Request for Information (RFI) on Public and Private Sector Uses of Biometric Technologies: Responses

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January 15, 2022

SUBMITTED ELECTRONICALLY VIA EMAIL

Suresh Venkatasubramanian
Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue NW
Washington, DC 20504

RE: Request for Information on Public and Private Sector Uses of Biometric Technologies

Dear Dr. Venkatasubramanian:

The Alliance for Automotive Innovation (“Auto Innovators”) is pleased to submit comments to the Office of Science and Technology Policy (“OSTP”) in response to its Request for Information (“RFI”) on public and private sector uses of biometric technologies. Auto Innovators appreciates the opportunity to provide input and feedback on this important issue.

Auto Innovators is the singular, authoritative, and respected voice of the automotive industry. Focused on creating a safe and transformative path for personal mobility, Auto Innovators represents the manufacturers that produce nearly 99 percent of cars and light trucks sold in the United States. Members of Auto Innovators include motor vehicle manufacturers, original equipment suppliers, technology companies, and others within the automotive ecosystem. The auto industry is the nation’s largest manufacturing sector and contributes $1.1 trillion to the United States economy and represents 5.5 percent of the country’s GDP. As a significant engine for our nation’s economy, the auto sector is responsible for 10.3 million jobs and $650 billion in paychecks.

Automotive Use Cases

Our member companies are leaders in innovation and are integrating cutting-edge technologies into consumer vehicles that are transforming mobility and steering us towards a cleaner, safer, and smarter transportation future. A number of these innovations – including automated driving and other advanced safety technologies, as well as other features that support drivers and passengers – may rely on or otherwise incorporate biometrics-related capabilities.

For example, facial detection technology is increasingly being used in vehicles with advanced driver assistance features, particularly vehicles with partial automation features, in driver engagement monitoring systems. In these driver engagement monitoring systems, cameras in the passenger cabin may be used to track eye movement, monitor head position, and perhaps even measure eyelid activity to warn drivers who become inattentive to the driving task or over-reliant on the automated features.
Similar facial detection capabilities or heartbeat sensors may also be used to detect if a driver is having a medical emergency that may impede their ability to safely operate a vehicle. Breath sensors, fingertip sensors, or facial detection sensors may eventually help detect if a driver is alcohol- or drug-impaired. Facial detection may also support features that darken portions of the sun visor to prevent sun glare for drivers and passengers. In these cases, the technology is not used for identification or verification. It is used to infer driver or occupant state.

Auto companies are also developing technologies that rely on facial detection or heartbeat sensors to help detect whether a child has been inadvertently left unattended in the backseat of a vehicle and to support more accurate seat belt reminders or airbag deployment controls. Facial detection technologies may also be used as part of advanced driver assistance systems or automated driving systems to detect pedestrians or other vulnerable road users for collision avoidance purposes. For these use cases, the technology is not used for identification, verification, or inference of driver or occupant state. Instead, it is used to help ascertain whether an object may be a person.

Finally, face scans or fingerprints may be used for verification of authorized vehicle users. These capabilities can help prevent vehicle theft by denying access to unauthorized users or increase convenience by allowing users to unlock doors and start the vehicle without the need for a key. Similarly, face scans or fingerprints may facilitate personalization of in-cabin systems and settings, assisting drivers and helping to reduce driver distraction. As a verified driver enters the vehicle, the seats, mirrors, climate controls, and radio stations may be changed to the driver’s preference and the driver’s phone may automatically sync with the vehicle. These biometrics-related capabilities may also facilitate parental controls, such as limits on vehicle speed and audio volume, while a vehicle is driven by a new driver. In these cases, the biometric information is not being used for the identification purposes and is instead being used for verification purposes.

Specific Recommendations

As OSTP continues its important work in this area, Auto Innovators respectfully offers the following recommendations.

Leverage Existing Industry Efforts

There are existing industry efforts related to biometric technology that OSTP may be able to leverage or amplify as best practices. For example, in 2014, automotive manufacturers released Privacy Principles for Vehicle Technologies and Services (“Privacy Principles”) to protect information collected through in-vehicle services. These comprehensive Privacy Principles, which are enforceable by the Federal Trade Commission, establish a set of baseline privacy protections related to the collection and use of such information. They also establish heightened protections for certain categories of information, including biometric information.

Under the Privacy Principles, companies must provide clear, meaningful, and prominent notices about the collection of biometric information, the purposes for which such information is collected, and the types of entities with which such information may be shared. In addition, the Privacy Principles specifically require affirmative consent for the use of biometric information for marketing purposes or for sharing biometric information with unaffiliated third parties for their own use. The Privacy
Principles also include commitments related to – among others – data minimization, data security, and respect for context.

OSTP should build upon these sorts of industry efforts where they exist. Should OSTP identify areas where technical standards or best practices would be particularly useful but do not currently exist, it should encourage industry to develop such standards or best practices.

**Balance Benefits and Risks**

Auto Innovators appreciates that the RFI seeks information on both the benefits and risks of biometric technologies. By fully understanding and – where possible - quantifying the benefits and risks posed by the technology, government and industry can focus on fostering the appropriate balance that enables these technologies for promising use cases, including those automotive use cases identified above, and appropriately manages or reduces the risks posed by them. Seeking this balance, rather than requiring zero risk, is essential. If policymakers hold biometric technology to an unattainable zero risk standard, important and – in some cases – lifesaving use cases may be lost.

For example, we certainly share OSTP’s concerns with the potential for differential effectiveness, outcomes, and harms for different demographic groups with biometric technology. However, we also recognize that human decision-making may reflect inherent or implicit biases. Biometric technology has the potential to reduce, minimize, or even eliminate such human biases. This potential should be considered in and factored into any assessment or analysis of biometric technologies and bias.

**Narrow the Initial Scope**

By including inference of cognitive/emotional state in the RFI, OSTP has put forward a significantly expansive definition of “biometric technology” with far-reaching implications. As this is undoubtedly a complex issue that requires a thoughtful and deliberate approach, Auto Innovators recommends that OSTP focus its initial efforts through a targeted and focused definition that is aligned with a more traditional understanding of biometric technology.

For example, we recommend that OSTP limit its initial efforts to the use of biometric information for recognition purposes only. We further recommend that OSTP consider limiting this initial effort to the use of biometric information for identification and exclude the use of such information for verification. With a targeted initial focus, OSTP may be better positioned to make meaningful progress that may be leveraged or adapted more broadly going forward.

**Prioritize High-Risk Use Cases**

Biometric technologies are currently being used or will be used in a variety of contexts and a diversity of applications. Undoubtedly, some of these use cases pose more significant risks for harmful societal outcomes than others. In this work, OSTP should prioritize the high-risk uses of biometric technologies that are likely to lead to harmful societal outcomes over those that are unlikely to lead to such outcomes. For example, OSTP should consider initially focusing on biometric technologies that are used for surveillance or for law enforcement purposes. Alternatively, OSTP may consider focusing
initially on uses that have significant legal impact or implication, such as those related to employment, education, housing, or health care.

**Ensure Broad Stakeholder Engagement**

Auto Innovators appreciates that the RFI and the related public listening sessions indicate an intent by OSTP to obtain feedback from the broader communities of interest and to hear the perspectives of a wide range of stakeholders. We urge OSTP to maintain an approach that is actively representative and includes a broad set of disciplines and stakeholders and that provides ample opportunity for public input.

We sincerely appreciate the opportunity to provide this feedback to OSTP as it embarks on this important work. We look forward to continuing to work with you on this and other matters.

Sincerely,

Tara Hairston
Senior Director, Technology, Innovation, & Mobility Policy