LAWYERS' COMMITTEE FOR CIVIL RIGHTS UNDER LAW

1500 K Street, NW
Suite 900
Washington, DC 20005

Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

January 15, 2022

Dr. Eric S. Lander, Science Advisor and Director
Office of Science and Technology Policy, Executive Office of the President
1650 Pennsylvania Avenue
Washington, DC 20504
BiometricRFI@ostp.eop.gov

RE: RESPONSE TO RFI ON BIOMETRIC TECHNOLOGIES

Dear Director Lander,

The Lawyers' Committee for Civil Rights Under Law (LCCRUL) is pleased to submit these comments in response to the White House Office of Science and Technology Policy (OSTP) request for information on "Public and Private Sector Uses of Biometric Technologies."[1] The LCCRUL is a nonpartisan, nonprofit organization whose mission is to secure equal justice for all through the rule of law, targeting in particular the inequities confronting Black Americans and other racial and ethnic minorities. The LCCRUL was formed in 1963 at the request of President John F. Kennedy to mobilize the private bar to combat racial discrimination and the resulting inequality of opportunity – work that continues to be vital today.

Thank you for the opportunity to build the record on the use of these technologies and how they fit into national policymaking on AI and equity.[2] As you and Deputy Director Nelson recently wrote while announcing this project, "[W]e need a 'bill of rights' to guard against the powerful technologies we have created" which may include "the federal government refusing to buy software or technology products that fail to respect these rights [and] requiring federal contractors to use technologies that adhere to this 'bill of rights.'"[3]

We write to provide guidance on the application of Title VI of the Civil Rights Act of 1964 to the use of biometric technologies by federal agencies and the recipients of federal funds. Title VI prohibits the use of federal funds for programs and activities that discriminate on the basis of race or national origin.[4] Consequently, the federal government and recipients of federal funds are prohibited from using technologies that either intentionally discriminate or produce discriminatory disparate impacts.[5] Many biometric and algorithmic technologies, such as facial recognition, have been shown to result in, or have the potential to result in, such discrimination.

---

[1] Notice of Request for Information (RFI) on Public and Private Sector Uses of Biometric Technologies, 86 Fed. Reg. 56300-02 (Oct. 8, 2021).
[2] The White House, *Join the Effort to Create a Bill of Rights for an Automated Society* (Nov. 10, 2021), https://www.whitehouse.gov/ostp/news-updates/2021/11/10/join-the-effort-to-create-a-bill-of-rights-for-an-automated-society/.
[3] Eric Lander and Alondra Nelson, *Americans Need a Bill of Rights for an AI-Powered World*, WIRED (Oct. 8, 2021), https://www.wired.com/story/opinion-bill-of-rights-artificial-intelligence/.
[4] 42 U.S.C. § 2000d.
[5] *See* U.S. DEP'T OF JUSTICE, CIVIL RIGHTS DIV., TITLE VI LEGAL MANUAL, SECTION VII: PROVING DISCRIMINATION – DISPARATE IMPACT, https://www.justice.gov/crt/fcs/T6Manual (2021). (hereinafter Title VI Legal Manual).

1500 K Street, NW
Suite 900
Washington, DC 20005

Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

Moreover, even if a tool is facially neutral that does not mean it is incapable of harm. No matter how complex biometric and algorithmic technologies are, they are just tools in the hands of those who wield them. When a technology is used to make a discriminatory system more efficient, that is a discriminatory use of the technology because it increases the quantity or quality of harm. Federal law requires that these technologies be used only in a nondiscriminatory manner.

We urge OSTP to incorporate the federal government's legal obligations under Title VI as it develops policy recommendations for biometric and algorithmic technologies.

Below, we discuss (I) the legal requirements of Title VI, and (II) examples of some technologies whose use may violate Title VI, such as facial recognition and behavioral recognition.

I. Title VI prohibits federal dollars from funding programs that either intentionally discriminate or have a disparate impact on protected classes.

