

LITIGATING GOVERNMENTAL USE OF AI

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In the last decade courts across the country have ruled on cases related to the use of AI by governmental bodies. But while legal disputes have served as trailblazer for relevant policy documents and have been used by scholars to support specific arguments, this litigation has not been the subject of a systematic analysis. This paper fills this gap and provides a quantitative and qualitative study of how courts deal with litigation on the use of AI by governmental bodies. The analysis leads to an overarching conclusion, namely that judicial decisions almost exclusively rely on procedural grounds—specifically those concerning due process infringements—thus suggesting that substantial issues are typically addressed through procedural solutions. In turn, these procedural issues consist of six violations: lack of adequate notice and explanation, lack of contestability, lack of human oversight, lack of notice and comment procedures, lack of assessment procedures, and denial of the right to access information. By revealing this tendency and by identifying the six procedural violations, the analysis ultimately provides a taxonomy of the minimum requirements that any governmental body should comply with to shield its use of algorithmic systems from judicial review.

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INTRODUCTION

The advent of artificial intelligence (AI) holds the promise of increased efficiency, extraordinary benefits, and lower costs of government systems.¹ Government bodies are increasingly relying on AI to handle public functions in a variety of settings.² Today, algorithmic systems help governments to administer social services programs, including the allocation of medical, food or welfare benefits, distribute public resources, and support enforcement activities. However, AI has also proven to be unsafe, revealing embedded patterns of gender, racial, and income discrimination.³

These harmful outcomes have not gone unnoticed. Scholars and policymakers have raised serious concerns over the use of algorithmic systems and have been strenuously working to address these urgent challenges.

Scholars have primarily focused on two solutions: technological or regulatory oversight, and technological due process. Danielle Citron first called for a new model of technological due process to address the risks posed by algorithmic decision-making and protect the interests of individuals in an era of automation.⁴ Citron and Frank Pasquale further developed this argument, suggesting that procedural protections should also apply to individual decisions based on algorithmic predictions.⁵ Other scholars have called for specific procedural safeguards in the implementation of algorithmic systems, such as the right to contest,⁶ transparency and access to information,⁷ adequate notice and

¹ See generally Cary Coglianese, *Administrative Law in the Automated State*, 150 DAEDALUS, 104, 106–07 (2021); Danielle K. Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249, 1251–52 (2008).

² See, e.g., Cary Coglianese & Lavi M. Ben Dor, *AI in Adjudication and Administration*, 86 BROOK. L. REV. 791, 814 (2020).

³ See generally Danielle K. Citron & Frank Pasquale, *The Scored Society: Due Process for Automated Predictions*, 89 WASH. L. REV. 1, 13–16 (2014); Kate Crawford & Jason Schultz, *Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms*, 55 B.C. L. REV. 93, 99–101 (2014); Solon Barocas & Andrew D. Selbst, *Big Data's Disparate Impact*, 104 CALIF. L. REV. 671, 673–74 (2016); Ryan Calo & Danielle K. Citron, *The Automated Administrative State: A Crisis of Legitimacy*, 70 EMORY L. J. 797, 800 (2021).

⁴ Citron, *supra* note 1, at 1301.

⁵ Citron & Pasquale, *supra* note 3, at 19.

⁶ Margot E. Kaminski & Jennifer M. Urban, *The Right to Contest AI*, 121 COLUM. L. REV. 1957, 1973 (2021).

⁷ Cary Coglianese & David Lehr, *Transparency and Algorithmic Governance*, 71

explanation,⁸ and the provision of a mindful human oversight.⁹ Lastly, other scholars have proposed more systematic measures, such as ex-ante testing, design requirements, and impact assessments.¹⁰

On the other hand, significant strides have been made by policymakers in addressing these concerns through the issuance of policy documents that establish general principles for the design, deployment, and use of AI-based systems.¹¹ In 2020, an executive order on “Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government”¹² outlined nine principles directing federal agencies to foster public trust and confidence in the use of AI to perform public functions. In 2022, the White House released the “Blueprint for an AI Bill of Rights” white paper, a document intended to provide practical guidance to government agencies and tech companies in developing automated systems. The Blueprint identifies five non-binding principles to minimize potential harms stemming from certain

ADMIN. L. REV. 1, (2019); David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey & Mariano-Florentino Cuéllar, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies* (2020), <https://law.stanford.edu/wp-content/uploads/2020/02/ACUS-AI-Report.pdf> [<https://perma.cc/6M4N-ECVL>].

⁸ Citron & Pasquale, *supra* note 3, at 27–28.

⁹ Rebecca Crotoof, Margot E. Kaminski & Nicholson W. Price, *Humans in the Loop*, 76 VAND. L. REV. 429, (2023).

¹⁰ See generally Deven R. Desai & Joshua A. Kroll, *Trust But Verify: A Guide to Algorithms and the Law*, 31 HARV. J.L. & TECH. 1, 11, 35 (2017); Margot Kaminski, *Binary Governance*, 92 S. CAL. L. REV. 1529, 1564 (2019); David Freeman Engstrom & Daniel E. Ho, *Algorithmic Accountability in the Administrative State*, 37 YALE. J. ON REG. 800, 847 (2020); Joshua A. Kroll, Joanna Huey, Solon Barocas, Edward W. Felten, Joel R. Reidenberg, David G. Robinson & Harlan Yu, *Accountable Algorithms*, 165 U. PA. L. REV. 633, 699 (2017); Deirdre K. Mulligan & Kenneth A. Bamberger, *Procurement as Policy: Administrative Process for Machine Learning*, 34 BERKELEY TECH. L.J. 773, 814–15 (2019).

¹¹ On April 25, 2023, the Consumer Financial Protection Bureau, the Department of Justice Civil Rights Division, the Equal Employment Opportunity Commission, and the Federal Trade Commission had issued a joint statement on enforcement efforts against discrimination and bias in automated systems. See generally Rohit Chopra, Kristen Clarke, Charlotte A. Burrows & Lina M. Khan, *Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems* (2023), https://www.ftc.gov/system/files/ftc_gov/pdf/EEOC-CRT-FTC-CFPB-AI-Joint-Statement%28final%29.pdf. See also Jessica Fjeld et al., *Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-Based Approaches to Principles for AI*, BERKMAN KLEIN CTR. RSCH. PUBL'N, (Jan. 15, 2020), <http://nrs.harvard.edu/urn-3:HUL.InstRepos:42160420>; Nestor Maslej et al., *The AI Index 2023 Annual Report*, INST. FOR HUMAN-CENTERED AI, STANFORD UNIV., 283–84, 291, (Apr. 2023), https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI_AI-Index-Report_2023.pdf.

¹² Exec. Order No. 13,609 85 Fed. Reg. 78939 (Dec. 3, 2020).

applications of AI and protect people from technological threats.¹³ In late 2023, President Biden issued Executive Order 14,100 aimed at achieving “a safe, secure and trustworthy development and use of Artificial Intelligence.”¹⁴ In addition to aiming to prevent irresponsible uses of AI across different sectors and strengthening American leadership on AI abroad, the executive order promotes the development of a responsible and effective governmental use of AI.¹⁵ The order outlines a series of procedural measures designed to advance equity and protect civil rights in three critical areas: criminal justice, government programs and benefits administration, and housing and consumer financial markets.¹⁶ Governments are urged to promote procedural safeguards in the implementation of algorithmic systems, including providing notice to recipients, ensuring human customer support, guaranteeing appeal processes to human reviewers, and enabling audits and regular evaluations, among other measures.¹⁷

Meanwhile, courts across the country have already been called upon to address challenges arising in the public and private sectors related to the implementation of algorithmic systems. Relevant areas, such as government programs and benefit administration, education, housing, and criminal justice, have been increasingly interested in AI-related

¹³ The White House, *Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People* (2022), <https://www.whitehouse.gov/ostp/ai-bill-of-rights/> (stating five non-binding principles set by the Blueprint: save and effective systems; algorithmic discrimination protections; data privacy; notice and explanation; human alternatives, consideration, and fallback) [<https://perma.cc/T2M5-XS3N>]. See Emmie Hine & Luciano Floridi, *The Blueprint for an AI Bill of Rights: In Search of Enaction, at Risk of Inaction*, 33 MINDS AND MACH. 285, 287 (2023).

¹⁴ Exec. Order No. 14,110, 88 Fed. Reg. 75,191 (Oct. 30, 2023). Most recently, the White House has sought to address the risks of AI use by the federal government by issuing a memorandum calling for federal agencies to designate chief AI officers, develop AI policy compliance plans, and release annual reports on AI use cases. See generally Shalanda D. Young, *Memorandum for the Heads of Executive Departments and Agencies: Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence*, OFF. OF MGMT. AND BUDGET (Mar. 28, 2024), <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>.

¹⁵ Exec. Order No. 14,110, 88 Fed. Reg. at 75,211, 75,218 (Sec. 7 Advancing Equity and Sec. 10 Advancing Federal Government Use of AI).

¹⁶ Exec. Order No. 14,110, 88 Fed. Reg. at 75,211–75,213 (Sec. 7.1 Strengthening AI and Civil Rights in the Criminal Justice System, Sec. 7.2 Protecting Civil Rights Related to Government Benefits and Programs, Sec. 7.3 Strengthening AI and Civil Rights in the Broader Economy).

¹⁷ Exec. Order No. 14,110, 88 Fed. Reg. at 75,213 (Sec. 7.2(b)(i)(ii)).

litigation in recent years.¹⁸ Although courts have been playing a crucial role in providing timely and effective responses to challenges related to unlawful discrimination and other harms due to the use of algorithmic systems, they are still overlooked. Legal disputes have often served as trailblazers for relevant policy documents and have been used in scholarly analyses to support specific arguments.¹⁹ However, the AI-related litigation has not yet been the subject of a systematic analysis.²⁰

This paper aims to fill this gap and contribute to the discussion on the governmental use of AI by providing a comprehensive and systematic overview of the related litigation. By providing a quantitative and qualitative analysis of how courts deal with litigation on the use of AI by governmental bodies, the paper aims to assess the presence of patterns and common tendencies in judicial outcomes, as well as to provide novel insights into the judicial approach, particularly when civil rights are at stake.

The analysis leads to an overarching conclusion: judicial decisions almost exclusively rely on procedural grounds—specifically those concerning due process infringements—while substantive aspects, such as arbitrariness, lack of scientific basis, or unfairness, remain in the background. In turn, the procedural issues consist of six violations: lack of adequate notice and explanation, lack of contestability, lack of human oversight, lack of notice and comment procedures, lack of assessment procedures, and denial of the right to access information.

¹⁸ See, e.g., Andrew D. Selbst, Suresh Venkatasubramanian & I. Elizabeth Kumar, *Deconstructing Design Decisions: Why Courts Must Interrogate Machine Learning and Other Technologies*, 85 OHIO ST. L.J. 415, 435–36 (2024); Elif Kiesow Cortez & Nestor Maslej, *Adjudication of Artificial Intelligence and Automated Decision-Making Cases in Europe and the USA*, 14 EUR. J. RISK REGUL., 457–58 (2023); see Calo & Citron, *supra* note 3, at 818–32; Coglianese & Ben Dor, *supra* note 2, at 833; Hannah Bloch-Wehba, *Access to Algorithms*, 88 FORDHAM L. REV. 1265, 1267 (2020); Aziz Z. Huq, *Constitutional Rights in the Machine-Learning State*, 105 CORNELL L. REV. 1875, 1895–97 (2020); see Rashida Richardson, Jason M. Schultz & Cincent M. Southerland, *Litigating Algorithms 2019 US Report: New Challenges to Government Use of Algorithmic Decision Systems*, AI NOW INST. 5–24 (Sept. 2019), <https://ainowinstitute.org/wp-content/uploads/2023/04/litigatingalgorithms-2019-us.pdf>; see *Litigating Algorithms: Challenging Government Use of Algorithmic Decision Systems*, AI NOW INST. 5–15 (Sept. 2018), <https://ainowinstitute.org/wp-content/uploads/2023/04/litigatingalgorithms.pdf>.

¹⁹ See, e.g., Kate Crawford & Jason Schultz, *AI Systems as State Actors*, 119 COLUM. L. REV. 1941, 1948 (2019); Bloch-Wehba, *supra* note 18, at 1274; Calo & Citron, *supra* note 3, at 818–32; Aziz Z. Huq, *supra* note 18, at 1892, 1948–52.

²⁰ This is likely due to the relative shortage of cases. However, in recent years litigation has exponentially increased. In addition, researchers have started to collect and organize these cases in databases. See *infra* notes 22–23.

These findings have (at least) two broad implications.

First, the fact that judicial decisions related to the governmental use of AI primarily focus on procedural grounds does not neglect the existence of other substantive aspects, e.g., unfairness, inaccuracy, or irrationality. Rather, the opposite: it suggests that substantive issues are typically addressed through procedural solutions, which allow courts to indirectly tackle broader concerns. One straightforward reason for this trend is that claims based on due process are easier to litigate and address in sentencing. In addition, this judicial trend aligns with the legal scholarship that advocates for procedural solutions to address substantial concerns, as well as with policy documents that emphasize the importance of procedural safeguards to promote equity and address unlawful discrimination.²¹ Because courts decide actual cases, their indication is extremely valuable in providing guidance on how these procedural adjustments might be operationalized in practice.

Second, by identifying the six procedural violations, the analysis provides a taxonomy of the minimum requirements that any governmental body should comply with to shield its use of algorithmic systems from judicial review. With this regard, it is worth noting that the six procedural violations that emerge by analyzing the cases are substantially aligned with the procedural safeguards outlined by Executive Order 14,110.²² This taxonomy can thus serve as a compass for governmental bodies aimed at ensuring compliance with future regulatory initiatives crafted by the executive order, such as the recent memorandum released by the Office of Management and Budget (OMB).²³

The paper is divided in two main parts. Based on a sample of 128 cases, the first part provides some descriptive evidence on the difference between private and public disputes and describes trends over time. This part offers specific insights into procedural aspects, with special attention given to patterns associated with collective action, including class actions, and exploring the role played by advocacy organizations. The second part then proceeds with a more in-depth qualitative assessment of the selected forty-four AI-related public cases providing a cluster of judicial outcomes and an analysis of the main challenges.

²¹ See *supra* notes 4–14.

²² Exec. Order No. 14,110, 88 Fed. Reg. at 75,211 (Sec. 7.1(B), Sec. 7.2(b)(i)(ii)).

²³ See e.g., Young, *supra* note 14, at 19–24.

1. Methodology

To quantitatively and qualitatively assess how courts decide AI-related cases, I rely on a sample of cases filed in the United States at both state and federal level since 2010. I select the cases primarily from two databases. The first is the “AI Litigation Database,” collected by George Washington University.²⁴ This database provides comprehensive information on ongoing and completed litigation involving artificial intelligence, covering a total of ninety-one cases. The second source is the AIAAIC Repository (AI, Algorithmic, and Automation Incidents and Controversies), which delves into AI-related incidents and controversies, contributing to an additional thirty-seven ongoing and completed cases.²⁵ Together, these databases consist of 128 cases.

Two caveats are worth a mention. First, this sample is not representative of all AI-related litigation in the United States.²⁶ However, the collected cases provide scope for an analysis of the most discussed cases, as well as judicial trends across major litigation areas.

