Regulating Robo-Bosses

Surveying the Civil Rights Policy Landscape for Automated Employment Decision Systems



Matthew Scherer



The **Center for Democracy & Technology (CDT)** is the leading nonpartisan, nonprofit organization fighting to advance civil rights and civil liberties in the digital age. We shape technology policy, governance, and design with a focus on equity and democratic values. Established in 1994, CDT has been a trusted advocate for digital rights since the earliest days of the internet. The organization is headquartered in Washington, D.C. and has a Europe Office in Brussels, Belgium.



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This report analyzes bills introduced during 2023 legislative sessions and covers amendments made through January 15, 2024.





Executive Summary

This report analyzes the current AEDS policy landscape by examining major legislative proposals introduced in the year-plus since the publication of the *Civil Rights Standards for 21st Century Employment Selection Procedures (the "Standards";* https://cdt. org/insights/civil-rights-standards-for-21st-century-employmentselection-procedures/). Given the rapid clip at which AEDS bills have appeared in recent months (many of which have been amended since their introduction), a truly comprehensive analysis of such legislation is impracticable. Nevertheless, this report's analysis should help orient policymakers and advocates grappling with how to govern AEDSs.

Part I: Classes of Legislation

The report identifies three classes of legislation targeting AEDSdriven discrimination based on the scope and nature of the technologies the bills seek to address:

- AEDS-specific bills, which focus exclusively on regulating AEDSs. That is, they seek to regulate neither other workplace technologies nor the use of artificial intelligence (AI) in nonemployment contexts.
- *Comprehensive workplace technology* bills, which seek to regulate both AEDS and a related class of technologies, electronic surveillance and automated management systems.
- *General AI fairness* bills, which seek to assess the discrimination potential of AEDSs in the context of a wide-ranging bill that addresses AI decisions in a wide range of settings.

Part II: Legislation analysis

This Part of the report analyzes which bills incorporate the key provisions of the *Standards*. It groups those provisions into six categories, the last five of which coincide with the five *Civil Rights Principles for Hiring Assessment Technologies* (https://civilrights.org/resource/civil-rights-principles-for-hiring-assessment-technologies/):

- Scope
- Notice and explanation
- Auditing
- Non-discrimination
- Job-relatedness
- Oversight and accountability

Each subsection in this Part includes an overview of the *Standards*' approach to the relevant topic along with an explanation of why that approach is preferred. It then notes which bills contain provisions mirroring the *Standards*', which fail to address the topic, and notable variations and gradations in between.

On most topics, the bills take a wide range of different approaches. For example, on auditing, the *Standards* call for a comprehensive audit that examines whether an AEDS poses a risk of any form of unlawful discrimination and whether the AEDS validly measures essential functions of the job(s) for which it is used. Only three bills take this comprehensive approach, while one bill includes no audit provisions at all, and some others require auditing only for discrimination risk—and others only for certain forms of discrimination risk. Two require testing of an AEDS's accuracy but not an analysis of whether the AEDS is measuring the right things (that is, ability to perform essential job functions). Because of variations such as these, the current policy landscape on any single issue defies easy summary.

This Part also includes detailed tables showing which bills incorporate the *Standards*' key recommendations relating to each principle, allowing advocates and policymakers to quickly ascertain which recent bills include specific types of provisions.

Part III: Missing Pieces

Part III highlights three key aspects of the *Standards* that were omitted from all the bills introduced in 2023 and makes the case for why policymakers should include them going forward, namely:

- Covering non-automated selection procedures
- Requiring employers to support arguments that a job function is "essential" through objective evidence
- Ensuring that evidence of an AEDS's validity is based on more than mere correlation between job performance measures and AEDS output

Part IV: Legislative Dos and Don'ts

The report concludes with three recommendations for future policy efforts:

- To address the full range of potential civil rights harms associated with AEDSs, policymakers should pursue comprehensive workplace technology legislation addressing both AEDSs and their proverbial cousin, electronic surveillance and automated management (ESAM). The best pending bills in this space are part of such comprehensive legislative proposals.
- Another beneficial, but less ambitious, approach would be legislation establishing robust disclosure requirements regarding AEDSs. When combined with the enforcement remedies already available under current antidiscrimination laws, the transparency provided by such legislation could address many, though not all, of the key discrimination risks posed by AEDSs.
- Conversely, policymakers should reject legislation that would adopt weak auditing or impact assessment requirements, particularly legislation that would require employers to check only for certain types of discrimination. Such legislation would undermine existing protections against discrimination, and thus do more harm than good, by sending a signal that certain forms of discrimination are less important than others. Policymakers must also carefully avoid drafting legislation with weak definitions, transparency, or enforcement provisions that give companies the effective ability to opt-out of regulation; these mistakes led to the failure of New York City's AEDS ordinance.

Appendices

The report concludes with three appendices:

- **Appendix A** collects and presents all of the tables from Part II for easy reference.
- **Appendix B** provides a summary showing how many of the key *Civil Rights Standards* provisions appear in each of the 2023 bills, allowing for quick comparisons between them.
- Appendix C provides brief scorecards for all AEDS legislation introduced or enacted in 2023, providing citations to specific provisions. This Appendix is a reference for readers looking for detailed information on a specific bill or for potential sources of legislative text from bills that contain specific types of provisions.

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Introduction

In December 2023, the Center for Democracy & Technology (CDT), in collaboration with a broad range of national civil rights and workers' rights organizations, published the *Civil Rights Standards* for 21st Century Employment Selection Procedures (the "Civil Rights Standards" or simply the "Standards"), a detailed set of policy recommendations regarding the methods and tools that today's employers use to recruit and assess workers.¹ The key impetus for the *Civil Rights Standards* was employers' increasing use of *automated employment decision systems* (AEDSs) to evaluate employees and make employment decisions.

Civil Rights Standards for 21st Century Employment Selection Procedures (2022), https://cdt.org/wp-content/uploads/2022/12/updated-2022-12-05-Civil-Rights-Standards-for-21st-Century-Employment-Selection-Procedures.pdf (Civil Rights Standards). [https://perma.cc/D26W-LZNV]

The rise of AEDSs underscores the degree to which antidiscrimination regulation has failed to keep pace with companies' recruitment, hiring, and personnel management practices in recent decades. Workers subjected to AEDSs are at an extreme information disadvantage, with little insight into how they are assessed or whether they face a risk of an unfair or discriminatory decision. This is deeply concerning because there is scant evidence that AEDSs are more effective than simpler and more transparent employment assessments, but considerable evidence that AEDSs can discriminate against candidates from protected groups.²

The *Standards* sought to provide advocates, policymakers, and workers alike with a roadmap on how to address these risks. The *Standards* made policy recommendations in five categories:³

- Notice and explanation: Require companies to provide concise disclosures to candidates about the key features of any AEDS they use, publish detailed summaries of all AEDS audits, and maintain records to ensure relevant materials are available if an AEDS leads to discrimination.
- Auditing: Ensure that independent auditors test AEDSs for both discrimination risks and job-relatedness both before deployment and at least annually thereafter.

- See generally, e.g., Hilke Schellmann, The Algorithm: How AI Decides Who Gets Hired, Monitored, Promoted, and Fired and Why We Need to Fight Back Now (2024); Olga Akselrod & Cody Venzke, How Artificial Intelligence Might Prevent You From Getting Hired, ACLU, Aug. 23, 2023, https://www.aclu.org/news/racial-justice/how-artificialintelligence-might-prevent-you-from-getting-hired [https://perma.cc/MP65-AZDN]; Lydia X.Z. Brown, et al., Algorithm-driven Hiring Tools: Innovative Recruitment or Expedited Disability Discrimination?, CDT, Dec. 3, 2020, https://cdt.org/insights/ report-algorithm-driven-hiring-tools-innovative-recruitment-or-expedited-disabilitydiscrimination/ [https://perma.cc/MBW7-YJC6]; Jeffrey Dastin, Insight - Amazon scraps secret AI recruiting tool that showed bias against women, Reuters, October 10, 2018, https://www.reuters.com/article/idUSKCN1MK0AG/. [https://perma.cc/ EHR9-TD3Y]
- 3 These categories come from the Civil Rights Principles for Hiring Assessment Technologies (Civil Rights Principles), which The Leadership Conference on Civil and Human Rights published in 2020 with input and endorsements from CDT and more than 20 other civil rights and workers' rights organizations. Civil Rights Principles for Hiring Assessment Technologies (2020), https://civilrights.org/resource/civil-rightsprinciples-for-hiring-assessment-technologies/. [https://perma.cc/Q2LC-WPXE]

- Nondiscrimination: Require employers and vendors to take proactive steps to minimize potential causes of discriminatory outcomes in their selection tools, use the least discriminatory tools available, explore accommodations and more accessible alternative selection methods, and refrain from using certain tools that pose a particularly high risk of discrimination.
- Job-relatedness: Require companies to conduct detailed validity studies to ensure a selection procedure is the least discriminatory valid method of measuring a candidate's ability to perform essential job functions.
- Oversight and accountability: Allow candidates to raise concerns about a selection procedure, appeal its results, or opt out of its use altogether; and ensure robust enforcement for discriminatory AEDSs by making vendors and employers jointly responsible for resulting harms.

These recommendations provided "a concrete alternative to recent proposals that would set very weak notice, audit, and fairness standards for automated tools."

The pace of AEDS legislation and policy proposals continued to increase in 2023 and into 2024. Nationally, at least eleven bills were pending at the end of 2023 purporting to target AEDS-driven discrimination. At least seven more bills across six states followed in the first weeks of 2024.

Although the increased legislative attention to AEDSs is a welcome development, much of the proposed legislation falls short of what is needed to address the risks that AEDSs pose. This report surveys the current policy landscape in the year-plus since the *Standards'* publication by analyzing legislation introduced or enacted in the subsequent months. Its goal is to help policymakers and advocates understand the structural approaches to AEDS regulation embodied by current legislation and evaluate how they do and do not incorporate the *Standards'* recommendations. That evaluation, in turn, provides a roadmap for needed improvements in legislation to help prevent AEDSs from giving rise to increased discrimination in employment decisions.

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Part I: Classes of Legislation

Given the large number of AI-related bills, the lens for this survey was focused (albeit somewhat roughly) on legislation with the explicit goal of regulating the fairness, bias, or discrimination risk of AEDSs. This survey does not attempt to assess bills whose focus is neither regulating automated employment decisions nor on preventing discrimination by automated systems in employment (and possibly other settings).⁴ The bills⁵ that this report does address can be grouped into three categories: AEDS-specific, comprehensive workplace technology, and general AI fairness.

- 4 This report does not cover, for example, the federal Algorithmic Accountability Act, which seeks to regulate Al systems, but with a focus neither primarily on employment (it governs Al in a wide variety of settings) nor primarily on preventing Al discrimination (it would require companies to assess all "material negative impacts" of Al systems, including certain forms of discrimination). It likewise does not address the California Consumer Privacy Act, a data privacy law that includes some regulations for the use of automated systems in workplace decisions, but whose focus is on privacy rather than discrimination. By contrast, this report does analyze the DC Stop Discrimination by Algorithms Act because it explicitly targets Al-driven discrimination and its scope includes employment decisions.
- 5 Because New York City's Local Law 144 has been enacted, it technically is no longer a "bill." For purposes of conciseness, however, this report will use the term "bills" to refer collectively to all recent legislation, whether enacted or not.

A. AEDS-specific bills

- No Robot Bosses Act, U.S. Senate Bill 2419 ("NRBA")
- New York City Local Law 144 ("NYC LL144")
- New Jersey Assembly Bill 4909 ("NJ A4909")
- New York Assembly Bill 567 ("NY A67")
- New York Assembly Bill 7859 ("NY A7859")
- Pennsylvania House Bill No. 1729 ("PA HB1729")

In terms of the raw number of proposed bills, the most common approach to regulating AEDSs thus far has been through legislation that focuses exclusively on AEDSs—that is, legislation that covers neither the use of automated decision-making in non-employment contexts (such as housing or public services) nor the use of non-AEDS technologies in the workplace (such as electronic surveillance or automated task allocation). Most bills in this category require employers to (1) disclose certain information to workers when they use AEDSs and (2) perform some form of audit or impact assessment. The scope of the disclosure and audit requirements varies considerably, however, across the bills in this category.

Senator Bob Casey's (D-PA) pending NRBA was the first AEDS bill introduced at the federal level. The NRBA has a broad scope and includes robust notice and disclosure provisions that incorporate most of the *Civil Rights Standards'* key recommendations. Consequently, CDT endorsed the NRBA along with two other workplace technology bills that Senator Casey introduced in 2023.⁶

6 Matthew Scherer & Ariana Aboulafia, CDT Endorses Senator Casey's Bills on Harmful Workplace Technologies, Sept. 4, 2023, <u>https://cdt.org/insights/cdt-</u> endorses-senator-caseys-bills-on-harmful-workplace-technologies/. [https://perma. cc/7HY7-6RPN]

Unfortunately, the other bills in this category are not nearly as strong as the NRBA—perhaps because they all spring from a common source, namely NYC LL144. That ordinance is the most significant legislation enacted to-date that explicitly addresses AEDSs.⁷ Immediately after its passage, CDT critiqued this ordinance at length due to the inadequacy of its notice provisions, the omission of most protected groups and several categories of

Bills based on New York City's AI in hiring ordinance (LL144) generally include fewer protections than the No Robot Bosses Act or bills falling under the other two categories. discrimination from its auditing provisions, and the ambiguity regarding the meaning of key terms.⁸ Those ambiguities ultimately set the stage for the city's enforcement agency to publish rules that significantly narrowed the scope and undermined the alreadydubious efficacy of LL144.⁹

Legislators in three states have introduced bills modeled on LL144. In New York's state Assembly, separate bills covering AEDS bias audits (NY A567) and AEDS notice (NY A7859) are currently pending;

in New Jersey (NJ A4909) and Pennsylvania (PA HB1729), there are single bills that include both bias audit and notice requirements. These bills avoid LL144's error of excluding most protected groups

- 7 It is not, however, the *first* such legislation enacted in the country. That distinction belongs to the 2019 Illinois AI Video Interview Act, 820 ILCS 42/1, et seq. But that law addresses only a narrow subtype of AEDS (as its title implies), includes no requirements other than a generic notice that AI may be used to analyze a candidate's recorded video interview, and has no enforcement mechanisms. Perhaps for those reasons, the Illinois law does not appear to have significantly influenced the subsequent policy discussion regarding regulation of AEDS in employment.
- 8 Matthew Scherer & Ridhi Shetty, NY City Council Rams Through Once-Promising but Deeply Flawed Bill on AI Hiring Tools, Nov. 12 2021, <u>https://cdt.org/insights/</u> <u>ny-city-council-rams-through-once-promising-but-deeply-flawed-bill-on-ai-hiring-</u> tools/. [https://perma.cc/XA5W-JT2T]
- 9 See Ridhi Shetty & Matt Scherer, CDT Comments Scrutinize NYC's Revised Rules That Leave Even More Workers Unprotected From Algorithmic Bias, Jan. 26, 2023, https://cdt.org/insights/cdt-comments-scrutinize-nycs-revised-rules-that-leaveeven-more-workers-unprotected-from-algorithmic-bias/ [https://perma.cc/X7CN-RLYK] Matthew Scherer & Ridhi Shetty, May 10, 2023, Workplace Technology: Recent Policy News & Publications from Across the U.S., https://cdt.org/insights/ workplace-technology-recent-policy-news-publications-from-across-the-u-s/. [https://perma.cc/UU9C-KRT9]

from the scope of their audit requirements. Nevertheless, LL144 and its progeny generally include fewer of the *Civil Rights Standards'* recommended protections than the NRBA or bills falling under the other two categories discussed below.

B. Comprehensive workplace technology bills

- Massachusetts House Bill 1873 ("MA H1873")
- New York Senate Bill 7623 ("NY S7623")
- Vermont House Bill 114 ("VT H.114")

Another class of pending legislation pairs provisions regulating AEDSs with provisions regulating electronic surveillance and automated management (ESAM) systems. ESAM encompasses, in the words of National Labor Relations Board General Counsel Jennifer Abruzzo, "a diverse set of technological tools and techniques to remotely manage workforces, relying on data collection and surveillance of workers to enable automated or semi-automated decision-making."¹⁰ Addressing both AEDSs and ESAM in a single bill results in legislation that examines the use of automated systems throughout the workplace and employment relationship, combining a well-tailored focus on the employment

10 NLRB GC 23-02, Electronic Monitoring and Algorithmic Management of Employees Interfering with the Exercise of Section 7 Rights 5 (Oct. 31, 2022) quoting Alexandra Mateescu & Aiha Nguyen, Explainer: Algorithmic Management in the Workplace, Data & Society Research Institute (Feb. 2019), <u>https://datasociety.net/wpcontent/ uploads/2019/02/DS_Algorithmic_Management_Explainer.pdf</u>. [https://perma.cc/ X54A-LQVM]; While Abruzzo's memorandum applied this definition to "electronic surveillance," the term ESAM better captures the true function of these systems—not merely monitoring workers, but also (and as Abruzzo's definition indicates) remotely managing them, meaning that these tools allow employers to direct and evaluate workers without the physical presence of a human supervisor. setting with a broad lens within that setting. Such comprehensive workplace technology bills generally incorporate more of the *Standards*' key protections than bills in the other categories. As discussed in Part IV, this seems like the most promising approach to regulating AEDSs.

Notably, the most promising of the AEDS-specific bills, the federal No Robot Bosses Act, could itself be seen as part of a comprehensive approach to workplace technology legislation. That is because the NRBA is a companion bill to the Stop Spying Bosses Act,¹¹ which Senator Casey introduced earlier in 2023 to address the risks associated with ESAM.¹²

C. General AI fairness bills

- California Assembly Bill 331 ("CA AB 331")
- District of Columbia Stop Discrimination by Algorithms Act of 2023 ("DC SDAA")
- Washington House Bill 1951 ("WA HB1951")

The most ambitious approach to addressing the discrimination risk of AEDSs is through legislation that targets—or at least purports to target—AI-driven discrimination in a wide range of settings. That is the approach of California's AB 331, which addresses "algorithmic discrimination" not only in the workplace and labor market, but in education, housing, utilities, family planning, health care, financial services, criminal justice, legal services, voting, and access to benefits. DC's SDAA likewise targets algorithmic discrimination when it affects "access to, approval for, or offer of credit, education, employment, housing, a place of public accommodation…, or insurance."

11 S. 262, 118th Cong., 1st Sess. (2023).

¹² CDT's statement endorsing these bills contains a more detailed analysis of each bill's provisions. *See* Scherer & Aboulafia, *supra* note 6.

Because of their broad scope, these bills are drafted in correspondingly broad terms. The result is bills that, while wellintentioned, are sometimes ambiguous and often fail to capture the unique nuances and challenges that automated decision-making in employment present. This is perhaps most evident in these bills' notice and job-relatedness provisions, which do not include most of the key items included in the *Standards*. These issues could be resolved through legislative amendments, but at the admitted cost of adding substantial length and complexity to the bills.

General AI fairness bills are sometimes ambiguous and often fail to capture the unique nuances and challenges that automated decision-making in employment present. 02

Part II: 2023 Legislation Analysis

The analysis in this section includes bills introduced during 2023 legislative sessions, and covers amendments made through January 15, 2024. This part of the report surveys the current policy landscape by analyzing the provisions of the legislation outlined in Part I, starting with the bills' scope and then moving through each of the five *Civil Rights Principles* that undergird the *Standards*:

- Notice and explanation
- Auditing
- Nondiscrimination
- Job-relatedness
- Oversight and Accountability

Each section discusses the *Civil Rights Standards*' approach to the topic and notes both the bills with relevant provisions mirroring the *Standards*' and those with approaches that differ from the *Standards*.' To allow readers to compare the various bills with each other and with the *Standards*, each section includes tables indicating which of the bills contain each type of provision. Relevant excerpts from the *Standards* are also provided in each section for reference.

Appendix A compiles the tables used in the report. Appendix B contains a summary scorecard showing how many key provisions from the *Standards* each bill contains. Appendix C then contains detailed descriptions benchmarking each bill against the *Standards*.

A. Scope

A threshold issue in assessing the likely effectiveness of AEDS legislation is whether its scope is broad enough to cover all the various ways such systems can lead to discriminatory or arbitrary decisions. All of the bills would cover AEDSs that play a *determinative* role in *hiring* decisions about *candidates who have affirmatively applied* for a position with a specific company. Beyond that, however, the scope of legislation varies significantly. There are three major categories of scope-related differences:

- What employment decisions does the legislation cover? Just *hiring*? Or also decisions relating to recruitment activities, promotion, pay, discipline, et cetera?
- What types of workers does the legislation cover? In addition to *candidates who have affirmatively applied* for a job, does it cover "passive" candidates selected for targeted advertisements, current employees, and independent contractors?
- What role must the AEDS play in the decision-making process to fall within the legislation's scope? Does it only cover AEDSs that play a *determinative* role in an employment decision, or does it also cover systems that make recommendations or are a substantial factor in a decisionmaking process?

This section considers each of these scope dimensions in turn.

A threshold issue in assessing the likely effectiveness of AEDS legislation is whether its scope is broad enough to cover all the various ways such systems can lead to discriminatory or arbitrary decisions.

Covered employment decisions

Relevant Standards Excerpts

Standard 1(n): The term "employment decision" includes but is not limited to hiring, promotion, demotion, referral, retention, termination, compensation; setting the terms, conditions, or privileges of employment; selecting workers for recruitment, interviewing, or targeted job or career advertising; and licensing and certification, to the extent that licensing and certification may be covered by applicable federal, state, or local laws against employment discrimination. Other decisions, such as training or transfer, may also be considered employment decisions if they alter a worker's terms or conditions of employment or lead to any of the decisions listed in the preceding sentence.

The *Civil Rights Standards'* coverage of employment decisions largely mirrors those of federal antidiscrimination laws, including Title VII of the Civil Rights Act of 1964 (Title VII) and the Americans with Disabilities Act (ADA). Indeed, the *Standards'* definition of "employment decision" primarily draws from the language of Title VII¹³ and the federal Uniform Guidelines for Employee Selection Procedures (UGESPs),¹⁴ which interpret and apply Title VII. The *Standards* extend not only to hiring but to all decisions affecting the terms and conditions of employment. It also includes clarifying language that explicitly encompasses targeted job advertising and related recruitment practices.

- See 42 U.S.C. § 2000e–2(a)(1) ("It shall be an unlawful employment practice for an employer...to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin.").
- See 29 C.F.R. § 1607.2(B) ("Employment decisions include but are not limited to hiring, promotion, demotion, membership (for example, in a labor organization), referral, retention, and licensing and certification, to the extent that licensing and certification may be covered by Federal equal employment opportunity law. Other selection decisions, such as selection for training or transfer, may also be considered employment decisions if they lead to any of the decisions listed above.").

There is no persuasive reason to adopt a scope substantially narrower than the *Standards*' on this front. At both the federal level and in all states with pending legislation, antidiscrimination laws extend not only to decisions relating to hiring and "employment

Legislation that covers hiring, but not other decisions like termination or compensation, would send a signal that certain decisions that significantly impact workers' lives are unimportant, undermining the effectiveness of longstanding civil rights laws. status," but to all decisions regarding termination, compensation, or any other terms, conditions, and/ or privileges of employment.¹⁵ Paying women less than men because of their sex is no more lawful than failing to hire women because of their sex. Legislation that covers only the use of AEDS in the latter context while omitting the former would send a signal that certain decisions that significantly impact workers' lives are unimportant, undermining the effectiveness of longstanding civil rights laws.

Several bills have a scope comparable to the *Standards*, including the NRBA, MA H.1873, NJ A4909, and NY S7623, all of which have language indicating that they cover recruitment activities. MA H.1873, for instance, states that it extends to decisions that affect

"access to work opportunities."¹⁶ Two other bills—PA HB1729 and VT H.114—appear coextensive with Title VII in their scope but do not contain language explicitly covering targeted advertising or other recruitment practices.

