INNOCENCE PROJECT

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Via Electronic Delivery

William C. Smith, Jr., Chair Jeff D. Waldstreicher, Vice Chair Senate Judicial Proceedings Committee Miller Senate Office Building, 2 East Wing 11 Bladen St. Annapolis, MD 21401-1991

RE: Senate Bill 182, Criminal Procedure: Facial Recognition Technology – Requirements, Procedures, and Prohibitions

Dear Chair Smith and Vice Chair Waldstreicher,

We are submitting this written testimony regarding Senate Bill 182 ("SB 182") and House Bill ("HB 338") on behalf of the Innocence Project. The Innocence Project is a nonprofit organization that exonerates the wrongfully convicted and works to reform the criminal justice system to prevent future injustice. We commend the Committee for its proactive discussion and effort to regulate law enforcement's use of facial recognition technology (FRT). Most of our recommendations for amendments are inspired by the National Academies of Sciences, Engineering, and Medicine's facial recognition report¹ and the Office of Management and Budget's memorandum on "Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence."² To ensure that FRT's use by law enforcement is reliable, safe, equitable, and sound, we believe that the following must be addressed, and further safeguards must be put in place.

I. Law Enforcement Agencies must independently assess the reliability, accuracy, risks, and impact of FRT.

There are many risks associated with the use of FRT that impact the rights and safety of individuals; therefore, only systems that are reliable and accurate should be used. Utilizing inaccurate or unreliable facial recognition systems can lead to a waste of resources, false arrests, and wrongful convictions. It is up to law enforcement agencies to verify facial recognition systems and not be reliant on developers' conclusions. Before the deployment of a facial

¹ NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE ET AL., *Facial Recognition Technology: Current Capabilities, Future Prospects, and Governance,* (2024), https://www.nap.edu/catalog/27397 (last visited Feb 5, 2024).

² OFFICE OF MANAGEMENT AND BUDGET, Shalanda D Young, Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence,

https://www.whitehouse.gov/wp-content/uploads/2023/11/AI-in-Government-Memo-draft-for-public-review.pdf (last visited Feb 5, 2024).

recognition system, law enforcement agencies must independently assess the reliability and accuracy of the system as well as determine the intended use, associated risks, potentially impacted individuals, and ways to mitigate or prevent potential harm. Accuracy and reliability assessments must be performed in the intended real-world context, using real-world samples and conditions.

Preexisting or newly developed risk management frameworks can be utilized for risk and impact assessments. Risk management frameworks are useful tools for "identifying and managing sociotechnical risks, defining appropriate measures to protect privacy, ensuring transparency and effective human oversight, and identifying and mitigating concerns around bias and equity".³ If the systems are deemed reliable and have high true positive rates for all demographics, the results of the risk and impact assessments can later help frame law enforcement agencies' FRT procedures and policies.

The Maryland legislature must require law enforcement agencies to independently assess the accuracy, reliability, risks, and impact of facial recognition systems before they are deployed. Additionally, to promote accountability, the results of these assessments must be publicly accessible.

II. Prevent the scanning and measuring of faces produced by predictive methods and generative AI.

§2-503(A)(1)(III) states that FRT cannot be used to analyze sketch or manually produced images.⁴ In the same light, FRT must not be used to analyze images produced by predictive methods or generative AI systems. According to a Wired article, in 2020, a detective used facial recognition software to analyze a 3D image generated by machine learning and predictive DNA phenotyping, violating the terms of services of the DNA phenotyping company.⁵ DNA phenotyping is used to predict the externally visible characteristics (e.g. eye color and hair color) of individuals using their DNA.⁶ Because of its probabilistic nature and inability to accurately predict all facial components, the method does not produce a unique face but rather characteristics that could be shared by multiple individuals.⁷ Using FRT on images produced by predictive methods or generative AI could inaccurately implicate many individuals; hence, law enforcement agencies must be prohibited from doing so.

III. Increase Transparency.

(2)(II) states that law enforcement can utilize databases other than the ones described in (2)(I), if there is an agreement between them and the entities that manage the

³ National Academies of Sciences, Engineering, and Medicine et al., *supra* note 1.

⁴ S.B. 182, 446th Sess. sec. 2-503(A)(1)(III), https://mgaleg.maryland.gov/2024RS/bills/sb/sb0182F.pdf.