²⁴ See *DAIL—the Database of AI Litigation*, GEO. WASH. UNIV., <https://blogs.gwu.edu/law-eti/ai-litigation-database-search/> (last visited on Dec. 1, 2023) [<https://perma.cc/YEL9-QKF6>]. On this date the database listed a total of 100 cases. However, nine of these cases have been excluded because they involved international litigation, were filed before 2010, or were assessed as irrelevant for this analysis.

²⁵ See *AAAIC Repository*, AIAAIC, <https://www.aiaaic.org/aiaaic-repository> (last visited Dec. 1, 2023) [<https://perma.cc/VPG3-Q2MJ>]. From this database I selected thirty-seven additional cases. These additional cases were selected filtering for “lawsuit filing/litigation,” followed by a more in-depth analysis of the filtered cases for the ultimate definition of the relevant ones for the purpose of this analysis.

²⁶ Just consider that the AI Index Report 2023, sponsored by Stanford University, identifies 110 federal and state AI-related cases in 2022 alone. However, the study acknowledges that some of the cases counted may not directly address issues related to AI jurisprudence, relying on initial research with keywords, such as *artificial intelligence*, *machine learning*, and *automated decision-making*. See Maslej et al., *supra* note 11, at 291–295; Additionally, the Berkman Klein Center research project identifies an additional seventy criminal cases involving the use of risk assessment tools; however, in the cases collected in the database, the use of algorithmic software is not always discussed by the court. See *Risk Assessment Tool Database*, BERKMAN KLEIN CTR., <https://criminaljustice.tooltrack.org/caselaw> [<https://perma.cc/V3BK-RCUF>].

Second, the sample includes both closed and ongoing litigation.²⁷ This means that for certain disputes only limited information, such as orders or preliminary injunctions, are available. For other cases, the data collected may be based on rulings from lower courts, and for litigation filed very recently, information may be entirely absent. Furthermore, the sample also includes some disputes that were settled.

I divide the sample into two types: cases between private parties and cases where private plaintiffs take legal action against governmental bodies.

Table I: Sample Division

| Private cases | 84 | Public cases | 44 |
|--------------------------|----|----------------------------|----|
| Generative AI | 18 | Allocating social services | 8 |
| Biometrics | 24 | Detecting fraud | 6 |
| Autonomous vehicles | 8 | Law enforcement | 26 |
| Discriminatory decisions | 17 | Other uses | 4 |
| N/A | 17 | N/A | 0 |

Private cases are the predominant subset and consist of eighty-four cases. In turn, these cases can be classified into four clusters of disputes concerning: (i) the use of generative AI, mostly involving intellectual property infringement or privacy violations; (ii) the unlawful collections and use of biometric data; (iii) claims for damages related to accidents caused by autonomous vehicles; and (iv) the discriminatory use of AI in hiring processes, housing tenancy, or consumer financial products, often entailing the assignment of lower scores to specific groups.

Forty-four public cases relate to the use of AI technologies by federal, state, and municipal bodies performing public functions. Ranging from civil to criminal cases, I identify four clusters for these disputes as well, as they concern: (i) the use of algorithms to improve the administration of social services programs and the allocation of public resources, including the allocation of medical, food, or welfare benefits; (ii) the use of digital welfare fraud detection systems in the

²⁷ I considered the closed disputes with at least one court ruling and not under appeal. I considered settlements litigation where a settlement is authorized by the court, or the private agreement is recalled by the court to dismiss the case. I considered ongoing cases still pending. The data reflect developments through April 2024.

administration of social and unemployment benefits; (iii) the use of algorithm to facilitate enforcement activities, including risk assessments, police surveillance, crime forecasting, predictive policing, and forensic analysis; and (iv) other uses, including algorithm-based systems to evaluate public teachers or tax calculations.

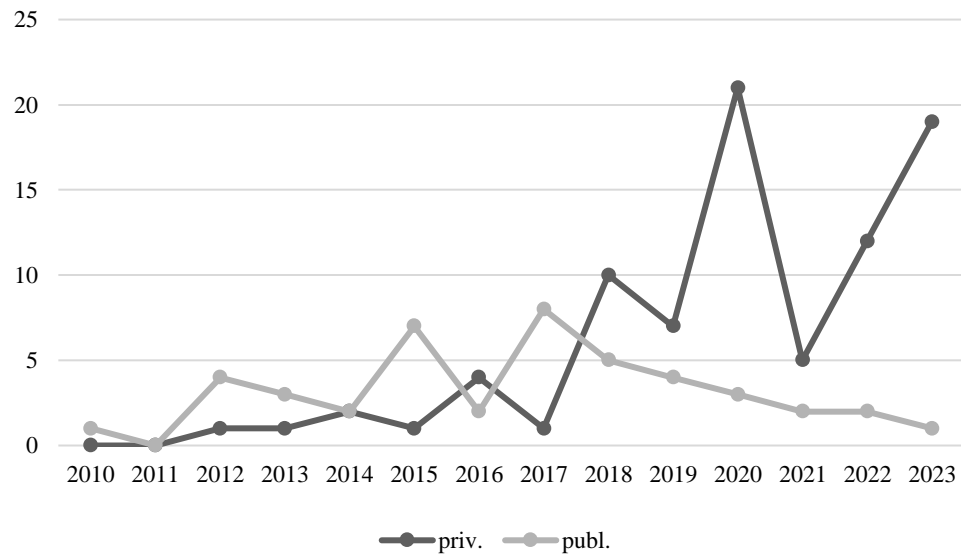
2. Descriptive Evidence

In what follows, I first provide some descriptive evidence related to the main sample (128 cases) and then a qualitative assessment of the subsample of public cases (forty-four cases).

The first part of this section highlights trends related to both public and private disputes filed over time. The second part offers specific insights into procedural aspects, focusing on the proceeding stage and distinguishing among cases that are settled, closed, or still ongoing. Special attention is given to patterns associated with collective action, including class actions, and exploring the role played by advocacy organizations.

2.1 AI Cases Over Time

Figure I—Private and Public Cases (2010–2023)



While public cases tend to decline over time, Figure I shows a significant surge in private disputes starting from 2020, with a second major peak in 2023. The first increase (2020) is attributable to a growing emphasis on biometric privacy measures at state and municipal levels.

This is reflected in the sample, with twelve lawsuits filed against Clearview AI solely in 2020.²⁸ These legal actions arose from allegations that the defendant unlawfully collected, captured, obtained, distributed, and profited from citizens' biometric data, thereby contravening the Biometric Information Privacy Act (BIPA).²⁹ By 2021, nine of these cases were consolidated in the Northern District of Illinois as part of a multidistrict litigation.³⁰ Meanwhile, similar lawsuits

²⁸ Complaint, *Am. Civ. Liberties Union v. Clearview AI, Inc.*, No. 20-CH-4353 (Cir. Ct. Cook County, Sept. 25, 2020); Complaint, *Calderon v. Clearview AI, Inc.*, No. 1:20-cv-01296 (S.D.N.Y. Feb. 13, 2020); Complaint, *Broccolino v. Clearview AI, Inc.*, No. 1:20-cv-02222, (S.D.N.Y. Mar. 12, 2020); Complaint, *Burke v. Clearview AI, Inc. et al*, No. 1:20-cv-03104 (S.D.N.Y. Apr. 17, 2020); Complaint, *Hall v. CDW Government LLC*, No. 1:20-cv-00846 (N.D. Ill. Feb. 5, 2020); Complaint, *John v. Clearview AI, Inc.*, No. 1:20-cv-03481 (S.D.N.Y. May 4, 2020); Complaint, *Marron v. Clearview AI, Inc.*, No. 1:20-cv-02989 (N.D. Ill. May 20, 2020); Complaint, *McPherson v. Clearview AI, Inc.*, No. 1:20-cv-03053 (S.D.N.Y. Apr. 15, 2020); Complaint, *Mutnick v. Clearview AI, Inc.*, No. 1:20-cv-00512 (N.D. Ill. Jan. 22, 2020); Complaint, *Carmean v. Macy's Retail Holdings, Inc.*, No. 1:20-cv-04589 (N.D. Ill. Aug. 5, 2020); Complaint, *Roberson v. Clearview AI, Inc.*, No. 1:20-cv-00111 (E.D. Va. Feb. 2, 2020); Complaint, *Thornley v. Clearview AI, Inc.*, No. 1:20-cv-03843 (N.D. Ill. Jun. 30, 2020); Complaint, *State v. Clearview AI, Inc.*, No. 226-3-20, 2023 Vt. Super. LEXIS 143 (Vt. Super. Ct. Mar. 10, 2020).

²⁹ The Biometric Information Privacy Act (BIPA), enacted by Illinois in 2008 requires that companies receive users' informed consent before processing their biometric data. Unlike many other privacy laws, BIPA grants a private right of action to aggrieved persons when biometric data is collected in violation of the Act, with liquidated damages ranging from \$1,000 for each negligent violation to \$5,000 for each intentional or reckless violation. In 2019, the Illinois Supreme Court, in *Rosenbach v. Six Flags Entertainment Corp.*, established that a plaintiff can qualify as an "aggrieved person" under BIPA and "be entitled to liquidated damages and injunctive relief" without needing to allege actual injury, leading to a rise in legal disputes. 129 N.E.3d 1197 (Ill. 2019); In May 2020, the U.S. Court of Appeals for the Seventh Circuit, in *Bryant v. Compass Group USA, Inc.*, clarified that such "aggrieved person" has suffered an injury-in-fact sufficient to support standing under BIPA Section 15(b). 958 F.3d 617 (7th Cir. 2020); In February 2023, the Illinois Supreme Court ruling in *Cothron v. White Castle System, Inc.*, determined that a separate claim arises under BIPA each time a private entity scans or transmits a person's biometric identifier or information in violation of the law. 216 N.E.3d 918 (Ill. 2023); *See Is Biometric Information Protected by Privacy Laws?*, BL, <https://pro.bloomberglaw.com/insights/privacy/biometric-data-privacy-laws/> (May 3, 2023) [<https://perma.cc/3SUY-6LT6>]; *See also* Jason M. Schultz, *The Right of Publicity: A New Framework for Regulating Facial Recognition*, 88 BROOK. L. REV. 1039 (2023); *See generally* Woodrow Hartzog, *BIPA: The Most Important Biometric Privacy Law in the US?*, in REGULATING BIOMETRICS: GLOBAL APPROACHES AND URGENT QUESTIONS 96, 96–100 (Amba Kak ed., 2020).

³⁰ Court Docket, *In re Clearview AI, Inc., Consumer Privacy Litigation*, No. 1:21-cv-00135 (N.D. Ill. Jan 08, 2021). On October 5, 2021, the United States Judicial Panel

were filed against other prominent companies, such as Amazon, Apple, Walgreens, and McDonald's³¹—litigation alleging BIPA violations, filed between 2020 and 2021, constitute 23% of the private cases subsample.

On the other hand, the second peak is due to the spread of generative AI technologies during 2023. Already eight class-action lawsuits have been filed against OpenAI, alleging the illegal collection and use of data for training generative AI products (ChatGPT 3.5–4.0).³² Combined with other litigation filed against Meta Platforms or Alphabet on similar grounds (claiming copyright infringement for training various version of generative AI tools),³³ the lawsuits against private companies in 2023 represent 17% of the total subsample.

A dimension not fully captured by Figure I is the tendency for AI-related disputes to be filed in clusters in a short period of time. Litigation

on Multidistrict Litigation ordered the transfer to Northern District of Illinois and consolidation with *In Re: Clearview* of another related action. *Renderos v. Clearview AI, Inc.*, No. 4:21-cv-02567, (N.D. Cal. Apr 08, 2021).

³¹ Complaint, *Carpenter v. McDonald's Corp.*, No. 1:21-cv-02906 (N.D. Ill. May 28, 2021); Complaint, *Rodriguez Perez v. Amazon.com, Inc.*, No. 1:23-cv-02251 (S.D.N.Y. Mar. 16, 2023); Complaint, *McCall v. Amazon.com Serv. LLC*, No. 1:23-cv-00901 (S.D.N.Y. Feb. 2, 2023); Complaint, *Bah v. Apple Inc.*, No. 2:20-cv-15018 (D.N.J. Oct. 27, 2020); Complaint, *Bah v. Apple Inc.*, No. 1:19-cv-03539 (S.D.N.Y. Apr. 22, 2019); Complaint, *Jacobs v. Walgreen Co.*, No. 2020-CH-06118 (Ill. Cir. Ct. Oct 02, 2020).

³² *T. v. OpenAI, LP*, No. 3:23-cv-04557 (N.D. Cal. Sept. 5, 2023); Complaint, *T. v. OpenAI, LP*, No. 3:23-cv-04557 (N.D. Cal. Sept. 5, 2023); Complaint, *Authors Guild v. OpenAI, Inc.*, No. 1:23-CV-08292 (S.D.N.Y. Sept. 19, 2023); Complaint, *Chabon v. OpenAI, Inc.*, No. 3:23-cv-04625 (N.D. Cal. Sept. 8, 2023); Complaint, *P.M. v. OpenAI LP*, No. 3:23-cv-03199 (N.D. Cal. June 28, 2023); Complaint, *Silverman v. OpenAI, Inc.*, No. 3:23-cv-03416 (N.D. Cal. July 7, 2023); Complaint, *Tremblay v. OpenAI, Inc.*, No. 3:23-cv-03223 (N.D. Cal. July 28, 2023); Complaint, *Walters v. OpenAI, L.L.C.*, No. 1:23-cv-03122 (N.D. Ga. July 14, 2023); Complaint, *DOE 1 v. GitHub, Inc.*, No. 4:22-cv-06823 (N.D. Cal. Nov. 3, 2022). For a summary of the cases and a description of the key issues related to these disputes, see Jonathan Gillham, *OpenAI and ChatGPT Lawsuit List*, ORIGINALITY.AI (Sept. 17, 2024), <https://originality.ai/blog/openai-chatgpt-lawsuit-list> [<https://perma.cc/Z5WZ-8FXN>]; see also Alicia Solow-Niederman, *Do Cases Generate Bad AI Law?* 25 COLUM. SCI. & TECH. L. REV., 261, 272–83 (2024).

³³ Complaint at *2, *Chabon v. Meta Platforms, Inc.*, No. 23-cv-04663 (N.D. Cal. Sept. 12, 2023); Complaint at *7, *Concord Music Grp., Inc. v. Anthropic PBC*, No. 23-cv-01092 (M.D. Tenn. Oct. 18, 2023); Complaint at *1, *Getty Images (US), Inc. v. Stability AI, Inc.*, No. 23-cv-00135 (D. Del. Feb. 3, 2023); Complaint at *23, *Huckabee v. Meta Platforms, Inc.*, No. 23-cv-09152 (S.D.N.Y. Oct. 17, 2023); Complaint at *7, *Kadrey v. Meta Platforms, Inc.*, No. 23-cv-03417 (N.D. Cal. July 7, 2023); Complaint at *84, *J.L. v. Alphabet Inc.*, No. 23-cv-03440 (N.D. Cal. July 11, 2023).

against the same algorithmic system employed by public authorities or private companies often are initiated concurrently. The media impact, coupled with advocacy efforts of organizations operating across numerous states, favors a ripple effect in lawsuits, leading to a surge in similar litigation across states.³⁴ Two leading examples of public disputes are the litigation against EVAAS (Education Value-Added Assessment System) in public teachers' evaluation³⁵ and the use of risk assessment systems in criminal justice, such as COMPAS.³⁶ Similar patterns emerge in private disputes, as in the case mentioned above involving Clearview AI and Open AI,³⁷ as well as disputes related to

³⁴ See Huq, *supra* note 18, at 1940 (emphasizing the benefits of aggregate litigation over retail challenges to increase public awareness and identify remedies that address the interests of all regulated subjects).

