

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON TECHNOLOGY

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October 16, 2017
Start: 1:16 p.m.
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HELD AT: Committee Room - City Hall

B E F O R E: JAMES VACCA
Chairperson

COUNCIL MEMBERS: Annabel Palma
David G. Greenfield
Barry S. Grodenchik
Joseph C. Borelli

A P P E A R A N C E S (CONTINUED)

Don Sunderland, Deputy Commissioner
Enterprise and Solution Architecture
Dept. of Information Technology & Telecommunications

Craig Campbell, Special Adviser
Mayor Office of Data Analytics, MODA

Noel Hidalgo, Executive Director, BetaNYC

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Helen Nissenbaum, Professor of Information Science
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Consultant and Programmer

Bryn Borelli (sic), Software Engineer
Google New York

Alex Rich, Cognitive Scientist & Data Scientist
New York University

2 [sound check, pause]

3 CHAIRPERSON VACCA: [interposing] Thank
4 you, thank you everyone. [sound check, pause] --
5 teen, which I proposed to establish measures of
6 transparency when New York City agencies use
7 algorithms or other automatic processing methods to
8 target services, impose penalties or police persons.
9 This legislation requires agencies to publish the
10 source code of these systems, and permit users to
11 submit data for testing. I know at first glance that
12 this topic can--can appear to be extremely technical,
13 and to some people of little importance. However,
14 over the course of today's hearing, I hope we can
15 demonstrate why algorithm--algorithm decision making
16 is, in fact, a matter of significant importance with
17 widespread implications for our city. We now live in
18 a time of unprecedented technological advancement
19 with new technologies playing an increasingly large
20 part in our everyday lives. During my time in public
21 service, I've had to witness technology's expanding
22 usage within government. The adoption of new
23 technologies undoubted offers us significant
24 benefits. They can vastly improve people's everyday
25 lives making once difficult tasks seem easy allowing

2 us to communicate effortlessly—effortlessly, and enabling
3 us to operate more efficiently. Nevertheless, as we
4 deploy these technologies and admire their potential,
5 we must acknowledge that if left unchecked, they can
6 have negative repercussions. In today's connected
7 world people produce massive amounts of data while
8 going about their everyday lives and when accessing
9 government services. This data is fundamental to our
10 city's operation. To make use of this data, and to
11 make decisions many agencies deploy advanced data
12 analytics and algorithms, and recently algorithmic
13 tools are deployed throughout city agencies to
14 evaluate communities and individuals and to make
15 determinations about services and penalties. While
16 it is undeniable that these tools help city agencies
17 operate more effectively and do offer residents more
18 targeted impactful services, algorithms are not
19 without issue. These tools seem to offer objectivity
20 but we must be cognizant of the fact that algorithms
21 are simply a way of encoding assumptions that their
22 design can be biased, and that the very data they
23 possess can be flawed. Over the last year, the number
24 of studies of detailed situations in which algorithms
25 produced biased outcomes, and I expect we will hear

2 about a few of these cases during today's hearing.

3 Now, despite the importance to government operations

4 and their potential problems, algorithms remain

5 hidden from the public view. In our city it is not

6 always clear when and why agencies deploy algorithms,

7 and when they do, it is often unclear what

8 assumptions they are based upon and what data they

9 even consider. This partially results from

10 algorithms natural complexity, but it is compounded

11 by a lack of transparency. I've heard of several

12 occasions on which members of the public requested

13 access to the internal workings of algorithms only to

14 be denied. A major issue was that algorithmic tools

15 are often developed by private companies, and these

16 companies are unwilling to disclose their methods. I

17 strong believe the public has a right to know when

18 decisions are made using algorithms, and they have a

19 right to know how these decisions are made. For

20 instance, when the Department of Education uses an

21 algorithm to assign children to different high

22 schools and a child is assigned to their sixth

23 choice, they and their family have a right to know

24 how-how that algorithm determined that their child

25 would get their sixth choice. They should not merely

2 be told that they were assigned to a school because
3 an algorithm made the most efficient allocation of
4 school seats. What is considered to be most
5 efficient? Who decided this? A mathematician, a
6 computer programmer? Additionally, when algorithms
7 factor into the allocation of city resources, it can
8 be more difficult for members of the City Council to
9 advocate for their constituents and to do the
10 oversight that we are mandated to do over this—as per
11 the City Charter. One of our main responsibilities
12 is to conduct oversight of city agencies and make
13 sure that people get these services. When there
14 appears to be inequities or a shortage of services,
15 it is our job to find out why and work too remedy the
16 issue. But if an allocation is determined by an
17 algorithm, we may be unable to contest the outcome.
18 For example, throughout my career in public service,
19 I've attempted to learn why the police precinct I
20 represent have not gotten additional police manpower.
21 I've always felt that the number of police officers
22 in my two police precincts has been
23 disproportionately low, inadequate. To this day, no
24 one has fully told me what is the formula that the
25 Police Department uses to determine police manpower.

2 I don't know what it is. I don't know how it works.

3 I don't know what factors go into it. Our city

4 agencies utilize more and more advanced analytics.

5 They must simultaneously work to make these tools

6 transparent, and available to the public and their

7 representatives. We have a right to know what goes

8 into the decisions made by city government and how

9 they arrived at the conclusion they arrived at. It's

10 call transparency. Now, these agencies must do so

11 because the ability to evaluate government decision

12 making and the ability to hold government accountable

13 are key features of our democracy. When government

14 institutions utilize obscure algorithms, our

15 principles of democratic accountability are

16 undermined. As we advance into the 21st Century, we

17 must ensure our government is not black boxed, and I

18 have proposed this legislation not to prevent city

19 agencies from taking advantage of cutting edge tools,

20 but to ensure that when they do, they remain

21 accountable to the public. There are a diverse

22 number of opinions on the best way to ensure

23 algorithmic accountability, and after introducing

24 this legislation, my office received much public

25 feedback. This input will be key to our efforts

2 going forward, and I'm eager to hear from all the
3 advocates today. To my knowledge, we are the first
4 city and the first legislative body in in our country
5 to take on this issue, and as with so many other
6 things, I'm hoping that New York City will set the
7 example for others around the world. We've been
8 known to take the lead, and here I think we are
9 taking the lead throughout the country and throughout
10 the world. This proposal was a priority for me, and
11 for this committee. I'm looking forward to working
12 with the Administration and advocates to perfect it.
13 We have quite a lot to get done today, so without
14 further to do I want to welcome the Administration.
15 We're going to be hearing from Don Sunderland, Deputy
16 Commissioner for Enterprise and Solution Architecture
17 at the Department of Information Technology and
18 Communicate-and Telecommunications, and you are
19 joined by-- Do you want to--would you identify
20 yourself, please?

21 Craig Campbell, Mayor's Office of Data
22 Analytics.

23 CHAIRPERSON VACCA: Greg Campbell,
24 Mayor's Office of Data Analytics.

25 CRAIG CAMPBELL: Craig, Craig.

2 CHAIRPERSON VACCA: Greg. Okay, okay
3 Greg. Okay. I have to swear you in, please. I'd
4 like to ask everyone please to turn off their cell
5 phones or put them on vibrate so that we can conduct
6 the hearing without interruption. This the largest--
7 this is the largest attendance a Technology Committee
8 meeting has ever had. I'm not used to this. How do
9 I top this--how do I top this next one. I don't know
10 what to do. [background comment] This is great.
11 Okay, please raise your right hand. Do you affirm to
12 tell the truth, the whole truth, and nothing but the
13 truth in your testimony before this committee and to
14 respond honestly to Council Member questions?

15 CRAIG CAMPBELL: I do.

16 DON SUNDERLAND: I do.

17 CHAIRPERSON VACCA: Okay, Mr. Sunderland
18 do you want to lead off?

19 DON SUNDERLAND: Sure. Good afternoon,
20 Chair Vacca and members of the Committee on
21 Technology. My name is Don Sunderland, and Deputy
22 Commissioner for Enterprise and Solution Architecture
23 at the Department of Information Technology and
24 Telecommunications also known as DOITT. Joining me
25 is Craig Campbell, Special Adviser to the Mayor's

2 Office on Data Analytics known as MODA. I'm here to
3 discuss Chair Vacca's legislation Introduction 1696,
4 a bill that would require agencies to publish the
5 source code of algorithms they use, and allow you
6 just to test these algorithms. This is a very timely
7 discussion, and I thank the chair and this committee
8 for initiating it. City agencies rely on computer
9 programs to varying degrees to assist in targeting
10 and delivering services to their clients, and I'm
11 happy to talk about the broad technical processes
12 that guide the city's use of algorithms. First, I'd
13 like to provide some back to the committee on the
14 work my division does at DOITT. The Enterprise and
15 Solution Architecture Division comprised as a team of
16 technical architects who help DOITT and its sister
17 agencies identify technology solutions to address
18 their business needs. A relevant example of this is
19 the recently launched Notify NYC app, which we
20 assisted NYC Emergency Management in developing.
21 DOITT's Insource Team, a group that assists agencies
22 managing special technical projects, was dispatched
23 to work with NYSAM in this app starting last year.
24 This team includes several positions that agencies
25 may not hire on their own such as special-for

2 specialized projects such a technical lead and IOS
3 developers and the US and UI designer and more.
4 While our services are available to all city
5 agencies, this does not afford us a comprehensive
6 view of technology across the city. Many agencies
7 have substantial technology shops of their own and
8 require no assistance from us at all. Others only
9 need us to help them in the design or delivery of
10 specific features required by the total application
11 architecture. But in all cases we strive to deliver
12 whatever services the agency needs to achieve its
13 technology goal. This work provides us with broad
14 exposure to a variety of systems implement by various
15 agencies, but agencies rely on their own subject
16 matter experts to devise strategies based on goals
17 they wish to achieve. No matter the level of the
18 engagement, DOITT develops technical solutions to
19 fulfill policy goals and support business processes
20 determined by agencies. In other words, by and large
21 we aren't making agency rules decisions or policies.
22 We are providing the technology that helps agencies
23 bring those elements into the world and onto our
24 streets. This bill seeks to increase transparency in
25 government decision making processes, which is a

1 laudable goal. We understand the impetus for this
2 legislation, and believe that this bill is an
3 excellent way to start the conversation. The Chair
4 has been a great partner in our transparency efforts
5 over the last few years and we're engaged to work
6 with the—we're eager to work with the committee to
7 achieve some of the goals of this legislation in ways
8 that will be useful to New Yorkers. That being said,
9 1696 is in its current form—presents significant
10 operational concerns that we must address directly.
11 First and foremost, there are considerable security
12 concerns. It is the opinion of our cyber security
13 experts that publishing algorithms would generate
14 considerable risk providing a roadmap for bad actors
15 to attack crucial city systems. Those looking to
16 cause damage could use knowledge of these algorithms
17 to circumvent important criteria put in place to
18 prevent abuse of these processes. There is also
19 meaningful risk to the private information of New
20 Yorkers since providing public access to decisions
21 regarding individual benefits or services could
22 provide tools for third parties to incur (sic)
23 specific personal information such as economic or
24
25

2 disability status of persons receiving those
3 benefits. (coughs)

4 Second, the scope is all encompassing. An
5 algorithm is a set of unambiguous instructions. All
6 software progress—programs use sets of unambiguous
7 instructions to carry out their functions. In
8 targeting all algorithms involved in rendering
9 decisions regarding service delivery or evaluative
10 processes, the legislation potentially targets every
11 computer program in the city, which as you could
12 imagine would be an incredibly large undertaking.
13 Almost every program supports agency operations by
14 producing data or interim values used to support the
15 decision making process of the agency by humans or
16 through algorithms and automation. As a result,
17 under this legislation city agencies would be
18 required to divulge the inner workings of all their
19 software. Aside from the shear scope of this effort,
20 the city's ability to do so, would face innumerable
21 legal and practical constraints such as the use of
22 software or vendors' proprietary code or the
23 inability to accurately identify the valid source
24 code of many older systems.

2 Third, testing is not possible. Setting
3 aside the scope of the issue for the moment, in most
4 cases the ability to create public ask-access to test
5 the accuracy of the decisions being rendered would be
6 nearly impossible. Decision carried out by systems
7 are driving by highly complex states of data, and
8 other factors that could not be emulated for the
9 purpose of public testing. Moreover, none of the
10 relevant programs were written to be freestanding
11 publicly usable software. DOITT and IT departments
12 across the city would likely have to put in an
13 extraordinary amount of time and energy just to
14 create a new body of software that could safely
15 imitate the existing functionality.

16 Fourth, this bill comes with unintended
17 consequences. The clear and laudable intent of the
18 legislation is to provide transparency around the
19 city's decision making processes and service
20 delivery. But as written, this legislation would
21 deliver a deluge of information, the bulk of it
22 likely unrelated to the services or decisions in
23 which the City—the city's constituents are most
24 interested thus complicating the search for the very
25 information it hopes to expose. Also, providing

2 self-service decision testing could empower users to
3 fabricate answers that will get them the response
4 they want, but most importantly, computers do not
5 unilaterally make decisions. Even if it were
6 possible to make this information available, the Code
7 is such a small part of the decision making. Often
8 algorithms take multiple sources of data and produce
9 results that are contingent on many other contextual
10 factors including policy decisions made by city
11 employees and often shaped by local, state and
12 federal law. On the whole, algorithms supplement
13 rather than replace the decision making process made
14 by city agencies.

