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SUMMIT
WASHINGTON, DC | JUNE 7–8, 2023

CMP101

Improving customer experience at U.S. Customs and Border Protection

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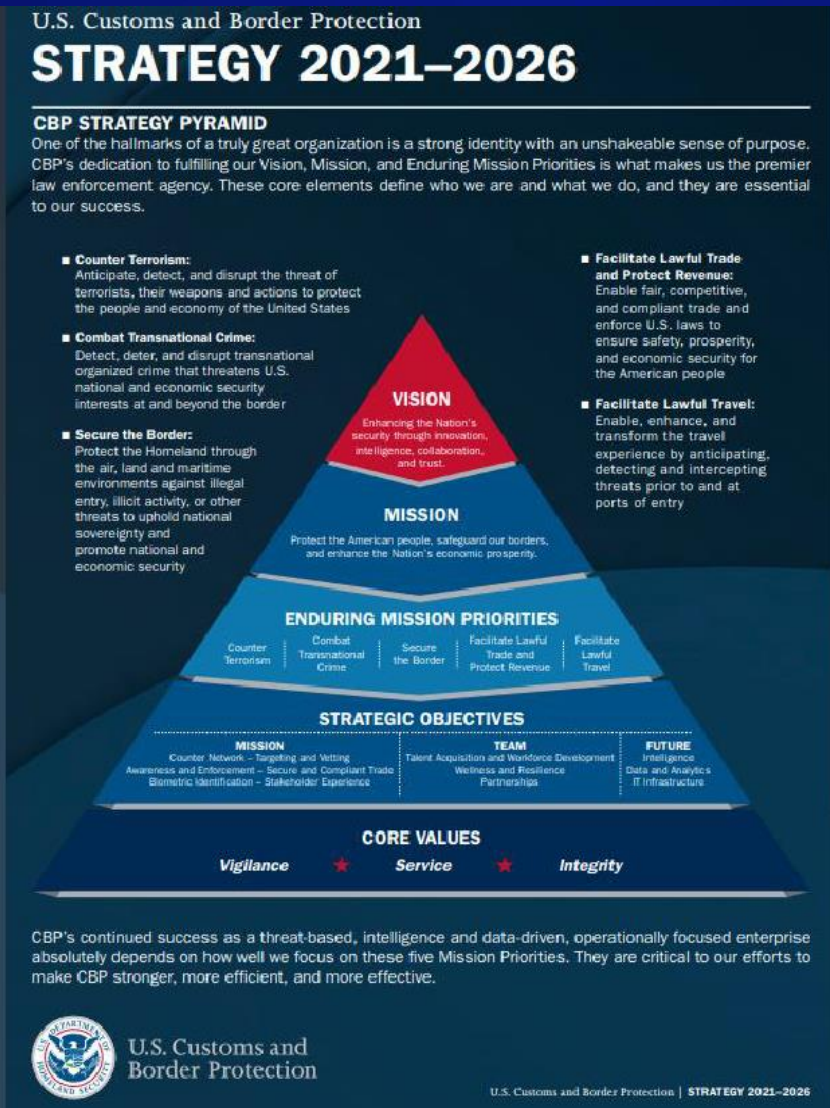
Agenda

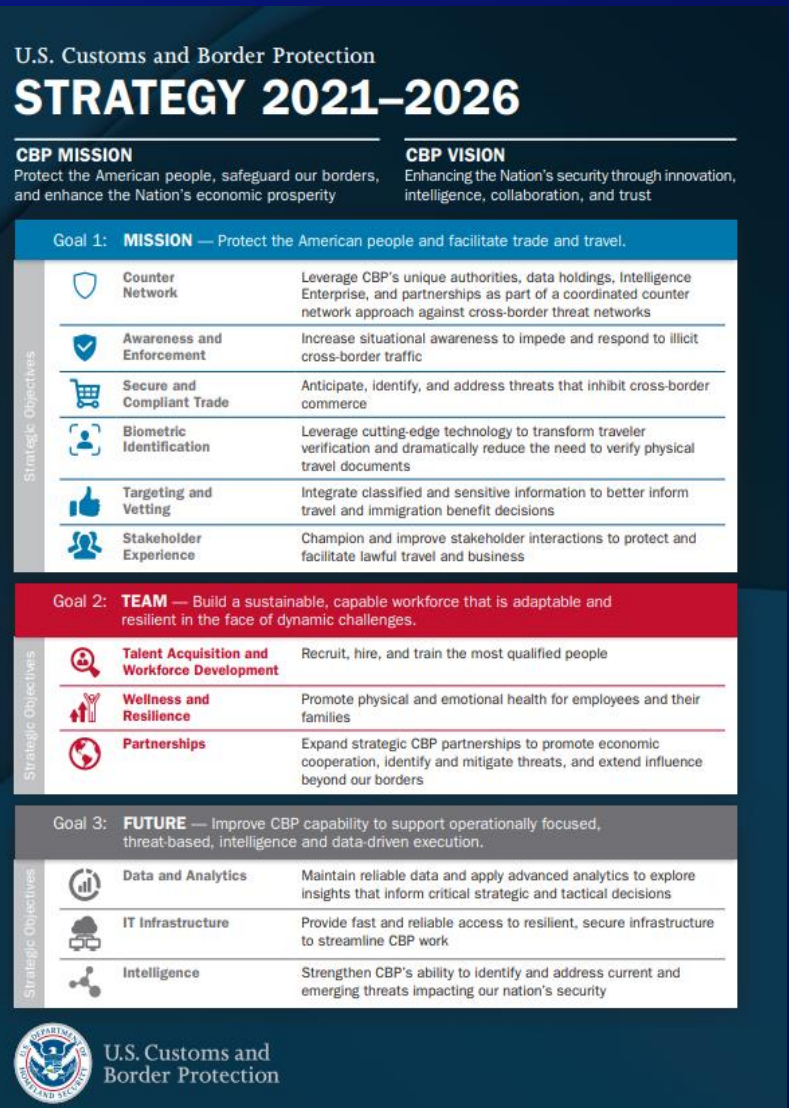
- Introduction to U.S. Customs and Border Protection (CBP)
- Cloud Journey
- Customer Experience (CX) at CBP
- CBP One App

