NYC

Automated Decision Systems Task Force

TESTIMONY OF JEFF THAMKITTIKASEM,
DIRECTOR OF THE MAYOR'S OFFICE OF OPERATIONS
BEFORE THE NEW YORK CITY COUNCIL COMMITTEE ON TECHNOLOGY
APRIL 4, 2019

Good afternoon Council Member Koo and members of the Committee on Technology. My name is Jeff Thamkittikasem, and I am the Director of the Mayor's Office of Operations and Chair of the Automated Decision Systems Task Force. I am joined by my fellow co-chairs, Kelly Jin, the City's Chief Analytics Officer and Director of the Mayor's Office of Data Analytics, and Brittny Saunders, Deputy Commissioner for Strategic Initiatives at the NYC Commission on Human Rights. I am here to testify today about the Task Force's work to date and our upcoming work and engagements.

I'll start with some background and basics about the Task Force. As you know, the Automated Decision Systems (ADS) Task Force was established by Local Law 49 of 2018, sponsored by then-Council Member Vacca. To our knowledge, the City's ADS Task Force is the first of its kind in the country in local government.

This law mandates the Task Force to issue recommendations specifically related to the following:

- A process for publicly disclosing information about agency ADS systems, where appropriate;
- A procedure for individuals to request and receive information about decisions affecting them that are made using an ADS;
- A procedure for the City to determine any disproportionate impact based upon an individual's protected status, and for addressing any instances of harm under such circumstances;
- Criteria for identifying which agency ADS systems should be subject to one or more of the above procedures; and
- A feasibility analysis of archiving agency systems and the associated data.

As you know, the Task Force's mandate is a new frontier for City government, and one that we are thankful for the opportunity to lead. Our recommendations will spur continued, important conversations surrounding the complex field of ADS.

Local governments have always made decisions based on information and data. But, today, governments increasingly rely on data and technology to improve the way they deliver services to, and engage, with residents. Automated decision systems are instruments that can help improve fairness, streamline workflows, and increase data-driven decision making. These positive outcomes of using ADS

are why they are becoming more prevalent in government—they can help better connect New Yorkers with City programs, improve service delivery, and, in some cases, can help make decisions fairer and more equitable. However, we also know that, unfortunately, ADS have the potential to perpetuate bias and disproportionately impact certain people or populations. We applaud our partners on the City Council for bringing attention to ADS through the creation of this Task Force, and for making space for the important and challenging discussions around the development and use of ADS tools in City decision making.

One of our goals is that the Task Force's recommendations will provide much needed clarity to City agencies and the public about the nature, purpose, and management of ADS in the local, New York City government context. As part of our mandate, we strive to develop clear recommendations that allow for continued research, dialogue, and encourage ongoing insights and comment from the public and advocates.

Now I would like to discuss the work the Task Force itself is undertaking. The Mayor's Office of Operations, the Mayor's Office of Data Analytics, and the City Commission on Human Rights serve as the co-chairs of this Task Force, reflecting our dedication to bringing different and balanced perspectives, project management, and analysis to the work ahead.

The Task Force has 18 additional members, 12 of whom work outside of City government and have rich backgrounds and expertise in the private sector, academic research, social justice advocacy, and technology. The other six members represent City agencies: the Administration for Children's Services, the Mayor's Office of Criminal Justice, the Department of Education, the New York City Police Department, the Department of Social Services, and the Department of Transportation. You can find a full listing of members and their biographies on the ADS Task Force website.

As required by the law, the Task Force was first convened in May 2018, and has met regularly since then to discuss strategy, deliverables, processes, research, and legal interpretations. As you can imagine, our discussions have at times been challenging. This is an emerging and continually evolving field about which many people—including many experts on our Task Force—have strong, differing opinions and keen lines of inquiry. These challenges, however, highlight exactly why a Task Force like ours is so important. When it comes to discussing the best practices around the use of ADS in government, the conversation must start somewhere.

That brings me to our progress to date. So far, our Task Force has met on a regular basis—both as a full group and in smaller groups—to work through the deliverables required by Local Law 49 of 2018. We've worked hard to develop processes to make sure all members of the Task Force have room to be heard, and as such have had many engaging and important discussions. We have also developed and refined processes that will keep our public engagement and research work streams on track, and have been working diligently on preparing forums and sessions for the public engagement upon which our work is critically dependent.

Since it was first convened, the Task Force has also devoted a substantial amount of time to clarifying which systems and tools may fall under the Law's definition of what constitutes an ADS. As you can

imagine, this has been a challenging but essential step in the Task Force's work. The Law requires the Task Force to develop criteria to determine which ADS systems and tools should be subject to procedures it recommends. Because the Law's definition of ADS is broad, many of our Task Force members flagged early on that the Task Force's purview could very well include a vast array of computerized models along the spectrum of automation, to include elements as generalized as calculators, search engine results, or using Excel. Logically, we must therefore clarify what types of systems and tools qualify as ADSs before we can create criteria to evaluate those which should—or should not—be subject to the Task Force's recommendations. To address this, we are currently developing factors and considerations to help identify what constitutes an ADS tool or system, from which the recommended criteria and procedures can follow. To be clear, the ADS Task Force is not going to produce a list of algorithms in use by the City, but will develop and issue the recommendations and criteria mandated by Local Law 49.

Finally, that brings me to the vital role the public will continue to play in the work of the ADS Task Force. Later this month, the Task Force will be kicking off its public engagement efforts, which will include two large, public forums at New York Law School on April 30th and May 30th, and a series of community-based events throughout the summer. Because a large part of the Task Force's mandate focuses on disclosing information, improving transparency, and addressing any disproportionate impact or harm to individuals and populations, it is vital that the Task Force hear not only from technical and subject-matter experts, but also members of the public who are impacted by these systems. Without such insights, our analysis would be incomplete.

Using our own research and insights from the public, per the local law, the Task Force plans to release its recommendations later this year. However, we know that our recommendations will not be the end of the discussion. We look forward to continuing the conversation around ADS, and know the Task Force's efforts will inform continued work on this important subject.

Thank you for the opportunity to testify today. I welcome any questions you may have.

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Testimony of Julia Stoyanovich and Solon Barocas before New York City Council Committee on Technology, regarding Update on Local Law 49 of 2018 in Relation to Automated Decision Systems (ADS) Used by Agencies

April 4, 2019

Dear Chair Koo and members of the Committee:

We, Prof. Julia Stoyanovich and Prof. Solon Barocas, are jointly entering this testimony. We both are appointed members 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).

