we

need people in place. Ok. I do wanna mention we

were joined by council member Mark Werpin and anymore

witness? No, ok. I wanna thank you for coming and

for your input and we will be in touch. You have some

good ideas, all of you. Without further business,

it's 11:15 and this hearing of Technology Committee

of the city council is hereby adjourned.

        [gavel]

C E R T I F I C A T E

World Wide Dictation certifies that the

foregoing transcript is a true and accurate

record of the proceedings. I further certify that

I am not related to any of the parties to this

action by blood or marriage, and that I am in no

way interested in the outcome of this matter.

Date ____May 5, 2014_____