



**Written Comments from Merve Hickok
Regarding Proposed Rules on NYC Local Law 144 of 2021 in relation to Automated Employment
Decision Tools**

TO: New York City Department of Consumer and Worker Protection (DCWP)
Rulecomments@dca.nyc.gov

01/22/2023

Dear Chair and Members of DCWP,

As the Founder of AIethicist.org and Lighthouse Career Consulting LLC, I welcome another round of public comment opportunity for the rules proposed by DCWP¹ on implementation of Local Law 144 of 2021², regulating automated employment decision tools (AEDT).

I submitted written comments to DCWP's previous rulemakings – in June³ and October 2022⁴ I also published on this local law and its impact extensively.^{5 6}

My work is focused on Artificial Intelligence (AI) ethics and AI policy and regulation globally. I am also a certified human resource professional with almost two decades of experience across Fortune 100 companies. As the founder of AIethicist.org, I provide research, training, and consulting on how to develop, use and govern algorithmic systems in a responsible way. I am also the Research Director at Center for AI & Digital Policy and lecturer on data science ethics at University of Michigan.

I commend DCWP on providing further clarification on several concepts related to this very important and impactful law. In particular, the below are clear and reflect the spirit of the law.

Published results of bias audit: Ensuring the selection rates and impact ratios for all categories are transparent is extremely critical for the success and impact of Local Law 144. A bias audit which only calculates these rates and ratios, but then is not transparent is not beneficial to anyone. Transparency creates accountability.

Definition of “independence”: I congratulate the Department on this clarification and the confirmation that auditor cannot be internal to either the vendor or the employer. Similarly, it is equally important a lawyer-client privileged relationship is not used for audit purposes. Such a relationship cannot be independent. It can also have negative consequences for DCWP and impacted parties and their access to adequate audit materials on AEDTs if/when needed.

¹ New York City Department of Consumer and Worker Protection (December 2022) Notice of Public Hearing and Opportunity to Comment on Proposed Rules to implement new legislation. <https://rules.cityofnewyork.us/wp-content/uploads/2022/12/DCWP-NOH-AEDTs-1.pdf>

² Local Law 144 of year 2021: <http://nyc.legistar1.com/nyc/attachments/c5b7616e-2b3d-41e0-a723-cc25bca3c653.pdf>

³ Merve Hickok (June 6, 2022). Written Comments regarding NYC legislation on Automated Employment Decision Tools (Local Law 144), submitted to New York City Department of Consumer & Worker Protection. <https://rules.cityofnewyork.us/rule/force-fed-products-open-captioning-in-motion-picture-theaters-and-automated-employment-decision-tools/>

⁴ Merve Hickok (October 23, 2022). Written Comments regarding NYC legislation on Automated Employment Decision Tools (Local Law 144), submitted to New York City Department of Consumer & Worker Protection. <https://www.nyc.gov/assets/dca/downloads/pdf/about/PublicComments-Proposed-Rules-Related-to-Automated-Employment-Decision-Tools.pdf>

⁵ Center for AI and Digital Policy (August 11, 2022). Policy Brief – NYC Bias Audit Law. <https://www.caidp.org/app/download/8407232163/AIethicist-NYC-Bias-Audit-Law-08112022.pdf>

⁶ Center for AI and Digital Policy (September 2, 2022). Policy Brief - State of AI Policy and Regulations in Employment Decisions. <https://www.caidp.org/app/download/8410870963/AIethicist-HumanResources-RecentDevelopments-09022022.pdf>



There is still need for further clarification in the proposed rules – to reflect Subchapter 25 of the Code and the intended scope of NYC Council’s decision. Also **concerning** are attempts to

- narrow the scope of the law by diluting the definition of AEDTs, and
- remove the requirement to make quantitative results of the bias audit public.

Definition of “automated employment decision tool”: Proposal has multiple qualifiers in definition of output, and tools which significantly narrow the scope and intent. Qualifiers such as “to substantially assist or replace discretionary decision making” , “rely solely on a simplified output” , “with no other factors considered” or “weighted more than any other criterion in the set” compromises the scope, and intent of the law to protect candidates in NYC.

Employers use multiple methods during the hiring process and invest in AEDTs mainly for efficiency, speed, and cost-cutting reasons. Employers usually do not elaborate weighing mechanisms for all the criteria used in a decision. Therefore, subjective assessments and qualifiers create loopholes.

