CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON TECHNOLOGY

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February 12, 2109
Start: 1:25 p.m.
Recess: 4:00 p.m.

HELD AT: Council Chambers – City Hall

B E F O R E: PETER A. KOO
Chairperson

COREY JOHNSON
Speaker

COUNCIL MEMBERS: Robert F. Holden
Brad S. Lander
Eric A. Ulrich
Kalman Yeger

COPIC MEMBERS: Clayton Banks
Steven Lewis
Pauline Toole
Dawn Barber
Samir Saini
Joanna Choi
Ben Kallos
Jeff Thomas
Isidro Medina

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

Jeff Thamkittikasem, Director, Mayor's Office of Operations, MOO

Julia Stoyanovich, Assistant Professor of Computer Science and Engineering at New York University's Tandon School of Engineering

Julia Lane, Professor, CUSP & NYU's Wagner Graduate School of Public Service

Stefaan Verhulst, Co-Founder and Chief Research and Development Officer, Governance Laboratory, NYU

Gale Brewer, Manhattan Borough President

David Siffert, Research Coordinator, Center on Civil Justice at NYC School of Law

Angel Diaz, Counsel to Liberty and National Security Program, Brennan Center for Justice, NYU School of Law

Albert Fox Cahn, Executive Director of Surveillance Technology Oversight Project or STOP

Sumana Harihareswara, Owner of Changeset Consulting

Noel Hidalgo, Executive Director, New York City Civic Technology, Data and Design

Andrew Rasiej

[sound check] [pause] [gavel]

SPEAKER JOHNSON: Good afternoon. I'm Corey Johnson, Speaker of the City Council and Acting Public Advocate and I'm calling this joint hearing of the New York City Commission on Public Information and Communications COPIC, and the Committee on Technology to order. Will the Committee Counsel please call the roll for the members of the New York City Commission on Public Information and Communication, COPIC.

LEGAL COUNSEL: Sure. Clayton Banks.

CLAYTON BANKS: Present.

LEGAL COUNSEL: Steven Lewis.

STEVEN LEWIS: Present.

LEGAL COUNSEL: Pauline Toole. [laughter]

PAULINE TOOLE: Present. I have to turn it on. Present.

LEGAL COUNSEL: Dawn Barber.

DAWN BARBER: Present.

LEGAL COUNSEL: Samir Saini.

SAMIR SAINI: Present.

LEGAL COUNSEL: Janna Choi.

JANNA CHOI: Present.

LEGAL COUNSEL: Jesus Joe Madia. (sp?)

JESUS JOE MEDINA: Present.

LEGAL COUNSEL: Ben Kallos.

COUNCIL MEMBER KALLOS: Here.

LEGAL COUNSEL: Jeff Thomas.

JEFF THOMAS: Present.

LEGAL COUNSEL: Thank you. Looks like we have a quorum.

SPEAKER JOHNSON: Great. So, we have a quorum present, and I want to read an open statement for today's hearing. So good afternoon everyone again. I'm Corey Johnson, and I am the Acting Public Advocate the Speaker of the City Council, and the Chair of the Commission on Public Information and Communication also known as COPIC. I think that is enough titles to have. I would like to welcome you all to this meeting. Today we are joined by the Committee on Technology, the, the Council's Committee on Technology chaired by Council Member Peter Koo. COPIC was created in 1989 by the City Charter Revision Commission at that time. Its direct responsibilities include among other things improving government transparency, making recommendations on city information policies and educating the public about such policies. COPIC and the Council's

Committee on Technology are grappling with many of the same questions about the benefits and risks related to transparency and data sharing and our technologically advanced society. Data sharing is essential for research, education, cultural preservation and most importantly making better policies for the city. While the use of data has many important benefits, data sharing poses difficult challenges for privacy, security and fairness in our society. Privacy violations and security breaches can cause a wide range of harm and negatively affect New York City residents. Therefore, it is critical to develop policies that effectively balance these benefits and risks and enable the city to use data without unduly compromising sensitive information. It is equally important for COPIC to educate the public about those policies and to make recommendations to improve governmental transparency. Last session the New York City Council addressed privacy related concerns by passing several bills including Local Laws 245 and 247 of 2017, which created the position of New York City Chief Privacy Officer who recently issued citywide privacy protection policies and protocols. This is an

essential step towards ensuring that New Yorkers' personal information is protected. When COPIC was initially established, there was no way to envision that in the future algorithms would be used in making decisions and recommendations, including hiring decisions credit score calculations and even jail sentencing guidelines. The data used in such—in such a computerized approach is, however, not publicly available. As a result, it is almost impossible to challenge the decision made by algorithms. Therefore, transparency in the automated decision making process is essential. In 2018, the City Council passed Local Law 49 by former Council Member Jimmy Vacca, the former Chair of the Committee on Technology, which created the Automated Decision Systems Task Force. The goal for the Task Force was to develop a process for reviewing the use of algorithms through the lens of equity, fairness and accountability. The Task Force is the first of its kind in the United States. That is an important step towards greater transparency and equity of—in our use of technology. The lack of standardization at the agency level for data governance and sharing and the lack of timely responses for data related requests—

requests often result in agencies and the Council having no means to access interagency data in an efficient manner. Together, we need to assess how we can develop data sharing policies, cyber security protocols, and proper infrastructure that would allow public access to the data while protecting the identity and privacy of New York City residents. More importantly COPIC look forward to hearing testimony from the public so we can ensure that our government is doing everything possible to use recent advancements in communication technology to further enhance the idea of open government. Today, we hope that the testimony provided by the public will provide the next Public Advocate—it can't happen soon enough—with a road map for the future of COPIC as an independent body that exists to review the city's data policies from the perspective of New Yorkers, the people. I would like to officially the public meeting of the Commission of Public Information and Communication, and at this time, I would ask for a roll call to be taken. It was already taken. We will start. Next, we are going to go to the Chair of the Committee on Technology my friend Peter Koo. I

want to recognize Peter Koo for his opening statement as part of this jointly called hearing today.

CHAIRPERSON KOO: Thank you, Speaker and Public Advocate Johnson.

SPEAKER JOHNSON: Acting Public Advocate.

CHAIRPERSON KOO: Yeah, Acting Public Advocate. [laughter] Good afternoon. I am Council Member Peter Koo, and I am the Chair of the Committee on Technology. Our committee and the Commission of Public Information and Communication often share their same goals and challenges. Today, we plan to discuss some of them including governmental transparency, data sharing and privacy. The New York City Open Data Portal is one of the tools that are most governmental, transparency and accountability. Currently, the New York City Open Portal is one of the most extensive in the world. The Open Portal—the Open Data Portal had approximately 17,000 datasets available to the public. The intention for open data is to make government more—more transparent, effective and accountable to the public. However, such a tool raises privacy concerns. Our aim is to balance benefits of data sharing, which, with risks (sic) to come of it. The Committee anticipates

having an open discussion with members of COPIC along with the public—general public on how city government can improve governmental transparency without compromising individuals' privacy. I look forward to hearing from COPIC members and panels today, and I would like to thank the Technology staff for putting together—for putting together this meeting. I'd also like to recognize the Technology Committee members, Council Member Lander, Council Member Ulrich and some are on their way. I would also like to—

SPEAKER JOHNSON: [interposing] I recognize aspiring Public Advocate Ulrich.

CHAIRPERSON KOO: Yeah and yes.

COUNCIL MEMBER ULRICH: Yes.

CHAIRPERSON KOO: Yes. [laughs] I would also like to thank our Acting Public Advocate for inviting the Technology Committee to this meeting. Thank you.

SPEAKER JOHNSON: Thank you Chair Koo. I now would like to call on the Director of Operations for the Mayor's Office, Jeff and I apologize if I mispronounce your name, Thamkittikasem.

JEFF THAMKITTIKASEM: That's good. Thank you, sir.

SPEAKER JOHNSON: Who would like to make a statement about open data at Open Data Week.

JEFF THAMKITTIKASEM: Thank you Acting Public Advocate and Speaker Johnson for your leadership in convening this group. It's quite exciting to join all of you for this conversation. Thank you for the members—thank you to the members and the members of the public who are here. My name is Jeff Thamkittikasem. I serve as the Director of the Mayor's Office of Operations, and Operations is responsible for advancing the city's performance and project management efforts, coordinating complicated initiatives and also managing the 311 system, but most pertinent to today's meeting my office houses the Mayor's Office on Data Analytics, and the Mayor's Office of Information Privacy. For us at Operations especially for these two teams, the mission of COPIC is a very familiar one. Our Office of Data Analytics led by the Chief the city's Chief Analytics Officer works with DOITT to make public data accessible through the Open Data Portal in compliance with our Open Data Laws. Office of Information Privacy headed by the city's first Chief Privacy Officer advances responsible data sharing practices citywide, protects

the privacy of our personal and identifiable information as required by law. We're fortunate to sit at such a crucial intersection of expertise as it relates to data and making it public. It means we are able to help aid other agencies, make improves to their data management practices as well as steer the city's data strategy. It means we can make more data available to New Yorkers where lawful to do so, and enable more transparency and innovation across the city's five boroughs. As a city, we are constantly identifying publishing new public datasets, fulfilling the promise of city's Open Data Law to achieve transparent and good government with the technology tools of the 21st Century. Particularly in partnership with DOITT, MODA is the reason New York City has more public datasets available than any other city in the nation. NYC Open data contains more than 2,300 public available datasets and welcomes over one million users to the platform every year. Our Open Data Program is stronger with new legislation, and policies that bolster our commitment to transparency. We combing through FOIL related data so that information that belongs on open data gets on the portal. We're also actively engaging the

public to nominate new datasets onto our website. We've leveraged MODA's strong presence in the civic tech community to collect feedback from far and wide and are encouraging agencies to actively promote open data and engage with the public on data issues. I'm proud that the Mayor's Office of Operations supports this type of work in such a crucial way, and also proud of our very dedicated staff who think—who work every day toward the mission of making government more accessible to everyone while still keeping their personal information safe and protected. Given our dedication to the Open Data Program and its progress over the last five years, it's a great opportunity to join together here, and think collaboratively about the mission we share with COPIC in today's datacentric world. We're also very excited to better understand how COPIC and open data can fit into the broader context of data usage and security strategies and particularly how to better promote smart and effective service delivery while safeguarding the privacy of New Yorkers' personal and identifiable information. I know the people in this room share these goals. I'm really grateful to be a part of this with all of you. I also just want to add that

the week of March 1st through the 9th is Open Data Week. I know some of our public speakers will also be referencing this, but we do this annually in collaboration with Beta NYC to celebrate the anniversary of Open Data Law. We are collaborating with dozens of community organizers across the city to highlight events ranging from art exhibits to project demos to student workshops. We've already confirmed dozens of events and are expecting more to come online in the next coming weeks. I want to encourage everyone here, and I encourage everyone here to get involved and spread the word about the event. It's a great showcase for how the Open Data Portal is being used by diverse communities for whole ranges of use cases, and really promotes the public to think thoughtfully about what other public datasets they'd like to see. So thank you for the opportunity, Speaker.

SPEAKER JOHNSON: Thank you very much, Jeff for that opening statement. Next, we're going to go to the DOITT delegate which is a member of COPIC. I would like to recognize Samir Saini from the Department of Information Technology and

Telecommunications, the Commissioner who would like to make an opening statement

SAMIR SAINI: Hello. I don't have a prepared opening statement, but again, just want to echo that I'm looking forward to the discussion to be part of this—this committee, and in line with Jeff's comments see what we can do, right-to help better increase the transparency right and access to—to the data that the public needs and wants. So, thank you for—for having me on this committee.

SPEAKER JOHNSON: Thank you for being here. I want to recognize the Council's appointee to COPIC, Council Member Ben Kallos.

COUNCIL MEMBER KALLOS: Thank you to Speaker Corey Johnson for your interest in the Commission on Public Information and Communications of COPIC. Speaker Johnson, you will only be serving as Public Advocate for 55 days and it is impressive that in your brief time you've focused on the Public Data Director and already fulfilled your Charter mandate. This is better than some public advocates have done in their full terms that were many more years, and so thank you. I'd like to also thank the Committee Counsel Irene Biowski (sp?), Patrick

Mulvihill, Jeff Baker for supporting this agency and today's meeting. I had the privilege of serving as the Council's appointee to COPIC. I—I—it's-it's the best appointment I think. It's really awesome. It where it's the best committee for nerds, and I want to thank our former Public Advocate Tish James for having held seven meetings. Now this agency, COPIC has gone unfunded dating back through multiple mayoralties, multiple public advocates. I joined former Public Advocate Tish James and Good Government Groups in requesting funding, and hope this year it finally gets funded. COPIC had a charter mandate for an Executive Director and General Counsel, and I hope we finally see those. This agency is—has a lot of responsibility, and I hope we hear during the public hearing about some of the things we can do in compliance with Section D relating to the availability and uses—usefulness of our city's data, and whether or not the city is adequately assisting in accessing such information. Would love to hear about data that's only available for inspection versus data that's already up on the portal, and ultimately, I think the thing that I am most excited about for this agency to one day to is to be an

analog to the State's Committee on Open Government. Robert Freeman is one of my favorite people on this planet, and it turns out that COPIC has a similar responsibility as being the agency that any New Yorker or elected official should be able to reach out to, to their general counsel to say what is your opinion on whether this information should be public, and whether that's police records or other information, it should be out there and COPIC should be there to help. So, I just—I'm very grateful for this meeting and hope for—for a lot to come from this. Thank you.

SPEAKER JOHNSON: Thank you, Council Member. Are there any other members of the Commission who would like to make an opening statement or remarks, contribute to the discussion before we start with the panels and everyone should feel free to talk if they want to. Also member of the Technology Committee, but also if you don't want to that's fine as well. Yes, Mr. Banks.