Julia Stoyanovich holds a Ph.D. in Computer Science from Columbia University. She is an Assistant Professor of Computer Science and Engineering at New York University's Tandon School of Engineering, and an Assistant Professor of Data Science at the Center for Data Science. In her research and teaching,[1] she focuses on responsible data science — on incorporating legal requirements and ethical norms, including fairness, accountability, transparency, and data protection, into data-driven algorithmic decision making. Prof. Stoyanovich is a recipient of a National Science Foundation CAREER award. Her extensive project portfolio includes a collaborative NSF-funded project "Foundations of Responsible Data Management."[2]

Solon Barocas holds a Ph.D. in Media, Culture, and Communication from New York University. He is a Researcher at Microsoft Research New York, an Assistant Professor in the Department of Information Science at Cornell University, and a Faculty Associate at the Berkman Klein Center for Internet & Society at Harvard University. Prof. Barocas co-founded the annual workshop on Fairness, Accountability, and Transparency in Machine Learning (FAT/ML)[3] and later established the ACM Conference on Fairness, Accountability, and Transparency (ACM FAT*).[4]

In our testimony, we would like to express our concerns with the direction of the work of the ADS Task Force.

The intent of Local Law 49 of 2018 is to uphold two important principles in the use of ADS in City agencies: to enable greater government transparency and accountability,

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[1] DS-GA 3001.009 Responsible Data Science, all course materials are publicly available at. https://dataresponsibly.github.io/courses/spring19/

[2] See https://dataresponsibly.github.io/ for information about this work, funded by the National Science Foundation through the BIGDATA program (NSF Award #1741047).

[3] http://www.fatml.org/

[4] https://www.fatconference.org/

and to ensure fairness and equity.[5] Yet, the work of the Task Force so far has failed to fully satisfy these principles.

Despite numerous requests, Task Force members have not been given any information about ADSs used by the City. To date, the City has not identified even a single system. Task Force members need to know about relevant systems used by the City to provide meaningful recommendations. A report based on hypothetical examples, rather than on actual NYC systems, will remain abstract and inapplicable in practice. The Task Force cannot issue actionable and credible recommendations without some knowledge of the systems to which they are intended to apply. The need for examples has been raised by several of us on numerous occasions, but remained unaddressed until yesterday, just one day before this hearing, with the City suggesting that two examples *might* be forthcoming, at some unspecified future date.

The City has cited concerns with privacy and security in response to our requests, but these cannot be used as blanket reasons to stand in the way of government transparency. Privacy and security considerations must be thoughtfully addressed as part of the process of formulating recommendations for transparency and accountability. However, we can only determine how to navigate these tensions if basic details about actual ADSs—and specific concerns that justifiably counsel against transparency—are shared with the Task Force. These cannot be negotiated in the abstract.

Despite these challenges, the Task Force was able to make some meaningful progress in developing a methodology for eliciting relevant information about ADSs, using so-called "ADS Cards" that ask developers and operators to provide specific details about the system in question (see attached). ADS Cards built on an emerging body of academic research on transparency and accountability for automated systems,[6] and we viewed them as a worthwhile and promising effort. Unfortunately, the City had the Task Force abandon ADS Cards at the start of the year for reasons that remain unclear.

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[5] In the press release from Office of the Mayor regarding the ADS Task Force, available at https://www1.nyc.gov/office-of-the-mayor/news/251-18/mayor-de-blasio-first-in-nation-task-force-examine-automated-decision-systems-used-by, "As data and technology become more central to the work of city government, the algorithms we use to aid decision making must be aligned with our goals and values," said Mayor de Blasio. "The establishment of the Automated Decision Systems Task Force is an important first step towards greater transparency and equity in our use of technology."

[6] Ke Yang, Julia Stoyanovich, Abolfazl Asudeh, Bill Howe, H. V. Jagadish, Gerome Miklau: A Nutritional Label for Rankings. SIGMOD Conference 2018: 1773-1776. http://demo.dataresponsibly.com/rankingfacts; Margaret Mitchell, Simone Wu, Andrew Zaldivar, Parker Barnes, Lucy Vasserman, Ben Hutchinson, Elena Spitzer, Inioluwa Deborah Raji, Timnit Gebru: Model Cards for Model Reporting. ACM FAT* 2019: 220-229; Timnit Gebru, Jamie Morgenstern, Briana Vecchione, Jennifer Wortman Vaughan, Hanna M. Wallach, Hal Daumé III, Kate Crawford: Datasheets for Datasets. CoRR abs/1803.09010 (2018).

The problems described above are exacerbated by the lack of transparency in the City's decision-making about the Task Force structure and operation. Not only do Task Force members lack the information about ADSs that they need to execute the mandate of the Law, but they lack information as to how and why these decisions are being made.

In light of these concerns, we make the following recommendations:

1. The City Council should urge the City to provide Task Force members with sufficient information and examples to develop well informed, concrete, and actionable recommendations. Should the City fail to be forthcoming, the City Council should amend the Law to give Task Force members legal authority to make such requests.
2. If it is determined that additional time is needed to identify and collect information about ADSs, the City Council should amend the Law to allocate additional time to the work of the Task Force. It is more important to do this work right than to do it quickly.
3. The City Council should play a more active and consistent role in overseeing the Task Force, with the goal of ensuring that the City works with Task Force members to fulfill the mandate of the Law.

The apparent lack of commitment to transparency on the part of Task Force leadership casts doubt on the City's intentions to seriously consider or enact the report's recommendations—recommendations largely about transparency. We hope that the City Council will take deliberate and decisive action to address the concerns we raise in our testimony. Otherwise, we worry that this highly visible, much anticipated effort—the first such effort in the United States—will be a missed opportunity.

ADS Card - Allegheny Family Screening Tool (AFST)

Agency: Allegheny County's Department of Human Services (DHS)

Agency's goals: Improve overall health, safety, and well-being of County residents

Time of ADS use in current form: August 2016 to present

Previous versions of ADS: None

Population:
- *Who/what are decisions made about:* Families
- *How do they enter that population:* Referral calls to the County

Population's role in ADS development: Research team met with community groups and families in the welfare system

Decision space:
- "Screen in": investigate
- "Screen out": do not investigate

(Stated) reasons for individualized decisions, rather than a population-level policy:
- Limited County resources for investigations
- Concern about burdening families with investigations

Ideal target: *(ideally, who/what would you target?)*

Families where a DHS investigation would reduce maltreatment

Proxy target: *(given data limitations, what/who will you target?)*

Families where the child would be removed from home if investigated

Assumption	Justification
• Home removal if investigated is a proxy for maltreatment	• ?
• Home removal stops maltreatment	• ?

Proxy target data:

Data on home removals are available for *past* screened-in cases, need to *predict* at decision-time

Data analysis (predictions, calculations, algorithms): see reverse

Overall metrics: area under the curve (AUC = 0.74); true positive rate (TPR = 0.54) and false positive rate (FPR = 0.21) using a threshold of top 25% highest scores

Group-specific metrics: calibration (probability of home removal at each score), AUC, TPR, and FPR all differ by race

(Stated) reasons for data analysis:
- Efficiency: decision-making with less human-hours [Who/what gets the saved resources?]
- Consistency across decision-making
- Accuracy: base decisions on the best possible predictions

Users: call screening staff

Use of data-analytic output (or raw data) in decision-making:

Call staff use the AFST score and the allegation content (which is not included in the score) to make the decision. Scores above a 16/20 are labeled "mandatory screen-ins" and only supervisors are allowed to screen them out.