³⁵ Hous. Fed'n of Tchrs v. Hous. Indep. Sch. Dist., 251 F. Supp. 3d 1168, 1172–73 (S.D. Tex. 2017); Lederman v. King, 47 N.Y.S.3d 838, 887 (Sup. Ct. 2016); N.M. *ex rel.* Stewart, v. Pub. Educ. Dep't, No. D-101-cv-2015-00409, at *3 (N.M. Ct. App. Dec. 2, 2015); see Richardson, Schultz, & Southerland, *supra* note 18, at 10–12; see also *Teacher Evaluation Heads to the Courts*, EDUCATIONWEEK, <https://www.edweek.org/policy-politics/teacher-evaluation-heads-to-the-courts> (last visited Dec. 29, 2023) [<https://perma.cc/W6PS-G6GV>].

³⁶ State v. Loomis, 2016 WI 68, 371 Wis. 2d 235, 881 N.W.2d 749 (2015); Complaint at *6, Flores v. Stanford, No. 18-cv-02468 (S.D.N.Y. Mar. 20, 2018); Complaint at *1, Henderson v. Stensberg, No. 18-cv-00555 (W.D. Wis. July 16, 2018); People v. Younglove, No. 341901, 2019 WL 846117, at *3 (Mich. Ct. App. Feb. 21, 2019); see generally Danielle Kehl, Priscilla Guo & Samuel Kessler, *Algorithms in the Criminal Justice System: Assessing the Use of Risk Assessments in Sentencing*, BERKMAN KLEIN CTR. FOR INTERNET & SOC'Y, HARV. L. SCH. (2017), https://dash.harvard.edu/bitstream/handle/1/33746041/2017-07_responsivecommunities_2.pdf?sequence=1&isAllowed=y; Sonja B. Starr, *Evidence-Based Sentencing and the Scientific Rationalization of Discrimination*, 66, STAN. L. REV. 803, 812 (2014); Anne L. Washington, *How to Argue with an Algorithm: Lessons from the COMPAS-ProPublica Debate*, 17 COLO. TECH. L. J. 131, 134 (2018); Andrew G. Ferguson, *Policing Predictive Policing*, 94 WASH. U. L. REV. 1109, 1120–23 (2017); Aziz Z. Huq, *Racial Equity in Algorithmic Criminal Justice*, 68 DUKE L. J. 1043, 1081 (2019).

³⁷ See *supra* note 28. See *supra* note 28.

housing tenancy, involving companies such as CoreLogic, SafeRent,³⁸ and RealPage.³⁹

³⁸ Court Docket, *Fernandez v. CoreLogic Credco, LLC*, No. 20-cv-01262, (S.D. Cal. July 6, 2020); Court Docket, *Brown v. CoreLogic Rental Property Sols., LLC*, No. 20-cv-00363, (E.D. Va. May 21, 2020); Court Docket, *Feliciano v. CoreLogic SafeRent, LLC*, No. 17-cv-05507, (S.D.N.Y. July 19, 2017); *Chris Robinson v. TransUnion Rental Screening Sols., Inc.*, No. 19-cv-01994, (C.D. Cal. Oct. 18, 2019); Court Docket, *TransUnion Rental Screening Sols. FCRA Litigation*, No. 20-md-02933 (N.D. Ga. Apr. 27, 2020); *Conn. Fair Hous. Ctr. v. CoreLogic Rental Prop. Sols., LLC*, No. 18-cv-705, (D. Conn. July 20, 2023); Court Docket, *Louis v. SafeRent Sols., LLC*, No. 22-cv-10800 (D. Mass. May 25, 2022). *See* Khari Johnson, *Algorithms Allegedly Penalized Black Renters. The US Government Is Watching*, WIRED (Jan. 16, 2023), <https://www.wired.com/story/algorithms-allegedly-penalized-black-renters-the-us-government-is-watching/> [<https://perma.cc/SC2Y-76B3>]; Rebecca Burns, *Artificial Intelligence Is Making the Housing Crisis Worse*, THE LEVER (June 27, 2023), <https://www.levernews.com/artificial-intelligence-is-making-the-housing-crisis-worse/> [<https://perma.cc/WN4K-K9ZW>]; Erin Smith & Heather Vogell, *How Your Shadow Credit Score Could Decide Whether You Get an Apartment*, PROPUBLICA (Mar. 29, 2022), <https://www.propublica.org/article/how-your-shadow-credit-score-could-decide-whether-you-get-an-apartment> [<https://perma.cc/QU49-K58W>].

³⁹ Court Docket, *D.C. v. RealPage, Inc.*, No. 2023-CAB-006762 (D.C. Super. Ct. Nov. 1, 2023); Court Docket, *Bason v. RealPage, Inc.*, No. 22-cv-01611, (S.D. Cal. Oct. 18, 2022); *see* Gabriele Bortolotti, *Algorithmic Collusion in the Housing Market*, PROMARKET (May 30, 2023), <https://www.promarket.org/2023/05/30/algorithmic-collusion-in-the-housing-market/> [<https://perma.cc/694X-5B5N>]; Heather Vogell, *Rent Going Up? One Company's Algorithm Could Be Why*, PROPUBLICA (Oct. 15, 2022), <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> [<https://perma.cc/R2PF-HPQ6>].

2.2 Procedural Aspects

Figure 2—Private and Public Judicial Status

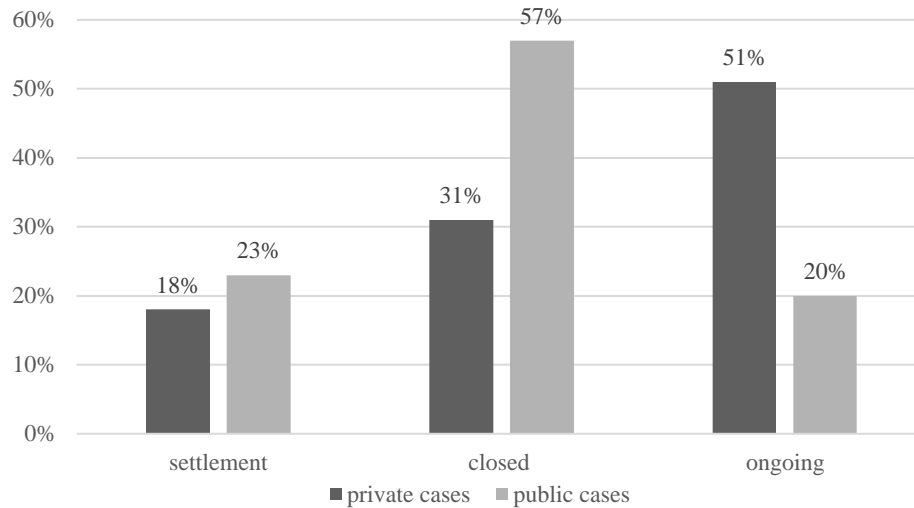


Figure II shows that more than 50% of private cases remain ongoing. This trend is mostly influenced by a composition effect, driven by the rising number of cases filed since 2020. Recent years have seen a decline in filed public cases juxtaposed with a surge in private ones (Figure I), consequently leading to a reduction in pending public cases.

Delving into closure rates, public cases exceed 50%, while private cases are around 31%. Both of these rates align with the overall trend of disputes filed over time. It is worth noting that this data is shaped by a preliminary assumption. Closed cases are considered those decided with at least rulings from lower courts that are not currently under appeal.

The Figure II highlights that AI-related disputes are settled slightly more frequently among public cases (23%) compared to private cases (18%). However, a closer analysis reveals that a portion of private cases⁴⁰ are dismissed by the court after the plaintiff files a notice of

⁴⁰ See, e.g., Notice of Voluntary Dismissal Without Prejudice, *Carmean v. Macy's Retail Holdings*, No. 20-cv-04589, (N.D. Ill. Mar. 16, 2021); Notice of Voluntary Dismissal Without Prejudice, *McCall v. Amazon.com Servs. LLC*, No. 23-cv-00901 (S.D.N.Y. Apr. 24, 2023); Notice of Voluntary Dismissal Without Prejudice, *Rodriguez Perez v. Amazon.com, Inc.*, No. 23-cv-02251 (S.D.N.Y. June 09, 2023); Notice of Voluntary Dismissal, *Jacobs v. Walgreen Co.*, No. 2020-CH-06118 (Ill. Cir. Ct. Aug. 17, 2021); Notice of Voluntary Dismissal Without Prejudice, *Van Pelt v.*

voluntary dismissal without prejudice.⁴¹ These dismissals likely indicate private agreements reached between the parties, which are not officially communicated to the court. Although this factor contributes to the increased number of settlements in private cases, accurately evaluating its true scope remains challenging. Moreover, while agreements between private parties to settle disputes on an individual basis are not public and often involve non-disclosure clauses,⁴² settlements in public cases are typically subject to disclosure policies and overseen by the court to ensure the fulfillment of the agreed-upon terms. Court-monitored settlements are often utilized to supervise the development of new algorithmic systems, updating procedural parameters or functional criteria, and setting the engagement in dialogue with relevant stakeholders, such as affected parties or advocacy organizations.⁴³ Settlements reached in public cases frequently entail the reinstatement of the benefits unlawfully disqualified and financial compensation for the adverse effects of the use of algorithmic systems. A settlement may also establish the review of determinations reached using the algorithmic system, the restoration of previous algorithmic formula or software, or limit current systems to specific uses.⁴⁴ See Part III.1 for a more in-depth analysis of judicial outcome and the terms of settlement agreements.

Cigna Group, No. 23-cv-01135 (D. Conn. Nov. 7, 2023); Notice of Voluntary Dismissal Without Prejudice, *Hudson v. Tesla, Inc.*, No. 2018-CA-011812-O (Fla. 9th Jud. Cir., Apr. 29, 2021).

⁴¹ FED. R. CIV. P. 41(A)(1)(A)(i).

⁴² FED. R. CIV. P. 41(A)(1)(A)(ii). *See, e.g.*, Stipulation of Dismissal, *Carpenter v. McDonald's Corp.*, No. 1:21-cv-02906 (N.D. Ill. July 12, 2023); Joint Stipulation for Dismissal with Prejudice, *Nilsson v. General Motors LLC*, No. 4:18-cv-00471 (N.D. Cal. June 26, 2018); Stipulation and Order of Dismissal with Prejudice, *Bah v. Apple Inc.*, No. 2:20-cv-15018 (D.N.J. Dec. 27, 2021); *see also*, Stipulation of Voluntary Dismissal, *Bah v. Apple Inc.*, No. 1:19-cv-03539 (S.D.N.Y. Dec. 17, 2021).

⁴³ *See, e.g.*, Class Action Settlement Agreement, *K.W. v. Armstrong*, No. 1:12-cv-00022 (D. Idaho Jan. 12, 2017); Joint Report to the Court, *C.S. v. Saiki*, No. 6:17-cv-00564-MC (D. Or. June 2, 2017); *see generally* Settlement Agreement, *Elder v. Gillespie*, No. 3:19-cv-00155 (E.D. Ark. July 18, 2023).

⁴⁴ *See, e.g.*, Settlement Agreement, *Zynda v. Arwood*, No. 2:15-cv-11449, 6 (E.D. Mich. Feb. 2, 2017) (the parties entered into a settlement agreement in which the state agency agreed to review determinations of claimant fraud that had been reached while it was using the auto-adjudication system); Amended Settlement Agreement, *Berliner v. Nassau Cnty.*, No. 605904/2019 (N.Y. Sup. Ct. Oct. 14, 2020); Settlement Agreement, *Velesaca v. Decker*, No. 1:20-cv-01803 (S.D.N.Y. Oct. 3, 2022); Settlement Agreement, *Hous. Fed'n of Tchrs. Loc. 2415 v. Hous. Indep. Sch. Dist.*, No. 4:14-cv-01189 (S.D. Tex. Oct. 10, 2017).

Figure 3—Private and Public Collective Actions



Figure 3 highlights a noteworthy trend, with over 55 % of the private cases being filed as a class action, although the percentage is lower for public cases (30%).⁴⁵ Conversely, the trend shifts when considering the involvement of advocacy organizations or legal aid entities: 10% of private cases benefit from such support, whereas for public cases it exceeds 34%.⁴⁶ What are the factors that might explain these differences?

The widespread use of class actions in private disputes rather than in public ones might be attributed to the nature of the litigation, particularly to a composition effect. The majority of public cases (61%) is connected to enforcement activities, which mostly relates to individual situations and is, therefore, less suitable for a class action.⁴⁷

⁴⁵ I considered as class actions both disputes that have already been certified by courts and those that have been filed as class actions but are still awaiting court authorization.

⁴⁶ Out of the total eighty-four private cases, forty-seven are filed as class actions, with only eight of them receiving support from advocacy organizations. In public cases, thirteen out of forty-four are filed as class actions, and fifteen out of forty-four are filed with the support of advocacy organizations or legal aid associations.

⁴⁷ Adam S. Zimmerman & David M. Jaros, *The Criminal Class Action*, 159 U. PA. L. REV. 1385, 1390 (2011) (“[C]riminal procedure does not have a class action rule, like Rule 23 of the Federal Rules of Civil Procedure, in part because of the due process concerns that aggregating criminal cases generally raises. For example, each criminal defendant enjoys a personal right to decide whether to enter a plea, testify, or cross-examine witnesses.”).

In the remaining cases, the percentage of disputes filed as a class action is approximately 50%, hence in line with private disputes (56%).

A potential explanation for the difference in advocacy support is that plaintiffs are vulnerable members of society in public cases: low-income individuals in need of food or welfare assistance or living in poor areas, minorities, or groups with physical or mental disabilities. In these cases, the role and support of advocacy organizations in promoting actions in court and covering litigation costs is vital.⁴⁸ On the other hand, plaintiffs in private cases are usually companies, individuals in certain qualified positions, such as a group of authors or scriptwriters, or, finally, individuals that exploit specific causes of action, such as those granted by BIPA. Supporting this hypothesis, consider that the 10% of private cases litigated with the support of advocacy organizations involves almost exclusively the discriminatory use of AI, often entailing the assignment of lower scores to specific groups, and thus connected to low-income plaintiffs and traditionally disadvantaged groups.⁴⁹

⁴⁸ See John Villasenor & Virginia Foggo, *Artificial Intelligence, Due Process, and Criminal Sentencing*, 2020 MICH. ST. L. REV. 295, 345 (2020) (noting that civil rights and criminal justice advocacy organizations may underwrite the costs of pursuing a due process claim, providing, such as resources to cover the costs related to the release of relevant information under protective orders). A significant example highlighting the impact of lacking legal support from advocacy organizations is provided by the cases related to the algorithm employed by the U.S. Department of Agriculture to screen potential food stamp fraud. See Claire H. Brown, *How an Algorithm Kicks Small Businesses Out of the Food Stamps Program on Dubious Fraud Charges*, THE INTERCEPT (Oct. 8, 2018), <https://theintercept.com/2018/10/08/food-stamps-snap-program-usda/> (noting that once retailers are accused of fraud and disqualified, their chances of successfully proving their innocence become exceedingly slim) [<https://perma.cc/SD4J-5BA2>].

