



# AI IN LAW ENFORCEMENT: ADDRESSING CONCERNS OF EQUITY AND INCLUSION

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# ABSTRACT

The following report aims to understand how the use of Artificial Intelligence (AI) tools in police surveillance perpetuates patterns of racial profiling in policing, ethical implications in prosecution, and equity concerns for marginalized communities. By recognizing discriminatory realities, this paper will identify how public policy could begin to regulate law enforcement's use of AI, producing a solution to address racial equity concerns in an under-regulated market.

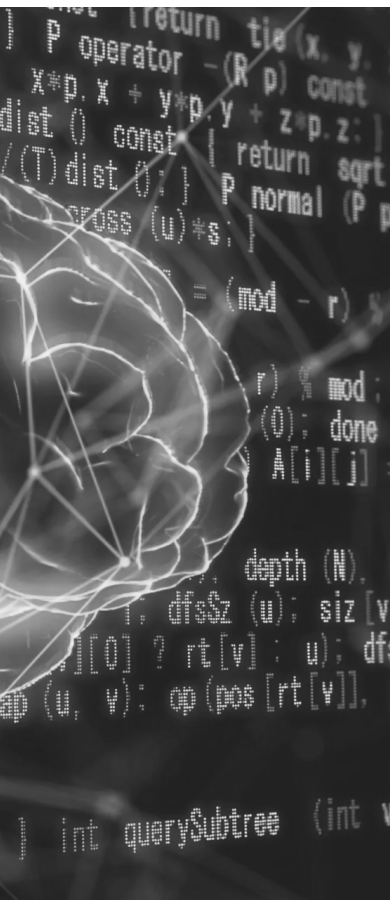
## PROBLEM DEFINITION

AI technology is rapidly expanding globally, changing the way people and systems work by taking on tasks once only performed by humans. In the realm of law enforcement, AI driven tools are transforming policing practices with the intent of allocating resources more effectively to address potential crime and improve public safety in a cost effective, evidenced-based manner (Alikhademi et al., 2022). Central to these advancements is the concept of predictive policing which uses historical crime data and machine-driven algorithms to predict criminal activity and identify high-risk areas of crime (Alikhademi et al., 2022). By using algorithms to process mass amounts of data, law enforcement agencies can deploy surveillance cameras where data would indicate they are needed most to bolster data collection, evidence preservation, and the ability to evaluate crimes in real-time (Hung & Yen, 2021). However, **ethical** and **privacy concerns** arise with regard to the discriminatory impacts created from using a system trained on biased data.



Academics warn that predictive policing algorithms that are making data-based decisions for purposes such as placing police surveillance cameras in strategic locations are at risk of human influence (Alikhademi et al., 2022). The most frequent criticism of predictive policing focuses on the issues of confirmation, systematic, and institutional biases that amass the datasets used to generate predictive policing algorithms (Lum & Isaac, 2016). Research has shown that policing decisions are highly susceptible to racial and ethnic biases, generating assumptive trends in racial profiling by police (Alikhademi et al., 2022). These arguments find ground in the facts such as that 9 out of 10 NYPD precincts with the highest stop rates are in predominantly Black and brown neighborhoods despite white people making up the largest racial group in the city at 39.8% of the population (NYCLU, 2020). Therefore, by logic, crime statistics are reflective of human bias as they depend upon officers' discretion of who is stopped, searched, reported, and detained.

**9 / 10** NYPD Precincts w/ the Highest Stop Rates are in Predominantly Black and brown neighborhoods.



Allowing datasets built upon biased police practices to shape the learned technologies used by law enforcement today, legitimizes discriminatory profiling and police practices under the cover of "fair" and "bias-free" algorithms (Alikhademi et al., 2022). Therein, racially skewed crime datasets can introduce bias into predictive tools that generate actionable material reliant upon discriminatory decision making. As a result, these predictive tools can lead to the misallocation of resources and ill-informed over, under, and targeted policing by law enforcement agencies (Hung & Yen, 2021). One study comparing predictive camera placement to actual crime data revealed that districts with low rates of recorded crime were under-surveilled by 20% while areas with high rates of recorded crime were over-surveilled by 20% (Haven, 2021). Therein, when human influenced datasets are used to craft predictive policing algorithms, prior human error serves to perpetuate patterns of racial profiling by police, placing communities already impacted by over-policing at an inequitable disadvantage.