New York City's LL144 has the narrowest scopes in this regard, applying only to hiring and promotion decisions. A few of the pending bills have significant ambiguities in their scope. The two bills introduced in the New York Assembly apply to tools that "screen candidates for employment." That definition certainly

- Of the jurisdictions with pending AEDS legislation, Vermont is the only state whose antidiscrimination statute does not explicitly mention hiring, discharge, compensation, and other terms, conditions, and privileges of employment. Instead, Vermont's statute simply makes it unlawful for an employer to "harass or discriminate" against a member of a protected group. Vt. Stat. tit. 21 § 495(a)(1). The lack of qualifications to this statement suggest that Vermont's antidiscrimination statute is, if anything, broader than its peers.
- 16 Consult Appendix B for citations to the relevant provisions in each individual bill.

encompasses hiring decisions, but it is not clear whether it also covers other decisions that determine whether someone obtains or keeps a job, such as promotion or termination/layoff decisions. Similarly, the DC SDAA defines an adverse action as "a denial, cancellation, or other adverse change or assessment regarding an individual's eligibility for, opportunity to access, or terms of access" to employment. This clearly includes hiring and termination, and quite likely promotion, but it is not clear what "terms of access" means in the context of active employment. The DC SDAA does cover recruitment practices through its provisions relating to "algorithmic information availability determinations," which explicitly extends to targeted advertising practices.

General rules for reading tables:

A " \boldsymbol{Y} " indicates that the legislation explicitly or clearly includes the item

A question mark (?) indicates that the legislation could plausibly be read as including the item, but does not clearly do so

A tilde (~) indicates that the legislation includes the intended item, but only in a limited way or with caveats. A table's Legend will provide specific information on what tildes mean in the context of that table.

A blank space indicates that the legislation does not include the item.

The Legends only include definitions/descriptions for headings whose meanings are not self-evident and not adequately explained in the accompanying section.

	Recruitment	Hiring	Pay	Promotion	Discipline	Termination	Other terms/conditions
Civil Rights Standards	Υ	Y	Y	Y	Y	Υ	Υ
No Robot Bosses Act	Y	Y	Y	Y	Y	Y	Υ
CA AB 331	?	Y	Y	Y	?	Y	?
DC SDAA	Y	Y	?	Y	?	Y	?
MA H.1873	Y	Y	Y	Y	Y	Y	Y
NJ A4909	Y	Y	Y	Y	Υ	Y	Y
NY A567	?	Y		?		?	
NY A7859	?	Y		?		?	
NY S7623	Y	Y	Y	Y	Y	Y	Υ
NYC LL 144		Y		Y			
PA HB1729	?	Y	Y	Y	Y	Y	Y
VT H.114	?	Y	Y	Y	Y	Y	Y
WA HB1951	?	Y	Y	Y	?	Y	?

Table 1. Types of employment decisions.

Legend: Does the bill cover the use of AEDSs in...

- **Recruitment**: ...identifying workers who have not yet submitted an application as potential candidates for recruitment or hire? This includes the use of targeted advertising.
- **Hiring**: ...deciding, for a candidate who has submitted an application, whether to advance that candidate to the next stage in the application/hiring process?
- Other terms and conditions of employment: ...setting other terms, conditions, or privileges of employment not covered by the other items in this table? This might include task or location assignments, scheduling, etc.

Covered workers

Relevant Standards excerpts:

Standard 1(ac): Worker. The term "worker" means an employee, contractor, paid or unpaid intern, applicant, or any other person who offers or provides labor or services in exchange for compensation or other benefits. "Worker" also includes any individual who is considered part of the labor force under the applicable standards and guidance issued by the United States Department of Labor's Bureau of Labor Statistics, regardless of whether the individual is currently working...

Standard 1(i): Candidate. The term "candidate" means any worker who is the subject of an employment decision made by a selection procedure, regardless of whether that worker applied for, expressed an interest in, or removed themselves from consideration for the position(s) for which the selection procedure is used.

The *Standards*' definitions of "worker" and "candidate" were drafted broadly to ensure coverage of not only regular employees and active job applicants, but also independent contractors and "passive" candidates. Independent contractors, particularly in "gig economy" jobs such as ride hail and delivery drivers, are increasingly recruited and managed through AEDSs. Companies frequently use automated systems to manipulate these workers and obscure basic information about their pay, schedule, and other terms and conditions of employment.¹⁷ Omitting such workers from the scope of AEDS legislation would thus ignore a large group of workers who face considerable threats to their rights, livelihoods, and dignity as a result of AEDS-driven practices.

A "passive" candidate is someone who an employer (or a job platform or other entity acting on the employer's behalf) identifies as a potential recruitment target. Passive candidates may receive targeted communications, job advertisements, or other materials or documents that alert them to the existence of a job or encourage

¹⁷ See generally Veena Dubal, On Algorithmic Wage Discrimination, 123 Columbia L. Rev. 1929 (2023).

them to apply for the job. Passive candidates stand in contrast to "active" candidates, or applicants, who affirmatively communicate their interest in working for an employer. The process of identifying and targeting passive candidates is often referred to as sourcing.

Employers that rely on AEDS-driven sourcing techniques can fill a job opening without ever posting the opening publicly. In such instances, sourcing practices have the same practical effect as screening out job applicants. Indeed, they effectively screen out more candidates than active applicant screening would, since only a fraction of the potential applicant pool is even given the opportunity to apply for the role. Legislation that fails to cover passive candidates thus threatens to create a loophole that would allow companies to evade AEDS regulations simply by shifting their personnel selection processes to focus on proactively identifying and reaching out to preferred candidates.

All of the bills addressed here cover active candidates and at least arguably cover current employees.¹⁸ Some of the bills include language clearly covering independent contractors as well. The NRBA and MA H.1873, for example, have definitions for covered "candidates" and "worker[s]," respectively, that extend to independent contractors. But for pre-employment decisions, their applicable definitions extend only to individuals who "apply" for work, suggesting that passive candidates are not covered.

CA's AB 331 and WA HB1951 similarly cover access to "selfemployment" opportunities, implying that the bill would cover independent contractors, but the bills' definitions of "consequential decision" make it unclear to what degree they extends to passive candidate screening. Both bills define a "consequential decision" as those having a "significant effect...relating to the impact of, access to, or the cost, terms, or availability of" employment. It is not clear what types of passive candidate screening techniques would cross the threshold of having a "significant effect" on a worker's "access" to employment opportunities.

¹⁸ As noted in the preceding section, the two pending bills in the New York Assembly, A567 and A7859 refer only to "screen[ing] *candidates for hire*"—language that likely, but not clearly, is meant to encompass current employees who apply for open positions.

Conversely, New Jersey's A4909, New York's A567, and Pennsylvania's HB1729 apply to systems that filter "prospective" candidates, which suggests coverage of passive candidate screening, but the bills do not contain language suggesting that they would apply to independent contractors. The DC SDAA also explicitly covers targeted advertising and thus would apply to prospective candidates, but it is not clear whether its coverage of employment extends to gig or contracting work.

Passive Candidates	Active Candidates	Employees	Independent Contractors
Y	Υ	Y	Y
	Y	Y	Y
?	Y	Y	Y
Y	Y	Y	?
	Y	Y	Y
Υ	Y	Y	
Y	Y	?	
?	Y	?	
Y	Y	Y	Y
	Y	Y	
?	Y	Y	
?	Y	Y	?
?	Y	Y	Y
	Y ? Y Y ? Y ? ? ? ? ?	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	Y Y Y Y Y Y ? Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

Table 2. Types of workers.

Legend: Does the bill cover...

- **Passive Candidates**: A passive candidate is a worker who has not specifically applied to work for a given company, but who an AEDS evaluates to determine whether the company should attempt to recruit the worker.
- Active Candidates: An active candidate is a worker who has specifically applied to work for a given company.
- Employees: Current employees of a given company.
- Independent Contractors: Workers who perform paid work for a given company, but who that company classifies as independent contractors rather than employees. Because most employment discrimination and labor laws apply only to employees, this chart assumes that a bill does not include independent contractors unless it clearly states or implies that it covers contractors.

Only NY S7623 explicitly covers both passive candidates and independent contractors. For the reasons explained above, that trend needs to change or the law will fail to protect a class of workers that is particularly vulnerable to AEDS-driven discrimination and exploitation.

Covered uses in decision-making process

Relevant Standards excerpts:

Standard 1(y): Selection procedure: The term "selection procedure" means any measure, combination of measures, test, method, or process to assess workers that meets the following criteria:

* * *

(2) It outputs a score, ranking, recommendation, evaluation, or other judgment that is primarily the result of:

(A) Automated processes, including processes that are based in whole or in significant part on machine learning, artificial intelligence, computerized algorithms, automated statistical or probabilistic modeling, or similar techniques; and/or

(*B*) Standardized processes, whether automated or nonautomated, where outputs are generated algorithmically or deterministically; and

(3) The output described in paragraph (2) is used as a basis for any employment decision, as a factor in any employment decision, to provide a recommendation with respect to any employment decision, or to assist, influence, or inform human decision-makers or automated systems in the making of any employment decision.

The final dimension of scope—how the AEDS affects an employment decision—is emerging as a particularly important battlefield in AEDS legislation. The federal UGESPs cover selection procedures that are "used as a basis" for an employment decision, which they define as both decisions directly determining hiring, promotion, termination, and other personnel decisions, as well as "[o]ther selection decisions...if they lead to any of" the listed decisions.¹⁹ This is consistent with the broad language of federal civil rights laws. Title VII, for example, makes it unlawful not only "to fail or refuse to hire or to discharge" a worker, but also to "limit, segregate, or classify...employees in any way which would deprive *or tend to deprive any individual of employment opportunities* or otherwise adversely affect his status as an employee.^{"20}

The *Standards'* language sweeps similarly broadly, covering not only selection tools that make final employment decisions, but also tools that make recommendations or otherwise impact the decision-making process that lead to such decisions. A narrower scope could erode existing antidiscrimination laws, given the broad scope of existing protections. Currently, for example, an employer violates Title VII if a protected attribute "was a motivating factor for any employment practice, even though other factors also motivated the practice."²¹ At a minimum, adopting legislation with a narrower scope would create inconsistencies and confusion; at worst, it could undermine the effectiveness of existing antidiscrimination laws.

Moreover, research indicates that people frequently defer to the decisions of automated systems that are purportedly designed to perform a particular function, even if they have no information on the system's reliability or accuracy.²² One would imagine that this tendency is, if anything, heightened when someone is ordered to

20 42 U.S.C. § 2000e-2(a) (emphasis added).

^{19 29} C.F.R. § 1607.2B.

^{21 42} U.S.C. § 2000e-2(m).

See, e.g., Keding, C., & Meissner, P., Managerial overreliance on AI-augmented decision-making processes: How the use of AI-based advisory systems shapes choice behavior in R&D investment decisions. *Technological Forecasting and Social Change*, 171, 120970 (2021) (experiment showing that a group of finance executives given recommendations from an AI-based advisory system were more likely to act on the recommendation than executives who received the same recommendations from a human managerial team); Robinette, P., et al. Overtrust of robots in emergency evacuation scenarios. In 2016 11th ACM/IEEE International Conference on Human-Robot Interaction (HRI), 101-108 (2021) (in a simulated emergency, study participants ignored the clearly marked exit they entered through and followed the unknown—and incorrect—path indicated by an apparatus labeled "emergency guide robot").

use an AI system to inform their decision-making. It thus is essential that AEDS legislation covers all assessments that influence the hiring process. Otherwise, employers could evade the law simply by casting AEDS outputs as "recommendations," even if human decision-makers as a practical matter rubber-stamp, hesitate to contradict, or otherwise generally defer to those recommendations.

The experience so far with NYC's LL144 heightens this danger. Although the statutory text of NYC's LL 144 covers tools that are "used to substantially assist or replace discretionary decision making,"²³ the rules interpreting the ordinance effectively narrowed its scope so that it only requires notice and bias audits of tools that play a dominant role in the decision process.²⁴ In comments to the regulatory agency that drafted the rules, CDT warned that this narrow interpretation would "create[] a loophole that could swallow the law."²⁵ Indeed, more than six months after the ordinance went into effect, only a handful of companies appear to have published bias audits, even though nearly all Fortune 500 companies reportedly use some form of automated system in their hiring processes.²⁶ The two New York Assembly bills and PA HB1729 import the "substantially assist or replace" language of LL144 and thus may be similarly vulnerable to narrow interpretations of their scope.

CA AB 331 and WA HB1951 are even weaker than LL144 and its progeny in this regard. AB 331 and HB 1951 apply only to systems that make a covered decision or that are "specifically developed and marketed to, or specifically modified to, make, or be a controlling factor in making" a covered decision. In effect, these bills only cover AEDSs that completely displace human decision-making.

- 23 LL 144 § 20-870 (emphasis added).
- 24 Rules of New York City, tit. 6, § 5-300 (defining "Automated Employment Decision Tool" as meaning a tool that either relies "solely on a simplified output," uses a set of criteria in which the simplified output is the criterion given the greatest weight, or uses the simplified output to overrule conclusions derived from other factors).
- 25 Ridhi Shetty & Matt Scherer, CDT Comments on NYC's Revised Automated Employment Decision Tools Rules, Jan. 23, 2023, <u>https://cdt.org/wp-content/</u> uploads/2023/01/2023-01-26-CDT-Comments-on-NYCs-Revised-AEDT-Rules.pdf. [https://perma.cc/P5DM-SE5B]
- 26 See Marissa Gerchick & Olga Akselrod, Why Meaningful Algorithm Auditing is Key to Protecting Civil Rights in the Digital Age, ACLU, Nov. 20, 2023, <u>https://www.aclu.org/news/racial-justice/why-meaningful-algorithm-auditing-is-key-to-protecting-civil-rights-in-the-digital-age. [https://perma.cc/WS9W-MGJH]</u>

Limiting a bill's scope in this way creates a fatal legislative weakness. Vendors almost invariably say that their systems are designed merely as tools to assist humans, and deployers always say that humans have final say in decisions—even if, in reality, AEDS "recommendations" are decisive and human "decision-makers" defer to AEDS outputs.

Indeed, a "controlling factor" or similar requirement creates a catch-22 that effectively makes it impossible for anyone to challenge a deployer or developer's assertion that an AEDS is exempt from the law. Once a company decides its human review policies suffice to make an AEDS not a "controlling factor" in employment decisions, it need not even disclose the AEDS's existence or use. In that case, consumers, workers, and regulators may not even be aware of the tool—even if, contrary to the company's private

Legislation that imposes a "controlling" or even "substantial" factor requirement on AEDS disclosure would give deployers and developers the unilateral ability to decide whether to comply with the law. determination, the AEDS has decisive impacts on employment decisions. Thus, legislation that imposes a "controlling" or even "substantial" factor requirement on AEDS disclosure means deployers and developers would have the unilateral ability to decide whether to comply with the law.

Fortunately, some pending bills contain stronger scope requirements. The NRBA, MA H.1873, and NY S7623 explicitly extend to recommendations and other inputs in the selection process, regardless of whether their role is decisive. Some other bills suggest a similarly broad scope, covering tools that "help" to

make employment decisions (NJ A4909) or that play a "significant part" in a covered employment decision (DC SDAA). That said, the ambiguous meaning-in-context of terms like "substantial" and "help" make the true scope of these bills unclear and, as with bills imposing "controlling factor" requirements, may allow companies to evade compliance.

	Recommendations	Substantial Factors	Dispositive Decisions
Civil Rights Standards	Y	Υ	Y
No Robot Bosses Act	Υ	Υ	Υ
CA AB 331			Y
DC SDAA	?	Y	Y
MA H.1873	Y	Y	Y
NJ A4909	?	Y	Y
NY A567	?	?	Y
NY A7859	?	?	Y
NY \$7623	Y	Υ	Y
NYC LL 144	Not as interpreted	Not as interpreted	Y
PA HB1729	Y	Υ	Y
VT H.114	Y	Υ	Y
WA HB1951			Y

Table 3. Covered uses in decision-making process.

Legend: Does the bill cover AEDSs that...

- Recommendations: ...make recommendations that may influence covered employment decisions?
- Substantial Factors: ... play a significant or substantial role in covered employment decisions?
- Dispositive Decisions: ... play a decisive or controlling role in covered employment decisions?

B. Notice and explanation

Overview

The *Civil Rights Standards*' disclosure provisions would help alleviate the enormous information advantage that employers have over candidates when it comes to the nature and impact of selection procedures. This advantage is particularly acute when employers use AEDSs. In some cases, candidates may not be aware that an employer is using an AEDS. In others, it may not be evident what attributes the AEDS will measure, how the AEDS will evaluate those attributes, and how the AEDS's outputs will influence the overall employment decision.

In principle, such transparency should be the least burdensome and controversial aspect of AEDS regulation. The typical hiring process entails companies providing potential candidates with job descriptions, instructions for submitting application materials, and other information regarding the job and application process. The transparency provisions of the *Civil Rights Standards* would simply ensure that candidates also receive important information on how employers will evaluate their applications. Employers should already have the necessary information for such disclosure in their own records. The cost of communicating that information to workers would be minimal and would give candidates the information they need to decide whether they wish to proceed with applying for a position.

Such disclosure is also needed so that disabled workers can determine whether they need to request accommodation. The accessibility requirements of AEDSs, and the ways in which they can discriminate or disadvantage disabled workers, are not always apparent. Without information on what an AEDS is supposed to measure and how it goes about measuring it, disabled workers will be unable to effectively exercise their rights under the ADA and other antidiscrimination laws.

The bills that have appeared over the past year vary widely in their disclosure requirements.

Disclosing what an AEDS measures and how it works

Relevant Standards excerpts

Standard 4(a) Any employer or employment agency that uses a selection procedure should prepare a short-form disclosure for each such selection procedure that:

(1) States the positions for which the selection procedure is or will be used and what types of employment decisions will be made or informed by the selection procedure;

(2) Describes, for each position:

(A) The knowledge, skills, abilities, and other characteristics that the selection procedure measures;

(B) How those characteristics relate to the position's essential function(s);

(C) How the selection procedure measures those characteristics; and

(D) How to interpret the results or other outputs of the selection procedure;

(3) Identifies any reasonably foreseeable accommodation that candidates may require;

The *Standards* require companies to disclose key information regarding what an AEDS measures, how it measures it, and how the characteristics relate to the job(s) for which it is being used. Providing this information is necessary both to give workers the information they need to exercise their legal rights and to alleviate the severe information disadvantage that workers face when employers subject them to an AEDS. Such disclosure is essential when an AEDS assesses candidates using means that may be inaccessible to a worker who is disabled or pregnant or who may otherwise require accommodation or face barriers to access. In such cases, the *Standards* would require employers to proactively communicate regarding available accommodations to prevent discriminatory or invalid results. This is consistent with both existing law²⁷ and current social science standards.²⁸

The NRBA, MA H.1873, and NY S7623 include robust disclosure and explanation requirements consistent with the *Standards*. Those bills would require companies to provide workers with essential pre-assessment information about the characteristics an AEDS will measure, how it will measure those characteristics, and how they relate to essential job functions. The NRBA and MA H.1873 also include strong post-assessment disclosure requirements so workers understand why an AEDS rendered an adverse decision (or a recommendation that influenced an adverse decision).

Conversely, NY A567 and WA HB1951 include no notice or disclosure requirements at all.²⁹ NJ A4909 only requires employers to tell candidates that an AEDS is assessing them—and even that disclosure need not happen until after the employer makes an employment decision.

Some bills take an approach to transparency that focuses on disclosing the role that the AEDS plays in the decision-making process but not the details of what the AEDS is supposed to evaluate. AB 331, for example, requires a "plain language description of" the AEDS, but the only items that it explicitly says must be

- 27 *E.g.*, 29 C.F.R. 1630.1(o)(3) (stating, as part of definition of "reasonable accommodation," that, "To determine the appropriate reasonable accommodation it may be necessary for the covered entity to initiate an informal, interactive process with the individual with a disability in need of the accommodation. This process should identify the precise limitations resulting from the disability and potential reasonable accommodations that could overcome those limitations").
- 28 Am. Educ. Research Ass'n, et al., Standards for Educational and Psychological Testing 67, Standard 3.10, cmt (4th ed. 2014) ("Test developers and/or users should provide individuals requiring accommodations in a testing situation with information about the availability of accommodations and the procedures for requesting them prior to the test administration.") (hereinafter, *APA Standards*).
- 29 Curiously, Vermont's H.114 also does not include any notice requirements, but it appears this may have been an inadvertent omission. The bill at one point references notice requirements for AEDSs and states that employers must comply with them, Vt. H.114 § 1(f)(2)(B)(iii), but the notice provisions themselves do not appear in the current text of the bill.

included in this description are "a description of any human components and how any automated component is used to inform a consequential decision."

While requiring an employer to disclose the purpose of an AEDS or how it fits into the decision-making process is better than requiring no disclosure at all, it is not adequate. Such disclosures do not ensure that workers understand what an AEDS will be measuring, how it works, or how it relates to the job they are applying for information that is essential to effectuate workers' civil rights and to address the severe information disadvantage that workers and enforcement agencies currently face. As a best practice moving forward, AEDS disclosure requirements should include role-indecision information—but in addition to, rather than in place of, disclosing what an AEDS measures and how it measures it.

Explaining adverse results and maintaining records of AEDS assessments

Relevant Standards excerpts

Standard 5(b) After subjecting a candidate to a selection procedure, an employer or employment agency should... [p]rovide an explanation that identifies the factors, candidate characteristics, and other information that led the selection procedure to render an adverse employment decision with respect to each position for which the selection procedure assessed the candidate.

The pending bills are generally less robust in terms of what employers must tell candidates and what records they must keep after an AEDS assessment. The *Civil Rights Standards* require employers to tell workers the result of the assessment and, in the case of an adverse decision, an explanation of the factors that led to that decision. They also require employers to maintain records relating to AEDS assessments and other selection procedures so that the material is available if a worker or enforcement agency files a complaint or initiates an investigation. Only the NRBA and DC SDAA include all of these explanation and recordkeeping requirements, and most pending bills do not require any postassessment notification or recordkeeping at all.

	Use	Audit	Attributes	Method	JFs	Accommodation / Alternatives	Decision Role	Data practices
Civil Rights Standards	Y	Y	Y	Y	Y	Y		Both
No Robot Bosses Act	Y	2	Y	Y	Y		Y	Sources
CA AB 331	Υ						Y	
DC SDAA	?		Y	?	?			Both
MA H.1873	Y	Post	?	?	?		Y	Both
NJ A4909	Post							
NY A567		2						
NY A7859	Y		Y		2			Sources
NY S7623	Y	Y	Y	Y	Y	Y		Sources
NYC LL144	2	2	~		2			Sources
PA HB1729	Y	2	Y	Y				
VT H.114		2						
WA HB1951	No notice provisions							

Table 4. Pre-test notice requirements.

Legend: Must the deployer notify candidates before they are assessed by an AEDS...

- **Use**: ...that an AEDS will assess them? Mere disclosure that an AEDS "may" be used does not qualify. A tilde (~) indicates that the bill requires the deployer to post this information publicly or provide it to candidates upon request, but need not include the information in job postings or proactively provide the information directly to candidates.
- Audit: ...the results (or a summary) of the most recent audit of the tool? A tilde (~) indicates that the bill requires the deployer to post this information publicly or provide it to candidates upon request, but need not include the information in job postings or proactively provide the information directly to candidates.
- Attributes: ...what knowledge, skills, abilities, and other attributes the AEDS is supposed to measure? A tilde (~) indicates that the bill requires the deployer to post this information publicly or provide it to candidates upon request, but need not include the information in job postings or proactively provide the information directly to candidates.
- Method: ...how the AEDS measures those attributes?
- JFs: ...the specific job functions the AEDS is relevant to, and how the attributes the AEDS measures relate to those job functions? A tilde (~) indicates that it requires companies to disclose the job functions it is relevant to but not how the tested attributes relate to those job functions.
- Accommodations/Alternatives: ... how the candidate can request an accommodation or alternative selection procedure?
- Decision Role: ...tell candidates how the tool is used or monitored by humans in the decision-making process?
- Data Practices: ... publish the following data practices or disclose them directly to candidates?
 - **Sources**: The sources from which the employer collects data used as inputs into the AEDS and/or how the employer collects its AEDS input data.
 - Sharing: Whether and how worker data can be shared with third parties.
- "Post" indicates that the deployer must provide the information only after making a decision

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Table 5. Explanation andrecordkeeping.