CLAYTON BANKS: [beeping sound] Yes, that's not part of remarks. So, I just wanted to first of all say good afternoon, and certainly to—to Corey for his leadership and all of my fellow

commissioners. My name is Clayton Banks and I'm the CEO of Silicon Harlem. I've been appointed by the five borough presidents to represent the citizens of our city, and for me COPIC provides not only the governmental transparency, but also our mission is to really provide public access to the information that this city generates. I've been hearing the word data a lot, and I'm—I'm probably conferring on them saying that data is not our core mission. Our core mission is to make sure that our data that we are collecting is transparent to the public. One statistic everyone in this room should know is that like Ben Kallos knows 50% of people in East Harlem do not have access to broadband and in a lot of ways don't have a computer in their home. So, communication to that public is really important and COPIC has a great role to play. A great example is—of transparency is when the great President Brewer came here and—and talked about casting and webcasting and all of this is also people with different abilities whether they're blind or deaf or anything else, and so there's a—a great responsibility that COPIC has beyond data. It's the human beings that we really concerned—are concerned about and their ability to understand what's happen

in the city on a day-to-day basis. Finally, I'll just simply say I'm proud to be a part of this Commission. I'm proud that I'm representing all of the boroughs, and I think it's probably the most vital thing we can as a city is to make sure that everyone has access and exposure to what's happening here. Thank you.

SPEAKER JOHNSON: Thank you very much for that—this is very wonderful. Anyone else want to make remarks before we go to the panel? Yes sir.

ISIDRO MEDINA: Good afternoon. My name is Isidro Medina. I'm Executive Director of the Washington Heights BID, and also Executive Vice President of Community Board 12. I am very confident that corporate can overcome a lot of the problems and challenges we face ahead. I do hope, however, that all information and—and all technology be accessible to communities that have been only neglected and are ignored. So, I'm looking forward to work with this Commission.

SPEAKER JOHNSON: Thank you, Mr. Medina. Thank you very much. Anyone else who would like to make any remarks? We've—we've also been joined by a member of the Technology Committee Council Member

Holden from Queens. Okay, seeing no other folks, we are going to go to the public testimony, and is there someone here—are there any Council Members? Okay. Is there someone here representing Borough President Brewer who was going to testify on her behalf? She'll be here in a little while. So, we'll go to the—the second panel, and the second panel is Professor Julia Lane, another Professor Julia Stoyanovich and Professor Stefan Verhulst. I apologize if-

COUNCIL MEMBER LANDER: I guess we have more professors than we usually have here at the City Council. [laughter]

SPEAKER JOHNSON: Well, I couldn't tell if it was C or an L. [laughter] Cane or Lane.

PROFESSOR JULIA LANE: [off mic] Lane.

SPEAKER JOHNSON: Lane.

COUNCIL MEMBER LANDER: Maybe we should switch to electronic sound--

SPEAKER JOHNSON: [interposing] Thank you, Professors for being here, and please you may begin in whatever order you'd like. If you could just please make sure your mic is turned that the red

light is on and you speak closely and directly and Identify yourself.

PROFESSOR JULIA STOYANOVICH: Alright. So this is our collective pleasure to be here. Dear Speaker Johnson, Chair Koo and members of the Committee and Commission. The data revolution is transforming every sector of science and industry, but has been slow to reach local and municipal governments that deliver vital human services in health, housing and mobility. The opportunities of data drive algorithms this is making in urban context have long been recognized. Evidenced by the remarkable progress around open data, the digital— digitalization of government records and process and Smart city efforts that emphasize using censors to optimize city processes. Despite this progress, the public sector is slow to adopt data driven technology for two related reasons both highly relevant to the topic of today's hearing. The first reason concerns the legal and technical difficulties inherent in the sharing of sensitive data both among government agencies and with externa entities. The second reason is the government's mandate for responsibility meaning that any decision made by algorithms will

need to be scrutinized by the affected individuals, groups and the general public. In my testimony today, I argue that both barriers to adoption of data driven technology can be overcome by establishing a robust and flexible data sharing infrastructure. Consequently, establishing this infrastructure should be seen as a clear strategic and operational priority of New York City. My name is Julia Stoyanovich. I hold a PhD in Computer Science from Columbia University. I am an Assistant Professor of Computer Science and Engineering at New York University's Tandon School of Engineering, and also an assistant Professor of Data Science at MS (sic) Tech for Data Science at the NYU. In my research in teaching I focus on responsible data science on incorporating legal requirements and ethical norms including fairness, accountability, transparency and data protection into data driven algorithm decision making some of the students who are enrolled in my responsible science course at the NYU are here today. I am an appointed member of a task force established in response to Local Law 49 of 2018 in relation to automated decision systems used by agencies, the ADS Task Force. My opinions in this testimony while

informed to some extent by my work on the ADS Task Force are my own, and do not represent the view of the Task Force. My testimony will be complemented by statements from my distinguished colleagues, Julia Lane, Professor at the Wagner Graduate School of Public Service at NYU; Stefaan Verhulst, Co-founder and Chief of Research and Development at Gov Lab, an action research center at NYU. I would like to make three points. The first is that establishing a robust and flexible data sharing infrastructure should benefit multiple stakeholders. The second is that there is a continuum of data sharing modalities that range between open data and the secure data clean room environment and this continuum needs to explore as part of infrastructure design. Third is the developing the data sharing infrastructure will require technological innovation buy-in from city stakeholders and public engagement. To my first point government agencies, one of the stakeholders needs to share data to make decisions more effectively and to enact policy and coordination. Regulators, of course, need access to agency data for purposes of oversight. In both cases much of the data is sensitive, and so is legally encumbered.

This data if it contains personally identifiable information or is anonymized, but will not guarantee privacy when linked with other data. Equally as importantly the public needs access to data in support of algorithm transparency. Recent reports on data driven decision making under score that fairness and equitable treatment of individuals in groups is difficult to achieve, and the transparency and accountability of these processes in government is indispensable but rarely enacted. As a society, we cannot afford the status quo. Algorithmic bias in administrative processes limits access to resources for those who need those resources most, and amplifies the effects of systemic historical discrimination. Lack of transparency and accountability threatens the democratic process itself. New York City's ADS Transparency Law initiates and meaningful responses to these threats, and other U.S. municipalities are watching and are likely to follow with similar laws and recommendations. Of utmost importance as this happens is recognizing the central role of data transparency in any algorithmic transparency framework. Meaningful transparency of algorithmic

processes simply cannot be achieved [bell] without data transparency, and data transparency in turn cannot be achieved without the robust and flexible data sharing infrastructure. My second point is that here's a continuum of data sharing modalities between open data and secure data sharing environments like data clear rows. (sic) An argument based on data transparency in service of algorithmic transparency is (1) that we need to give the public access to datasets on which algorithms are trained and validated. However, giving the public access to this data may be intention with privacy regulation. That is in light of this, a data sharing infrastructure can offer an alternative modality to simply sharing the training and validation data sets. When raw datasets cannot be exchanged or re—or released, relevant statistical properties of these datasets can be exposed or they—in—in essence as datasets or data summaries, using state-of-the-art methods to preserve the privacy of individuals included in the data. Additionally, it is possible to develop access control and usage control mechanisms for trusted environments. A carefully designed data sharing infrastructure can be made to support multiple size

modalities. My third and final point is brief. When developing a data sharing infrastructure we must consider the legal, societal and technical aspects of the challenge. A solution will entail engaging technology experts, building competencies and incentives within the city and developing government structures. My colleagues Julia Lane and Stefaan Verhulst will discuss these aspects in their statements. To conclude, I recommend that the city consider the development of a data sharing infrastructure as a strategic and operational priority with the goals of increasing efficiency of delivery of human services, and supporting transparency and accountability to the public, thus increasing the public's trust in government. Developing this infrastructure will require significant investment, which would be amortized so as to benefit multiple city and external stakeholders. Different data sharing scenarios would require different sharing modalities including open data; privacy preserving synthetic data and summaries; access and usage control mechanisms and secure data clean rooms. Thank you.

SPEAKER JOHNSON: Thank you Professor. Professor Lane.

PROFESSOR JULIA LANE: Hello, Chair Koo, Acting Public Advocate Johnson and members of the Committee and Commission. So, I'm delighted to be here. Thank you for having us speak. I think like my colleagues, I would like to make three key points and I'll make them as during this discussion. The key points are essentially that the way in which government does business has lagged behind that of the private sector. In the private sector the—the largest businesses are now businesses that produce data not things, and yet in the public sector unfortunately our ability to use and produce data has been not kept pace, and think there are there three reasons for that. One is that the technology to—to share confidential data across agency and jurisdictional lines does not—has not been fully exploited. The second reason is that the workforce capacity within government agencies has not kept pace with the needs of using the data, and the third has been that our ability to produce measures that are valued by the community that the governments serve has similarly lagged—lagged behind. So, in each one

of those three areas, we have a great deal that can be done and that has been done, and so the message here is that if the committee and the commission zero in those three things, and leverage existing activities these barriers can be addressed relatively straight forwardly and we have the infrastructure to do so. So, let me speak a little bit about my background. I am a professor, as you know at NYU, and I'm also half time work with the federal government with the Office of the Chief Statistician and the CIO in the White House, and—and I've been primarily working with them on the federal data strategy, and the implementation of the recently signed Foundation to the Evidence-Based Policy Act. So, clearly these issues resonate at federal level just as much as they do with every state and local government with which I've worked in career, which I many look like I'm 25. I'm a little bit older than that. So, it's been close on 30 years, and what I've been primarily involved in is working with combining government administrative data in a secure way building workforce capacity within government agencies, and producing measures that have done it. So, what can we build on? Well, there are three

areas as I said: Technology, workforce, community engagement. On the technology side the federal government has actually invested substantial amount and indeed worked with us to develop an Administrative Data Research facility, the Fed Ram procedures that enable the secure sharing of government data being accepted, and are being used by government agencies across the country and indeed New York. The—so many of those technologies, as my colleague pointed out [bell] have been used. The second piece is building the workforce capacity to join data across agency lines. It—90% of the work is not just getting the data, but it is people understanding how to link the data where the errors can be made to algorithmic decision making that they're an issue, but also making a million decisions about how to handle what turns out to be very dirty data, and that needs to be done by the agencies themselves, the staff in the agencies themselves because they're cold face. They're the ones who have to deliver products that have value to their constituencies. They understand the pluses and minuses of different sets, and they're the ones who have to at the end of the day work across agency

lines to produce something that has value to their constituency. I'm going to give you a brief quote. I cannot over-emphasize how important that is. In the city of Baltimore, and you'll see it in my testimony, the Commissioner of the—the Health made a comment to a colleague of mine that every time a child dies in the city and Baltimore is quite a violent city, every time a child dies in the city, the commissioners from the different agencies that touched that child, for example, education, homelessness, criminal justice, welfare and so on, they get together with a fat file on the kid to find out what they cold have done differently. But the only time they get together is when the kid is dead. So, think about how much we could do if that child were alive. So, it's critically important to think about privacy, of course, but it's also critical important to think about how we can intervene in the trajectories of children's lives and—and citizen's lives, and the agencies understand more than any of us in many ways how to do that. And then the third piece as was quite eloquently said is community engagement. The communities need to be able to understand how the indicators are being generated,

and how to develop indicators that aren't done in a—in a cold little dark room, but in which there's engagement and a communication back and forth, and we can do that as well, and, in fact, we've built the Administrative Data Research Facility. We've build and applied data analytics from across the country that's been very successful. These provide models that community engagement work was done with technology. So, thank you very much indeed for having me.

SPEAKER JOHNSON: Thank you very much professor for being here, and for your very thoughtful and helpful testimony today, and next we have Professor Verhulst.

PROFESSOR VERHULST: Thank you very much, Speaker Johnson, Chairperson Koo and members of the committee and commission. It's always daunting to follow distinguished professors Julia Lane and Julia Stoyanovich. So, I will try to add value to what they already have said, which—by which I mean I won't specifically focus on some of the topics that I have focused on. So, I will not try to focus on these data responsibility questions, now will I try to focus on the technical questions, which, of course, have

already been address, but what I will try to focus on are four questions. The first question is: Why should New York City care about data? The second question that Ill try to answer and focus on is: If you build a data sharing infrastructure, will they come. The third question that I will try to focus on is: What about private data instead of an—an addition to public data? And then the last question, which is there's a question that might have already been answered is: Is technology the solution? As mentioned, my name is Stefaan Verhulst. I'm the co-founder of Gov Lab, which is an action research center based at New York University, and I'm also a resident of New York City for the last 20 years in Park Slope. The first question is: Why should data be imported for New York City, and has already been answered by the mandates because of government transparency, but what I would like to argue, which also has been mentioned before is that data matters more than just government transparency. If used responsibly, data can transform the way we operate as a—as a city government, and can also transform the way the city is managed specifically because of four reasons. One, data provides for a better

situationally analysis. Two, data allows us to understand cause and effects such as for instance we would understand why certain vulnerable populations are more like to—to get harmed. Three, data allows us to also make predictions so that we can be more targeted. So, it's actually investing and preventing certain kinds of events of happening; a fourthly, data also allows us to assess the impact of interventions in a far more superior manner Now, those four value propositions are common to many of the members of those commissions, but they are not well understood by many city officials and people working within government. And toward that end, what we would recommend is to really provide for an urban evidence-based within the city on how the city has used data and can use data moving forward so that this becomes a movement around calling for more data in order to ultimately change the way we govern. And secondly, we also would recommend not just to have a directory of datasets, which is essential, and it's very important that this committee has advocated and implemented a transparency in regard to the data that is being held, but we also advocate a directory of expertise within the city that ultimately would

understand who can help? If there is a clear value proposition, what is the expertise that is distributed across the city with regards to data science and with regards to the understanding the value of the data. The second question that I would like to—first is if you build a data sharing framework or an architecture, will they come? And obvious I guess many of you can guess the answer to that: Not necessarily because to a large extent, and this is lessons that we've learned from open data as well and at Gov Lab we've done a little assessment of the value of open data infrastructures is that ultimately you need to establish a demand side for the infrastructure that you're building, and too often we are building an infrastructure without really understanding what is the demand, what are the use cases. And quite often at Gov Lab we made the joke: It's great to have a 100 datasets. What I really would like to have are 100 questions that matter that if answered through the data we would make progress. So my recommendation would be to—for every agency to at least list 10 questions that they are trying to answer, and then then subsequently the data can be released or made available in a secure

manner to start answering those questions so that you—next when you have a committee meeting you can actually see these are the 100 questions that if answered, New York City would be better off. The third question is what about the private sector? And clearly, much of the data that is being collected and generated these days does not reside within the public sector, and so for the last three years we've been trying to understand how can you also unlock private sector data for public good? And this is the work that we've done within the concept of data collaboratives because clearly this is a different proposition than open government data, and to which that end, you really have to start looking at new kinds of public/private partnerships, which we call data collaboratives. So, my recommendation to the committee is to really understand how can you establish city data collaboratives? Many cities around the world are looking to that question, and really trying to understand how can you engage the private sector whether these are telephone operators, whether these are banks or whether these are transportation companies, how can you engage them around the data to understand the city better and

actually improve the city? This also requires a new kind of function within corporations, which we call data stewards and so one of the recommendations would be is to hold convenings, and perhaps even develop a network of data stewards within the private sector so that you can engage and have some kind of a liaison with the private sector around that data. And then the last question is, of course: Is Tech the answer? Is technology the answer to some of those problems? Likely so as already mentioned, but not sufficiently if only tech is the answer because this is ultimately about change management. This is about cultural change, and so towards that end, we also have to understand what are the metrics of success and more importantly, how can you embed the change that you want to have in performance reviews at the individual and at the agency level so that you ultimately can establish the change that is necessary, and it also requires another cultural change, and change management strategies, and towards that end for instance the committee might think about organizing a Data Stewards of the Year Award that would really name and fame. Good practice as opposed to name and shame, and those that might fail. So with that, I'm

going to stop here and thank you for this opportunity.