The use of AI tools to place surveillance cameras resulted in areas with high crime rates being over-surveilled by **20%**





Likewise, the widespread adoption of AI powered facial recognition technology (FRT) or the biometric identification of an individual from captured image or video surveillance has revealed alarming racial disparities that highlight the under-regulation of datasets used to train modern police technologies (Johnson et al., 2022). While the overabundance of racially biased crime data in predictive policing leads to the over-policing of minority populations, the under-development of a diverse data set has led to the creation of racial disparities in arrests reliant upon FRT. Studies have consistently revealed that FRT systems experience higher error rates when identifying individuals with darker skin tones, disproportionately impacting populations of racial and ethnic minorities (Johnson et al., 2022). For example, communities of color are 100 times more likely to be misidentified through the use of FRT than white people, yet at least 25% of U.S. police agencies remain heavily dependent upon such technology in their operations (Johnson et al., 2022). This racial bias not only results from systemic inequity but also highlights further implications on wrongful arrests and improper prosecutions based on a system trained by predominantly white datasets despite its use to identify individuals from the broadly diverse U.S. population.

Communities of color are **100x** more likely to be misidentified by FRT systems than white people.

*Herein, the nation is faced with the problem of a lack of comprehensive regulation pertaining to the use of AI technologies by law enforcement agencies. It is clear that racial bias and facets of systemic racism serve to generate skewed and under-representative datasets that law enforcement agencies have grown reliant upon to bolster the efficacy of their work today. Sitting at the forefront of concern is the reality that AI systems are being equipped to over police the nation's minority populations while underprepared to root out human bias and correctly identify the individuals that have been subjected to patterns of discriminatory police profiling.*

# POLICY CONTEXT

Government bodies, private sector and law enforcement have an extended past of surveilling citizens and collecting data in the name of economic advancements, national security and keeping communities safe (Lai & Brooke-Tanner, 2022). However, these surveillance and policing patterns do not affect citizens equally and marginalized individuals are more vulnerable to data collection and privacy and security. In 2020, The United Nations Committee on the Elimination of Racial Discrimination, an 18 member body of independent experts that works to take action against racial injustice and its dangers, advised that while AI in decision making may contribute to increased effectiveness in some areas, introducing this technology to law enforcement could deepen the pre-existing disparities and, "lead to human rights violations" (Cumming-Bruce, 2020).

AI technology could have a negative effect for marginalized populations, expanding their distrust in police and law enforcement and exposing them to more data security and privacy violations. The Pew Research Center found that Black Americans are 17% more likely than white Americans to believe the government is tracking most of what they do online (Auxier, 2019). As a result, non-white adults are more likely to be concerned with what law enforcement and police know about them (Auxier, 2019).

Congressional Democrats have urged legislators to enact the The Facial Recognition and Biometric Technology Moratorium Act, which calls for the regulation of AI technology in law enforcement by policymakers. Attempts to address this issue have been made by the White House and Biden administration through the AI Bill of Rights, but the proposed blueprint does not acknowledge the serious equity issue that disproportionately affects non-white individuals and marginalized communities.