⁵ Dhruv Mehrotra, *Cops Used DNA to Predict a Suspect's Face—and Tried to Run Facial Recognition on It*, WIRED, https://www.wired.com/story/parabon-nanolabs-dna-face-models-police-facial-recognition/ (last visited Feb 5, 2024).

⁶ Manfred Kayser et al., *Recent Advances in Forensic DNA Phenotyping of Appearance, Ancestry and Age*, 65 FORENSIC Sci. INT. GENET. 102870 (2023).

⁷ Gabrielle Samuel & Barbara Prainsack, *Civil Society Stakeholder Views on Forensic DNA Phenotyping: Balancing Risks and Benefits*, 43 FORENSIC SCI. INT. GENET. 102157 (2019).

databases.⁸ It is important to emphasize that a consumer database can only be used if the company informs its users that their data can be accessed by law enforcement or receives consent from the users. Permitting law enforcement to use consumer databases without the consent or knowledge of its users diminishes public trust and can lead to privacy violations.

SB 182 requires law enforcement agencies to publicly publish annual reports.⁹ These reports are a good way of promoting transparency. However, the information that the agencies are required to disclose does not allow the public to properly examine the accuracy, effectiveness, and fairness of the facial recognition systems. The report should include the total number of false positive matches that lead to further investigative action as well as the race, age group, and sex of all matches.

IV. Training requirements must address issues and concerns that arise from the use of FRT.

FRT results are probabilistic and inherently biased. Law enforcement agencies must thoroughly train employees on the probabilistic nature of FRT and the importance of verification. The training should also cover FRT or algorithm-specific biases and the risk of compounding them with human bias. Additionally, it is important to ensure that the FRT training program consists of a competence test that all officers must pass before using FRT.

V. Establish a multidisciplinary and multi-stakeholder working group to create standards and guidelines specific to law enforcement use of FRT.

Standards and guidelines consist of specifications and procedures to ensure that services and systems are consistent, reliable, and safe.¹⁰ Facial recognition technology standards are needed to establish best practices, improve performance, enhance transparency and confidence, and provide insightful and useful information.¹¹ They can also be used to conduct audits. FRT standards and guidelines must be developed to aid and guide law enforcement agencies that are using the technology. The standard and guideline development process must include individuals from different (relevant) disciplines as well as relevant stakeholders. Most law enforcement agencies do not have the resources or expertise to do this on their own. Establishing this working group would be very beneficial to law enforcement.

⁸ S.B. 182, 446th Sess., https://mgaleg.maryland.gov/2024RS/bills/sb/sb0182F.pdf.

⁹ S.B. 182, 446th Sess. sec. 2-510(A), https://mgaleg.maryland.gov/2024RS/bills/sb/sb0182F.pdf.

¹⁰ Linzi Wilson-Wilde, The International Development of Forensic Science Standards — A Review, 288 Forensic Science International 1 (2018), https://linkinghub.elsevier.com/retrieve/pii/S037907381830166X (last visited Feb 6, 2024).

¹¹ Shaping the Future of Forensic Science: Your Voice, Our Guide, Innocence Project,

https://innocenceproject.org/shaping-the-future-of-forensic-science-your-voice-our-guide/ (last visited Feb 6, 2024).

VI. Provide clarification about the limitation of law enforcement use of FRT.

The language "substantial and ongoing threat to public safety or national security" is vague and may be misinterpreted by law enforcement agencies as a catch-all phrase.¹² To prevent misinterpretation, the phrase "substantial and ongoing threat" should be defined.

Conclusion

We appreciate that Senator Sydnor has proposed SB 182, which aims to govern and limit law enforcement use of FRT. If law enforcement's use of FRT is not prohibited, this bill is essential. The bill is on the right path; however, certain areas need clarification, and more protection is needed to prevent the targeting of innocent civilians and promote transparency. Thank you for your consideration. If you have any questions, please feel free to contact Barry Scheck (bscheck@innocenceproject.org), Tebah Browne (tbrowne@innocenceproject.org), or Amanda Wallwin (awallwin@innocenceproject.org).

Sincerely,

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Barry Scheck, Cofounder and Special Counsel Tebah Browne, Forensic Science Policy Specialist Amanda Wallwin, State Policy Advocate

¹² S.B. 182, 446th Sess. sec. 2-503(A)(1)(I)(11), https://mgaleg.maryland.gov/2024RS/bills/sb/sb0182F.pdf.