U.S. Customs and Border Protection (CBP)

- **U.S. CBP, is the largest law enforcement organization in the USA.**
- **CBP's 24/7 Mission: Protect the American People, Safeguard our Borders, and Enhance the Nation's Economic Prosperity.**
- **As the US's first unified border entity, CBP takes a comprehensive approach to border management and control, combining customs, immigration, border security, and agricultural protection into one coordinated and supportive activity.**
- **On a Typical Day in Fiscal Year 2022, CBP… \| U.S. Customs and Border Protection [CBP.gov]**

CBP Strategy 2021-2026





CBP Strategy 2021-2026 | U.S. Customs and Border Protection

CBP OIT Delivers Continuous IT Transformation at Scale

CBP Mission

Protect the American people, safeguard our borders, and enhance the nation's economic prosperity.

OIT Mission

Deliver secure, reliable IT services and capabilities anywhere, anytime, at the speed of CBP's 24/7/365 mission.

Strategic Approach

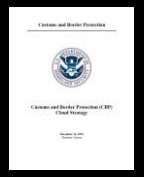
Strategic Transformation + **Tactical Excellence** + **Innovation**

Strategic Focus Areas

- APPLY — Mission Applications
- MAKE — Mission Infrastructure
- SECURE — Mission Cybersecurity
- PARTNER — Trusted Partnerships
- STRATEGIZE — Enterprise IT Governance
- OPERATE — CIO Business Operations

OIT Strategy Documents

IT Strategy


Cloud

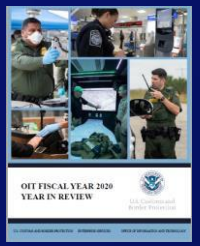
Data

Cyber

Three Years of Excellent Results (CBP.gov)