15 I would like to share areas in which the
16 city has proactively made strides in making certain
17 kinds of algorithms transparent. The Mayor's Office
18 on Data Analytics recently unveiled an Analytics
19 Project Library, a platform that in addition to
20 sharing the results of MODA's analyses, also makes
21 transparent the source code for these data analytics
22 projects. When MODA's data scientists partner with
23 city agencies on advanced data analytics projects,
24 they are almost always using open data exclusively.
25 So, in these instances, publishing the intermediate

2 steps of the—of the analytics process would allow the
3 public to apply the same process elsewhere. Craig
4 Campbell from MODA is here today to answer questions
5 you may have about this project. Finally, an example
6 taken from this project library can further explain
7 the Administration's position on this legislation.
8 Following the 2015 outbreak of Legionnaire's Disease
9 in the Bronx, MODA worked with several agencies to
10 identify and tack all cooling towers in New York
11 City. The results in addition to the data sources
12 and methods used to conduct the analysis are
13 available in Project Library. However, the decision
14 making process in enacting policy to proactively
15 prevent sources (coughs) of Legionnaires in the
16 future, could not be unilaterally made based solely
17 on these analysis. We've had great successes in
18 working with this committee to enact meaningful
19 legislation that has had—has made impactful changes
20 in this administration's transparency efforts. Thus,
21 we'd like to hear more from the committee on the
22 types of city decisions. There is interest in making
23 more transparent, and we can subsequently work with
24 our partner agencies to formulate a focused effort to
25 elucidate the decision making process in those

2 specific areas. This concludes my prepared
3 testimony. Thank you for the opportunity to speak,
4 and I'm happy to continue the discussion with the
5 committee.

6 CHAIRPERSON VACCA: Thank

7 DON SUNDERLAND: Uh-hm.

8 CHAIRPERSON VACCA: Do you have
9 testimony, Craig or--?

10 CRAIG CAMPBELL: I do not.

11 CHAIRPERSON VACCA: You want to jump in?

12 Anybody have questions? Great. Okay, thank you for
13 your testimony. I-I first want to say that I'm happy
14 to note that the Open Data Report got MODA and now
15 has it up, and I thank you for that. Now, does that
16 Project Library include all the work MODA has done or
17 only a selection of the work.

18 DON SUNDERLAND: The Project Library
19 currently includes three recent projects. We intend
20 to do the background--the backlog of projects prior to
21 that in the coming months.

22 CHAIRPERSON VACCA: Well, your motivation
23 to create the Project Library is very much closely
24 aligned with my legislation. So, you're

2 acknowledging that it's important for data analytics
3 to be used by city agencies in a transparent way.

4 CRAIG CAMPBELL: Correct.

5 CHAIRPERSON VACCA: Okay. So am I to--am I
6 to surmise by that, that many of your objections
7 although serious may--may not speak of the fact that
8 you support the intent of my legislation.

9 CRAIG CAMPBELL: The Mayor's Office on
10 Data Analytics serves as a center of excellence for
11 the use of municipal analytics. The work with
12 different city agencies on specific projects, and we
13 also work with on certain projects as an adviser to
14 the city agencies. [door bangs] We believe that our
15 Open Source Analytics process and vision closely
16 aligns with goals of our business ownership of the
17 Open Data Program, but we do not necessarily--[door
18 bangs. Our scope is not entirely citywide, but we
19 believe by serving as that center of excellence, we
20 lead in ways that other people that we work with in
21 this way. (sic)

22 CHAIRPERSON VACCA: That's a political
23 answer. [laughter] Alright, let me try to--do you
24 believe that the public has a right to know more
25 about algorithms? Do you believe that my legislation

2 addresses ad transparency issue that needs to be
3 addressed? And do you know.

4 CRAIG CAMPBELL: Yes, I—I think we agree
5 with the intent of transparency around the overall
6 decision making process and the degree to which
7 algorithms contribute to that.

8 CHAIRPERSON VACCA: Okay. We in this
9 Council have enacted much legislation about
10 transparency. I'm here 12 years. Much of our
11 legislation has been about transparency.

12 CRAIG CAMPBELL: Uh-hm.

13 CHAIRPERSON VACCA: Yet, much of it is
14 behind—much of what decisions are—much about how
15 decisions are arrived at is cloaked, and it's not
16 fully known to us.

17 CRAIG CAMPBELL: Yes.

18 CHAIRPERSON VACCA: And it's not fully
19 explained to us, and data goes into the algorithm
20 that determines what many agencies do and that's what
21 we don't have.

22 CRAIG CAMPBELL: Uh-hm.

23 CHAIRPERSON VACCA: Now, you indicated
24 that you work with many agencies on a regular basis
25 in the city. How and why does MODA decide to work

2 with a particular agency? Are you working with every
3 single agency or how do you decide what agency to
4 work with?

5 CRAIG CAMPBELL: So, MODA in particular
6 is a small but mighty group. We work on
7 administrative priorities such as Universal Pre-K or
8 IDNYC specific data analytics projects for those
9 programs. We work on across agency projects. An
10 example of that is the harassment [door bangs]
11 Prevention Task Force, and then we work on high value
12 projects that come from agency solicitation. So
13 different agencies will approach us for our services,
14 and we'll partner with them.

15 CHAIRPERSON VACCA: So, what I just heard
16 from you is that you seem to work on agency projects
17 that are determined to be priority of the Mayor or
18 wither there is a legislative mandate for you to act.

19 CRAIG CAMPBELL: That's correct.

20 CHAIRPERSON VACCA: Okay. That leaves
21 out a whole bunch of agencies.

22 CRAIG CAMPBELL: Uh-hm.

23 CHAIRPERSON VACCA: Does MODA create any
24 data analytic tools that agencies then continue to
25 use on their own?

2 CRAIG CAMPBELL: Yes. Our goal is not to
3 own any analytics projects long term, but to develop
4 capacity and hand them off.

5 CHAIRPERSON VACCA: So, you help agencies
6 determine their own data analytics criterial and
7 usage policies?

8 CRAIG CAMPBELL: For very specific
9 projects, but not universally or unilaterally, but on
10 the specific project.

11 CHAIRPERSON VACCA: [interposing] Do you
12 then--do you then--do you then have input into what
13 information these agencies can give to the public
14 when it comes to how they arrived at basic decisions?

15 CRAIG CAMPBELL: So, as part of the
16 Project Library, we're not only disclosing the source
17 code behind the analytics and the algorithms that
18 we're developing, but also information in a plain
19 language form on the technology landscape and the
20 policy goals that were made as part of that
21 engagement, but again, that represents a limited
22 number of--of projects that--

23 CHAIRPERSON VACCA: [interposing]
24 Limited?

2 CRAIG CAMPBELL: --our office is involved
3 in.

4 CHAIRPERSON VACCA: Alright. I have a
5 lot of questions. Let me ask you something. The
6 Rand Formula, R-A-N-D, the Rand Formula, what is it?

7 CRAIG CAMPBELL: What was the question,
8 sir?

9 CHAIRPERSON VACCA: What's the Rand
10 Formula, R-A-N-D, Rand.

11 CRAIG CAMPBELL: It's-it's-it's my
12 understanding it's a formula that's used by the Fire
13 Department. Yes.

14 CHAIRPERSON VACCA: What is it, though?
15 What-what goes into the Rand Formula?

16 CRAIG CAMPBELL: I-I can't tell you.
17 I'm-I'm-I'm not a subject matter expert on that.

18 CHAIRPERSON VACCA: This formula has been
19 in existence for 20 years. I'm a former District
20 Manager to a community board. I'm a Councilman 12
21 years. I cannot tell you what the Rand Formula is.
22 Yet, I know it determines fire protection services.

23 CRAIG CAMPBELL: Uh-hm.

24 CHAIRPERSON VACCA: I know it also had a-
25 a-a role in determining police manpower numbers, but

2 it was never told to anyone that I know of, and
3 officials in the Fire Department in the past have
4 stated that they know what it is, but the public does
5 not have a right to know. I don't accept that. I
6 want to know what governs how many offices I have,
7 and level of fire protection I have. Why am I not
8 allowed to know that? What goes into that formula,
9 data, algorithm?

10 CRAIG CAMPBELL: Uh-hm.

11 CHAIRPERSON VACCA: This is the basis for
12 my—for my legislation. Here we have a formula we
13 used for 20 years, and you're from DOITT representing
14 them in a very able way, but you don't know what it
15 is. Do you know anyone in the Fire Department who
16 knows what the formula is?

17 CRAIG CAMPBELL: We don't—we don't have
18 site view matter expertise in that area. We
19 generally--

20 CHAIRPERSON VACCA: [interposing] But—but
21 you said you consult with other city agencies. Don't
22 you know something as basic as the Rand Formula? Do
23 you consult with the Fire Department?

24

25

2 CRAIG CAMPBELL: We were not consulted in
3 the development of that formula, the development of
4 the system that delivers it.

5 CHAIRPERSON VACCA: Has it been updated
6 in 20 years.

7 CRAIG CAMPBELL: I don't—I'm—I'm sorry.
8 I don't know.

9 CHAIRPERSON VACCA: You don't know. A
10 big secret. I wonder how many people in the Fire
11 Department knows what's in it—know what the Rand
12 Formula is. Do you have a list of which agencies
13 have their own data analytics and software
14 development items, which agencies or teams?

15 CRAIG CAMPBELL: We don't have a
16 comprehensive list of who would be doing their own
17 data analytics. I mean we run across them on kind of
18 an episodic basis, but we—we know. We don't have an
19 ability to—to comprise a comprehensive list of what
20 data analysis is being done.

21 CHAIRPERSON VACCA: But if the Mayor has
22 an Office of Data Analytics, why doesn't he know what
23 agencies are using data analytics?

24 CRAIG CAMPBELL: Well, (coughs) the
25 Office of Data Analytics was put together actually as

2 a-as a-a functional team to execute on specific
3 analytical goals not as a-a comprehensive citywide,
4 you know, inventory of where all analytics are. The
5 idea was to be able to augment the analytical
6 capabilities not necessarily supplant them throughout
7 all the agencies across the city.

8 CHAIRPERSON VACCA: So, is there no real
9 centralized oversight over which-over when agencies
10 deploy potentially complex data analytics?

11 CRAIG CAMPBELL: Yeah, there-there is not
12 and I would-I would argue that it's probably better
13 that way. In general if we take a look for instance
14 at the-at the group that I had, which is the
15 Enterprise and Solutions Architecture Group.
16 Enterprise Architecture implies a comprehensive
17 technology architecture, but you can't actually
18 prescribe it in a-in a comprehensive technology
19 architecture if you don't understand every problem
20 the city is trying to serve. So, the-the city has
21 been organized with the idea of putting the
22 technology as closely as possible to the actual
23 operational functionality that the agencies have to
24 deliver. This is the best-best model for delivering
25 the most efficient and-and best focused technology,

2 and in many instances, you know, the analytics
3 associated with that technology would be part of that
4 development effort. [door bangs]

5 CHAIRPERSON VACCA: You realize these are
6 administrative issues? They've been—at what level is
7 there an understanding of these issues in the city?
8 You—your agency doesn't seem to know what other
9 agencies are doing when it comes to data analytics
10 and, however it is.

11 CRAIG CAMPBELL: We don't—that's
12 (coughs) that's actually not our function as an
13 agency is to understand what every agency does. Our—
14 our—our function as a—as a central IT agency is to
15 provide services to those agencies to implement their
16 designs not to dictate the designs to them.

17 CHAIRPERSON VACCA: And so they—has any
18 agency ever come to you and said that they want to
19 provide more transparency because of the algorithms
20 that are used and ask you for assistance in providing
21 greater transparency?

22 CRAIG CAMPBELL: I've never been
23 approached with that question.

24

25

2 CHAIRPERSON VACCA: Oh, okay. Can you
3 explain the process that occurs when agencies procure
4 data analytics tools from third party vendors?

5 CRAIG CAMPBELL: I, you know, beyond what
6 the normal procurement rules for the city are I
7 couldn't—I couldn't provide you any further insight
8 on that. I mean it would be a case by case,
9 application by application, use by use basis.

10 CHAIRPERSON VACCA: Well, when you do
11 contract out for data analyst tools, do you provide
12 private companies with any sensitive or proprietary
13 data by which they train their products?

14 CRAIG CAMPBELL: That's—that's something
15 you would have to take up on a case-by-case basis
16 with the agencies themselves as to what data is
17 required for them to train up to us like that.

18 CHAIRPERSON VACCA: Now, do you know of
19 any city agencies that make use of information
20 provided by private data brokers?

21 CRAIG CAMPBELL: I don't first hand have
22 any knowledge of those. No.

23 CHAIRPERSON VACCA: Now, one objection
24 you raised to my legislation is that releasing the
25 source code for particular decisions could have

2 negative security implications. I do understand this
3 concern, but I have also heard some experts assert
4 that open source software can have more robust
5 security. Could you explain the difference in
6 thought here?