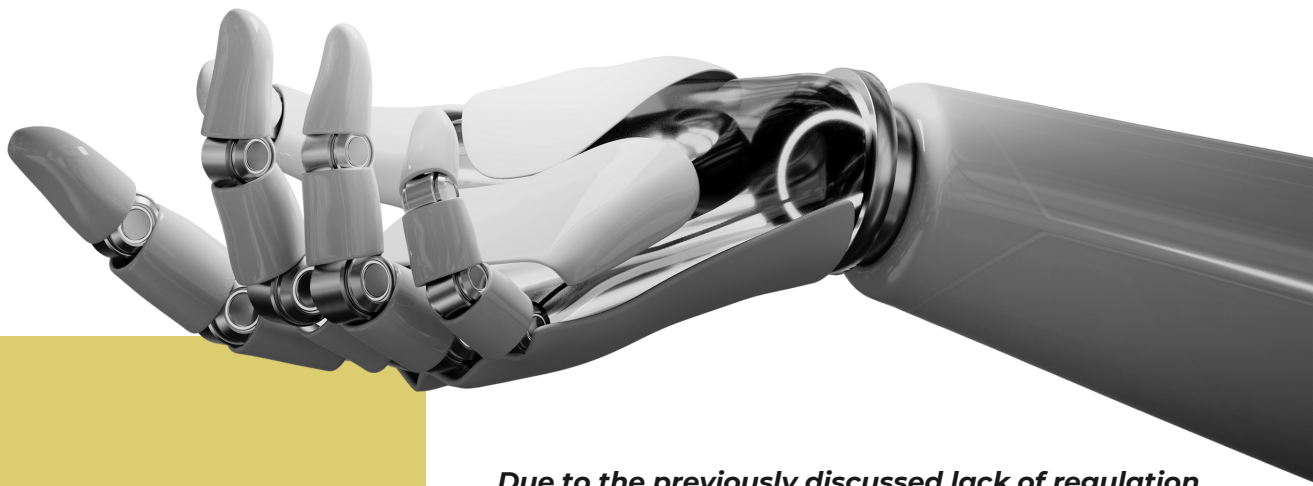


# ROLE FOR GOVERNMENT INTERVENTION

Government intervention is essential to addressing the equity concerns that arise in the use of AI technologies by law enforcement within the realms of police surveillance, predictive policing, and FRT systems. These disparities serve to perpetuate systemic inequalities, with marginalized communities subject to disproportionate rates of surveillance, biased law enforcement practices, and wrongful arrests. For the sake of equity, the government must rectify the nation's systems of disparity to promote the fairness and equal opportunity granted to all individuals by the Constitution's Bill of Rights. The government's lack of comprehensive regulation pertaining to the use of AI technologies by police serves to justify and worsen the effects of racial bias, perpetuating injustice and limiting the potential for a more equitable society.







# POLICY ALTERNATIVES

*Due to the previously discussed lack of regulation surrounding the use of AI within law enforcement, as well as the various equity concerns that this issue raises, government intervention becomes necessary. Considering this, there are several policy routes elected officials, both federal and state, can adopt to mitigate this issue and its respective implications.*

The first, and arguably most far-reaching alternative, calls for a federal, permanent ban on the use of AI within law enforcement. Notably, more than 25% of local and state police forces and almost 50% of all federal law enforcement agencies use this technology regardless of the discussed ethical implications (Johnson et al., 2022) Due to this widespread adoption, this technology poses a threat to U.S civil liberties, including the constitutional right against unlawful searches and seizures. So, implementing a permanent ban could serve as an effective measure in protecting U.S. citizens against these violations.

A second, and potentially more moderate approach, would require the implementation of a federal, temporary ban on the use of AI within law enforcement. This alternative combines features of the existing (proposed) legislation to produce a policy that would in turn temporarily ban these technologies until policy makers can adopt proper guidelines to regulate their usage. The AI Bill of Rights, while non-binding, serves as a viable blueprint to help control the design, use and deployment of AI systems to help protect the rights of U.S citizens. However, this bill is limited in the sense that it does not include the use of AI within law enforcement. So, implementing a bill that follows suit to the original proposal, with the introduction of an additional section that covers systems such as camera surveillance, predictive policing, and FRT, would be beneficial.

The final, and most swift-action approach, would be to direct attention towards state and local police agencies. To reduce the distinguished impacts of this technology, state agencies could implement training programs to advise officers from local agencies on how to properly use this technology, all while highlighting the limitations of what these existing systems cannot offer. By increasing education on the use of AI within law enforcement, as well as the respective equity concerns that emerge, police officers may be able to better signal when this technology is being misused.