Legend: Must the deployer...

- Result: ...notify candidates what the result of the AEDS assessment was? A tilde (~) indicates the bill does not explicitly require disclosure of AEDS results, but that it does require employers to allow candidates to request reevaluation after an AEDS decision, which implies that the candidate must receive notice of the results.
- **Explanation**: ...tell candidates adversely assessed by an AEDS the factors, attributes, or other information that led the AEDS to render an adverse assessment?
- **Records**: ...keep records relating to the results of its AEDS audits and assessments?

	Result	Explanation	Records		
Civil Rights Standards	Y	Υ	Y		
No Robot Bosses Act	Y	Υ	Y		
CA AB 331			Audits only		
DC SDAA	Y	Y	Y		
MA H.1873	Y				
NJ A4909					
NY A567					
NY A7859					
NY S7623	~		Y		
NYC LL144					
PA HB1729					
VT H.114	Upon request	Upon request			
WA HB1951	No notice provisions				

C. Auditing

The *Civil Rights Standards* call for vendors and employers to rigorously analyze AEDSs and other selection procedures for both discrimination risk and validity. Most pieces of pending legislation also call for either vendors or employers (and sometimes both) to evaluate their AEDSs, although different bills use different terminology when describing the proposed evaluations. The most commonly used terms are "audit" and "impact assessment." The below analysis uses auditing as shorthand for any requirement that employers or vendors analyze/evaluate an AEDS to determine its reliability, validity, impact, or legal compliance.

Auditing Logistics

Timing of audits

Relevant Standards excerpts

Standard 3(b): An employer or employment agency should not use a selection procedure unless . . . [a]n auditor has conducted a predeployment audit on the selection procedure for each position for which the selection procedure is to be used.

Standard 6(a): After a selection procedure has been deployed, the selection procedure should undergo ongoing audits at standardized intervals that ensure the selection procedure is audited at least once per year for each position for which the selection procedure is used.

Logistically, the *Civil Rights Standards* call for all AEDSs to be subjected to independent audits both before an employer deploys an AEDS and at least annually thereafter. The vast majority of pending bills include at least some auditing requirement, with most requiring both pre-deployment and ongoing audits.

Responsibility for audits

Relevant Standards excerpts:

Standard 2(g): An "auditor" is a person licensed by the enforcement agency...to conduct the audits described in Standard 3 and Standard 6; who is independent of all employers, employment agencies, and other persons and entities that designed, developed, or used the selection procedure being audited; and whose methodologies for conducting such audits have been approved by the enforcement agency. Standard 3(b): Each employer and employment agency that uses, sells, distributes, or develops the selection procedure should have a joint and non-delegable responsibility for ensuring that an audit compliant with this Standard is performed before the selection procedure is deployed. Such employers and employment agencies may enter into contracts assigning obligations, duties, and indemnification responsibilities relating to the conduct of a pre-deployment audit, but such contracts should not abrogate any party's duty to ensure that a proper audit is conducted or liability under these Standards in the event of non-compliance.

Under the *Civil Rights Standards*, the developers, vendors, and deployers of an AEDS have a "joint and nondelegable responsibility" for ensuring that compliant audits occur. This requirement is intended to provide both the developers and deployers of an AEDS with a strong incentive to participate fully and to monitor each other's compliance with the audit process. Moreover, if all parties must cooperate in a comprehensive audit process, deployers will gain an understanding of the AEDS's functionality and limitations, while developers will gain an understanding of the deployer's intended use of the AEDS. This would help avert situations where developers or deployers disclaim knowledge and responsibility when an AEDS causes harm.

Of the bills issued in the past year, only MA H1873 makes deployers and vendors jointly responsible for audits. Most bills instead place audit responsibility solely on the deployer—i.e., the employer or platform that operates the AEDS and uses it to assess candidates. NY S7623 requires vendors to provide any required information or otherwise cooperate with deployers' audits.

Some legislation would impose separate audit requirements on vendors and deployers. But true joint responsibility is the preferred approach, both to ensure that all parties cooperate with the auditing process and to better detect problems arising from the interplay between the developer's AEDS design and the deployer's implementation of the AEDS in practice. In the absence of joint responsibility, it is essential that the bias audit requirements include provisions ensuring that all entities involved in the development and use of an AEDS have a clear obligation to cooperate with the audit and provide all information necessary to complete the audit.

Most bills include some requirement that audits be conducted by an independent or at least impartial party (the exceptions being CA AB331, VT H.114, and WA HB1951), but most do not define independence or impartiality. The experience of LL144 suggests that legislation should detail what true independence means. The text of LL144 defines the required bias audit as an "impartial evaluation by an independent auditor." The initial draft of the enforcement agency rules interpreted this requirement narrowly, however, requiring only that the auditor be "a person or group that is not involved in using or developing" the AEDS in question. There was no requirement that auditors exercise independent judgment or be free of financial or personal conflicts of interest.

While the final rule strengthened the independence requirements, this near-miss strongly suggests that independence requirements be spelled out in the text of any legislation. Here, the Lawyers' Committee Model Act's definition of "independent auditor" provides excellent language:

The term "independent auditor" means a person that conducts a pre-deployment evaluation or impact assessment of a covered algorithm in a manner that exercises objective and impartial judgment on all issues within the scope of such evaluation or assessment. A person is not an independent auditor of a covered algorithm if they—

(A) are or were involved in using, developing, offering, licensing, or deploying the covered algorithm;

(B) at any point during the pre-deployment evaluation or impact assessment, has an employment relationship with a developer or deployer that uses, offers, or licenses the covered algorithm; or

(C) at any point during the pre-deployment evaluation or impact assessment, has a direct financial interest or a material indirect financial interest in a developer or deployer that uses, offers, or licenses a covered algorithm.³⁰

³⁰ Lawyers' Committee on Civil Rights Under Law, Online Civil Rights Act § 2(12) (2023), https://www.lawyerscommittee.org/wp-content/uploads/2023/12/LCCRUL-Model-AI-Bill.pdf. [https://perma.cc/6D5A-RQ5G]

	Pre-deployment	Ongoing	Responsibility	Independence	Summary
Civil Rights Standards	Y	Annually	Joint	Y	Y
No Robot Bosses Act	Y	Annually	Deployer	Y	
CA AB 331	~	Annually + "significant" updates	Split		
DC SDAA	Y	Annually	Deployer		Y
MA H.1873	Y	If "material" changes are made	Joint	Y	Y
NJ A4909	Y	Annually	Vendor	~	
NY A567	~	Annually	Deployer	~	Y
NY A7859		No au	dit provisions		
NY S7623	Y	Annually	Joint	Y	
NYC LL144	Y	Annually	Deployer	Y	
PA HB1729	Y	Annually	Deployer	Y	
VT H.114	Y	If "significant" changes made	Deployer		
WA HB1951	Y	Annually + "significant" updates	Split		

Table 6. Audit Logistics.

Legend

- **Pre-deployment**: Does the bill require a pre-deployment audit? A tilde (~) indicates that the bill requires annual auditing but does not explicitly state that an audit must be completed prior to deployment.
- Ongoing: How often (if at all) must audits occur after deployment?
- Responsibility: Who is responsible for ensuring audits occur?
 - Vendor: Entities involved in the development and/or distribution of the AEDS
 - **Deployer**: The entity that uses the AEDS to evaluate/process candidates (usually an employer or staffing company)
 - **Joint**: Joint responsibility between vendors and deployers (or equivalently, vendors and deployers are jointly and severally liable for improper audits)
 - Split: Vendors and deployers assigned separate audit responsibilities
- **Independence**: Is there a requirement that the auditor be independent of and free of financial and personal conflicts of interest with respect to the entities involved in the development or deployment of the AEDS? A tilde (~) indicates that it includes some impartiality requirement, but does not require the assessment to be conducted by an independent person or entity.
- **Summary**: Does the bill require the creation of a summary of the audit that must be published or filed with an employment agency?

Scope of audit

Discrimination, bias, accessibility, and accommodation

Relevant Standards excerpts

Standard 3(b): The audit should:

(4) Determine whether the decisions, recommendations, scores, or other outputs of the selection procedure have an adverse impact on members of any protected class...;

(5) Determine whether the administration of the selection procedure or its results limits accessibility for persons with disabilities, or for persons with any specific disability;

(7) Consider and describe potential sources of adverse impact against protected classes that may arise after the selection procedure is deployed;

(8) Identify and describe any attributes on which the selection procedure relies and determine whether the selection procedure engages in disparate treatment by relying on any protected attribute or any proxy for a protected attribute to make an employment decision;

All of the bills that include an audit requirement mandate some form of disparate impact testing—that is, analyzing whether the AEDS disproportionately screens out or assigns lower scores to members of particular protected groups. In the case of LL144 and two bills closely modeled on it (NY A567 and PA HB1729), however, such disparate impact testing is the only required component of the required audit. That is a fundamentally flawed approach. Unlawful discrimination includes not only disparate impact, but also disparate treatment, which can arise when automated systems "learn" from biased training data to recognize (and discriminate against) protected characteristics without being explicitly programmed to do so. This risk is highest when an AEDS is based on data sets rich with personal characteristics that correlate with protected class status, a problem called redundant encoding.³¹ For example, an AEDS might be able to reconstruct race as a characteristic if it has access to candidates' zip codes, schools attended, and organizational affiliations, which may serve as individual or collective proxies for race. Inferring candidates' pictures or social media profiles. Testing for disparate treatment thus should be part of any auditing process.

Traditional disparate impact testing, which relies on running statistical tests comparing large groups of workers, also does not adequately cover discrimination under the ADA, under which it is unlawful to use a tool that unfairly screens out any disabled worker.³² Such statistical testing also will not capture forms of discrimination that completely prevent a disabled worker from completing an AEDS-driven assessment, either because the AEDS is inaccessible (e.g., a gamified assessment that has audio or visual features that make it impossible for deaf or blind workers to complete) or because the vendor or deployer fail to provide reasonable accommodation.

As with bills whose scope only covers certain employment decisions, adopting legislation that only requires employers to check for certain forms of discrimination sends a signal that some forms of unlawful discrimination are simply less important than others. That

- 31 See Cythia Dwork et al., Fairness Through Awareness 22 (2011). Solon Barocas & Andrew D. Selbst, Big Data's Disparate Impact, 104 Cal. L. Rev. 671, 695 (2016); Matthew U. Scherer et al., Applying Old Rules to New Tools: Employment Discrimination Law in the Age of Algorithms, 71 S. Car. L. Rev. 449, 491-92 (2019) (hereinafter, Old Rules, New Tools). [https://perma.cc/UP7B-TSUH]
- 32 42 U.S.C. § 12112(b)(6) (making it unlawful for an employer to use "qualification standards, employment tests or other selection criteria that screen out or tend to screen out *an individual with a disability or a class of individuals with disabilities*") (emphasis added).

would undermine civil rights laws and create inconsistent standards for determining when an AEDS violates antidiscrimination laws. For these reasons, legislation should require an AEDS to be evaluated for all forms of unlawful discrimination.

Another notable weakness in the implementation of LL144 that policymakers in other jurisdictions must avoid is that the regulations interpreting NYC's ordinance permit employers to aggregate their data with data from other employers to conduct the impact assessment. This practice renders the so-called bias audit completely untethered from how the employer actually uses the tool and thus can "mask stark disparities or discriminatory practices by employers."³³

Validity

Relevant Standards excerpts

Standard 2(bb): The term "validity" means the extent to which a selection procedure is an accurate and effective means of measuring the essential job functions that it purports to measure, using the principles of test validation under contemporary standards of social science at the time the selection procedure is used....³⁴

Standard 3(b): The audit should:

(1) Identify and describe essential functions for each position for which the selection procedure will be used to evaluate candidates, explain why these functions are in fact essential, and demonstrate that the selection procedure is scientifically valid in measuring candidates' ability to perform these essential functions;

33 Gerchick & Akselrod, *supra* note 26.

34 See Part III for a discussion of components of the *Standards'* definition of validity that recent bills do not include.

(2) Identify and describe the methods and techniques used to design the selection procedure, the attributes and criteria on which the selection procedure relies, and any other input or aspect of the design, development, validation, or testing of the selection procedure that the enforcement agency determines necessary;

(3) For any automated selection procedure, describe the sources of the training/modeling data, and the steps taken to ensure that the training data and samples are accurate and representative in light of the position's candidate pool;

(9) Determine, for any adverse impacts or limitations on accessibility detected during the audit, whether alterations to the selection procedure can be made, whether effective accommodation can be provided, and whether less discriminatory alternative selection procedures or other assessment methods are available, that would mitigate the adverse impact or limitation on accessibility while retaining validity in measuring candidates' ability to perform essential functions;

As the *Civil Rights Principles* explain, AEDSs should be tested for job-relatedness because "[a]ssessments based on criteria that are unnecessary to job performance risk creating artificial or discriminatory barriers to employment opportunity." The *Civil Rights Standards* would require all selection procedures to be validated both prior to use and throughout its lifecycle as part of the *Standards*' auditing requirements.

NY S7623 likewise includes validation requirements. The NRBA, VT H.114, and MA H.1873 require that AEDSs be tested for "efficacy, "accuracy," and the risk of "errors," respectively, but do not further specify what such testing entails. CA AB 331 and WA HB1951 say that an impact assessment must indicate how the tool "has been or will be evaluated for validity or relevance," but does not explicitly require such validity testing. Unfortunately, the remaining bills namely, NYC LL144 and all of the bills based upon it—do not require any testing for validity, accuracy, or reliability.

Exploring alternative assessment methods

The *Standards* and two pending bills (MA H.1873 and NY S7623) also would require companies to explore potential alternative assessment methods before using an AEDS. Such a search for improvements and alternative valid methods will help ensure that the employer is not overlooking available or readily achievable alternative methods of candidate assessment that, in the words of the Supreme Court, "would also serve the employer's legitimate interest in 'efficient and trustworthy workmanship''' without the discriminatory effect.³⁵

This approach is consistent with both existing law and modern social science. The ADA requires employers to select and administer selection procedures "in the most effective manner to ensure that...the test results accurately reflect the skills, aptitude, or whatever other factor...the test purports to measure," rather than irrelevant characteristics related to the candidate's disability.³⁶ The UGESPs state that validity studies should include investigation and documentation of suitable alternative selection procedures and alternative methods of administering selection procedures to minimize adverse impact.³⁷

Modern test validation standards require test developers to "attempt to improve accessibility within the test itself" before considering the need for specific accommodations or adaptations for test-takers.³⁸ Likewise, they "should document any search for selection procedures (including alternate combinations of the procedures) that show substantially equal or greater validity for the given selection situation with an accompanying reduction in subgroup differences."³⁹

- 35 Albemarle Paper Co. v. Moody, 422 U.S. 405, 425 (1975) (quoting McDonnell Douglas Corp. v. Green, 411 U. S. 792, 901 (1973)).
- 36 29 C.F.R. § 1630.11.
- 37 29 C.F.R. § 1607.3(B).
- 38 APA Standards at 57.
- 39 Soc'y for Indus. & Organizational Psychology, *Principles for the Validation and Use of Personnel Selection Procedures* 34 (5th ed. 2018) (hereinafter, *SIOP Principles*).

Proper Use

Relevant Standards excerpts

Standard 3(e): An employer or employment agency should not use a selection procedure unless...[t]he conditions and manner in which the employer uses the selection procedure, and purpose for which the employer uses the procedure, comport with the specifications of the selection procedure as implemented after the incorporation of [changes made to address sources of discrimination and limits on accessibility].

Another necessary aspect of audits is analyzing whether employers deploy an AEDS in accordance with the validated uses of the system and with appropriate accommodations and safeguards. Among the 2023 bills, only AB 331 and WA HB1951 include this audit component. Other pending legislation should include similar provisions; validating an AEDS and testing it for bias does little good if an employer uses a system in inappropriate ways or unvalidated settings.

D. Non-discrimination

Relevant Standards excerpts

Standard 2(q): The term "high-risk selection procedure" means a selection procedure that relies on analysis of a candidate's affect or emotional state; personality; facial features or movements, body language, gait, tone of voice, vocal pitch, or pace of speech; heart rate, respiration, or other bodily functions regulated by the autonomic nervous system; or any other technique or methodology identified by the enforcement agency as creating an especially high risk of unlawful discrimination.

	Disparate Treatment	Disparate Impact	Accessibility / Accommodation	Validity	Alternatives	Proper Use
Civil Rights Standards	Y	Y	Y	Y	Y	Y
No Robot Bosses Act	Y	Y	Y	~		
CA AB 331		Y	~			Y
DC SDAA	Y	Y	~			
MA H.1873	Y	Y	~	~	Y	
NJ A4909	Y	Y	~			
NY A567		Y	~			
NY A7859			No audit provisio	ons		
NY S7623	Y	Y	Y	Y	Y	
NYC LL144		Y				
PA HB1729		Y	~			
VT H.114	Y	Y	~	~	Y	
WA HB1951	Y	Y	~			Y

Table 7. Scope of audit.

Legend: Does the bill contain audit requirements that include...

- **Disparate [treatment/impact]**: ...checking for whether the AEDS presents a risk of disparate [treatment/impact] discrimination? This is also marked "Y" if it requires audits that cover all forms of discrimination in the applicable jurisdiction.
- Accessibility/Accommodation: ...examining potential barriers to accessibility and/or potential accommodations that disabled or pregnant workers may need? A tilde (~) indicates that the audit must evaluate the risk of adverse impact on disabled and/or pregnant workers, but does not explicitly call for an evaluation of potential barriers to accessibility or what accommodations disabled or pregnant workers might need.
- Validity: ...a validity or job-relatedness study of the AEDS? A tilde (~) indicates that the audit includes some requirement(s) for testing AEDS efficacy or accuracy but not a complete validation study.
- Alternatives: ...exploring potential alternative assessment methods to determine if assessments with greater validity and/or less discrimination risk are available?
- **Proper Use**: ...determining whether the deployer's use of the AEDS conforms with industry standards and/or developer specifications?

Standard 3(c)(3): [An employer may not use an AEDS if the pre-deployment audit] identifies any reliance on any protected attribute or proxy for a protected attribute, adverse impact, or limitation on accessibility [unless] the selection procedure is both valid and the least discriminatory method of assessing the candidate's ability to perform the essential job function(s).⁴⁰

Federal laws prohibit discrimination against a wide range of protected groups in employment decisions. These laws apply to AEDS-driven decisions to the same degree as decisions made solely by a human.⁴¹ Many states have laws providing protection that is even broader than federal law in various ways, such as by expanding the number of protected groups or using a lower employer size threshold. Consequently, much of the legal scaffolding to protect workers from technological discrimination is already in place. Many of the steps that policymakers should take to protect workers from the unique threats posed by AEDS fall under the two categories discussed above: greater transparency and rigorous auditing. How effective those steps will be in preventing discrimination depends in large part on whether:

- The required audit examines the risk of both disparate treatment and disparate impact against all groups protected against discrimination under applicable law;
- Employers are required to select the least-discriminatory valid method of assessing/selecting candidates;
- The bill prohibit assessment methods that pose a particularly high risk of discrimination, such as personality testing or facial analysis, or at least subjects them to greater scrutiny.

- 40 Standard 6(b)(3)(A) includes a parallel provision requiring employers to cease use of a selection procedure if a subsequent audit reveals discrimination unless the employer demonstrates that the selection procedure is the "least-discriminatory valid method for assessing candidates' ability to perform essential job functions."
- 41 In addition to the unequivocal language of antidiscrimination laws, which do not draw distinctions based on the medium through which an employment decision is made, the EEOC and several other federal agencies released a joint statement reiterating, "Existing legal authorities apply to the use of automated systems and innovative new technologies just as they apply to other practices." Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems, https://www.ftc.gov/system/files/ftc_gov/pdf/EEOC-CRT-FTC-CFPB-AI-Joint-Statement%28final%29.pdf. [https://perma.cc/CEN2-JT5E]

Covering all forms of discrimination

As noted in previous sections, an audit requirement that only covers certain forms of discrimination would create inconsistent standards and send an unfortunate signal that some forms of discrimination are less objectionable than others.

The vast majority of bills require an examination of all forms of discrimination against all protected groups, with NYC LL144 representing a notable exception. That ordinance only requires employers to conduct a simple statistical test that checks for one form of disparate impact against a limited number of protected groups, namely race, sex, and ethnicity.⁴² Two bills based on LL144 (NY A567 and PA HB1729) likewise require only an examination of disparate impact, although both of those bills do require employers to examine the risk of disparate impact against all groups protected under applicable state law. These bills, which effectively exempt certain forms of discrimination from their audit requirements, should be amended to require an assessment of disparate treatment risk as well.

Searching for and choosing the leastdiscriminatory valid selection method

Unfortunately, far fewer bills require employers to choose the leastdiscriminatory selection method; only NY S7623 explicitly contains such a requirement. Including such a provision should not be controversial; indeed, if a tool has a disparate impact, federal law already requires (albeit obliquely) that employers consider potential

42 The ordinance does so obliquely, stating that a bias audit consists of testing each "component 1 category required to be reported" by "part 1602.7 of title 29 of the code of federal regulations," which refers to an EEOC rule requiring companies with 100 or more employees to file what is known as an EEO-1 form. The Component 1 reporting categories are race/ethnicity and sex. See EEOC, Frequently Asked Questions (FAQs): EEO-1 Component 1 Data Collection 6 (2021).

alternative methods of assessment.⁴³ A provision affirmatively requiring employers to choose the least-discriminatory valid method would simply create greater clarity by requiring employers to proactively search for and consider alternative methods of assessment, and determine whether any such alternatives offer a valid and less discriminatory means of measuring the candidate's ability to perform the essential function(s). Such a search for improvements and alternative valid methods will help ensure that the employer is not overlooking available or readily achievable alternative methods of candidate assessment that, in the words of the Supreme Court, "would also serve the employer's legitimate interest in 'efficient and trustworthy workmanship'" without the discriminatory effect.⁴⁴

Bringing greater clarity to the least-discriminatory-method requirement is desperately needed given the potential for AEDSs to reinforce existing inequities in the labor force, and it is consistent with both existing law and modern social science. The ADA requires employers to select and administer selection procedures "in the most effective manner to ensure that...the test results accurately reflect the skills, aptitude, or whatever other factor... the test purports to measure," rather than irrelevant characteristics related to the candidate's disability.⁴⁵ The UGESPs state that validity studies should include investigation and documentation of suitable alternative selection procedures and alternative methods of administering selection procedures to minimize adverse impact.⁴⁶ In interpretive guidance, the agencies that issued the UGESPs expanded on this point:

- 43 The Supreme Court's ruling in Albemarle Paper Co. v. Moody, 422 U.S. 405 (1975), first established that an employee can succeed in a disparate impact case by demonstrating that a less discriminatory alternative was available that would meet the employer's business needs. Courts have rarely decided cases on this basis in practice, however, and federal law contains only two vague and circular references to this component of the disparate impact analysis. See 42 U.S.C. § 2000e-2(k)(1)(A)(ii) and (k)(1)(C).
- 44 Albemarle Paper Co. v. Moody, 422 U.S. 405, 425 (1975) (quoting *McDonnell Douglas* Corp. v. Green, 411 U.S. 792, 801 (1973)).
- 45 29 C.F.R. § 1630.11.
- 46 9 C.F.R. § 1607.3(B).