7 CRAIG CAMPBELL: Well, the-the-the
8 technology that's been developed over the last 20
9 years doesn't have the benefit what a-of what an Open
10 Source Library might have in many instances, which is
11 complete transparency to begin with. I mean open
12 source by its definition is public. So, a lot of the
13 stuff that makes it into an open source stock, ends
14 up being very well vetted and thoroughly understood
15 and doesn't divulge anything critical about the
16 actual internal workings of the-of the systems and
17 the infrastructure that it's in. That wouldn't be
18 the case with most city systems. Most city systems
19 would within their code be able to divulge through
20 someone who is clever enough in the environment in
21 which they operate and maybe other aspects about the
22 network and the-and the functionality of the broader
23 technology suite of that agency.

24 CHAIRPERSON VACCA: Back to the example I
25 gave in my original opening statement. Isn't a-isn't

2 a parent for example entitled to know why her child
3 didn't get the first choice of their high school and
4 someone else did? Why her child got her fifth
5 choice?

6 CRAIG CAMPBELL: It would be difficult to
7 take any umbrage to that. You know, I'm—I'm a parent
8 myself who—and—and I've had, you know, children go
9 through the—all four of my children go through the
10 public education system here. We certainly don't
11 argue with the rights of—of citizens to have
12 transparency. We very much support that.

13 CHAIRPERSON VACCA: But right now,
14 there's no such thing. The parents are told that
15 there was no seat. How do we know there was no seat?
16 How did somebody else get the first choice and my
17 child got the fifth choice, you know? I mean there
18 is no seat for my child at her second choice, here
19 third choice, and there is no transparency
20 whatsoever. So, when we seek to find out about these
21 algorithms and what goes into decision making, this
22 is something that's clear and concise that people can
23 relate to everyday in the city of New York, but it's
24 one of many, many instances that exists.

25 CRAIG CAMPBELL: And we understand that.

2 CHAIRPERSON VACCA: But, separate from my
3 bill, I don't think that we're doing anything about
4 this.

5 CRAIG CAMPBELL: I think that you'd be
6 right.

7 CHAIRPERSON VACCA: Yeah. So, if you
8 believe in transparency, where—where—where have we
9 been? We don't believe in transparency when it comes
10 to algorithms because we're not doing anything? Has
11 this been discussed internally before my bill? Has
12 anyone said to themselves, you know, we owe the
13 public an explanation? One day somebody is going to
14 come out. One day somebody is going to wake up.

15 CRAIG CAMPBELL: It was a new topic to
16 me and I'm fairly up on the, you know, the questions
17 that are being asked.

18 CHAIRPERSON VACCA: Do you know of any
19 city agencies using algorithms to make automatic
20 decisions that are not reviewed by a human before
21 being administered?

22 CRAIG CAMPBELL: I don't know of any
23 first hand. [door bangs]

24 CHAIRPERSON VACCA: Okay. Now I know
25 that HRA deploys algorithms to detect benefits fraud,

2 and in other states there have been reports about
3 eligible applicants being automatically denied
4 benefits by a computer system with no level of human
5 review. Are you aware of any such thing in the city?

6 CRAIG CAMPBELL: I'm—I'm—I'm not first
7 aware of the HRA system. You know, I've heard
8 mention of it. So, I can't—I can't comment beyond
9 that. You know, I think that the—the—the best way to
10 approach a question like that would be able to—would
11 be to take it up directly with the agency who has
12 that system.

13 CHAIRPERSON VACCA: But no agency chose—
14 no agency chose to attend today? Does the Human
15 Resources Adminis—does the Human Rights Commission
16 have people in the Human Rights Commission studying
17 algorithms? Are you aware of this? The Human Rights
18 Commission?

19 CRAIG CAMPBELL: I don't know that
20 they're studying algorithms specifically. I know
21 they're studying decision making or I've heard that
22 they have.

23 CHAIRPERSON VACCA: They're studying
24 what?

25 CRAIG CAMPBELL: Decision making.

2 CHAIRPERSON VACCA: Decision making?

3 CRAIG CAMPBELL: Yeah.

4 CHAIRPERSON VACCA: My understanding is
5 that they're studying decision making. I-I will
6 agree with you, and I requested of the Mayor's Office
7 that somebody be here for the Human Rights
8 Commission, and I-and I never heard back for the
9 record. You state there now algorithms are used to
10 supplement decision making. Is there a feature where
11 they do make fast decisions?

12 CRAIG CAMPBELL: Well, there are
13 certainly places in which if you had multiple inputs
14 and you had a lot of data to process then-then the
15 algorithms, the computer programs themselves could
16 enhance the decision making process, but and this is
17 purely from-from the experience that we've had
18 directly with agencies with systems thus far. I-I
19 personally do not know of a-of a system that renders
20 a unilateral decision without-without human
21 assistance. I think there are certainly algorithm
22 that are in action that render information on which
23 decisions are predicated, or they can render maybe
24 values or sorting of information, but I don't know of
25 a fully automated decision rendering system. That's

2 not to say it doesn't exist. I just haven't
3 encountered one.

4 CHAIRPERSON VACCA: Well, the first thing
5 that comes my mind again is that when a student is
6 assigned to a high school, it is done strictly by
7 computer. That is my understanding.

8 CRAIG CAMPBELL: Okay.

9 CHAIRPERSON VACCA: That student is
10 assigned by computer because I've had cases where
11 students and their parents have come to my office and
12 when they come to my office we've been told we cannot
13 touch the assignment. They must go to a central
14 office, and the can appeal as a—as a hardship.

15 CRAIG CAMPBELL: Yeah, yeah.

16 CHAIRPERSON VACCA: So, we have computers
17 using algorithms and data spitting out pupil
18 assignments that no one can touch. How does somebody
19 get an apartment in public housing? I'm told that
20 it's strictly done by computer.

21 CRAIG CAMPBELL: And once again, I don't
22 have first hand knowledge of those specific systems.

23 CHAIRPERSON VACCA: Yes, they give you a
24 computer assignment and then you have the right to
25 appeal once, if you appeal once, you appeal once, but

2 then after that if you don't like what they gave you,
3 you come off the public housing list. If we're going
4 to be governed by machines and algorithms and data
5 well, they better transparent. They're not
6 transparent. How—how does someone know what public
7 housing project they're being assigned to? On what
8 basis? Many people want to live in public housing
9 who want to be near their doctors. They want to be
10 near their elderly parents. They have criteria, too.
11 They matter, too. Yet, they don't matter because
12 some inhuman computer is spitting them out and
13 telling them where to go, and if you don't like it,
14 lump it. Well, I have a right to know what criteria
15 is going into that machine. What is—what is the
16 basis for this decision, and right now, no one can
17 tell me how this is done, and you want to talk about
18 homelessness in the city of New York? You want to
19 talk about it? Now feedback loops. I want to go
20 into that. So, for example, if the policing
21 algorithm decides where to station offices based on
22 nuisance crimes, officers are likely to make more
23 arrests for nuisance crimes in that area, and then
24 more offices are stationed there and so on. Is there
25 any way that your—you have looked at this to examine

2 whether this is a fair criteria in allocating police
3 manpower, whether this results in many people in
4 many communities having an increase in arrests for
5 nuisance crimes.

6 CRAIG CAMPBELL: You know, we weren't
7 involved in that system at all. No.

8 CHAIRPERSON VACCA: So, nobody is
9 watching any of the agencies as they implement
10 algorithms. That's what I'm being told.

11 CRAIG CAMPBELL: Right.

12 CHAIRPERSON VACCA: Agencies are watching
13 their own algorithms.

14 CRAIG CAMPBELL: That's correct, but I
15 would have to caution you again--

16 CHAIRPERSON VACCA: [interposing] Can you
17 provide us a list with those agencies? I don't even
18 have a list of what agencies use algo-use algorithms.
19 Do you have a list of what agencies use algorithms?

20 CRAIG CAMPBELL: Well, I would say that
21 probably every agency uses some algorithm. I mean if
22 you use a computer program, you're using an
23 algorithm.

24 CHAIRPERSON VACCA: Right, but I would
25 like a list, and I don't understand how no one knows

2 what other agencies are doing. Don't--don't we have
3 deputy mayors that oversee a portfolio of several
4 other agencies. Deputy mayors oversee a portfolio of
5 several agencies. Do the deputy mayors know what
6 algorithms and data algorithms are used to determine
7 basic decisions?

8 CRAIG CAMPBELL: I haven't heard of a
9 position that was given that responsibility but--

10 CHAIRPERSON VACCA: I think we're missing
11 something very drastic. Now, you've cited some
12 objections to the legislation, but I don't hear you
13 saying that there's no need for legislation.

14 CRAIG CAMPBELL: We are strongly in favor
15 of transparency around the decision making process.

16 CHAIRPERSON VACCA: So, I think that we
17 have to do something.

18 CRAIG CAMPBELL: And we--and we love to
19 work with you on--on finding a practicable and, you
20 know, executable solution, but it would have to
21 involve working obviously with the agencies as well.

22 CHAIRPERSON VACCA: And you open to a--a
23 commission type legislative body, a commission full
24 by legislative act that would call in stakeholders
25 and try to arrive at legislation modeled after what I

2 proposed but maybe modifying it as we see fit to get
3 the accomp—the desired result.

4 CRAIG CAMPBELL: That's a—that's an idea
5 that we could come back to you on.

6 CHAIRPERSON VACCA: Okay. I want to
7 thank you both. We now have witnesses to testify.
8 [background comment, pause] Okay, I have to vote so
9 let me just call up the first panel and—and we'll
10 take a two-minute recess. Dr. Julia Howell, Rashida
11 Richardson, New York City Liberties Union, Dr. House
12 is in Cornell Tech. Rachel Levinson-Waldman, Brennan
13 Center for Justice. I think three people is enough.
14 [background comment] Noel Hidalgo, Data New York
15 City. [background comment, pause]

16 CHAIRPERSON VACCA: Okay, let's
17 reconvene. I'm sorry. I had to vote. [background
18 comment] Okay, we will now reconvene. Noel would you
19 like to go first. Please identify yourself and we're
20 going to give each person three minutes.

21 NOEL HIDALGO: Three minutes. It's
22 really hard to follow after what you just asked. So,
23 three minutes is—is an honor. I submitted some
24 written testimony. I'm not really sure that I'll be
25 able to get through it all, but first of all, we want

to thank you for vocal—we want to thank you for this opportunity to vocalize our support of the bill. I speak as the Executive Director of Beta NYC, and a former technology and democracy fellow at the Harvard Kennedy School's Ash Center, and a former fellow at Data and Society's Research Institution and for the past five years we've been able to collaborate with this administration, and previous administration to get the Open Data Law passed. And as we are a community over 4,400 technologists, designers, data scientists and civic hackers—hackers, who want to see an equitable municipal government in the 21st Century, this legislation reinforces the core of a future in equitable municipal government. In 2016, Data and Society's Research Institution produced a number of documents outlining what is at stake when we're dealing with algorithms, and we must be concerned about technology companies as dominant curators of information and their unprecedented power to engineering the public's fear and social services, and to be perfectly blunt, our future of democracy is at stake. If we refuse to hold algorithms and their authors accountable, we no longer have government for the people, by the people. If we refuse to hold

2 algorithms and their authors accountable, we
3 outsource our government to the unknown. At this
4 past year's NYC School of Data our annual conference,
5 we hosted a panel on Algorithmic Disprin Innovation
6 where we discussed how parts of our criminal justice
7 system is governed by black boxes. How can we talk
8 about justice when we can't see the software code,
9 the algorithms or hold the underlying software
10 accountable in the same way that we hold humans
11 accountable? Our democracy requires transparency,
12 copyright, more trade secrets, should ever stand in
13 the way of an equitable and accountable municipal
14 government. We're very fortunate that the city's
15 existing Open Data Law provides a framework for this
16 bill, and in our written testimony, we've outlined a
17 few core components that we would like to see added
18 to this particular bill, and we look forward to a
19 healthy and honest debate around the passage of the
20 nation's first Open Algorithms Law. Thank you.

21 CHAIRPERSON VACCA: Thank you. Thank you
22 always. You've been great for this committee. Would
23 you introduce yourself, please?

24 RASHIDA RICHARDSON: Yep. Hi. I'm
25 Rashida Richardson for the New York Civil Liberties

2 Union. Yep. Okay. [laughs] I want to thank you for
3 introducing the legislation and holding this hearing.
4 The New York Civil Liberties respectfully submits the
5 following testimony in support of Intro 1696,
6 legislation relating to the government use of
7 algorithm: Federal, state and local governments are
8 increasingly using algorithms to conduct government
9 services. One of the promises of algorithms is that
10 they can process, analyze and manipulate large
11 amounts of data to help optimize government services.
12 However, algorithms are fallible human creations that
13 are vulnerable to many sources of error and bias.
14 So, there should be great concern when the government
15 employs algorithm whose design and implementation are
16 not understood by the government agents using them or
17 the public. There is a strong public interest in
18 ensuring that algorithms are designed and used in an
19 equitable manner especially when they affect
20 decisions regarding the use of government forests,
21 allocation of public resources or potential
22 deprivation of civil liberties. In order to make
23 this assessment, information about the design, use,
24 functions of algorithms must be transparent. Without
25 algorithmic transparency, governments stand to lose

2 democratic accountability, efficacy, fairness in
3 government processes and control over sensitive
4 public data. For the sake of brevity, I'm not going
5 to read our entire testimony, but it does detail the
6 many ways in which error and bias can exist in the
7 creation and use of algorithms. So, I encourage the
8 Council to read it in its full entirety, but
9 algorithmic systems function when—best when
10 stakeholders have access to enough information so
11 that they can identify problems and design of the
12 algorithm and its application. Therefore, greater
13 transparency about the algorithms that government
14 agencies use and how they're being used or
15 implemented can help increase accuracy fairness and
16 overall utility of these tools. As algorithm tools
17 improve, they produce great—greater cost savings and
18 help local governments become more sustainable.
19 Algorithmic transparency can help increase public
20 confidence in government practices, and the system
21 but making constituents feel like they are actively
22 engaged in government systems that affect their live.
23 Conversely, if algorithmic based decisions of
24 government remain opaque and invisible, New Yorkers
25 will feel increasingly confused about the rationale

2 for government policies and this will lead to
3 increasing skepticism about the fairness and
4 accountable—and the accountability of government
5 officials, and the decisions they make. Therefore,
6 we urge the City Council to pass Intro 1696 as soon
7 as possible because the civil liberties and civil
8 rights of New Yorkers depend on it.