Title VI states, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving [f]ederal financial assistance."[6] This prohibition on discrimination applies to both intentional discrimination and practices that result in unfair disparate impacts. Every federal agency is obligated to ensure that their programs—and recipients of their funding—comply with Title VI.[7]

The Department of Justice (DOJ) has assembled a comprehensive manual for agency guidance on Title VI. This manual explains the legal principles behind federal agency Title VI enforcement as well as legal criteria agencies should use to determine Title VI compliance with agency action.[8] Such guidance assists federal agencies with ensuring that they enforce rules to (A) prohibit intentional discrimination and (B) withhold funding from programs that result in intentional discrimination or a disparate impact.

A. Title VI prohibits intentional discrimination and practices that result in unfair disparate impacts.

Title VI outright bans federal funding for discriminatory programs, including those that are intentionally discriminatory as well as those that create discriminatory disparate impacts. When determining if a program is intentionally discriminatory, the Supreme Court has indicated that one must show that an entity adopted a policy "because of" not merely "in spite of" its adverse effects upon an identifiable group.[9] In determining disparate impact, "Title VI regulations prohibit practices having a discriminatory effect on protected groups, even if the actions or

[6] Civil Rights Act of 1964 § 601, 42 U.S.C. § 2000d (1964).
[7] 42 U.S.C. § 2000d-1.
[8] *See* TITLE VI LEGAL MANUAL, *supra* note 3.
[9] *Id.* (quoting *Personnel Adm'r of Mass. v. Feeney*, 442 U.S. 256, 279 (1979)).

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

practices are not intentionally discriminatory."[10] Unlike intentional discrimination, a disparate impact results where a particular program may not have been designed with a discriminatory purpose, but has a disproportionate adverse effect on protected groups.[11] The DOJ notes that establishing adverse effect for a disparate impact claim is generally a "low bar" given the wide range of harms, such as "physical, economic, social, cultural, and psychological" harms.[12]

Disparate impact analyses proceed in three steps.[13] A *prima facie* disparate impact claim requires demonstrating that a facially neutral policy is discriminatory in practice. Upon such a showing, the burden shifts to the funding recipient to provide a "substantial legitimate justification" for the policy or practice. If the recipient can provide this, the practice may still be unlawful if an "equally effective alternative practice" would yield less discriminatory results or if the recipient's "legitimate practices are a pretext for discrimination."[14]

B. Agencies must ensure programs they finance comply with Title VI, including by withholding funds from discriminatory programs.

Disparate impact guidelines prohibit the subsidizing of policies or practices that are facially neutral but discriminatory in practice.[15] Title VI requires federal agencies to promulgate regulations and take appropriate actions—including withholding funds—to ensure compliance with Title VI's prohibition of discrimination.[16] Agencies have a duty to investigate and monitor funding recipients even without an official complaint.[17] Under guidance from the Attorney General, agencies must "ensure that…disparate impact provisions in [agency] regulations are fully utilized."[18] Indeed, as the Supreme Court has indicated, private lawsuits are not permitted under Title VI, and thus federal agencies are the only means of enforcing this cornerstone of the Civil Rights Act. To date, 26 federal agencies have published Title VI regulations. Agencies should "initiate affirmative compliance reviews" to guarantee that agency funding violates neither the intentional nor the disparate impact standards of Title VI.[19]

Per these guidelines, for instance, state and local law enforcement agencies may not use federal funding in any racially discriminatory manner. The DOJ has a wide array of enforcement tools to ensure compliance, such as lengthy cooperation agreements with local police departments deemed to be in violation of Title VI, subjecting such departments to court-orders, or even

---

[10] *Id.* (citing (citing *Guardians Ass'n v. Civil Serv. Comm'n*, 463 U.S. 582, 643 (1983) (Steven, J., dissenting) (citing *Lau v. Nichols*, 414 U.S. at 568, 571 (Stewart, J., concurring) and *Fullilove v. Klutznick*, 448 U.S. 448, 479 (1980) (opinion of Burger, C.J.)); *Alexander v. Choate*, 469 U.S. 287, 293 (1985)).
[11] *Ricci v. DeStefano*, 557 U.S. 557, 577 (2009).
[10] Title VI Legal Manual, *supra* note 3, at Section VII.
[13] *Ga. State Conference of Branches of NAACP v. State of Georgia*, 775 F.2d 1403, 1417 (11th Cir. 1985) (disparate impact standard from Title VII is "instructive" for Title VI). *See Albemarle Paper Co. v. Moody*, 422 U.S. 405, 425 (1975); *see McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802-03 (1973) (describing the three-step disparate impact analysis in the analogous Title VII context).
[14] *Id.*
[15] *Id.*
[16] 42 U.S.C. § 2000d-2.
[17] Title VI Legal Manual, *supra* note 3, at Section VII(D). Agencies have a "clear mandate" to collect relevant demographic data from recipients of federal assistance to monitor or evaluate compliance. *Id.*
[18] Title VI Legal Manual, *supra* note 3, at Section VII.
[19] *Id.*