If on the basis of the evidence available, the user determines that the alternative selection procedure is likely to meet its legitimate needs, and is likely to have less adverse impact than the existing selection procedure, the alternative should be investigated further as a part of the validity study. The extent of the investigation should be reasonable. Thus, the investigation should continue until the user has reasonably concluded that the alternative is not useful or not suitable, or until a study of its validity has been completed. Once the full validity study has been completed, including the evidence concerning the alternative procedure, the user should evaluate the results of the study to determine which procedure should be used.⁴⁷

Searching for alternative selection methods is also consistent with modern social science standards.⁴⁸

A 2023 article by Emily Black et al., fittingly titled Less Discriminatory Algorithms, provides a detailed examination of what a search for less discriminatory alternative selection methods might look like in practice.⁴⁹ That article proposes that the deployers of an AEDS should have a duty to conduct a "reasonable search for less discriminatory algorithms as part of the model development process," and explores the ways in which a deployer could undertake such a search at various points in the development and implementation pipeline.⁵⁰

- 47 Questions and Answers to Clarify and Provide a Common Interpretation of the Uniform Guidelines on Employee Selection Procedures, <u>https://www.eeoc.gov/</u> <u>laws/guidance/questions-and-answers-clarify-and-provide-common-interpretation-</u> uniform-guidelines. [https://perma.cc/V9V6-EP8Z]
- 48 Modern test validation standards require test developers to "attempt to improve accessibility within the test itself" before considering the need for specific accommodations or adaptations for test-takers. APA Standards at 57. Likewise, they "should document any search for selection procedures (including alternate combinations of the procedures) that show substantially equal or greater validity for the given selection situation with an accompanying reduction in subgroup differences." SIOP Principles at 34.
- 49 Emily Black, et al, *Less Discriminatory Algorithms* (2023), <u>https://papers.ssrn.com/</u> sol3/papers.cfm?abstract_id=4590481. [https://perma.cc/5UGR-LXJG]

50 *Id*.

Targeting high-risk AEDSs

Relevant Standards excerpts

Standard 2(q): The term "high-risk selection procedure" means a selection procedure that relies on analysis of a candidate's affect or emotional state; personality; facial features or movements, body language, gait, tone of voice, vocal pitch, or pace of speech; heart rate, respiration, or other bodily functions regulated by the autonomic nervous system; or any other technique or methodology identified by the enforcement agency as creating an especially high risk of unlawful discrimination.

The *Standards* call for prohibitions against selection procedures that present a high risk of unlawful discrimination with a questionable, at best, link to performance in all or the vast majority of jobs. Of the pending legislation, only S7623, MA H.1873, and VT H.114 include provisions targeting certain high-risk selection procedures.

Among the types of assessment that the *Standards* designate as high risk, personality testing, which has been a component of many employee selection processes since long before the rise of AEDSs, is likely to prove the most controversial. The Society of Industrial and Organizational Psychologists supports the use of certain personality tests in some contexts.⁵¹ But personality assessments are difficult to untangle from cultural expectations and stereotypes, and their use could adversely impact protected groups, including Black, female, and disabled workers.⁵² Given that the correlation between even the most-validated components of personality assessments and job performance is modest at best,⁵³ the discrimination risk they pose outweighs any potential utility they have in worker assessment.

- 51 Society for Industrial and Organizational Psychology, Types of Employment Tests, https://www.siop.org/Business-Resources/Employment-Testing/Test-Types (listing purported advantages and disadvantages of personality testing, with one claimed advantage being that they "[h]ave been demonstrated to produce valid inferences for a number of organizational outcomes"). [https://perma.cc/8BZV-VY7L]
- 52 See, e.g., Kelly Cahill Timmons, Pre-Employment Personality Tests, Algorithmic Bias, and the Americans with Disabilities Act, 125 Penn. St. L. Rev. 389 (2020) [https:// perma.cc/SHD8-ESUL]; Quinisha Jackson-Wright, To Promote Inclusivity, Stay Away from Personality Assessments, NY Times, Aug. 22, 2019, https://www.nytimes. com/2019/08/22/smarter-living/inclusivity-diversity-personality-assessementsmyers-briggs.html. [https://perma.cc/3BYQ-9UQ9]
- 53 See Timmons, supra note 53, at 440.

	Disparate treatment	Disparate impact	All protected groups	Accommodation	Least discriminatory method	Targets high- risk AEDSs
Civil Rights Standards	Y	Y	Y	Y	Y	Υ
No Robot Bosses Act	Y	Y	Y	~		
CA AB 331	Y	Y	~	~		
DC SDAA	Y	Y		~		
MA H.1873	Y	Y	Y	~		Y
NJ A4909	Y	Y	Y	~		
NY A567		Υ	Y	?		
NY A7859						
NY S7623	Y	Y	Y	Y	Y	Y
NYC LL144		Y				
PA HB1729		Y	Y	~		
VT H.114	Y	Y	2	~		Y
WA HB1951	Y	Y	Y	2		

Table 8. Non-discrimination provisions.

Legend: Does the bill...

- **Disparate [treatment/impact]**: ...include an audit requirement that examines the risk of disparate treatment/impact discrimination and/or prohibit uses of AEDSs that result in disparate treatment/impact?
- All protected groups: ...include an audit/impact assessment requirement that examines the risk of discrimination against all groups protected from discrimination under applicable law? A tilde (~) indicates that it has a lengthy enumerated list of covered attributes, but does not explicitly state that the audit must cover all groups protected from discrimination under applicable law.
- Accommodation: ...require deployers to offer reasonable accommodation to disabled candidates? A tilde (~) indicates that the bill covers discrimination against disabled workers, but does not expressly address accommodation requirements.
- Least discriminatory method: ...require deployers to explore potential alternative selection approaches and assess whether the AEDS is the least discriminatory valid method of assessment?
- **Targets high-risk AEDSs**: ...include provisions banning on or more of the types of selection procedures categorized as high-risk under the *Civil Rights Standards*, or subjecting such procedures to additional scrutiny?

E. Job-relatedness

Relevant Standards excerpts

Standard 1(d): The policies specified in these Standards would... [e]nsure that selection procedures assess candidates solely on the basis of valid measurements of essential job functions using the least discriminatory method available;

Standard 2(p): The term "essential functions" means the fundamental job duties of a position and does not include the marginal functions of the position. Essential functions are to be determined based on objective evidence such as the amount of time workers spend performing each function, the direct consequences of not requiring workers in the position to perform the function, the direct consequences of a worker failing to perform or inaccurately performing the function, the terms of any applicable collective bargaining agreement, and workers' past and present work experiences and performance in the position in question...

Standard 2(bb): The term "validity" means the extent to which a selection procedure is an accurate and effective means of measuring the essential job functions that it purports to measure, using the principles of test validation under contemporary standards of social science at the time the selection procedure is used, but a selection procedure is not valid for purposes of these Standards if the evidence for validity is based solely on correlation between the output of the selection procedure and measures of job performance, unless the employer or employment agency using the selection procedure supports the correlational evidence with theoretical, logical, or causal reasoning sufficient to explain why the specific attributes measured by the selection procedure should be predictive of the ability to perform essential job functions. The *Civil Rights Standards* advance job-relatedness by requiring employers and developers to demonstrate that a selection procedure with a tendency to screen out protected workers is a valid method of measuring candidates' ability to perform the essential functions of each position for which it is used. The essential functions requirement comes from the ADA, and the requirement of validity is implemented under federal law through the UGESPs.

Despite these ties to federal law, only about half of the bills explicitly require validation and fewer still limit the use of AEDSs to measuring essential job functions. Both of these requirements are needed to protect workers from arbitrary and discriminatory assessments. While federal law requires job-relatedness for tools that have a disparate impact on a protected group, the UGESPs, which implement that requirement, have not been updated since they were first issued in 1978. They do not incorporate the requirements of the ADA or Rehabilitation Act,⁵⁴ which established a stricter standard than Title VII by requiring that disabled candidates be assessed according to their ability to perform essential job functions.⁵⁵ The UGESPs also do not reflect nearly four decades of advances in the social science of test validation. Consequently, effective legislation must require AEDSs to be evaluated for their validity in assessing the essential functions of the positions for which they are used, using modern standards of social science.

- 54 The UGESPs only apply to discrimination against the groups protected by Title VII, despite the fact that the Rehabilitation Act of 1973, a key predecessor statute to the ADA, was in place at the time federal agencies promulgated the UGESPs. See 29 C.F.R. § 1607.1(B) (stating that the UGESPs' purpose is to help entities comply with laws against discrimination "on grounds of race, color, religion, sex, and national origin").
- 55 See 42 U.S.C. § 12112(a) ("No covered entity shall discriminate against a qualified individual on the basis of disability in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment."); 42 U.S.C. § 12111 (defining "qualified individual" as "an individual who, with or without reasonable accommodation, can perform the essential functions of the employment position"). For a discussion of how the ADA and Rehabilitation Act's job-relatedness standard is closely tied to those statutes' focus on essential job functions, see Old Rules, New Tools, supra note 32 at 466-70.

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Table 9. Job-relatednessrequirements.

- Validity: Does the bill require AEDSs to be subjected to a validity or job-relatedness study? A tilde (~) indicates that the audit includes some requirement(s) for testing AEDS efficacy or accuracy but not a complete validation study.
- Essential Functions Only: Does the bill require AEDSs to be limited to measuring a candidate's ability to perform essential job functions?

	Validity	Essential Functions Only
Civil Rights Standards	Y	Y
No Robot Bosses Act	Y	
CA AB 331		
DC SDAA		
MA H.1873	~	Y
NJ A4909		
NY A567		
NY A7859		
NY S7623	Y	Y
NYC LL144		
PA HB1729		
VT H.114	~	Y
WA HB1951		

F. Oversight and Accountability

The *Civil Rights Principles* framed this principle in terms of what could be termed external accountability—that is, accountability created through liability, government regulation, or other mechanisms allowing parties other than the developer or deployer of an AEDS to scrutinize it or raise concerns about its use. The *Civil Rights Principles* focused on regulation, calling for "[f]ederal and state policymakers [to] develop new legal and technical standards, and equip state and federal regulators with the ability to meaningfully investigate and hold organizations accountable for ensuring equal opportunity in their use of hiring assessments."⁵⁶ Another form of external accountability is a private right of action (PRA) giving workers and their representatives the right to challenge uses of AEDSs in court. Existing antidiscrimination laws provide a PRA to workers who are subjected to unlawful discrimination.

56 Civil Rights Principles, supra note 3.

The *Civil Rights Standards* expand on this principle by recommending internal accountability mechanisms as well, such as allowing candidates to raise concerns about a selection procedure, appeal its results, or opt out of its use altogether. This section examines 2023 legislation for both forms of accountability.

Internal accountability

Relevant Standards excerpts:

Standard 5

a. Prior to using a selection procedure on an applicant, an employer or employment agency should:

2. Provide the applicant with a meaningful opportunity to request accommodation or an alternative selection procedure or other assessment method, or to otherwise communicate concerns to the employer or employment agency regarding the selection procedure's ability to validly evaluate the applicant's ability to perform the position's essential functions;

3. Engage in an interactive process with candidates with disabilities if the candidate requests accommodation or if the employer or employment agency knows of the candidate's need for accommodation; and

4. If the selection procedure is an automated selection procedure, allow the applicant to opt out of using the selection procedure and assess the applicant through human review, a non-automated selection procedure, or other means of assessment, on equal footing with applicants who are assessed through the automated selection procedure. b. After subjecting a candidate to a selection procedure, an employer or employment agency should...[p]rovide the candidate with a meaningful opportunity to submit corrections or otherwise provide supplementary information challenging factors [that led to an adverse decision] and/or the selection procedure's overall ability to validly measure the candidate's ability to perform the position's essential functions.

Most bills relating to AEDSs include provisions establishing internal oversight or governance mechanisms.⁵⁷ The simplest, but arguably most powerful, is allowing candidates to opt out of AEDS assessment altogether and be assessed by alternative means, as the *Civil Rights Standards* suggest. Another important internal accountability mechanism in the *Standards* is giving candidates the right to raise concerns about the AEDS prior to assessment and a right to submit corrections and request reevaluation of an AEDS-driven decision after assessment. Such processes would allow candidates to identify potential sources of adverse impact that may have gone undetected in pre-deployment and ongoing audits. Allowing candidates to raise pre-assessment concerns would also give disabled candidates an opportunity to initiate the interactive process regarding potential accommodations, as the ADA contemplates.

New York's S7623 and PA HB1729 provide an opt-out right. AB 331 provides a qualified opt-out right, stating that a deployer should allow candidates to be assessed by alternative means "if technically feasible."

A few pending bills require some level of human oversight of AEDS output by requiring corroboration of AEDS output or by prohibiting employers from using an AEDS as the sole basis for a decision. As noted in the Scope section of this report, however, research indicates that people tend to defer to the recommendations of automated systems.⁵⁸ A requirement of meaningful human oversight, as the NRBA and NY S7623 include, would theoretically prohibit employers from simply having a human recruiter rubber

58 See note 22 and accompanying text.

⁵⁷ Audits, impact assessments, and other forms of testing and evaluation may also be a form of internal oversight, particularly if there is an obligation to mitigate issues identified during the audit. See the Auditing and Non-discrimination sections for an overview of bills' auditing and mitigation requirements, respectively.

stamp AEDS decisions. But it may be difficult to structure decision processes where human overseers or reviewers are empowered to provide truly independent reviews or judgment. Nevertheless, because such a requirement is a potentially useful check on AEDS-driven discrimination, it has been added to the below table and Appendices.

	Mitigation	Opt-out	Concern	Appeal	Corroboration
Civil Rights Standards	Y	Υ	Y	Υ	
No Robot Bosses Act		~		Y	Y
CA AB 331	Y	~			
DC SDAA	Y			Y	
MA H.1873	~				Y
NJ A4909					
NY A567					
NY A7859					
NY \$7623	Y	?		Y	Y
NYC LL144					
PA HB1729		Y			
VT H.114					Y
WA HB1951					

Table 10. Internal accountability.

Legend: Does the bill...

- Mitigation: ...require companies to mitigate or correct any sources of potential discrimination identified during audits or impact assessments? A tilde (~) indicates that the bill would require companies to mitigate or correct the tool only upon agency order.
- Opt-out: ...give candidates the right to opt-out of AEDS assessment or requires deployers to obtain a candidate's consent before assessing them with an AEDS? A tilde (~) indicates that the bill provides a partial or qualified opt-out right.
- Concern: ... give candidates a right to communicate concerns regarding the AEDS prior to assessment?
- **Appeal**: ...give candidates the right to request reevaluation, submit corrections, or appeal an AEDS decision after an adverse decision?
- **Corroboration**: ...prohibit employers from using AEDSs as the sole basis for covered employment decisions or require corroboration of AEDS output before an employer can use it to make employment decisions?

Despite the utility of allowing candidates to raise concerns, only two pending bills (the NRBA and NY S7623) include these workerdriven accountability mechanisms.

Several bills also include a requirement that companies mitigate potential sources of discrimination discovered during the course of an audit. Existing law implies such a mitigation requirement; an employer who is on notice of potential discrimination sources would obviously face liability if they failed to correct them and discrimination ultimately results. But explicitly requiring employers to fix issues identified during the course of audits would ensure that employers address discrimination risks proactively, which should be a key goal of any AEDS legislation.

External accountability

A major issue in ensuring accountability for harmful employment AEDSs is that multiple entities are typically involved in their development, distribution, and deployment. Vendors may claim to lack the ability to control employers' use of their products, while employers may claim to lack the technical expertise necessary to conduct proper testing and implement proper safeguards of a vendor's AEDS. Policy solutions must take this dynamic into account by ensuring that both vendors and employers have incentives to share information, cooperate with audits, and take the steps necessary to ensure a tool's validity and fairness.

In addition to making employers and vendors jointly responsible for audits, the *Civil Rights Standards* would address this problem by making all entities responsible for the development, distribution, and deployment of an AEDS jointly and severally liable for any discriminatory decisions by that AEDS. Joint and several liability would encourage vendors and employers to determine amongst themselves which entity is best-positioned to carry out the responsibility of designing and implementing appropriate safeguards and designing a governance regime suited to that purpose. It also would ensure that workers have an adequate remedy if a jury finds that a selection procedure is discriminatory but has difficulty allocating responsibility for the resulting harms, or if the party most responsible for the discrimination is judgment proof. In the absence of full joint and several liability, legislation should, at a minimum, include provisions requiring both vendors and employers to cooperate with audits and share information necessary to provide adequate candidate disclosures and implement necessary antidiscrimination safeguards and accommodations.

	Vendor Penalties/Liability	Employer Penalties/ Liability	Joint/Several Liability	Private Right of Action
Civil Rights Standards	Y	Y	Y	Y
No Robot Bosses Act		Y		Y
CA AB 331	Y	Y		Y
DC SDAA	Y	Y		Y
MA H.1873	Y	Y	~	Y
NJ A4909	Y	Y		
NY A567		Y		
NY A7859				
NY \$7623	Y	Y	Y	Y
NYC LL144		Y		
PA HB1729				
VT H.114	?	Y		Y
WA HB1951	Y	Y		

Table 11. External accountability.

Legend: Does the bill...

- Vendor Penalties / Liability: ...subject a vendor or developer of an AEDS to penalties for failing to comply with their obligations under the bill?
- Employer Penalties / Liability: ...subject an employer or deployer of an AEDS to penalties for failing to comply with their obligations under the bill?
- Joint/Several Liability: ...make vendors and employers jointly and severally liable for discrimination resulting from the use of an AEDS? A tilde (~) indicates that the bill imposes joint liability if a vendor uses an AEDS on an employer's behalf.
- **Private Right of Action**: ... give individual workers the right to bring a civil action against companies that violate some or all of the law's requirements?

Of the pending bills, only NY S7623 includes a full joint/several liability provision, although MA H.1873 would impose joint liability if a vendor operates an AEDS on an employer's behalf. All other pending bills save those based on NYC LL144 impose some form of liability on both employers and vendors.⁵⁹ NYC's LL144 and the bills based on it would impose liability on employers alone.

Policy solutions must ensure that both vendors and employers have incentives to share information, cooperate with audits, and take the steps necessary to ensure a tool's validity and fairness. CA AB 331 includes a requirement that both developers and deployers of AEDSs establish a governance process designed to "[i]dentify and implement safeguards to address reasonably foreseeable risks of algorithmic discrimination." The bill also specifies that the governance program's safeguards should be "appropriate to...[t]he deployer's or developer's role as a deployer or developer" as well as the company's resources, and scope of activities in connection with the AEDS. Without a provision providing for joint responsibility or additional guidance

on the scope and meaning of these provisions, however, there is a risk that companies will disclaim responsibility for preventing discrimination by claiming that they lack the requisite resources or that another entity is better-positioned to prevent discrimination and achieve legal compliance.

VT H.114 would incorporate and apply the enforcement provisions of the state's laws against employment discrimination, which apply to employers and "employment agencies." As in federal law, it is not clear whether the extent to which the definition of "employment agency" extends to vendors that provide employers with the tools they use to screen workers—although Vermont's statutory definition of "employment agency" is considerably broader than the comparable federal provisions. 21 V.S.A. § 495d(3) (""Employment agency' means every person, corporation, association, or governmental body representative thereof engaged in the business of advertising for advising, classifying, training, or referral of persons for employment within this State, or that at the direction of any employer advertises, locates, advises, classifies, trains, refers, or selects persons to engage in any employment.").

Approximately half of the pending bills allow workers to bring a private right of action (PRA) for violations, either through express legislative language creating a PRA or by incorporating existing provisions of state law providing such a PRA. A PRA is vital for meaningful external accountability given the reality of scarce investigative resources at labor and civil rights enforcement agencies. The bills that do not include a private right of action are NYC LL144 and the bills based on it as well as WA HB1951. The latter bill includes language incorporating all provisions of Washington's consumer protection act except the provisions providing for a private right of action.

Part III: Missing Pieces

In addition to the provisions discussed in Part II, policymakers should adopt three important elements of the *Standards* that have yet to gain substantial traction in proposed AEDS legislation:

- Covering non-automated selection procedures;
- Requiring employers to support arguments that a job function is "essential" through objective evidence; and
- Ensuring that evidence of an AEDS's validity is based on more than mere correlation between job performance measures and AEDS output.

These elements may not have gained traction because they would modify or clarify employers' legal obligations in ways that impose stricter requirements on developers and deployers. They are nevertheless, and for the reasons we will detail in this section, necessary to ensure adequate accountability. The *Standards* contain a number of other provisions that have not appeared in any proposed legislation; their omission from the following discussion should not be misinterpreted as a suggestion that those provisions are unimportant. The three elements of the *Standards* discussed below are particularly significant, however, because their omission could severely undermine the effectiveness of any regulatory regime for modern employment decision tools.

A. Covering non-automated selection procedures

While the increasing use and sophistication of AEDSs was a key impetus for the *Civil Rights Standards*, the *Standards* extend to all formal employment assessments and selection tools. All of the bills discussed in this report, however, are limited solely to AEDSs. This is unfortunate, because many of the problematic features of AEDSs are shared by other formalized selection processes. Personality testing, for example, can discriminate against marginalized workers regardless of whether it is done through an AEDS or through a paper-and-pencil assessment. Employers who adopt employment testing designed to predict cultural "fit" may likewise exclude protected groups of workers regardless of whether it is accomplished through the use of digital systems.

Moreover, both the substantial changes to the social science of test validation over the past several decades and the rise of AEDSs in recent years demonstrate that the field of employee assessment changes significantly over time. Further changes in technology and developments in social science could easily lead to methods of assessment 20 years from now that differ considerably from today's AEDSs and other selection methods. Well-designed legislation should therefore future-proof itself by covering all formalized selection methods, rather than being limited to the universe of AEDSs coming into widespread use today.

B. Modernizing job-relatedness requirements

The *Standards* include two crucial features in their definitions of essential job functions and validity that are designed to close potential loopholes that might otherwise allow employers to adopt tools that unfairly screen out vulnerable workers. First, the *Standards* call for employers to demonstrate that functions are essential to a particular job through objective evidence—that is, evidence of what workers actually do on a day-to-day basis in a particular job, and the practical consequences that would result if workers in the job did not perform those functions. Second, the *Standards* would require employers to demonstrate stronger evidence of validity by prohibiting employers from relying on correlational evidence alone to establish validity.

1. Requiring employers to establish essential job functions through objective evidence

Relevant Standards excerpts:

Essential functions are to be determined based on objective evidence such as the amount of time workers spend performing each function, the direct consequences of not requiring workers in the position to perform the function, the direct consequences of a worker failing to perform or inaccurately performing the function, the terms of any applicable collective bargaining agreement, and workers' past and present work experiences and performance in the position in question. Past and current written job descriptions and the employer's reasonable, non-discriminatory judgment as to which functions are essential may be evidence as to which functions are essential for achieving the purpose of the job, but may not be the sole basis for this determination absent the objective evidence described above. "Essential functions" does not include prerequisites that the employer establishes that do not relate to the work activities of the job itself, such as being able to work all shifts, to work overtime, or to arrive at work at a specified time.

This requirement is meant to mitigate the effects of current judicial interpretations of Title VII, under which courts frequently give undue deference to employers' unilateral statements regarding which functions are essential.⁶⁰ Giving such deference to the employers' perspective creates the risk that employers can arbitrarily designate particular job functions as essential simply by modifying the job description or by exaggerating the importance of marginal duties. This can have the effect—and can be done with the intent—of discriminating against vulnerable and marginalized workers.

For example, say an employer wished to characterize regular inperson attendance at the company offices as an essential function for a job in which workers had long been permitted to work remotely. Such a requirement could have a negative impact on a wide range of protected characteristics. It could have an adverse impact on workers with disabilities that affect their mobility, vision, or immune systems. It could disadvantage workers who live far from the office—a requirement that can have a disparate impact on race, given the close association between race and geography. It could disadvantage pregnant or lactating workers, creating an adverse impact on gender or sex. And so on.

Under current law, the employer could add such an attendance requirement to a job description in which it did not previously appear—or exaggerate its importance in a job description in which it did appear, but had long been ignored—and reasonably expect courts to take that as strong evidence that in-person attendance was, in fact, essential. The same would be true of an employer suddenly adding a new quota or pace-of-work requirement that disadvantages disabled, pregnant, and lactating workers. Absent an objective-evidence requirement, an employer could skirt its antidiscrimination responsibilities by establishing new "essential" job requirements that marginalized workers are less likely to meet, and then use an AEDS to assess and screen out those workers. For that reason, employers should be required to demonstrate the essential nature of job functions through objective evidencethat is, workers' actual day-to-day experience and the practical consequences of failing to fulfill that function-rather than deferring to employers' subjective statements.

⁶⁰ See 29 C.F.R. § 1630.2(n)(3)(i)-(ii) (listing the "employer's judgment" and "[w]ritten job descriptions" as evidence of essential functions).