⁴⁹ The increasing use of algorithms in housing tenancy, hiring processes, or consumer financial products has given rise to several new disputes alleging discriminatory practices against low-income plaintiffs and traditionally disadvantaged groups. See generally Citron & Pasquale, *supra* note 3, at 13–16; Crawford & Schultz, *supra* note 3, at 99–101; Barocas & Selbst, *supra* note 3, at 673–74. The recent Executive Order 14,110 outlines a series of procedural measures designed to advance equity and protect civil rights in housing and consumer financial markets. It requires the Secretary of Labor to publish guidance for federal contractors regarding nondiscrimination in hiring involving AI and other technology-based hiring systems. Additionally, the Secretary of Housing and Urban Development is required to issue guidance to address the use of tenant screening systems and housing advertising to combat unlawful discrimination enabled by algorithmic tools used to make decisions about access to housing and in other real estate-related transactions. Lastly, the Director of the Consumer Financial Protection Bureau is encouraged to use his authority with his regulated entity to address discrimination and biases against protected groups in

The first example is provided by private disputes related to housing tenancy. In *Louis v. SafeRent Sol.*, a non-profit organization supported the plaintiffs in alleging that the defendants' use of an algorithm-based scoring system to screen rental applicants violates the FHA. The screening software relies on certain factors, such as credit history and non-tenancy related debts, disproportionately disadvantaging specific group of applicants while failing to consider that the use of housing vouchers makes such tenants more likely to pay their rents.⁵⁰ On similar grounds, in *Connecticut Fair Housing v. CoreLogic Rental* a housing advocacy organization alleged that the algorithm-based software "CrimSAFE" assesses tenant suitability by specifically searching through their criminal records and notifying landlords if the prospective tenant does not meet their established criteria.⁵¹

We can observe a similar tendency in disputes related to hiring. In 2019, the non-profit Electronic Privacy Information Center filed a complaint with the Federal Trade Commission (FTC) against a recruiting-technology company, alleging unfair and discriminatory practices related to the use of face-scanning algorithms targeting job

consumer financial markets. See Exec. Order No. 14,110, 88 Fed. Reg. 75,191 (Oct. 30, 2023) (Sec. 7.3(a)(b)(c)).

⁵⁰ Statement of Interest of the United States, *Louis v. SafeRent Sols. LLC*, No. 1:22-cv-10800-AK (D. Mass. Jan. 9, 2023). The Department of Justice and the Department of Housing and Urban Development (HUD) filed a Statement of Interest in the case. See *Justice Department Files Statement of Interest in Fair Housing Act Case Alleging Unlawful Algorithm-Based Tenant Screening Practices*, OFF. OF PUB. AFF. (Jan. 9, 2023), <https://www.justice.gov/opa/pr/justice-department-files-statement-interest-fair-housing-act-case-alleging-unlawful-algorithm> [<https://perma.cc/ZY62-LCBL>]. On May 30, 2023, fifteen state attorneys general submitted a comment letter to the Federal Trade Commission (FTC) and the Consumer Financial Protection Bureau (CFPB) on the "Adverse Impacts of Tenant Screening Reports and Algorithmic determination of Tenant Worthiness." See Letter from 15 State Att'ys Gen. to Rohit Chopra, Dir., CFPB and April Tabor, Sec'y, FTC (May 30, 2023), <https://oag.ca.gov/system/files/attachments/press-docs/Multi%20State%20State%20Attorneys%20General%20Comment%20Letter%20to%20the%20FTC%20CFPB%20on%20Tenant%20Screening%20%281%29.pdf>; see also Cathy O'Neil, Holli Sargeant, & Jacob Appel, *Explainable Fairness in Regulatory Algorithmic Auditing*, W. VA. L. REV. (forthcoming 2024) (manuscript at 15) (<https://ssrn.com/abstract=4598305>).

⁵¹ *Conn. Fair Hous. Ctr. v. Corelogic Rental Prop. Sols., LLC*, No. 3:18-cv-705-VLB (D. Conn. July 20, 2023). See Colin Lecher, *Automated Background Checks Are Deciding Who's Fit for a Home*, *The VERGE* (Feb. 1, 2019), <https://www.theverge.com/2019/2/1/18205174/automation-background-check-criminal-records-corelogic> [<https://perma.cc/HG6D-MD37>]. See also Court Docket, *Nat'l Fair Hous. All. v. Facebook, Inc.* No. 1:18-cv-02689 (S.D.N.Y. Mar. 27, 2018).

candidates on behalf of prospective employers.⁵² The complaint alleged that candidates are deprived of the opportunity to access data or factors used to generate their algorithmic assessments and, consequently, to challenge them.⁵³ Likewise, the U.S. Equal Employment Opportunity Commission challenged the algorithmic system used by a private company for recruiting, arguing that the hiring tool was biased against certain groups of applicants, resulting in automatic rejections of older applicants solely because of their age.⁵⁴

3. An In-Depth Analysis of Public Cases

I will now conduct a thorough analysis of public cases for a twofold reason. On the one hand, the paper aims to contribute to the discussion on the governmental use of AI by providing a comprehensive and systematic overview of the related litigation. On the other hand, private cases mostly involve issues such as intellectual property infringement, privacy violations, collection and use of biometric data, or claims for damages related to autonomous vehicles. Consequently, this subset of cases is not tied to the use of AI technologies as aids or substitutes for

⁵² Complaint, *In re HireVue Inc.*, F.T.C. (2019) (available at https://epic.org/wp-content/uploads/privacy/ftc/hirevue/EPIC_FTC_HireVue_Complaint.pdf); further information about the complaint is available at *Consumer Cases: In re HireVue*, ELEC. PRIV. INFO. CENTER, <https://epic.org/documents/in-re-hirevue/> (last visited Nov. 20, 2024) [<https://perma.cc/2B6M-U6YY>]. See also *Baker v. CVS Health Corp.*, No. 23-11483, 2024 BL 51726 (D. Mass. Feb. 16, 2024); Court Docket, *Mobley v. Workday, Inc.*, No. 3:23-cv-00770 (N.D. Cal. Feb. 21, 2023) (the plaintiff challenging the algorithmic systems and screening tools provided by the defendant, arguing that these hiring tools are biased against applicants on the basis of age, gender, race and disability).

⁵³ Drew Harwell, *A Face-Scanning Algorithm Increasingly Decides Whether You Deserve the Job*, WASH. POST (Nov. 6, 2019), <https://www.washingtonpost.com/technology/2019/10/22/ai-hiring-face-scanning-algorithm-increasingly-decides-whether-you-deserve-job/> [<https://perma.cc/45FJ-5E8W>]; see Roshan Abraham, *Business Lobby Tries to Weaken Law Regulating Bias in Hiring Algorithms*, VICE (Mar. 6, 2023), <https://www.vice.com/en/article/n7ejn8/business-lobby-tries-to-weaken-law-regulating-bias-in-hiring-algorithms>; Maddy Varner, *Public Agencies Are Buying Up AI-Driven Hiring Tools and “Bossware,”* THE MARKUP (Dec. 23, 2021), <https://themarkup.org/news/2021/12/23/public-agencies-are-buying-up-ai-driven-hiring-tools-and-bossware> (claiming the spread of AI-driven hiring tools among public agencies) [<https://perma.cc/3KA5-9WQ2>].

⁵⁴ Complaint at 1, *Equal Emp. Opportunity Comm’n v. iTutorGroup, Inc.*, No. 1:22-cv-02565 (E.D.N.Y. May 5, 2022); see *EEOC Sues iTutorGroup for Age Discrimination*, U.S. EQUAL EMP. OPPORTUNITY COMM’N (May 5, 2022), <https://www.eeoc.gov/newsroom/eeoc-sues-itutorgroup-age-discrimination> [<https://perma.cc/H7PJ-QBTK>].

decision-making activities.⁵⁵ Conversely, the analysis of public cases allows for a deeper understanding of how judicial reasoning addresses the use of AI technologies—particularly when they impact civil rights. Two relevant aspects can be highlighted as follows.

First, public cases clustered on judicial outcomes show a distinctive trend. In the majority of the cases related to the administration of social services, detection of welfare fraud, and other uses, the judicial approach distinctly questions the use of the algorithmic systems and ensures remedies to plaintiffs through preliminary or permanent injunction, prompt to redevelopment, and economic restoration. However, as I will delve into shortly, it is important to note that the judicial reasoning is primarily centered on procedural grounds. Conversely, the majority of cases related to enforcement activities results in a decision that challenges specific aspects of the algorithmic systems but either refrain from issuing an injunction against its use, or even does not contest the use of the algorithmic systems at all.

Second, the analysis of forty-four AI-related public cases reveal that judicial decisions almost exclusively rely on procedural grounds—specifically those concerning due process infringements. The public disputes analyzed challenge aspects, such as the lack of adequate notice and explanation, lack of contestability, lack of human oversight, lack of notice and comment procedures, lack of assessment procedures, and the denial of the right to access information. On the contrary, courts did not contest the general use of algorithm-based systems to perform public

⁵⁵ Cases related to the discriminatory use of AI in hiring processes, housing tenancy, or consumer financial products, often entailing the assignment of lower scores to specific groups, are an exception. *See supra* notes 49–53; *see, e.g.*, Complaint at 2, *In re Estate of Gene B. Lokken v. UnitedHealth Grp., Inc.*, No. 0:23-cv-03514 (D. Minn. Nov. 14, 2023) (alleging that the health insurer and its subsidiary, used an algorithm (nH Predict) to systematically deny medical claims from patients recuperating from illnesses in nursing homes); Rebecca Pifer, *UnitedHealth Sued Over Use of Algorithm to Deny Care for MA Members*, HEALTHCARE DIVE (Nov. 15, 2023), <https://www.healthcaredive.com/news/unitedhealth-algorithm-lawsuit-care-denials/699834/> [<https://perma.cc/ZH4B-XRPW>]; Complaint at 2, *Van Pelt v. Cigna Grp.*, No. 3:23-cv-01135, (D. Conn. Aug. 25, 2023) (claiming that relying on the algorithmic system, Cigna’s doctors instantly reject claims on medical grounds without ever opening patient files, leaving thousands of patients effectively without coverage and with unexpected bills); Susan Morse, *Cigna Sued for Using Algorithms to Allegedly Deny Claims*, HEALTHCARE FIN. (July 25, 2023), <https://www.healthcarefinancenews.com/news/cigna-sued-using-algorithms-allegedly-deny-claims> [<https://perma.cc/67QC-PLLW>]; Complaint at 2, *Huskey v. State Farm Fire & Casualty Co.*, No. 1:22-cv-07014 (N.D. Ill. Dec. 24, 2022).

functions, and substantial aspects related to arbitrariness, lack of scientific basis, or unfairness rarely are challenged.⁵⁶

3.1 Judicial outcomes

To conduct a qualitative analysis of AI-related public cases, I classify the forty-four cases into five clusters on the basis of the following judicial outcomes: (i) the court orders a permanent or temporary injunction enjoined the use of the algorithmic system; (ii) the court prompts the redevelopment of the algorithmic system, either monitored or unmonitored by the judge; (iii) the court challenges specific aspects of the algorithmic system, but refrains from enjoining its use; (iv) the court orders the disclosure of information related to the algorithmic system; (v) others.

Figure 4—Judicial Outcomes

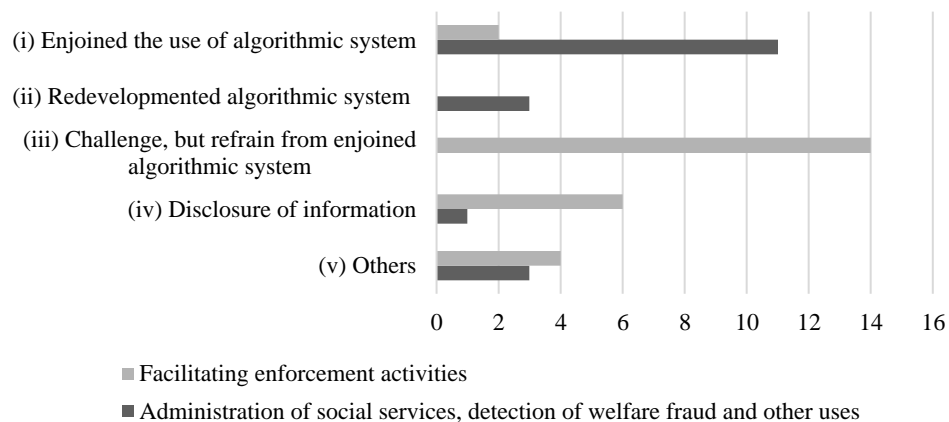


Figure 4 shows that the majority of the disputes related to the administration of social services, detection of welfare fraud, and other

⁵⁶ Only a few cases have been found where courts have explored substantive aspects concerning algorithmic systems in their reasoning; however, these aspects have not been foundational in sentencing considerations. *See, e.g.*, *Hous. Fed’n of Tchrs. v. Hous. Indep. Sch. Dist.*, 251 F. Supp. 3d 1168, 1182 (S.D. Tex. 2017) (“Plaintiffs offer up numerous other ways in which EVAAS falls short. Even accepting plaintiffs’ criticisms at face value, the loose constitutional standard of rationality allows governments to use blunt tools which may produce only marginal results.”); *People v. Wakefield*, 107 N.Y.S.3d 487, 499 (App. Div. 3d Dep’t 2019) (rejecting the criminal defendant’s due process challenge based on the specific facts of the case, and acknowledging that the reliance on the algorithmic system can raise valid concerns regarding due process and artificial intelligence).

uses of algorithmic systems result in a court order that enjoins the use of the algorithmic system or prompts its redevelopment.

Consider the following examples where the courts enjoined the use of the algorithmic system. In *Arkansas Department of Human Services v. Ledgerwood*, the Arkansas Department of Human Services implemented an algorithm to allocate home healthcare to Medicaid patients. This new system resulted in a significant reduction in in-home attendant care hours assigned to beneficiaries. The court issued a preliminary injunction on the ground that the new policy was implemented in violation of the state administrative procedures act, failing to provide adequate notice about the introduction of the new policy to beneficiaries. The injunction restrained the use of the algorithmic system until compliance with the state administrative procedures act was ensured.⁵⁷ Similarly, in *C.S. v. Saiki*, a class action was filed against the Oregon Department of Human Services after the agency's sudden cuts to disability benefits with no individualized notice or explanation. These reductions were due to the implementation of a new algorithmic assessment tool. The court issued a preliminary injunction, ordering the restoration of all recipients' hours of in-home attendant care service to their previous levels.⁵⁸ Following the identification of procedural violations, a preliminary injunction was also issued in *Zynda v. Arwood*. This class action was brought against the State of Michigan over the algorithmic system, MiDAS, on behalf of recipients who had been wrongly accused of unemployment benefits fraud. In this case, the court ordered a suspension of all collection activities, unless individually reviewed by agency staff and affirmed with new notice to claimants.⁵⁹ Under the terms of the settlement

⁵⁷ Ark. Dep't of Hum. Serv. v. Ledgerwood, 530 S.W.3d 336, 341 (Ark. 2017); see Richardson et al., *supra* note 18, at 7–8; Calo & Citron, *supra* note 3, at 820–23; Colin Lecher, *What Happens When an Algorithm Cuts Your Health Care*, THE VERGE (Mar. 21, 2018), <https://www.theverge.com/2018/3/21/17144260/healthcare-medicaidalgorithm-arkansas-cerebral-palsy> [https://perma.cc/63LC-97NU]; see also, Preliminary Injunction at 2, *K. W. v. Armstrong*, No. 1:12-cv-00022 (D. Idaho Mar. 12, 2012); Barry v. Corrigan, 79 F.Supp. 3d 712, 753 (E.D. Mich. 2015); Michael T. v. Bowling, No. 2:15-cv-09655, 2016 U.S. Dist. LEXIS 123749, at *54-56 (S.D.W. Va. Sept. 13, 2016) (for a discussion of this litigation, see Bloch-Wehba, *supra* note 18, at 1274–79).