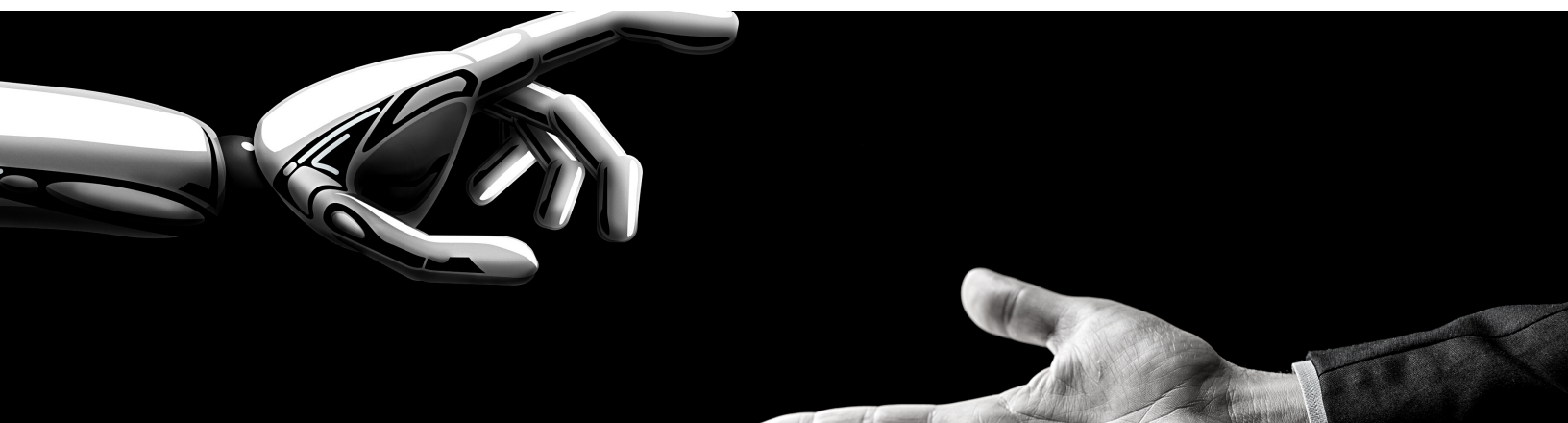
# POLICY RECOMMENDATION

## WHERE DO WE GO FROM HERE?

***The following report recommends a two pronged-approach that draws from a combination of the suggested policy alternatives***

First, to ensure both an effective and long-term solution, it becomes necessary to implement **a federal, temporary ban** on the use of AI within law enforcement. Due to growing staff-shortages that many police agencies face, many have recognized the utility of AI. Implementing a ban would not eradicate this technology, shutting down the possibility of utilizing its benefits, but merely pause the use of AI until policy makers can establish proper guidelines and regulations for its usage.

To guarantee that action is being taken across all levels of government, the report additionally recommends that state and local police agencies implement **educational training programs** after this technology is regulated. While new technology may decrease the likelihood of conditions such as racial profiling occurring, training programs would nevertheless further protect citizens, especially non-white communities, from potential spill-offs. Ideally, these programs would be organized by state agencies and distributed to local agencies, ensuring that all police departments receive proper training.





## CONCLUSION

The widespread adoption of AI in law enforcement, despite its various ethical concerns, creates a new era in crime prevention and detection. By drastically altering the scope and precision of facial recognition technology, camera surveillance, and predictive policing, AI has the potential to exacerbate already existing issues of racial bias and disparities in the collection and use of this data that inform arrests and profile criminals.

It would be irresponsible to integrate artificial intelligence into these law enforcement tactics without examining why data security and privacy is so imperative to marginalized populations and communities. These contemporary equity concerns, rooted in a dense history of disproportionate data collection and security that has targeted and criminalized non-white Americans, truly underscore the need for the proposed policy recommendations. Allowing policymakers time to develop proper guidelines and regulations for AI in law enforcement will ensure that this technology is used equitably and justly.

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THANK  
YOU!

ANY QUESTIONS?

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