SPEAKER JOHNSON: Thank you to all three of you. We have a bunch of questions from both Council Members who are part of this committee and I want to say that we're joined by Council Member Kalman Yeger, a member of the Committee on Technology. Thank you for being here Council Member, and the first person to have some questions is the Chair of the Committee on Technology, Chair Koo.

CHAIRPERSON KOO: Thank you Speaker Johnson, yeah. So, Professor Lane—Lane, yeah, yeah, can you tell us more about your experience and obstacles than you have faced in implementing the Data Sharing Initiative?

PROFESSOR JULIA LANE: What a great question. [laughter] I could go on. I will try and keep it brief. Let me give you a little bit of context. I've spent a career, as I said, linking data across jurisdictional and agency lines. So the LEHD Program we brought together unemployment insurance wage records from all 50 states linking them tax data, IRS W-2 records to business data since Spyro to Social Security Administration data and to

many other datasets, and we did it in a secure, confidential privacy protected way. The—the biggest barrier was not technical because the technology exist to do so. The biggest barrier was figuring out how to do so in a way that was consistent with the agencies, those different agencies' mission and that created value back to the agencies. So, once you've figured that out, and you get the agency buy-in because the agency staff had committed to doing what has value to the agency and to the citizens they serve. Once you figure out, that's the biggest barrier. Once you figure that out, the legal and the technical and the social issues can—can be addressed.

CHAIRPERSON KOO: Thank you, yeah. So, what-what—what kind of advice you would give us?

PROFESSOR JULIA LANE: So the same advice I gave to the Commission on Evidenced-Based policy when they were put together by Paul Ryan—Speaker Paul Ryan and Senator Patty Murray. What you need to do is to figure out what data sharing activity will create value relatively quickly and demonstrate the value of linking the data. So the particular use case so you want—you want to get some numbers on the board. You want to get some wins that showed the

value. So, the-the very first project that we started on to inform the decision making of the Commission was the following? There were four agencies that were interested in using data across agency lines: Justice, Bureau of Justice statistics; Labor, Housing and Transportation. So here was the core set of questions that was asked. What is the impact of access to jobs and neighborhood characteristics on the earnings and employment outcomes of X offenders and welfare recipients, and their subsequent recidivism and/or retention on welfare. It's a pretty straightforward question, but it requires linking data across agency lines, and the agencies then have to come together to be able to answer those questions, and—and work together. So, we developed classes, and applied data analytics classes around those questions. We very quickly developed a series of prototype, a pipeline of prototype products that could help answer those four questions and that helped convince the agencies and obviously the citizens that they served that—the issues could be addressed.

TRANSLATOR: Thank you, Chair Koo. There are a lot of folks that have questions. So, we're

going to keep moving. I'm going to go to Council Member Kallos next. Council Member just if you could keep it just to a few questions just so we can get to everyone as part of the Committee and the Commission.

COUNCIL MEMBER KALLOS: Thank you, Speaker and Public Advocate—Acting Public Advocate Johnson. I have a question to Professor Julia Stoyanovich relating to increasing efficiency of delivery of Human Services. In particular, I'm working on something called Automatic Benefits--

PROFESSOR JULIA STOYANOVICH: Uh-hm.

COUNCIL MEMBER KALLOS: --which would with Stefan and the Gov Lab and seeing I can pull you into this erstwhile effort in terms of do—do you have resources or does your department have resources to dig into of the challenges and technicalities in dealing with 40 different benefit services. We currently have a screening, but to really make sure that we can open source and—and change the way that we deliver services so that we give them to people using the information we already have instead of making them fill out information—information over and over again. That goes to data sharing. With regards to Professor Lane there's a really awesome book that

the city puts out called the Mayor's Management Report. It's only 600 pages. [laughter]

PROFESSOR JULIA STOYANOVICH: I've read every word.

COUNCIL MEMBER KALLOS: Say that on the record, please quick.

PROFESSOR JULIA STOYANOVICH: I've read every word.

COUNCIL MEMBER KALLOS: But in terms of that you mentioned specific—

SPEAKER JOHNSON: [interposing] I'm scared. [laughter]

COUNCIL MEMBER KALLOS: You should be but if—would—would you and your institution and as either by either academics or with students, be willing to engage in the indicators whether or not they are the correct indicator—indicators and just to Stefaan, you had a lot of recommendations. I subscribe to your weekly email, which gives everyone a—a state to the—of where open government is moving and the intersection of governance and technology. A couple of panelists--and I agree with them—spoke to the digital divide. It's 1 in 3— 1 in 4 households in Brooklyn, 1 in 3 households in the Bronx have. How

can we use this to improve governance when a lot of people don't even have access to the technology?

PROFESSOR JULIA STOYANOVICH: My question was first so I will go first and the answer is yes. We absolutely would love to engage with the city on these very difficult challenges. A part of the challenge is, of course, technical right and these are social technical questions and legal questions, but the technology is not yet in place for us to be able to link data to deliver coordinated recommendations, and to do it responsibly most of what you say.

COUNCIL MEMBER KALLOS: The technology is built. Intuit built it for us and gave it to us for free.

PROFESSOR JULIA STOYANOVICH: Wonderful. So, that means that we need to really see what it's doing, right, and the questions it's asking and—So, yeah, we're—we're more than happy to engage with you. My students are thrilled to be looking at real projects that make a difference in the city, and really we are just—I'm thrilled to be in the city because we are a leader in every respect and we are affirming our role as a leader in responsible data

driven governance and the thing that we need all hands on deck for that. So, we're in.

PROFESSOR JULIA LANE: So, of course, happy to be involved. I'm going to push pretty hard on the notion of people within the government agencies being part of the conversation. That's absolutely critical. Can say no to data and—and how to pull it together. So, we can have an offline conversation about that.

STEFAAN VERHULST: Thanks. Thanks for the question and—and I do agree that equity should be part of the, and a core priority of any data effort that the city undertakes, and there are many ways, of course, that digital divide has already been considered, but I think data also provides this for a real better insight in what is the (a) situation, (b) the cause and effect behind the current divide, and there was an interesting story even today in regard to the Broadband Agenda, the National Broad Brand Agenda where they came to the realization that they actually measure the wrong data to—to get a better insight in actually the reals broadband gap, which shows the importance of actually understanding the data, and also having access to private data to

really understand who is using it for what purpose and what are the implications.

SPEAKER JOHNSON: Thank you all very much. I'm sure—I would imagine that Council Member Kallos has a few more questions, but I want to get to some other folks and then we can come back. Next up is Council Lander followed by Commissioner Barber, Commissioner Banks and then Commissioner O'Toole—Commissioner Toole, not O'Toole. [background comments

SPEAKER JOHNSON: They have questions for you. Council Member Lander.

COUNCIL MEMBER LANDER: Thank you very much, Mr. Speaker, Mr. Acting Public Advocate and Mr. COPIC Acting Chair. I'm glad we're going this hearing together. It's great to be with the folks COPIC. Thanks to you for being here and I guess Professor Verhulst, you're my constituent and, you know non-citizens can vote in participatory budgeting. So, I hope you're—you're out voting in our elections. So, I just want to give a kind of real time example and ask for some of your thoughts on it. The Speaker and I were actually just downstairs at a press conference for a bill we called the Reckless Driver Accountability Act. About a year

ago in my district a driver killed two young children, and what quickly happened, it was quite remarkable. It happened on Twitter that—I mean we were all heartbroken and thought of this as some sort of just awful, you know, accident. What quickly transpired on Twitter is that data researcher kind of in is spare time name Brian Howald tapped into the city's databases for the right light and speed camera violations, and found that the driver or, you know, he had the license plate of the car--because in this case that's what we have is from the red light and speed camera—that she and the preceding year had had five tickets from these red light and speed cameras. So, in fact, there was some potentially predictive data on her reckless driving that we might have done something with. Actually, she had also be in hit and run in Queens. That actually was a paper report sitting in a file drawer in a Queens Police Precinct. You know, that data doesn't happen to be online at all. It turns out that her doctor had told her not to drive, something which was not available—private data that was not available, but became, you know, available subsequently. We never saw insurance records, of course. Brian then asked or a

conversation on Twitter: How many other drivers? How many other cars are there out there that have that bad a record? It turned out the answer is about 25,000 cars, about 1% of the cars in the city, and so now that helped us put in legislation to try to do something about that, to target this set of reckless drivers for a kind of restorative justice program before they do harm. But we've also realized, you know, what we have are these light and speed cameras. They take pictures of license plates and not of driver. There might be a whole bunch of other information out there. Insurance companies surely have information that would help us know who were the folks most likely to cause harm, and subsequently someone set up a—a Twitter account called How's My Driving, a kind of doxing account that someone can when you see a car out there doing bad, you could take their license plate and query, and you get the whole record of their violation. So, this has become sort an object lesson for using data, and—and the public's ability to access it to think about how to—t develop public policy, but it's raised a lot of questions because we didn't start from a question. We started from a horrible tragedy. We didn't think

at the front what information we would like to have. We grabbed the data that we do have. We didn't think that much about what the ethics of, you know, this type of—I meant that data was already public. So, we just started using it, and I just wonder and—and I'm not sure. You know, I think we have good predictive data here that we should use in policy making and not wait until we, you know, let the perfect be the enemy of the good, but I just—I wonder what thoughts you have on kind of a project like that, how we ought to have set it up. How we should engage with the private sector, you know, so that we could get something from kind of data policy and ethical grounds that helps us confront a problem. We weren't really confronting at all. We've done a lot of intersection and redesign to try to make our streets safer. We haven't yet done anything to confront the challenge of—of reckless drivers, and we know—we-we know these are reckless drivers. We don't know if they've yet caused harm. So, I'd just—I'd love to get your take since we're kind of using that right now as, you know, how you would have set that up as a project, what you think we should be paying attention as we move forward. [background comments]

STEFAAN VERHULST: Yes. Well, I think it's a very interesting case study. Thanks for sharing and I think as it would—I think it would be very useful to—to use it as a case study on how data could be on the one hand potentially beneficial to prevent accidents of happening, but also those will raise a huge amount of ethical questions because the moment you enter personal profiling, then you automatically enter, of course, a domain that might generate harm in addition to positive benefits. So, one way to think about it is to (a) be transparent about what the current state of the project is. Also be transparent in regard to future intentions, and then engage with, which was already mentioned, citizens around what is the views with regard to what is appropriate. It doesn't mean it's legal, but it's appropriate, and-and I think we do have to start understanding this kind of thin line between what would be beneficial. Now, clearly there is a potential to work with the private sector. Whether that means that it leads to personal profiling that would be a red flag to me, but it could also mean we actually have aggregated data sets that provide for a better understanding on what for instance

intersections are more likely to generate certain kinds of reckless behavior. When this reckless behavior happened, is it after the Super Bowl and—and if so, should you have a—a public campaign to actually limit that kind of behavior.

COUNCIL MEMBER LANDER: And I want to push you a little here because we've actually done a lot to figure out what intersections are unsafe, and we have not yes done anything to figure out which drivers are—are unsafe, an the data, you know, it turns out that 80% of people if they get one of these tickets never get a second, but a small percentage of people get so many that they're driving like sociopaths, and we better have a public policy intervention. So, I agree with you. Look, I'm a big advocate of data privacy, but this is just a really interesting example for of like on the one hand, yes to data privacy, and on the other hand, if you blow all of our, you know, like that's public data because we had to give you a ticket and send it to you. So, so I think you're right that we need to involve the public in setting the ground rules, and I don't know that we yet have a good way of doing that, but I also, you know, it's an interest challenge to balance

appropriate data privacy with the public's interest in, you know, saving lives in this case.

STEFAAN VERHULST: Yeah. Thank you.

PROFESSOR JULIA LANE: So, this may come as a shock to you, but I'm not originally from New York. [laughter] I'm acquiring the accent, but it's been slow I have to say. I'm originally from New Zealand, and in the New Zealand we built and integrated data infrastructure, which actually combined a lot data from—from different government agencies. So, a similar problem. When you take a look at crimes that are committed, you--there are a lot of events that you can seen in a child's history. So, you can pretty much predict by the time the kid is 18 a type of what he's—of committing a crime, too. So, now it goes to your—to your driving example. So, obviously, prediction is not destiny, and that's where the ethical issue comes up. So, there—there are several points of discussion that we have baffled with or-or the policymakers in New Zealand have grappled, with which policymakers in New Zealand have grappled. One is a simple resource allocation decision. So, the kids who are at a high risk of offense and, you know, they make—New Zealand is a

small country. You must vote for New York. So, you know, there might be 600 or 1,000 kids and you—you just made roughly the same. So what you can do is instead of allocating resources to peanut butter across all activities, you can allocate resources one-on-one in—in-in a—in a very big case to intervene with those that have high predictive likelihood of—of having harm, and change of trajectories of that child's life. Right, and that was a little bit the example of the Baltimore that I—I cited. So, if you think of it in terms of given safer conditions, what kind of interventions might make sense prior to an activity in order that an accident doesn't happen. I think that's the way to couch it rather than a gotcha afterwards, right. So, in its thinking strategically about what those decisions and how you're going to deal with them, and—and allocating the resources where they can be most effective without it necessarily being punitive prior. And that's a policy—that's a key policy discussion that can be informed by data.