⁵⁸ Proposed Order on Motion for Preliminary Injunction at 2, *C.S. v. Saiki*, No. 6:17-cv-00564 (D. Or. Apr. 19, 2017); see Richardson et al., *supra* note 18, at 8–9; DISABILITY RTS. OREGON, *Lawsuit: Protecting In-Home Care Hours*, <https://www.drOregon.org/litigation-resources/cs-v-odhs> (last visited Dec. 30, 2023) [https://perma.cc/TP2U-FF2Q].

⁵⁹ Stipulated Order for Preliminary Injunctive Relief at 1, *Zynda v. Arwood*, No. 2:15-

agreement, the state agency agreed to review all fraud determinations made by the automatic system.⁶⁰

In other cases, after having issued a preliminary or permanent injunction, courts prompted the redevelopment of the algorithmic system, either monitored or unmonitored by the judge. In *Elder v. Gillespie*, after a previous unsuccessful attempt,⁶¹ the Arkansas DHS implemented a new algorithmic assessment tool (ARIA) to allocate healthcare services. Plaintiffs alleged a lack of notice and explanation in the notification of in-home care reduction, along with other due process violations. In 2023, the court authorized a settlement agreement focused on the development of a new algorithmic system aligned with specific procedural guarantees, such as the automatic continuation of benefits under appeal procedure.⁶² Similarly, in *K.W. v. Armstrong*, a class action lawsuit was filed against the State of Idaho over reductions in Medicaid payments due to the introduction of an algorithmic system.⁶³ After a preliminary order directed to fix the algorithm, the case was settled. As part of the settlement agreement, the state was required to engage with the affected population and advocacy organizations to develop a new system in accordance with the inputs of stakeholders.⁶⁴

In all of these cases, the judicial approach distinctly questions the use of algorithmic systems and ensures remedies to plaintiffs through preliminary or permanent injunction, prompt to redevelopment and

cv-11449 (E.D. Mich. Jan. 11, 2017); *see also* Calo & Citron, *supra* note 3, at 827–29.

⁶⁰ Stipulated Order of Dismissal at 2, *Zynda v. Arwood*, No. 2:15-cv-11449 (E.D. Mich. Feb. 2, 2017).

⁶¹ *See supra* note 57.

⁶² Settlement Agreement at 3, *Elder v. Gillespie*, No. 3:19-cv-00155 (E.D. Ark. May 23, 2019); *see* Arkansas Democrat Gazette, My Ly, *Arkansas DHS Agrees to Pay \$460,000 to Settle Case Over In-home Care Cuts*, LEGAL AID OF ARK. (Aug. 9, 2023), <https://arlegalaid.org/news-events/newsroom.html/article/2023/08/09/arkansas-dhs-agrees-to-pay-460-000-to-settle-case-over-in-home-care-cuts> [<https://perma.cc/3572-3WZZ>].

⁶³ Joint Motion for Preliminary Approval of Class Action Settlement and for Approval of Class Notice at 2–5, *K.W. v. Armstrong*, No. 1:12-cv-00022 (D. Idaho Jan. 12, 2017).

⁶⁴ *See id.*; *Artificial Intelligence in Government: Hearing Before the Senate Committee on Homeland Security & Government Affairs*, ACLU IDAHO (May 16, 2023) <https://www.hsgac.senate.gov/wp-content/uploads/Testimony-Eppink-2023-05-16-1.pdf> (detailing the active involvement and engagement of class members as required by the settlements agreements); *see also* Joint Report to the Court at 1–2, *C.S. v. Saiki*, No. 6:17-cv-00564 (D. Or. June 2, 2017) (reporting that the parties have been working cooperatively to address the issues raised by the plaintiffs in their complaint, particularly focusing on the development of a new assessment tool).

economic restoration. However, it is worth noting that if public defendants can demonstrate they have overcome due process issues, judges tend to dismiss the case even if concerns remain about the substantial functioning of the AI systems.⁶⁵

On the other hand, Figure 4 highlights a distinctive tendency in disputes related to enforcement activities: in only two cases a court challenged and enjoined the use of the algorithmic system.⁶⁶ Conversely, the majority of cases result in a decision that challenges specific aspects of the algorithmic system but either refrains from issuing an injunction against its use, or does not contest the use of the algorithmic system at all.

A few examples serve to clarify this different approach. In *State v. Jennings*, the criminal defendant challenged his conviction, claiming that the trial court erred in considering the results of the risk assessment tool regarding his likelihood of recidivism because it improperly considers the neighborhood in which he resides as a factor of risk.⁶⁷ While acknowledging that risk assessment tools can be misleading, biased, and based on unreliable fact, the appeals court rejected the appeal arguing that the trial court record provides no indication that the

⁶⁵ Michael T. v. Crouch, No. 2:15-cv-09655, 2018 WL 1513295, at *11-15 (S.D.W. Va. Mar. 26, 2018) (“A review of the new authorization system reveals that the proposal does not appear to suffer from similar due process infirmities and, therefore, does not promote the injustices that this Court’s injunction was designed to remedy. . . . Thus, Plaintiffs’ argument that the new authorization system will decrease their I/DD Waiver Program budgets across the board, cannot be the focus—regardless of its truth—in deciding whether to modify or vacate the current injunction, which was based in part on a finding that Plaintiffs were likely to succeed on their claim under procedural due process.”); *see also* Ark. Dep’t of Hum. Serv. v. Ledgerwood, 571 S.W.3d 911, 915 (Ark. 2019).

⁶⁶ *In re* [Juv. Client], the court questioned the reliability of the results provided by the Structured Assessment of Violence Risk in Youth (SAVRY), disallowing his use, due to a lack of validation studies. Despite significant criticisms, the court stated the lack of sufficient evidence to deem the SAVRY inherently unreliable as a forensic assessment tool. Therefore, the case would not establish a judicial precedent for future cases. The court order is available at GOOGLE DRIVE, <https://drive.google.com/drive/folders/1MKaqFMukpbCRp-ihj2X1G8EL9xEEBIWI> (last visited Sept. 27, 2024) [<https://perma.cc/6E3R-QKXY>]; *see also* Velesaca v. Decker, 458 F. Supp. 3d 224, 242–43 (S.D.N.Y. 2020) (granting a preliminary injunctive relief, enjoining public defendant from using a risk-assessment tool that substantially deprived immigration officials of their discretion). *See* Richardson et al., *supra* note 18, at 9–10.

⁶⁷ *State v. Jennings*, No. 2013 CA 60, 2014-Ohio-2307, at *10 (Ct. App. 2d Dist. 2014) (arguing that the inclusion of information provided by the risk assessment tool “unduly prejudices and discriminates against a defendant from a disadvantaged economic background.”).

score of the risk assessment tool significantly influenced the decision.⁶⁸ Likewise, in *State v. Gordon* a criminal defendant argued that the use of sex offender risk assessment tools by the district court in sentencing violated his due process rights.⁶⁹ The Iowa Court of Appeals reversed the decision, citing the absence of statutory authority to employ these tools in sentencing.⁷⁰ However, the Supreme Court of Iowa stated that the defendant failed to preserve error in his due process claim as he failed to raise the issue to the attention of the district court at the time of sentencing, thus stating the right of the district court to rely on the risk assessment tool.⁷¹ Lastly, in *People v. Younglove* the criminal defendants argued that the use of risk assessment information deprived them of their due process rights.⁷² The appeals court affirmed that unless the criminal defendants specifically articulate how their due process rights have been violated, the use of these tools cannot be challenged.⁷³

In the remaining cases, courts only ordered the disclosure of information related to the algorithmic formula or technical manuals. In *People v. Superior Court (Chubbs)*, a death penalty defendant claimed access to the source code for a forensic software program used for his conviction.⁷⁴ The trial court ordered the disclosure of the source code.⁷⁵

⁶⁸ *Id.* at *12; *see also* Malenchik v. State, 928 N.E.2d 564, 568 (Ind. 2010) (affirming the appeal sentence, because the trial court, in its sentencing, did not rely on risk assessment tool as an aggravating factor).

⁶⁹ *State v. Gordon*, 919 N.W.2d 635, at *1–5 (Iowa Ct. App. 2018).

⁷⁰ *Id.* at *9–10 (“Because the district court considered Gordon’s risk level scores as an aggravating factor when imposing sentence, and we find no statutory authority for using these instruments for that purpose, we vacate his prison term and remand for resentencing.”).

⁷¹ *State v. Gordon*, 921 N.W.2d 19, 24 (Iowa 2018); *see also* Rodriguez v. Mass. Parole Bd., 193 N.E.3d 1050, 1057 (Mass. 2022); Brief for Elec. Priv. Info. Center as Amici Curiae supporting appellant, Rodriguez v. Mass. Parole Bd., 193 N.E.3d 1050, 1057 (Mass. 2022).

⁷² *People v. Younglove*, No. 341901, 2019 Mich. App. LEXIS 338, at *1–5 (Feb. 21, 2019).

⁷³ *Id.* at *4 (noting that defendants offer no evidence that in their sentencing courts actually placed significant (or any) weight on the COMPAS recidivism risk scores in crafting their sentences. Moreover, the defendants have failed to carry their burden of showing that the inclusion of this information affected their substantial rights); *see also* Henderson v. Stensberg, No. 18-cv-555-jdp, 2021 U.S. Dist. LEXIS 58010, at *9 (W.D. Wis. Mar. 26, 2021) (stating that the defendant fails to raise a reasonable inference that racial bias in the COMPAS recidivism risk scores caused him to be denied parole). *See generally* State v. Hickerson, 312 So. 3d 1124 (4th Cir. 2020).

⁷⁴ *People v. Superior Court (Chubbs)*, No. B258569, 2015 WL 139069, at *4 (Cal. Ct. App. 2d Dist. Jan. 9, 2015).

⁷⁵ *Id.* (finding that nondisclosure of the source codes does “work injustice” in the sense

A protective order was deemed sufficient to safeguard the developer's interest in protecting the trade secret, allowing for discovery during cross-examination.⁷⁶ However, the California appeals court issued a new order denying the motion to compel disclosure of the source code, prioritizing the protection of the trade secret.⁷⁷ In *State v. Pickett*, a criminal defendant accused of murder requested access to the source code of the probabilistic genotyping software used to convict him.⁷⁸ The Supreme Court of New Jersey ordered the discovery of the source code and related documentation through a protective order to ensure the defendant's right to challenge the reliability of the software.⁷⁹ Similarly, in *Flores v. Stanford*, the court ruled in favor of the criminal defendants' right to access the algorithm's source code considering it prevalent over the protection of trade secrets.⁸⁰

In summary, when the disputes involve enforcement activities, courts generally avoid questioning the functioning and utilization of algorithmic systems.⁸¹ Even when a judicial challenge is raised, it typically does not result in an injunction against the use of the algorithmic system. On the other hand, there is an increasing level of openness regarding requests for discovery: the right to access algorithms' information often outweighs the protection of trade secrets.⁸²

that it denies the criminal defendant's right to confront and cross-examine witnesses and determined that a protective order can adequately protect company's interest).

⁷⁶ Rebecca Wexler, *Life, Liberty, and Trade Secrets*, 70 STAN. L. REV. 1343, 1358 (2018).

⁷⁷ *People v. Superior Court (Chubbs)*, No. B258569, 2015 WL 139069, at *10; *See infra* note 102.

⁷⁸ *State v. Pickett*, 246 A.3d 279, 283 (N.J. Super. Ct. App. Div. 2021).

⁷⁹ *Id.* at 284 ("We hold that if the State chooses to utilize an expert who relies on novel probabilistic genotyping software to render DNA testimony, then defendant is entitled to access, under an appropriate protective order, to the software's source code and supporting software development and related documentation . . . to challenge the reliability of the software and science underlying that expert's testimony . . ."). For a discussion of this litigation, see Elizabeth A. Rowe & Nyja Prior, *Procuring Algorithmic Transparency*, 74 ALA. L. REV. 303, 330–33 (2022); *see also* *State v. Flanigan*, No. 5303A-15D, at 7 (S.C.D.C. Nov. 17, 2015).

⁸⁰ *Flores v. Stanford*, No. 18 Civ. 02468, 2021 WL 4441614 at 11 (S.D.N.Y. Sept. 28, 2021). For a discussion of this litigation, see Cortez & Maslej, *supra* note 18, at 468–70.

⁸¹ *See* Selbst et al., *supra* note 18, at 421.

⁸² However, there are still judicial cases in which criminal defendants are denied access to the source code or other relevant information. For case examples, *see infra* note 102. For a more in-depth analysis on the balance between the right to access information and the right of companies to protect their trade secrets, *see infra* Part 3.2.3.

All these disputes reveal a rather less interventionist judicial approach to the use of algorithmic systems by public authorities.

3.2 Procedural and Due Process Violations

The analysis of the public cases shows that the majority of decisions that declare the use of AI by government bodies unlawful is based on six procedural and due process violations: (i) lack of adequate notice and explanation; (ii) lack of contestability; (iii) right to access information; (iv) lack of human oversight; (v) failed to comply with notice and comment procedures; and (vi) lack of assessment procedures.

3.2.1. Lack of Adequate Notice and Explanation

The absence of a clear communication procedure supporting adverse automated decisions, along with the failure to provide reasons in terms comprehensible to claimants, constitutes a constitutional violation of the Fifth or Fourteenth Amendment.⁸³ Individuals deprived of constitutionally protected property or liberty interests have the procedural right to receive notice that sufficiently explains the reasons behind an adverse algorithmic decision.⁸⁴ These notices must provide detailed information, enabling affected people to identify potential errors and decide whether to pursue a corrective action.⁸⁵ The absence

⁸³ Citron, *supra* note 1, at 1281–82; Citron & Pasquale, *supra* note 3, at 27–28; Crawford & Schultz, *supra* note 3, at 111–17. *See generally* Cary Coglianese & David Lehr, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, 105 GEO. L.J., 1147 (2017).

⁸⁴ *See K.W. ex rel. D.W. v. Armstrong*, 180 F. Supp. 3d 703, 715 (D. Idaho 2016) (acknowledging that the lack of adequate notice violates procedural due process, and therefore mandating the provision of reasons for denying informal review); *Cahoo v. Fast Enters.*, 528 F. Supp. 3d 719, 759 (E.D. Mich. 2021) (noting that the State cannot rely on post-deprivation process to remedy the lack of pre-deprivation notice); *Bauserman v. Unemployment Ins. Agency*, No. 333181, 2017 WL 3044120, at *8 (Mich. Ct. App. July 18, 2017) (explaining that it constitutes a deprivation of due process when defendant issues notices informing the plaintiffs of its determination that they had engaged in fraudulent conduct without providing them with the requisite notice and opportunity to be heard); *Perdue v. Gargano*, 964 N.E.2d 825, 844–45 (Ind. 2012) (stating “the notices used by the FSSA to inform applicants that they have been denied Medicaid, Food Stamp, and TANF benefits are unconstitutional under the Due Process Clause of the Fourteenth Amendment to the United States Constitution because they fail to sufficiently explain the reasons underlying the agency’s adverse determination.”).

