

Biometric Entry-Exit

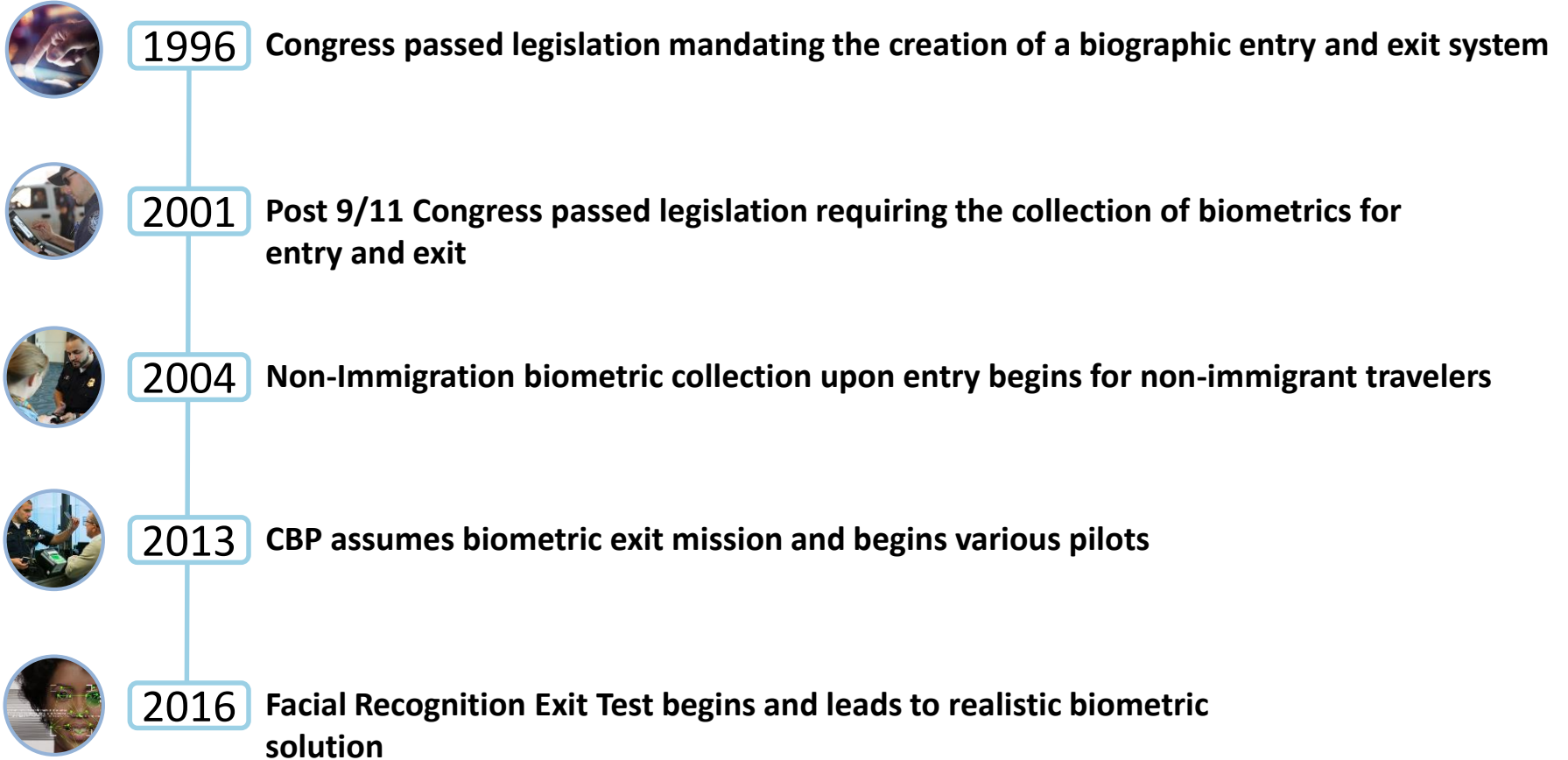
July 11, 2017



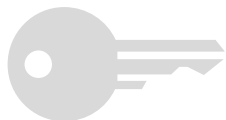
CBP Assumes Biometric Exit Mission in 2013



U.S. Customs and
Border Protection



Facial recognition emerged as the key to connecting a traveler's biographic and biometric data.