YEAR IN REVIEW 2022

YEAR IN REVIEW 2021



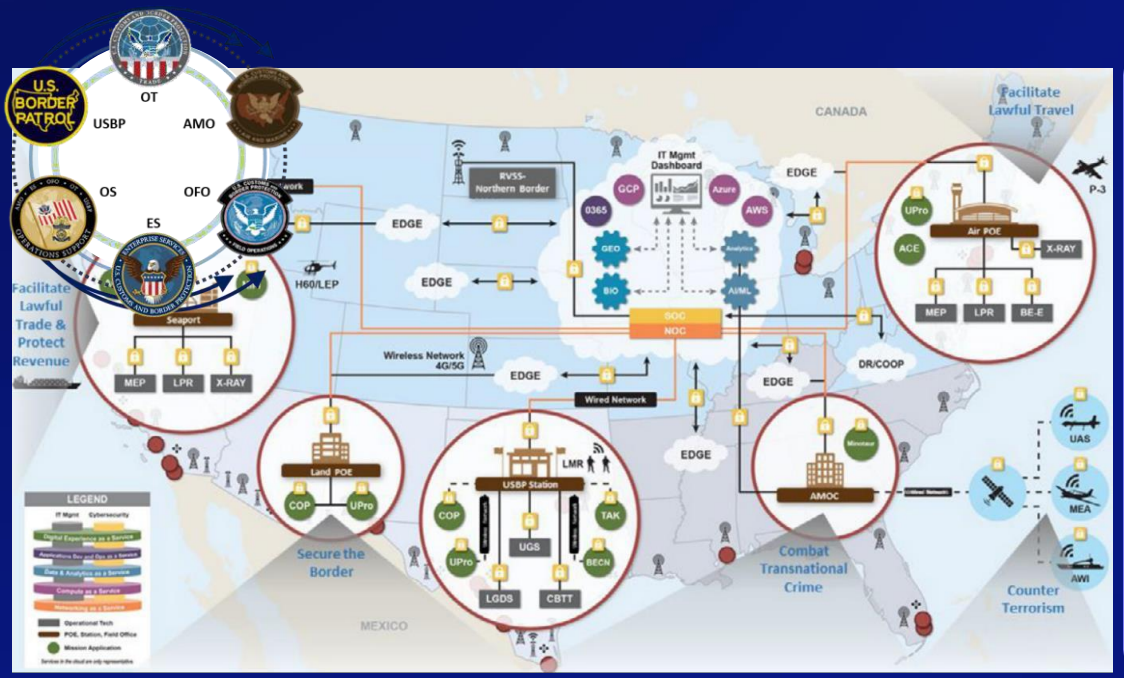
YEAR IN REVIEW 2020

Mission Outcomes: **FASTER • BETTER • MORE RELIABLE • MORE SECURE**

Operational Technology and Information Technology Unified by Cloud

CBP OIT Support Enabled by Cloud

Cloud migration and modernization brings an array of benefits to CBP customers, mission partners, and OIT that heighten our cyber posture, optimize enterprise costs, and enhance service delivery.



Technology Environment

Our multicloud strategy enables the rapid deployment of cutting edge operational & informational technologies that are critical to our mission.

Scale of IT Environment

CBP's IT landscape is expansive and provides 24/7 mission support across 1,744 locations nationally. Metrics that illustrate our scale include:

- Over 8B Data Queries per Day
- 40-50B Data Exchanges per Day and 172 PB per day of traffic on network
- Connectivity for over 60,000 CBP Employees
- Hundreds of Thousands of Endpoint Devices Secured
- Processed 800,000+ Passengers and Pedestrians per day in FY22
- 277 Mission Enabling Applications
- Over 200,000+ Operational Technology and IT Assets

CBP's cloud capabilities enable our organization to meet the mission by modernizing our infrastructure, improving our cybersecurity posture, and expanding functionalities of our mission critical applications.

U.S. CBP ACE Collections Modernization – A Cloud Success Story

The goal of CBP IT Modernization is continue to evolve programs from Legacy technology to change and adopt modern Cloud technologies without risk to mission delivery.

The modernization of ACE Collections module is a cloud success story:

- ***Leveraged TMF funds* ($15 M / ROI $112B)***
- ***Modernized mainframe-based application running on a 30+ year old, 3.9 M COBOL Software Lines of Code (SLOC).***
- ***Used cloud hosted MFaaS (Mainframe As A Service) for Mainframe tasks during modernization.***
- ***Modernized to an automated Collections solution.***
- ***Retire the application from Mainframe by end of calendar year 2023***

PROCESSING STATS

- Over $3.4T in Total Import Goods processed through the ACE annually.
- Over $372M commercial import cargo entries through ACE.
- Over 20.7M commercial cargo export shipments per fiscal year through Automated Export System (AES).
- Total duties collected for FY 22 is $112 B.

CBP's Collections module is the primary system for the collection of duties, taxes, and fees for the Federal Government and the second-largest source of Government revenue.

CX is Central to CBP's Strategy – Mission-led CX Roadmap

U.S. Customs and Border Protection

STRATEGY 2020–2025

CBP MISSION
To safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the Nation's global economic competitiveness by enabling legitimate trade and travel

ASPIRATION
To be the most innovative and trusted law enforcement agency in the world

GOAL 1: MISSION — Protect the American people and facilitate trade and travel

Strategic initiatives

Counter Network	Leverage CBP's unique authorities, data holdings, Intelligence Enterprise, and partnerships as part of a coordinated counter network approach against cross-border threat networks
Awareness and Enforcement	Increase situational awareness to impede and respond to illicit cross-border traffic
Secure and Compliant Trade	Anticipate, identify, and address threats that inhibit cross-border commerce
Biometric Identification	Leverage cutting-edge technology to transform traveler verification and dramatically reduce the need to verify physical travel documents
Targeting and Vetting	Integrate all-source information on travelers across agencies to identify threats
Stakeholder Experience	Champion and improve stakeholder interactions to protect and facilitate lawful travel and business

GOAL 2: TEAM — Build a capable and resilient workforce ready for anything

Strategic initiatives

Hiring and Retention	Recruit, hire, train, and retain the most qualified people
Resilience	Promote physical and emotional health for employees and their families
OneCBP	Create a unified and integrated enterprise working together at all levels to execute the CBP mission

