



U.S. Customs and  
Border Protection



FY24

# CBP Experience (CBPX) Annual Report

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# FY24 Results Achieved through Employee & Customer Inputs

U.S. Customs and Border Protection, through its legacy agencies, has interacted with the public from our national founding to today. Our employees engage with a broad, diverse and always evolving public as part of our mission operations. We are constantly adapting as employees on behalf of our agency to address the dynamic landscape of trade and travel coupled with technological changes to uphold our national security mission to protect the United States while allowing legitimate travel and trade.



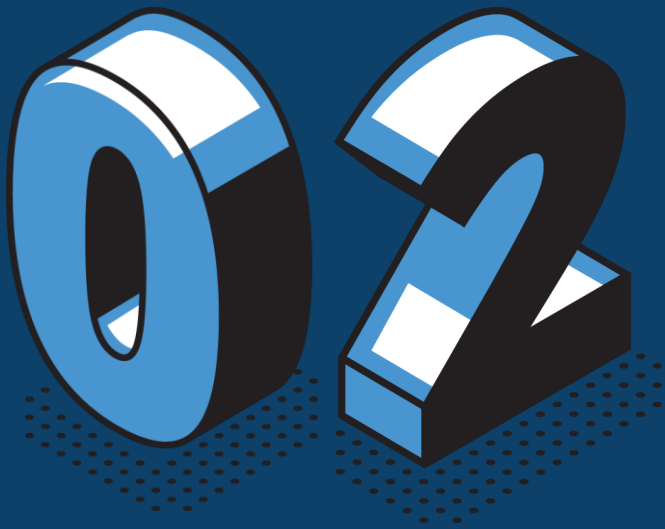
With our mission history in mind, it is particularly exciting for CBP to formally stand up the CBP Experience (CBPX) Division in FY24. Doing so formally institutionalizes a CBP practice of using human-centered design and strengthens our focus on our employees and customers.

Today, technology drives much of the change we hope to implement within CBP. As the volume of trade and travel continues to grow, we recognize that we must rely on technology to serve as a force multiplier to meet the staffing challenges to fully address workload demands. It is **especially critical that we closely engage our internal and external customers and stakeholders** to best capture and reflect their needs and insights as we develop new technological solutions and platforms. Our most effective developments will result in reducing administrative and operational burdens upon our workforce as well as all those with whom we interact daily across our complex national security mission as the public and as customers of CBP. Obtaining ongoing employee and customer input will better enable us to design, develop and deploy applications and services that achieve desired results.

This year's report of significant achievements in FY24 is only made possible because of all those who collaborated to deliver CBPX efforts in support of our CBP mission. Thank you.

**James McCament,**  
Acting Chief Operating Officer &  
Executive Sponsor Accountable for CBP Experience





Launching CBPX

CBPX FOCUS:

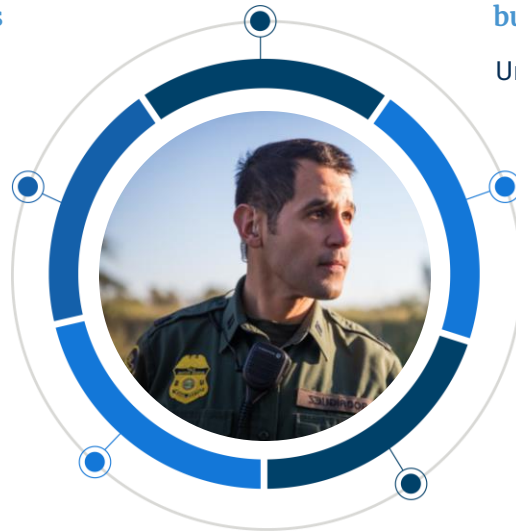
# Human-Centered Design at CBP

CBP Experience captures the end-to-end experiences of employees and users through first-hand research to inform iterative improvements to CBP products and services.

## CBPX puts the voice of the employee and end user at the center

**Listening to employees and taking actionable measures to solve their challenges increases employee morale.**

When we improve employee experiences, we empower personnel to further CBP’s core mission priorities: protecting the American people, safeguarding our borders, and enhancing economic prosperity.



**Human-centered innovations reduce administrative processing burdens for CBP employees.**

Uncovering employee feedback and turning it into data-driven decisions yields financial and time benefits –increasing capacity and returning time to mission.

**Human-centered design increases voluntary compliance and public trust so CBP can focus on areas of high risk.**

By consistently delivering an optimal experience that pinpoints and reduces areas of public burden, CBP can improve program outcomes and customer satisfaction - within and beyond the agency.

**CBPX elevates the voice of the employee to executive leadership at CBP, DHS, and OMB – enabling action.**

CBPX’s human-centered design and measurement strategies uncover impactful data points and connect innovative programs with executive leadership at CBP, DHS, and OMB.