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

withholding funding.[20] In September 2021, the DOJ launched a comprehensive review of all law enforcement departments currently receiving federal dollars to ensure Title VI compliance.[21]

One example of a successful Title VI challenge includes a 2013 Ninth Circuit finding that the Maricopa County Sheriff's Office engaged in intentional discrimination when it permitted officers to expressly take race into account in determining which individuals it should detain.[22] In another example, a Florida case found a Title VI violation where a racially neutral formula was used to distribute aid to elderly residents, but the result was a disparate impact.[23] The court found that certain "[m]inority elderly [residents] have a disproportionate tendency to reside with…extended family."[24] As a result, a greater number of minority residents were excluded from aid while non-minority residents that more commonly lived alone did receive aid. The funding formula skewed federal assistance away from racial minorities in need of help, a statistical effect the Court held to violate the disparate impact requirement.[25]

As the federal government consider policies for the use of biometric and algorithmic technologies by federal agencies or recipients of federal funds, Title VI obligates them to ensure that these technologies and how they are used do not produce unlawful racial discrimination.

II. Biometric technologies carry significant risk of bias and disparate impact.

Biometric technologies are a subset of algorithmic technologies, which operate by analyzing large sets of data, identifying correlations and patterns within the data, and then extrapolating from those patterns to make decisions, predictions, or matches.[26] When the source data for an algorithm comes from societal sources that are a product of historic and ongoing systemic inequalities—such as our criminal justice system, housing markets and urban development produced by redlining and segregation, or longtime disparities in access to jobs, education, lending, or healthcare—the algorithm will discover the pattern.[27] The algorithm will not know that one set of patterns is acceptable to use and that another set of patterns is unacceptable. Absent careful design and intervention, the algorithm will see patterns of discrimination in society and reproduce them, because that is how the algorithm (or artificial intelligence) works.[28] Researchers have noted that such technologies "present a veneer of social control or risk

[20] Katie Benner, *Justice Dept. to Review Enforcement of Civil Rights Protections in Grants*, N.Y. Times (Sep 16, 2021).
[21] *Id.*
[22] *Melendres v. Arpaio*, 989 F.Supp.2d 822, 827 (9th Cir. 2013).
[23] *Meek v. Martinez*, 724 F. Supp. 888, 899 (11th Cir. 1987).
[24] *Id.*
[25] *Id.*
[26] Nicol Turner Lee, Paul Resnick, & Genie Barton, *Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harm,* BROOKINGS (May 22, 2019), https://www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/.
[27] *See, e.g., Leaders of a Beautiful Struggle v. Baltimore Police Dep't*, 2 F. 4th 330, 348 (4th Cir. 2021) (en banc) (Gregory, C.J. concurring) ("Many measures of resource distribution and public well-being now track the same geographic pattern [from past redlining]: investment in construction; urban blight; real estate sales; household loans; small business lending; public school quality; access to transportation; access to banking; access to fresh food; life expectancy; asthma rates; lead paint exposure rates; diabetes rates; heart disease rates; and the list goes on.").
[28] *See Confronting Bias: BSA's Framework to Build Trust in AI,* BUSINESS SOFTWARE ALLIANCE (June 8, 2021), https://ai.bsa.org/wp-content/uploads/2021/06/2021bsaaibias.pdf.