2. Ensuring validity is supported by strong evidence of job-relatedness

Relevant Standards excerpts:

Standard 2(bb): [A] selection procedure is not valid for purposes of these Standards if the evidence for validity is based solely on correlation between the output of the selection procedure and measures of job performance, unless the employer or employment agency using the selection procedure supports the correlational evidence with theoretical, logical, or causal reasoning sufficient to explain why the specific attributes measured by the selection procedure should be predictive of the ability to perform essential job functions.

With respect to validity, the *Standards* would prohibit validity from being established solely on the basis of mere "correlation between the output of the selection procedure and measures of job performance." This aligns with modern social science, which is skeptical of correlation-based evidence of an algorithm's validity unless supported by logical or causal reasoning explaining why its output should be expected to predict ability to perform essential job functions.⁶¹ The need for such supporting evidence is particularly acute when use of the correlative measure adversely impacts protected groups.⁶²

There are a number of reasons to treat correlation-based evidence with skepticism. First, a tool built on correlation-based techniques alone is highly unlikely to capture all (or a representative set) of the essential functions of a specific job. Few, if any, data sets can adequately cover all the essential knowledge and abilities needed

- 61 See SIOP Principles at 13 (in the context of algorithmic selection procedures, "when some form of empirical keying is used, clear evidence of cross-validity should be provided prior to operational use to guard against empirically driven algorithms' propensity to capitalize on chance. As is the case for all predictors, it is also important that algorithms do not introduce systematic bias against relevant subgroups.").
- 62 See id.

for a given job, much less the nuances of how such knowledge and abilities will be needed for a role at a specific company. This means that any tool that operates solely by searching for correlations in historical data sets will create an incomplete picture of a candidate's ability to perform the job in question.

Requiring correlationbased evidence to be supported by additional evidence, logic, or causal reasoning would help prevent workers' livelihoods from being determined by algorithmic models that may be driven more by the vicissitudes of chance and the biases of society than by actual links to job performance. Second, algorithmic models constructed using correlation alone could incorporate systemic biases or cultural norms that disadvantage vulnerable groups, in addition to (or instead of) characteristics that have a causal link to workers' ability to perform essential job functions. This is especially likely when algorithmic tools are trained on large data sets containing hundreds or thousands (or hundreds of thousands) of data points on each candidate. Each additional data point increases the risk of spurious correlations making their way into the model.⁶³

That risk is increased still further if fair and complete measures of workers' ability to perform those functions were not in place at the time of validation—a statement that is true of many jobs today, given the difficulty in designing objective and unbiased

methods of employee evaluation.⁶⁴ Requiring correlation-based evidence to be supported by additional evidence, logic, or causal reasoning would help prevent workers' livelihoods from being determined by algorithmic models that may be driven more by the vicissitudes of chance and the biases of society than by actual links to job performance.

- 63 Old Rules, New Tools, supra note 32, at 487-88.
- 64 See, e.g., Theresa Agovino, The Performance Review Problem, HR Magazine, Mar. 15, 2023, https://www.shrm.org/hr-today/news/hr-magazine/spring-2023/pages/ the-problem-with-performance-reviews.aspx [https://perma.cc/UG8S-TYKC] Lori Nishiura Mackenzie et al., Why Most Performance Evaluations Are Biased, and How to Fix Them, Harv. Bus. Rev., Jan. 11, 2019, https://hbr.org/2019/01/why-mostperformance-evaluations-are-biased-and-how-to-fix-them. [https://perma.cc/AJ7Y-X7KN]

C. The flip side: Recommended provisions that do not appear in the *Standards*

Conversely, and as indicated in the corresponding tables in Part II, several pending bills include two types of provisions that do not appear in the *Standards* but that should be included in legislation going forward.

First, some bills require employers to disclose the role that an AEDS plays in the decision-making process.⁶⁵ Taken together with the disclosure about what the AEDS measures and how, providing role-in-decision information will allow candidates to make a better-informed decision about whether to proceed with an application or to seek an alternative method of assessment. For workers who suffer an adverse decision, knowing the role the AEDS was

Providing role-in-decision information will allow candidates to make a better-informed decision about whether to proceed with an application or to seek an alternative method of assessment. supposed to play in the decision-making process will allow the workers to determine the likelihood that the AEDS influenced that adverse decision, and thus whether to exercise their legal rights under the AEDS legislation or preexisting antidiscrimination laws.

Second, several bills prohibit AEDSs from being the sole basis for an employment decision or, equivalently, requires employers to corroborate AEDS output with information from other sources when making a decision.⁶⁶ While requiring corroboration is no substitute for strong notice, explanation, auditing,

and validation requirements, it can help reinforce those other protections by requiring employers to adopt some level of human oversight for AEDSs. That said, a requirement of corroboration or human review is no guarantee that human oversight will actually be meaningful. As illustrated in several passages of Hilke Schellmann's

66 See the "Corroboration" column in Table 10 for bills that include this type of provision.

⁶⁵ See the "Decision Role" column in the Table 4 for bills that include this type of provision.

recent book, *The Algorithm*, AEDSs often play a decisive role even when companies claim that an AEDS is merely one factor in a decision process that humans ultimately control.⁶⁷ Consequently, this requirement must be in addition to, rather than in place of, the other protections that the *Civil Rights Standards* recommend.

67 See Schellmann, supra note 2 at 79-80 (company using AI assessment to screen out workers despite vendor's public statement that its tool "does not perform automated decision-making") and 94-95 (public school system using AI tool to screen out job applicants, despite the vendor's public statements stating that their tools should not be used in that manner).

Part IV: LegislativeDos and Don'ts

The evolution of the AEDS policy landscape over the past year provides policymakers and advocates with ample material that they can use to craft good workplace-technology policy. This report concludes with three high-level recommendations for such future policy efforts:

- To address the full range of potential civil rights harms associated with AEDSs, policymakers should pursue comprehensive workplace technology legislation addressing both AEDSs and electronic surveillance and automated management (ESAM).
- Another beneficial, but less ambitious, approach would be legislation granting all workers robust disclosure requirements regarding AEDSs, ideally as a first step toward more comprehensive regulation once policymakers gain access to more information on AEDSs due to the greater transparency that strong disclosure requirements would engender.
- Conversely, policymakers should reject legislation that would, like NYC's LL144, require employers to check only for certain types of discrimination—an approach that would do more harm than good by sending a signal that certain forms of discrimination are less important than others.

A. The Goldilocks Solution: Comprehensive workplace technology laws

As the table in Appendix B indicates, comprehensive workplace technology bills tend to align more closely with the *Standards* than legislation that falls into the other two categories. The only other bill that aligns well with the *Standards* is the No Robot Bosses Act. That bill, perhaps not coincidentally, is the AEDS-focused companion to an ESAM-focused bill, the Stop Spying Bosses Act.⁶⁸

There are strong reasons to believe that comprehensive workplace technology legislation that addresses ESAM as well as AEDSs is the best way to address the risks that AEDSs pose to workers' rights. First, addressing ESAM along with AEDSs allows legislators to take a more holistic approach to managing the civil rights risks associated with AEDSs. In addition to regulating the mechanics of the decision itself, such legislation can address the risks associated with the collection of worker data that both feeds into AEDS training data and drives AEDS predictions about individual workers.

Moreover, AEDS and ESAM issues are already interconnected and becoming ever more so. Data collected through electronic surveillance systems are used to evaluate employees evaluations that may themselves be made by or with the assistance of an AEDS. For some workers, such as rideshare and delivery drivers, the data collected through automated data collection and surveillance may be the dominant means through which platforms evaluate and manage workers.⁶⁹ Indeed, as Ifeoma Ajunwa notes in her recent book, *The Quantified Worker*, the simultaneous and rapid rise of AEDSs and ESAM creates the potential for a "closed loop" where digital systems drive the entire employee lifecycle. Such a

68 S. 262, 118th Cong., 1st Sess. (2023).

⁶⁹ See, e.g., Dubal, supra note 17; Myung Kim Lee, et al.; Working with machines: The impact of algorithmic and data-driven management on human workers. In Proceedings of the 33rd annual ACM conference on human factors in computing systems, 1603-1612 (2015).

closed loop would consist of "algorithmically driven advertisement determining which applications will send in their resumes, and automated sorting of resumes leading to automated onboarding and eventual automated evaluation of employees, with the results of that evaluation being looped back into criteria for job advertisement and applicant selection."⁷⁰

Policymakers crafting legislation with both ESAM and AEDSs in mind are thus more likely to see the full picture of how employers use both types of technology and how they impact workers. That makes it less likely that legislation will leave gaps in addressing either technology.

This is not to say, of course, that well-crafted AEDS-specific legislation would not be helpful; the No Robot Bosses Act is an example of AEDS legislation that would protect workers from discriminatory AEDSs, even in the absence of corresponding ESAM-focused legislation. Strong AEDS disclosure legislation, like that discussed in the following section, would meaningfully benefit workers as well. But, as discussed above, legislation that focuses narrowly on AEDSs may overlook the employer practices, namely ESAM, that feed into AEDS development.

Likewise, general AI fairness legislation is far from undesirable in itself. Automated decision systems threaten to undermine civil rights in a variety of contexts, not just employment. Policymakers should look to protect people from algorithmic discrimination in all situations where they face it. It is very difficult, however, to craft legislation that effectively addresses discrimination in many different contexts. Decisions relating to voting, criminal justice, housing, etc., involve different preexisting legal protections, different power dynamics, and different types of actors than employment decisions.

The Civil Rights Act of 1964 was comparably ambitious in its scope, addressing discrimination in voting, public services, employment, education, and public accommodations. But that statute was

70 Ifeoma Ajunwa, The Quantified Worker 155 (2023).

divided into separate titles addressing discrimination in each of these spheres. As the Congressional Research Service has noted, "The eleven titles vary substantially, including the actions they prohibit, how they are enforced, the entities subject to a title's requirements, and the remedies for different statutory violations."⁷¹ Title VII, the portion of the statute pertaining to employment, thus functions as a standalone statute, comprehensively covering discrimination in all aspects of the employment relationship.

Such an approach, where employment is addressed as a distinct component of a broader bill, could be effective for addressing the civil rights risks of automated decisions. But none of the currently pending bills take that approach. Instead, the pending general AI fairness bills attempt to apply the same definitions, notice, audit, and oversight requirements to decisions made in a wide range of disparate contexts. The result is legislation that is not sufficiently tailored to the unique dynamics of the employment setting.

At this point, the focus of pending general AI fairness legislation tends to be too broad to effectively address the unique civil rights risks associated with AEDSs, while pending legislation focusing on AEDSs alone tends to be too narrow. The Goldilocks solution is legislation that focuses on employment while addressing both AEDSs and ESAM. Future policy efforts in this space should use bills in that category as their model—either by passing standalone workplace technology legislation covering both practices, or by incorporating more detailed and tailored ESAM and AEDS provisions into broader legislation.

⁷¹ Congressional Research Service, In Focus: The Civil Rights Act of 1964: Eleven Titles at a Glance, Dec. 14, 2020, <u>https://crsreports.congress.gov/product/pdf/IF/IF11705</u>. [https://perma.cc/YK8E-YUU8]

B. A Good Start: Robust AEDS disclosure legislation

While comprehensive AEDS and ESAM legislation covering the key *Standards* relating to all five Civil Rights Principles is the preferred approach, carefully crafted legislation with a narrower focus can still help advance equity and fairness in employment decision practices. In particular, a bill that includes strong notice and explanation requirements, if paired with strong enforcement provisions, would help close the severe information gap between companies and workers regarding AEDSs. Such legislation would allow employers to make better-informed decisions about whether to purchase or deploy an AEDS and workers to better understand how an AEDS may affect their legal rights and make better-informed decisions about whether to proceed with an AEDS assessment.

If not paired with additional audit requirements, however, the transparency requirements must be comprehensive and detailed to ensure workers and regulators have the information needed to assess an AEDS's compliance with applicable laws. If there is no audit—and thus no audit summary, as the *Standards* would require—then the candidate disclosures must also include the following items in addition to those required by the *Standards*:

- A statement of what steps, if any, were taken to reduce or eliminate potential adverse impacts during the development, testing, or implementation of the AEDS;
- A link to the results of the most recent assessment of the tool's potential to result in unlawful discrimination against each group protected from discrimination under applicable law, or a statement that no such assessment has been conducted;
- A link to the results of the most recent validation study, or a statement that no such study has been conducted.

Armed with that information, workers who suffer an adverse decision would be able to make an informed judgment as to whether they might have a legal basis for challenging the AEDS decision. If they do, existing antidiscrimination laws—which include private rights of action and the possibility of class-action claims likely provide an adequate means of redress.

Such legislation would need to include strong accountability and enforcement provisions to ensure employers provide the required information and do not treat non-compliance simply as a cost of doing business, as appears to be the case with NYC LL144.⁷² This means either a private right of action or, at a minimum, a well-funded enforcement agency with the authority to compel production of AEDS documentation and issue substantial civil penalties for violations.

These requirements should be paired with provisions establishing a task force or similar body charged with examining the information gleaned from these disclosures and determining what, if any, additional regulation might be necessary. In this way, strong disclosure requirements could serve as a stepping stone to more comprehensive regulation.

C. Worse than doing nothing: Passing laws that focus only on some forms of discrimination or entrench poor transparency

Conversely, it is possible for AEDS legislation to take the law backwards by undermining existing civil rights protections or entrenching the extreme information disadvantage that workers face in AEDS-driven decisions. In both respects, New York City's LL144 provides a cautionary tale.

72 See discussion in following section.

1. Laws should not focus on only some forms of unlawful discrimination while ignoring others

One especially troubling aspect of LL144 was the weakness of its "bias audit" provisions, which, despite the term, do not cover most forms of unlawful bias and do not require much of an audit. Instead, LL 144 merely requires employers to conduct a simple statistical test to check for adverse impacts on race, sex, and ethnicity. Companies need not check AEDSs for disparate treatment discrimination, nor for any form of discrimination on the basis of disability, age, or other protected statuses. Even for the few types of discrimination that the law covers, the "bias audit" could mask discrimination by an individual employer because companies can aggregate data from multiple employers when conducting a disparate impact analysis.

Immediately after the New York City Council passed LL144, CDT warned that these weak audit requirements could "create a situation worse than the status quo ante:"

The intent of the ordinance, and indeed its ultimate effect, seems to be to make it easy for vendors and employers to comply. *By marketing their compliance with such weak protections, vendors and employers would create the false impression that their tools are valid and nondiscriminatory.* That could well create additional pressure for employers to adopt such tools, creating a boon for vendors but threatening further harm to vulnerable workers.

Sadly, these predictions appear to be proving prescient. Just a few months after the law went into effect, some AEDS vendors are claiming, based on their purported compliance with LL144, that their tools are "free of bias,"⁷³ "unbiased,"⁷⁴ or "bias free and responsible,"⁷⁵ with some displaying "NYC Bias Audit Verified" badges on their

- 73 Hired, Hired Conducts AI Audit to Ensure Bias-Free Hiring, https://hired.com/blog/ highlights/hired-ai-audit-ensure-bias-free-hiring/ (accessed Dec. 27, 2023). [https://perma.cc/8WUT-QSFU]
- 74 Bryq Blog, Beyond Compliance: Bryq's Proactive Approach to Unbiased AI, <u>https://</u> www.bryq.com/blog/compliance-unbiased-ai (accessed Dec. 27, 2023). [<u>https://</u> perma.cc/ZFM6-NZP2]
- Vervoe, Vervoe Bias Audit, https://vervoe.com/ai-bias-audit-results/ (accessed Dec. 27, 2023). [https://perma.cc/FV6N-D8Q8]

product pages to boost those claims.⁷⁶ Unwary employers and workers may falsely conclude such claims as indicating that the product complies with applicable laws against employment discrimination. In reality, and as discussed above and in CDT's prior publications on LL144, the NYC law's "audit" consists of a single statistical test, potentially using data inappropriately aggregated from several employers, that provides only a single indicator of a single form of discrimination against just three of the many groups of workers that are supposed to be legally protected from employment discrimination.

That vendors are already leveraging NYC's ordinance to engage in such questionable marketing highlights the danger of weak audit requirements. Requiring companies to check for only certain forms of discrimination trivializes the types of discrimination that are omitted, undermining the effectiveness of existing antidiscrimination laws. Indeed, by opening the door to misleading claims, inadequate audit requirements may well accelerate the adoption of potentially discriminatory technologies.

It is essential that future audit requirements require tests for all forms of unlawful discrimination. Anything less is, as the experience of LL144 suggests, worse than doing nothing at all.

2. Poor scope, transparency, and enforcement provisions can negate an AEDS law's effectiveness and undermine confidence in AEDS regulation

As noted in Part IV.B, a law establishing robust transparency requirements, paired with enforcement provisions strong enough to ensure that companies abide by them, could be an effective step toward strong AEDS regulation. Conversely, however, a law that establishes weak or easily ignored transparency requirements

76 See notes 75-76, supra.

will entrench the wide information gap between employers and workers and undermine confidence in the ability of regulators to effectively address AEDS harms. Here too, LL144 appears to provide a cautionary tale.

The text of LL144, on its surface, appears to provide a reasonable scope and require some meaningful, albeit modest, disclosures. LL144's definition of "automated employment decision tool" covers automated systems that "substantially assist or replace discretionary decision making." The use of "substantially assist" language would seem to extend to AEDSs that make recommendations that influence employment decisions and certainly to those that are a substantial factor in such decisions. On the transparency front, the text of LL144 requires companies to notify candidates that they will use an AEDS to assess them along with "job qualifications and characteristics" that the AEDS will use in its assessment. While this language is vague, it would at least alert candidates to the AEDS' existence prior to assessment.

Unfortunately, the New York City Department of Consumer and Worker Protection (DCWP) issued interpretive rules effectively gutting LL144's scope and notice provisions. Despite the plain meaning of "substantially assist," the DCWP rules state that LL144 applies only to AEDSs that dominate the decision-making process by being the sole basis for an employment decision, being the single most important factor in that decision, or overruling conclusions made by human decision-makers.⁷⁷ CDT warned in comments to the DCWP that this interpretation would allow employers to "evade the requirements of LL144 simply by casting [AEDS] outputs as 'recommendations' that human decisionmakers either rubber-stamp or hesitate to contradict."⁷⁸ Similarly, the DCWP rules undercut LL144's notice requirements by allowing employers to provide "notice" simply by posting the information on

⁷⁷ Rules of New York City, tit. 5, § 5-300 (definition of "Automated Employment Decision Tool").

⁷⁸ CDT, Comments to the New York City Department of Consumer and Worker Protection re: Revised Proposed Rules to Implement Local Law 144 of 2021 on Automated Employment Decision Tools, at 2 (Jan. 23, 2023), <u>https://cdt.org/wpcontent/uploads/2023/01/2023-01-26-CDT-Comments-on-NYCs-Revised-AEDT-Rules.pdf. [https://perma.cc/UH4C-REM7]</u>

their website rather than including it in job listings or providing it directly to candidates. CDT likewise critiqued DCWP's notice rules as severely undermining the effectiveness of the notice provisions by placing the "onus…on workers to try to find these details on employers' websites or submit a written request for these details."⁷⁹

These fears regarding the impact of DCWP's rules sadly appear to have come to fruition. In a recent study by researchers from Cornell University, Data & Society, and Consumer Reports (the LL144 Study), investigators searched for LL144 notices and disparate impact results on the websites of 267 employers who had posted positions in New York City in late 2023.⁸⁰ Even though several recent surveys indicate that AEDSs are "widespread" and that their use is "rapidly growing,"⁸¹ the study found that only 5% of companies posted disparate impact analysis results and only 4% included LL144 notices.⁸² For companies that did publish the required information, the student investigators often struggled to find the relevant notice information on their websites.⁸³

They suggested that the paucity of compliant publications of LL144 notices and audit results may be the result of a combination of weaknesses in the bill, including that it:

- Grants employers "near-total discretion over whether their system is in scope, and offers them many chances to move out of scope.";
- Neither provides a private right of action nor gives the DCWP proactive investigative or discovery authority; and
- Provides for very modest penalties.

79 *Id*. at 6.

- 80 Lucas Wright, et al., *Null Compliance: NYC Local Law 144 and the Challenges of Algorithm Accountability*, <u>https://dl.acm.org/doi/10.1145/3630106.3658998</u>. [<u>https://</u> perma.cc/86T9-KHEP]
- 81 Id. at 4. The authors acknowledged, however, that there is no "reliable source" on AEDSs' prevalence, id., a fact that is doubtless a function of the AEDS transparency problem that LL144 was supposedly meant to address.
- 82 *Id*. at 10.
- 83 *Id.* at 10-11. Because of the degree of discretion LL144 affords employers to decide whether the law applies to them, the study's authors used the term *null compliance* (as opposed to non-compliance) to describe the results of their research. With null compliance, "the absence of evidence of compliance cannot be ascertained as non-compliance because the investigator lacks the information to determine if the regulated party's actions or products are in scope of the regulation." *Id.* at 5.

Moreover, examining the few cases where companies did post disparate impact analyses, the researchers found that almost no published reports showed a disparate impact on any protected groups, despite the fact that audit industry workers told researchers

Transparency requirements—or, indeed, any substantive component of AEDS regulation must be accompanied by a broad, clear scope and strong enforcement provisions to be effective. in interviews that "many, if not the majority" of AEDSs on the market have such disparate impacts.⁸⁴ This led the researchers to conclude that reporting bias was at work—that is, companies whose adverse impact analyses indicated a potential disparate impact may have decided simply not to report adverse results.⁸⁵

The weak enforcement provisions would seem the most logical explanation for the lack of published notices and audit reports and the related skew of published disparate impact analyses. Even the worst-case scenario for failing to comply with LL144

would expose a company to penalties of less than \$550,000 per year—far less than what it would face in damages from a classaction employment discrimination suit. Faced with that calculus, a company could rationally conclude that it would be preferable to ignore LL144 and risk accruing its comparatively modest maximum penalties rather than posting information about an AEDS that could lead to discrimination lawsuits.

The experience so far with LL144 suggests that transparency requirements—or, indeed, any substantive component of AEDS regulation—must be accompanied by a broad, clear scope and strong enforcement provisions to be effective. Indeed, a regulatory regime missing one or more of those components is likely to be harmful. As the LL144 Study indicates, the publicly available disparate impact results paint an implausibly rosy picture of AEDSs' fairness. That is likely to accelerate, rather than reverse, the spread of discriminatory AEDSs. Legislation with similar flaws will be similarly counterproductive.

84 *Id.* at 12.85 *Id.* at 13.

05

Conclusion

The *Civil Rights Standards* provide a strong, civil-rights-focused roadmap for crafting public policy on modern employment decision systems. A year and a half later, it is gratifying to see pending bills at both the state and federal levels that incorporate its key protections. But many other bills do not, and some legislation—including, unfortunately, the only AEDS bill to become law thus far—could actually undermine existing legal protections.

With technology and workplace issues remaining squarely in the public eye, the tempo of workplace technology legislation is increasing in 2024. It is thus more essential now than ever for advocates and policymakers to educate themselves on the policy landscape and pick appropriate models for future legislative and regulatory action. This report has aimed to further that goal by providing information about many bills that appeared in the year after the *Standards* were published as illustrative examples of both good and bad legislative approaches in this area. It is incumbent upon civil rights and labor advocates to educate themselves and policymakers by highlighting which approaches are—and which are not—likely to protect and advance workers' legal rights. $\bigcirc 6$

Appendix A: Tables

The analysis in this section includes bills introduced during 2023 legislative sessions, and covers amendments made through January 15, 2024.

General rules for reading tables:

A " \boldsymbol{Y} " indicates that the legislation explicitly or clearly includes the item

A question mark (?) indicates that the legislation could plausibly be read as including the item, but does not clearly do so

A tilde (~) indicates that the legislation includes the intended item, but only in a limited way or with caveats. A table's Legend will provide specific information on what tildes mean in the context of that table.