GOAL 3: FUTURE — Invest in technology and partnerships to confront emerging threats

Strategic initiatives

Data and Analytics	Maintain reliable data and apply advanced analytics to explore insights that inform critical strategic and tactical decisions
IT Infrastructure	Provide fast and reliable access to resilient, secure infrastructure to streamline CBP work
Partnerships	Expand international and intelligence partnerships to promote economic cooperation, identify and mitigate threats, and extend influence beyond our borders

U.S. Customs and Border Protection

Capabilities required to deliver best-in-class customer service

Omnichannel, cloud contact center
Core contact center infrastructure (e.g., telephony, IVR, intelligent call routing)
Seamless experience across voice and chat
Workforce optimization tools (e.g., QA, agent desktop, performance management)

Multichannel comm platform
Inbound / outbound communications service
Email, in-app messaging, push notifications, and SMS to deliver support on customers' preferred channels

AI / ML tools and predictive servicing
Automated audience segmentation based on predictive criteria
Targeted servicing
Recommendations
Intelligent customer segmentation
Personalized content/service recommendations
ML powered decisioning

AI enabled self service / chatbot
Omnichannel conversational AI
24/7, scalable virtual agent support

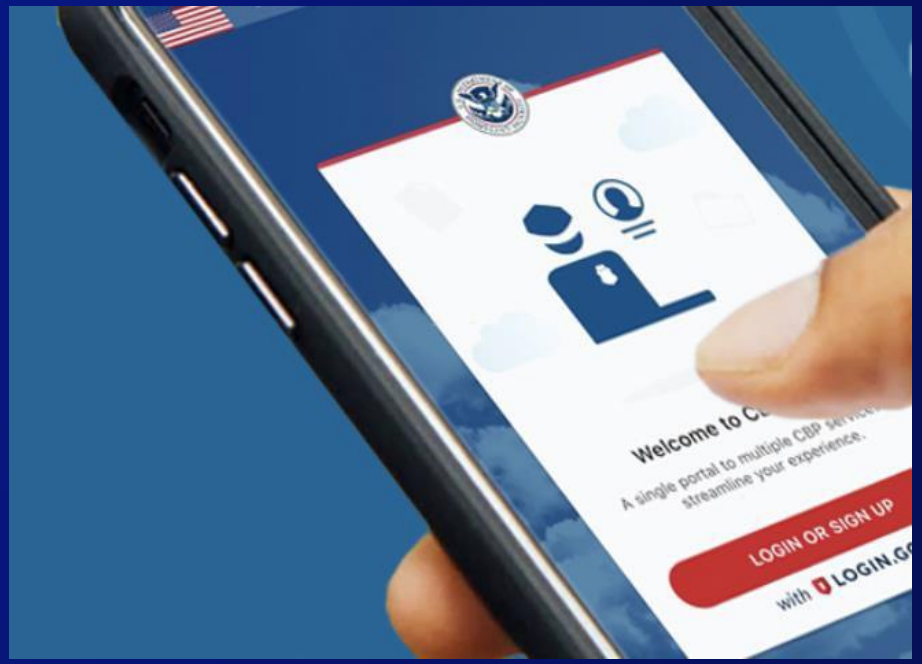
Automated document processing
Intelligent text extraction, structuring and storage
ML-powered document processing, categorization, and analytics

Expedited KYC biometric authentication
AI/ML digital identity verification
Automated customer risk scoring

Source: https://www.cbp.gov/sites/default/files/assets/documents/2019-May/cbp-strategy-2020-2025-one-pager.pdf

CBP One App Background

- The CBP One application serves as an intuitive single portal to a variety of CBP services.
- CBP One utilizes plug-in architecture to easily integrate new public facing applications and allows applications to share basic services such as login, document scanning, liveness (determining that user is a live person), and facial matching authentication.
- CBP One currently has several available features, with more scheduled to roll out over the next year. Current features include:
  - ✓ Mobile access to the scheduling application
  - ✓ I-94 Entry
  - ✓ Workflows for submission of advance information for asylum seekers
  - ✓ Air traveler inspection requests
  - ✓ International Organization (IO) boarder presentation scheduling
  - ✓ Digitized bus operator manifest submissions



CBP One™ Mobile Application | U.S. Customs and Border Protection [CBP.gov]

CBP One App Statistics

- 116,000+ individual appointments scheduled and 101,000+ Total processed using the CBP One app since 1/12/23.
- Using Cloud and Cybersecurity protections.
- Allows more open access and reduces the exploitation of vulnerable persons seeking to present at ports of entry.
- Rapid implementation of process improvements and software updates have driven numbers (e.g., CBP addressed reported challenges related to geolocation and error messages due to bandwidth issues with a third-party software for liveness).
- CBP One's undocumented noncitizen scheduling functionality is now available in English, Spanish, and Haitian Creole.

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