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

mitigation," while in reality they "tend to reproduce, maintain, and naturalize structural inequalities…and allow policymakers to avoid necessary structural reforms."[29]

Biometric and algorithmic technologies can directly or indirectly result in discrimination through their design or the datasets used to train their algorithms. "Biometric information" is an umbrella term for "any information, regardless of how it is captured, converted, stored, or shared, based on an individual's biometric identifier used to identify an individual."[30] Biometric technologies, in turn, capture and analyze such information.[31] Biometric technologies are used in various ways, each of which carries risk of discrimination. Some systems are used to identify or verify identity of an individual, such as facial recognition. Others are used to make decisions about whether an individual will receive an opportunity, such as eligibility determinations for jobs or healthcare.[32]

As explained below, the reliability and risk of bias in biometric technology varies greatly depending on the design of the technology and the biometric marker being analyzed. One significant factor in determining reliability and risk of bias is the representativeness of the data set, including how the data was collected and how it is used. For example, criminal DNA databases are over-representative of Black people,[33] while medical research DNA databases are over-representative of white people.[34]

---

[29] Stefanie Coyle & Rashida Richardson, *Bottom-Up Biometric Regulation: A Community's Response to Using Face Surveillance in Schools,* in AI NOW INSTITUTE, REGULATING BIOMETRICS: GLOBAL APPROACHES AND OPEN QUESTIONS 104 (Amba Kak ed., Sep. 1, 2020). *See also* Erin Simpson & Adam Conner, *How To Regulate Tech: A Technology Policy Framework for Online Services*, CENTER FOR AMERICAN PROGRESS (Nov. 16, 2021), https://www.americanprogress.org/article/how-to-regulate-tech-a-technology-policy-framework-for-online-services/ ("Use of digital technologies—including…biometric technology, and more—have introduced new vectors to continue the deeply rooted historical exploitation of and discrimination against protected classes."); Yeshimabeit Miller & Amy Traub, *Data Capitalism + Algorithmic Racism,* DEMOS, https://www.demos.org/sites/default/files/2021-05/Demos_%20D4BL_Data_Capitalism_Algorithmic_Racism.pdf ("Baked into the mathematical formulas of the algorithm, represented by lines of code, are legacies of racist public policy and discrimination dating back to the foundation of this country, codified through existing data sets as if they were digital artifacts of the past.").

[30] Illinois' Biometric Information Privacy Act, 740 ILL. COMP. STAT. 14/10 (2008); *see also* California's California Consumer Privacy Act, defining the same term as "an individual's physiological, biological, or behavioral characteristics, including an individual's deoxyribonucleic acid (DNA), that can be used, singly or in combination with each other or with other identifying data, to establish individual identity." Cal. Civ. Code §1798.140 (West 2019).

[31] *See Biometric Standards Program and Resource Center,* NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (last updated June 4, 2020), https://www.nist.gov/programs-projects/biometric-standards-program-and-resource-center.

[32] *See generally* P. Jonathan Phillips, Et Al., *An Introduction to Evaluating Biometric Systems* 56, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (2000), https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=151436.

[33] Erin Murphy and Jun H. Tong, *The Racial Composition of Forensic* DNA *Databases*, California Law Review (Dec. 2020), *available at* https://www.californialawreview.org/print/racial-composition-forensic-dna-databases/#clr-toc-heading-1.

[34] Vicky Stein, *Genetic research has a white bias, and it may be hurting everyone's health*, PBS NewsHour (updated on Mar. 22, 2019), https://www.pbs.org/newshour/science/genetic-research-has-a-white-bias-and-it-may-be-hurting-everyones-health.

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

To better consider the risk of disparate impact, we focus here upon two commonly used biometric technologies: (A) biometric identification technology (primarily facial recognition technology), and (B) behavioral recognition technology.

A. Biometric Identification Technology, such as facial recognition technology (FRT), discriminates on the basis of race and gender.

Biometric identification technology involves measuring biological characteristics to identify or verify the identity of individuals. FRT is the most common technology and it typically is used to compare "identity information in features vectors extract from two face image samples and produce a measure of similarity between the two."[35]

Empirical research demonstrates that FRT presents a significant risk of bias and disparate impact on protected groups by producing inaccurate and skewed outputs. Of all biometric technologies, FRT in particular has received the most criticism for its demonstrated racial and gender bias and its subsequent impact on individuals and communities of color due to its frequent use by law enforcement.[36] Indeed, the data is so alarming that three of the largest purveyors of FRT recently scaled back their operations because of these concerns: IBM and Microsoft both stopped selling FRT products to police departments out of concern that "such technology could be used by the police to violate 'basic human rights and freedoms,'"[37] as did Amazon.[38] And these concerns have already prompted at least seven states and almost two dozen cities to limit the use of FRT by government entities, such as law enforcement, schools, and campus security.[39]

