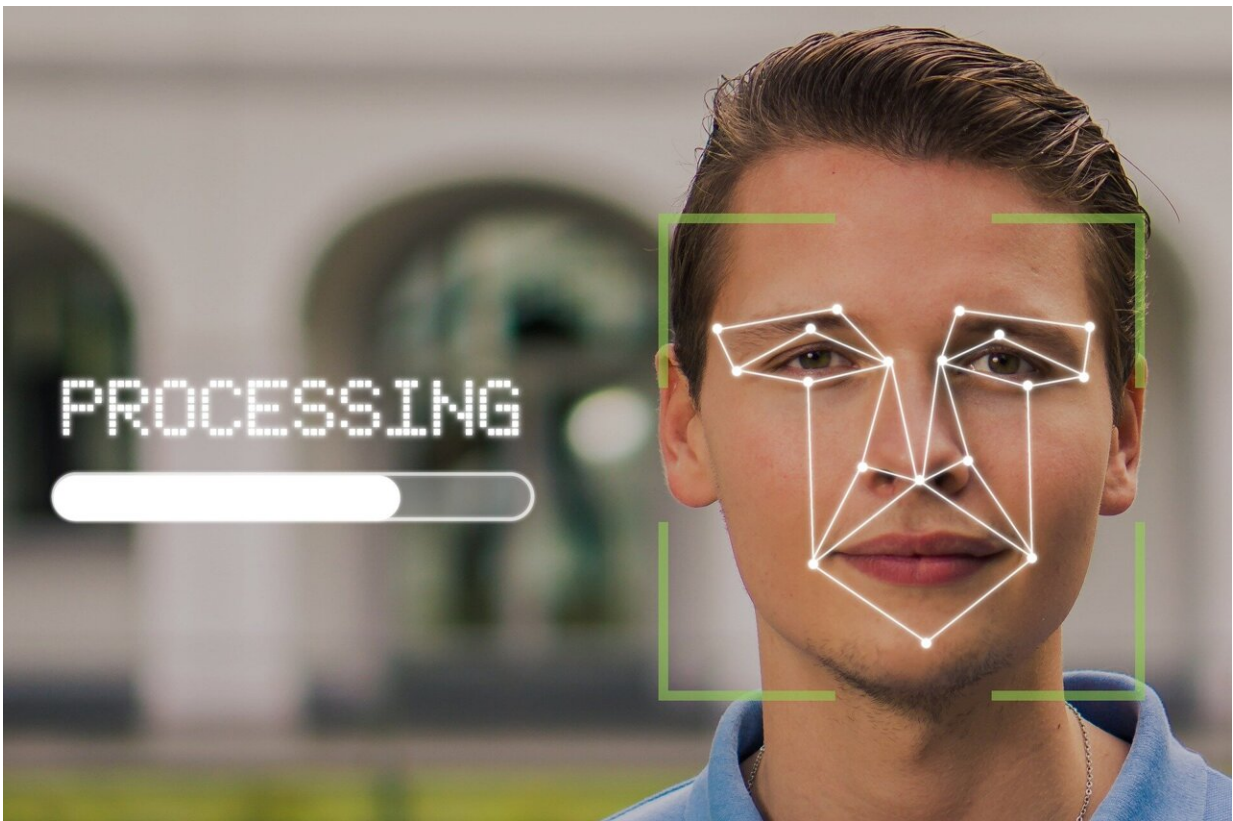


Here's how facial recognition is changing travel through Bay Area airports

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For speedier entry into the U.S., your most important travel tool is now your face.

All three of the Bay Area's airports are deploying new [facial recognition](#) technology, called Simplified Arrival, to screen incoming international passengers and testing it in San Jose to track some departing passengers too. It's catching imposters and processing travelers more efficiently—but also raising privacy concerns.

"You get instant verification," said James Hutton of U.S. Customs and Border Protection on a recent morning as hordes of bleary-eyed travelers streamed through San Francisco International Airport's immigration control booths and paused for a snapshot.

"The camera does immediate identification," he said, "telling the customs officer that 'this is the person that's in front of me.'"

The old approach we've long relied on—passport scanning and stamping—has vanished.

Instead, in a major overhaul of its strategy of processing travelers, [government officials](#) have installed cameras next to customs officers at all 238 [international airports](#), 13 seaports and every pedestrian and bus processing facility along the nation's northern and southern land borders. The new technology was introduced at Bay Area airports in 2020 and completed at all ports of entry nationwide last June.

