About Apex AEER

The Apex Air Entry/Exit Re-Engineering (AEER) program is a multi-year effort within the Department of Homeland Security (DHS) that will inform the transformation of the international arrivals process and the implementation of a biometric capability to verify the departure of foreign nationals leaving from U.S. air ports of entry.

Through the Apex AEER program, DHS Science and Technology Directorate (S&T) and U.S. Customs and Border Protection (CBP) are collaborating to transform CBP operations by leveraging commercially available technologies, re-engineering current processes, and introducing new operational capabilities.

The Apex AEER program will identify, develop, test, and evaluate new concepts of operation to enhance and facilitate traveler-screening processes. There are three primary drivers for Apex AEER:

- Increase security while facilitating trade and travel

- Implement operational capabilities required by federal legislation

- Support the National Travel and Tourism Strategy
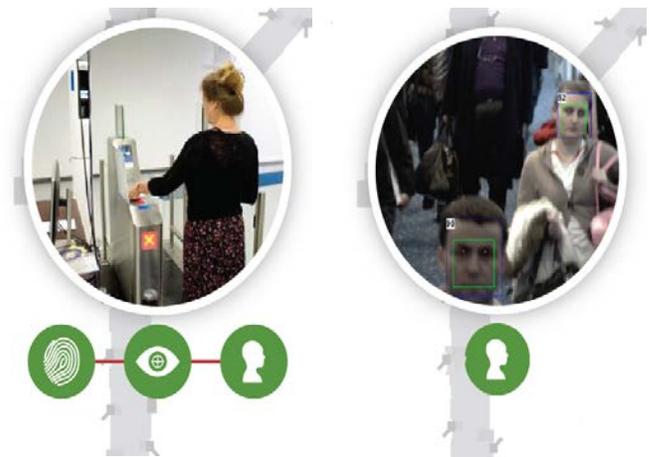
Biometric Air Exit Approach

The Apex AEER program, in partnership with the National Institute of Standards and Technology (NIST), is employing a methodical approach to assess the feasibility of methods to biometrically confirm the departure of foreign visitors from the U.S., as required by legislation.

The program is working with the private sector, including airlines and airports, air industry associations, foreign governments, industry solution providers, and other key stakeholders to better understand the challenges and impacts of proposed concepts and work to minimize disruptions and impact to airport and airline operations. Leveraging new technologies and lessons learned from previous pilots as well as private sector and foreign government systems, the Apex AEER program is developing new candidate solutions to meet legislative requirements and operational needs.

Evaluations and Analysis

Various concepts of operation, employing different biometric technologies and processes, have been developed and are currently undergoing laboratory evaluation as well as scenario-based testing.

The evaluations will consider technical performance, processing times, traveler throughput, impact on CBP, airport, and airline operations, cost, and quality of the traveler experience.

The program will culminate in a field trial at a U.S. international airport in early 2016. The results of previous testing and the field trial will be incorporated into a business case analysis to inform CBP planning for a comprehensive, cost-effective, biometric exit solution that will fulfill federal mandates for a biometric exit system.