1. Even when facially neutral, FRT is discriminatory in practice.

Several major studies have analyzed commercially available and "state-of-the-art" FRT algorithms and found overwhelming evidence of bias that runs across lines of race, gender, and skin color. One 2018 study, for instance, "measured the accuracy of three commercial gender

[35] PATRICK GROTHER ET. AL, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, FACE RECOGNITION VENDOR TEST (FRVT) PART 3: DEMOGRAPHIC EFFECTS 14 (2019), https://nvlpubs.nist.gov/nistpubs/ir/2019/NIST.IR.8280.pdf.

[36] We understand that there are additional technologies, including iris scanning technologies, but we focus on FRT in our discussion as it is one of the more commonly-used biometric technologies.

[37] Bobby Allyn, *IBM Abandons Facial Recognition Products, Condemns Racially Biased Surveillance,* NPR (June 9, 2020), https://www.npr.org/2020/06/09/873298837/ibm-abandons-facial-recognition-products-condemns-racially-biased-surveillance; Olivia Solon, *Microsoft won't sell facial recognition to police without federal regulation,* NBC NEWS (June 11, 2020), https://www.nbcnews.com/tech/internet/microsoft-won-t-sell-facial-recognition-police-without-federal-regulation-n1230286. *See also,* Kashmir Hill & Ryan Mac, *Facebook Plans to Shut Down Its Facial Recognition System,* N.Y. TIMES (Nov. 2, 2021), https://www.nytimes.com/2021/11/02/technology/facebook-facial-recognition.html (describing Facebook's decision to turn off facial recognition tools but keep the data).

[38] Jeffrey Dastin, *Amazon extends moratorium on police use of facial recognition software,* REUTERS (May 18, 2021), https://www.reuters.com/technology/exclusive-amazon-extends-moratorium-police-use-facial-recognition-software-2021-05-18/.

[39] Associated Press, *States Push Back Against Use of Facial Recognition by Police,* U.S. NEWS (May 5, 2021), https://www.usnews.com/news/politics/articles/2021-05-05/states-push-back-against-use-of-facial-recognition-by-police. The City of San Francisco prohibited the practice in 2019, followed by California's statewide three-year moratorium on police use of FRT derived from body cameras. And other states have responded with bans of varying intensity: New York, for example, currently has a two-year moratorium on the use of FRT in schools, while Virginia requires all local law enforcement and campus-based security to get the approval from the state legislature before FRT can be utilized. Additional limits and requirements are currently being considered in about twenty states.

classification algorithms" and found that all three systems are more accurate on "male faces than female faces" and "lighter faces than darker faces," while performing "worst on darker female faces."[40] The authors of the study noted that despite "darker females [constituting] 21.3% of the [benchmark], they constitute 61.0% to 72.4% of the classification error."[41] A 2019 study from the National Institute of Standards and Technology (NIST) found similar results when it discovered that "a majority of facial-recognition systems exhibit bias," finding that they "falsely identified African-American and Asian faces 10 times to 100 times more than Caucasian faces."[42] These and other studies demonstrate FRT is discriminatory.[43] Research also shows that humans are very bad at identifying unfamiliar faces, which can compound discrimination from FRT if the algorithms require humans to check and verify the accuracy of their results.[44]

2. Law enforcement agencies use FRT in a discriminatory manner with disproportionate adverse effect on protected groups.

FRT has a well-documented history of compounding previously existing racial disparities, particularly when used in the law enforcement sector. Studies show, "[i]n at least three cases that are publicly known police have relied on erroneous face recognition identifications to make wrongful arrests of Black men,"[45] leading to multiple lawsuits against the police departments that made the arrests.[46] Critically for Title VI analysis, we are not aware of *any* false arrests based on a FRT mismatch of non-Black individuals.[47] Black Americans are more likely to be stopped, arrested and incarcerated for minor crimes, and therefore have more mugshots in the police databases. This creates what some call a "feed-forward loop" making Black Americans disproportionately "subject to future [FRT] surveillance."[48] In Detroit, a 2016 program saw