- Well-informed employers who do not want transparency may use these loopholes to escape scrutiny and transparency.
- Uninformed employers may not understand the extent of bias in AEDTs⁷, hence not feel the necessity to examine further.
- Candidates, in their individual capacity and without protection of this law, never have a way to find out what tools they are subjected to, or whether the tool was biased.

I strongly **recommend DCWP not include any qualifiers which weaken** the scope and enforcement of the law.

The definition should simply be: ‘automated employment decision tool’ means any computational process, derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues simplified output (including prediction, classification, score, tag, categorization, recommendation, ranking, or similar results) used to automate or support employment decision-making that impact natural persons.’

Definition of “Machine learning, statistical modelling, data analytics, or artificial intelligence”:

- The word “and” at the end of each point makes the definition extremely narrow, focusing on mainly on ML techniques. Not all AEDTs are AI/ML-based systems.
- A model which does not identify the inputs, or the relative importance of the inputs/other parameters can still be biased. In other words, inputs may be determined by human developers and still reflect bias of developers or historical biases in the dataset. Therefore, should be subject to bias audit.

I recommend DCWP not to try to define these techniques. This would also allow the law to be flexible for future technological innovation and new methods.

Definition of “bias”: The limitations of dataset and model, and design/model decisions made by vendor and employers must be included as audit criteria. For example, different cut-off thresholds may change the results significantly across different groups.

⁷⁷ Merve Hickok (July 2020) Why was your job application rejected: Bias in Recruitment Algorithms? Medium. <https://medium.com/@MerveHickok/why-was-your-job-application-rejected-bias-in-recruitment-algorithms-part-1-4ab24573c384>



§ 5-302 Data Requirements for analysis of Impact Ratio: Proposal suggests “an employer may rely on a bias audit of an AEDT that uses the historical data of other employers only if it provided historical data from its use of the AEDT to the independent auditor for the bias audit or if it has never used the AEDT”
If a vendor uses a general model and does not tailor / train models with client’s own data, an aggregate dataset made up of all clients’ historical data may suffice for a bias audit & report.

- **However, if the vendor tailors its model and/or trains model with client employer’s data, there is a possibility for the outcomes to vary across different employers.** If an employer is liable for the outcomes of an AEDT model trained with its own data, then running an audit on the aggregate data of many employers may not correctly reflect impact ratios for different employers. This necessitates separate audits for each model in use. In this case, a possible solution would be to conduct 2 separate selection rate and impact ratios analyses: 1) for all candidates in the system, regardless of clients, AND 2) a separate client-based analysis.

Impact Ratio analysis, as defined by Local Law 144, has been around for decades and should have been utilized by both vendors and employers as good practice, this should not be an extra burden.

Proposal defines Bias Audit as a simple Impact Ratio analysis. Vendors should already be monitoring client models for quality and liability purposes. Employers should already be monitoring their hiring pipelines. This approach would also give more confidence to employers and provide evidence of good will and practice.

- § 20-871(b)(2) of the Code requires employers to notify on “job qualifications and characteristics that such AEDT will use in the assessment of such candidate or employee”. This would mean that for each audit, the **data should also be analyzed for different ‘job categories.’** For example, AEDT outcomes might be biased for females in administrative jobs with traditionally female hires, or vice versa for executive or technical jobs with traditionally male hires. If multiple job categories (which require different skills, traits) are combined for a single analysis, the aggregate dataset may not correctly reflect the possible biases in hiring decisions. Using job categories would also allow vendors and employers to compare their results to existing labor market demographics.

Notice to Candidates: § 20-871(b)(2) of the Code also requires the information about specific job qualifications and characteristics the tool will use in the assessment of candidate so that candidates can request an alternative selection process or accommodation. To be able decide if accommodation is needed and to request an appropriate accommodation or alternative, a **candidate needs to know if the use or assessment of the AEDT require any physical, cognitive, or motor skills, or mental, emotional, character capabilities or competencies.** DCWP Proposal omits this last part in the notice requirement. Ideally, the information should be both included in the candidate notice, and in published audit results.

We need vendors to create products responsibly and employers not to create disparate impact. Transparent audit results give the businesses a chance to walk their talk about equity, diversity and inclusion. Scope of law and transparency requirements will define if NYC law can be a blueprint for future local, state and national jurisdictions around the world; and prioritize diversity, equity, and civil rights.

Thank you for your consideration of my views. I would welcome the opportunity to discuss further about these recommendations.

A handwritten signature in black ink, appearing to read "Merve Hickok".

Merve Hickok, SHRM-SCP

Founder, Alethicist.org, and Lighthouse Career Consulting LLC
merve@lighthousecareerconsulting.com