TSA agents are testing similar devices for departing flights at some security check-in lines at San Jose International Airport and others—a "curb to gate" approach that uses the passenger's face as a boarding pass.

"Your face is matched to the document that's tied to your reservation," easing the process of boarding passengers, said Hutton. "If we can verify that the person who went through TSA screening is the same person at the gate, you would never have to take your passport out of your pocket."

It's a far cry from the instantaneous-everywhere facial recognition portrayed in many popular TV crime shows, but [biometric technology](#), which uses an individual's unique physical traits to verify their identity, is increasingly used by private businesses and law enforcement.

Facial recognition is already a familiar part of smartphones, supplanting passwords. Most banks use "FaceID" to let customers securely log onto mobile banking apps. Target, Walmart and Lowe's are experimenting with facial recognition to combat shoplifting and fraud, identifying known thieves.

At the nation's borders, cameras started replacing self-serve passport kiosks in 2019 after a Congressional mandate, funded in 2016, directed the Department of Homeland Security to record the entry and exit of all foreign nationals. The effort, first tested at pedestrian crossing lanes in San Ysidro, is intended to prevent terrorism and find people who overstay their visas.

The pandemic accelerated the technology's adoption, offering a "touchless" way to process passengers. Officials don't have to scan a passport or clean a kiosk.

"This approach makes sense from a national security perspective," said Stephen Flynn, founding director of the Boston-based Global Resilience Institute.

"Border control efforts at ports of entry have always been a needle-in-the-haystack challenge, given the volume, velocity and variety of people, conveyances and goods moving through the world's airports, seaports and border crossings."

But [civil liberties](#) and digital privacy groups said the technology represents a fundamental threat to privacy.

"We see this continual expansion of facial recognition into more and more areas of our lives. And we are giving in to it with the promise that it somehow will make our experience more convenient," said Albert Fox Cahn, executive director of the New York-based Surveillance Technology Oversight Project.

"Once you have someone's biometric information, you have it for life," he said. "You can change your credit card number. You can change your Social Security number. But you can never change your face. And so even if a program is only tracking our faces for one purpose today, it's creating the biometric infrastructure to track it—however agencies may want to—in future years."

Compared to fingerprinting, face-recognition technology poses a greater potential for growth into spy tools, critics say. That's because it can be used for surveillance through public video cameras—mapping a person's movement without their knowledge or consent.

Studies also suggest the technology is racially biased, with error rates rising significantly when applied to people of color, according to Jay Stanley, senior policy analyst with the ACLU Speech, Privacy, and Technology Project.

How does the new system work?

When entering the U.S. by plane and arriving at a Customs booth, a camera photographs your face. Then a computer checks that photo against all the images in a photo "gallery" of everyone else on your incoming flight. That's possible because airlines are required to submit a list of passengers—and your fellow travelers already have submitted their photo to the U.S. government, either on a passport or a visa.

If your new photo matches your database photo, you don't have to hand

over your passport. The National Institute of Standards and Technology recently found that facial biometrics are nearly 99% accurate.

The line-skipping system Global Entry also uses facial comparison technology.

If your photos don't match, the system reverts to the traditional process: Officials look at your face, ask you to swipe your passport and may require that you submit fingerprints. They may ask tougher questions: "Where did you go to school? What was your school mascot?"

Passport photos are almost impossible to manipulate because images are stored in a chip. Already the system has stopped around 1,800 "impostors"—someone using a stolen, borrowed or counterfeit passport—from entering the country, according to Hutton.

After scanning at entry, photos of U.S. citizens are deleted within 12 hours. Photos of foreign nationals are permanently stored in a secure U.S. Department of Homeland Security system.

Americans can opt out, asking an agent to verify their identity the original way. There are exemptions for minors under age 14 and elders over age 80.

But every foreign national is required to participate. They may also be asked for fingerprints if they've never entered the U.S. before.

In the future, there may be no need to pose for a photo. Instead, your image may be taken soon after passengers get off the plane or boat, further streamlining the process, said Hutton.

"The ultimate vision is that there are cameras in the hallway," said Hutton. "As you walk up, cameras would take a photo that says, 'Oh, yes,

that's Ryan, coming back from Narita, Japan."

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