---

[40] Joy Buolamwini & Timnit Gebru, *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classificationi,* 81 Proc. of Machine Learning Res. 1, 12 (2018), https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf.
[41] *Id.* at 10.
[42] *Grother et. al, supra,* FN 30.
[43] This detection bias is well-documented in several peer-reviewed studies. *See generally, id.*; Brenan F. Klare et. al, 7 IEEE TRANSACTIONS ON INFO. FORENSICS AND SECURITY 1789 (2012) ("performances of all three commercial algorithms [studied] were consistent in that they all exhibited lower recognition accuracies on the following cohorts: females, Blacks, and younger subjects"); Cynthia M. Cook et. al., Demographic Effects in Facial Recognition and their Dependence on Image Acquisition: An Evaluation of Eleven Commercial Systems, 1 IEEE TRANSACTIONS ON BIOMETRIC BEHAV. AND IDENTITY 32 (2019) ("our analyses show that demographic factors influenced both the speed and accuracy of all eleven commercial biometric systems evaluated.").
[44] *See, e.g.,* Alice Towler et. al., *Can face identification ability be trained? Evidence for two routes to expertise,* PSYARXIV (Aug. 26, 2020), https://psyarxiv.com/g7qfd/ (noting that "many uses of face recognition software have actually increased the need for human processing" but that "[p]rofessional staff who use this technology in their daily work are extremely prone to error, identifying the wrong face from the array on 40% of trials").
[45] *Civil Rights Concerns Regarding Law Enforcement Use of Face Recognition Technology*, New America: Open Technology Institute (June 3, 2021), https://www.newamerica.org/oti/briefs/civil-rights-concerns-regarding-law-enforcement-use-of-face-recognition-technology/.
[46] Complaint, *Robert Julian-Borchak Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich. Apr. 13, 2021), ECF No. 1; Complaint and Demand for Trial By Jury, *Nijer Parks v. John E. McCormack*, Case No. L-003672-20 (N.J. Nov. 25, 2020).
[47] Kashmir Hill, *Another Arrest, and Jail Time, Due to a Bad Facial Recognition Match,* N.Y. TIMES (last updated Jan. 6, 2021), https://www.nytimes.com/2020/12/29/technology/facial-recognition-misidentify-jail.html.
[48] Alex Najibi, *Racial Discrimination in Face Recognition Technology,* Harvard University: Blog: Science Policy (Oct. 24, 2020), https://sitn.hms.harvard.edu/flash/2020/racial-discrimination-in-face-recognition-technology/?web=1&wdLOR=c495F80EB-3312-4EC4-8695-0AB4D028987B.

police install high-definition cameras throughout the city. While most Michigan residents were found in the system, police unevenly distributed the cameras resulting in higher surveillance in predominantly Black areas and little surveillance in predominantly White or Asian ones.[49]

Law enforcement has also utilized biometric scans to selectively chill protected First Amendment protest activity. Six federal agencies used FRT to identify protestors after George Floyd's May 2020 murder.[50] Baltimore Police used the same technology in 2015 during protests over Freddie Gray's death in police custody.[51] Given Black Americans' overrepresentation in preexisting police databases, police use of FRT to surveil protestors carries with it both a disparate impact in terms of Black protestors' likelihood of arrest and also in its ability to deter constitutionally protected activity. Such surveillance also builds on a long history of law-enforcement efforts to "target[] groups that the government deem[s] subversive."[52] The Fourth Circuit recently held *en banc* that Baltimore activists would likely prevail on their constitutional challenge to the city's aerial surveillance program.[53] Whereas mass surveillance presents risks to everyone, the court found, its impact is felt primarily by "'those least empowered to object.' Because those communities are over-surveilled, they tend to be over-policed, resulting in inflated arrest rates and increased exposure to incidents of police violence."[54]

As demonstrated here, the use of FRT by law enforcement and other state actors has a disparate impact on protected groups due to both the technology itself and its deployment in a manner that makes existing discriminatory systems more efficient and therefore more discriminatory.

B. Behavioral Recognition Technology carries significant risk of bias and disparate impact on protected groups, and lacks a reliable scientific foundation.