COUNCIL MEMBER LANDER: Thank you very much. I appreciate your time, and your testimony, and I've enjoyed my first COPIC meeting.

SPEAKER JOHNSON: It won't be your last. [laughter]

COUNCIL MEMBER LANDER: I'm not ready to go with you guys. (sic)

SPEAKER JOHNSON: [interposing] We're going to go to Ms. Barber.

DAWN BARBER: [off mic] Thank you. [on mic] Thank you so much. Professor—Professor Stoyanovich and Professor Lane, I—my understanding is that—is that one of you is suggesting we need new infrastructure, and one of you is suggesting that we use existing infrastructure. I was wondering if—if either or both of you, you know, have some—maybe can provide some more detail about how much money this might cost. My understanding is that we don't actually have a budget but, of course, I'll let Mr. Kallos deal with that, and Mr. Johnson but, you know, if you could provide a little bit of detail in that regard.

PROFESSOR JULIA STOYANOVICH: So, I think that we need new infrastructure, but building blocks of that infrastructure can be based on insights from other domains where we know how to enact policy that will agree. So, for example, we know how to build

the—the clean rooms and how to operate them and how to educate the--

DAWN BARBER: [interposing] Pardon me. Say it again.

PROFESSOR JULIA STOYANOVICH: We know for example how to build data clean room, secure data environment--

DAWN BARBER: Yes.

PROFESSOR JULIA STOYANOVICH: --and in particular Julia knows about how to do that, but I don't think that there exists currently an infrastructure that actually is able to flexible--

DAWN BARBER: [interposing] Yes.

PROFESSOR JULIA STOYANOVICH: --and to serve multiple stakeholders, to serve both for oversight and for linking within the city across agent—agencies, and for public accountability, and for open--

DAWN BARBER: [interposing] This is extensive. It is my understanding that--

PROFESSOR JULIA STOYANOVICH: [interposing] So, so absolutely it's going to cost money and as a matter of fact, it's more expensive to do things responsibly in any domain including data

science thank it is to just do them somehow, and it's more expensive to be transparent than to just drive profit, right, but this something that I think we need to expect.

DAWN BARBER: Yes, yes.

PROFESSOR JULIA LANE: So I can give you a full parking slot because I—because we've been doing this funded by the federal government. So, the cost of setting up the secure Cloud-based environment within which we have linked data across agency and state lines, it was about $4 million, and it costs about a million a year to keep that secure.

DAWN BARBER: A useful Process.

PROFESSOR JULIA LANE: Having said that, that's being paid for. The marginal cost of an agency or a group of agencies supporting metadata, that's built city walls. The marginal cost of an agency or set of agencies putting a house inside those walls is about $150,000 a year, and to give you a ballpark sense.

DAWN BARBER: Good to know. Thank you.

PROFESSOR JULIA STOYANOVICH: Okay, but that is just for the—the secure data environment, right. To—do things that—that will require algorithm

transparency, for example, where we can, you know, look at sensitive data and release a medium summary that is spatial still to the dataset yet is privacy preserving and where the public can have access, that's another set of methods yet.

PROFESSOR JULIA LANE: And the since Spyro, which is where I have my closest affiliation has poured tens of millions of dollars a year, and interests has pulled tens of millions of dollars a year.

DAWN BARBER: Sure, year.

PROFESSOR JULIA LANE: But those investments can be built on. [cellphone chime]

DAWN BARBER: Yep.

SPEAKER JOHNSON: Do you have anything? Is that--? Okay.

DAWN BARBER: Thank you.

SPEAKER JOHNSON: Great. Thank you very much.

PROFESSOR JULIA STOYANOVICH: So, I can give you

DAWN BARBER: It's good for us to have it.

SPEAKER JOHNSON: Mr. Banks.

CLAYTON BANKS: Thank you, and thank you for your remarks. Just a quick question. Well, first, let me just say in my opinion data does not drive. Data is a compass. We are still human beings and we still make decisions. So, this notion of data and—and I learned this from Professor Norton of the University of Virginia and he's an historian and an engineer. So, anyway, my question is given the research that you've done on privacy, on algorithms, the bias that can come with that, my question is do you—and all three of you can answer this easy question, which is should there be an oversight commission or committee in New York City to over—basically monitor how data is being collected, used and distributed, and how easy it is for an average citizen to access, understand it, use it, understand who owns it? I'm curious if—if you believe in oversight in any sort of form of fashion?

PROFESSOR JULIA STOYANOVICH: Of that, yes, absolutely. I think that we need mechanisms for oversight, and I agree with you that data is not the end goal, right. Data is a reflection of the world in which we live, and which we're able to measure imperfectly to some extent, and data reflects the

kinds of inequities that are evident in our world. Data we use to be able to-to drive policy that is meaningful, right. So, really the public's understanding of what the data is for, which kinds of questions that will be used to answer like the Stefaan said. What the costs are in terms of privacy, in terns of potential harms in the future as in this example of the reckless driving. These are all the things that are of essential importance. Data is just the fuel somehow. It's the raw materials here. But yes, we do need oversight and we need regulation, and the ADS transparency bill is the first step, but it's only just the first step.

STEFAAN VERHULST: Yeah, and I would add to, and I like— First of all, I—I--I appreciate you indicating this is a life cycle, a data life cycle challenge, right. So there are—there are concerns and there are possible risks at every part of the data life cycle including at the collection state, the design of highly collected data to ultimately storage and then sharing to ultimately analyzing where then goes the algorithmic kind of bias might come in to ultimately then using it, and because there are risks in also using data wrongly to a large

extent. And so having a data life cycle approach would be my first recommendation that you don't focus on one element because ultimately the risk is across the life cycle. Too, oversight is always so very important with regard to acquiring and—and instigating certain behavior, but ultimately coming back to my last point of my testimony, this is a cultural issue. And so, you want to instigate a culture, a data culture that is responsible across agencies and across city government because if you only rely on oversight, you might actually miss the opportunity to really have certain kind of data responsibility culture from day one, and that would be an additional kind of focus that I would recommend.

PROFESSOR JULIA LANE: So, you can gather, we're for once all free of this and completely on the same page, but—but the fundamental notion, which I think you highlighted is that at the core any use of data, there's a tradeoff between the risk and the utility. You know, any time—any time you work with data there is a risk of it being misused. There is a risk of re-identification. There is great utility associated with data, and I

don't think it's appropriate to that that be done in a dark room by a single individual or group of individuals. So, I—the-the—it's difficult to quantify risk and utility, and so my colleagues like Helen Nissenbaum will say it's—it's—it's a very deep philosophical issue, but more voices in the room and more people who understand how the data are generated and to what purpose they can reasonably be used, which is the community and the agencies, and the Community Representative Chris Crisco.

STEFAAN VERHULST: If I may, I want to add one more—

SPEAKER JOHNSON: [interposing] Sure.

STEFAAN VERHULST: --element here is that just following up on Professor Lane's comment here is that it is indeed about cost benefit analysis, and we've become to a large extent sophisticating—sophisticated in measuring the risk, but we lag quite often in sophistication in measuring the value. And to a large extent we need to not only pose whether the risk of sharing data, we also need to pose the question was the risk of not sharing the data? And quite often we don't have a good answer to that as opposed to the first one. So, we need to do both,

and the Commission that, or any oversight mechanism should not only be about the risk of using, it should also be about the risk of not using, and that will provide for a more sophisticated assessment.

PROFESSOR JULIA LANE: In the form of dead children.

SPEAKER JOHNSON: Thank—thank you all. We're going to have one final question for this panel, and then our great Manhattan Borough President is here. So, we're going to go to Commissioner Saini for the final question for this panel.

SAMIR SAINI: Great. It's actually two questions. Then I'll be—I'll be quick. So, first off I—I just want to thank you for your testimony. I have a deep respect for—for the work you do, and as well just hear in your testimony appreciation for and—and for what your seeking, what—where you believe we need to be, right as a city to improve how we share, right and utilize data. So, that's the first point. A couple questions. So, first is in terms of NYU, right and yourselves and your students utilizing this modern data platform, how do you see that working? You know, when I—when I look at your recommendations a lot of this is around the need for

a modern, right, you know, data platform to improve, right, the ability for agencies to share data amongst each other ensuring privacy and security, integrity, et cetera. But what do you get out of it or what do you want to get out of as joint research project is there some, and if so, is there IP that you would be developing? If so, would you own that IP or would the city own that IP? I ask all these questions because I made partnerships with—with universities before like Georgia Tech, and these questions come up, and usually they're not easy answers. So, Beyond the big picture yeah we got to do this, what does NYU get out of this? What are you trying to get out of this as a university and as professors in this space?

PROFESSOR JULIA LANE: It's a great question. So, I'm a—I'm a bit of a sap. I've made a career out of building public data infrastructures and giving them away.

SAMIR SAINI: Okay.

PROFESSOR JULIA LANE: So, yeah, I know. It's rally sick. [laughs] So, it's really stupid, but that's—that's—that's what I've done. So, most of the work has been funded by philanthropic foundations. Thank you to Futures, The Gates

Foundation, Overdeck Foundation, which is based here in new York through Sigma, the Alfred P. Sloan Foundation, and then federal agencies. So, we have made it very explicit there is no IP. NYU is—so again, I'm going to sound like a Pollyanna here. NYU is a great place. They have done nothing but support our ability to—we are—we are--in some ways what we are trying to do is transform the public data sector in the same way that the private data sector has. So, it's a—it's a social mission, and yes. So, that's what we're trying to.

SAMIR SAINI: So, that—that's—that's great, that's great to hear.

PROFESSOR JULIA LANE: And I just loved seeing that when I came in this Of the People, by the People, For the People because I think that's really what we're talking about here.

SAMIR SAINI: Agree. Please.

PROFESSOR JULIA STOYANOVICH: So, just to follow up on that, these kinds of questions is really what gets me out of bed in the morning. I mean I'm really very interested in understanding the research questions that—that are in this responsible data science space, and there's no better place to look

for these questions and to develop solutions than a city, and this is the greatest city that there is.

PROFESSOR JULIA LANE: It is.

PROFESSOR JULIA STOYANOVICH: So, so to me and I say this sincerely. I've been a resident of New York City for 20 years, and I don't want to leave. So, our research can be based on this. This is what we get out of this. Our education efforts. We are educating data scientists of the future. I am assigning projects to my students, and my responsible data classes that they are inspired by the kinds of problems that we encounter here by fairness, by privacy, by the privacy and fairness and utility trade-offs, transparency. These are fascinating questions for us as a science. So, yeah, you know, what's not to like?

SAMIR SAINI: Okay. Then just one last point and final question. So, the—today the city has data sharing infrastructure because there is data sharing happening today. It's largely managed through my agency DOITT. It's—it's a Legacy data sharing—data sharing technologies, but we're obviously working heavily to—with new initiatives to modernize the entire platform, and basically

accomplish all the things that you had described and—and more. A lot of this is laid out in a 10 point plan for my agency that's online and—and more information around that is going to be published. So, I just wanted to make that aware to the—to the—to the panel, and—and to the public. The question is or the request I'll say is that we're seeking—back to the point around people and the need. This isn't just about technology, right? It's about having the right people within city government that can support the plumbing of these—I'm simplifying this—but the plumbing required right to support this highly complex data—data infrastructure, data platform, data sharing infrastructure, and the analytics, right, as well to produce insights that can improve quality of life. The request is can we seek to partner with NYU and not just NYU, but quite frankly several other universities, to do joint research projects to bring in interns in the data science space both on the heavy technology side, which is mine, and then I would imagine the same with—with Jeff and MODA and Kelly who is fantastic, right, the Chief Analytics Officer.

MALE SPEAKER: I'll take them, too.

SAMIR SAINI: And there is another request. So, you know, this—this is a team sport here, right, and the intellectual property knowledge right within—within NYU and other universities is something I think we can benefit from if we structure formal—formal projects, formal relationships and—and I'd love to help to advance that.

PROFESSOR JULIA LANE: So, two quick things. One is yes I'm very aware and obviously MODA and the work that it has done is terrific. The—there are limited to having just city data sharing because people are mobile. So, if for example, I want to look to the return to investment in education, I can't do it with all due respect with New York City data. I need to be able to look at New Jersey data and Connecticut data in turn because—so you've got to have a platform that will go across state lines, and that was one of the reasons why we built the ADRS, and the ability for example for Illinois to be able to look at Indiana and Missouri data and see what's happening, the flows of—of welfare recipients across state lines is critical. And so, you need to be able to look much more broadly than a city agency. The second thing is with—clearly there are lots of

partnerships that can be done with interns and so on, but I am actually going to challenge the committee, and so I'm an economist by training and, you know, you look at the proliferation of executive education programs in business schools across the country, and there are masses of them. You look at the proliferation of executive education and training programs for government officials, certificate classes and there are almost none working with confidential microdata, which is what we're talking about. So, why is that? it's because the private sector is willing to invest in data science skills in their workforce. They're willing to pay. Starting salaries are a lot higher, and then they're willing to pay for the ongoing education. The government workforce needs--their data science skills need to be improved and any number of interns and partnerships it's not going to happen if city agencies don't pay for it because no university or community college is going to put up a high quality training program if it's not paid for. You can get by on foundation funding for a little while, but essentially then what happens it's the see with the opium pharma problem. You get the free aid and you don't build the—the

potential for a strong and robust relationships with the universities.

SAMIR SAINI: Okay, thank you.

STEFAAN VERHULST: Just—just to emphasize, we would be delighted—so you Gov Lab is an action research Center. So, we work with partners and already have a great experience with working with some of the partners that are present here at the committee. So, we would be delighted to examine what—what are the possibilities and also to what extent can we add value if at all?