9 CHAIRPERSON VACCA: Thank you. Introduce
10 yourself, please.

11 JULIA HOWELL: Certainly. Good
12 afternoon, Chair Vacca. My name is Julia Howell
13 (sic) and I'm a research fellow at Digital Life
14 Initiative at Cornell Tech. New York City's bold new
15 interdisciplinary research and tech campus at
16 Roosevelt Island. I am joined in providing this
17 testimony with two of my Cornell Tech colleagues
18 Professor Helen Nissenbaum, Professor of Information
19 Science and Director of the Life-Life Initiative, and
20 Thomas Ristenpart, Associate Professor of Computer
21 Science. We together are involved in a major multi-
22 year NSS funded research project to investigate
23 threats of privacy and fairness in automated decision
24 making systems, and in particular to develop
25 mechanisms to bring accountable information use in

2 subsystems. The most important work that a bill in
3 the area of automated systems can do is to bring
4 accountability, both the accountability of vendors to
5 the-of these systems to the city and the
6 accountability of the city's agencies to the people
7 of New York, and this has been very clear in your
8 line of questioning. This bill is an ambitious
9 attempt to seek accountability through transparency,
10 and we applaud you and your committee for binging for
11 the proposal. It's a direction of legislation that
12 is both exciting and essential. I'd like to just
13 focus my comments on some aspects where the bill
14 makes important advances, but does not yet reach the
15 critical aims you outlined in your opening statement.
16 A primary source of these limitations is that the
17 provisions in this bill applies to the Administrative
18 Code in the section under Open Data. This fundament-
19 fundamentally affects the nature and impact of the
20 bill as it is currently drafted. It means crucially
21 that according to Section 23-504-C of the Code the
22 bill gives rise to no action with that either for
23 individuals or against an agency. Section 23-504-A
24 makes clear that data is provided to the public only
25 for informational purposes. With Section 23-604-B

2 clarifying that there are no guarantees as the
3 completeness, accuracy, content of treatments (sic)
4 to use. Further, the bills placement within the open
5 data provisions also means that following the logic
6 of Section 23-501-G, any proprietary claims and
7 intellectual property assertions in relations to
8 carding systems, which are last in this domain. No
9 matter how broad a basis will readily thwart your
10 intents of transparency. It may be that the city
11 regards that locating these provision in the Open
12 Data Provisions is optimal for other reasons. For
13 example, the city's commitment to open public
14 processes. But we urge that legislative content
15 should be given further and very careful
16 consideration. If it is resolved that the optimal
17 location is optimal for other reasons, the bill
18 should be elaborated and the applicability or
19 otherwise that the remainder of the provisions should
20 be explicitly addressed particularly those concerning
21 private rights of action, liability of agencies, and
22 the tension between disclosure of the source code and
23 the operation automated systems and proprietary
24 interests. One further dimension of the [bell]-

25 CHAIRPERSON VACCA: [off mic] Conclude.

2 JULIA HOWELL: I just wanted to also say
3 that black box testing it's a domain that
4 particularly my colleague Professor Ristenpart works
5 on. The requirement is likely to be very
6 administrative—administratively good, and some of the
7 agencies as the mediators of this requirement. It
8 often takes me thousands of queries depending on the
9 context to be able to do the necessary third party
10 testing in the public interest of algorithmic
11 systems, and we're concerned that such a prospect is
12 not going to be highly constrained if they're always
13 to be mediated by agencies. Thank you.

14 RACHEL LEVINSON-WALDMAN: Thank you very
15 much. My name is Rachel Levinson-Waldman and I am
16 Senior Counsel to the Liberty and National Security
17 Program at the Brennan Center for Justice. The
18 Brennan Center is a non-partisan law and policy
19 institute that seeks to improve our systems of
20 democracy and justice, and the Liberty and National
21 Security Program specifically focuses on restoring
22 the proper flow of information between the government
23 and the people by among other things increased public
24 access to government information and securing
25 appropriate government oversight and accountability.

2 As part of that work, I filed a Freedom of
3 Information Law request last year with the New York
4 City Police Department requesting information about
5 their use of predictive police and technologies. As
6 you know, predictive policing involves the uses of
7 statistics for algorithms to make inferences about
8 crime. Where a crime is going to occur or about a
9 particular person that commit a crime. It has been a
10 subject of considerable criticism from civil rights
11 and civil liberties applicants including ourselves.
12 There have been significant concerns that predictive
13 policing both relies on recreates patterns of biased
14 law enforcement, simply sending officers back to
15 neighborhoods that are already over-policed. In
16 addition, there is little hard proof that predictive
17 policing is actually effect-effective in predicting
18 and reducing crime. One phrase often used is that
19 predictive policing predicts policing. It does not
20 predict crime. In light of these concerns,
21 transparency about the codes that provides the
22 foundations for predictive policing is paramount.
23 According to publicly available documents that we
24 reviewed in preparation for our FOIL request, the
25 NYPD expected to spend about \$45 million on

2 predictive policing technologies over the course of
3 five years, but there is little information publicly
4 available about how the department intended to use the
5 technologies, what information would be input and how
6 the community—how the community would be affected
7 among other questions. We were concerned that the
8 use of predictive policing was occurring in the dark
9 with little information available to the most
10 effective communities about how policing decisions
11 were being made, or opportunities for those
12 communities to make their concerns known. As a
13 result of that, we filed a FOIL request last July for
14 a range of documents. We got no records from the
15 NYPD either from our request or a subsequent appeal,
16 and so we filed suit where we emphasized the
17 important interest in transparency that FOIL
18 embodies. Much of this legislation does as well.
19 Almost immediately after we filed suit, the NYPD did
20 disclose some documents about predictive policing,
21 but they did not disclose the source code for their
22 predictive algorithm along with a range of other
23 important information. It's worth noting that the
24 NYPD has expressed concerns about making the source
25 code for predictive policing publicly known. They've

2 argued that with the source code in hand, criminals
3 could learn where police officers will be patrolling
4 and evade detection. We believe, as we have told the
5 NYPD and the judge hearing the case, that this risk
6 is remote. Predictive policing programs generally
7 identify limited areas where officers are directed to
8 spend some fraction of each shift. They do not
9 direct or reveal the location of each officer at
10 every moment, and we believe they are extremely
11 unlikely to provide a detailed road map to a curious
12 criminal. On the flip side, there are significant
13 public benefits to understanding the workings of this
14 program [bell] for transparency and community
15 accountability, and as a result, we strongly support
16 the passage of Bill 1696.

17 CHAIRPERSON VACCA: Let me ask you. So,
18 you brought the lawsuit. They provided some
19 information but not all of what you wanted--

20 RACHEL LEVINSON-WALDMAN: [interposing]
21 That's correct.

22 CHAIRPERSON VACCA: --not-not the-not the
23 most significant. Where is the lawsuit now?

24

25

2 RACHEL LEVINSON-WALDMAN: We had a
3 hearing in August and the-it's-it's before the judge
4 to render a decision.

5 CHAIRPERSON VACCA: Before the judge?

6 RACHEL LEVINSON-WALDMAN: Yes.

7 CHAIRPERSON VACCA: How long is this
8 lawsuit going on to get the information you wanted?

9 RACHEL LEVINSON-WALDMAN: How long-sorry-
10 was it--?

11 CHAIRPERSON VACCA: Was the lawsuit going
12 on, for you to get this information?

13 RACHEL LEVINSON-WALDMAN: So, we filed
14 our request last July. We then filed suit in
15 December. We had hearing before the judge, and soon
16 after we filed. So, probably in January the NYPD
17 produced initial information, which did call into
18 some question the initial refusal to produce
19 documents. We then continued the suit because there
20 was more information we believe that they basically
21 owed to us and public, and so there was the hearing
22 in August. So, the lawsuit has been going on now for
23 about nine months.

24 CHAIRPERSON VACCA: Before that, you had
25 filed a Freedom of Information Law request, FOIL?

2 RACHEL LEVINSON-WALDMAN: Correct.

3 CHAIRPERSON VACCA: Where did that go?

4 RACHEL LEVINSON-WALDMAN: In terms of
5 whether it produced documents?

6 CHAIRPERSON VACCA: Did you get anything?

7 RACHEL LEVINSON-WALDMAN: No. Nothing
8 from the original request or the repeal.

9 CHAIRPERSON VACCA: So, then you went to
10 court?

11 RACHEL LEVINSON-WALDMAN: Correct.

12 CHAIRPERSON VACCA: The interesting
13 question I have is how many people go through the
14 FOIL process and never hear anything, and I just
15 think sometimes people wish that they would go away.

16 RACHEL LEVINSON-WALDMAN: Well, and if-if
17 I may add, something, it was quite striking to us.
18 There were several different exemptions that were
19 invoked in response both to our request and our
20 appeal. Clearly those exemptions could not have
21 actually applied in their entirety since then
22 documents were produced in response to our lawsuit.
23 In this hearing in August, there was a comment from
24 the Police Department's General Counsel suggesting
25 that to some extent that was the strategy to wait for

2 a lawsuit to really be forced to produce documents,
3 and at that point start the process of disclosure.

4 CHAIRPERSON VACCA: Thank you very much
5 for your support for the legislation. We will
6 certainly be calling upon you hopefully as we develop
7 this program.

8 RACHEL LEVINSON-WALDMAN: Thank you, sir.

9 CHAIRPERSON VACCA: Thank you. Council
10 Member Greenfield has joined us and we welcome him.
11 Our next panel Scott Levy, the Bronx Defenders; Yung
12 Mi Lee, Brooklyn Defender Services; Alexander Krupp
13 from the Bronx, New York. [pause] Have a seat. Are
14 you Mr. Krupp?

15 ALEXANDER KRUPP: Yes I am.

16 CHAIRPERSON VACCA: Okay. I'd like you
17 to go first. I know your building where you are.

18 ALEXANDER KRUPP: Sure.

19 CHAIRPERSON VACCA: Right outside my
20 district. Used to be in my district.

21 ALEXANDER KRUPP: Yeah. I'm a couple of
22 yards away in Council Member Torres' district.

23 CHAIRPERSON VACCA: Yes, but you were in
24 my district for eight years, your building.

25 ALEXANDER KRUPP: Okay, and what you say.

2 CHAIRPERSON VACCA: Okay, Mr. Krupp,
3 could you introduce yourself?

4 ALEXANDER KRUPP: Yeah, sure. So, I
5 don't have like prepared testimony, but I want to say
6 first that like thank you for this bill. Like I'm
7 very strongly in favor of it. You know, just as a
8 citizen like it certainly does seem like if the
9 government wants, for example, put me in prison, then
10 like I should be able to see the software that
11 determines how that sort of like decision was made?
12 [door bangs] But the beyond just being, this is also
13 an entrepreneur and a software developer, like in
14 that sense like I'd like to note that, you know, if
15 you want to say paint someone's nails as a
16 cosmetologist, there's a thousand hours of training
17 that you need to go through in New York State, but if
18 you want to create these sort of algorithms, there's
19 no training at all, no college degree required, no
20 professional certification, and that your problems in
21 this sort of software is really more than the willing
22 exception in my professional experience. You know,
23 further as like an entrepreneur as like a small
24 startup, not Facebook or Google size, I'd like to say
25 that although, you know, you seem to come at this

2 from the position of someone like being very
3 skeptical with the technology. From my perspective I
4 think it would actually greatly benefit the New York
5 technology industry, as one the earlier speakers were
6 saying that there are some issues with the DOIC. I
7 think of software the powers New York City would have
8 to be rewritten since it was not originally written
9 to be open source, but from my perspective that's a
10 good thing. Like, you know, this software written in
11 New York City like, of course, it should be
12 transparent, and not, you know, close-close or a
13 software created by, you know, companies from across
14 the country or outside the country. This bill would
15 not only with New York's policy be in a position to,
16 you know, set the precedent for the country, but like
17 this software created here to be compliant with this
18 legislation cannot only empower New York City, but
19 could power every other city across the country as
20 well. So, I think this would be very good for New
21 York's technology industry, and for New York
22 entrepreneurs.