The Legends only include definitions/descriptions for headings whose meanings are not self-evident and not adequately explained in the accompanying section

	Recruitment	Hiring	Pay	Promotion	Discipline	Termination	Other terms/conditions
Civil Rights Standards	Y	Y	Y	Y	Y	Y	Υ
No Robot Bosses Act	Y	Y	Y	Y	Y	Y	Υ
CA AB 331	?	Y	Y	Y	?	Y	?
DC SDAA	Y	Y	?	Y	?	Y	?
MA H.1873	Y	Y	Y	Y	Y	Y	Υ
NJ A4909	Y	Y	Y	Y	Y	Y	Υ
NY A567	?	Y		?		?	
NY A7859	?	Y		?		?	
NY S7623	Y	Y	Y	Y	Y	Y	Y
NYC LL 144		Y		Y			
PA HB1729	?	Y	Y	Y	Y	Y	Y
VT H.114	?	Y	Y	Y	Y	Y	Υ
WA HB1951	?	Y	Y	Y	?	Y	?

Table 1. Types of employment decisions.

Legend: Does the bill cover the use of AEDSs in...

- **Recruitment**: ...identifying workers who have not yet submitted an application as potential candidates for recruitment or hire? This includes the use of targeted advertising.
- **Hiring**: ...deciding, for a candidate who has submitted an application, whether to advance that candidate to the next stage in the application/hiring process?
- Other terms and conditions of employment: ...setting other terms, conditions, or privileges of employment not covered by the other items in this table? This might include task or location assignments, scheduling, etc.

	Passive Candidates	Active Candidates	Employees	Independent Contractors
Civil Rights Standards	Υ	Υ	Υ	Y
No Robot Bosses Act		Υ	Y	Y
CA AB 331	?	Υ	Y	Y
DC SDAA	Y	Y	Y	?
MA H.1873		Y	Y	Y
NJ A4909	Y	Y	Y	
NY A567	Y	Y	?	
NY A7859	?	Y	?	
NY S7623	Y	Y	Y	Y
NYC LL 144		Y	Y	
PA HB1729	?	Y	Y	
VT H.114	?	Y	Y	?
WA HB1951	?	Y	Υ	Y

Table 2. Types of workers.

Legend: Does the bill cover...

- **Passive Candidates**: A passive candidate is a worker who has not specifically applied to work for a given company, but who an AEDS evaluates to determine whether the company should attempt to recruit the worker.
- Active Candidates: An active candidate is a worker who has specifically applied to work for a given company.
- Employees: Current employees of a given company.
- **Independent Contractors**: Workers who perform paid work for a given company, but who that company classifies as independent contractors rather than employees. Because most employment discrimination and labor laws apply only to employees, this chart assumes that a bill does not include independent contractors unless it clearly states or implies that it covers contractors.

	Recommendations	Substantial Factors	Dispositive Decisions
Civil Rights Standards	Υ	Υ	Υ
No Robot Bosses Act	Υ	Υ	Υ
CA AB 331			Y
DC SDAA	?	Y	Y
MA H.1873	Υ	Y	Y
NJ A4909	?	Y	Y
NY A567	?	?	Y
NY A7859	?	?	Y
NY \$7623	Υ	Y	Y
NYC LL 144	Not as interpreted	Not as interpreted	Y
PA HB1729	Υ	Y	Y
VT H.114	Υ	Y	Y
WA HB1951			Y

Table 3. Covered uses in decision-making process.

Legend: Does the bill cover AEDSs that...

- Recommendations: ...make recommendations that may influence covered employment decisions?
- Substantial Factors: ... play a significant or substantial role in covered employment decisions?
- **Dispositive Decisions**: ...play a decisive or controlling role in covered employment decisions?

	Use	Audit	Attributes	Method	JFs	Accommodation / Alternatives	Decision Role	Data practices
Civil Rights Standards	Y	Y	Y	Υ	Y	Y		Both
No Robot Bosses Act	Y	2	Y	Y	Y		Y	Sources
CA AB 331	Y						Y	
DC SDAA	?		Y	?	?			Both
MA H.1873	Y	Post	?	?	?		Y	Both
NJ A4909	Post							
NY A567		~						
NY A7859	Y		Y		~			Sources
NY \$7623	Y	Y	Y	Y	Y	Y		Sources
NYC LL144	~	~	~		2			Sources
PA HB1729	Y	~	Y	Y				
VT H.114		~						
WA HB1951				Ν	o notic	e provisions		

Table 4. Pre-test notice requirements.

Legend: Must the deployer notify candidates before they are assessed by an AEDS...

- Use: ...that an AEDS will assess them? Mere disclosure that an AEDS "may" be used does not qualify. A tilde (~) indicates that the bill requires the deployer to post this information publicly or provide it to candidates upon request, but need not include the information in job postings or proactively provide the information directly to candidates.
- Audit: ...the results (or a summary) of the most recent audit of the tool? A tilde (~) indicates that the bill requires
 the deployer to post this information publicly or provide it to candidates upon request, but need not include the
 information in job postings or proactively provide the information directly to candidates.
- Attributes: ...what knowledge, skills, abilities, and other attributes the AEDS is supposed to measure? A tilde (~)
 indicates that the bill requires the deployer to post this information publicly or provide it to candidates upon request,
 but need not include the information in job postings or proactively provide the information directly to candidates.
- Method: ...how the AEDS measures those attributes?
- JFs: ...the specific job functions the AEDS is relevant to, and how the attributes the AEDS measures relate to those job functions? A tilde (~) indicates that it requires companies to disclose the job functions it is relevant to but not how the tested attributes relate to those job functions.
- Accommodations/Alternatives: ... how the candidate can request an accommodation or alternative selection procedure?
- Decision Role: ...tell candidates how the tool is used or monitored by humans in the decision-making process?
- Data Practices: ... publish the following data practices or disclose them directly to candidates?
 - Sources: The sources from which the employer collects data used as inputs into the AEDS and/or how the employer collects its AEDS input data
 - Sharing: Whether and how worker data can be shared with third parties
- "Post" indicates that the deployer must provide the information only after making a decision

	Result	Explanation	Records			
Civil Rights Standards	Y	Y	Y			
No Robot Bosses Act	Y	Y	Y			
CA AB 331			Audits only			
DC SDAA	Y	Y	Y			
MA H.1873	Y					
NJ A4909						
NY A567						
NY A7859						
NY S7623	~		Y			
NYC LL144						
PA HB1729						
VT H.114	Upon request	Upon request				
WA HB1951	No notice provisions					

Table 5. Explanation and recordkeeping.

Legend: Must the deployer...

- **Result**: ...notify candidates what the result of the AEDS assessment was? A tilde (~) indicates the bill does not explicitly require disclosure of AEDS results, but that it does require employers to allow candidates to request reevaluation after an AEDS decision, which implies that the candidate must receive notice of the results.
- **Explanation**: ...tell candidates adversely assessed by an AEDS the factors, attributes, or other information that led the AEDS to render an adverse assessment?
- Records: ...keep records relating to the results of its AEDS audits and assessments?

	Pre-deployment	Ongoing	Responsibility	Independence	Summary
Civil Rights Standards	Y	Annually	Joint	Υ	Y
No Robot Bosses Act	Y	Annually	Deployer	Y	
CA AB 331	~	Annually + "significant" updates	Split		
DC SDAA	Y	Annually	Deployer		Y
MA H.1873	Y	If "material" changes are made	Joint	Y	Y
NJ A4909	Y	Annually	Vendor	~	
NY A567	~	Annually	Deployer	~	Y
NY A7859		No au	dit provisions		
NY \$7623	Y	Annually	Joint	Y	
NYC LL144	Y	Annually	Deployer	Y	
PA HB1729	Y	Annually	Deployer	Y	
VT H.114	Y	If "significant" changes made	Deployer		
WA HB1951	Y	Annually + "significant" updates	Split		

Table 6. Audit Logistics.

Legend

- **Pre-deployment**: Does the bill require a pre-deployment audit? A tilde (~) indicates that the bill requires annual auditing but does not explicitly state that an audit must be completed prior to deployment.
- Ongoing: How often (if at all) must audits occur after deployment?
- Responsibility: Who is responsible for ensuring audits occur?
 - Vendor: Entities involved in the development and/or distribution of the AEDS.
 - Deployer: The entity that uses the AEDS to evaluate/process candidates (usually an employer or staffing company).
 - **Joint**: Joint responsibility between vendors and deployers (or equivalently, vendors and deployers are jointly and severally liable for improper audits).
 - Split: Vendors and deployers assigned separate audit responsibilities.
- **Independence**: Is there a requirement that the auditor be independent of and free of financial and personal conflicts of interest with respect to the entities involved in the development or deployment of the AEDS? A tilde (~) indicates that it includes some impartiality requirement, but does not require the assessment to be conducted by an independent person or entity.
- **Summary**: Does the bill require the creation of a summary of the audit that must be published or filed with an employment agency?

	Disparate Treatment	Disparate Impact	Accessibility / Accommodation	Validity	Alternatives	Proper Use
Civil Rights Standards	Y	Y	Y	Y	Y	Y
No Robot Bosses Act	Y	Y	Y	~		
CA AB 331		Y	~			Y
DC SDAA	Y	Y	~			
MA H.1873	Y	Y	~	~	Y	
NJ A4909	Y	Y	~			
NY A567		Y	~			
NY A7859			No audit provisio	ons		
NY S7623	Y	Y	Y	Y	Y	
NYC LL144		Y				
PA HB1729		Y	~			
VT H.114	Y	Y	~	~	Y	
WA HB1951	Y	Y	~			Y

Table 7. Scope of audit.

Legend: Does the bill contain audit requirements that include...

- **Disparate** [treatment/impact]: ...checking for whether the AEDS presents a risk of disparate [treatment/impact] discrimination? This is also marked "Y" if it requires audits that cover all forms of discrimination in the applicable jurisdiction.
- Accessibility/Accommodation: ...examining potential barriers to accessibility and/or potential accommodations that disabled or pregnant workers may need? A tilde (~) indicates that the audit must evaluate the risk of adverse impact on disabled and/or pregnant workers, but does not explicitly call for an evaluation of potential barriers to accessibility or what accommodations disabled or pregnant workers might need.
- Validity: ...a validity or job-relatedness study of the AEDS? A tilde (~) indicates that the audit includes some requirement(s) for testing AEDS efficacy or accuracy but not a complete validation study.
- Alternatives: ... exploring potential alternative assessment methods to determine if assessments with greater validity and/or less discrimination risk are available?
- **Proper Use**: ...determining whether the deployer's use of the AEDS conforms with industry standards and/or developer specifications?

	Disparate treatment	Disparate impact	All protected groups	Accommodation	Least discriminatory method	Targets high- risk AEDSs
Civil Rights Standards	Y	Y	Y	Y	Y	Y
No Robot Bosses Act	Y	Y	Y	~		
CA AB 331	Y	Y	~	~		
DC SDAA	Y	Y		~		
MA H.1873	Y	Y	Y	~		Y
NJ A4909	Y	Y	Y	~		
NY A567		Y	Υ	?		
NY A7859						
NY S7623	Y	Y	Y	Y	Y	Y
NYC LL144		Y				
PA HB1729		Y	Y	~		
VT H.114	Y	Y	~	~		Y
WA HB1951	Y	Y	Y	~		

Table 8. Non-discrimination provisions.

Legend: Does the bill...

- **Disparate [treatment/impact]**: ...include an audit requirement that examines the risk of disparate treatment/impact discrimination and/or prohibit uses of AEDSs that result in disparate treatment/impact?
- All protected groups: ...include an audit/impact assessment requirement that examines the risk of discrimination against all groups protected from discrimination under applicable law? A tilde (~) indicates that it has a lengthy enumerated list of covered attributes, but does not explicitly state that the audit must cover all groups protected from discrimination under applicable law.
- Accommodation: ...require deployers to offer reasonable accommodation to disabled candidates? A tilde (~)
 indicates that the bill covers discrimination against disabled workers, but does not expressly address accommodation
 requirements.
- Least discriminatory method: ...require deployers to explore potential alternative selection approaches and assess whether the AEDS is the least discriminatory valid method of assessment?
- **Targets high-risk AEDSs**: ...include provisions banning on or more of the types of selection procedures categorized as high-risk under the *Civil Rights Standards*, or subjecting such procedures to additional scrutiny?

	Validity	Essential Functions Only
Civil Rights Standards	Y	Υ
No Robot Bosses Act	Y	
CA AB 331		
DC SDAA		
MA H.1873	~	Υ
NJ A4909		
NY A567		
NY A7859		
NY S7623	Y	Υ
NYC LL144		
PA HB1729		
VT H.114	~	Υ
WA HB1951		

Table 9. Job-relatedness requirements.

- Validity: Does the bill require AEDSs to be subjected to a validity or job-relatedness study? A tilde (~) indicates that the audit includes some requirement(s) for testing AEDS efficacy or accuracy but not a complete validation study.
- **Essential Functions Only**: Does the bill require AEDSs to be limited to measuring a candidate's ability to perform essential job functions?

	Mitigation	Opt-out	Concern	Appeal	Corroboration
Civil Rights Standards	Y	Y	Υ	Y	
No Robot Bosses Act		~		Υ	Y
CA AB 331	Y	~			
DC SDAA	Y			Y	
MA H.1873	~				Y
NJ A4909					
NY A567					
NY A7859					
NY S7623	Y	?		Y	Y
NYC LL144					
PA HB1729		Y			
VT H.114					Y
WA HB1951					

Table 10. Internal accountability.

Legend: Does the bill...

- **Mitigation**: ...require companies to mitigate or correct any sources of potential discrimination identified during audits or impact assessments? A tilde (~) indicates that the bill would require companies to mitigate or correct the tool only upon agency order.
- **Opt-out**: ...give candidates the right to opt-out of AEDS assessment or requires deployers to obtain a candidate's consent before assessing them with an AEDS? A tilde (~) indicates that the bill provides a partial or qualified opt-out right.
- Concern: ... give candidates a right to communicate concerns regarding the AEDS prior to assessment?
- **Appeal**: ...give candidates the right to request reevaluation, submit corrections, or appeal an AEDS decision after an adverse decision?
- **Corroboration**: ...prohibit employers from using AEDSs as the sole basis for covered employment decisions or require corroboration of AEDS output before an employer can use it to make employment decisions?

	Vendor Penalties/Liability	Employer Penalties/ Liability	Joint/Several Liability	Private Right of Action
Civil Rights Standards	Y	Y	Y	Y
No Robot Bosses Act		Y		Y
CA AB 331	Y	Y		Y
DC SDAA	Y	Y		Y
MA H.1873	Y	Y	~	Y
NJ A4909	Y	Y		
NY A567		Y		
NY A7859				
NY S7623	Y	Y	Y	Y
NYC LL144		Y		
PA HB1729				
VT H.114	?	Y		Y
WA HB1951	Y	Y		

Table 11. External accountability.

Legend: Does the bill...

- Vendor Penalties / Liability: ...subject a vendor or developer of an AEDS to penalties for failing to comply with their obligations under the bill?
- Employer Penalties / Liability: ...subject an employer or deployer of an AEDS to penalties for failing to comply with their obligations under the bill?
- Joint/Several Liability: ...make vendors and employers jointly and severally liable for discrimination resulting from the use of an AEDS? A tilde (~) indicates that the bill imposes joint liability if a vendor uses an AEDS on an employer's behalf.
- **Private Right of Action**: ...give individual workers the right to bring a civil action against companies that violate some or all of the law's requirements?



Appendix B: Legislation Scorecard Summary

The analysis in this section includes bills introduced during 2023 legislative sessions, and covers amendments made through January 15, 2024. The table in this Appendix provides a simple numerical summary showing how many provisions from each of the categories examined in Part II appear in each bill / meant to show degree to which:

- Scores are calculated using the tables (see Appendix A).
- Explanations for each score can be found in the legislation scorecards in Appendix C.
- Each bill receives 1 point for each "Y" and ½ point for each question mark (?), tilde (~), or other non-blank entry.
- Parentheses in the headings indicate the maximum number of possible points for that category.

	Lowest Tier	Middle Tier	Highest Tier
Scope	0-4.66	4.67-9.33	9.34–14
Notice and Explanation	0-3.66	3.67–7.33	7.34–11
Auditing	0-3.66	3.67–7.33	7.34–11
Non-discrimination	0-2	2.01-4	4.01-6
Job-relatedness	0-0.66	0.67–1.33	1.34–2
Oversight and Accountability	0-3	3.01–6	6.01–9

	Scope (14)	Notice and Explanation (11)	Auditing (11)	Non- Discrimination (6)	Job- Relatedness (2)	Oversight / Accountability (9)
Civil Rights Standards	14	10	11	6	2	8
No Robot Bosses Act	13	9	7	3.5	1	4.5
CA: AB 331	10	2.5	4.5	3	0	4.5
DC: SDAA	11.5	6.5	6	2.5	0	5
MA: H.1873	13	6	9	4.5	1.5	5
NJ: A4909	12.5	0.5	5.5	3.5	0	2
NY: A567	7	0.5	5	2.5	0	1
NY: A7859	6.5	3	0	0	0	0
NY: S 7623	14	8	9	6	2	7.5
NYC: LL144	5	2.5	4.5	1	0	1
PA: HB1729	12	3.5	5	2.5	0	1
VT: H.114	12.5	1.5	6.5	4	1.5	3.5
WA HB1951	10	0	6	3.5	0	2



Appendix C: Legislation Scorecards

The analysis in this section includes bills introduced during 2023 legislative sessions, and covers amendments made through January 15, 2024. This appendix provides scorecards for each bill, explaining which specific provisions covered by the tables (see Appendix A) appear in the bill, which provisions do not appear, and which are partially or ambiguously included.

No Robot Bosses Act (S. 2419)

Scope	13/14
Notice and Explanation	9/11
Auditing	7/11
Non-discrimination	3.5/6
Job-relatedness	1/2
Oversight and Accountability	4.5/9

Scope (13/14)

The NRBA's coverage mirrors the *Standards'* in nearly all aspects. Its definition of "employment-related decision" covers recruiting, hiring, firing, promotion, discipline, and all other terms and conditions of employment,⁸⁶ and its definition of "automated decision system output" explicitly states that the bill covers recommendations and scores in addition to final employment decisions.⁸⁷ The bill's definition of "candidate" extends to workers "who applies, or applied, to be employed by, or otherwise perform work for remuneration for, the employer."⁸⁸ This would seem to cover independent contractors, but not passive candidates.

Notice and Explanation (9/11)

The NRBA includes more of the *Standards*' notice and explanation requirements than any other pending bill. Under the NRBA, an employer would be required to inform candidates of AEDS use and disclose the key aspects of what the AEDS will measure and how it will measure it.⁸⁹ The bill would also require employers to provide thorough post-assessment explanations for all AEDS decisions.⁹⁰

86 NRBA § 2(7).
87 *Id*. § 2(2).
88 *Id*. § 2(3).
89 *Id*. § 3(a)(2)(A).

90 Id. § 3(a)(1)(B)(vi).

The only component of the *Standards'* transparency requirements that the NRBA does not include is disclosure regarding how candidates can accommodations or alternative selection procedures. Additionally, the NRBA requires audit results to be made "publicly available," but does not require them to be included in job listings or provided directly to candidates.⁹¹ It also requires employers to disclose the sources of their data,⁹² but does not require disclosure regarding the sharing of candidate data with third parties.

Auditing (7/11)

The NRBA requires "pre-deployment testing and validation" that must include an analysis of the AEDS's efficacy (though not a full validity analysis) as well as the risk of discrimination under all applicable federal laws.⁹³ Responsibility for impact assessments falls on the employer.⁹⁴ Full audits must be conducted prior to deployment,⁹⁵ and independent disparate impact assessments must be conducted annually thereafter.⁹⁶ It does not explicitly require an examination of potential barriers to accessibility or necessary accommodations, although such an analysis is arguably required by the broad requirement that employers evaluate the risk of discrimination.

Non-discrimination (3.5/6)

The NRBA covers both disparate treatment and disparate impact discrimination against all groups covered by federal antidiscrimination laws.⁹⁷ This arguably would require an

- 91 Id. § 3(a)(1)(B)(ii).
- 92 Id. § 3(a)(2)(A)(ii)(I) (requiring employers to disclose "the types of data collected or intended to be collected as inputs to the automated decision system and the circumstances of such collection").
- 93 Id. § 3(a)(1)(B)(i)(II)-(III).
- 94 Id. § 3(a)(1).
- 95 Id. § 3(a)(1)(B)(i).
- 96 Id. § 3(a)(1)(B)(ii).
- 97 Id. § 3(a)(1)(B)(i)(II)-(III).

examination of potential accessibility barriers and necessary accommodations as well. The bill does not require employers to use the least discriminatory valid selection method and does not prohibit any high-risk AEDS or subject them to additional scrutiny.

Job-relatedness (1/2)

The NRBA requires employers to audit AEDSs' "efficacy" but does not require a full validation study.⁹⁸ It does not require employers to assess whether an AEDS measures essential job functions or prohibit the use of AEDS that measure candidate attributes unrelated to essential job functions.

Oversight and Accountability (4.5/9)

The NRBA prohibits employers from relying exclusively on AEDS when making employment decisions,⁹⁹ specifically requiring that employers provide "meaningful oversight" of AEDS in decision-making.¹⁰⁰ The bill does not provide candidates with a mechanism to raise concerns about an AEDS prior to assessment, but employers must allow candidates to appeal adverse AEDS-driven decisions.¹⁰¹ Employers must also allow current employees to opt out of management by AEDS, but the bill does not otherwise provide opt-out rights.¹⁰²

The NRBA allows workers to bring a private civil action against employers who violate the law,¹⁰³ but the bill does not appear to include any provisions actionable against vendors.

98 Id. § 3(a)(1)(B)(i)(I).
99 Id. § 3(a)(1)(A).
100 Id. § 3(a)(1)(B)(iii).
101 Id. § 3(a)(1)(B)(vii).
102 Id. § 3(b).
103 Id. § 7(a)(3).

California Assembly Bill 331

Scope	10/14
Notice and Explanation	2.5/11
Auditing	4.5/11
Non-discrimination	3/6
Job-relatedness	0/2
Oversight and Accountability	4.5/9

Scope (10/14)

In terms of covered employment decisions, AB 331 extends to decisions that have a "legal, material, or similarly significant effect on a natural person's life relating to...[e]mployment, workers [sic] management, or self-employment."¹⁰⁴ The bill lists several examples of covered employment decisions, including pay, promotion, hiring, termination, and automated task allocation, but it does not explicitly cover recruitment, sourcing, or disclipline, and does not include a catch-all ensuring that its scope mirrors antidiscrimination laws—that is, it does not extend to all decisions affecting the terms, conditions, or privileges of employment.¹⁰⁵ Similarly, while the bill clearly extends to both active employees, applicants, and independent contractors (through its coverage of "self-employment"), the bill's silence on recruiting activities makes it unclear whether it extends to decisions regarding passive candidates.¹⁰⁶

104 CA AB 331, § 22756(d)(1).
105 See id.
106 See id.

Unfortunately, the bill's definition of "automated decision tool" severely undercuts the bill's otherwise-reasonable scope. That definition states that ADSs are only covered if they are "specifically developed and marketed to, or specifically modified to, make, or be a controlling factor in making," in a covered decision.¹⁰⁷ As noted in Part II, that definition effectively gives companies license to argue that the vast majority of ADSs fall outside the bill's scope simply by arguing that a tool is not designed to make final decisions, even if that is precisely how the tool is used in reality.

Notice and Explanation (2.5/11)

AB 331 requires employers to give candidates pre-assessment notice that they will be subjected to an AEDS.¹⁰⁸ Beyond this, the bill's notice requirements are limited. Employers must tell candidates the "purpose" of the AEDS and provide a "plainlanguage description of the [AEDS] that includes a description of any human components" and how the AEDS is "used to inform" the employment decision.¹⁰⁹ But as explained in Part II,¹¹⁰ such purpose and role-in-decision disclosures do not ensure that workers receive the critical information about what an AEDS measures, how it measures it, and how it relates to the job for which they are being assessed.

AB 331 includes no requirement for post-assessment notice or explanation of adverse decisions.

Notably, the "controlling factor" requirement in AB 331's definition of "automated decision tool" will have the practical effect of negating even the few notice provisions that the bill contains, for the reasons explained in Part II of this report.