Appeals process: None

Concern	Mitigation
• AFST scores could influence investigations (confirmation bias)	• scores are not shared with workers who investigate cases
• AFST scores could be stigmatizing	• ?

Discovery: *(how was this metadata obtained?)*

http://proceedings.mlr.press/v81/chouldechova18a/chouldechova18a.pdf

Prediction function

Built by: researchers from four universities, with DHS

Target *("proxy target" above)*: home removal (after screened-in for investigation)

Methods used to build:
- *Considered:* ?
- *Selected:* logistic regression   *[Code public? Yes/No]*
- *Selection Process:* ?

Input variables:
- *Considered:* 800 variables (demographics, welfare interactions, imprisonment...) *[List of variables public? Yes/No]*
- *Selected:* 71 of the above   *[List of variables public? Yes/No]*
- *Selection Process:* ?

Data used to build: *[Data public? Yes/No]*
- *Sample:* 46,503 screened-in referral calls
- *Train/test split:* 32,086 train / 14,417 test
- *Sources:* administrative data

Extrapolation: [Research question: how to summarize multidimensional overlap]
- *Range of input data used to build:* ?
- *Range of input data during deployment:* ?

Output: scores estimating probability of home removal, given a set of features   *[Data public? Yes/No]*

Prediction performance metrics: area under the curve (AUC = 0.74); true positive rate (TPR = 0.54) and false positive rate (FPR = 0.21) using a threshold of top 25% highest scores

ADS Card - Indiana Welfare Eligibility

Agency: Indiana Family and Social Services Administration (FSSA)

Agency's goals: Reduce fraud, curtail spending, improve access to services, move clients off the welfare rolls

Time of ADS use in current form: 2007-2009

Previous versions of ADS: Indiana Client Eligibility System (ICES)

Population:
- *Who/what are decisions made about:* People
- *How do they enter that population:* Applying for Medicaid/SNAP/TANF

Population's role in ADS development: None

Decision space:
- .Mark eligible: person can access Medicaid/SNAP/TANF
- Mark ineligible: person receives a generic "failure to cooperate" notice

(Stated) reasons for individualized decisions, rather than a population-level policy:
- Eligibility laws
- Limited resources for giving everyone Medicaid/SNAP/TANF

Ideal target: *(ideally, who/what would you target?)*

People who are eligible for Medicaid/SNAP/TANF

Proxy target: *(given data limitations, what/who will you target?)*

People whose applications meet certain criteria...

Assumption	Justification
•	•

Proxy target data:

Submitted applications

Data analysis (predictions, calculations, algorithms): see reverse

Overall metrics: For SNAP: false negative rate (FNR = 0.12), number of households receiving SNAP dropped 7% in Delaware County...

Group-specific metrics: ?

(Stated) reasons for data analysis:
- Efficiency: decision-making with less human-hours [Who/what gets the saved resources?]
- Consistency across decision-making
- Accuracy: less human error

Users: Caseworkers

Use of data-analytic output (or raw data) in decision-making:

Caseworkers receive *tasks* from the Workflow Management System (WFMS), rather than a caseload of *clients*.

Appeals process: Eubanks describes a backlog of 32,000 appeals cases during 2006-2008

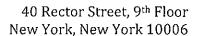| Concern	Mitigation
• Loss of face-to-face help	• ?
• FSSA workers frustrated, or lose their jobs	
• False negative rate (FNR): marked ineligible, when truly eligible. Disparity across groups?	• ?

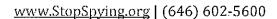**Discovery:** *(how was this metadata obtained?)*

Eubanks, Virginia. Automating inequality: How high-tech tools profile, police, and punish the poor. St. Martin's Press, 2018.

Workflow Management System
Built by: IBM and Affiliated Computer Services (ACS)   ????

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STATEMENT OF
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BEFORE THE
COMMITTEE ON TECHNOLOGY
NEW YORK CITY COUNCIL

FOR A HEARING CONCERNING,
OVERSIGHT - UPDATE ON LOCAL LAW 49 OF 2018 IN RELATION TO
AUTOMATED DECISION SYSTEMS USED BY AGENCIES.

PRESENTED
April 4, 2019

Good afternoon, my name is Albert Fox Cahn, and I serve as the Executive Director for the Surveillance Technology Oversight Project ("STOP"). STOP advocates and litigates for New Yorkers' privacy rights, fighting discriminatory surveillance. I commend the committee and Chairman Koo for today's hearing; for bringing much-needed attention to the stagnating work of the New York City Automated Decision System ("ADS") Task Force.

In 2018, I was proud to partner with the City as part of its ADS Task Force, meeting with City leaders, academics, and advocates to shape recommendations for the future role of artificial intelligence in New York City Government. In my initial discussions with the Task Force, I was hopeful that we would leverage this unique opportunity, setting a national model of how to address the role of artificial intelligence and other ADS in government. Sadly, more than halfway through the Task Force's lifecycle, those hopes are almost completely gone.

Outreach
For an entity tasked with promoting transparency, the Task Force itself is alarmingly opaque. Rather than engaging with the public, soliciting input on the ADS questions that impact every single New Yorker, the Task Force hosted a single web page. In my time working with the Task Force, I was never notified about a single public comment. To the extent that public comments were made, whether through 311 or the NYC.gov website, they were never presented to Task Force members during my tenure. More recently, the Task Force has expanded public outreach, but I fear it's too little, too late.

Given the complexity of ADS, a city-wide outreach and engagement campaign would have been difficult during the full eighteen-month lifecycle of the Task Force, but it's quite impossible to shoe-horn such efforts into the short remaining time. Additionally, it's concerning to see the lack of clarity about the purpose of the Task Force's for a. We still don't know the extent to which Task Force members will be available for public questions or the extent to which this will be a truly democratic process, versus engagement from hand-picked participants.

Role of city agencies
Local Law 49 of 2018 envisioned the Task Force as being independent.[1] That's why the Council required it to include experts on ADS "fairness, accountability and transparency" and representatives of nonprofits that "represent persons in the city affected by" ADS.[2] The goal was to create a body of experts who could hold the city's feet to the fire and challenged agency norms around ADS.

Unfortunately, that does not reflect the composition of the Task Force that we've seen in practice. Officially, one-third of the Task Force members are city employees, including representatives from ACS, the NYPD, and DOE. This number does not include unofficial Task Force members, the numerous city staffers who have effectively driven this process from the start, despite having no official position on the Task Force. Rather than being a member-driven undertaking, the Task Force has been repeatedly asked to sign-off on plans and language that were already set by city officials, with limited input from the experts who are meant to control this process.