23 CHAIRPERSON VACCA: Thank you very much.
24 Yes. Would you like to identify yourself, please?

2 SCOTT LEVY: Yes. Thank you. My name is
3 Scott Levy. I'm Special Counsel to the criminal
4 practice at the Bronx Defenders. Thank you for the
5 opportunity to testify today. I've submitted written
6 testimony. So, I will try to sort of summarize what
7 we've put in that—in that testimony. We're really
8 here today to bring to the Committee's attention a
9 specific algorithm that is currently in development
10 Mayor's Office of Criminal Justice and the use of
11 pre-trial detention, and we want to draw attention to
12 that fact and also suggest some steps that this
13 committee might take and that the City Council might
14 take in ensuring that those algorithms are used
15 correctly, are just, are fair, and ultimately help
16 further the goals of a fair and just—more just
17 criminal justice system. In particular the city is
18 currently developing a new algorithm with the
19 Criminal Justice agency and an outside private
20 contractor to predict people's failure to—risk of
21 failure to appear in court, and this tool that's
22 under development would be used by judges in
23 thousands of cases across the city, tens of thousands
24 of cases across the every year in making bail
25 determinations. That is determining whether somebody

2 from a—whether a New Yorker returns to their family
3 and community after they are arraigned in Criminal
4 Court or whether they spend, days, months or even
5 years sitting on Rikers Island. We think that the
6 committee and the City Council can play a crucial
7 role in making sure that the algorithms that are in
8 development don't create more harm, don't do more
9 harm than they do good. And specifically, we want to
10 alert particularly to our position that we believe
11 that these types of algorithms have the possibility
12 of actually increasing pre-trial detention in New
13 York City. That is obviously problematic for a
14 number of reason, the first of which is that the city
15 is currently trying to close Rikers Island and
16 decrease the pretrial detainee population on Rikers
17 Island. It is our fear that the development of these
18 types of algorithms may actually hinder that
19 progress. There is nothing inherent in these
20 algorithms that would lead to a substantive decrease
21 in the use of pre-trial detention, and these
22 algorithms present an enticing but ultimately false
23 promise that we can accurately predict whether an
24 individual will come back to court or not. The truth
25 is we can't predict, but attempts to do so will

likely lead to increases in pre-trial detention. We believe that the primary goal of bail reform in the city and across the should be decreasing our jail populations, and that any-any algorithm that the city might develop should be judged on that metric first and foremost, and transparency and accountability are crucial components of any holding the city to account—to account for these—these algorithms. And specifically, [bell] we think that the Council can insist the city about a do no harm approach to these—to these instruments. I will try to very quickly sum up the rest. We are also very concerned about the racial justice—racial justice aspects of these algorithms. We know that these algorithms are only as good as the data that goes into them, and that data, as we know, is tainted by years of disproportionate arrest rates, and conviction rates in communities of color across the city. And so we are worried that the creation of these algorithms will exacerbate existing racial disparities and we want to caution, and again transparency and—and oversight and accountability are the only ways that we can actually ensure that we don't make problems worse than they already are. And I—I will just end by

2 saying one of the things that we would recommend that
3 is not—the transparency and accountability are good
4 first steps, but the city has recently required other
5 agencies to do equity assessments in develop—when
6 they develop certain policies and programs. And we
7 would suggest that before certain algorithms are put
8 into use and actually applied—against—applied in
9 courts, that they city be required to do equity
10 assessments of these tools before they're actually
11 put into use. So, that there's actually some X anti-
12 oversight of these algorithms so that they aren't
13 just put out into the field going forward. That's
14 it. Thank you.

15 CHAIRPERSON VACCA: [off mic]

16 SCOTT LEVY: Well, thank you.

17 YUNG MI LEE: Good afternoon. I'm Yung
18 Mi Lee. I'm a Supervising Attorney at Brooklyn
19 Defender Services. BDS provides multi-disciplinary
20 and client centered criminal, family and immigration
21 defense as well as civil legal services, social work
22 support and advocacy for over 30,000 clients in
23 Brooklyn every year. I want to thank the New York
24 City Council Committee on Technology and in
25 particular Chair James Vacca for holding this hearing

2 today. I want to talk about risk assessment
3 instruments and predictive policing today. Across
4 the United States and especially in New York City,
5 nearly half a million people are detained pre-trial
6 legally presumed innocent but locked up. The
7 majority of these individuals are legally eligible
8 for release on bail, but detained because courts set
9 bail in an--in an amount and form they can't afford.
10 Financial conditions of release are on their face
11 discriminatory and amplified throughout our
12 inequalities in society. While attempts to reform
13 have come in cycles for the last several decades, the
14 most onerous forms of money bail remain in use in
15 most of the country. Meanwhile [door bangs] multi-
16 national surety companies have profited from this
17 mass--from the mass industry to financing of the bail
18 bonds industry, which is banned in every country
19 except the United States and the Philippines. Because
20 the courts generally only accept bail in cash or
21 commercial bail bond as opposed for example an
22 unsecured bond, which is authorized by the New York
23 State Penal Law and Criminal Procedure Law. Bail
24 bond agents are often a family's only hope for
25 getting a loved one out of jail. The agents can

1 charge exorbitant unrefundable fees, demand unlimited
2 collateral and impose onerous conditions. All this
3 know, we must allow oversight by local, state or
4 federal regulators. The industry siphons billions of
5 dollars from marginalized communities across the
6 country. Understandably, there is a demand for
7 something, anything different. The policymakers must
8 be deliberate about reform. Specifically, the goal
9 of bail reform must be to reduce pre-trial detention
10 and eliminate racial and other disparities. The
11 Zeitgeist (sic) on Bail Reform is a promotion of
12 RAI's to drive decisions about pretrial detention,
13 but it is not clear this approach will help rather
14 than harm. RAIs purport to objectively and
15 accurately predict one outcome or another. In
16 reality, they function as a proxy for a series of
17 subjective human decisions. In practice, RAIs
18 typical-typically use a series of highly
19 discriminatory metrics that provide little or no
20 utility to seeing the future. Common factors include
21 homelessness, employment, school enrollment, age,
22 family connections, prior convictions and prior
23 incarcerations. RAI proprietors argue their tools are
24 not discriminatory because they do not consider
25

2 demographic information. [bell] But this analysis
3 ignores the pre-existing sharp disparities in the
4 aforementioned factors: A landmark for the public
5 for investigation of RAIs found one commonly used
6 tool is more likely to falsely identify Black people
7 as likely to commit a crime. The investigation also
8 found this RAI to be only somewhat more accurate than
9 a coin flip in determining a risk of re-offense and
10 remarkably unreliable in predicting violent crimes.
11 RAIs come with a unique threat to liberty in New York
12 State. A concurrent push to allow judges to make
13 assumptions about dangerousness using RAIs in pre-
14 trial detention decisions. Under currently state
15 law, judges may only consider—under current state
16 law, judges may only consider a risk of flight with
17 certain exceptions. While RAIs can be used
18 exclusively to measure this risk, many high level
19 policymakers including Mayor de Blasio are urging
20 changes to the bail statute so that dangerousness may
21 be assessed and considered as well. As such, the
22 first order of business is to stop this push towards
23 dystopic preventive detention. There is ample
24 evidence that even a few days in jail can be
25 criminogenic. Prevention detention is a counter-

2 productive tool of public safety. Moreover, there is
3 no guarantee that adding dangerousness to the statute
4 would significantly reduce jail populations.

5 CHAIRPERSON VACCA: [interposing] Can you
6 just finish?

7 YUNG MI LEE: Sure. In short, RAIs by
8 their nature bypass an individual's right to due
9 process and the individualized case-by-case analyses
10 required of prosecutors, judges, and defense
11 attorneys. I—I just want to add that while many RAIs
12 across—that are being used across the country claim
13 to be transparent, what's really not transparent and
14 what's needed is the underlying data to come up that
15 formulates these algorithms that are used in Risk
16 Assessment Instruments. So, I urge the City Council
17 to really include RAIs in this bill, and to also
18 require that the underlying data be transparent as
19 well. Thank you.

20 CHAIRPERSON VACCA: Thank you all.
21 Council Member Greenfield has a question.

22 COUNCIL MEMBER GREENFIELD: Yes. Thank
23 you very much, Mr. Chairman and thank you for the
24 legislation that you are sponsoring today, and the
25 hearing that we're having. Certainly, fascinating

2 stuff, and we had another hearing this morning, a
3 different hearing, on Youth Services and I was
4 actually able to quote a line from another one of my
5 favorite movies, *My Cousin Vinny*. So, today is movie
6 day for me. This is like *Minority Report*. Right,
7 we're sitting around and trying to figure out who's
8 going to engage in what crime? So, I guess—I guess
9 the question—the question that I have is twofold. So,
10 the first is that, you know, I'm sure you've heard
11 the city's testimony, and their testimony from the
12 Department of Information Technology and
13 Telecommunications. They said well there are
14 considerable security concerns if they were to give
15 you this—give us, rather, give the public and publish
16 this algorithm. So, you folks are the experts in
17 security. I'm a lawyer, a law professor, a
18 legislator. So, to talk test is that, in fact, a
19 legitimate concern or is the city overstating their
20 case when they say that there are "considerable
21 security concerns?" Anybody who feels like they're
22 an expert can answer this question.

23 SCOTT LEVY: I mean I'm—I'm happy to
24 address that. I think with—with respect to risk
25 assessment tools and algorithms used in pre-trial

2 detention decisions there are no such security risks.
3 This is essentially past data that is put into an
4 algorithm to produce risk scores and-and risk
5 assessment instruments. The-the-the data can be
6 anonymized, and randomized, and-and-an essentially
7 clean so that there are no privacy concerns or
8 security risks.

9 YUNG MI LEE: and I-I--I was not able to
10 talk about predictive policing, but when we're
11 talking about constitutional protections versus
12 possible security risks that aren't even realized and
13 they never happen, I think our constitutional
14 protections have to take precedence.

15 ALEXANDER KRUPP: Yeah, certainly there
16 are potential security concerns depending on how you
17 define them. You know, for example with the case of,
18 you know, students trying to figure out like why they
19 got assigned to a school district. Like you can
20 certainly imagine a case where, you know, a parent
21 could get their kind assigned to a better school
22 district, just by, you know, like spelling their
23 first name just, you know, slightly differently or-or
24 moving a couple, you know, doors over. You know,
25 whatever the case is like once these are algorithms

2 are public, but I don't, you know, see anything that
3 should be like a show stopper or, you know,
4 ultimately prevent [door bangs] this type of
5 legislation from getting passed.

6 COUNCIL MEMBER GREENFIELD: Got it and
7 then my-my second question I just want to clarify
8 this point to just really understand this a little
9 bit better. So, we're living in a sort of post-
10 Equifax data breach world, right. So, I think the
11 average citizen like me folks are professionals. You-
12 you obviously, you know, you-you wore a sweatshirt.
13 So, you clearly are a tech startup guy who's an
14 expert unlike the guy wearing the-the suit and tie.
15 So, certainly you're more qualified to understand
16 this than I am. So, I'm just curious to understand
17 this a little bit better from a tech perspective.
18 The reality is that whether we like it or not, data
19 is being mined all the time, right? So, there's all
20 this data that's out there, and the credit card
21 companies, for example, or not the credit card
22 companies, but the-the credit data companies and the
23 credit card companies and the mortgage companies and
24 everything from getting your car to a credit card to
25 in some cases the job that you applied for they're

2 happily no longer in New York City. There is data
3 that people are accessing, right. So, I'm trying to
4 understand sort of from your perspective where is the
5 line as to okay, this is—it's okay to access this
6 data versus it's not okay to access the data at all
7 versus it's okay to access the data if we all know
8 what data is being accessed, right? So, I'm just
9 trying to understand sort of like that because it
10 seems to me like listening to the city, essentially
11 that's sort of part of their concern as well. So,
12 where do we go where we say okay don't ever access my
13 data versus it's okay to access my data versus I's
14 okay to access my data if we all know what the data
15 is being accessed. So, where do you fall out in
16 that, and how do we navigate the realities of the
17 fact that's just sort of the world we live in, right?
18 You surf the web and—and I know this happens tom me
19 and iPhone within five minutes, you know, I'm looking
20 for pants for my 10-year-old son, and I get 60
21 different popups from different pant companies saying
22 you can get really cool belts and pants and shoes for
23 your kids. Well, they must know somehow because
24 right. So, where does that line cross in terms of

2 how it interacts with government? I'm just genuinely
3 trying to understand this from your perspective.

4 ALEXANDER KRUPP: Sure. Well, I mean
5 from—from like the startup perspective like certainly
6 the Equifax the bridges (sic) are like quite
7 alarming. You know, every time we have one of these
8 incidents where, you know, the very large multi-
9 national companies like lose everyone's data, then it
10 undermines the trust that everyone has in the
11 technology disarray. And this doesn't even
12 necessarily hurt the companies that are very big
13 like, you know, Equifax or Google or Facebook because
14 they're—should they fail frankly, it's—it's really
15 the startups where you—like these big companies
16 create this problem of exposing data, and—but like
17 the—the trust issue really impacts startups even more
18 I think. In—in terms of like, you know, what should
19 be allowed, like—like certain—

20 COUNCIL MEMBER GREENFIELD: [interposing]
21 I don't know if that's my question. More
22 specifically when—when is government going too far as
23 far as accessing the data versus what to you think is
24 okay, this is not okay?