Beyond FRT researchers that study facial geometry, some scientists are also attempting to judge behaviors in an "objective" fashion. We touch upon this concerning area briefly given that it is growing in popularity but not in reliability. Behavioral biometrics technology seeks to identify or

---

[49] *Id.*

[50] Radhamely De Leon, *Six Federal Agencies Used Facial Recognition On George Floyd Protestors*, VICE (June 30, 2021), https://www.vice.com/en/article/3aqpmj/six-federal-agencies-used-facial-recognition-on-george-floyd-protestors. In another high-profile incident, NYPD surveilled a racial justice protest, recorded an attendee "speaking loudly into a megaphone," and attempted to arrest him in his apartment shortly thereafter by sending dozens of officers in riot gear. Amnesty International, *Ban dangerous facial recognition technology that amplifies racist policing* AMNESTY INTERNATIONAL (Jan. 26, 2021), https://www.amnesty.org/en/latest/news/2021/01/ban-dangerous-facial-recognition-technology-that-amplifies-racist-policing/.

[51] Kevin Rector & Alison Knezevich, *Social media companies rescind access to Geofeedia, which fed information to police during 2015 unrest,* THE BALTIMORE SUN (Oct. 11, 2016), https://www.baltimoresun.com/news/crime/bs-md-geofeedia-update-20161011-story.html.

[52] Sahil Singhvi, *Police Infiltration of Protests Undermines the First Amendment*, BRENNAN CENTER FOR JUSTICE (Aug. 4, 2020), https://www.brennancenter.org/our-work/analysis-opinion/police-infiltration-protests-undermines-first-amendment.

[53] *Leaders of a Beautiful Struggle v. Baltimore Police Dep't.*, 2 F.4th 330 (4th Cir. 2021) (en banc).

[54] *Id.* at 347 (quoting Barton Gellman & Sam Adler-Bell, *The Disparate Impact of Surveillance,* THE CENTURY FOUNDATION (Dec. 21, 2017), https://tcf.org/content/report/disparate-impact-surveillance/?agreed=1.). The opinion noted further that "liberty from governmental intrusion can be taken for granted in some neighborhoods,while others "experience the Fourth Amendment as a system of surveillance, social control, and violence." *Id.*at 348. (quoting Devon W. Carbado, F*rom Stopping Black People to Killing Black People: The Fourth Amendment Pathways to Police Violence*, 105 CAL. L. REV. 125 (2017)).

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

make qualitative assessments about individuals based on human behavior. It works by observing *how* someone performs a certain action, rather than by scrutinizing a discrete biological characteristic.[55] Examples include analysis of an individual's gait, keystrokes, facial expressions, and voice. Such biometrics depend on artificial intelligence to "identify and model those features of each [individual's] behavior that are most unique."[56] For example, software might analyze an individual's unique typing rhythm, speed, or cadence, or their speed and step patterns to create a unique profile for that individual for the purposes of future identification.

1. Behavioral biometrics often rests on ill-derived scientific findings.

Many applications of behavioral biometrics have been labeled "pseudo-science" and "a license to discriminate," to the extent they are "not rooted in scientific fact."[57] One study of existing technology that aimed to discern people's internal emotional states concluded that "there is insufficient evidence to support" the "common view that humans around the world reliably express and recognize certain emotions in specific configurations of facial movements."[58] As the study firmly noted, its findings showed conclusively that facial expressions "are not 'fingerprints' or diagnostic displays that reliably and specifically signal particular emotional states."[59] In particular, these technologies pose a high risk of discrimination against people with disabilities, such as a person who has suffered partial facial paralysis.

And yet, the market for emotion recognition biometric software is worth billions.[60] The increased demand for such services is particularly worrisome, as such technologies are increasingly deployed in high-stakes situations: from a recruiter's review of a job applicant, to a "jury's cultural misunderstanding about what a foreign defendant's facial expressions mean," to a "'smart body' camera falsely telling a police officer that someone is hostile and full of anger."[61]

2. Many algorithms used to assess human behavior have been shown to be discriminatory in practice.

Analyses of behavioral biometrics have found repeatedly that certain algorithms perform differently across various demographic subgroups. In 2011, researchers documented the repeated inability of car-based voice recognition systems to accurately detect the speech of women and individuals with thicker accents, which indicates a propensity for discrimination on the basis of