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[1] Local Law No. 49 (2018) of City of New York § 1(B)(2), Available at
https://legistar.council.nyc.gov/View.ashx?M=F&ID=5828207&GUID=DDC22B3B-B5F8-41D7-AE14-2A7BC5838233.

[2] *id.*

Task Force Management
One example of Task Force members being structurally disempowered is the role of the Jane Family Foundation. The foundation effectively drove the process for much of the first year, despite never being an official, publicly recognized part of the Task Force. The foundation's role grew from initially providing background briefings to providing proposed language and policy documents for the Task Force to ratify. Increasingly, the foundation was writing a first draft of the Task Force's report. The foundation's role drew complaints from numerous Task Force members, so it was eventually phased out, but it's a telling example of how the role of Task Force members themselves was circumscribed as part of this process.

This organizational structure led to a lack of Task Force member buy-in on key questions that go to the heart of automated decision systems. We should have asked the nationally-recognized experts who sat on the task force to decide how to shape and engage with this process. Instead, they were asked to sign off on proposals put forward by outside groups. Rather than being asked to set the agenda for meetings, Task Force members were often presented with the City's pre-planned list of agenda items. While Task Force members could always provide feedback, it felt like commentators on the process we were supposed to lead. Unfortunately, this internal dysfunction has come at a cost.

Lack of access to info about relevant city systems
Sadly, the lack of transparency goes even farther. Not only has the city failed to make the Task Force accessible to the public, but it has also failed to make city records accessible to Task Force members themselves. Throughout this process, Task Force members have pushed to learn more about the ADS that New York uses already, but the Mayor's office has refused. It's hard to overstate how large an obstacle this presents for the Task Force.

How can we ask Task Force members to build a map to the future if we don't know where we are today? It's challenging enough to imagine all the ways that ADS might become a part of city life in the future, but it's impossible to do so if we don't know how those systems are already being deployed. Going forward, the Task Force must have a comprehensive listing of ADS deployed around the city, along with the background and context information needed to understand how they impact New Yorkers. Without this information, the Task Force becomes nothing more than an academic exercise.

Losing our lead
At the time I ended my work with the Task Force, nearly a year after its launch, we had yet to reach agreement on the most basic questions about what an ADS. This includes a lack of consensus about what even constitutes an ADS. We had no clear pathway to a consensus on the countless derivative questions that also needed to be addressed, such as the basic regulatory framework for ADS, an effective model of dispute resolution, or way in which our findings would be updated going forward

Sadly, while our city was initially a leader in the national movement for ADS transparency, we have quickly fallen behind other localities that have engaged in the type of public outreach that is indispensable for the Task Force's work. Vermont, which created a statewide Artificial Intelligence Task Force five months after New York City, has already engaged in the public outreach that the

city is only now contemplating.[3] The Vermont Task Force has had experts testify at publicly broadcasted hearings, it publicly posts its meeting agendas and minutes, and its Task Force is expected to release a report by this summer, far ahead of our own.[4]

In another case, when the Pennsylvania Sentencing Commission engaged in broad public engagement around the role of ADS in risk assessment. It held public hearings throughout the state, including advocates, people affected by the criminal justice system, researchers, lawyers, and lawmakers.[5] Additionally, when California evaluated its state law, replacing cash bail with risk assessment ADA, advocates provided prolific comments on every aspect of the policy.[6]

Best Practices

In contemplating the Task Force's recommendations, we must remember that algorithms are not magic. Like all statistical models, they have limitations. New York City should look to some of the best practices found in the private sector, such as "model cards" that explain a model's methodology and limits.[7] Additionally human training practices are needed to teach decisionmakers how bias (conscious and unconscious) impacts ADS outputs, along with the impact of "automation bias."[8]

Moreover, we must make sure that our city-wide community engagement primarily targets directly impacted communities. For these New Yorkers, ADS is not an abstraction, but a potentially insurmountable barrier to their next job, their preferred school placement, or even maintaining their freedom. These communities' voices must be heard if we're to ensure that ADS are not merely

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[3] H.B. 378, 91 Leg., Reg. Sess. (Vt. 2018),
https://legislature.vermont.gov/Documents/2018/Docs/ACTS/ACT137/ACT137%20As%20Enacted.pdf; H.B. 2701, 191 Leg., Reg. Sess.(Ma.2019), https://malegislature.gov/Bills/191/HD951; H.B.1655, 66 Leg., Reg. Sess. (Wa. 2019), https://app.leg.wa.gov/billsummary?BillNumber=1655&Initiative=false&Year=2019.

[4] Vermont Agency of Commerce and Community Development, Artificial Intelligence Task Force,
https://accd.vermont.gov/economic-development/artificial-intelligence-task-force.

[5] See e.g, Samantha Melamed, Move afoot to dismantle work of Sentencing Commission, Pitts. Post-Gazette (Dec. 12, 2018),https://www.post-gazette.com/news/politics-state/2018/12/12/Move-afoot-to-dismantle-work-of-Sentencing-Commission/stories/201812120200

[6] Upturn, Comments on Proposed California Rules of Court 4.10 and 4.40 (2018),
https://www.upturn.org/static/files/2018-12-14_Final-Coalition-Comment-on-SB10-Proposed-Rules.pdf; Human Rights Watch, Comments on Proposed California Judicial Council Rules 4.10 and 4.40 (2018),
https://www.hrw.org/news/2018/12/10/human-rights-watch-comments-california-judicial-council-bail-reform-rules; Electronic Frontier Foundation, Written Comments on Proposed Rules 4.10 and 4.40 (2018),
https://www.eff.org/document/written-comments-eff-proposed-california-rules-court-410-and-440; JusticeLA S.B.10 Comments (2018), http://justicelanow.org/sb10comments/.

[7] Model cards explain the training materials, methodology, limitations, known biases, and unknown or untested capacities that the models might harbor. Understanding how narrow the focus of a model is, or whether it includes racial features or racial proxy features like zip Code can impact the decision-making of a human agent involved in reading the output of the algorithm.

[8] "Automation bias" is the phenomenon that people presented with an algorithmic prediction will confirm its truth rather than deny it. As we saw in the Boeing 737 case, poor training can result in catastrophic outcomes, especially when the machines and the humans disagree.

transparent, but also just. ADS justice also requires explainability tools with which New Yorkers can understand how they have been impacted by ADS.[9]

In addition to explainability tools, we must deploy fairness testing that examine ADS for potential bias.[10] We must agree-upon a metric with which to audit ADS and ensure that biases are not coded into our government.[11] But algorithmic fairness is not enough, since even a "fair" algorithm will produce discriminatory results when applied to a discriminatory dataset.[12] While there is no such thing as an "unbiased algorithm", ongoing and rigorous evaluation can reduce the biases that are unavoidable in any human-designed systems.