SPEAKER JOHNSON: Thank—thank you.

PROFESSOR JULIA STOYANOVICH: And we already are in the same building as DOITT and too Metro Tech.

SAMIR SAINI: I met Helena last week actually and your Nadine and we had some-some great conversation over what we just described. I just want to make sure you were in the—you were also aware, right of what we had discussed. So I'm looking forward to—to—to that partnership and coming soon.

SPEAKER JOHNSON: Thank you, Commissioner. Thank you Professors for this very helpful testimony and answering our questions today.

Next up is our wonderful Manhattan Borough President Gale Brewer who, of course, a former member of this body and the former Chair of the Technology Committee of the City Council. [pause] Hi, Gale

GALE BREWER: Hello, Corey. Thank you very much, Mr. Speaker. I am Gale Brewer and. I am the Borough President and I want to thank you, Speaker Johnson and Chairman Koo and all the members of the committee. I was a member not only of the Technology Committee, but also I was the Council rep as Ben Kallos is to COPIC representing the City Council when I was on the City Council and I think it helped us figure out what open data is and should be. The desire to improve government transparency that led to the creation of COPIC in 1989 remains an important motivating force today, as you know. New York City we know has made great strides and can boast the most robust open data offerings of any municipality in the United States although I know you need to have apples to apples comparison, and not apples to oranges. It's all been strong leadership. The one aspect I will counter to the amazing economist professor is that we do have a civic hacker community in New York, which I think is phenomenal.

Again, is it as great as other cities? I always think we're better than other cities, but I do think this particular community, although maybe not paid for by government, and that was a good notion that we need the science to be paid for our city employees, but the civic hacker community here is excellent. The Commission, however, is in dire need of restructuring, as you know, to be relevant and to fulfill its purposes. That's why it's great to be here today. Section 1061 of the Charter outlines the duties of COPIC as you know, and these duties in some cases have been left by the wayside. Others have picked them up. COPIC's annual public hearing on city information policies has been replaced in some cases by the great work of this committee. The Annual Report the Commission is supposed to publish is instead put together by DOITT, to their credit and to MODA. I do want to point out that I have every God damn piece of paper known to mankind in my house [laughter] and here is the first edition of the Public Data Directory, April 1993 just so you know.

SPEAKER JOHNSON: That's scary, kid.

GALE BREWER: I'm actually the only one that has that, but I have it, and then I have another version that Betsy Gotbaum--

SPEAKER JOHNSON: [interposing] Commissioner Toole has that.

GALE BREWER: --in September 2008 and if you wan, I can get you the more versions of them all, but here they all are. Actually—I'm sorry. Betsy Gotbaum, is 2002, June 13th. That's her version. She complained there wasn't enough money to do what she needed to do. We know in addition to all of this that since COPIC hasn't met to the best of my knowledge—I know that Ben Kallos has been at meetings, but the Commission no longer has a website or a clear point of contact for information. It's kind of ironic because its mandate is to be transparent. You know, some of the reductions in the scope of COPIC resulted from a duplication of efforts among other agencies, but there's a clear value looking at the amazing array of individuals here today to make a difference on technology. It's clear value in having an organization composed of stakeholders from different backgrounds dedicated to preserving something that we all care tremendously

about: Government transparency. COPIC could be restructured and resourced to develop strategies to safeguard open data platforms and the philosophy of open access. The restrictions of public information and its distortion and misuse for political purposes at the federal level should alert us of the dangers that could occur locally if we're not careful. The current degree of open data and access to government information was inconceivable in '89, but in the future we can reimagine the structure and the role of COPIC. It should be funded for a functioning website to ensure the public remains informed on data issues and try to get some of the back material. It should have a full-time staff that can inform and at the vision of the members, and I want to thank the Speaker as the acting Public Advocate for bringing us together to do exactly that, and hopefully COPIC will meet quarterly if not more often. When Mayor de Blasio was the Public Advocate, COPIC met rarely. I was the one who bugged the dickens out of him to get to meet—meet at all. As Public Advocate, de Blasio felt that any meaningful activity and the agenda items that COPIC initiated would not be able to be successful if staff was not in place and it needed

funding, and that continues to be an issue. I think that continued even under Tish James who did a great job, but there wasn't a lot of discussion about COPIC. Government transparency is vital. You know that. It makes government more accountable and empowers citizens, small businesses and more importantly it improves city services. There is much progress to be made on this front. I will do all I can to ensure that the vision of earlier COPIC discussions continue to inspire and inform such initiatives and that New York City remains a national leader in municipal data innovation. COPIC is part of that vision, and it must be reinvented to ensure the continued success of New York City's Open Data offerings, and I just want to remember that this took place April 1993. Thank you very much.

SPEAKER JOHNSON: Gale, you're the best. I have a question for you, which is and I—I think you answered it but I would love to—to hear you expound on it a little bit more, which is there have been some who have said both before we called this hearing today but during the last many years that COPIC was really—should be considered irrelevant now because of the Open Data Portal because of the how certain city

agencies and of the work that DOITT does and some of the work other agencies do, and the Mayor's Office of Operations. People are already doing this type of work so this—so COPIC is duplicative in some ways, and that it's unnecessary. I don't share that viewpoint, but given your history with COPIC, I would love to hear your viewpoint a little bit more on that.

GALE BREWER: I appreciate that. The reason I think it's still relevant is an example to date because what the difference is with the open data as much, and I respect the work that DOITT is doing and MODA is doing, but there are still agencies that have Legacy issues and they're still—because we have don't forget 12 CUNY students working with BetaNYC. I'm sure you heard from Noel earlier. They are finding the challenges of working with the open data to be able to communicate to the community boards and the community at large. This is a huge city, and in order to get the data to be real time and to be acceptable and to be transparent with all due respect to the work that Council Member Koo was doing and the staff and the City Council, you need them sitting around at a table as opposed to the

hearings file to be able to find ways to bring in the outside public to change the way in which the open data is collected, and then we heard earlier the challenge of government participating in the very changing science that take—that's changing so rapidly. You need those kind of expertise on at COPIC to be able to keep up with the work that is going on outside of city government. Having participated in this since 1989, and having seen the way in which groups can come together. Beth Nowick (sic) who was the CPO for Bill Clinton she's the one that helped me with open data. She's now at NYU. Bringing in her expertise and the people from academics to continue to push the city to do the kinds of work they heard about today, I think COPIC is absolutely necessary and in 10 years it will be a completely different discussion than what we're having today. So, I—I think it's necessary, and I also just wanted to thank Clayton Banks. He's not just my—he represents all five borough presidents. I just want to make that clear. Thank you.

SPEAKER JOHNSON: We're—we're really grateful to have him here today participating in this, and I want to go to Mr. Banks who h as a

question or a comment followed by Council Member Kallos followed by Ms. Barber.

CLAYTON BANKS: Madam President.

GALE BREWER: Yes, Mr. Banks.

CLAYTON BANKS: You mentioned that the Commission should—I'm going to use your exact words "Be restructured or in dire need of restructuring. Can you give us some ideas of—of what you have on what that structure would look like?

GALE BREWER: Sure. I mean I think again it would have had to come through the Charter Revision Commissions, which is taking place as we speak. I do think that the way in which it has faltered there were—there's no money attached to it. There's no staff attached to it. It's sort at the behest of people who were doing other things in the Public Advocate's Office. So, one way would be to mandated the funding. That's one restriction and then second this, you know, times are changing in terms of the—what is going on in terms of the science. So, in some cases on different boards we mandate. I'm making this up. In the Landmark Preservation Commission you need an architect, you need a preservationist, et cetera. So, I would think

on this particular COPIC you would try to think there are certain disciplines that you would like to see on this commission. Again, that would be up to those who are more familiar with what's changing in the world. Just to give you an example. I think that we need that kind of expertise.

CLAYTON BANKS: One follow-up question, we are about to embark on the 2020 census and I'm curious your thoughts about a role COPIC would have in that sort of public communication.

GALE BREWER: Yep.

CLAYTON BANKS: We—we are finding that many people are under-represented when it comes to census in general, but a digital census that we're about to embark on where there are several people that are not digitally literate or don't even have devices. Would that be a role COPIC could play?

GALE BREWER: Well, certainly there's so many different ways. Obviously, this will be the first census that is to be done on April 1st 2020 online. You can also call in, you can write in. You get a knock at your door. There are four ways that you're going to be filling out that census and, of course, there's all the challenges of the citizenship

question? There are—but it's not just filling out and who's digitally sophisticated. It's where are the—you—you knock on somebody's door and if there's no connectivity even on your phone because there's no connectivity in that area, then that's an issue. So, just looking at dead spots, looking at kinds of speeds that are operable, or the libraries where people are going to go to fill this out. Do they have their—is E-rate up to date? Is there the kind of support in terms of expertise at these different institutions? So, I think yes COPIC could play a big role. Technology can play a big roll for the census and I'm not just talking about the actual survey, but leading up to the survey and after the April 1, 2020. There's many, many ways that we could be using, right, COPIC to be part of the survey and the census be need to count everybody, and in the past we have not had a great record in New York.

CLAYTON BANKS: Thank you.

GALE BREWER: Thank you.

CHAIRPERSON KOO: Now, I'm going to have Council Member Kallos.

GALE BREWER: Yes, Mr. Kallos. I see him three—like 365 days a year.

COUNCIL MEMBER KALLOS: And it's very hard to try to keep up with you. I—I--

GALE BREWER: You do just fine, Mr. Kallos.

COUNCIL MEMBER KALLOS: It is an honor to succeed you as the Council and COPIC--

GALE BREWER: [interposing] Just ask the question.

COUNCIL MEMBER KALLOS: I won't say nice things about you. I'm sorry. So, you have a long history with COPIC. Has it every actually had an executive director or general counsel or ever actually been funded?

GALE BREWER: It had—I was working for Mark Green when it was initiated. There were two—I would say 2 or 3 people on staff who focused and then the funding ran out. In other words, either he—I can't remember if he found other things for them to do or if they went on to other jobs, but I wouldn't say that the full complement had ever been part of COPIC and it's why every public advocate since has not given it full attention because of the staffing issue. That would be the one challenge that has accompanied COPIC. No staff.

COUNCIL MEMBER KALLOS: Recently, you passed the law for a Charter Revision Commission that is currently needing one of the items they identified was creating independent budgets. COPIC is actually tasked with being the—the Committee on Open Government, the Robert Freeman for New York City as it were. Is this something that you might recommend to the Charter Revision Commission to look at?

GALE BREWER: Yes. I mean I do think for instance that the Public Advocate's Office would be a good place to house that, but again you come back to this issue of having, as you suggest, counsel and staff to be able to accompany all of those duties. You can't do it with folks who are also doing other jobs.

COUNCIL MEMBER KALLOS: In terms of the composition of COPIC, as you see it from the table there's a whole bunch of the mayoral appointments. There's the Counsel an then there's the five borough—so the—the non-mayoral agencies including the Public Advocate end up being out—out-numbered on that board by mayoral appointments. So, I guess is it mayoral or public advocate? Where—where is it? Yeah.

GALE BREWER: Well, I mean I think obviously you and will probably share that the mayor doesn't have to control everything. So, I would suggest that there would be fines that have the mayoral outnumbered, but what I'm also stating is you need to have people who have a specific expertise if you're going to do that.

COUNCIL MEMBER KALLOS: Thank you.

CHAIRPERSON KOO: We have Ms. Barber

GALE BREWER: I love Dawn Barger just so you know.

DAWN BARBER: [off mic] Yeah, me, too, President Brewer. [on mic] I just wanted to say, Gale that I just fully—I—I fully support you in this. Thank you for saying that, and—and as I recall from my last COPIC meeting, it's the staff issue. I could not be more supportive because as much as we h hear from these wonderful professors, all this infrastructure stuff is supper important, but even if we get to the point where we can afford to adapt and adopt new technologies, people are the ones who have to run it, babysit it, take care of it, make it's responsible for the people of our city, and doing

what it's supposed to do. So, that's all. I'm just fully supportive of President Brewer as usual.

GALE BREWER: Thank you Dawn Barber.

CHAIRPERSON KOO: We have Jeff Thamkittikasem.

JEFF THAMKITTIKASEM: [off mic] Thank you Madam President.

GALE BREWER: Nice to see you.

JEFF THAMKITTIKASEM: It's great to see you, too. Thank you. I actually am really just interested in this comment about how can we really figure out a way to kind of reconfigure COPIC, but also keep it, you know, as you've said abreast of the times because I think as Professor Verholst said, there's a lot also about culture, and what people are willing to receive and participate in, and as we kind of go through, there are technology changes, but also to at least, you know, voice the opinion of the mayoral side of this, and a lot of operational agencies are trying to figure out what they can do while not disrupting what they are doing. And I just wonder from a process standpoint do you have any recommendations on how we can stay abreast of the times in that way?

GALE BREWER: Well, I meant, you know, having been to the—many meetings of the ACCOs or people who are the tech folks in the different agencies, and, you know, going with Allan Lightner everywhere he traveled. For those who knew him, he's been around for a long time. I think the issue is because technology changes so fast, having an outside voice it's not confrontational, but has the best of the city in mind and the city agencies in particular to have some outside ways to bounce off ideas would be helpful. I have to say, you know, within your agencies there's a lot of expertise. We know that, but sometimes they feel a little crushed. I'll be honest with you having spoken with them on a regular basis, and I think that for them, too, to have a place to bounce off ideas would be helpful. So, it's-it's intra-agency is greatest. As much as DOITT is doing and as much as MODA is doing, those agency folks because things change so much. Nothing changes in housing. There's not one damn thing that I have learned in 30 years in housing. I can promise you, but in technology it changes every minute. So, it's a different type of—if coming together than would—you might with supportive housing or some other housing

group that's going to just try to build. But in your case, there will be 100 different things in five years, as you know, and it's hard for the agency. So, as big as they are to keep up, you know, just the small thing that we've been talking about for a long time on procurement. You're trying to fix that.

JEFF THAMKITTIKASEM: Yes.