For a solution to be both feasible and realistic:

- 1** *Do not add another process*
Avoid adding any new processes
- 2** *Existing Infrastructure*
Utilize existing airport and airline infrastructure
- 3** *Existing Business Models*
Leverage existing stakeholder systems, processes, and business models
- 4** *Current Passenger Behavior*
Leverage passenger behaviors and expectations that do not require new or unexpected steps for travelers
- 5** *Existing Data & IT Infrastructure*
Use existing traveler data and existing government IT infrastructure

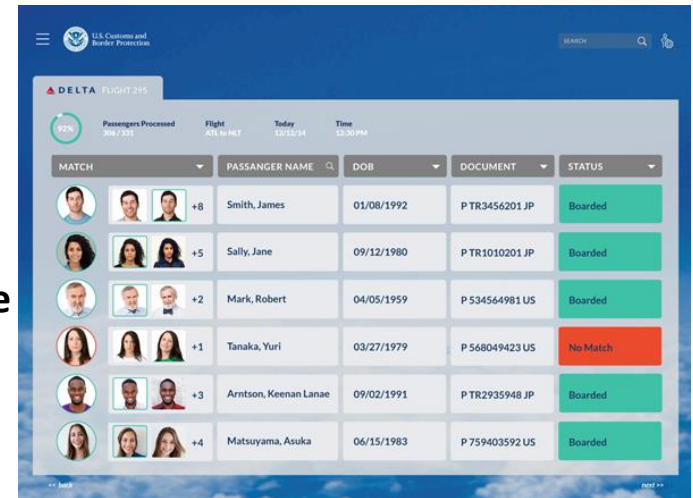
Traveler Verification Service



CBP designed a backend Traveler Verification Service (TVS), that leverages existing advanced passenger information, existing photographs from OBIM and U.S. Passport Database, and is front end device agnostic. TVS will be used in Land, Air, and Sea

WHY THE TVS WORKS:

- Uses Existing Traveler Biometrics
- No New Data Requirements
- Matches One to Few Utilizing Cloud Infrastructure
- Tokenless Processing
- Integrates into Existing Airport Infrastructure



~30,000 participating passengers



High 90 percentile of passengers have a photo available



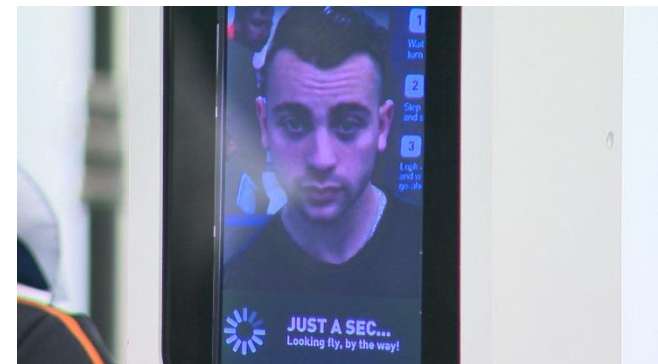
High 90 percentile match rate for passengers with photos

Facial recognition is the clear business choice because it integrates into existing stakeholder processes and infrastructure and it capitalizes on traveler behavior.



Biometric Air Exit – Deployment Progress

- **Small Scale, Cloud Based Traveler Verification Service (TVS) functioning to support Air Exit. Currently working to scale up infrastructure for larger nationwide rollout.**
- **CBP is implementing technical demonstrations at the following international airports in 2017:**
 - June 6- Dulles
 - June 8- Atlanta (equipment upgrade)
 - June 27- Houston Intercontinental Airport
 - July 11- Chicago
 - 4 additional airports by September
- **Airlines Initiated facial recognition projects:**
 - June 12- Jet Blue-Paperless Boarding Project- Boston
 - June 12- Delta Auto Boarding Gate Project-JFK
 - July 17- Delta Camera Integrated Boarding- Atlanta
- **Additional stakeholders have interest in projects:**
 - San Francisco
 - Los Angeles
 - Royal Caribbean
 - British Airways
 - Lufthansa



- **Third Country National Plan**
 - Self-Report Final Departure From US at Land Ports of Entry. Will use existing application to record departures via desktop or mobile device.
 - Begin implementing in late 2017
- **Simultaneously work technical solution for pedestrians**
 - Staged biometrics using cloud services tailored similarly to current air exit strategy (e.g. build gallery of frequent pedestrian crossers)
 - Tie RFID to biometrics to expedite matching
 - Work with GOM on biometric inbound/outbound
- **Longer-Term Strategy**
 - Vehicle at-speed screening technology
 - High Resolution Infra-red cameras



- **TSA**
 - **CBP will conduct a Facial Recognition Pilot with TSA at a checkpoint in Late Summer 2017**
 - **CBP and TSA meet weekly to coordinate and discuss biometric pilot**
 - **Working together to identify opportunities for the future**
- **DHS Science and Technology**
 - **Biometric Device Evaluations**
 - **Human Factors**
 - **Algorithm evaluation**
- **DHS Digital Services**
 - **Evaluate System Design and Architecture**
 - **Provides best practices for programming and development**
 - **Facilitates Department wide collaboration**
- **Office of Biometric Identity Management (OBIM)**
 - **Utilizing existing biometric information in IDENT**
 - **CBP will send in-scope photos to OBIM**
 - **Developing strategic requirements for HART**
- **CBP/DHS Privacy**
 - **Privacy Impact Assessments Completed for CBP Projects and Airline Led Projects**
 - **Working together to ensure security of PII information**



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