# CBP Experience (CBPX) Division Established

The CBP Experience (CBPX) Division informs, coordinates, and executes capabilities across the organization, providing advice, guidance and resources. CBPX staff collaborates with key leaders and stakeholders to infuse leading practices into CBP processes and operations, building on existing capabilities and advancing maturity over time. One of its core functions is to partner with service teams across the agency to understand more deeply the needs of people and organizations who interact with CBP.

**Tens of thousands of CBP personnel interact with hundreds of thousands of individuals every day** via direct engagement or through CBP products and services. The CBPX Division is designed to complement, build upon, and evolve CBP's foundational customer service excellence.

Through comprehensive research with key stakeholders across CBP, we learned that as a law enforcement agency with a complex mission set, the generic term "Customer Experience" lacks the necessary crucial emphasis upon the roles and needs of our CBP employees, their interactions with our systems, and our broad and diverse customer base.

We therefore branded the division "CBP Experience" to reflect CBP's vast scope and put CBP employees at the core of our efforts.

**"I'm delighted to announce that the CBP Experience (CBPX) Division has now launched, crystalizing the importance of employee and customer experience to CBP. This division will promote human-centered design research and data, serving as advisors and subject matter experts. This will drive a deeper understanding of user needs, help the agency develop and deploy solutions that meet those needs, and capture feedback to continue innovating and enhancing experiences."**

**Janet Pence**

*Acting Director, CBP Experience*



# Collaboration with & Commitments to the White House & DHS

As a designated High Impact Service Provider (HISP), CBP is supporting the government-wide imperative to build government trust through improved Customer Experience (CX) and service delivery.

## CBPX Action Plan

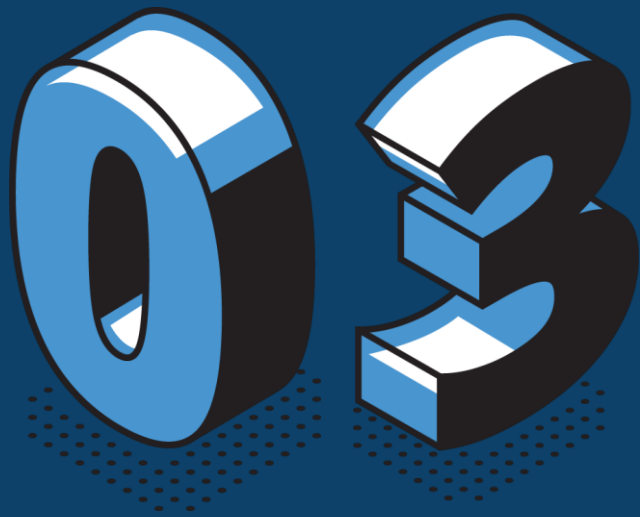
In FY24, CBPX committed to delivering 12 milestones across 5 initiatives to the Office of Management and Budget (OMB), which oversees the performance of federal agencies. Our Action Plan commitments deliver service improvements to critical programs and further solidify CX as an integral part of CBP. As of September 2024, CBPX completed 10 of the 12 commitments.

## DHS CBPX Strategy

In December of FY24, CBP delivered a CBPX Strategy document to DHS. The 11-page document outlines CBPX’s vision, mission, leadership, capacity-building approach, location, metrics, activities and timelines, stakeholders, assumptions, constraints, risks, maturity model, and requests of DHS.

Workstream	Initiative
<b>Global Entry (GE)</b>	Create initial audience personas and journey map to illustrate a frictionless GE experience
	Conduct a current state analysis of GE enrollment to identify issues and <b>opportunities for improvement</b>
	<b>Implement improvements</b> including making it easier for families to enroll
	Develop and administer survey to <b>capture customer feedback</b>
	Roll out GE <b>mobile app at all airports</b>
<b>Automated Commercial Environment (ACE) Cargo Developer Portal</b>	Complete customer segmentation to <b>understand current state experiences and challenges</b> for government employees and trade organizations
	Develop and administer survey to <b>capture customer feedback</b>
<b>ACE Tech Demos</b>	Release and beta test the cargo developer portal with an initial user base (scheduled for FY25 Q1)
<b>ACE Tech Demos</b>	Execute three technology demonstration projects to help <b>transform the framework for international supply chain data sharing between countries</b> (scheduled for FY25 Q1)
<b>CX Division</b>	Establish a <b>formal CX staff</b> within the Office of the Commissioner to drive CX excellence at CBP
<b>Communications &amp; Training</b>	Establish CX communications and training plans to <b>build knowledge</b> and expand the use of CX methods and their <b>value to the mission</b>
	Establish a CX community of practice to <b>enable offices to leverage CX tools</b> and best practices across agency initiatives