GALE BREWER: But if you had some other outside entity that was supportive, but more innovative, then maybe that could help in terms of the innovation for procurement for instance. That's just one example. I know you have many others, but that's the one that I'm—I'm familiar with. The private sector obviously DOITT talks of them, MODA talks of them. You go to a million different conferences, but to have a group of people, you know, selected by the mayor, selected because of their expertise to be able to, you know, carry your message so to speak or to come up with some innovative ideas, I—I think it would be very helpful. This is a—I mean I was eight years I think Chair of Technology from 2002 to 2000—towards the end. It changed so much, you wouldn't even know you were in the same hemisphere, literally. And when we started out, we had no

website almost, and look where we are today, and that won't be the same in 10 years from now.

JEFF THAMKITTIKASEM: Okay.

GALE BREWER: So, I hope I'm answering your question, but I think--

JEFF THAMKITTIKASEM: [interposing] Oh, it is--

GALE BREWER: --to have something that is outside but not confrontational, and that meets on a regular basis, and that can give you feedback and that has the expertise that you feel is helpful to as the city. You know, we're so big, but I though—I think it would be helpful.

JEFF THAMKITTIKASEM: Thank you.

CHAIRPERSON KOO: Thank you and does anyone else have any question for our Borough President? No. Right now I would like to call--

GALE BREWER: [interposing] Thank you very much.

CHAIRPERSON KOO: Thank you. Thank you. Thank you Borough President. Now, I would like to call our next panel. David Sivert (sp?) and Angel Diaz, [[background comments/pause] [coughing] You may start, yeah. Just identify yourselves and start.

DAVID SIFFERT: Thank you so much for inviting me to speak here today. Thank you to Chair Koo and to Speaker Johnson and to the Committee and the Commission. My name is David Siffert. I'm the Research Coordinator at the Center on Civil Justice at NYC School of Law. The Center is dedicated to the study of the Civil Justice System in the United States, and how it can continue to fulfill its purposes. The Center is directed by Peter Zimroth, who is the former corporation counsel for New York City. Its faculty co-directors are Arthur Miller, Daniel Issacharoff, John McKenzie and Jeffrey Miller were some of the most distinguish law professors in America. Our Board's Advisors is chaired by Sheila Birnbaum, who's one of the top trial lawyers in the country and contains some of the nation's most accomplished plaintiff's lawyers, defense lawyers and judges. One major focus of the center is providing access to data and information the civil justice system. One of our projects for example is a simple online searchable document database on the subject of third-party litigation funding. The website, which we're calling the Dispute Financing Library will serve as neutral quality—quality repository for the

collection of information and data about this new growing and largely unknown industry. Another project we are working on involves working with judges to help them issue orders to administrative agents in large cases to make public the data collected in those cases. This project involved balancing some of the privacy concerns that are being discussed at this hearing, and making sure the information we collect is not only anonymized, but also can't be reversed engineered so that any of the individual claimants can be identified. Most recently the center hosted a conference on Artificial Intelligence in a Democratic Society. The conference discussed the use of data, algorithms and machine learning and how to make sure that AI technologies are developed responsibly. As a result of this work, the Center is very well aware of the DASILA (sic) and CARIB (sic) that's facing the world's law and government. We're far behind the bar in terms in creating, distributing and using data to make our government and legal system work better, but we also lack a lot of the institutional protections and technical know-how to ensure that this data is used responsibly in a way that will protect business and

ensure that data biases are minimized. Many of the speakers here can better explain the excellent uses for data in government and out legal system or about the dangers to our privacy or about the risks of algorithm bias. Some may have answers and policy prescriptions for how to use the data or how not to use the data, and how to regulate the use of the data. I have one very simple proposal, and I would just like to highlight one thing to help navigate DASILA and CARIB as they're discussed and its education. The Center is currently working on educational programs for lawyers and judges to teach them about data, algorithms and automated decision making especially as it currently exists in the civil justice system. We hope to teach about what data is available, what is not available, what is appropriate to use in what context and how to use it responsibly. But the use of data in New York City extends far beyond the legal profession. The city needs to make substantial efforts to increase statistical literacy across the board. Of course, those in city government who already handle data need to understand concerns about privacy and bias and those in government who don't already work with data still

need to have sufficient understanding of what data exists to know whether that data could be used to improve the work they do, and I believe Professor Lane got into this a little bit earlier when she talked about the need to make investments in terms of the education of members of city government in data and data analysis. But education cannot just start and end with the government. Student in New York City's public schools need to have baseline levels of statistical competence if they're got to compete in this economy and if they're going to be able to work in a world that relies on data. We also need to create a talent pool that can lead us to a New York that has true responsible adoption of data use. We need a populace that understands data, what it is, what it can do, how to use it appropriately, and the dangers of using it inappropriately. The Center of Civil Justice at NYU [bell] is working hard to supply this education to New Yorkers, and we need your help. Thank you for your time.

ANGEL DIAZ: Good afternoon, Chairman Koo, Members of COPIC and the Committee on Technology. My name is Angel Diaz and I am Counsel to the Liberty and National Security Program at the

Brennan Center for Justice at the NYU School of Law. I'm pleased to be here to be testifying about how COPIC and this committee can help advance policies that increase governmental transparency. The Brennan Center is a non-partisan law and policy institute that seeks to improve our systems of democracy and justice. The Liberty and National Security Program focuses on restoring the proper flow of information between the government and the people by securing public access to public information, ensuring that government policies that target suspected criminals and terrorists do not affect—do not target individuals based on their religious, faith or their ethnic background, and we hope to secure appropriate government oversight and accountability. As part of this work, we actively seek greater transparency and oversight of the NYPD surveillance tools. The NYPD has prided itself as being the most transparent police department in the world, but, in fact, the NYPD frequently resisted transparency requiring lawyers, journalists and others to spend significant resources to obtain even basic information that is of critical interest to the public. For example the Brennan Center is party to a multi year legal dispute

with the NYPD to obtain information about Predictive Policing Program. These systems rely on algorithms to analyze large datasets and generate statistical estimates about crime, which are used as direct police resources. Predictive Policing tools have been roundly criticized by civil liberties and civil rights advocates as they often rely on historical crime data that both reflects and recreates decades of biased enforcement against communities of color. In addition, there is little consensus that Predictive Policing is actually effective in predicting and reducing crime. There's a common refrain that Predictive Policing predicts policing. It doesn't predict crime. Despite these efforts, Police Commissioner—former Police Commissioner Bratton and Mayor de Blasio announced in 2016 that the NYPD client will spend $45 million Predictive Policing Technologies over the next five years. We believe it's critical for the public to know more about the department's existing systems or any future versions of them, and we, therefor, filed a public request in July of 2016 for a range of documents that would shed light on the NYPD's Predictive Policing efforts including the information about what type of

information was fed into the algorithms and the results that they generated. The NYPD denied our initial request and our subsequent appeal forcing the Brennan Center to file suit in late 2016, and despite months of negotiations, the NPPD continued to stonewall us refusing to produce most of the documents that produced—that we requested. In late 2017, a judge finally order the department to produce records about its testing, development and use of Predictive Policing tools, but even then it took almost a full year from the judge's order before the NYPD finally produced the information of request. This is just one example of the NYPD's many surveillance tools. The NYPD also has optic commission software that can identify individuals based on their skin tone. It deploys self sight simulators that can trick every phone in their vicinity into sharing identifying information, and it operates a domain awareness system that combines information from NYPD records and databases with thousands of public and private security cameras around the city. Earlier this year a public records request revealed how the NYPD was engaging in social media monitoring a Black Lives Matters activist

during a protest in 2014. In short, there is a serious need for mandatory transparency and oversight when it comes to the NYPD to ensure that the department is disclosing records and other data that the public should be entitled to access. This is why the Brennan Center is calling on this Committee and COPIC to support the Post Act, a bill that was reintroduced by Council Member Gibson, and is co-sponsored by Council Member Lander of this committee. [bell] The Post Act would require the NYPD to publicly report on the surveillance tools that it uses and describe the rules it has for using them. Although the NYPD may not wish to discuss the surveillance tools they use, a strong local democracy like New York City requires at least a basic level of information about what its local police is doing and how their doing it. The Post Act is carefully balance to achieve transparency and accountability while avoiding the disclosure of operational details that might compromise police investigations of harm public safety. In an increasingly data driven society it is important that our elected officials do not let transparency fall by the wayside. We commend this committee for addressing this important issue

and urge you to support measures that empower the public to hold the NYPD accountable. Thank you again for the opportunity to testify today. I'm happy to answer any questions.

CHAIRPERSON KOO: [coughs] Thank you, yeah. Mr. Banks has a question.

CLAYTON BANKS: Thank you and thank you for your testimony. It really resonate with me. [laughs] So—but I'm going to bite on Andrew Rose who's sitting in here. He may be making a testimony. I hope I don't get ahead of you, but one of the things he talks a lot about are terms and conditions when it comes to anything you sign up for, and he makes the point that many of us just hit the agree. I'm curious if within your work, have you analyzed that? Because what I'm hearing from a lot of those—for a lot of us who do data, you know, at the end of it we say oh, here's your terms and conditions, which we don't read. So, it ends up they can use our data any way they want. I'm curious if any of you have done any research around that?

DAVID SIFFERT: So, I—the Center on Civil Justice hasn't actually done any work on that. So, I can't speak for the Center on the issue. I will say

that as a—on—on a personal level this does resonate with me, and when I was in law school at NYU I remember thinking that there should be some rule of contract law that the length of the contract needs to be proportionate to its value such that if you write a really, really long contract that for free software you can't enforce all those terms against someone who click yes, but—but as a –as a center we haven't done any specific research of what the effects of that are.

ANGEL DIAZ: The Brenan Center also has not done research on terms and service, but it actually raises an interesting question of how can we meaningfully use the Internet if you have to agree to terms and conditions to access any number of services, and by the same measure, how can move around New York City without being surveilled by the police?

CLAYTON BANKS: It's still an issue Andrew.

CHAIRPERSON KOO: Council Member Yeger.

COUNCIL MEMBER YEGER: Thank you, Mr. Chair. You indicated, sir, that the NYPD planned to spend $45 million on predictive policing technology

over the next five years. How much do you think it should spend?

ANGEL DIAZ: Well, I think it should actually study whether the Predictive programs actually can work before I'd invest in--

COUNCIL MEMBER YEGER: [interposing] How do you know they haven't

ANGEL DIAZ: We've actually been trying to obtain information that--

COUNCIL MEMBER YEGER: [interposing] So, they haven't told you that they haven't, but do you assume that because they haven't told you that they have or haven't—I mean they haven't? They resist giving you information, which you would then put into the public domain, information about its surveillance technology, information about how it works to combat crime and how it works to protect New Yorkers. Do you assume because they haven't told you how they do things they're not doing things?

ANGEL DIAZ: I think that the public has a right to understand what-

COUNCIL MEMBER YEGER: [interposing] That's not my question. My question is: Do you assume because they haven't told you the fine

wonderful people at the Brennan Center for Justice how they do things, that they're not doing things?

ANGEL DIAZ: Well, as—as the judge ordered the Police Department to turn over information about--

COUNCIL MEMBER YEGER: [interposing] I'm not—I'm not a judge. I'm a Council Member. My question is—starts with you said—you said $45 million over five years. I asked how much would be appropriate, and you said they need to tell us how they do things first--

ANGEL DIAZ: Uh-hm.

COUNCIL MEMBER YEGER: --and I am—I'm asking you do—no, you said they need to study how they do things first, and I'm asking you if you believe they haven't studied how they do things?

ANGEL DIAZ: Well, everything that we understand about how these systems work, is assuming that they don't work, and that's all I really generally do is predict based on where they've already policed in the past, and they continue to send officers back to those locations. So, it doesn't predict where a crime is going to occur. It just predicts where the police have been in the past.

COUNCIL MEMBER YEGER: So, zero is your answer to my firs question?

ANGEL DIAZ: Do you want to repeat your question one more time?

COUNCIL MEMBER YEGER: How much should the city spend on predictive policing technologies over the next five years?

ANGEL DIAZ: Firstly, I don't think the Police Department should be investing in the systems that don't work.

COUNCIL MEMBER YEGER: Is zero the question? Is zero the answer?

ANGEL DIAZ: If it doesn't work the answer is yes.

COUNCIL MEMBER YEGER: How do you know if the system works or not?

ANGEL DIAZ: It's not that. Council Member, it's as if it's—there ought to be a New York City Police Department to produce information that shared with information that actually works.

COUNCIL MEMBER YEGER: I'm sorry. Say that again.

ANGEL DIAZ: And it's the role of the New York City Police Department to actually turn over information about how these things work.

COUNCIL MEMBER YEGER: The role of the Police Department? Is that what you said? I—I didn't hear the first part of your answer. What?

ANGEL DIAZ: The Police Department should turn over to the public--

COUNCIL MEMBER YEGER: [interposing] Should turn over to the public--

ANGEL DIAZ: --so the public has an accountability over what it is that the Police Department is doing and its name. If it's surveilling massive numbers of communities base on data that doesn't actually show that crime is going to happen somewhere, it's not acceptable.

COUNCIL MEMBER YEGER: Okay, but that's a different question and answer to the question of whether or not the city should be spending $45 million or a 11 cents or somewhere in between on a technology that you say principally you just don't like, right?

ANGEL DIAZ: Principally, we'd like to know more about how they empower. (sic) This doesn't actually work.

COUNCIL MEMBER YEGER: What if they decide they don't want to tell you?

ANGEL DIAZ: We'll continue to file lawsuits.

COUNCIL MEMBER YEGER: Okay and what if they decide they are going to continue to fight your lawsuits, but my point is if they decide they don't want to tell you, and let's say a judge doesn't agree with you and they're not ordered to tell you.

ANGEL DIAZ: No. Several judges have agreed with us, and—and why we're asked on this committee just the part of the Post Act would be to require the Police Department to put—disclose basic information about how their systems work.

COUNCIL MEMBER YEGER: Maybe they don't want to tell criminals how they do their work.

ANGEL DIAZ: Council member, respectfully, it's in public domain how wiretaps work and wiretaps continue to produce useful information that help the police catch criminals.