---

[55] International Biometrics and Identity Association, *Behavioral Biometrics,* 3 (May 1, 2017), https://www.ibia.org/download/datasets/3839/Behavioral%20Biometrics%20white%20paper.pdf.
[56] *Id.* at 4.
[57] Drew Harwell, *HireVue's AI face-scanning algorithm increasingly decides whether you deserve the job*, The Washington Post (Nov. 6, 2019), https://www.washingtonpost.com/technology/2019/10/22/ai-hiring-face-scanning-algorithm-increasingly-decides-whether-you-deserve-job/.
[58] Lisa Feldman Barrett et. al, *Emotional Expressions Reconsidered: Challenges to Inferring Emotion from Human Facial Movements*, 20 PSYCHOL. SCI. IN THE PUB. INT. 1, 46 (2019).
[59] *Id.*
[60] Jay Stanley, *Experts Say 'Emotion Recognition' Lacks Scientific Foundation*, American Civil Liberties Union (Jul. 18, 2019), https://www.aclu.org/blog/privacy-technology/surveillance-technologies/experts-say-emotion-recognition-lacks-scientific.
[61] *Id.*

1500 K Street, NW
Suite 900
Washington, DC 20005
Tel: 202.662.8600
Fax: 202.783.0857
www.lawyerscommittee.org

national origin.[62] A 2017 study of YouTube's automatic captioning software found the same, and suggested that the overrepresentation of Caucasian, male speakers in the algorithm's training dataset may be to blame.[63]

Some prominent companies using biometric-based behavioral data are starting to limit the ways biometrics are used to screen job applicants. For example, HireVue recently announced its decision to stop using facial monitoring in its candidate recruitment software.[64] After auditing its technology, HireVue found little correlation between monitoring facial expressions and candidate success,[65] leading many to worry that the technology would simply "replicate systemic biases that are ingrained in the environment in which they are designed."[66] The audit suggested HireVue investigate the risk of bias against protected groups and candidates with accents.

The underlying science and studies support the conclusion that use of behavioral biometrics is discriminatory, which has legal consequences, pursuant to Title VI, for its use by federal agencies and recipients of federal funds.

III. Conclusion

Title VI of the Civil Rights Act of 1964 strictly prohibits the federal government and recipients of federal funds from engaging in activities that result in discrimination based on race or national origin. Many biometric and algorithmic technologies produce just such results. Consequently, Title VI forbids the use of these technologies unless and until mechanisms are developed to prevent the discriminatory outcomes.

This is not a situation where a problem exists without a statute to address it. Current federal law controls this situation and must be executed correctly and thoroughly. We urge OSTP to take account of the federal government's legal obligations under Title VI as it addresses biometric and algorithmic technologies and crafts policy recommendations for agencies.

Thank you for the opportunity to provide comment on this important topic. For additional questions, please contact David Brody, dbrody@lawyerscommittee.org.

---

[62] Graeme McMillan, *It's Not You, It's It: Voice Recognition Doesn't Recognize Women*, TIME.com (June 01, 2011) https://techland.time.com/2011/06/01/its-not-you-its-it-voice-recognition-doesnt-recognize-women/.
[63] Rachael Tatman, *Gender and Dialect Bias in YouTube's Automatic Captions* (Apr. 4, 2017), *available at* http://www.ethicsinnlp.org/workshop/pdf/EthNLP06.pdf.
[64] Lindsey Zuloaga, *Industry Leadership: New Audit Results and Decision on Visual Analysis*, HireVue (Jan. 11, 2021), https://www.hirevue.com/blog/hiring/industry-leadership-new-audit-results-and-decision-on-visual-analysis. In 2019, a formal complaint was lodged against HireVue with the Federal Trade Commission, alleging the software was "biased, unprovable, and not replicable," this constituting "unfair and deceptive trade practices." Harwell, *supra*, fn. 51.
[65] Zuloaga, *supra*, fn. 58.
[66] Roy Maurer, *HireVue Discontinues Facial Analysis Screening*, SHRM.org (Feb. 3, 2021), https://www.shrm.org/resourcesandtools/hr-topics/talent-acquisition/pages/hirevue-discontinues-facial-analysis-screening.aspx.