Next Steps

To make the most of the remaining time, it's essential that the Task Force give a broad cross-section of the public a meaningful opportunity to voice their concerns. The planned fora should include a chance for New Yorkers to question and speak to members directly. We must better publicize the work done by the Task Force to date, publicizing meeting agendas and summaries. We should empower Task Force members to understand the full range of ADS operating in New York City and how the data from those systems is used. Lastly, the Task Force's report must memorialize the full range of opinions expressed by members. A document that effectively preserves members' competing positions is far more helpful that a document that provides us with artificial consensus.

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[9] Any particular transaction should be made available through a searchable database that provides explainability metrics for why that decision was the output. This is the only way that humans will be able to appeal machine-made decisions.

[10] There are more than 50 definitions of fairness, but one of the most prominent is "equality of odds." This test asks if the algorithm makes equally many errors (false positives and false negatives) on people of one protected group compared to another.

[11] For example, reducing gender categories to "Male" or "Female" on a driver's license excludes non-binary individuals from representation. This flattens/simplifies the data, representing individuals more crudely, and thus with less predictive power, something known as the "undersampled majority.

[12] An instructive example is predictive policing, which often relies on evidence about past crimes to determine where future crimes will likely occur. Since historic policing data reflects bias against communities of color, which face higher rates of policing and arrests (including false arrests), the product of such predictive policing algorithms is skewed against those same communities. Data collection and labeling must examine and remedy such biases before this data can be used for ADS.

Data&Society

Written Testimony of
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April 4, 2019

Our names are Janet Haven and Andrew D. Selbst. We are the executive director and a postdoctoral scholar at the Data & Society Research Institute, an independent non-profit research center dedicated to studying the social and cultural impacts of data-driven and automated technologies. Over the past five years, Data & Society has focused on the social and legal impacts of automated decision-making and artificial intelligence, publishing research and advising policymakers and industry actors on issues such as algorithmic bias, explainability, transparency, and accountability more generally.

Government services and operations play a crucial role in the lives of New York City's citizens. Transparency and accountability in a government's use of automated decision-making systems matters. Across the country, automated decision-making systems based on nonpublic data sources and algorithmic models currently inform decision-making on policing, criminal justice, housing, child welfare, educational opportunities, and a myriad other fundamental issues.

This Task Force was set up to begin the hard work of building transparent and accountable processes to ensure that the use of such systems in New York City is geared to just outcomes, rather than only those which are most efficient. The adoption of such systems requires a reevaluation of current approaches to due process and the adoption of appropriate safeguards. It may require entirely new approaches to accountability when the city uses automated systems, as many such systems, through their very design, can obscure or conceal policy or decision-making processes.

We at Data & Society lauded the decision to establish a Task Force focused on developing a better understanding of these issues. Indeed, we celebrated the city leadership's prescience in being the first government in the nation to establish a much-needed evidence base regarding the inherent complexity accompanying ADS adoption across multiple departments. We have seen little evidence that the Task Force is living up to its potential. New York has a tremendous opportunity to lead the country in defining these new public safeguards, but time is growing short to deliver on the promise of this body.

We want to make two main points in our testimony today.

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First, for the Task Force to complete its mandate in any meaningful sense, it must have access to the details of ADS systems in use by specific agencies, and the ability to work closely with representatives from across agencies using ADS. We urge that task force members be given immediate access to specific, agency-level automated decision-making systems currently in use, as well as to the leadership in those departments, and others with insight into the design and use of these systems.

Social context is essential to defining fair and just outcomes.[1] The city is understood to be using ADS in such diverse contexts as housing, education, child services, and criminal justice. The very idea of a fair or just outcome is impossible to define or debate without reference to the social context. Understanding the different value tradeoffs in decisions about pretrial risk assessments tells you nothing whatsoever about school choice. What is fair, just, or accountable in public housing policy says nothing about what is fair, just, and accountable in child services. This ability to address technological systems within the social context where they are used is what makes the ADS Task Force so important, and potentially so powerful in defining real accountability measures.

The legislative mandate itself also demonstrates why the Task Force requires access to agency technologies. Under the enacting law, the purpose of the Task Force is to make recommendations particular to the City's agencies.[2] Specifically, the Task Force must make recommendations for procedures by which explanations of the decisions can be requested, biases can be detected, harms from biases can be redressed, the public can assess the ADS, and the systems and data can be archived.[3] Each of these recommendations apply not to automated decision systems generally, but to "agency automated decision systems," a term defined separately in the test of the law.[4] Importantly, the law also mandates that the Task Force makes recommendations about "[c]riteria for identifying *which* agency automated decision systems" should be subject to these procedures.[5] Thus, the legislative mandate makes clear that for the Task Force to do its work, it will require access to the technologies that city agencies currently use or plan to use, as well as the people in charge of their operation. Lacking this level of detail on actual agency-level use of automated decision-making systems, the recommendations can only be generic. Such generic recommendations will be ineffective because they will not be informative enough for the city to act on.

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[1] *See generally* Andrew D. Selbst et al., Fairness and Abstraction in Sociotechnical Systems, Proceedings of the 2019 ACM Conference on Fairness, Accountability, and Transparency (ACM FAT*), 59.

[2] See Local Law No. 49 of 2018, Council Int. No. 1696-A of 2017 [hereinafter Local Law 49] (repeatedly referring to "agency automated decision systems").

[3] *Id.* §§ 3(b)–(f)

[4] Id. § 1(a).

[5] *Id.* § 3(a) (emphasis added).

If the city wanted to find generic guidelines or recommendations for ADSs, it could have looked to existing scholarship on these issues instead of forming a Task Force. Indeed, there is an entire interdisciplinary field of scholarship that has emerged in the last several years, dedicated to the issues of Fairness, Accountability and Transparency (FAT*) in automated systems.[6] This field has made significant strides in coming up with mathematical definitions for fairness that computers can parse, and creating myriad potential methods for bias reduction in automated systems.

But the academic work has fundamental limitations. Much of the research is, by necessity or due to limited access, based on small hypothetical scenarios—toy problems—rather than real-world applications of machine learning technology.[7] This work is accomplished, as is characteristic of theoretical modeling, by stating assumptions about the world and datasets that are being used. In order to translate these solutions to the real world, researchers would have to know whether the datasets and other assumptions match the real-world scenarios.

Using information from city agencies, the task force has the ability to advance beyond the academic focus on toy problems devoid of social context and assess particular issues for systems used in practice. Without information about the systems in use, the Task Force's recommendations will be limited to procedures at the greatest level of generality--things we already would guess, such as testing the system for bias or keeping it less complex so as to be explainable. But with information about these systems, the Task Force can examine the particular challenges and tradeoffs at issue. With community input and guidance, they can assess the appropriateness of different definitions of bias in a given context, and debate trade-offs between accuracy and explainability given specific social environments. The recommendations of the Task Force will only be useful if they are concrete and actionable, and that can only be achieved if they are allowed to examine the way ADS operate in practice with a view into *both* the technical and the social systems informing outcomes.

