



Facial Recognition Technology for Certain Traveler and Noncitizen Identity Verification

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Facial recognition technology (FRT), which uses algorithms to compare faces against a collection of known faces, is a biometric tool [employed by law enforcement](#), including U.S. Customs and Border Protection (CBP) officials. FRT can be used to verify the identity of travelers and certain noncitizens awaiting entry.

FRT is used in two primary ways:

- identification searches, comparing features of a *probe* photo with those in a database of images to produce a gallery of potential matches ranked by similarity (not a single affirmative match), and
- identity verifications, comparing a probe photo against known photos to produce a binary, match/no match result.

Traveler Verification Service (TVS)

CBP [employs FRT](#) at many air, land, and sea ports of entry and preclearance locations, both domestically and abroad, and used it to process [over 23 million travelers](#) in FY2020. Specifically, CBP, in partnership with the Transportation Security Administration (TSA), uses FRT to verify travelers' identities. [TVS is a public-private partnership](#) between the federal government and private airlines, airports, and cruise lines. It compares a traveler's *live photograph* (taken, for example, by a gate agent) to a gallery of preexisting photographs maintained by CBP. The [composition of the galleries](#) depends on the travel context. TVS provides a *match* or *no match* result within two seconds. In case of the latter result, the traveler's identity is checked manually by a CBP agent.

TVS Access through CBP One

In October 2020, CBP launched [CBP One](#), a publicly available mobile application and portal for the public to interact with CBP. Its functionality differs depending on the type of user. For instance, cargo carriers can make appointments for the inspection of perishable items, travelers can apply for and view their [I-94 forms](#), and international organizations (IOs) can verify the enrollment of individuals in certain programs—specifically, the [Migrant Protection Protocols \(MPP\)](#) program.

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Migrant Protection Protocols Program

MPP, or “Remain in Mexico,” was broadly implemented under the Trump Administration in mid-2019 to address what [DHS described](#) as a “security and humanitarian crisis on the Southern border.” MPP required many asylum seekers who arrived at the southern border to wait in Mexico while U.S. immigration courts process their cases, a departure from the previous policy of releasing some (particularly those in family groups) into the United States while they wait. The Biden Administration, after suspending enrollments in January 2021, [ended the program and stopped](#) new enrollments in June 2021. Approximately 68,000 individuals were enrolled in MPP and returned to Mexico. As of February 2021, there were approximately [25,000 MPP enrollees](#) outside of the United States awaiting adjudication of their cases.

IOs, including the [United Nations High Commission on Refugees \(UNHCR\)](#) and the [International Organization of Migration \(IOM\)](#), provide humanitarian and legal assistance to MPP enrollees as they wait in Mexico. [These organizations](#) “identify MPP enrollees, verify their identity and MPP status, and transport them to a designated port of entry” at the date and time listed on their [Notice to Appear](#) document. CBP has partnerships with specified IOs, identified by the Department of State, to assist MPP enrollees. These organizations have access to the international organization functionality on [CBP One](#).

IOs can use CBP One to verify that an individual is enrolled in MPP and has a pending immigration case. With the individual’s consent, IO users upload a photograph of the individual to CBP One, which searches for a match against a pre-staged [TVS](#) photo gallery comprised of approximately 70,000 images of MPP enrollees saved in the Department of Homeland Security’s (DHS’s) [Enforcement Integrated Database \(EID\)](#). These images were collected during MPP enrollees’ initial encounters with CBP. Just as TVS provides a match/no match response for travelers, it also does so for photographs that IOs enter in CBP One to verify the identity of MPP enrollees.

- If a *match* is confirmed, CBP sends the biographic information associated with the EID image (e.g., first name, last name, date of birth) to the [Person Centric Query System \(PCQS\)](#) to verify the individual has a pending immigration case. The IO user then receives one of four responses: (1) a green check mark indicating the individual is enrolled in MPP and has a pending immigration case; (2) a yellow bar indicating either the individual is enrolled in MPP but their case is closed or the individual is enrolled in MPP but CBP could not locate their immigration case (the IO user can then check the Department of Justice’s [Executive Office for Immigration Review](#) website to confirm the case status); (3) a red “X” indicating CBP was unable to locate the individual’s information; or (4) a system error message.
- If the submitted photograph results in a *no match* or if the individual elects not to provide a photograph, the IO user can submit the individual’s [Alien Registration Number](#) (“A-Number”) instead. This will also query EID and PCQS and result in one of the four responses listed above. If CBP is still unable to confirm a match, it can submit the individual’s biographic information (e.g., first name, last name, date of birth) to CBP One and repeat the same process.

Accuracy of TVS

One of the primary concerns over use of FRT has been its accuracy. While the reliability of FRT algorithms has improved, [accuracy rates can vary](#) based on demographic factors. An errant match (false positive) in TVS could pose a security risk, while an errant no match (false negative) could cause travel or immigration delays. [CBP internal analysis](#) estimates the false positive rate of TVS at .0103%. (It did not report the false negative rate.) Policymakers may exercise oversight over how CBP implements—including training for officials using FRT—and evaluates the accuracy of TVS and related systems as their use evolves.

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