⁸⁵ *See Perdue*, 964 N.E.2d at 838 (arguing that notice must be unambiguous and inform

of comprehensive explanation not only hinders comprehension but also undermines the ability to effectively challenge automatic decision in appeal, constituting an autonomous procedural violation.⁸⁶

Furthermore, courts recognize a due process infringement when notices lack proper information about data and algorithms employed in generating adverse decisions.⁸⁷ This deficiency makes it more challenging for affected parties to propose appeal or request correction for erroneous determinations.⁸⁸ The procedural right to receive complete and accurate information is closely connected with the right to access and discover information.

Finally, deficit in proper communication extends to the introduction of new algorithmic tools or changes to existing ones. The failure to provide adequate communication regarding the use of such tools leaves individuals less aware of potential errors or modifications in the

applicants of the specific reason for which they were denied benefits, enabling them to determine the accuracy of the State's adverse determination); *Barry v. Corrigan* (Lyon), 79 F. Supp. 3d 712, 742–43 (E.D. Mich. 2015) (stating that the notices of termination of public benefits provided to recipients used only the general phrase “criminal justice disqualification,” the court emphasizes that recipients lack the necessary information to make an informed decision on whether to contest the disqualification or to understand what issues need to be addressed at a hearing); *Citron*, *supra* note 1, at 1305.

⁸⁶ In *Michael T. v. Bowling*, No. 2:15-cv-09655, 2016 WL 4870284, at *10 (S.D. W. Va. Sept. 13, 2016), the court recognized that in the letters sent to recipients notifying them of their individualized budget, the algorithm provided only the budget amounts and did not include any individualized rationale for the recipient's budget allocation. As a result, without indication of the basis for each plaintiff's benefits determination, plaintiffs could not meaningfully challenge the adverse determination. *See also* *Cahoo*, 528 F. Supp. 3d at 758 (E.D. Mich. 2021); *Elder v. Gillespie*, 54 F.4th 1055, 1064–65 (8th Cir. 2022); *Class Action Complaint for Declaratory and Injunctive Relief* at ¶¶ 32–35, *C.S. ex rel. K.C. v. Saiki*, No. 6:17-cv-00564 (D. Or. Apr. 10, 2017).

⁸⁷ *Hous. Fed'n of Tchrs. Loc. 2415 v. Hous. Indep. Sch. Dist.*, 251 F. Supp. 3d 1168, 1180 (S.D. Tex. 2017) (“HISD teachers have no meaningful way to ensure correct calculation of their EVAAS scores, and as a result are unfairly subject to mistaken deprivation of constitutionally protected property interests in their jobs.”); *Michael T.*, 2016 WL 487028, at *10 (“The record provides no information as to what factors are incorporated into the APS Algorithm, how each factor is weighted, or the overarching methodology APS utilizes in the APS Algorithm. In short, there is simply no way to determine how the APS Algorithm generates each waiver recipient's individualized budget.”).

⁸⁸ *Kaminski & Urban*, *supra* note 6, at 2035 (noting that individuals cannot contest or request correction of inaccurate decisions if they cannot see the incorrect data, reasoning, or inferences underlying decisions); *Bloch-Wehba*, *supra* note 18, at 1290.

decisional criteria used by the algorithmic systems.⁸⁹ This lack of information raises social alarm, diminishes public trust, and reduces the chance for individuals to contribute to a collaborative post-release assessment procedure.

3.2.2. Lack of Contestability

A critical aspect of due process violations is the absence of a meaningful appeal remedy.⁹⁰ This procedural violation can take various forms and degrees of severity. The most serious infringement is the absence of an effective way to challenge errors, contest algorithmic decisions, and resolve disputes. In short, a general lack of pre-deprivation process and inadequate post-deprivation process are censured.⁹¹

The deficiency in providing affected people with adequate notice and information regarding how to contest algorithmic decisions,⁹² along with a reasonable time frame for filing appeals, can also constitute a violation of procedural due process.⁹³ Instructions related to the appeals process should be presented in a clear format and easily accessible by individuals affected by automated systems. The brevity, clarity, and accessibility of such notices and instructions should be subject to

⁸⁹ In *Ark. Dep't of Hum. Servs. v. Ledgerwood*, 530 S.W.3d 336 (Ark. 2017), the sudden introduction of a new reassessment system (“RUGs”) without prior notice, based solely on a set of complex computer algorithms, resulted in a series of significant issues for the recipients. See also Richardson et al., *supra* note 18, at 7. In *Berliner v. Nassau Cnty.*, No. 605904/2019 (N.Y. Sup. Ct. Jan 28, 2020), the County conducted a reassessment of residential market values using algorithms programmed into computer software that generates calculations based on the entered data. Plaintiffs allege that the countywide reassessment was rushed and unfair and was performed under a veil of secrecy with the utilization of undisclosed software and algorithms. See also Crawford & Schultz, *supra* note 19, at 1949–1950; Engstrom & Ho, *supra* note 10, at 841–842.

⁹⁰ See Kaminski & Urban, *supra* note 6, at 1989.

⁹¹ See e.g., *Cahoo*, 528 F. Supp. 3d at 759.

⁹² In *Barry v. Corrigan (Lyon)*, the court stated that the deprivation notice fails to make clear whether a hearing request is required to resolve disqualifications. 79 F. Supp. 3d 712, 744 (E.D. Mich. 2015). The court further stated that the notice fails to inform recipients of the necessary steps to lift the disqualification, such as “resolving” it with law enforcement and eventually reapplying for benefits. *Id.* In sum, the disqualification notice fails to provide the due process required by the Fourteenth Amendment. *Id.*

⁹³ *Cahoo v. SAS Analytics Inc.*, 912 F.3d 887, 903 (6th Cir. 2019) (observing that even if plaintiffs theoretically had the opportunity to attend an appeal hearing, the vast majority of claimants did not receive notice of the fraud determinations until the window to appeal had expired).

evaluation, possibly through user experience research. More broadly, it is essential to ensure that those impacted by the algorithmic systems are not only aware of their right to appeal but also equipped with sufficient support and assistance during the appeals process.⁹⁴ This procedural violation extends to the lack of adequately trained public servants capable of providing meaningful and helpful guidance to affected individuals.⁹⁵

Furthermore, some courts have also emphasized the right of affected individuals to be placed in an economic position that enables them to contest algorithmic decisions. This aspect is crucial in cases associated with government service programs and with welfare fraud detection systems, where the absence of an automatic continuation of benefits during the appeal process is deemed a due process implicit infringement.⁹⁶

Finally, judicial scrutiny has been directed at instances where algorithmic systems negatively affected users without disclosing the details of the automatic decisions, although this information has been shown to be essential for effective contestation.⁹⁷ The fulfillment of the

⁹⁴ *K.W. ex rel. D.W. v. Armstrong*, 180 F. Supp. 3d 703, 716 (D. Idaho 2016) (“Due process requires more than just assuming someone will volunteer to assist the participant; it requires that IDHW receive a commitment from someone competent to assist the participant in the appeal. That commitment could be from a family member, guardian, volunteer, or other person, if competent. But the IDHW must receive that commitment before proceeding to informal review and taking any action to confirm a budget reduction produced by the budget tool.”).

⁹⁵ In *Lyon*, the court highlighted that notice recipients could call the DHS contact person and number listed on the notice to receive further information regarding their disqualification. 79 F. Supp. 3d at 743. However, due process protections cannot be satisfied by requiring notice recipients to call elsewhere. *Id.* Moreover, in this instance, such a call would be fruitless, as DHS staff are instructed not to disclose Fugitive Felon status information to the individual. *Id.* See also Crawford & Schultz, *supra* note 19, at 1948–49.

⁹⁶ See *Elder v. Gillespie*, No. 3:19-cv-00155, 2021 WL 1226671, at *15 (E.D. Ark. Mar. 31, 2021) (concluding that plaintiffs adequately allege that ADHS defendants violated their clearly established right to continued benefits pending the outcome of a hearing, giving that the existing procedure automatically terminates or reduces benefits); *Cahoo*, 912 F.3d at 903 (recognizing that the Agency terminated a claimant’s right to benefits immediately upon a positive fraud determination by MiDAS and before any appeal hearing took place).

⁹⁷ See *Lyon*, 79 F. Supp. 3d at 745–46 (stating that defendant’s disqualification notice is inadequate under the Fourteenth Amendment’s due process clause. To satisfy constitutional due process, the notice must detail: the nature and duration of the intended action; the factual and legal bases for the action; and the specific steps a disqualified individual can take to resolve the disqualification and regain full access

right to a proper appeal is closely tied to the lack of proper notice and explanation about the automatic decision.⁹⁸ Affected individuals are denied the opportunity to challenge algorithmic decisions if they are not adequately informed about their use, particularly evident in litigation related to risk assessment tools, predictive policing models, or facial recognition technologies used to facilitate enforcement activities.⁹⁹

3.2.3. Right to Access Information

The absence of disclosure about the type of algorithm employed, source code, and technical information (including training and testing data, a list of the input variables, and the algorithm's tuning parameters) used in making automated decisions is frequently qualified by courts as a breach of procedural due process.¹⁰⁰ The lack of access to this critical

to benefits); *Elder v. Gillespie*, 54 F.4th 1055, 1064–65 (8th Cir. 2022) (acknowledging that, as a matter of policy, practice, or procedure, ADHS provides insufficient notice of the reasons for the reduction in services. This inadequate notice hampers beneficiaries' ability to contest ADHS's decisions. Indeed, beneficiaries have a clearly established right to be provided adequate notice of reduction, loss, or termination of benefits); *K.W. v. Armstrong*, 683 F. Supp. 3d 1125, 1130 (D. Idaho 2023) (stating that denying beneficiaries access to User's Manual prevents their ability to challenge errors. In essence, without access to the manual, beneficiaries would be unable to demonstrate error in the functioning of the algorithmic software); *Michael T. v. Bowling*, No. 2:15-cv-09655, 2016 BL 298070, at *11 (S.D.W. Va. Sept. 13, 2016); *Hous. Fed'n of Tchrs. v. Hous. Indep. Sch. Dist.*, 251 F. Supp. 3d 1168, 1176 (S.D. Tex. 2017); *See also Baker v. CVS Health Corp.*, No. 23-11483, 2024 BL 51726, at *5–6 (D. Mass. Feb. 16, 2024); *Mobley v. Workday, Inc.*, No. 3:23-cv-00770 (N.D. Cal. Feb. 21, 2023); *Consumer Cases: In re HireVue*, *supra* note 52.

⁹⁸ *Kaminski & Urban*, *supra* note 6, at 1961 (noting that “if related due process protection such as transparency and notice are implemented badly or not at all, meaningful challenge will not be possible.”).

⁹⁹ *See e.g. Velesaca v. Decker*, 458 F. Supp. 3d 224 (S.D.N.Y. 2020); *Talley v. United States*, No. 1:16-cv-02327, at 28 (D. Colo. Sept. 14, 2016); *United States v. Curry*, No. 3:17-cr-00130, 2018 BL 93136, (E.D. Va. Mar. 19, 2018); *State v. Hickerson*, 516-272 (La. App. 4 Ct. 3/8/18), 312 So. 3d 1124.; *Lynch v. State*, 260 So. 3d 1166 (Fla. Dist. Ct. App. 2018). *See generally Crawford & Schultz*, *supra* note 3, at 103–5; *Andrew G. Ferguson, Predictive Policing and Reasonable Suspicion*, 62 EMORY L.J. 259, 319–20 (2012); *Natalie Ram, Innovating Criminal Justice*, 112 NW. U. L. REV. 659, 692 (2018).

¹⁰⁰ *See, e.g., Berliner v. Nassau County*, No. 605904/2019, 2020 Lexis 311, at *21–22 (N.Y. Jan. 28, 2020) (highlighting that not all aspects of the software, algorithms, formula, computer modeling, and data utilized in the multiple regression analysis have been provided. The Court finds that the information requested is essential to plaintiffs' case); *State v. Pickett*, 246 A.3d 311 (N.J. Super. Ct. App. Div. 2021) (stating that anything less than full access to TrueAllele's source code and related materials contravenes fundamental principles of fairness, which indubitably compromises a

information affects individuals' ability to fully comprehend the algorithmic decision and make informed choices on whether and how to challenge it through an appeal.¹⁰¹ However, there are still judicial cases in which defendants have been unsuccessful in challenging algorithm use without disclosure as a due process violation.¹⁰² This is particularly evident in criminal cases, especially when litigants are low-income individuals or under-resourced organizational parties.¹⁰³ Procedural errors in contesting the lack of discovery and the broader tendency for companies to claim trade secrets, even without valid basis, may play a significant role in these unsuccessful challenges.¹⁰⁴

The approach of courts differs on what kind or amount of information should be available to affected people to understand and eventually challenge the algorithmic decisions.¹⁰⁵ In *K.W. v. Armstrong*, the court emphasized the need for granting access to a substantial volume of information pertaining to the algorithmic formula and related

criminal defendant's right to present a complete defense); *Hous. Fed'n of Tchrs. v. Hous. Indep. Sch. Dist.*, 251 F. Supp. 3d 1168, 1176 (S.D. Tex. 2017) (recognizing that the procedures utilized are constitutionally inadequate for teachers threatened with termination based on low value-added scores, because they are denied access to the computer algorithms and data necessary to verify the accuracy of their scores); *Flores v. Stanford*, No. 18 Civ. 02468, 2022 BL 40564 (S.D.N.Y. Feb. 7, 2022); *State v. Flanigan*, No. 5303A 15D, at *4 (Snohomish Cnty. Ct. Nov. 17, 2015) (Mem.); *K.W. v. Armstrong*, 683 F. Supp. 1125, 1135 (D. Idaho 2023).

¹⁰¹ See Citron, *supra* note 1, at 1284 (noting that access to source code might provide a meaningful way for individual to challenge an agency's claims); Ram, *supra* note 99, at 664 (arguing that access to source code and other similar information is often essential for defendants to fully interrogate the algorithms that have led to their arrest, conviction, or sentence); Villasenor & Foggo, *supra* note 48, at 347 (noting that "it is hard to see how due process can be present when a defendant is denied access to the workings of the algorithm.").

¹⁰² See, e.g., *People v. Superior Court (Chubbs)*, No. B258569, 2015 BL 4669, at *10 (Cal. Ct. App. Jan. 9, 2015) ("Chubbs has received extensive information regarding TrueAllele's methodology and underlying assumptions, but he has not demonstrated how the source code is necessary to his ability to test the reliability of its results."); *People v. Wakefield*, 175 A.D.3d 158, 169 (N.Y. App. Div. 2019) (denying the criminal defendant access to the source code, as under the specific facts of the case, the source code did not qualify as a declarant); *Lynch v. State*, 260 So. 3d 1166, 1170 (Fla. Dist. Ct. App. 2018). See generally Wexler, *supra* note 76, at 1356.

¹⁰³ Bloch-Wehba, *supra* note 18, at 1310.

¹⁰⁴ *People v. Wakefield*, 175 A.D.3d 158, 172 (N.Y. App. Div. 2019) (noting that after the defendant initially demanded discovery of the source code and the People objected, the defendant took no further action, such as seeking a court order to require disclosure of the source code or issuing a subpoena to Cybergenetics to gain access to the source code). See also Wexler, *supra* note 76, at 1397.