Second, we urge the Task Force to prioritize public engagement. Because social context is essential to defining fair and just outcomes, meaningful engagement with community stakeholders is fundamental to this process. Once the Task Force has access to detailed information about ADS systems in use, public listening sessions must be held to understand community experiences and concerns with the goal of using that feedback to shape the Task Force's process going forward. Iteration and reviewing of recommendations with community

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[6] ACM Conference on Fairness, Accountability, and Transparency (ACM FAT*), https://fatconference.org/
[7] See generally Andrew D. Selbst et al., Fairness and Abstraction in Sociotechnical Systems, Proceedings of the 2019 ACM Conference on Fairness, Accountability, and Transparency (ACM FAT*), at 59.

stake-holders as the Task Force moves this work forward will be important to arriving at truly transparent, accountable and just outcomes.

We are here today because we continue to believe the Task Force has great potential. We strongly believe that the Task Force's work needs to be undertaken thoughtfully and contextually, centering on cooperation, transparency, and public engagement. The Task Force's goal needs to be offering actionable and concrete recommendations on the use of ADS in New York City government. We hope that the above testimony provides useful suggestions to move towards that goal.

Thank you.

March 1, 2019

Via E-mail
Acting Director Emily W. Newman
Deputy Commissioner Brittny Saunders
New York City Automated Decision Systems Task Force Members
ADSTaskForce@cityhall.nyc.gov

Re: New York City's Automated Decision Systems Task Force- Public Engagement

Dear Task Force Chairs and Members:

The undersigned organizations and individuals write to request that the New York City Automated Decision System Task Force ("Task Force") expeditiously initiate an inclusive and meaningful public engagement process to inform its forthcoming report and recommendations on a range of issues relating to government use of automated decision systems. Local Law 49 of 2018 requires the Task Force to make this report publicly available by December 2019, and we fear that given this timeline the window of opportunity for the type of *meaningful* public engagement that would inform the Task Force's work is rapidly closing. In our view, a robust and inclusive public engagement process, review of evidence-based research, and ongoing public communication about the Task Force process and work are necessary predicates to any publication that the Task Force produces.

In August 2018, a number of the undersigned and other advocates wrote to the Task Force with recommendations based on the provisions of the law, and provided a list of individuals and organizations with expertise in relevant domains that the Task Force should engage while developing its report.[i] We remain hopeful that this letter will contribute to ongoing debates regarding government use of automated decision systems and provide a means for the Task Force to engage with stakeholders. While we recognize the City has since developed a webform and email address for residents to share concerns with the Task Force, we believe these options must be supplemented with further avenues for public engagement that are accessible to a broader range of New Yorkers. Additional avenues are necessary to empower, the public to help determine how automated decision systems appeals processes are structured, how the impact and harms of such systems might be measured, and which systems should, and should not, be classified within the automated decision systems definition.[ii]

When Local Law 49 of 2018 was codified in the New York City Charter, it made New York City the first jurisdiction in the world to require a comprehensive review of how its government uses automated decision systems, and to require recommendations on a range of complicated legal, technical, and social concerns that arise from continued government use of these systems. In the wake of that historic step, several other jurisdictions have followed the City's lead by establishing government bodies to evaluate similar questions, or considered legislation requiring

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[i] Advocates Letter to the New York City Automated Decision Systems Task Force, Aug. 17, 2018, http://assets.ctfassets.net/8wprhhvnpfc0/1T0KpNv3U0EKAcQKseIsqA/52fee9a932837948e3698a658d6a8d50/NYC_ADS_Task_Force_Recs_Letter.pdf

[ii] New York City Automated Decision System Task Force, https://www1.nyc.gov/site/adstaskforce/index.page.

[iii] H.B. 378, 91 Leg., Reg. Sess. (Vt. 2018), https://legislature.vermont.gov/Documents/2018/Docs/ACTS/ACT137/ACT137%20As%20Enacted.pdf; H.B. 2701, 191 Leg., Reg. Sess. (Ma.2019), https://malegislature.gov/Bills/191/HD951; H.B.1655, 66 Leg., Reg. Sess. (Wa. 2019), https://app.leg.wa.gov/billsummary?BillNumber=1655&Initiative=false&Year=2019.

[iv] Vermont Agency of Commerce and Community Development, Artificial Intelligence Task Force, https://accd.vermont.gov/economic-development/artificial-intelligence-task-force.

[v] See e.g, Samantha Melamed, Move afoot to dismantle work of Sentencing Commission, Pitts. Post-Gazette (Dec. 12, 2018),https://www.post-gazette.com/news/politics-state/2018/12/12/Move-afoot-to-dismantle-work-of-Sentencing-Commission/stories/201812120200.

[vi] Upturn, Comments on Proposed California Rules of Court 4.10 and 4.40 (2018), https://www.upturn.org/static/files/2018-12-14_Final-Coalition-Comment-on-SB10-Proposed-Rules.pdf; Human Rights Watch, Comments on Proposed California Judicial Council Rules 4.10 and 4.40 (2018), https://www.hrw.org/news/2018/12/10/human-rights-watch-comments-california-judicial-council-bail-reform-rules; Electronic Frontier Foundation, Written Comments on Proposed Rules 4.10 and 4.40 (2018), https://www.eff.org/document/written-comments-eff-proposed-california-rules-court-410-and-440; JusticeLA S.B.10 Comments (2018), http://justicelanow.org/sb10comments/.

[vii] For instance, the Obama Administration's Task Force on 21st Century Policing was given 90 days to conduct hearings around the country, review research and make recommendations to the President. To fulfill this mission, the Task Force invited stakeholders to participate in issue-specific listening sessions, which allowed stakeholders to provide specific and detailed feedback as well as engaged with cross-cutting issues and concerns. They also held sessions targeted at communities with particular concerns (e.g. people with disabilities) so their concerns were not overlooked or missed. The President's Task Force on 21st Century Policing, Final Report of The President's Task Force on 21st Century Policing (2015), https://cops.usdoj.gov/pdf/taskforce/taskforce_finalreport.pdf.

August 17, 2018

<u>Via E-Mail & First Class Mail</u>
Acting Director Emily W. Newman
Deputy Commissioner Brittny Saunders
Mayor's Office of Operations
235 Broadway - 10th Floor
New York, NY 10007

Re: New York City's Automated Decision Systems Task Force

Dear Task Force Chairs Newman and Saunders:

The undersigned organizations and individuals write to offer recommendations to the Automated Decision Systems Task Force, which is mandated by Local Law 49 of 2018. The Task Force is required to present the Mayor and ultimately the public with recommendations on identifying automated decision systems in New York City government, developing procedures for identifying and remedying harms, developing a process for public review, and assessing the feasibility of archiving automated decision systems and relevant data. This is an important opportunity to ensure that emerging technologies, like automated decisions systems, are adopted and implemented fairly and equitably to serve all New Yorkers.