25 ALEXANDER KRUPP: It—

2 YUNG MI LEE: [interposing] I think
3 there's a difference between when the government
4 accesses data and what they're using that data for
5 [door bangs] and how it's used as opposed to a
6 project that has been giving up some private
7 information for a specific purpose. So, I think in
8 the case of RAIs, predictive policing, thousands of
9 New Yorkers are not consenting to the use of their
10 data, their information to be used for this purpose
11 that can result in racial policing, over-policing,
12 the invasion or privacy interests.

13 COUNCIL MEMBER GREENFIELD: Alright,
14 thank you for that. Thank you Chair.

15 CHAIRPERSON VACCA: Thank you. Thank
16 you. Our next panel. Taline Sanassarian, Tech NYC;
17 Josh North and Julia Fry, the Legal Aid Society;
18 Roderick Wallace; Julia Stoyanovich Roderick, are you
19 here? [background comment] Okay, we'll start with
20 Mr. Roderick Wallace. Would you identify yourself,
21 please?

22 RODERICK WALLACE: Well, my name is
23 Roderick Wallace. I am a Research Scientist in the
24 Division of-[bell]

2 CHAIRPERSON VACCA: That's okay. Go
3 ahead.

4 RODERICK WALLACE: That was quick. In
5 the Division of Epidemiology at the New York State
6 Psychiatric Institute. Some of my research involves
7 using algorithms as model systems for mental
8 disorders, and that's not a good thing. In the past
9 I have done work for the Uniform Firefighters
10 Association Occupational Health, and that required
11 going to look in detail at the Rand models that
12 nobody can see. We went in under Freedom of
13 Information some years ago and we got not only the
14 models, but we got data, managed data. The models by
15 our citing models response time model based on model
16 calculated response time for the first responding
17 unit. Response time is a good index or an ambulance
18 where you take the sick person to the hospital.
19 That's why you have to build the hospital around the
20 patient. So, response time is not a good measure.
21 Model calculated response time is a worse measure.
22 Damage measures, empirical damage measures have to be
23 used to determine Fire Department policy. Now, why
24 would they go to this? Why would they do this?
25 They're not stupid. They know this. At the turn of

2 the 20th Century fire companies were established in
3 fire hire incidence tenement areas. Lots and lots of
4 them close together because in 1905 and 1910, they
5 understood this dynamic, and they wanted to keep
6 those tenements from burning down. If you use a
7 response time model, you will automatically target
8 high fire incidents in tenement neighborhoods for
9 fire company eliminations. Now, who in the 1970s was
10 living in high fire incidents neighborhoods? The
11 minority voting blocks. So a Rand model and it's—
12 it's really simple stuff. I mean you wouldn't be
13 allowed to use this on fish populations, models of
14 this quality, but behind the screen they use these
15 models on human populations in the targeted high fire
16 incidents, high population density neighborhoods, but
17 withdrawal of essential fire service. Those models
18 are really dumb, and they haven't changed since the
19 1970s, and we have books on this stuff. I'll—I'll
20 leave you one of our books. This was done on the—an
21 investigator award on Health Policy Research with
22 Robert Wood Johnson Foundation, which is no small
23 thing, and it goes into more detail [bell] than the
24 papers I've handed out, which are 2011.

2 CHAIRPERSON VACCA: Thank--thank you. You
3 touched on the Rand Formula and so did I. I have a
4 New York Post Article from 2010 where they talk about
5 it, and I think it's relevant to read some of the
6 remarks. In 2010, we were facing a budget shortfall.
7 The city almost went bankrupt in 1975, as you know,
8 and there was a Rand formula then also. The--the
9 Mayor's initial budget plan called for closing 25
10 companies--

11 RODERICK WALLACE: [interposing] Yes.

12 CHAIRPERSON VACCA: --by July 1st.

13 RODERICK WALLACE: Yes.

14 CHAIRPERSON VACCA: With more closing
15 likely to come, if other savings were not realized--

16 RODERICK WALLACE: [interposing] Yes.

17 CHAIRPERSON VACCA: --the fire units up
18 for closing would--would be announced that week. One
19 of those slated for closing, by the way, was the fire
20 company in my own district, the Ladder Company on
21 City Island--

22 RODERICK WALLACE: [interposing] Right.

23 CHAIRPERSON VACCA: --in the Bronx, which
24 we fought and we kept open. Once again, the Fire
25 Department is making cuts with computer models based

2 on data of questionable validity releasing incomplete
3 and misleading statistics when it suits their
4 department's purposes, and refusing to release raw
5 data so that their claims can be verified by anyone
6 outside the department. But FDNY Spokesman Frank
7 Gribbon says this time it will be different. The
8 Chiefs are looking at other factors as well. There's
9 a whole host of criteria and then it's the expertise
10 of the Chief Officers who have to consider all the
11 facts and all of the data. Gribbon says that the
12 department does not share the data behind the models
13 nor will it discuss the specifics of how the models
14 work. The public doesn't understand Gribbon said.
15 In terms of what the criteria off the closings, we're
16 not going to convince anybody by discussing, you
17 know, the facts. We're not going to convince anyone.

18 RODERICK WALLACE: It takes your breath
19 away.

20 CHAIRPERSON VACCA: It takes my breath
21 away. Now, at the time when they were going to close
22 City Island, that's in my district, and those of you
23 who know City Island we are in a—they are an isolated
24 community of 4,200 people, and I went up to City Hall
25 at the time. I met with the Deputy Mayors and all,

2 and I was told Mr. Vacca, you are one of last when it
3 comes to Fire Department runs. That's why you're
4 being closed. You firehouse on City Island is the
5 last based on the number of runs. So, I said what
6 else went into your calculations? How about the fact
7 that this is an island that it's cut off from the
8 mainland, that response has to be considered when you
9 have off-island fire companies coming, but we have
10 many, many wood frame structures, and I went into the
11 whole. Nothing else supposedly was--was considered
12 except the fact that the number of runs was small,
13 but here when you have an official at the time from
14 the Fire Department being quoted as saying, Oh, the
15 public wouldn't understand. The public would
16 understand.

17 RODERICK WALLACE: Okay, there's a--

18 CHAIRPERSON VACCA: [interposing] The
19 public has a right to know.

20 RODERICK WALLACE: There's a civil law in
21 the private fund. A certain group wants to go to
22 damage measures, empirical damage measures as to the
23 principal tool for policy decisions. Most certainly
24 insurance. You wouldn't cancel your insurance on
25 weekends because you're--you're not traveling on

1 weekends. I mean if something happens on City Island,
2 you're—you're done. Breezy Point, we're down. The
3 deployment, the number of fire companies, we're about
4 50 fire companies down from what we were before the
5 Bronx burned out. We're about 5,000—2 to 5,000
6 firefighters down. We had a tax. We have—we have
7 more tax on the city. We have global climate change.
8 We're going to have more hurricanes. These people
9 are using models from the 1970s that failed. It's
10 known that they failed. Those models provide a
11 shield, a legal shield against accusations of
12 arbitrary and capricious. That's all those models
13 do. Those models do not adequately manage fire
14 service. Large areas of the city wouldn't have
15 burned down in the '70s if they had.

17 CHAIRPERSON VACCA: Certainly not if we
18 had knowledge of what the criteria was, and that we
19 could have oversight here at this body if the
20 community boards could know what the criteria was and
21 the general public and the advocacy community. But
22 now we sit here today in 2017, and we still don't
23 know what the models are. We still don't know what
24 goes into the data that makes these agencies--

2 RODERICK WALLACE: [interposing] Most of
3 the models are actually buried in the scientific
4 literature and the handout that I've—I've given out
5 is a 2011 summary of what we were able to pull out.
6 They publish—there are people in the Fire Department
7 they publish stuff in the deep scientific literature
8 that you can winkle out, and you can make a picture
9 of their algorithms, and it's-it's really—I--I don't
10 know how to say this. You wouldn't manage a fish
11 population using the Fire Department algorithms. You
12 wouldn't be allowed. The—I mean the environment
13 groups would close you down, but we have been
14 managing fire service for humans using models that
15 aren't fit for the management of animal populations,
16 and this continues. The Firehouse citing model, the
17 response time model. They've gone to dispatch
18 algorithms on top of these two models. I mean this
19 is not what you need to confront global terrorism or
20 global climate change.

21 CHAIRPERSON VACCA: Thank you. Thank you
22 so much. Next. Please identify yourself.

23 TALINE SANASSARIAN: My name is Taline
24 Sanassarian. I the Policy Director for Tech NYC, and
25 I wanted to thank your for having us here today,

2 Chair Vacca and member of the Technology Committee.

3 Tech NYC is a non-profit trade group with the mission

4 of supporting the technology industry in New York to

5 increased engagement between our more than 500

6 members, New York City Government and the community

7 at large. Tech NYC believes that New York's unique

8 business ecosystem as a global center for so many

9 industries such as finance, media, fashion, art and

10 real estate serves to strengthen the technology

11 businesses that call New York home and in turn

12 technology further strengthens those incumbent

13 industries and our communities. With that in mind,

14 we are here today to express our concerns regarding

15 Bill 1696 before you which seeks to amend the

16 Administrative Code in relation to automated

17 processing and data for the purpose of targeting

18 services, penalties or policing to persons. At the

19 outset, we want to be clear that we strongly believe

20 in transparency and ensuring that algorithms

21 including those that govern the provision of public

22 services treat residents fairly and without any

23 inherent biases. This particular proposal, however,

24 is unworkable from the perspective of many of our

25 members who are engaged in the local tech community.

2 Specifically, imposing disclosure requirements that
3 will require the publishing of confidential and
4 proprietary information on city websites could
5 unintentionally provide an opportunity for bad actors
6 to copy programs and systems. This would not only
7 devalue the code itself, but could also open the door
8 for those looking to compromise the security and safety
9 of systems potentially exposing underlying sensitive
10 citizen data. Indeed, one may look no further than
11 their recent breaches of data including at Equifax,
12 which affected as many as 145 million Americans and
13 at the Office of Personnel Management, OPM, in which
14 sensitive personnel information was stolen from
15 current and former government employees and
16 contractors. These are examples of the kinds of
17 dangers that both public and private actors currently
18 face, and given the sensitivity of the underlying
19 data, it is crucial that any relevant law or
20 regulation treats security concerns seriously. We
21 are worried that this bill in its current form does
22 not do that. Further, as you know, algorithms are
23 used to improve service and reliability in numerous
24 city services such as hospitals, emergency services,
25 schools and courts. As such, the lack of a clear

2 understanding of the impact of these systems is
3 concerning—on—on new systems is concerning. Also,
4 mandating proprietary information, which many
5 companies have built their businesses on, be shared
6 on public websites could cause a chilling effect on
7 local companies willing to do business with the city.
8 Unfortunately, this proposal does not take these
9 concerns into account and, therefore, we urge caution
10 before imposing such broad and sweeping mandates.
11 Instead, we ask the committee work with the private
12 [bell] and public sectors to find a more workable
13 solution that could increase transparency while
14 allowing companies and contractors to protect
15 confidential information, and in conclusion, Tech NYC
16 believes that there could be better ways to address
17 these concerns, and under—and underlying—of the
18 underlying concerns, and with this bill, and urges
19 this committee to more closely examine potential
20 ramifications of this legislation. We are happy to
21 provide any assistance or input that the committee
22 requests towards that effort. Thank you for your
23 time today, and we look forward to continuing this
24 conversation.

25 CHAIRPERSON VACCA: Thank you. Next.

2 JOSHUA NORTH: Thank you. I—I just want
3 to clarify we have two representatives from Legal Aid
4 here today, if we can give two or three components
5 that would be great if that's okay. Thank you. My
6 name is Joshua North, and I'm a staff attorney with
7 the Decarceration Project at the Legal Aid Society.
8 We want to thank you, Council Member for having us
9 and in giving us the opportunity to testify [door
10 bangs] on what the Legal Aid Society believes is one
11 of the most important and concerning issues of our
12 time: The rise of good data and the corresponding
13 lack of transparency and accountability that's come
14 with it. Today, we're pleased to submit testimony on
15 behalf of the Legal Aid Society and we will focus of
16 the proliferation of algorithms throughout the
17 Criminal Justice System and its impact on our clients
18 in New York City. While shortcomings of algorithms
19 are used by tech companies on Wall Street have been
20 front page news, there's no public discussions of the
21 dangers posed by algorithms now being used in
22 virtually every aspect of the Criminal Justice
23 System. While such algorithms may not fuel
24 catastrophies like the 2008 Financial Crisis or the
25 2016 federal elections, their burden is being

2 disproportionately shouldered by our clients and
3 their communities. These algorithms are riddled with
4 concepts of indoor-individ-excuse me, individualized
5 justice standing in opposition to principles of equal
6 protection, and challenge both due process and
7 fundamental fairness. They may result in wrong
8 convictions. They undermine the presumption of
9 innocence. Critically, they largely and been
10 unregulated and hidden from public scrutiny. Our
11 written testimony discusses separate topics where
12 algorithms are currently being used in the Criminal
13 Justice System: Bail, Predictive Policing, DNA that
14 my colleague Julie Fry is going to testify about,
15 Family Court, Juvenile Representation in Delinquency
16 proceedings, as well as Parole proceedings and sex
17 Offender Registration. I would like to specifically
18 focus on bail, and I will reiterate or at least
19 endorse the comments of my colleagues from the Bronx
20 Defenders and Brooklyn Defender Services. We
21 testified earlier. There are currently two
22 algorithms being used in New York City right now for
23 bail determinations. The first has been used since
24 2001, and it's used to predict failure to appear. To
25 our knowledge, this tool has never been independently

2 studied or verified and anonymized data and source
3 code has never been released to independent third
4 parties. It's currently administered by the CJA
5 through an interview that occurs before every
6 arraignment in every single case in New York City.
7 The tools give judges one of three recommendations
8 about someone's likelihood of returning to court, and
9 the Mayor's Office of Criminal Justice and the CJA
10 have openly admitted that this tool is out of date,
11 and ineffective. For the past few years, MOCJ has
12 worked with CJA to redevelop the tool, but late last
13 year the redevelopment process was terminated. In
14 September MOCJ and CJA conducted a forum at NYU
15 School Law that Legal Aid attended, and was discussed
16 the development of a new risk assessment tool that
17 Scott Levy of Bronx Defenders mentioned would be
18 unveiled in late 2018 and 2019. The City Council I
19 would agree should seek to step in and regulate these
20 tools before they are developed. [bell] I will also
21 point--if I can just have one more second--that in
22 April 2016, the Mayor announced a \$17.8 million
23 Supervised Release Program that is currently being
24 utilized in New York City because of limited space of
25 3,000--a limited space of 3,000 spaces. The City has

2 developed and is currently using a risk assessment
3 algorithm to determine eligibility for that program.
4 To our knowledge that data has not been released for
5 independent peer reviewed research, and we are
6 seeking to get that data currently from MOCJ and CJA
7 so that we can do that ourselves, and with that, I
8 will turn the DNA portion over to my colleagues.
9 Thank you.