COUNCIL MEMBER YEGER: Right, but what you're asking for is how they determine what they're going to do would enable people to change their behavior as such and to avoid the predictive technology--I'm assuming because I don't know any more about it than you do—to avoid those technologies. I don't know what that means if it's predictive technology based on pictures of people though who wear masks. I mean I don't know what the answer is, but my point is that we don't know, right. You don't know. I don't know. I don't know more than you. You don't know more than me I assume or at least not much more than me. How much should it spend if not $45 million? Is the answer zero? Right now the answer would be zero?

CLAYTON BANKS: [interposing] Excuse me. I only got limited got limited to like one or two questions. Is this a side bar or I mean—because you've asked that same questions six times that I recall.

COUNCIL MEMBER YEGER: Try—trying to get the answer, sir, but the way it's—

CLAYTON BANKS: [interposing] It doesn't sound like he's going to—

COUNCIL MEMBER YEGER: The way—the way it works in this Chamber is that I'm going to be ruled—required to turn off my microphone, it's the Chairman who tells me to do that, and all—

CLAYTON BANKS: [interposing] I was—I was just commenting.

COUNCIL MEMBER YEGER: --and with due respect I would appreciate that. If the Chairman is tired of hearing me he'll let me know and I'll turn off my microphone.

ANGEL CHAIRPERSON KOO: Yes, can you answer the question. No. So, you'd be a lot more comfortable to provide an answer. Council Member Yeger, would like to ask another question?

COUNCIL MEMBER YEGER: As the Chairman is saying if you're not able to answer the question, if you're not comfortable saying what the number should be, if you're comfortable saying zero and as assume, but I don't want to assume because I don't want to put words in your mouth, then just, you know, tell me that but is something—I mean we're doing a budget and—and we're working the budget now here in this Chamber. We just heard from the Mayor on the

Preliminary Budget. We're going to be talking about it over the next three, four months. We all vote—the Council Member and I vote on the budget, and I don't know if all of the Council Members are still here, but there are 49 others who vote on the budget. We'd like to know should we be raising a red flag with the Mayor? Mr. Mayor $45 million is not the right number. How about $32 million or maybe 11 cents or what's the right number?

ANGEL DIAZ: I think to answer your question we'd have to have information about how these systems work, and so in order to be able to tell the Mayor how much money they should spend on a—you need to be able to understand what that system does and that that system can't do, which is why we're asking you to support the Post Act, which would require basic information. So that you are empowered as with everybody else to continue to make--

COUNCIL MEMBER YEGER: [interposing] Okay.

ANGEL DIAZ: --its right nature. (sic)

COUNCIL MEMBER YEGER: Okay. Thank you.

CHAIRPERSON KOO: So, thank you, yeah. Council—thank you for your testimony. We share your

concerns now. So, we will call the next panel. We have Albert Fox Cahn, Suma [background comment] Sorry, Harriet Houser—Harriet Summer and Lorel Hidalgo. [background comments/pause]

ALBERT FOX CAHN: Good afternoon My name is Albert Fox Cahn and I serve as the Executive Director for the Surveillance Technology Oversight Project or STOP. Stop advocates and litigates the privacy rights of New Yorkers impacted suspicionless warrantless surveillance, and I commend the committee and Chairman Koo for bringing needed attention to fight for governmental transparency here today. The statement I'm going to make is an excerpt of the longer written remarks that have been entered into the record. For the past year I've been proud to partner with the city as part of its Automated Decisions Systems Task Force meeting with leaders, academics and advocate to shape recommendations for the future role of Artificial Intelligence and other automated decision tools in New York City government. As part of my role in the Task Force, I have noted that while transparency is crucial in every area of government, it nowhere more vital than in policing or mistakes can quickly rob New Yorkers of their liberty

or even their life. As part of today's hearing I urge the committee to note the urgent need for greater transparency in NYPD surveillance practices especially those tools that use Artificial Intelligence and other automated decision systems. Specifically I speak today as others have in support of the Post Act, which would be a significant step forward in strengthening police oversight, promoting public safety and safeguarding the New Yorkers' privacy rights. Historically the NYPD has deployed novel and highly evasive surveillance technologies in ways that circumvented democratic oversight and accountability, circumventing this very Council. The NYPD has used private and federal funds without any disclosure to lawmakers that we depend upon to oversee our police force. With this unaccountable funding, the NYPD was able to deploy tools like Stingrays, fake cell towers, the collect sensitive location and communications data. Like many of the NYPD's new tools, Stingrays collect sensitive location and data spying not just on the target of an investigation, but on untold numbers of bystanders. Le t me be clear, the Post Act does not prohibit the NYPD from using new surveillance tools. It is not a

ban on new technologies. Rather, it merely secures this Council's indispensable role in reviewing when and how such tools are deployed. Under the Post Act the NYPD must issue an impacting use policy report when choosing new surveillance tools. This report must describe the technology rules and guidelines for that technology and safeguards for any data collected. The City Council and the people of New York City would then be allowed to provide feedback on such an acquisition. So it is not a bill that will set the amount of money being spent on these new technologies. It is the bill that is the precursor to that debate. As we just saw here a moment ago, advocates lack the information necessary to answer some of the vital questions being presented to this Council. Also, I would like to note it was previously mentioned in today's hearing that Public Law 245 and 247 from 2017 established the Chief Privacy Officer position here New York City and protected New Yorkers' private information with new—a new set of restrictions. We have at STOP are very concerned that those bills exempted the NYPD, and exempted any data collected during the course of an NYPD investigation from the important safeguards

being enacted for other city agencies. We will be working with members of the Council to push a fix for this loophole in the coming months and we look forward to working with many members of the Committee and the Commission to make sure that when New York City says that it is a sanctuary city that that is a protection we enforce in all its forms, digital and otherwise. Thank you so much.

SPEAKER JOHNSON: Thank you.

Hello, Good afternoon everyone. My name is Sumana Harihareswara. You can pronounce any variance and I will probably understand that you're talking to me. I am a New York City resident. I'm in Astoria. I'm in Costa's district and I'm a small business owner. I run Changeset Consulting, which is a tiny consultancy focusing on project management and often source software. I don't have any business with New York City itself although I have worked on government software, software for government use, state and municipal use before. So, I have three things to say, and they're mostly response to things that came up today so I don't have any printed testimony for you. First, very quickly I'd like to second Ms. Brewer. It is really hard for an ordinary

resident to even find out anything about COPIC that it exists. It seems a bit of phantom kind of like the G Train used to be, and it would be nice, you know, once we get an non-interim public advocate right to have the names of the Commission members listed in a somewhat easier way because all of you seem like excellent people, and we ought to be able to know that you're defending our city. Second, the ADS Task Force there an extremely bare bones website, and I'm appreciative of every pixel that's on it, but it would be wonderful if there were a little bit more information about whether there's any kind of interim timeline between and when they're actually going to deliver thee recommendations, and now less than a year. I understand there's a feedback for where I as a resident can, you know, punch them in, go right in there and that's great, but are there going to be any public hearings? It would be nice to know, and I figure the folks in this combined session might be among those who could—who could ask that more effectively than I could. And third, the Open Data Portal. New York City's Open Data—Open Data Portal. I have a question I'd like to answer, and that is what are the A, E, D deserts in New York City? Let

me explain. My father died of a heart attack . If someone is having a cardiac event, every minute that goes by without their heart getting restarted, reduces the risk of their successful resuscitation by 10%. An automated external defibrillator can in many cases restart that person's heart, and that's why several years ago in 2005 as part of Local Law 20, the City Council passed a law creating a Public Access Defibrillator Registry, and that information is held by Department of Health and Mental Hygiene in coordination with NYC REMSCO, Regional Emergency Medical Sources Council and the Fire Department of New York of the information where there are AEDs in public places including private businesses that are open to the public around the city so that 911 dispatchers can know and can say, Oh, you're at a place with AED. You know, go get somebody to get that and restart—restart that person's heart. There is an app where you can find out where the three nearest ones are, but I want to know where are there huge swatches of the city where maybe there's none within reach, and then we could get local merchants to buy them, and—and put them places. There's a New York State Tax Credit. We could do a lot to possibly

save more people from fatal cardiac events. I submitted a request through NYC's Open Data Portal on September 21, 2017. I got—you'll get a response in two weeks notice. I got a close—this issue has been closed no explanation note on the 22nd of November 2017, and now I look at it and the status is simply marked this has no response, but there's no indication of why, whether the status is open or closed or what have you. So, I'd love to some help with that from the oversight side of you all.

SPEAKER JOHNSON: Thank you very much for your testimony. Thanks for being here today.

NOEL HIDALGO: Hello. My name is Noel or Noel. I'm a Gemini so I have two names. In a similar way you can call me whatever you want as long as you know it's me. So, it is an honor to be here and have this opportunity to represent New York City Civic Technology, Data and Design. I'm the Executive Director of a member driven good government group non-profit organization and we are the advocates for a city government that is for the people, by the people and for the digital era. Essentially some binary that's underneath Lincoln's name up there. In 2020- in 2009 a group of neighbors started meeting to

discuss the future of municipal open data and technology because we were concerned about the lack of open data, and expensive technology procurements in New York City, and over the last 10 years over 5,000 of our members have gotten together and have fought for improvements to people's lives through technology, data and design. We have watched the last three public advocates appointed COPIC members, host one meeting per term and walk out of the office with little accomplishments. We watched every public advocate publish flowery press releases only for them to disappear like tears in the rain, In 2012, we joined with the City Council member then Gale A. Brewer to support the city's Open Data Law because COPIC was absent. Since 2014, we published the People's Road Map to s Digital New York City, and we outlined how the city could adopt modern agile practices to meet pressing needs for a more efficient participatory and transparent government. out of those 34 ideas, we have been able to get the city record online and in a machine-readable format, ensure that city's Charter and laws are owned by the people not a publishing corporation, strengthening the city's Open Data Law through seven interlocking

pieces of legislation and formalize the city's Chief Analytics Officer and the Mayor's Office on Data Analytics into the Charter. The People's Roadmap outline ideas that required government partnership, and for the past four years we've been working successfully with the Borough President in Manhattan Gale Brewer, the Brooklyn Borough President Eric Adams, the Mayor's Office on Data Analytics, Manhattan and Brooklyn Community Boards, CUNY Service Corps, the Fund for the City of New York and the Alfred P. Sloan Foundation to study and test how community—how communications technologies and Open Data can equip the public to improve their decision making. We have published three reports and filed numerous dataset enhancements with the goal of improving community decision making. I could go through all of these achievements, but I'm afraid that I'm going to run out of time. What I really want to focus on is that we now have an open data boot camp. We have suggestions on how community boards can better use technologies. We have convinced DOITT to be part of the District Needs process. We've educated and mentored over 50 CUNY undergraduate students, and one of our alumnis

happens to be your scheduler, Corey. We've built a suite of specialized tools for community boards and we've detailed—we have documented in detail information flows thorough community board and how they can improve their decision making processes. We've educated over a thousand New Yorkers on how to use open data, and we've enriched the local community of open data professionals and advocates by hosting three annual citywide open data festivals with the fourth coming up, Corey in your district. So, if you want to come, we would love to have you, which is on Saturday the 2nd of March, and we've been doing this with MODA. We love MODA. We are one of the city's open data's biggest fans. We've partnered with Parks, 311, Planning. I could keep on going on, but essentially we're at the point where we are helping the city explore and demystify its data. We've worked with the Department of Education's Computer Science for All Program to build a generation of the next citizens. We've been doing this because COPIC has been missing. At its core COPIC has three functions: An oversight of government information and communications and technologies access to public information and data, and government adoption of new

communications technologies. If there is an opportunity to provide leadership, that time is now. I conclude my testimony with 12 particular questions that if you're so interested in rebooting COPIC, these are the fundamental questions that need to be asked: More or less what is the role of the Public Advocate in technology decision making? What is the role of DOITT doing public facing technology? What is the role of the Chief Digital Officer, the Chief Technology Officer? These are big underlying questions that I think need to be asked from Council and the Mayor's Office, and if they're effectively answered, we will effectively have a COPIC for the 21st Century.

SPEAKER JOHNSON: Thank you Noel. We have—I appreciate your testimony, and I appreciate the very thoughtful questions that you put forward, and we will be sure to make sure whoever the next Public Advocate is, is, of course, briefed on this hearing, is provided all the information that's been discussed here today. So, we have a couple of questions, and then we have one final panelist that we're going to hear from. We're going to start Jeff and then we're going to go to Clayton.

JEFF THAMKITTIKASEM: Sorry. I actually don't have questions so much as to the Speaker about the AEDs and one as kind of the head of operations and MODA under us, which operates the Open Data. I apologize for the experience. I happened to look up. I know the AED is available right now. It doesn't have enough land. There's a latitude and longitude to kind of do an actual visualization of what it is, but the leagues, the boroughs all of that is there. It's published by the Parks Department. Again, I apologize for your experience.

SUMA HARIHARESWARA: Maybe I could follow up with you--

JEFF THAMKITTIKASEM: sure.

SUMA HARIHARESWARA: --on one about this later because I believe there a list with addresses that REMSCO holds, and so that would, you know, could be resolved for that one.

JEFF THAMKITTIKASEM: Yes, we're happy to definitely work with you on this, but certainly I continue to build up our ability to kind of answer specific questions by New Yorkers so thank you.

SPEAKER JOHNSON: And just as a follow up to that, I'm very sorry about your loss and that that

happened. The Council in the last few years has expanded AED legislation. So, we've gotten it in the hand of Little Leagues across the city. There was a staff member here whose son nearly died three years ago because he was hit in the chest with a baseball in Central Park, and if there was not an AED on site the doctor said that he would have died. He as 16 years old at that time. So, I'm proud of the work we're doing, but as you said, we need to ensure that public knows where the AEDs are and that it's easily findable, searchable and relatable for people who need it most.

SUMA HARIHARESWARA: Absolutely. There was a—in follow up to that law in 2005, creating this AED registry there were actually five follow-up reports each subsequent year for five years, and I got those DOHMH since they weren't on NYC.gov and those would be right for analysis to see if there's any refreshes that need to happen in general for a policy lever for PAD.