¹⁰⁵ Cary Coglianese & Erik Lampmann, *Contracting for Algorithmic Accountability*, 6 ADMIN. L. REV. ACCORD 175, 188 (2020); Bloch-Wehba, *supra* note 18, at 1291.

materials. Without complete access to this information, the algorithm would remain a black box for beneficiaries, triggering their right to appeal the automated decision.¹⁰⁶ Conversely, in *Loomis v. Wisconsin*, the court affirmed that to meet procedural due process standards, it is enough that the criminal defendant had the opportunity to ensure the accuracy of his own personal information that the algorithm processed, but he was not entitled to know the full details about the proprietary algorithm's design.¹⁰⁷

Another crucial aspect related to the right to access information is the corresponding right of private companies to protect trade secrets. The approaches shown by courts are different, but there is always a strong emphasis on the protection of commercial secrets.¹⁰⁸ In *Houston Federation of Teachers v. Houston Independent School District*, while acknowledging the prevailing status of the trade secret, the court qualified the absence of enough information to verify the accuracy of the algorithmic system as a severe violation of due process. The court ruled against the public authority, enjoining the use of the algorithmic system by the school district, while leaving the trade secret intact.¹⁰⁹ In other cases, courts considered that a balance between trade secrets and the right to access information could be achieved through the release of compelled information under protective orders, coupled with nondisclosure orders that permit disclosure to the parties while preventing disclosure to the general public.¹¹⁰ The use of a protective

¹⁰⁶ *K.W. v. Armstrong*, 683 F. Supp. 1125, 1134 (D. Idaho 2023); *See also Malenchik v. State*, 928 N.E.2d 564, 568 (Ind. 2010).

¹⁰⁷ *State v. Loomis*, 2016 WI 68, 55–57 (2015).

¹⁰⁸ *Wexler*, *supra* note 76, at 1395; *Crawford & Schultz*, *supra* note 19, at 1970–71.

¹⁰⁹ *Hous. Fed'n of Tchrs. v. Hous. Indep. Sch. Dist.*, 251 F.Supp. 3d 1168, 1179 (S.D. Tex. 2017) (“When a public agency adopts a policy of making high stakes employment decisions based on secret algorithms incompatible with minimum due process, the proper remedy is to overturn the policy, while leaving the trade secrets intact.”). *See Bloch-Wehba*, *supra* note 18, at 1282–83 (discussing this litigation).

¹¹⁰ *K.W. ex rel. D.W. v. Armstrong*, 180 F.Supp. 3d 703, 717 (D. Idaho 2016) (recognizing concerns of copyright holder but emphasizing that harm to copyright holder could be substantially mitigated by a Protective Order and granting access to only that information essential for full confrontation); *State v. Pickett*, 466 N.J. Super. 270, 278 (N.J. Super. Ct. App. Div. 2021) (“Hiding the source code is not the answer. The solution is producing it under a protective order. Doing so safeguards the company’s intellectual property rights and defendant’s constitutional liberty interest alike.”); *Flores v. Stanford*, No. 18 Civ. 02468, 2022 BL 40564, at *7 (S.D.N.Y. Feb. 7, 2022) (“The court agrees that the privacy and safety concerns here are important, and there are compelling reasons to maintain their confidentiality. However, these concerns are outweighed by Plaintiffs’ need for the documents to pursue this civil rights action and the court can issue an order that requires the documents to be produced in a manner to reduce any harm.”).

order mitigates the risk of a competitive injury to companies and would prevent prejudice against plaintiffs or criminal defendants.¹¹¹ Secrecy and commercial value concerns are crucial for companies and innovation. The goal of preventing business competitors from stealing proprietary information is a central aim of intellectual property law, but it should not justify the violation of due process rights by withholding relevant information from parties.¹¹²

To overcome the tension between safeguarding trade secrets of algorithm-deploying companies, and promoting informed transparency, public administrations can leverage their bargaining power and other incentives.¹¹³ One approach is to draft contractual provisions compelling private vendors to disclose sufficient information to address public concerns, clarifying beforehand a delineation between confidential and disclosable information.¹¹⁴ Additionally, public administrations may opt to purchase only algorithmic tools that meet a certified level of openness.¹¹⁵ Such policies might encourage the development of higher-quality tools capable of withstanding adversarial scrutiny.¹¹⁶ The final goal is not to compel full disclosure but to guarantee access to information required for due process compliance,¹¹⁷

¹¹¹ Wexler, *supra* note 76, at 1409–10; Villasenor & Foggo, *supra* note 48, at 344. See also Huq, *supra* note 18, at 1948.

¹¹² Wexler, *supra* note 76, at 1412.

¹¹³ Ram, *supra* note 99, at 701–14 (suggesting alternative policy mechanisms, such as patents, prizes, grants, regulatory exclusivities, or tax incentives, to promote the disclosure of source code or other relevant information beyond the confines of a protective order or nondisclosure agreement); Wexler, *supra* note 76, at 1423.

¹¹⁴ Coglianese & Lehr, *supra* note 7, at 49; Lavi M. Ben Dor & Cary Coglianese, *Procurement as AI Governance*, 2 INST. ELEC. & ELECS. ENG'RS TRANSACTIONS ON TECH. & SOC'Y 192, 194 (2021); Coglianese & Lampmann, *supra* note 105, at 184–89; Bloch-Wehba, *supra* note 18, at 1308; Ram, *supra* note 99, at 715–16; Cary Coglianese, *Procurement and Artificial Intelligence*, in HANDBOOK ON PUBLIC POLICY AND AI 235–24 (Regine Paul et al., eds., 2024); Robert Brauneis & Ellen P. Goodman, *Algorithmic Transparency for the Smart City*, 20 YALE J. L. & TECH. 103, 164–67 (2018); Rowe & Prior, *supra* note 79, at 350; Citron, *supra* note 1, at 1308–09.

¹¹⁵ Rowe & Prior, *supra* note 79, at 362.

¹¹⁶ Wexler, *supra* note 76, at 1422.

¹¹⁷ Steven M. Appel & Cary Coglianese, *Algorithmic Administrative Justice*, in THE OXFORD HANDBOOK OF ADMINISTRATIVE JUSTICE 481, 489 (Marc Hertogh et al. eds., 2021); Coglianese & Lampmann, *supra* note 105, at 188; Wexler, *supra* note 76, at 1376; Rowe & Prior, *supra* note 79, at 351.

as well as to provide courts the information needed to trust the design and functioning of the algorithmic system.¹¹⁸

3.2.4. Lack of Human Oversight

The lack of human oversight—qualified by some courts as procedural infringement—can manifest in two primary forms. First is the exclusion of any human involvement throughout the automated decision-making process.¹¹⁹ Second is the denial of the opportunity for affected individuals to present their cases to public employees or receive an immediate human review of an automated decision before implementation.¹²⁰

In the series of disputes linked to fraud detection through the Michigan Integrated Data Automated System (MiDAS), courts censured instances where decision-making processes unfolded without human involvement. The system automatically accused people of intentional fraud, neglecting the assignment of a staff member to investigate discrepancies in more complex or uncertain cases. After a class action lawsuit, the state of Michigan enacted new legislation that prohibits fraud determinations based solely on computer-identified discrepancies, ensuring the involvement of humans in every determination of fraud to identify and correct the algorithm's errors.¹²¹ In *Barry v. Corrigan (Lyon)* the court censured the lack of a human verification process before disqualifying applicants and the failure to provide human assistance to explain potential mistakes or offer reasons for the algorithmic decisions.¹²² The court ultimately enjoined the

¹¹⁸ Coglianesse, *supra* note 114, at 9.

¹¹⁹ Crootof, Kaminski & Price, *supra* note 9, at 475 (noting that humans may play a corrective role to improve algorithmic system performance, including error, situational, and bias correction); *see also* Cary Coglianesse & Kat Hefter, *From Negative to Positive Algorithm Rights*, 30 WM. & MARY BILL RTS. J. 883, 918–19 (2021).

¹²⁰ Crootof, Kaminski & Price, *supra* note 9, at 475 (noting that humans may play a justificatory role to increase the system's legitimacy by providing reasoning for decisions).

¹²¹ *Zynda v. Arwood*, 175 F. Supp. 3d 791, 798 (E.D. Mich. 2016) (alleging that flaws in the system cause the software to make erroneous fraud determinations and noting that when such errors occur, there is no attempt by the agency to determine, before benefits are terminated, whether the identified discrepancy was a result of administrative error, good faith dispute, or misrepresentation by the employer).

¹²² *Barry v. Corrigan (Lyon)*, 79 F. Supp. 3d 712, 746 (E.D. Mich. 2015) (enjoining permanently the defendant from automatically disqualifying recipients from receiving food assistance benefits without further verifying the outstanding felony warrant and determining whether law enforcement is “actively seeking” the recipient).

public administration from automatically disqualifying beneficiaries without further verification.

In summary, the inclusion of human oversight as an inherent due process right is satisfied by the provision of human review in either ex-ante or ex-post deprivation process. However, it is worth noting that when a human is involved in the automatic decision-making process (whether ex-ante or ex-post), even if we do not have reassurance that the role is effectively played,¹²³ courts appear to be more inclined to bless algorithmic decisions,¹²⁴ with a proportional reduction in the scrutiny placed on the accuracy of algorithmic systems.¹²⁵ Despite efforts to implement human oversight, these policies often fail to eliminate error and bias, instead legitimizing a decreased level of institutional scrutiny over the use of AI systems.¹²⁶

3.2.5. Failed to Comply with Notice and Comment Procedures

There are no procedural rules specifically applicable to the use of AI systems by public administrations. However, if the algorithm is analogous to a rule,¹²⁷ then the federal or state administrative procedure act's requirements of rulemaking procedures would apply.¹²⁸

¹²³ See Huq *supra* note 18, at 1908–10 (reporting that human oversight may not adequately address due process concerns regarding the quality of AI decisions because a human in the loop does not always reduce the number of false positives and false negatives); Aziz Z. Huq, *A Right to a Human Decision*, 106 VA. L. REV. 611, 682 (2020); Kiel Brennan-Marquez, Karen Levy & Daniel Susser, *Strange Loops: Apparent Versus Actual Human Involvement in Automated Decision Making*, 24 BERKELEY TECH. L.J. 745, 754 (2019).

¹²⁴ See *e.g.*, *People v. Wakefield*, 107 N.Y.S.3d 487, 497 (App. Div. 3d Dep't 2019) (denying criminal defendant's due process challenge, as under specific facts of the case, access to source code was deemed nonessential due to sufficient human input being involved in use of the algorithmic system); *State v. Loomis*, 2016 WI 68, 371 Wis. 2d 235, 241, 881 N.W.2d 749, 761 (finding that disclosure of source code was unnecessary, as risk assessment score did not play a decisive role in sentencing); *Lynch v. State*, 260 So. 3d 1166, 1170 (Fla. Dist. Ct. App. 2018).

¹²⁵ See Bloch-Wehba, *supra* note 18, at 1292; Crootof, Kaminski & Price, *supra* note 9, at 438; Coglianese & Dor, *supra* note 2, at 811.

¹²⁶ Ben Green, *The Flaws of Policies Requiring Human Oversight of Government Algorithms*, 45 COMPUT. L. & SEC. REV. 1, 3 (2022) (proposing a shift from human to institutional oversight for regulating governmental algorithms).

¹²⁷ 5 U.S.C. § 551(4) (2000).

¹²⁸ See Citron, *supra* note 1, at 1288–89; Francesca Bignami, *Artificial Intelligence Accountability of Public Administration*, 70 AM. J. COMPAR. L. 312, 341–43 (2022); Mulligan & Bamberger, *supra* note 10, at 814–15. See also Young, *supra* note 14, at 12–13.

Determining whether the adoption of an algorithmic system constitutes a legislative rule that must undergo notice and comment procedures can be challenging.¹²⁹ However, when AI systems deprive an agency and its staff of future substantive discretion, especially through numerical or methodological choices, they should count as a legislative rule requiring full engagement in the notice and comment procedures.¹³⁰ Algorithms that result in benefits determinations or employment decisions can be qualified as legislative rules, as well as algorithms that influence agency enforcement priorities or that target certain types of regulatory violations might also very well be considered a legislative rule.¹³¹

In *Arkansas Department of Human Services v. Ledgerwood*, the court affirmed that the adoption and the implementation of a policy of general applicability and future effect—the algorithmic system—without providing proper notice, meaningful opportunity for public comment, reasoned consideration of the issues involved, and a proper legislative oversight it was in violation of the State Administrative Procedure Act.¹³² Likewise, in *Velesaca v. Decker*, the court ruled the introduction of a new *No-Release Policy*—through the use of a risk-assessment tool that substantially deprived immigration officials of their discretion—without the notice and comment requirements unlawful.¹³³ In these cases, courts censured the lack of transparency in informing the public about the new criteria and assessment methodology, as well as the absence of an opportunity for affected people to provide comments.¹³⁴

In summary, if the use of the algorithmic system meets the definition of a legislative rule and does not fully adhere to notice and comment

¹²⁹ Engstrom & Ho, *supra* note 10, at 806 (arguing that it is unclear whether the implementation of a new algorithmic system constitutes legislative rules); Citron, *supra* note 1, at 1290 (noting the challenge in discerning whether the introduction of an algorithmic system constitutes a “new rule” or an “interpretative rule”); Mulligan & Bamberger, *supra* note 10, at 814–17; Bignami, *supra* note 128, at 345.

¹³⁰ Engstrom & Ho, *supra* note 10, at 815.

¹³¹ Bignami, *supra* note 128, at 342. *See also* Engstrom & Ho, *supra* note 10, at 845–46 (suggesting a list of different factors that may guide courts and agencies in evaluating whether algorithmic tools should be subject to notice and comment procedures).

¹³² ARK. CODE ANN. § 25-15-204 (2020). *See* Ark. Dep’t of Human Servs. v. Ledgerwood, 2017 Ark. 308, at 11–12, 530 S.W.3d 336, 344–45 (Ark. 2017).

¹³³ *Velesaca v. Decker*, 458 F.Supp. 3d 224, 242 (S.D.N.Y. 2020). *See also* Mulligan & Bamberger, *supra* note 10, at 815–17 (providing additional examples of existing jurisprudence).

¹³⁴ *See* Citron, *supra* note 1, at 1290.

procedures prescribed by the federal or state administrative procedure act, then it may qualify as a procedural violation by the courts.¹³⁵ The infringement of notice and comment procedures directly effects the lack of public engagement in the deployment of AI systems. The absence of broader participation in the adoption and design of algorithmic systems poses several challenges—public participation is essential for legitimate administrative decision-making, promoting awareness, and enhancing trust in the use of AI systems.¹³⁶

3.2.6. Lack of Assessment Procedures

The lack of a proper assessment procedure regarding the introduction and functioning of an algorithmic system can be qualified as a procedural violation. In *K.W. v. Armstrong*, the court censured the lack of regular testing and checks on the algorithmic formula by the public authority to ensure that the budget tool functions do not arbitrarily reduce beneficiaries' budgets.¹³⁷ More broadly, scholars suggest that public authorities should periodically undergo independent auditing to monitor unintentional biases or erroneous results in the algorithm's formula,¹³⁸ also through the introduction of specific contractual provisions in agreements with software providers.¹³⁹

¹³⁵ See Citron, *supra* note 1, at 1288–89; see Bignami, *supra* note 128, at 341–43; Mulligan & Bamberger, *supra* note 10, at 814–15. See also, Young, *supra* note 14, at 12–13.