Though we hope the Task Force will engage experts, advocates, and community members over the next year, we are offering the following recommendations in hopes that they can assist the Task Force in answering the varied and complicated questions mandated by Local Law 49 of 2018. We also anticipate that the Task Force's prospective findings and recommendations can serve as a national or international model for other jurisdictions grappling with the opportunities and challenges presented by the use of automated decision systems, so we hope this letter can assist other advocates in their local efforts. This letter includes general recommendations for the Task Force as well as specific recommendations related to the provisions of Local Law 49 of 2018.

<u>General Recommendations for the Task Force</u>
- The effects of an automated decision system will vary by agency, as will the intended goals of the system and the public policy issues the agency seeks to address through use of the automated decision system. As the Task Force evaluates the myriad of issues presented by automated decision systems, we recommend Task Force members consult domain experts and advocates, including but not limited to those listed in the attached appendix, while developing recommendations that relate to or may significantly impact specific issue areas.

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- The City should require procurement contracts to include provisions requiring the vendor to provide information[1] for all datasets used to develop and implement the systems; plain language explanations of how the system makes determinations; any records of bias, fairness or any validation testing performed on the system; design documentation and information about the technical architecture; records of the vendor marketing materials; plans for ongoing maintenance and system updates; response plans for any system changes that result from updates; and any other relevant information that will assist agencies in developing explanations of how an automated decision system determination was reached and compliance with any other Task Force recommended procedures, rules, policies or actions.
- Agency explanations of an automated decision system determination should include general, plain-language descriptions of the automated decision systems' overall function, the degree of human intervention in the system, and an explanation of the specific determination in question.
- Agencies should adopt procedures that guarantee an agency response to a request for an explanation of an automated decision system determination within a 20-day time period. Requests for explanations of automated decision system determinations pertaining to critical issues (e.g. public benefits eligibility or allocation) should have a limited response timeline of five business days. Explanations should include a description of the process and timeline to appeal an automated decision system determination.
- The City should require agencies using automated decision systems to maintain and publish metrics regarding how many requests for explanation it received, whether the explanation resulted in a challenge, and the outcome of that challenge. This information can be published in a privacy-preserving manner but it should allow the public and public officials to assess the efficacy and impact of procedures and practices as well as the utility of automated decision systems.

Recommendations on procedures and standards to determine whether an agency automated decision system disproportionately impacts persons based on protected status
- The City should require agencies to develop a pre-acquisition or development procedure to ensure experts and representatives from directly affected communities are consulted during the development of an automated decision system. Agencies should maintain a public record of external participation. Agencies must ensure that non-agency experts are consulted early in the acquisition or development process, since important policy determinations that can result in disproportionate outcomes occur early in system development.
- The explicit expectation is that automated decision systems should not result in a disproportionately negative effect on members of a protected status, and measures should

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[1] Timnit Gebru, et al., Datasheets for Datasets (March 2018), https://arxiv.org/pdf/1803.09010.pdf.

procedure for how a person may challenge a decision where an automated decision system was involved, timelines for each procedure, and expected response time from the agency.

- The degree of human intervention in the automated decision system (e.g. whether a decision-making process is fully automated or if the automated decision system is used for decision-support).
- Relevant technical information of the system including but not limited to:
  - source code; models; documentation on the algorithms used; design documentation and information about the technical architecture; training data; data provenance information; some justification for the validity of using a model trained on data from a potentially different context than the agency's; the system's intended use as-implemented (e.g. the automated decision system's actual objective function); any records of bias, fairness or any validation testing performed on the system; materials relating to how a user interacts with a system (including wireframes or documentation on how determinations from the system are displayed and communicated).
- Any marketing materials and training instructions or materials for public servants using the tool.
- If a contract with a third party would prevent the agency from releasing such technical information, (i) the name of such third party, (ii) an electronic link to a copy of such contract, (iii) the date that the current term of such contract will expire and (iv) a statement explaining why the contract prevents the agency from releasing such technical information. If no such obstacles exist, a plan for publicly releasing such technical information, including the anticipated date of such release.
- Policies and procedures relating to access, use of the system or input data, and any safeguards to protect system or input data from unauthorized access or use.
- Documentation of any other agencies or third parties that have access to the automated decision system or input data.
- Information regarding audits of such systems, including frequency, scope, and public availability of such audits.
- A statement on who made policy decisions related to the development of the automated decision system model (e.g. score thresholds, system objectives) and a description of how policy decisions were made.
- There should be no exceptions to making the aforementioned list of automated decision systems information public. If an agency attempts to raise agency-specific concerns that would prevent releasing of all or some technical information, the City should require the agency to provide a detailed statement regarding the need for the limitations and review

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APPENDIX

Recommended list of experts and advocates that the Task Force should consult when developing recommendations that relate to or may significantly impact specific issue areas.

- **Children Welfare**
  - Individuals: Khiara M. Bridges (Boston University School of Law), Lauren Shapiro (Brooklyn Defender Services), Christine Gottlieb, Ashley Sawyer (Girls for Gender Equity), Lisa Freeman (The Legal Aid Society), Emma Ketteringham (Bronx Defenders), Michelle Burrell (Neighborhood Defender Services of Harlem), Michele Cortese (Center for Family Representation)
  - Organizations: Council of Family and Child Caring Agencies (COFFCA), Silberman School of Social Work, Youth Represent, Community Service Society of New York, CWOP (Child Welfare Organizing Project), RISE
- **Disability Rights**
  - Individuals: Beth Haroules (NYCLU), Chancey Fleet (Data & Society), Kathleen Kelleher (The Legal Aid Society)
  - Organizations: Bazelon Center for Mental Health, New York Association of Psychiatric Rehabilitation Services (NYAPRS)
- **Education/School Choice**
  - Individuals: Aaron Pallas (Columbia Teachers College), Genevieve Siegel-Hawley (Virginia Commonwealth University), Susan Eaton (Brandeis University), Claire Fontaine (Data & Society), Monica Bulger (Future of Privacy Forum), Cara Chambers (The Legal Aid Society)
  - Organizations: IntegrateNYC, Teens Take Charge, ASID, Alliance For Quality Education (AQE NY), NYSUT
- **Employment/Workers Rights**
  - Individuals: Peter Roman-Friedman (Outten & Golden), Annette Bernhardt (U.C. Berkeley Labor Center), Karen Levy (Cornell), Ruth Milkman (CUNY, Murphy Institute), Louis Hyman (Cornell ILR Worker Institute), Ifeoma Ajunwa (Cornell IRL), Julia Ticona (Data & Society), Aiha Nguyen (Data & Society), Alex Rosenblat (Data & Society), Alexandra Mateescu (Data & Society), Karen Cacace (The Legal Aid Society)
  - Organizations: National Employment Law Project (NELP), Make the Road NY
- **Healthcare**
  - Individuals: Valerie J. Bogart (NYLAG), Kadija Ferryman (Data & Society)
  - Organizations: Empire Justice, Medicaid Matters NY