SPEAKER JOHNSON: I mean this points to I think a much bigger question that we have been looking at over the last year and probably before I was Speaker, which is we pass all sorts of reporting

legislation. What happen with those reports? How does the public see those reports? Are those worthwhile reports? Where is the repository of those reports? How were those reports used by Council Members, by the public, by the agencies, and so we have been working over the past year on looing at the number or reports that are supposed to be issued by city agencies. The number of reports that are not issued by city agencies and what we can do to actually ensure that there is greater compliance so that when we pass legislation it's actually meaningful in some ways. So, I think this is a great example.

SUMA HARIHARESWARA: [interposing] That sound great, yeah.

SPEAKER JOHNSON: --of—of-of sort of a deficiency in that process. I want to go to Clayton and then we're going to go to our final Witness.

CLAYTON BANKS: This question is of Noel. You talked about—first of all, I'm just a big fan of Beta NYC. I love what you've done. You listed a lot of the accomplishments in here. I'm curious. A two—two part question. I'm curious if you think COPIC should be like Beta NYC or Beta NYC should be like

COPIC is one question and the other is you refer to, which every one is going to need governmental resources. Do you have any idea of what you're thinking about and how this should be resourced properly?

NOEL HIDALGO: Thank you and it's been an honor to work with Silicon Harlem. So we've—Beta NYC has stepped into a void where COPIC should have been in regards to educating the general public around public information and giving technology guidance and also research. This is what we've been able to do as a small group of dedicated full-time staff members. In no way, shape or form is Beta NYC replacing COPIC. We're only kind of articulating and standing in that place. We actually think that MODA is one representative of COPIC functions. The series of pieces of legislation that we've gotten past really speaks to the Public Data Directory, Charter Amendments or the—the parts in the Charter for COPIC, the Open Data Directory. MODA has successfully been able to accomplish that in the seven pieces of legislation that we've gotten past that are interlocking fulfills that. There's another part of COPIC that's really missing and that's around the

technology advice and guidance and hopefully construction. We know that DOITT is—does a great job when it comes down to technology contracting. We are now in a point where government is producing technology and I know Sammy you've cone up with a 10-point plan, and I've been hearing from you and your predecessor that there's going to be better in-sourcing for government technology, but we've seen successes like 18F and the U.S. Digital Services produce things at the federal government that are leaner and more effective of conveying public information. We have two really great agencies inside of New York City, the New York City Planning Labs as well as NYC Opportunity that are doing a great job of building technology inside of city government that is more effective of complaint—displaying information. So, COPIC needs to do its job of oversight but it needs to oversee agencies that are building modern technology. COPIC as a 30-year-old commission cannot continue to verse 30-year-old technology. Otherwise, we will continue to be in the same hearing 'til we age out of our own existence. And so, we need to see an evolution of both COPIC and New York City government technology

and there's a lot of examples that are on the table. We really hope that, you know, this next two years before this Administration kind of closes everything out we can see improvements. I should also point out DORIS has done a great job of adopting open source tools in regards to centralizing the FOIL system, and there's great get HUB repo, and so if I have an issue I can go and I can file that. Like COPIC should be leading the way, and we need public oversight of these types of technologies. Beta NYC is never going to be that replacement so—

SPEAKER JOHNSON: Thank you.

CLAYTON BANKS: Thank you.

SUMA HARIHARESWARA: And I may have misspoken. It's the Fire Department of New York not NYPD.

SPEAKER JOHNSON: Thank you very much.

CLAYTON BANKS: Otherwise, Samir is going to be speaking in Harlem tomorrow night. Go to SiloconHarlem.net. So, it's got Samir's ten points.

SPEAKER JOHNSON: Thank you very much. We're going to thank you all. We're going to call our final witness Kevin Roche. [pause]

ANDREW RASIEJ: Thank you everybody. Thank you Speaker and the COPIC Committee. I really am honored to be here today. I'll try to be as brief as possible because I know everybody has been here for a little bit. In 2005 I ran for the Office of Public Advocate on a platform to transform the office into a network of public advocates all around the city who would use WiFi Broadband technologies to connect with each other, build coalitions and advocate for their communities. Very few people understood what I was talking about or believed it could be done. The New York Times Editorial Board in my endorsement in the View asked me to explain what WiFi was. Journalists covering the campaign asked me how I could possibly wire the entire city on the Public Advocate's measly budget. And candidates for Mayor the same year asked me if WiFi meant that we would have dig up the streets. Their doubt and ignorance was not so hard to understand. At the time social media was still a nascent emerging technology. There was no Twitter. There was no LinkedIn. There was no Facebook. Facebook, in fact, was still a platform mostly for college students. We were carrying flip phones like motor on the start tax and

paying fifty cents for each text message we either sent or received. How things have changed. Today we live in a hyper connected world. The Internet and mobile technologies have transformed our economy and lives. Mayor de Blasio has made universal access to free WiFi and low-cost broadband for all New Yorkers a major policy bill. Our start tax have evolved into Smart phones for better or for worse that have become indispensable in how we live, work and play. Every business not in technology is now rushing to transform itself into a digital enterprise in order to compete with millions of tech start-ups looking to disrupt their marketplaces. Cloud computing has become ubiquitous in almost free. Students are choosing careers in data science in droves. Professionals in every major industry are taking classes in digital skills to help them either perform better in their jobs or give them the tools they need to start their own start-ups. And although there are serious issues and challenges that all these technologies present particularly around the use of— he use of and safety of people's private data, the distribution of fake and biased media as well as the ever-growing threat of cyber warfare, the technology

itself continues to evolve dramatically and at even faster rates. Artificial Intelligence is now being embedded in every new technology, 5G and small cell technologies are being deployed and data science is transforming commerce, medicine and finance. However, the one place technology has failed to really impact is the government. Walk in to many New York City government offices and you will see papers piled on top of file cabinets. Go online to apply for government service and you mostly will find the same website that was built 15 years ago. Our public schools and our police precincts—precincts essentially look and operate the same way they did 40 years ago. We can order a special meal to be delivered with a few swipes of our Smart Phone, but apply for SNAP benefits still requires a paper application faxed to a government office. That's not to say that government hasn't made any progress in the use of technology. As mentioned earlier, her by some of my colleagues the New York City Open Data Law has championed them by—by then City Councilwoman Gale Brewer has opened up vast amounts of data for public consumption offering more transparency and catalyzing and creating many new applications built by the

private sector and not just by government. Our subways sometimes even tell us when they're arriving and Easy Pass is essentially eliminated lines to pay tolls in bridges—at our bridges and tunnels. Our schools are now wired with Broadband, and thanks to funding by the Manhattan DA, the police officers that—of our city now carry Smart Phones, too. But procedures to provide standardized—but—I'm sorry. But unfortunately such innovations are few and far between. City agencies do not have procedures to standardize data. There are few resources to train city workers in digital skills to help them do their jobs much less learn critical cyber security procedures to keep our city safe. The city still maintains much of its data in siloed physical data center wasting millions of dollars on physical infrastructure that is also costly to maintain and power. While the rest of the world is designing and driving Teslas, New York City Government is still driving a 1985 Pontiac. It doesn't have to be this way. New technologies offer the New York City opportunities to transform our city into a more efficient and effective and responsive place. I'm sure everyone in this room and everyone who isn't

here and cares about our city and its people would agree with me: The questions is how to make it happen. One way is for the New York City government to develop a strategic plan to transform itself into a more modern and digitally capable institution. In the past, the city has relied on the Department of Information Technology and Telecommunications, DOITT for about half—a little bit more than half of the agency's technology needs. The problem is that the other agencies do a dozen service, have their own technology infrastructure and procedures. Few are coordinated with each other, few share data or outside services and virtually none provide professional development for their staff. There is no single agency that is responsible for the entire city's technology infrastructure capacity. Also because people working at these agencies are busy running their—running them everyday, their ability to develop strategic plans for technology is much less—much less, using (sic) one is very limited. Therefore, it is now imperative the City Council, possibly empowering COPIC or through some other mechanism create a separate strategic planning commission which would include representatives from

the Office of the Mayor, Comptroller, the Public Advocate along with advisors from the private sector and potentially former government officials to research what the city can do to upgrade its proficiency and the use of information technology. If the goal of this hearing is to discuss ways the city could increase government transparency, the public access to government information, protect the privacy of New Yorkers and facilitate the data sharing by government agencies, the prerequisite is for the city to develop just such a plan. As well meaning and thoughtful as the other recommendations being offered here today may be, they will be not likely to succeed if a strategic plan develop—they will be more likely to succeed if a strategic plan is developed particularly with a non-political perspective with the support of the private sector and other advisors. I'm almost finished. Today, if I was the Public Advocate—-by the way I'm not running again just to be clear--[laughter] the idea of building a network for all the city's public advocates connected by WiFi and Broadband would not only be believable, but it would also be possible. What our cities needs now more than anything else to

face the challenges and the opportunities of the inevitable technological future is having leaders who have a vision and a will to change the way the city works. If not now, when? And if not you, who? Thank you very much.

SPEAKER JOHNSON: Thank you Andrew for being here and for all the advocacy that you've done for a very long time being so far ahead of the curve on so much of the conversation that we have to have. Is there any—Mr. Banks. Clayton has a question? Anyone else? The Commissioner yes.

CLAYTON BANKS: Andrew, you talk about a strategic plan. How inclusive do you think that could be really? I mean is it—is it—were you looking at the communities? You're looking at five boroughs. You're looking at people feuding with the land use? Like what—how big can this be?

ANDREW RASIEJ: Well, I mean the—the make up obviously has to make sure that it reflects the diversity of our city. Diversity not only of where people—people themselves, but also of industry. But to be honest, I've been advocating for a strategic plan for the city of New York's technologic—technology for a really long time. I tried to

convince the Mayor to appoint a Deputy Mayor for Technology. He chose instead to create the Office of Chief Technology Officer, a very well meaning potential role. Unfortunately, the role was not filled until six months after his administration started. It had to borrow money from the DOITT, the budget in order to exist, and it was n ever empowered to—to really integrate into all of the other city's efforts. The—the leadership of that office has changed a number of times and the problem for any Mayor, and frankly for any changing government is that there's never enough time to do any kind of strategic planning. So, we rely on these kinds of commissions and committee hearings to try to help move the needle, and obviously pass some legislation like the Open Data Law and other types of legislation to help move the needle, but we never step back far enough to take a look at this holistically. And what I'm advocating for is that the City Council, the Comptroller, the Mayor, the Public Advocate and other come together in a non-partisan way not worrying about the politics of today, but to design a strategic plan so that the next administration taking office after the next election actually has a road

map so that we don't have to have hearings like this. Because this kind of hearing has been happening for 20 years, and it's time for us to step back and finally structurally change the way the city approaches technology. Not as a slice of the pie, but actually as the pan that supports the entire city of New York.

SPEAKER JOHNSON: Thank you. Commissioner okay.

SAMIR SAINI: Great. Thank you for your testimony. I just wanted to sort of answer that last question that you made, which is if not now, right, when? Well, the time is now, right and then who is me and my agency in close collaboration with City Hall the Mayor's Office on Data Analytics with the CTOs Office, with the CYBER Team, with the agency's CIOs and Commissioners. This happening right now. So, very soon I think I mentioned earlier we had released—DOITT had released a 10-point plan. One of those points—all of those points really driven around long-term strategic goals that we want to attack to leverage technology to improve quality of life. Part of it is about tools to enable agencies to do that—to—to play that role and part of it is DOITT itself

leveraging new innovative technologies to improve quality of life for New Yorkers including things around Broadband in partnership with the CTO's office, but this is in motion. The ten point plan was released but the next month a detailed roadmap, right will be released that I would encourage you to look at and give us feedback on because that's going to be rally critical for us to—to get input from—from the public on whether this plan is the right plan. But I can—I can assure you that coming now a year in the role that the--the points you articulated in your testimony are—are—are valid. We need to do a better job, right to strengthen how we leverage technology to—to improve the city right, and its growth, and we are—we are doing it, and we're publishing these plans and-and we're just seeking—seeking of it, right, from the public on whether we're—we're on the right track.

ANDREW RASIEJ: So, commissioner just to quickly comment on your comment, first of all I'm sorry if my comments sounded like friendly fire--

SAMIR SAINI: No, it's okay.

ANDREW RASIEJ: It was up to me, you'd be the Deputy Mayor for Technology as opposed just the Commissioner of DOITT. As I mentioned in my

testimony, you do support a large portion of the city agencies with their information technology, but you don't support all of them. It's very difficult for you to be able to change the behavior of agencies that you don't actually have reporting mechanisms for. Every CIO frankly should be reporting to you and to their Commissioner, but more importantly, the City Charter needs to be adjusted and changed. The Charter was written in the industrial age. It needs to be written in the information age, and as much as you may try, and I agree that all your points are definitely moving the needle, there is a prerequisite to—to do something greater than just follow the same model that we've been following from our previous administrations and actually bring ourselves parallel to what the private sector does in the way it purges and uses technology, and you for example don't have a budget to make sure that every city worker is trained in digital skills. That's not your job. That's not in your—it's not your—you don't have the budget to do it, and it's not your mandate to do. So, what I'm suggesting is to work off of your plan, partner with the private sector, but have all three—four major departments of government, the Mayor's Office, the

Comptroller's Office, the City Council and the Public Advocate work together so that there's no partisan harping around whose got power over what, and develop a strategic plan for the next administration not for implementation now, but for a road map for the future and so it's not to be an indictment of your work, which is very important, but we need to think bigger and broader to succeed.

SPEAKER JOHNSON: Andrew, thank you for being here.

ANDREW RASIEJ: Thank you.

SPEAKER JOHNSON: Thank you very much. Seeing no other witnesses, I want to thank those--all of you that took time out of your busy schedule to be here today to testify. I want to thank the members of COPIC for being here. I want to thank Peter Koo, the Chair of our Technology Committee and the members of the Technology Committee who joined us here today for their participation in this joint hearing. I'm glad we had this hearing, and I will make sure that whoever the next Public Advocate is will have all the information related to COPIC so that they can, of course, continue I hope to call this body together to

talk about these important issues, and with that, this hearing is now adjourned. [gavel]

C E R T I F I C A T E

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. 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 March 15, 2019