¹³⁶ Mulligan & Bamberger, *supra* note 10, at 846; Kaminski & Urban, *supra* note 6, at 2042; see also, Coglianese & Hefter, *supra* note 119, at 920; Ellen P. Goodman, *The Challenge of Equitable Algorithmic Change*, 8 REGUL. REV. IN DEPTH 1 (2019).

¹³⁷ *K.W. ex rel. D.W. v. Armstrong*, 180 F.Supp. 3d 703, 712 (D. Idaho 2016) (stating that regular testing must be conducted by the Agency to ensure that the budget tool functions as intended. However, despite knowing that the tool requires annual recalculation, the Agency has failed to do so. Furthermore, the Agency has never checked to determine how many participants are assigned insufficient budgets or to ensure that the current tool is not reducing participant budgets arbitrarily).

¹³⁸ Dor & Coglianese, *supra* note 114, at 195; Citron, *supra* note 1, at 1310–12 (suggesting that agencies should be required to regularly test their algorithmic systems to identify and eliminate bias and other errors); Kaminski & Urban, *supra* note 6, at 2003 (noting the importance of systemic solutions, such as testing, audits, algorithmic impact assessments, and documentation requirements); Ferguson, *supra* note 36, at 1167 (suggesting the auditing of predictive policing tools must include peer review and outside testing). David Lehr & Paul Ohm, *Playing with the Data: What Legal Scholars Should Learn About Machine Learning*, 51 U.C. DAVIS L. REV. 653, 698–700 (2017); Coglianese & Hefter, *supra* note 119, at 915.

¹³⁹ Dor & Coglianese, *supra* note 114, at 195 (suggesting the opportunity to introduce contractual provisions to periodically undergo independent auditing for monitor

Another relevant aspect related to assessment procedures is the proper engagement of users and stakeholders. In *K.W. v. Armstrong*, the court-ordered settlement required that the state agency continuously engage in a dialogue with the affected population and community stakeholders throughout the development of the new algorithmic system.¹⁴⁰ Moreover, the state agency was required to provide information and updates on progress to affected individuals and advocacy organizations, actively solicit feedback, and incorporate it in the development of the algorithmic system.¹⁴¹ Public administrations can only benefit from the perspectives and expertise of stakeholders engaged in the design, development, deployment, and impact of AI systems.¹⁴² By promoting user engagement and understanding of models and outputs, algorithmic systems can leverage this engagement to iteratively challenge and correct system outputs.¹⁴³ In short, the involvement of affected stakeholders in the design and development process might help in recognizing issues faster and more systematically.¹⁴⁴ Once again, leveraging the bargaining power of public entities in procurement procedures can lead to the negotiation of contractual terms that mandate private vendors to engage in a dialogue with users and stakeholders.¹⁴⁵ As suggested by Coglianese and Lampmann, contracts might require private vendors to actively participate in public engagement processes and collaborate with public administrations in providing “notice and comment” opportunities about key design choices.¹⁴⁶

CONCLUSION

unintentional race/gender/socio-economic biases or erroneous results in algorithmic tools); Citron, *supra* note 1, at 1310–12 (proposing that federal procurement could require contracts to specify that decision systems pass testing suites before states can accept systems from vendors); Coglianese & Lampmann, *supra* note 105, at 194.

¹⁴⁰ Settlement Agreement, *K.W. v. Armstrong*, No. 1:12-cv-00022-BLW (D. Idaho Jan. 12, 2017). *See also* The Statement of Ritchie Eppink, *supra* note 64, at 10.

¹⁴¹ *Id.*; *see also* Joint Report to the Court, *C.S. v. Saiki*, No. 6:17-cv-00564 (D. Or. June 2, 2017).

¹⁴² Citron, *supra* note 1, at 1310–1312; Bignami, *supra* note 128, at 31.

¹⁴³ *See* Mulligan & Bamberger, *supra* note 10, at 850–51.

¹⁴⁴ Kaminski & Urban, *supra* note 6, at 2042. *See also* Coglianese & Hefter, *supra* note 114, at 920; Goodman, *supra* note 136.

¹⁴⁵ Coglianese & Lampmann, *supra* note 105, at 194.

¹⁴⁶ *Id.* at 195 (noting that through public participation processes, government agencies can help ensure that AI tools better match the values and priority of the public and that they enjoy greater public acceptance when put into use).

Discussions in the academic and public debate have raised concerns related to economic, minority, and social discrimination due to the use of algorithmic systems by governments.¹⁴⁷ An in-depth analysis of forty-four AI-related public cases reveals that judicial decisions almost exclusively rely on procedural grounds,¹⁴⁸ and that these procedural issues consist of six violations: lack of adequate notice and explanation, lack of contestability, lack of human oversight, lack of notice and comment procedures, lack of assessment procedures, and denial of the right to access information. However, the fact that judicial decisions related to the governmental use of AI primarily focus on procedural grounds does not neglect the existence of substantial aspects. Rather, the opposite: it suggests that substantial issues are typically addressed through procedural solutions, which allow courts to indirectly tackle broader concerns. An effective application of procedural adjustments can indeed empower governmental bodies to address substantial concerns related to equality and fairness. In turn, this can mitigate adverse effects and enhance public trust.¹⁴⁹

As pointed out by Professor Huq, a potential explanation for this tendency is that due process claims are more easily alleged in court.¹⁵⁰ Due process claims primarily focus on the effective adherence to procedural rules in the decision-making process rather than the broader impact of algorithmic decisions on different groups.¹⁵¹ Therefore, it

¹⁴⁷ See generally Citron & Pasquale, *supra* note 3, at 13–16; Crawford & Schultz, *supra* note 3, at 99–101; Barocas & Selbst, *supra* note 3, at 673–74; Calo & Citron, *supra* note 3, at 800.

¹⁴⁸ See *supra* Part 3.2.

¹⁴⁹ Since *C.S. v. Saiki* was filed, the Oregon Department of Human Services has developed a new assessment tool, which has been tested by external experts for completeness, accuracy, usability, reliability, and validity. The Department also adopted a new rule stating that if a consumer's hours are reduced, they will be served with a notice describing their administrative appeal rights. This notice is designed to be transparent, clear, and responsive to the specific assessment criteria that changed, or the exceptions criteria applied by the assessment tool. In short, the aspects of the assessment tool, exceptions, notice, and administrative appeal systems challenged in the case have undergone significant changes. See Defendants' Unopposed Motion to Dismiss as Moot at 4–6, *C.S. v. Saiki*, No. 6:17-cv-00564 (D. Or. Apr 10, 2017). Similarly, after *K.W. v. Armstrong*, the Idaho Department of Health and Welfare launched an official website called "My Choice Matters," which provides the public with easy access to general information, as well as effective support for filing complain, speaking with a representative, or submitting an appeal. See *My Choice Matters*, IDAHO DEP'T OF HEALTH, <https://healthandwelfare.idaho.gov/services-programs/about-kw-lawsuit> (last visited Nov. 8, 2024) [<https://perma.cc/ZC3H-RY7C>].

¹⁵⁰ Huq, *supra* note 18, at 1897.

¹⁵¹ *Id.*

may be more straightforward to collect evidence or arguments related to the procedural aspects of the decision-making process, rather than demonstrating their consequences on dimensions such as equality and fairness.¹⁵² As a result, lawyers may find due process challenges more accessible to conceive compared to addressing more substantial issues.¹⁵³ Additionally, the absence of effective channels for challenging some type of algorithmic systems, particularly in domains like crime forecasting and predictive policing, may contribute to the limited exploration of broader substantial aspects, such as those related to arbitrariness, lack of scientific basis, or unfairness, in judicial decisions.¹⁵⁴

In addition, this judicial tendency aligns with the legal scholarship that advocates for procedural solutions to address substantial concerns, as well as with policy documents that emphasize the importance of procedural safeguards to promote equity and address unlawful discrimination.¹⁵⁵ Because courts decide actual cases, their indication is extremely valuable in providing guidance on how these procedural adjustments might be operationalized in practice.

From a different perspective, the six procedural violations unveiled in this paper provide a taxonomy of the minimum requirements that any governmental body should comply with to shield its use of algorithmic systems from judicial review. Because the six procedural violations are substantially aligned with Executive Order 14,110,¹⁵⁶ this taxonomy can serve as a compass for governmental bodies aimed at ensuring compliance with future regulatory initiatives crafted by the Executive Order.¹⁵⁷ This paper ultimately underscores the pivotal role that judicial

¹⁵² At the same time, courts may lack the technical expertise to analyze and assess the negative impact of technologies on more substantial issues. *See* Selbst, Venkatasubramanian & Kumar, *supra* note 18, at 421 (noting that judges and juries are typically laypeople, and without proper training to critically examine such technologies, they tend not to do so).

¹⁵³ Huq, *supra* note 18, at 1897.

¹⁵⁴ *Id.* at 1903 (noting that “When it comes to policing, for example, it would be difficult for an individual litigant to challenge the use of a machine-learning tool to allocate policing resources so long the legal basis for his or her encounter with the police was constitutionally sufficient.”).

¹⁵⁵ *See supra* notes 4–14.

¹⁵⁶ The Executive Order outlines a list of procedural safeguards in the implementation of algorithmic systems, such as providing notice to recipients, ensuring human customer support, guaranteeing appeal processes to human reviewer, and enabling audits and regular evaluations, among other measures. *See* Exec. Order No. 14,110, 88 Fed. Reg. 75,191, at Sec. 7.1(B) and Sec. 7.2 (b)(i)(ii).

¹⁵⁷ Coglianesi & Lehr, *supra* note 83, at 1191 (noting that the capacity of an

reasoning may play in shaping policy documents and guiding governmental bodies in the evolving landscape of AI systems deployment.¹⁵⁸

algorithmic system to satisfy the standards of due process guarantees depend on how well the system is implemented).

¹⁵⁸ See Ashley Deeks, *The Judicial Demand for Explainable Artificial Intelligence*, 121 COLUM. L. REV. 1829, 1841 (2019) (noting that courts can play a significant role in shaping the AI ecosystem); Coglianese & Hefter, *supra* note 119, at 922–23.

APPENDIX 1—LIST OF FORTY-FOUR PUBLIC CASES

| Case Name | Court | Citation/Case Number |
|--|---|--|
| <i>ACLU v. DOJ</i> | District Court, D. Massachusetts | No. 1:19-cv-12242 |
| <i>Ark. Dep't of Human Servs. v. Ledgerwood</i> | Supreme Court of Arkansas | 2017 Ark. 308, 530 S.W.3d 336 2019 Ark. 121, 571 S.W.3d 911 |
| <i>Barry v. Corrigan (Lyon)</i> | U.S. District Court, E.D. Michigan, Southern Division | 79 F. Supp. 3d 712 |
| <i>Bauserman v. Unemployment Insurance Agency</i> | Court of Appeals of Michigan | 950 N.W.2d 446 |
| <i>Berliner v. Nassau County</i> | New York Supreme Court | No. 605904/2019 |
| <i>C.S. et al v. Saiki</i> | U.S. District Court District of Oregon | No. 6:17-cv-00564 |
| <i>Cahoo v. Fast Enters.</i> | U.S. District Court, E.D. Michigan, Southern Division | No. 2:17-cv-10657-DML-RSW |
| <i>Cahoo v. Fast Enters. LLC</i> | U.S. District Court, E.D. Michigan, Southern Division | 508 F. Supp. 3d 138 (E.D. Mich. 2020) |
| <i>Cahoo v. SAS Analytics Inc</i> | U.S. District Court, E.D. Michigan, Southern Division | No. 2:17-cv-10657-DML-APP |
| <i>EPIC v. CPB</i> | U.S. District Court, District of Columbia | 950 N.W.2d 446 |
| <i>Flores v. Stanford</i> | U.S. District Court, Southern District of New York | No. 18 Civ. 02468 (VB)(JCM), 2021 BL 367742 |
| <i>Ginger Elder, et al v. Cindy Gillespie, et al</i> | U.S. Court Of Appeals for the eighth circuit | 54 F.4th 1055 |
| <i>Henderson v. Steinsburg</i> | U.S. District Court, Western District of Wisconsin | No. 3:18-cv-00555-jdp, 2021 BL 111352 |
| <i>Hous. Fed'n of Teachers v. Hous. Indep. Sch. Dist</i> | U.S. District Court, S.D. Texas, Houston Division | 251 F. Supp. 3d 1168 |
| <i>Hawkins v. Cohen</i> | U.S. District Court, E.D. North Carolina | 327 F.R.D. 64 |
| <i>IBM Corp. v. State ex rel. Ind. Family & Soc. Servs. Admin.</i> | Court Of Appeals of Indiana | 112 N.E.3d 1088 |

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| <i>In the Matter of [Juvenile Client]</i> | Superior Court of the District of Columbia, Family Court | 2017 DEL * |
| <i>K.W. v. Armstrong</i> | U.S. District Court of Idaho | 180 F. Supp. 3d 703 - 683 F. Supp. 3d 1125 |
| <i>Lederman v. King</i> | Supreme Court of New York Albany County | 47 N.Y.S.3d 838 |
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| <i>Lynch v. Florida</i> | Court Of Appeals of Florida, First District | 260 So. 3d 1166 |
| <i>Malenchik v. State</i> | Supreme Court of Indiana | 928 N.E.2d 564 |
| <i>Michael T. v. Bowling</i> | United States District Court Southern District of West Virginia (Charleston) | Michael T. v. Bowling, No. 2:15-cv-09655, 2016 BL 298070 Michael T. v. Crouch, No. 2:15-cv-09655, 2018 BL 103935 |
| <i>Nijer Parks v John E. McCormack</i> | U.S. District Court for the District of New Jersey | No. 2:21-cv-04021 |
| <i>Oliver v. Detroit, City of</i> | District Court, E.D. Michigan | No. 2:20-cv-12711 |
| <i>People v. H.K.</i> | Criminal Court of the City of New York, Bronx County | 69 Misc. 3d 774 |
| <i>People v. Superior Court (Chubbs)</i> | Court of Appeals of California, Second Appellate District, Division Four | No. B258569, 2015 BL 4669 |
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| <i>State of Washington v. Flanigan et al</i> | State of Washington Snohomish county District Court | No. 5303A 15D |
| <i>State v. Gordon</i> | Supreme Court of Iowa | 919 N.W.2d 635 |
| <i>State v. Jennings</i> | Court of Appeals of Ohio, Second Appellate District, Clark County | 2013 CA 60, 2014-Ohio- 2307 |
| <i>State v. Pickett</i> | Superior Court of New Jersey, Appellate Division | 246 A.3d 279 |
| <i>United States v. Curry</i> | District Court, E.D. Virginia | No. 3:17-cr-00130 |
| <i>United States v. Wilson</i> | U.S. District Court, S.D. California | No. 3:15-cr-02838-GPC-1 |
| <i>Velesaca v. Decker</i> | U.S. District Court, S.D. New York | 458 F. Supp. 3d 224 |
| <i>William v. City of Detroit</i> | U.S. District Court, E.D. Michigan, Southern Division | No. 2:21-cv-10827 |
| <i>Williams v City of Chicago</i> | U.S. District Court, N.D. Illinois, Eastern Division | No. 1:22-cv-03773 |
| <i>Woodruff v. Detroit, City of</i> | District Court, E.D. Michigan | No. 5:23-cv-11886 |
| <i>Zynda et al. v. Arwood</i> | U.S. District Court, E.D. Michigan, Southern Division | 175 F. Supp. 3d 791 |