¹⁰⁷ Id. § 22756(c).

¹⁰⁸ Id. § 22756.2(a)(1).

¹⁰⁹ Id. § 22756.2(a)(2).

¹¹⁰ See Part II, Notice and Explanation, Disclosing what an AEDS measures and how it works.

Auditing (4.5/11)

AB 331 would require employers to conduct an audit (termed "impact assessment" in the bill) by January 1, 2025 and at least annually thereafter.¹¹¹ This does not necessarily ensure, however, that such audits must be conducted before an employer first begins using an AEDS. There is no independence or impartiality requirement for audits.

The bill's audit provisions would require employers to conduct an adverse impact analysis for "sex, race, color, ethnicity, religion, age, national origin, limited English proficiency, disability, veteran status, or genetic information,"¹¹² but it is not clear that this list is exhaustive of all protected classes under California law. There is no requirement that employers check for disparate treatment; while the audit must include "a description of the safeguards implemented...to address any reasonable foreseeable risks of algorithmic discrimination,"113 a term that encompasses both disparate treatment and disparate impact,¹¹⁴ there is no actual requirement that an employer adopt such safeguards or, for that matter, check to see whether a risk of disparate treatment exists. Similarly, while the impact assessment must include a "description of how the automated decision tool has been or will be evaluated for validity or relevance," the bill does not actually require a validation study to be completed.¹¹⁵ The audit would also examine whether the employer's use of the AEDS is consistent with the developer's specifications.¹¹⁶

- 111 *Id.* § 22756.1(a). Additional impact assessments would be required if a "significant update" is made to the ADS. *Id.* § 22756.1(c).
- 112 Id. § 22756.1(a)(5).
- 113 *Id*. § 22756.1(a)(6).
- 114 *Id*. § 22756(a).
- 115 *Id*. § 22756.1(a)(8).
- 116 Id. § 22756.1(a)(4).

Developers would also have to conduct impact assessments separate from the deployer's.¹¹⁷ The bill completely exempts employers with fewer than 25 employees from the scope of the audit requirements unless the deployer used an AEDS "that impacted more than 999 people per year."¹¹⁸ Neither the deployer nor the developer would need to conduct any form of testing under the bill if the employer using the AEDS falls below those thresholds.

Non-discrimination (3/6)

AB 331 prohibits AEDS discrimination on the basis of both disparate treatment and disparate impact,¹¹⁹ although, as noted above, the audit requirements only cover disparate impact. While the bill includes a lengthy list of covered protected classes, it does not expressly tie this to the requirements of state law, and it is thus not clear whether the listed groups encompass all protected classes under California law.¹²⁰

The bill does not explicitly state that employers or developers need to explore whether disabled candidates might require accommodation. The bill does not require employers to explore alternative selection procedures, much less choose the least discriminatory alternative. The bill also includes no specific restrictions on high-risk selection tools.

Job-relatedness (0/2)

As noted above, while the employer audit must state whether or how an AEDS has been or will be tested for validity or relevance,¹²¹ there is no specific validation requirement in the bill. Additionally, the bill does not require AEDS to measure only essential job functions.

- 117 *Id*. § 22756.1(b).
- 118 *Id*. § 22756.1(d).
- 119 *Id*. § 22756.6.
- 120 *Id*. § 22756(a).
- 121 Id. § 22756.1(a)(6).

Oversight and Accountability (4.5/9)

In terms of internal accountability, AB 331 requires each employer and developer to establish a "governance program," which must be designed among other things, to "Identify and implement safeguards to address reasonably foreseeable risks of algorithmic discrimination."¹²² AB 331 also contains a highly qualified opt-out right. Specifically, if a covered decision "is made solely based on the output of" an AEDS and if it is "technically feasible," an employer must "accommodate a natural person's request to not be subject" to the AEDS "and to be subject to an alternative selection process or accommodation."¹²³ If a candidate makes such a request, however, the employer may require the candidate to provide unspecified additional "information...for purposes of identifying" the candidate and the associated employment decision.¹²⁴

AB 331 includes a private right of action if a deployer's use of a tool results in "algorithmic discrimination," as defined under the bill.¹²⁵ Beyond that, "public attorneys," which include the Attorney General and county and municipal attorneys, would be able to bring civil actions for violations of the act.¹²⁶

122 Id. § 22756.4(b)(2).
123 Id. § 22756.2(b)(1).
124 Id. § 22756.2(b)(2).
125 Id. § 22756.6.
126 Id. § 22756.8.

District of Columbia Stop Discrimination by Algorithms Act (SDAA)

Scope	11.5/14
Notice and Explanation	6.5/11
Auditing	6/11
Non-discrimination	2.5/6
Job-relatedness	0/2
Oversight and Accountability	5/9

Scope (11.5/14)

The SDAA has a broad scope, with the bill either clearly or arguably extending to all decisions, workers, and decision roles covered by the *Standards*. Notably, the DC SDAA explicitly covers targeted advertising and other passive candidate sourcing and recruitment practices.¹²⁷

But several other key definitions are ambiguous as applied to workers and employment decisions, as is often the case with general AI fairness legislation. For example, the SDAA defines an adverse action as "a denial, cancellation, or other adverse change or assessment regarding an individual's eligibility for, opportunity to access, or terms of access" to employment.¹²⁸ This clearly includes hiring and termination, and quite likely promotion, but it is not clear what "terms of access" means in the context of active employment—that is, whether the bill covers decisions regarding compensation, discipline, scheduling, and other terms and conditions of employment. The SDAA also does not explicitly refer to independent contractors or self-employment, and it is unclear whether the bill's references to "employment" are meant to encompass independent contractors.

127 DC SDAA § 3(3). 128 *Id*. § 3(1).

Notice and Explanation (6.5/11)

The SDAA's post-assessment explanation requirements are strong; the bill would require employers to tell candidates the factors that an adverse decision depended on, as well as an opportunity to submit corrections.¹²⁹

Its pre-assessment notice requirements are not as robust, however. A pre-use notice must indicate what data sources the employer uses and whether (and with whom) it shares candidate data.¹³⁰ It also indicates that the employers must provide a "brief description of the relationship between the personal information" of the candidate that the AEDS uses and the AEDS-driven decision.¹³¹ This appears to require disclosure of candidate attributes, and arguably requires some disclosure of the AEDS's methodology and the job functions for which the AEDS determination is relevant.

Beyond this, however, it does not have to provide candidates with any information regarding the nature of the AEDS.

Auditing (6/11)

The SDAA requires AEDS deployers¹³² to "annually audit [their] "algorithmic eligibility determination and algorithmic information availability determination practices,"¹³³ and appears to require audits prior to deployment as well, although the language is somewhat unclear as to when the first audit of a newly deployed system

- 129 *Id*. § 6(d)(2)-(3).
- 130 Id. § 6(a)(1)(B)-(C). See also § 6(c) (company cannot make "algorithmic eligibility determination" about an individual unless it has provided the notice required by § 6(a)(1)).
- 131 Id. § 6(a)(1)(D).
- 132 See id. § 3(4) (defining "covered entity" as a person or entity "that either makes algorithmic eligibility determinations or algorithmic information availability determinations, or relies on algorithmic eligibility determinations or algorithmic information availability determinations supplied by a service provider").
- 133 Id. § 7(a).

must be completed.¹³⁴ A deployer must file a report with the DC Attorney General summarizing key information from the audit.¹³⁵ There is no requirement that audits be impartial or conducted by an independent party.

The audit must examine the risk of both disparate treatment and disparate impact discrimination,¹³⁶ but there is no explicit requirement that the audit examine potential barriers to accessibility for disabled or pregnant workers nor to evaluate what accommodations such workers might require. The audit need not examine validity, the availability of alternative selection methods, or whether the deployer uses the AEDS in accordance with developer specifications.

Non-discrimination (2.5/6)

The SDAA's prohibition against algorithmic discrimination and auditing provisions cover both disparate treatment and disparate impact.¹³⁷ The bill includes a lengthy list of covered protected classes, but the list is not exhaustive of DC's protected classes. The bill also does not expressly require employers to provide reasonable accommodation to disabled workers, or include audit provisions requiring employers to examine the potential need for such accommodations.

The SDAA does not target any high-risk selection procedures or require employers to choose the least discriminatory method of assessment.

- 134 See id. § 7(a)(4)(B) (requiring employers to conduct "annual impact assessments of...prior to implementation, new systems that render algorithmic eligibility determinations and algorithmic information availability determinations").
- 135 Id. § 7(b)(1).
- 136 Id. §§ 4(a)(1) (prohibiting algorithmic determinations that "segregate[], discriminate[] against, or otherwise make important life opportunities unavailable to" a member of a protected class); 7(a)(1) (requiring the audit to "[d]etermine whether the [algorithmic determination] practices discriminate in a manner prohibited by section 4 of this act).
- 137 See provisions cited in preceding footnote.

Job-relatedness (0/2)

The SDAA does not require a validation study or an examination of whether an AEDS measures essential job functions.

Oversight and Accountability (5/9)

The SDAA's definition of "covered entity" appears to cover both employers (as a party that "makes algorithmic eligibility determinations") and certain vendors ("a service provider").¹³⁸ Employers must mitigate any potential sources of discrimination identified in an audit.¹³⁹ There does not appear to be a mechanism for candidates to raise concerns prior to assessment, but they may submit corrections and request "a reasoned reevaluation" after an adverse decision.¹⁴⁰ The bill does not require oversight or corroboration of AEDS decision-making.

The SDAA allows candidates to bring a civil action against employers for violations of the act.¹⁴¹

138 DCAA § 3(4).
139 *Id*. § 7(a)(6).
140 *Id*. § 6(d)(3)(B)-(C).
141 *Id*. § 8(d).

Massachusetts House No. 1873 (MA H.1873)

Scope	13/14
Notice and Explanation	6/11
Auditing	9/11
Non-discrimination	4.5/6
Job-relatedness	1.5/2
Oversight and Accountability	5/9

Scope (13/14)

H.1873 covers "employment-related decisions," which it defines broadly as decisions that affect "wages, benefits, other compensation, hours, work schedule, performance evaluation, hiring, discipline, promotion, termination, job content, assignment of work, access to work opportunities, productivity requirements, workplace health and safety, and other terms or conditions of employment."¹⁴² The inclusion of the phrase "access to work opportunities. The bill extends to sourcing and recruitment activities. The bill's definition of "worker" expressly includes any "job applicant," "employee," or "independent contractor;" the use of the phrase "applicant" but not other job candidates suggests that the bill does not cover passive candidates.¹⁴³

The bill's definition of "Automated Decision System" indicates that it covers AEDSs that make recommendations or are a factor in an employment decision, in addition to systems that play a dispositive role in decision-making.¹⁴⁴

- 142 MA H.1873 § 1 (definition of "Employment-related decision").
- 143 Id. (definition of "Worker").
- 144 Id. (definition of "Automated Decision System").

Notice and Explanation (6/11)

H.1873 requires employers to notify workers that they will be subject to AEDS assessment as well as the "nature, purpose, and scope of the decisions for which the [AEDS] will be used, including the range of employment-related decisions potentially affected and how, including any associated benchmarks."¹⁴⁵ This language clearly requires disclosure of the role the AEDS plays in the decision ("and how") and arguably requires disclosure of the attributes and methodology the AEDS uses and the job functions to which it is purportedly relevant. Employers must also disclose their data sources and sharing practices.¹⁴⁶

After an AEDS assessment, employers must notify a candidate of the result of the assessment and provide a copy of the AEDS' audit results.¹⁴⁷ That post-assessment notice need not explain how the AEDS arrived at its decision or recommendation, although the notice must include any non-AEDS information used in addition to the ADS in making the decision.¹⁴⁸

Auditing (9/11)

H.1873 contains some of the strongest audit provisions among pending bills. It requires both pre-deployment audits as well as audits whenever "material" changes made to an AEDS become evident.¹⁴⁹ The bill makes employers responsible for ensuring proper audits (called "Algorithmic Impact Assessments") are completed, although vendors are jointly liable for audits of any AEDS that they use on an employer's behalf.¹⁵⁰ Audits must be "conducted by an independent assessor with relevant experience."¹⁵¹ The audit must evaluate:

- 145 Id. § 4(b)(iii)(1).
- 146 Id. §§ 2C & 4(B)(iii)(3).
- 147 Id. §§ 4D(c)(iv)(1), (6).
- 148 Id. § 4D(c)(iv)(2).
- 149 *Id*. §§ 5(a) and 5B(b).
- 150 Id. §§ 5(a) & 5D(a).
- 151 *Id*. § 5B(a).

- The risk of "errors, including both false positives and false negatives," but not a full validity study;¹⁵²
- The risk of both disparate impact and disparate treatment against protected groups, which arguably includes identifying potential accessibility barriers and accommodations for disabled and pregnant workers;¹⁵³ and
- The "necessity and proportionality of the ADS in relation to its purpose, including reasons for the superiority of the ADS over non-automated decision-making methods.¹⁵⁴

Employers must prepare an audit summary and post it on their website.¹⁵⁵ The audit need not examine whether an employer uses an AEDS in accordance with vendor specifications.

Non-discrimination (4.5/6)

The bill's audit provisions require employers to evaluate the risk of "[d]iscrimination against protected classes," without limitation, suggesting it covers both disparate impact and disparate treatment discrimination against all protected groups.¹⁵⁶ This arguably requires assessing barriers to accessibility and potentially necessary accommodations as well.¹⁵⁷ The bill targets several high-risk selection procedures, specifically barring employers from using any "ADS that draws on facial recognition, gait, or emotion recognition technologies, or that makes predictions about a worker's emotions, personality, or other types of sentiments.¹⁷⁵⁸

- 152 *Id*. § 5(b)(v)(1).
- 153 Id. § 5(b)(v)(2). See also id. § 5(b)(vi) (impact assessment must include the "specific measures that will be taken to minimize or eliminate the identified risks").
- 154 *Id*. § 5(b)(iv).
- 155 Id. § 5B(h)-(i).
- 156 Id. § 5(b)(v)(2).
- 157 *Id. See also id.* § 5(b)(vi) (impact assessment must include the "specific measures that will be taken to minimize or eliminate the identified risks").
- 158 Id. § 4C(a)(iv).

Job-relatedness (1.5/2)

H.1873 does not explicitly require employers to conduct a validity study, but its audit provisions require employers to examine the risk of "errors, including both false positives and false negatives."¹⁵⁹ The bill prohibits employers from making "predictions about an employee's behavior that are unrelated to essential job functions."¹⁶⁰

Oversight and Accountability (5/9)

H.1873 would prohibit employers from making employment decisions solely on the basis of AEDS output and require "meaningful human oversight" of decisions assisted by AEDS.¹⁶¹ Under the bill, an impact assessment must include the "specific measures that will be taken to minimize or eliminate the identified risks,"¹⁶² but it appears employers need only actually implement mitigation measures if ordered to do so by the state's enforcement agency.¹⁶³ The bill does not require employers to provide candidates with the opportunity to raise concerns prior to assessment, or allow candidates to opt-out of AEDS use or appeal adverse decisions.

In terms of external accountability, H.1873 provides for a private right of action against both vendors and employers.¹⁶⁴ It also makes vendors and employers jointly and severally liable for damages when a vendor uses an AEDS on an employer's behalf, but not when an employer uses an AEDS developed by a third-party vendor.¹⁶⁵

159 Id. § 5(b)(v)(1).
160 Id. § 4C(a)(2).
161 Id. § 4D(b)-(c).
162 Id. § 5(b)(vi).
163 Id. § 5B(g)(ii).
164 Id. § 6(a).
165 Id. § 5D(a).

New Jersey Assembly No. 4909

Scope	12.5/14
Notice and Explanation	0.5/11
Auditing	5.5/11
Non-discrimination	3.5/6
Job-relatedness	0/2
Oversight and Accountability	2/9

Scope (12.5/14)

A4909 has a broad scope. The bill defines "automated employment decision tool" as a system that "automatically filters candidates or prospective candidates for hire or for any term, condition or privilege of employment."¹⁶⁶ This suggests coverage of sourcing, recruitment, and hiring decisions regarding both passive candidates and active applicants, as well as all decisions made during the course of active employment. The same definition also covers the use of tools "in a way that establishes a preferred candidate or candidates," indicating that the bill covers the use of AEDS that make recommendations or that play a non-dispositive role in employment decisions.¹⁶⁷ The bill contains no language suggesting it covers independent contractors, but otherwise it appears to extend to all decisions and workers that the *Standards* cover.

Notice and Explanation (0.5/11)

A4909 requires employers to provide workers with post-assessment notice that it used an AEDS to assess them.¹⁶⁸ This post-assessment notice must also state that the AEDS "assesed the job qualifications

- 166 NJ A4909 § 1(a). *See also id*. (defining "employment decisions" as "screen[ing] candidates for employment or otherwise [helping] to decide compensation or any other terms, conditions or privileges of employment").
- 167 See id. (definition of "automated employment decision tool").
- 168 *Id*. § 1(c)(1).

and characteristics of the candidate," but not what those job qualifications and characteristics are.¹⁶⁹ Even though this notice comes only after the AEDS assessment is complete, the bill would not require employers to disclose or explain the outcome of the assessment, and the bill otherwise contains no notice, disclosure, or explanation requirements.

Auditing (5.5/11)

Uniquely among pending bills, and reflecting the original version of NYC LL144, A4909 requires vendors (not employers) to conduct bias audits of any AEDS they sell to "assess its predicted compliance with" New Jersey's antidiscrimination laws.¹⁷⁰ A vendor cannot sell an AEDS unless such an assessment has been conducted "in the past year prior to selling the tool," which means that such assessments must be conducted both prior to first sale and at least annually for as long as the vendor continues selling the tool.¹⁷¹ The bias audit must be "impartial," but need not be conducted by an independent entity.¹⁷²

It does not require an examination of validity, potential alternative selection methods, or whether an employer uses an AEDS in a manner consistent with vendor/developer specifications. Indeed, because the bias audit obligation falls on the vendor, it is not immediately clear whether the bias audit must be specific to an employer's use of the AEDS, or whether, as in the case of NYC LL144, a bias audit can be based on data aggregated across multiple employers.

Non-discrimination (3.5/6)

A4909's bias audit requirements cover all forms of discrimination under New Jersey laws, meaning that it covers both disparate treatment and disparate impact for all protected classes.¹⁷³ This

169 *Id*. § 1(c)(2).

- 170 *Id.* §§ 1(a) (definition of "bias audit") and (b)(1) (requiring bias audit to be conducted "in the past year").
- 171 Id. § 1(b)(1).
- 172 Id. § 1(a) (definition of "bias audit").
- 173 *Id*.

arguably would require an examination of potential accessibility barriers and necessary accommodations as well. The bill does not require employers to use the least discriminatory valid selection method and does not prohibit any high-risk AEDS or subject them to additional scrutiny.

Job-relatedness (0/2)

A4909 does not require a validation study or any examination of whether an AEDS assessment is related to essential job functions.

Oversight and Accountability (2/9)

A4909 provides for civil penalties against both vendors and employers.¹⁷⁴ The bill does not provide for a private right of action and does not require employers to corroborate the results of AEDS assessments or mitigate disparate impacts identified in the bias audit that the bill requires. It also does not provide candidates with a right to opt-out, raise concerns, or make appeals in connection with AEDS decisions.

174 *Id*. § 1(d).

New York Assembly Bill A567

Scope	7/14
Notice and Explanation	0.5/11
Auditing	5/11
Non-discrimination	2.5/6
Job-relatedness	0/2
Oversight and Accountability	1/9

Scope (7/14)

A567's definition of "employment decision" simply states: "Employment decision' means to screen candidates for employment."¹⁷⁵ This extends to hiring, and arguably to sourcing, promotion, and termination decisions as well, but it does not appear to cover decisions made during the course of employment. It thus covers candidates who actively apply for a job, but it is unclear whether it extends to passive candidates or current employees. Nothing in the act suggests it is meant to cover independent contractors.

A567 imports the key scope language from LL144's definition of "automated employment decision tool," specifically its coverage of automated systems that "substantially assist or replace discretionary decision making."¹⁷⁶ This plainly covers dispositive decisions and the playing meaning of "substantially assist" suggests that it should cover recommendations and other outputs that influence human decisions as well. As it stands, however, the language must be considered at best ambiguous in light of the New York City Department of Consumer and Worker Protection's narrow interpretation of that language as applying only to automated systems that play a dominant role in decision-making.

175 NY A567 § 203-f(1)(c).
176 *Id*. § 203-f(1)(a).

Notice and Explanation (0.5/11)

A567 requires employers to post a summary of the most recent audit results online, though they need not be included in job listings or communicated directly to candidates.¹⁷⁷ A567 otherwise contains no notice, disclosure, or explanation requirements.

Auditing (5/11)

A567 requires employers to conduct annual bias audits.¹⁷⁸ Employers must file a summary of each bias audit with the state labor department and publish the most recent summary on their website.¹⁷⁹ The bill imposes no audit obligations on vendors, and it is not clear whether a bias audit must be conducted before an employer first uses an AEDS. There is no requirement that the audit be conducted by an independent entity.

The audit covers disparate impact, but not disparate treatment.¹⁸⁰ It does not require an examination of validity, potential alternative selection methods, or whether an employer is using the AEDS in a manner consistent with developer specifications.

Non-discrimination (2.5/6)

A567 requires a disparate impact analysis covering all groups protected from discrimination under New York law.¹⁸¹ This arguably would require an analysis of potential barriers to accessibility and potential accommodations for disabled and pregnant workers.

The bill does not require disparate treatment analysis or use of the least discriminatory valid selection method, and does not prohibit any high-risk AEDS or subject them to additional scrutiny.

177 Id. § 203-f(2)(b).
178 Id. § 203-f(2)(a).
179 Id. § 203-f(2)(b)-(c).
180 Id.
181 Id. §§ 203-f(1)(b) and (2)(a).

Job-relatedness (0/2)

A567 does not require a validation study or any examination of whether an AEDS assessment is related to essential job functions.

Oversight and Accountability (1/9)

A567 does not require employers to corroborate the results of AEDS assessments or mitigate disparate impacts identified in the bias audit that the bill requires. The bill does not provide candidates with a right to opt-out, raise concerns, or make appeals in connection with AEDS decisions.

The bill's only enforcement mechanisms are administrative actions against an employer by the attorney general or labor commissioner.¹⁸²

182 *Id*. § 203-f(3)-(4).

New York Assembly Bill A7859

Scope	6.5/14
Notice and Explanation	3/11
Auditing	0/11
Non-discrimination	0/6
Job-relatedness	0/2
Oversight and Accountability	0/9

Scope (6.5/14)

A7859's definitions of "employment decision"¹⁸³ and "automated employment decision tool"¹⁸⁴ are identical to NY A567's in all relevant respects. The discussion of that bill's scope thus applies equally to A7859.

Notice and Explanation (3/11)

A7859 requires employers to provide covered workers with preassessment notice that an AEDS will be used.¹⁸⁵ The notice must also indicate "the job qualifications and characteristics" that the AEDS will use and the sources of data for the AEDS.¹⁸⁶ The "job qualifications and characteristics" requirement likely requires disclosure of the candidate attributes that the AEDS uses and arguably the job functions to which the AEDS is relevant, but not the method through which the AEDS measures those attributes or job qualifications.

The bill does not require any post-assessment notice or explanation to candidates, and it does not impose any recordkeeping obligations.

183 NY A7859 § 203-f(1)(b).

- 184 Id. § 203-f(1)(a)(i).
- 185 Id. § 203-f(1)(a)(ii)-(iii).

186 Id. § 203-f(2)(a).

Auditing (0/11)

A7859 does not contain any audit or impact assessment requirements.

Non-discrimination (0/6)

A7859 does not prohibit AEDS-driven discrimination or require AEDS to be tested for potential disparate treatment or impact.

Job-relatedness (0/2)

A7859 does not require a validation study or any examination of whether an AEDS assessment is related to essential job functions.

Oversight and Accountability (0/9)

A7859 contains no enforcement or accountability provisions.