# CBPX High Impact Services



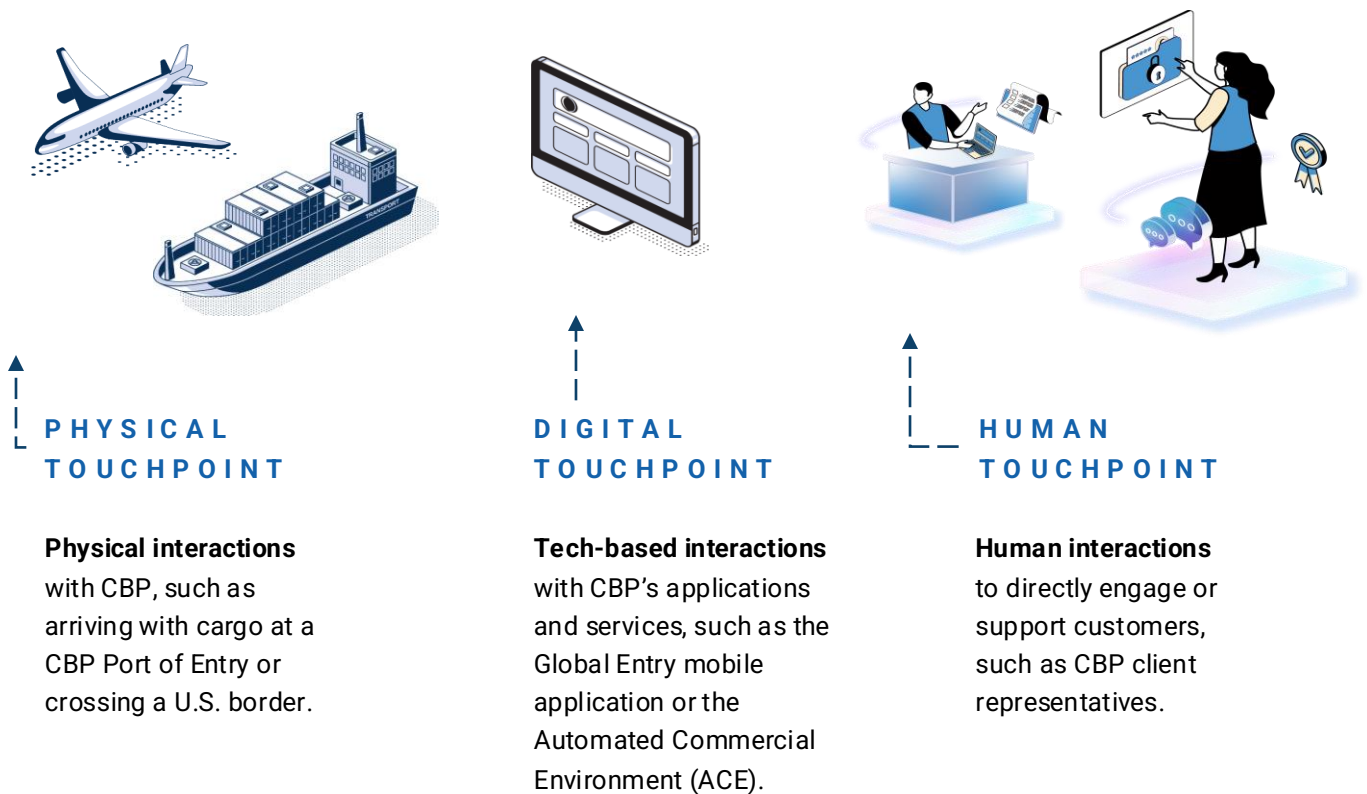
# Designated High Impact Services

CBP Experience (or “CBPX”) efforts are grounded in the bold vision outlined in the **President’s Management Agenda**, supported by specific actions defined in **Executive Order #14058 on Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government**, which prioritizes “**designing and delivering services with a focus on the actual experience of the people whom it is meant to serve.**”

The CBPX Division uses human-centered design methodologies to improve ease, efficiency and effectiveness of interactions by and with CBP across touchpoints. Illustrative examples are below.

## Further Understanding Customer Experience

**Customer experience** describes the overarching **experience journey**, addressing the **touchpoints** and cultivating the relationship between the organization and those who engage with its applications and/or services both **internally** (CBP employees) and **externally** (e.g., passengers, members of the trade community).



# Designated High Impact Services



*CBPX has been a driving force in shedding light on the operator’s perspective for software delivery. By highlighting the importance of the end-user, management can see true return on investment. In the agile world, minimal viable product is front and center, and at times the end user can lose out on what they deem important to what is technically believed to be a “a greater good.” The CBPX team and their work brings the focus back to business needs over technical desire and confirms that the customer experience remains consistent throughout the process.”*

**Vincent Annunziato**  
 Director of the Business Transformation & Innovation Division

As one of the 38 agencies designated by OMB as a High Impact Service Provider, **CBP is committed to optimizing the experiences of our CBP employees – “internal customers” – as well as those external to our agency who engage with our products and services.** Each year, CBP is responsible for selecting designated high impact services for which to infuse and integrate experience-focused research, insights, and recommendations.

