Identity Week America 2023
The 9/11 Commission stated that “a biometric entry-exit system is an essential investment in national security.” CBP executed and delivered a Biometric Entry-Exit Program delivering biometric confirmation in the travel continuum in partnership with airlines, airport authorities and sea cruise lines worldwide.

How Did We Get Here?

**TIMELINE: HOW CBP HAS CHANGED THE FACE OF TRAVEL**

- **1996: Illegal Immigration Reform and Immigrant Responsibility Act**
  Congress directs the implementation of a Biographic Entry and Exit System

- **2002: Border Security Act**
  Act requires all ports of entry to have equipment that allows biometric comparison and travel document authentication

- **2004: U.S. Visit Begins to Collect Biometrics**
  In January 2004, U.S. Visit begins to capture a photograph and fingerprints of foreign travelers

- **2004: Intelligence Reform and Terrorism Prevention Act**
  The 9/11 Committee advises Congress to direct DHS to accelerate the implementation of an automated biometric entry/exit data system

- **2006: Border Security Act**
  Requires all ports of entry to have equipment that allows biometric comparison and travel document authentication

- **2010: Biometric Exit (BE) Mobile**
  At top 10 airports, tested viability of implementing BE in conjunction with outbound anti-terrorism and contraband enforcement operations

- **2013: Congress Transfers the Biometric Exit Mission to CBP**

- **2015: Biometric Exit (BE) Mobile**
  At top 10 airports, tested viability of implementing BE in conjunction with outbound anti-terrorism and contraband enforcement operations

- **2016: DHS Appropriations Act (P.L.114-113)**
  Establishes Biometric Entry-Exit H-1B and L-1 Fees Fund

- **2016: Departure Information System Test**
  First facial comparison exit pilot at Atlanta, Georgia

- **2016: Pedestrian Biometric Field Test**
  Pilot at Otay Mesa, California demonstrates the travelers preferred ease of use of facial technology

- **2017: Simplified Arrival First Deployed**
  Set up commercial cloud matching environment for trial

- **2017: Using the Cloud**
  Facial pilot for cruise line passengers during debarkation

- **2020: COVID-19 impact drives increased interest in CBP biometrics and touchless processes**

- **2023 More to Come!**

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Traveler Verification Service (TVS)

Cloud-based biometric facial comparison service designed with privacy and security in mind

- Enables external partners and other government agencies to confirm traveler identity against a trusted source
- TVS easily applies across modality and use-cases for verification of identity throughout the travel process
- Scaled for enterprise use, builds speed and accuracy of the capability
Biometric Travel Vision

BIOMETRIC → DEPARTURE

CBP receives manifest from airlines
CBP builds galleries using travel photos
Traveler checks in with airline
Checks bag with facial comparison (Partner with TSA)
Verifies face at security (Partner with TSA)
Confirms face on boarding, CBP records departure

Officer performs admissibility interview
Matches traveler on arrival
Traveler checks in with airline
CBP builds galleries using travel photos
CBP receives manifest from airlines

← ARRIVAL

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Partnership With TSA

Partnering with TSA in 2017 to evaluate facial comparison, TSA’s captures photos during check-in, bag drop, or the screening checkpoint (before the traveler proceeds to the gate). TSA is using the photos to verify identity as well as conduct vetting checks via TSA’s Secure Flights. For these CBP-TSA partnership, CBP is providing TVS as a service to TSA. We partner to determine the necessary technical and operational requirements, but the screening checkpoint is TSA’s mission space, so CBP is in the support role.

1. Travelers have photo taken at the TSA checkpoint
2. Match result and Secure Flight indicator are displayed on a mobile device to the Transportation Security Officer (TSO)
3. TSO directs travelers to the appropriate screening lane based on match and Secure Flight results
4. If there is no match, TSO follows current policy to verify traveler identity
5. CBP officers may assist with inspection of travelers that do not match
• Proactive monitoring of biometric algorithm performance to identify deficiencies
• Based on top-rated NEC algorithm
• Specific areas evaluated include performance differentials and algorithm recommendations based on CBP’s various operational environments

Limited retention of facial images
• U.S. Citizen photos deleted within 12 hours
• Retention of photos by stakeholder partners restricted by CBP business rules
• U.S. citizens can voluntarily participate in the facial biometric process

Enhanced security measures
• Data encryption both in transit and at rest
• Device access restricted to authorized personnel
• TVS creates irreversible templates separated from biographic data, associated only with a unique ID

Traveler Communication
• Extensive communications can be found throughout the passenger journey communicating the biometric process and options
Lessons Learned

Occlusions

Environmental Variances

Algorithm
CBP’s Biometric Entry-Exit Program provides enterprise capabilities in an accessible, cost-effective, and efficient way that can meet wide-ranging requirements with minor adaptation. As CBP moves towards the future we are guided by the following principles:

- Respecting privacy
- Working with stakeholders
- Communicating with travelers on new processes
- Partnering with industry
- Providing options to travelers