10 JULIE FRY: Good afternoon. My name is
11 Julie Fry. I'm an attorney with the DNA Unit of the
12 Legal Aid Society. Year after year we learn that
13 innocent people have spend decades in jail based on
14 faulty hair comparisons, bite mark analysis and arson
15 investigations, what history has shown to be junk
16 science. Courtrooms have proven ill equipped to
17 stand guard against facts and the sciences, and there
18 is little public or scientific oversight that
19 regulate their use. This bill provides much needed
20 accountability in the absence of more robust
21 regulations from courts or the scientific community
22 itself. Its adoption will act as a barrier to
23 wrongful convictions and will help ensure that they
24 are an impartial administration of justice in New
25 York City. T he D-DNA Unit at the Legal Aid Society

2 has noted with concern the increased use of closed
3 source proprietary software based on complex
4 algorithms and DNA interpretation. The Legal Aid
5 Society established a DNA Unit in 2013 in an effort
6 to train lawyers in the use of DNA evidence and to
7 challenge the use of experimental and potentially
8 scientifically unsound DNA interpretation techniques
9 in the courtroom. Attorneys in the DNA units, one of
10 the only five (sic) hearings in the country to
11 preclude the use of an algorithmic based DNA
12 interpretation software. The New York City's own
13 Office of the Chief Medical Examiner's Forensic
14 Statistical Tool or FST. FST is a probabilistic
15 genotyping program. It's designed to interpret
16 complex DNA mixtures that would otherwise be
17 uninterpretable. In practice OCME analysts would put
18 into a report or testify as to FST results supporting
19 the inclusion of a suspect in the DNA mixture.
20 However—however the analyst issuing the reports are
21 testifying on the witness stand had no idea how FST's
22 calculations were actually performed. There was no
23 way to verify the soundness of FST's conclusions.
24 The defense bar repeatedly sought the FST source code
25 in order to consult with an expert regarding how the

2 FST performs its mysterious calculations. In State
3 Court, we lost every time that the City prosecutors
4 and OCME who vociferously opposed our efforts to
5 obtain this code. The finer details on how FST
6 operated remained in the dark. Last year Judge
7 Valerie Caproni ordered the OCME to turn over their
8 source codes to the Federal Defenders of New York.
9 The Federal Defenders were the first organization in
10 over five years to get its hands on FST's
11 instructions that had an expert to review the code.
12 The expert found that FST was performing calculations
13 differently than the OCME—the OCME described in
14 court, differently from what OCME described to the
15 New York State Commission on Forensic Science and
16 differently from what DOC—OCME described in their two
17 scientific journals, and I should say that this
18 difference was a difference that favored the
19 prosecution. However, their expert was prevented by
20 a court order from revealing the specifics because
21 the—the specifics of what he saw in the code. At
22 this court, FST has been used in thousands of cases.
23 People pled guilty based on FST results. People lost
24 their child based on FST results. People went to
25 prison because of FST. We renewed our—we renewed our

2 fight in State Court to obtain the source codes to
3 FST. We needed to know how bad the problem was.
4 OCME—OCME and New York City prosecutors continued to
5 fight against us in court. However, OCME employees
6 admitted that there was an error in the FST code,
7 albeit a different one than what the expert in Coney
8 (sic) case described and that FST has been changed.
9 We recently filed a complaint with the Inspector
10 General's Office and due to their—the press attention
11 this received, we're hopeful that the entire code
12 will be released by OCME soon. However, the OCME has
13 started phasing out FST and instead replace it with
14 another proprietary software called Starnik (sic).
15 Unfortunately, Starnik is also closed source and has
16 itself had two verified coding errors that resulted
17 in miscalculations. The problem with closed source
18 is not limited to searching for errors. It also has
19 to do with subjectivity. Different DNA mixture
20 interpretation software programs are getting answers
21 in the same case. As one of the Starnik designers
22 stated, these programs, "Contain elements of
23 subjectivity program and design."

24 CHAIRPERSON VACCA: You're going to have
25 to conclude.

2 JULIE FRY: Sure.

3 CHAIRPERSON VACCA: Because the clock has
4 broken or stopped.

5 JULIE FRY: Oh, sorry.

6 CHAIRPERSON VACCA: So that you could sum
7 up.

8 JULIE FRY: I didn't hear the beep so-

9 CHAIRPERSON VACCA: I'm glad-I'm glad it
10 helped you, though. It's okay. I'm just saying.

11 JULIE FRY: Okay. So, in conclusion the-
12 the only way for the-the city to ensure that
13 questionable funded clients seep out of our courts is
14 to require all city agencies to use open source
15 forensic software. This should be a procurement
16 requirement. Science must be open to scrutiny. If
17 not, the city will be welcoming more wrongful
18 convictions within the five boroughs. Thank you.

19 CHAIRPERSON VACCA: Thank you. [door
20 bangs] Thank you all. [background comment] Oh, I'm
21 sorry one more. Please come up. Let them go because
22 this way you have the desk, and why don't we call up
23 the next panel. If the four of you can leave, and
24 we'll-Okay, alright.

25

2 JULIA STOYANOVICH: So, I'll be first one
3 to let go?

4 CHAIRPERSON VACCA: Oh, are you with you
5 the Legal Aid? [background comment, pause] Oh, okay.

6 JULIA STOYANOVICH: Because this panel
7 has five people. So, should they be the first person
8 and the next one?

9 CHAIRPERSON VACCA: Yes, she'll be first
10 person.

11 JULIA STOYANOVICH: Okay.

12 CHAIRPERSON VACCA: No, stay there. You
13 can take a—take a seat and then I'll call up William.
14 [background comment] Yes, I will. William Benzio,
15 Charlie Moffett, and then we have one more panel
16 after that. You go first.

17 JULIA STOYANOVICH: Good. I've waited
18 patiently, right? Okay, my name is Julia
19 Stoyanovich, and I am ecstatic to be here simply.
20 I'm a resident of New York. I hoped a PhD in
21 Computer Science from Columbia, and I am an Assistant
22 Professor of Computer Science at Jackson University
23 in Philadelphia, and also an affiliated faculty at
24 the Center for Information Technology Policy at
25 Princeton. In my teaching and my research which is

2 generously funded by the National Science Foundation,
3 I focus on data management and data science topics
4 including algorithmic ethics, fairness,
5 accountability and transparency, and I'm also the
6 founder of the Data Responsibility Consortium. I
7 would like to express my enthusiastic support for the
8 bill. However, it is my belief that the current
9 bill, the current one of discussions requires
10 significant improvements to achieve its intended
11 goal. In my statement I will focus on three critical
12 [door bangs] shortcomings of the bill. Namely, that
13 algorithmic transparency cannot be achieved without
14 data transparency. The results received by the user,
15 by interacting with the system, must be made
16 interpretable, and currently that—the transparency
17 will require significant technological efforts on the
18 part of the agencies. For which more time than will
19 be necessary than the 120 days with our current
20 provision. My first point essentially means that
21 while making source code publicly [door bangs]
22 publicly available is a significant step towards
23 transparency as long as the posted code is readable,
24 well documented and complete, very importantly. We
25 include transparency. However, other of the

2 processes simply cannot be achieved without
3 transparency of data. In the case of predictive
4 analytics—analytics like used with the policing, data
5 is used to customize algorithm behavior, and this is
6 called training. The same algorithm may exhibit
7 radically different behavior, made different
8 predictions, different mistakes and different kinds
9 of mistakes and different kinds of mistakes when
10 trained on two different datasets. And so without
11 access to training later, we cannot know how a
12 predictive analytics method will actually work, how
13 will it—will it behave. But this issue is not to
14 predictive analytics. Other decision making
15 algorithms such as for example squaring methods like
16 that DS Pidod (sic) which is used to prioritize
17 homeless individuals for receiving services and the
18 matchmaking efforts such as those used by the
19 Department of Education to assign children to spots
20 in public schools do not exclusively attempt to
21 predict future behavior based on past behavior, but
22 all surround data in very important ways. These
23 algorithms are designed and validated using data.
24 So, I would like to propose the following
25 interpretation of transparency. In addition to

2 releasing training and validation, data sets whenever
3 possible agencies shall make publicly available
4 [bell] information about the data collection and
5 pre-processing. In terms of assumptions, including
6 criteria, known sources of bias and data quality.
7 Agencies shall make publicly available summaries of
8 statistical properties of the data sets while using
9 stat-of-the-art methods to preserve the privacy of
10 individuals. And when appropriate, we can also
11 privacy preserving synthetic data when we cannot
12 release data publicly. I will conclude here, but my
13 written testimony contains more specifically about
14 inter-collectability (sic) for the user, for the
15 auditor. And also, I give some examples of similar
16 legislation in Europe where much than 120 days was
17 provisioned.

18 CHAIRPERSON VACCA: Thank you. I'm
19 reading your testimony. It's very informative. So,
20 thank you for your—for your insight in coming here
21 today. Sir, would you identify yourself, please.

22 CHARLIE MOFFETT: Hello, Council. Thank
23 you for allowing me the opportunity to speak today.
24 My name is Charlie Moffett. I am currently a
25 graduate student at NYC Center for Urban Science and

2 Progress. This past summer I conducted some research
3 on behalf of the Accountability and Algorithms
4 Committee and the Civic Analytics Network, which is a
5 network of chief data officers, and technologists and
6 government across the country. This was done
7 specifically in my home town of San Francisco, but
8 gets shared across the county with different
9 technologists and government, and New York City
10 participates in this committee by way of MODA also.
11 So, most of the research that I've done would be an
12 echo of some of the things that have already been
13 said here today, but I just wanted to contribute a
14 couple extra points and some of the recommendations
15 that I made to that committee. The first being
16 with regard to publishing source code. Even if an
17 algorithms code is known, often times it will be too
18 complex for most folks to understand. So, it—what we
19 might consider truly interpretable algorithm would be
20 something that would allow us to understand the
21 outcomes of that algorithm not just merely the
22 process by which those outcomes were produced but a
23 key component of this for—for any agency that wishes
24 to use automatic—automated decision making or
25 algorithms would be to make clear their confidence in

2 their data. So, you know, we-we know the age old
3 adage about garbage in, garbage out, but being clear
4 about the-the confidence in that data quality that
5 was used to train the algorithms would be essential.
6 A number of useful methodological recommendations
7 have already been set forth by the research community
8 in terms of address expandability, and I would also
9 add that we should question the use of an algorithm
10 law if it can't be explained or-or meaningfully
11 explained to-to the general public. In terms of self
12 testing, it's critical to design terms of service
13 that welcome audits of the algorithms as your
14 legislation has-has noted. I would argue that the
15 burden should fall however on the-on the vendor or
16 agency that created the algorithms. Too often we-we
17 rely on the active auditing but really the-the people
18 in the best position to explain the systems are the
19 ones that created them, but any audits that come
20 about should-should be documented and made available
21 [bell] regarding the methods and the results of those
22 efforts-efforts. The-the last kind of-I'll conclude
23 with this, what was communicated to me by different
24 professors of law and-and thought leaders in the
25 field [door bangs] was the biggest source of power

2 that government holds in this arena is—is leveraging
3 their position when contracting with vendors, and
4 making sure that the—the terms of those contracts
5 aren't restricted in terms of how information about
6 the algorithms can be released in the future.
7 Secondly to—to, you know, I think there needs to be a
8 set of—there needs to be a plan in place for what
9 happens when the algorithms go wrong or, you know,
10 if—if mistakes are made specifically what the—what
11 the course of redress would be for any individuals or
12 groups.