(Georgetown Law Center on Privacy & Technology), Mary Madden (Data & Society)
- o Organizations: Harvard Law's Berkman Klein Center, CAIR-NY, Brennan Center for Justice, CLEAR Project at CUNY, National Association of Criminal Defense Lawyers, Center for Democracy & Technology
- **Public Benefits**
  - o Individuals: Richard Alan Eppink (ACLU Idaho), Elizabeth Edwards (National Health Law Program), Kevin De Liban (Legal Aid Arkansas), Susan Welber (The Legal Aid Society)
  - o Organizations: FPWA
- **Public Health**
  - o Individuals: Rodrick Wallace (New York State Psychiatric Institute), Elizabeth Edwards (National Health Law Program), George Annas (Boston University Law), Wendy Parmet (Northeastern University Law), Wendy Mariner (Boston University School of Public Health), Larry Gostin (Georgetown Law), Rebecca Novick (The Legal Aid Society)
  - o Organizations: Community Service Society of New York, Center for Democracy & Technology
- **Re-entry**
  - o Individuals: Wesley Caines (Bronx Defenders)
  - o Organizations: EXODUS, Fortune Society, Center for Court Innovation, National Association of Criminal Defense Lawyers (NACDL)
- **Sentencing/Parole/Probation**
  - o Individuals: Beth Haroules (NYCLU)
  - o Organizations: Legal Aid Society (Prisoners Rights), Urban Justice Center, Correctional Association of New York, Center for Court Innovation, National Association of Criminal Defense Lawyers (NACDL)
- **Transportation**
  - o Individuals: Noel Hidalgo (Beta NYC), Aaron Naparstek (Vision Zero), Mandu Sen (RPA), Sarah Kaufman (NYU Rudin Center)
  - o Organizations: Transportation Alternatives, Vision Zero, Regional Plan Association
- **Voting Rights/Political Participation**
  - o Organizations: Demos, Brennan Center for Justice, ACLU Voting Rights Project

Oral Testimony of Jordan Kroll, Director, State & Local, Information Technology Industry Council before the New York City Council Committee on Technology

Chairman Koo and members of the Committee on Technology, on behalf of the members of the Information Technology Industry Council,[1] or ITI, thank you for the opportunity to share our perspective on the New York City Automated Decision Systems Task Force. ITI's public sector work represents more than 80 of the most innovative companies offering hardware, software, services, and solutions of information and communications technologies to state and local governments like New York City. We appreciate the work of this Committee, in conjunction with the Task Force, to study the responsible use of automated decision-making and algorithms in city government.

Many of our member companies actively provide services to New York City, and several of them rely on automated decision-making systems to provide more efficient and cost-effective services to constituents. While the potential benefits of these systems and artificial intelligence broadly are wide-ranging, we are all still working to determine the future impact of these technologies. Stakeholders globally, including this Committee and the Task Force, are aware of and working to address the main challenges. For instance, there is recognition from all stakeholders that they must find ways to mitigate bias, inequity, and other potential harms in automated decision-making systems. As AI is constantly evolving and improving, so too are the tools to address the challenges around explainability, bias, and fairness. We believe technology and further research can help address some of the fairness and interpretability challenges that result from the use of these systems. The most effective way for New York City to maximize its use of automated decision-making is to collaborate across the public and private sectors to explore solutions to address these challenges.

As leaders in the AI field, our members recognize their important role in making sure that technology is built and applied for the benefit of everyone. While we are supportive of New York City's focus on embedding transparency and oversight in the use of artificial intelligence, we remain concerned by the lack of public engagement by the Task Force thus far and lack of balance in Task Force representation across the private and public sector. We strongly urge the Task Force and this Committee to promote sustained engagement

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[1] **About ITI.** ITI is the global voice of the tech sector. Our members represent the entire spectrum of technology: from internet companies, to hardware and networking equipment manufacturers, to software developers. With a focus on federal, state, and local levels of government, as well as on educational institutions, ITI's public sector work advocates for improved procurement policies and practices while identifying business development opportunities and sharing market intelligence with our industry participants. Visit itic.org to learn more. Follow us on Twitter @ITI_TechTweets

across public and private stakeholder groups as they to explore the solutions to challenges presented by these technologies. This includes, but is not limited to, the upcoming public forums that have been scheduled. In the European Union, the Artificial Intelligence High-Level Expert Group (AI HLEG) is composed of 52 experts from academia, industry, and civil society and helps to guide and support the implementation of the European Strategy on Artificial Intelligence through recommendations on societal, ethical and legal issues as it relates to AI. This group further interacts with the European AI Alliance to help gather additional feedback from outside stakeholders.[2] We strongly urge the Task Force to promote a similar multi-stakeholder engagement approach. ITI, and our member companies, stand ready to partner with New York City, the Task Force, and the City Council in promoting further transparency and oversight in automated-decision making.

To close, the technology sector supports the work of the Task Force to advance the benefits and responsible use of automated decision-making. We are at the early stages of the commercialization of AI, and we think it's imperative that society, governments, and the technology sector work together to begin to solve some of the most complex issues. Any time you are driving innovation that is transformative, there are going to be points of tension, and we understand the concerns that are being raised. We look forward to collaborating with the Task Force, the Committee, and the general public on the exciting road ahead. I am happy to answer your questions at the appropriate time and thank you again for the opportunity to share our perspectives.

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[2] High-level Expert Group on Artificial Intelligence
Smuhana - https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence

THE COUNCIL
THE CITY OF NEW YORK

| Appearance Card |

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Solon Barocas

Address: 101 Clark St. Apt. 24J Brooklyn, N.Y. 11201

I represent: myself

Address: _____

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THE CITY OF NEW YORK

| Appearance Card |

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/4/2019

(PLEASE PRINT)

Name: KELLY JIN

Address: 100 GOLD ST. 2ND FLOOR NY NY

I represent: MODA

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

| Appearance Card |

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Brittny Saunders

Address: CCHR

I represent: _____

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Jeff Thamkittikasem

Address: _____

I represent: Office of Operations

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/4/2019

(PLEASE PRINT)

Name: Janet Haven

Address: 36 W 20th St

I represent: Data + Society Research Institute

Address: 36 W 20th St NY

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/4/19

(PLEASE PRINT)

Name: Rashida Richardson

Address: _____

I represent: AI Now Institute, NYU

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

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I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Albert Cahn

Address: _____

I represent: STOP Surv. Tech. Oversight Proj.

Address: 40 Rector, NY, NY 10006

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Noel Hidalgo

Address: _____

I represent: BETA NYC

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 9AM 4/4/19

(PLEASE PRINT)

Name: Jordan Knoll

Address: 1101 K St. Washington DC

I represent: Information Technology Industry Council

Address: _____

Please complete this card and return to the Sergeant-at-Arms