New York (City) Local Law 144

Scope	5/14
Notice and Explanation	2.5/11
Auditing	4.5/11
Non-discrimination	1/6
Job-relatedness	0/2
Oversight and Accountability	1/9

Scope (5/14)

LL144's definition of "employment decision" states: "'Employment decision' means to screen candidates for employment or employees for promotion."¹⁸⁷ This extends to hiring and promotion, but it does not otherwise cover decisions made during the course of employment. It thus covers candidates who actively apply for a job and current employees, but not passive candidates. Nothing in the act suggests it is meant to cover independent contractors.

LL144's definition of "automated employment decision tool" covers automated systems that "substantially assist or replace discretionary decision making."¹⁸⁸ This plainly covers dispositive decisions. Despite the playing meaning of "substantially assist," however, New York City's Department of Consumer and Worker Protection's interpreted that language as applying only to AEDS that are dispositive or otherwise play a dominant role in the decision-making process; specifically, the ordinance applies only if the AEDS is the sole basis for a decision, is weighed more than any other factor in a decision, or is used to override human decisions.¹⁸⁹ Consequently, the ordinance does not currently cover AEDS that make recommendations or whose output significantly influences (but does not predominate in making) covered employment decisions.

188 *Id*.

189 Rules of New York City, tit. 5, § 5-300 (definition of "Automated Employment Decision Tool").

¹⁸⁷ NYC LL144 § 20-870.

Notice and Explanation (2.5/11)

LL144 requires employers to notify candidates that they will use an AEDS to assess them.¹⁹⁰ The notice must also indicate "the job qualifications and characteristics" that the AEDS will use and the sources of data for the AEDS.¹⁹¹ The "job qualifications and characteristics" requirement likely requires disclosure of the candidate attributes that the AEDS uses and arguably the job functions to which the AEDS is relevant, but not the method through which the AEDS measures those attributes or job qualifications. However, the rules interpreting LL144 allow an employer to comply with this requirement by posting the information on their website rather than providing it directly to candidates.¹⁹²

Employers must also, upon candidate request, provide information about the data sources an AEDS uses.¹⁹³ An employer has 30 days to provide this information after receiving such a request.¹⁹⁴ LL144 requires employers to post a summary of the most recent audit results online, though they need not be included in job listings or communicated directly to candidates.¹⁹⁵

The ordinance does not require any post-assessment notice or explanation to candidates, and it does not impose any recordkeeping obligations.

190 *Id.* § 20-871(b)(1).
191 *Id.* § 20-871(b)(2).
192 Rules of New York City, tit. 5, § 5-304(b)(1).
193 NYC LL144 § 20-871(b)(3).
194 *Id.*195 *Id.* § 20-871(a)(2).

Auditing (4.5/11)

LL144 requires employers to conduct a "bias audit" that examines whether an AEDS has a disparate impact on the basis of race, sex, or national origin.¹⁹⁶ An employer cannot use an AEDS unless such an assessment has been conducted "no more than one year prior to the use of the tool," which means that such assessments must be conducted both prior to first use and at least annually thereafter.¹⁹⁷ The bias audit must be "impartial" and conducted by an "independent auditor."¹⁹⁸ Under the rules interpreting LL144, an auditor for an AEDS is considered independent so long as it was not involved in using, developing, or distributing the AEDS; is not employed by the employer; and has no financial interest in the employer.¹⁹⁹ LL144 requires employers to publish a summary of the most recent bias audit on their website.²⁰⁰

LL144 does not require an examination of validity, potential alternative selection methods, or whether an employer uses an AEDS in a manner consistent with vendor/developer specifications.

Non-discrimination (1/6)

LL144's "bias audit" only requires a disparate impact analysis on the basis of race, sex, and national origin; other protected groups are not covered.²⁰¹ The ordinance does not require employers to choose the least discriminatory assessment method and it does not target high-risk selection procedures.

- 196 Id. §§ 20-871(a)(1) and 20-871 (defining "bias audit" as assessment of disparate impact "on persons of any component 1 category required to be reported by employers pursuant to" 29 C.F.R. § 1602.7); 29 C.F.R. § 1602.7 (requiring employers to file a report in conformity with the instructions for the EEOC's EEO-1 report); EEOC, 2022 EEO-1 Component 1 Data Collection Instruction Booklet, at 7 (requiring employers to include sex, race, and ethnicity data in EEO-1 reports).
- 197 NYC LL144 § 20-871(a)(1).
- 198 Id. § 20-870 (definition of "bias audit").
- 199 Rules of New York City, tit. 5, § 5-300 (definition of "Independent Auditor").
- 200 NYC LL144 § 20-871(2).
- 201 See chain of authorities cited in note 197, supra.

Job-relatedness (0/2)

LL144 does not require a validation study or any examination of whether an AEDS assessment is related to essential job functions.

Oversight and Accountability (1/9)

LL144 does not require employers to corroborate the results of AEDS assessments or mitigate disparate impacts identified in the bias audit that the ordinance requires. The ordinance does not provide candidates with a right to opt-out, raise concerns, or make appeals in connection with AEDS decisions.

The ordinance's only enforcement mechanisms are administrative actions against an employer by the attorney general or labor commissioner.²⁰²

202 *Id*. § 203-f(3)-(4).

New York Senate Bill S7623

Scope	14/14
Notice and Explanation	8/11
Auditing	9/11
Non-discrimination	6/6
Job-relatedness	2/2
Oversight and Accountability	7.5/9

Scope (14/14)

S7623's scope is coextensive with the Standards'. It extends to:

- All employment decisions covered by applicable antidiscrimination laws, including recruiting, hiring, pay, promotion, and all terms and conditions of employment.²⁰³
- Passive candidates, active applicants, employees, and independent contractors.²⁰⁴
- Scores, recommendations, and other outputs that "assist or replace decision making."²⁰⁵

Notice and Explanation (8/11)

S7623 contains strong pre-assessment notice requirements, including disclosure of the job qualifications the AEDS will assess, the candidate data or attributes used in that assessment, the data sources, and information on how workers can access accommodations or alternative selection methods.²⁰⁶ Employers

- 203 NY S7623 § 203-g(1)(h).
- 204 Id. § 203-g(1)(c) ("Candidate' means any natural person or their authorized representative seeking employment through an application, or who is screened or evaluated for recruitment..."); id. § 203-g(1)(f) (including independent contractors within the definition of "employee").
- 205 *Id*. § 203-g(1)(a).
- 206 Id. § 203-g(5)(b), (c), and (e).

must also disclose the results of the most recent bias audit,²⁰⁷ which ensures that candidates receive information on the essential job functions for which the AEDS is purportedly relevant, as well as the modeling techniques that the AEDS uses to generate its outputs.²⁰⁸

The bill does not explicitly require any post-assessment notification or explanation of adverse AEDS results. It does, however, require employers to provide candidates with an opportunity to request reevaluation when an AEDS contributes to an adverse decision, which implies that candidates must at least receive notification of such a decision.²⁰⁹

Auditing (9/11)

S7623 contains some of the strongest audit provisions among pending bills. S7623 requires an audit "conducted by an independent and impartial party with no financial or legal conflicts of interest" to be completed both prior to deployment and at least annually thereafter.²¹⁰ The audit must evaluate:

- The AEDS's validity;²¹¹
- The risk of both disparate impact and disparate treatment against protected groups, and potential limitations on accessibility for persons with disabilities;²¹² and
- Whether the AEDS is the least discriminatory valid method of assessment.²¹³

Although responsibility for the audit is assigned to employers, the bill imposes joint and several liability on employers and vendors for violations of the act, thus effectively placing vendors on the hook as well for improperly conducted audits.²¹⁴

- 207 Id. § 203-g(5)(d).
- 208 Id. § 203-g(4)(a)(iii).
- 209 Id. § 203-g(7)(a).
- 210 Id. §§ 203-g(4)(a)(i)-(ii) and (4)(b).
- 211 Id. § 203-g(4)(a)(iv).
- 212 Id. § 203-g(4)(a)(v)-(viii).
- 213 Id. § 203-g(4)(a)(ix).
- 214 Id. § 203-g(8).

The two *Standards* audit provisions that S7623 does not include will not likely hinder the audit's effectiveness. It does not require the preparation of an audit summary, instead permitting employers to choose to file either the full audit results "or an accessible summary" with the state enforcement agency.²¹⁵ It also does not require the audit to assess whether the employer uses the AEDS in accordance with the developer's specifications; this is unlikely to undercut the audit's effectiveness, however, since a validation study (which S7623 requires) should reveal any deficiencies in a deployer's implementation of an AEDS.

Non-discrimination (6/6)

S7623 includes all of the major components of the Civil Rights *Standards'* approach to nondiscrimination. Its definition of bias audit covers all forms of discrimination against all protected classes,²¹⁶ and, when an audit reveals a risk of discrimination, requires employers to demonstrate that the AEDS is the least discriminatory valid alternative before using it.²¹⁷ The bill also targets high-risk AEDS by prohibiting employers from using AEDS to assess personality or emotional state, as well as the use of facial recognition, gait, or emotion recognition technologies.²¹⁸

Job-relatedness (2/2)

S7623's audit provisions require the auditor to examine "whether those attributes and techniques are a scientifically valid means of evaluating an employee or candidate's performance or ability to perform the essential functions of a role."²¹⁹ In instances where an

- 215 Id. § 203-g(4)(a)(x).
- 216 Id. § 203-g(1)(b).
- 217 Id. §§ 203-g(4)(a)(ix) and (4)(e)(ii).
- 218 *Id*. § 203-g(6)(a)(iii) & (6)(a)(vii).
- 219 Id. § 203-g(4)(a)(iv).

audit reveals a risk of discrimination, the employer would have to demonstrate that the AEDS is "the least discriminatory method of assessing an employee's performance or ability to complete essential functions of a position."²²⁰

Oversight and Accountability (7.5/9)

S7623 contains robust internal accountability mechanisms. It would prohibit employers from making employment decisions solely on the basis of AEDS output and require "meaningful human oversight" of decisions assisted by AEDS.²²¹ Employers would have to offer candidates a "meaningful opportunity to request a reevaluation" of AEDS-driven adverse decisions "if an employee or candidate believes or suspects that the decision resulted from inaccuracy, error, or bias in the tool, that the tool was used as the sole basis for the decision, or that the employer's use of the tool in some other way violates" the act.²²² The bill also requires employers to provide workers with information on how to "request an alternative selection process or accommodation," but it is not clear whether this would require companies to actually offer such an alternative or accommodation if requested.²²³

In terms of external accountability, S7623 provides for a private right of action and makes vendors and employers jointly and severally liable for damages.²²⁴

The bill does not require employers to provide candidates with the opportunity to raise concerns prior to assessment, but this omission is not likely to hinder S7623's effectiveness given the strength of the bill's other accountability provisions.

- 220 Id. § 203-g(4)(e)(ii).
- 221 Id. § 203-g(6)(b)(i).
- 222 Id. § 203-g(7)(a).
- 223 Id. § 203-g(5)(e).
- 224 *Id.* § 203-g(8). Like the *Standards*, the bill would require the vendor to assume sole responsibility for damages for employers with fewer than 50 employees. Id. § 203-g(8)(b).

Pennsylvania House Bill No. 1729

Scope	12/14
Notice and Explanation	3.5/11
Auditing	5/11
Non-discrimination	2.5/6
Job-relatedness	0/2
Oversight and Accountability	1/9

Scope (12/14)

HB1729 has a broad scope. The bill defines "automated employment decision tool" as a system that "automatically filter[s] individuals or prospective individuals for employment or for any term, condition or privilege of employment."²²⁵ This suggests coverage of all decisions regarding active applicants and employees, but the language is somewhat ambiguous regarding sourcing/recruitment activities and passive candidates.²²⁶ The same definition also covers the use of tools "in a way that establishes a preferred individual or individuals," and omits only those systems that do not "automate, support, or substantially assist or replace discretionary decision-making processes."²²⁷ This language indicates that the bill covers the use of AEDS that make recommendations or that play a non-dispositive role in employment decisions.

The bill contains no language suggesting it covers independent contractors.

- 225 PA HB1729 § 1(bb). See also id. § 1(dd) (defining "employment decision" as "screen[ing] individuals for employment or promotion or...otherwise help[ing] to decide compensation or any other terms, conditions or privileges of employment").
- 226 This is in slight contrast to NJ A4909, which contains practically identical language but uses the phrase "candidates or prospective candidates" instead of "individuals or prospective individuals." *Compare id., with* NJ A4909 § 1(a). A "prospective candidate," particularly when used in the same phrase as the bare term "candidate," most likely refers to persons who have not yet submitted an application for a position. The meaning of the term "prospective individual" is less obvious.
- 227 PA HB1729 § 1(bb).

Notice and Explanation (3.5/11)

HB1729 requires employers to provide workers with pre-assessment notice that it will use an AEDS to assess them.²²⁸ This notice must also include information "explaining how the [AEDS] works and what general types of characteristics it uses to evaluate individuals for an employment decision."²²⁹ Employers must also publish a summary of the most recent bias audit on their website but need not include a link to those results in job postings or otherwise communicate audit results directly to candidates.²³⁰

The bill would not require employers to disclose or explain the outcome of an AEDS assessment, and it does not impose any recordkeeping requirements.

Auditing (5/11)

HB1729 requires employers to conduct a "bias audit" that examines whether an AEDS has a disparate impact on groups protected by Pennsylvania's antidiscrimination laws.²³¹ An employer cannot use an AEDS unless such an assessment has been conducted "no more than one year prior to the use of the tool," which means that such assessments must be conducted both prior to first use and at least annually thereafter.²³² The bias audit must be "impartial" and conducted by an "independent auditor," but the bill does not define what "independent" means in this context.²³³

It does not require an examination of validity, potential alternative selection methods, or whether an employer uses an AEDS in a manner consistent with vendor/developer specifications.

228 Id.
229 Id. § 2(a)(1).
230 Id. § 2(b).
231 Id. §§ 1(cc) and 2(b).
232 Id. § 2(b).
233 Id.

Non-discrimination (2.5/6)

HB1729's bias audit requirements cover all groups protected from discrimination under state law, but the required bias audit need only include an analysis of disparate impact, not disparate treatment.²³⁴ This arguably would require an examination of potential accessibility barriers and necessary accommodations. The bill does not require employers to use the least discriminatory valid selection method and does not prohibit any high-risk AEDS or subject them to additional scrutiny.

Job-relatedness (0/2)

HB1729 does not require a validation study or any examination of whether an AEDS assessment is related to essential job functions.

Oversight and Accountability (1/9)

HB1729 requires companies to obtain affirmative consent from workers before subjecting them to an AEDS assessment—an opt-in requirement that provides even stronger protection than an optout right.²³⁵ The bill does not, however, provide candidates with a right to raise concerns or make appeals in connection with AEDS decisions. It does not require employers to corroborate AEDS decisions or mitigate disparate impacts identified during audits.

HB1729 provides for civil penalties against employers who violate the act.²³⁶ It does not provide for a private right of action and does not explicitly subject vendors to any liability.

234 *Id.* § 1(cc).
235 *Id.* § 2(a)(3).
236 *Id.* § 3(b).

Vermont House Bill 114

Scope	12.5/14
Notice and Explanation	1.5/11
Auditing	6.5/11
Non-discrimination	4/6
Job-relatedness	1.5/2
Oversight and Accountability	3.5/9

Scope (12.5/14)

H.114 covers "employment-related decisions," which it defines broadly as decisions that affect "compensation, benefits, or terms and conditions of employment" or relate to "discipline, evaluation, promotion,...termination[, or] the hiring of an individual or employee for a position or a job."²³⁷ The only ambiguity is whether this definition extends to sourcing and recruitment decisions. Read literally, such decisions "relate" to hiring, but given that the bill does not otherwise refer to advertising or recruitment, it is not clear whether such activities are intended to be in-scope. For similar reasons, although the definition clearly extends to hiring decision regarding active applicants, it is not clear whether it extends to passive candidates.

The bill defines "employee" as "an individual who, in consideration of direct or indirect gain or profit, is employed by an employer."²³⁸ This arguably, but not conclusively, covers independent contractors.

237 VT H.114 § 1(a)(8). 238 *Id*. § 1(a)(6).

Notice and Explanation (1.5/11)

As previously noted, this bill's text contains a reference to a notice section, but the notice section itself appears to have been omitted.²³⁹ The bill does require audit results to be provided to employees upon request.²⁴⁰ Similarly, the bill requires employers to provide an employee with "any data that relates to the employee that was produced or utilized by [an AEDS] used by the employer."²⁴¹ This would appear to require employers to provide the results of any AEDS assessment as well as the candidate-related factors upon which the decision was based.

Auditing (6.5/11)

H.114 requires impact assessments that examine the risk of errors (though not a full validity analysis) as well as the risk of discrimination and other violations of "employees' legal rights."²⁴² Responsibility for impact assessments falls on the employer, and the impact assessments must be conducted both prior to deployment and after any "significant change or update is made" to the AEDS."²⁴³ It does not explicitly require an examination of potential barriers to accessibility or necessary accommodations, although such an analysis is arguably required by the broad requirement that employers evaluate the risk of violations of employees' legal rights. The impact assessment must also evaluate "the necessity for the system, including reasons for utilizing the system to supplement nonautomated means of decision making," which means employers must examine potential alternatives to AEDSs.²⁴⁴

239 See supra note 29.
240 Id. §§ 1(g)(2).
241 Id. § 1(j).
242 Id. §§ 1(g)(1)(E)(i)-(iii).
243 Id. §§ 1(g)(1) and (g)(3).
244 Id. § 1(g)(1)(D).

Non-discrimination (4/5)

The bill's audit provisions cover all forms of discrimination, but it is not clear that the list of protected classes is exhaustive of Vermont's antidiscrimination laws.²⁴⁵ Because disability is one of the named protected groups, this arguably requires assessing barriers to accessibility and potentially necessary accommodations as well. The bill targets several high-risk selection procedures, specifically barring employers from making "predictions about an employee's emotions, personality, or other sentiments"²⁴⁶ and from using facial, gait, or emotion recognition technologies.²⁴⁷

Job-relatedness (1.5/2)

H.114 does not explicitly require employers to conduct a validity study, but its audit provisions require employers to examine the risk of "errors."²⁴⁸ The bill prohibits employers from making "predictions about an employee's behavior that are unrelated to essential job functions."²⁴⁹

Oversight and Accountability (3.5/9)

H.114 states that employers cannot "solely rely" on AEDS outputs in making covered employment decisions.²⁵⁰ The bill does not, however, provide candidates with a right to opt-out, raise concerns, or make appeals in connection with AEDS decisions. While the bill's audit provisions require employers to describe "measures taken by the employer to address or mitigate the risks" discovered during an audit, it does not mandate that employers actually resolve such risks prior to deployment.²⁵¹

245 See id. § 1(g)(1)(E)(ii).
246 Id. § 1(f)(1)(D).
247 Id. § 1(h).
248 Id. § 1(g)(1)(E).
249 Id. § 1(f)(1)(B).
250 Id. § 1(f)(2)(A).
251 Id. § 1(g)(1)(F).

In terms of external accountability, the bill incorporates the enforcement provisions of Vermont's antidiscrimination laws,²⁵² which include a private right of action.²⁵³ These provisions impose liability on employers, but it is does not appear they would extend to AEDS vendors. On the other hand, the bill's definition of "employer" includes "any agent or contractor acting on the employer's behalf," which arguably creates a route for workers to join a vendor in an action against an employer.²⁵⁴

252 *Id.* § 1(I).
253 Vt. Stat. tit. 21 § 495b(b).
254 *See id.* § 1(a)(7).

Washington House Bill 1951

Scope	10/14
Notice and Explanation	0/11
Auditing	6/11
Non-discrimination	3.5/6
Job-relatedness	0/2
Oversight and Accountability	2/9

Scope (10/14)

The scope provisions of WA HB 1951 are identical to those of CA AB 331 in all material respects, and the analysis of that bill's scope in this appendix—including how the bill's definition of "automated decision tool" severely undercuts the bill's effective scope—is equally applicable here.

The relevant scope provisions of WA HB 1951 are:

- Covered employment decisions: § 1(4)(a)
- Covered workers: § 1(4)(a)
- Covered uses in decision-making processes: § 1(3)

Notice and Explanation (0/11)

HB 1951 would require no disclosures to candidates whatsoever, either before or after an AEDS assessment. The bill would require developers to publish statements about the "types" of AEDSs they sell, but no information that would help workers know whether a particular employer is using that developer's AEDSs, much less whether and how an employer might use an AEDS to assess them.²⁵⁵ The bill does allow the state Attorney General to request



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the results of the impact assessment, but those results would be exempt from disclosure under public records laws.²⁵⁶ This would do nothing except ensure that workers remain in the dark about ADS used to make decisions about them.

Auditing (6/11)

HB 1951 would require employers to conduct an audit (termed "impact assessment" in the bill) both before deployment and at least annually thereafter.²⁵⁷ There is no independence or impartiality requirement for audits.

The bill's audit provisions would require employers to assess "the reasonably foreseeable risks" of both disparate treatment and disparate impact discrimination²⁵⁸ and whether the employer's use of the AEDS is consistent with the developer's specifications.²⁵⁹ The impact assessment must include a "description of how the automated decision tool has been or will be evaluated for validity or relevance," but does not actually require a validation study to be completed.²⁶⁰

Deployers would also have to conduct impact assessments separate from the deployer's.²⁶¹ The bill completely exempts employers with fewer than 50 employees from the scope of the audit requirements, meaning that neither the deployer nor the developer would need to conduct any form of testing under the bill if the employer using the AEDS is below that threshold.²⁶²

- 256 Id. § 2(4)-(5).
- 257 *Id.* § 2(1). Additional impact assessments would be required if a "significant update" is made to the ADS. Id. § 2(3).
- 258 Id. §§ 1(1) & 2(1)(e).
- 259 Id. § 2(1)(d).
- 260 Id. § 2(1)(h).
- 261 Id. §§ 2(1) & 2(2).
- 262 *Id*. § 2(6).

Non-discrimination (3.5/6)

The bill covers all forms of discrimination under Washington law, but does not explicitly state that employers or developers need to explore whether disabled candidates might require accommodation.²⁶³ Additionally, the bill does not require employers to explore alternative selection procedures, much less choose the least discriminatory alternative. The bill also includes no specific restrictions on high-risk selection tools.

Job-relatedness (0/2)

As noted previously, while the employer audit must state whether or how an AEDS has been or will be tested for validity or relevance, there is no specific validation requirement in the bill.²⁶⁴ Additionally, the bill does not require AEDS to measure only essential job functions.

Oversight and Accountability (2/9)

The bill's accountability requirements are quite weak. There is no requirement that developers or deployers mitigate risks of algorithmic discrimination identified during the course of an audit. Candidates have no right to raise concerns, appeal the result of AEDS-driven decisions, or opt-out of AEDS decision-making.

The closest thing to an internal accountability mechanism is the bill's requirement that developers publish a statement regarding "[h]ow the developer manages the reasonably foreseeable risks of algorithmic discrimination that may arise from the use of the automated decision tools it currently makes available to others."²⁶⁵ This vague provision gives developers considerable leeway

263 *Id*. § 1(1). 264 *Id*. § 2(1)(h). 265 *Id*. § 4(2). regarding what information to include. Moreover, employers—who are often the only entities that candidates interact with—have no similar obligation. Because the bill does not require candidates to receive any notice before being subjected to AEDS assessment, it is unlikely candidates will read or even be aware of statements published under this provision.

The bill also does not provide a private right action and, in fact, carefully carves a private right of action provision out of its enforcement section, which otherwise incorporates the enforcement provisions of Washington's consumer protection laws.²⁶⁶ The only external accountability appears to be through administrative actions for civil penalties brought by the Attorney General, not the state's labor or civil rights enforcement agencies—hardly a recipe for effective enforcement.²⁶⁷ The bill allows developers and deployers to escape even those penalties if they cure an alleged violation within 45 days of receiving a notice of action from the attorney general.²⁶⁸

266 See id. § 5(1)(a) (stating, "An action to enforce this chapter may not be brought under RCW 19.86.090," which provides for a private right of action for violations of Washington's consumer protection act).

267 See id.

268 Id. § 5(1)(b).

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