13 CHAIRPERSON VACCA: [off mic] You need
14 to sum it up.(sic)

15 CHARLIE MOFFETT: The last point here is
16 that users should be made aware when and why
17 algorithms are being employed as well as the degree
18 to which human agency is being exercised in such
19 situations. I have a lengthy 10 and 12 page research
20 document that kind of goes into more this in-depth
21 and would be happy to share any of that upon request.
22 Thank you for the opportunity.

23 CHAIRPERSON VACCA: And thank you. I
24 thin you raised some good points. Contractors use
25 algorithms so legislation would probably have to

2 include contractors and what transparency obligations
3 contractors have toward their use of algorithms, and
4 data. The other thing you mentioned was about making
5 sure that the data is understood, the algorithms are
6 understood. Originally when DOE put things on their
7 website— They're making faces at me. When DOE put
8 things on their website, many parents did not
9 understand what they were talking about. So we
10 wanted transparency and we got it, but it was not in
11 an understandable format. So, that's another
12 challenge. Some bureaucracies don't necessarily want
13 information to be easily understood, but we certainly
14 want to be inclusive of—of everyone when it comes to
15 them knowing the—the facts. So, you raised two good
16 issues.

17 CHARLIE MOFFETT: Yeah, I've heard lines
18 drawn to media literacy. People starting to talk
19 about algorithmically received data literacy. So,
20 you know, as you mentioned it's not just enough to
21 make everything available. If it can't be understood
22 by the people it's impacting, what use does it have.
23 So, different suggestions have been made about
24 intermediary bodies or—or perhaps people interested
25 in the—the interest of the public maybe having some

2 sort of funnel to explain what is made transparent to
3 those end users.

4 CHAIRPERSON VACCA: I just—think it's a
5 question of simpli—simplification that as we proceed,
6 people in government have to be aware of what we
7 would expect. Being clear and concise, but also
8 being—making sure the information is formatted in as
9 simple a way as possible, and clear. Yes.

10 JULIA STOYANOVICH: Well, one important
11 part of this is giving the stakeholder, the users,
12 the auditors, the developers of the algorithms
13 sufficient data context in the way that's these
14 explanations are provided.

15 CHAIRPERSON VACCA: I see.

16 JULIA STOYANOVICH: Right, so when you
17 return a score to and individual like 42, but the
18 systems actually rates them, what is the individual
19 to conclude about whether their—their score is high
20 enough to be in the top 10 or not high enough. What
21 can they do to change things, right? And explaining
22 things in a way that it's interpretable and
23 actionable. It requires the release data in a way
24 that's very thoughtful that does not violate the
25 privacy and the trust of individuals whose data is

2 included in the data sets. So, these are very
3 difficult and exciting technical questions.

4 CHAIRPERSON VACCA: Thank you. Thank
5 you, sir. Would you identify yourself, please?

6 WILLIAM BANFIELD: Hey, yeah. First of
7 all, thank you so much for having this hearing, and
8 for letting me speak. My name is William Banfield.
9 I'm a tech worker here in New York City. I work for
10 one of the largest open source companies in the city,
11 but I have to stress that I am not here on behalf of
12 that company. I'm here to discuss this issue as a
13 private citizen, and I'd just like to talk about
14 (coughs) the value in open-of open source. In terms
15 of a parable relating to that company, in 2013, that
16 company was diversion of its product with an
17 incorrect implementation of the Wrapped Consensus
18 Protocol. What that meant was that potentially data
19 could be lost. However, that company was an open
20 source product publicly available and viewable on
21 GitHub. Anybody could download it and compile it.
22 In 2013, a member of the open source community
23 downloaded it, compiled it and ran his own set of
24 tests against it and wrote a lengthy blog post about
25 the set of issues with this piece software. The open

2 source community spent the next several years
3 lambasting them, and eventually that private
4 contractors was hired and the fixes suggested by him,
5 by or implemented and newer versions of the software
6 and the tests were run publicly and visibly current
7 to this day, and for that reason an implementation
8 error caused by a private company could have resulted
9 in tons of data loss, but because of the power of
10 opens source and visibility, it did not. And so I
11 think that largely speaks to the power of algorithmic
12 visibility by the public and then secondly I would
13 like to address the point of security. Again, as a
14 technologist I feel fairly stable making the
15 assertion that security through obscurity is not a
16 comfortable way to—or a practical way to enforce
17 security. Many of the most powerful algorithms for
18 security that we use every single day are again
19 visible public process or projects. First and
20 foremost spoken (sic) SSL as a public project visible
21 again on GitHub and it is the standard implementation
22 of TLS and it has a government certification of TLS.
23 So, I find it very silly to say that keeping things a
24 secret improves the security, and those are my main
25 statements.

2 CHAIRPERSON VACCA: [off mic] Thank you.

3 [on mic] Thank you very much. Our next and our last
4 panel Sumana Harihareswara Burt Motaldi or Motalvi,
5 Alexander Rich. That is easy. [background comment,
6 pause] Would you want to go first? Yes.

7 SUMANA HARIHARESWARA: Hi, Council
8 Member. It's me again.

9 CHAIRPERSON VACCA: Yes.

10 SUMANA HARIHARESWARA: Hi. Sumana
11 Harihareswara who spoke to you about data last month.

12 CHAIRPERSON VACCA: With the last
13 hearing.

14 SUMANA HARIHARESWARA: I was.

15 CHAIRPERSON VACCA: You were great.

16 SUMANA HARIHARESWARA: Well, thank you.
17 I hope impress again.

18 CHAIRPERSON VACCA: Thank you.

19 SUMANA HARIHARESWARA: You have to hold
20 up signs like 10 and so on. So I'm speaking as a
21 consultant, programmer and citizen who wants to tell
22 you a few things in response to what others have said
23 earlier today.

24 1. Tech NYC does not speak for me. I
25 am an entrepreneur and a programmer in New York City

2 who's been in this community for more than a decade
3 and I'm an entrepreneur who works on open source
4 tools that help governments make decisions. Open
5 source and transparency are a way to better security.
6 If there are businesses in our community that are
7 making money off citizen data and can't show us the
8 recipe for the decisions they're making, they need to
9 step, and they need to get better and we need to hold
10 them accountable. I also want to bring out that the
11 phrasing: algorithms, analytics and words like that
12 probably need a little bit more attention to the
13 definition of the law, speaking of definitions as I'm
14 sure you've noticed, the placement of this particular
15 bill in 23502 means that as Julia House spoke earlier
16 that means that there is no private road of action.
17 That means that there's cutout for private-things
18 that are private, secret, the trade secrets,
19 proprietary code. We need to fix the procurement
20 process to make sure that we aren't taking in as many
21 vend-vendors, right? We need to talk to these
22 vendors, and use the leverage we have to say you
23 should be using open source. You could be right
24 using taxpayer money, should be-belong to the public
25 the same as the public parks should be available to

2 the public, but beyond that also in this bill we
3 should iterate towards making it so that this—this
4 particular great goal of algorithmic transparency
5 isn't limited just to a code that no vendor can wave
6 the flag of trade secret or patent on. And I'll
7 speak a little bit about don't let them try to tell
8 you oh, look here's an algorithm. Here's a formula.
9 I'll give you a piece of math. It's written on
10 paper, but I won't show you the source code because
11 I've decided to claim that's a patent or a trade
12 secret. Don't let them fool you like that because
13 then you don't actually know the recipe. You don't
14 know it's in a dish that's been served. So,
15 audibility if it's good enough for the restaurants in
16 New York City, it's should be good enough for our
17 code. Thank you.

18 BRYN BORELLI: Hi, Councilman. Thanks
19 for having this hearing. I'm—my name Bryn Borelli
20 (sic) I'm a software engineer here at Google New
21 York. I'm speaking as a private citizen and not on
22 behalf of my employer. I wanted to directly address
23 some of the concerns laid out by the Mayor's
24 Enterprise Applications Office, Enterprise
25 Architectural Office. Sorry. So, all of the

2 objections raised so far have been about existing
3 programs for ones that already serve the public and
4 have been so for some time. There is none of the
5 concerns about the existing security models of these
6 programs or the onerousness of rewriting them to the
7 freestanding programs, as I said. So, they're
8 suitable for open source apply the new development.
9 So, development undertaken by the city can be held to
10 this high standard of transparency by default. I
11 think at the very least if—if there's pushback from
12 existing agencies we could enforce this at like the
13 procurement level and at that agency level.

14 Secondly, I work in one of the biggest shared code
15 bases in the world if not the biggest and I believe
16 that public numbers that Google has two lines of
17 source code and we all worked on it together. I
18 wanted to say that the concerns laid out about
19 centralized review and their, and the lack of
20 centralization of security and privacy review, and
21 the lack of centralization of the existing review of
22 equitability. Google does centralize privacy and
23 security reviews. It scales to the largest, one of
24 the larges code bases in the world, and this—people
25 of New York should be able to obtain a list of all

2 completed program whether open source or not, but
3 police persons, target services and post-penalties.
4 I feel like adding these two goals, the procurement
5 goal and the goal of being able to list programs that
6 are currently being kept from the public that are
7 being used to make decisions, should be added to the
8 test of those. Thanks.

9 CHAIRPERSON VACCA: [off mic] Thank you.
10 Okay, next.

11 ALEX RICH: Hi. My name is Alex Rich.
12 I'm a cognitive scientist and data scientist at New
13 York University. I want to thank you for holding
14 this hearing and suggesting this bill. I just want
15 to speak very briefly on the topic of bail (sic)
16 decisions that's already come up several times. So,
17 we're talking about sort of two different directions
18 of that kind—that kind of condone. So, people have
19 talked a lot about these for-profit companies that
20 are creating systems that are using a very opaque way
21 and there's a lot of accusations of bias in those
22 systems, but there's also recent academic that I
23 think has been brought to your attention from people
24 at John Jay College and Stanford as well as other
25 places. So, just note these algorithms can instead

2 be in ways that are not just open source but, in
3 fact, are quite understandable by-by an everyday
4 person. So, you know, may be systems that are just
5 basically a set of simple rules that perform
6 basically undistinguishable from these very complex
7 algorithms, and like they can lead more people to
8 released on their own recognizant than our current
9 system. And so, you know a system like this lead a
10 lot of people to feel like they actually have if not
11 control over their own lives, at least understanding
12 of-of how this is used and how decisions are being
13 made for them. So I think this kind of transparency
14 in open source will be a really important first step
15 towards encouraging that kind of viability (sic) in
16 society, one that, you know, people can understand
17 and people can, you know, feel like it's working for
18 them instead of opaquely against them. Thank you.

19 CHAIRPERSON VACCA: I thank very much.
20 So much was brought up today. You know, I'm just
21 sitting here thinking to myself and I'm say, if you
22 are-if you're convicted of a crime you know that you
23 have the right to appeal. You know what you were
24 convicted of and why and how, but if you're assigned
25 high school X, and you want to appeal, you do not

2 know why you—you were not assigned high school Y. You
3 were just assigned a high school. So, on what basis
4 were you denied what you wanted? Your appeal has to
5 be based on your pleading that you want be near home,
6 or you want to go to a special program, but you don't
7 know how you were denied the first high school. You
8 don't know specifically why you were denied food
9 stamps or why you were placed in a certain public
10 housing development, and could go down the list.
11 What determines what fire companies were proposed for
12 closing over the year when we had firehouse close-
13 closures? It's an illusive Rand formula that no one
14 talks about as to specifically what is the formula.
15 So, so much of what we were trying to arrive at today
16 is—and I hate to use the word over and over again—but
17 is a transparency, but that is because people are
18 entitled to know the facts. They're not—they're
19 entitled to know how government decisions are made
20 and on what basis. I would say—I would say who makes
21 government decisions, but I think we're—we're
22 sometimes talking about what? Because they're being
23 made by data—they're being made by computers that--
24 We see data that create algorithms, and that's a
25 little much.

2 SUMANA HARIHARESWARA: To the point of
3 sort of understandability there, I alluded to the
4 sort of report, the report by President Reeves and
5 New York City Restaurants, right? We're not saying
6 every single person in New York has to go and look
7 around at the kitchens. We provide. We—we worked on
8 it and we figured out how to provide an easily
9 understandable thumbnail that people can look at and
10 then yes if they want to understand they can look at
11 more details about this permit and what assessment—what
12 assessment it goes, and what the rules are, they can go
13 do that. We know how to do that work when it comes
14 to medicine, when it comes to health, when it comes
15 to the report cards for schools, although I—I know
16 it's in controversy, we can figure out how to do
17 this, and we will be able to—we'll lead it if we do.

18 CHAIRPERSON VACCA: Oh, yes definitely.
19 This is—this is a—a discussion that places New York
20 City in the lead again because no other municipality
21 or state has had this discussion. The legislation is
22 meant to create that discussion, and we're looking
23 for a product at the end of the day so--

24 SUMANA HARIHARESWARA: [interposing] As
25 we find in the open source software community and as

2 I think Mayor Bloomberg found when he was introducing
3 311, introducing the need of transparency and the
4 goal of greater transparency, and it's exposing all
5 sorts of problems, inefficiencies, biases, such that
6 along the way of implementing this work you have done
7 a great deal of work right here in City Hall as side
8 effect.

9 CHAIRPERSON VACCA: Without further to
10 do, it is now 3:20 and with no further questions or
11 who are—deeply wish to testify, this hearing is
12 hereby adjourned. [gavel] Thank you all for coming.

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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. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date October 25, 2017