In FY24, CBP opted to focus on passenger and trade programs such as:

- **Global Entry (GE):** a program that allows expedited clearance for pre-approved, low-risk travelers upon arrival in the United States.
- **Automated Commercial Environment (ACE):** the system through which the trade community reports imports and exports, and the government determines admissibility of goods.

This report contains details of how the CBP Experience Division partnered with other Offices in the agency to understand and improve experiences for each of those programs as well as a variety of additional initiatives.



# Automated Commercial Environment (ACE)

CBPX partnered with the Office of Trade and Office of Information and Technology to conduct and analyze robust Voice of the Customer (VoC) research to **understand current experiences with ACE** and **capture future impacts** of the technology and associated process improvements for CBP personnel, partner government agencies, and members of the trade community.

**CBP Trade facilitates legitimate trade, enforces law, and protects the American economy to ensure consumer safety and to create a level playing field for American businesses. The Automated Commercial Environment (ACE) is the system through which the trade community reports imports and exports, and the government determines admissibility of goods.**

ACE has enabled **260+ forms** to be automated across CBP and **more than 49 partner government agencies (PGAs)**.

## During FY23, CBP processed:

- **\$3.3T** worth of imported goods
- **36.6M** imported cargo containers at U.S. Ports of Entry
- **\$94.3B** in duties, taxes, and fees
- **36.7M** formal entries

## During FY23, ACE enabled:

- **Saved \$2.64B and 800K hours in processing time** for the trade community
- **Saved \$1.35B and 16.8M hours in processing time for CBP**, returning vital time to mission to best optimize CBP enforcement activities



# Automated Commercial Environment (ACE) Designated High Impact Services

As CBP seeks to modernize ACE to further its mission priorities to safeguard national and economic security and facilitate legitimate trade, global interoperability standards lay the groundwork and have garnered strong enthusiasm within the agency, partner government agencies, and the trade community as captured by CBPX.

## Global Interoperability Tech Demos

CBP, in collaboration with the DHS Science and Technology (S&T) Directorate Silicon Valley Innovation Program (SVIP), has embarked on five projects to test global interoperability standards using business cases for the **steel, natural gas, pipeline oil, food safety, and e-commerce sectors**.

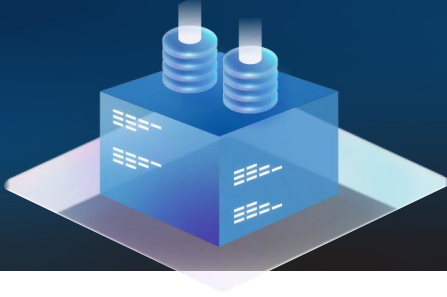
Through SVIP, CBP has engaged a group of private sector companies – Mesur.io, Transmute, and Neoflow – to facilitate and/or support the tests. Interoperability:

- Will provide flexibility for businesses to choose the most efficient way to exchange data with CBP and potentially any system in the world;
- Will allow CBP to receive and transmit data between traditional and non-traditional trade entities in near real-time; and
- Should future-proof CBP and the private sector, enabling systems to be adapted as new technologies emerge.

## Technical Enablement via Cargo Developer Portal

The **Cargo Developer Portal** allows developers across the Trade to **test and submit data through modern standards** rather than expensive proprietary infrastructure and message specifications. This technical enablement is critical to the successful implementation and adoption of global interoperability standards.





# Enhancing Trade Experiences

In partnership with the CBP Office of Trade and Office of Information and Technology, the CBPX Division conducted an extensive stakeholder engagement effort to:

## Understand

the current state of data exchange across the supply chain and learn about key factors, including:

- The **people** at the center of the work
- **Industry** or **commodity-specific** nuances
- Modes of **transportation**

## Discover

anticipated burden reduction and impacts of modernization.

## Identify

critical impact areas to inform a comprehensive measurement strategy & approach, burden reduction analysis, and industry case studies.

## Global Interoperability Tech Demos Stakeholder Interviews

### 28 Leaders & Experts

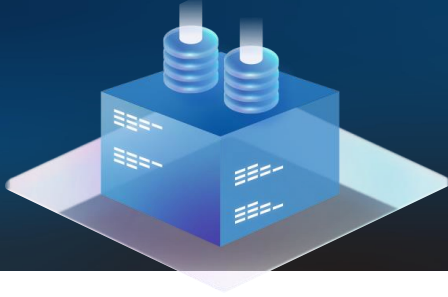
- CBP subject matter experts in pipeline oil, e-commerce, and steel sectors
- DHS Silicon Valley Innovation Program (SVIP) companies
- Industry participants in the 2023 and 2024 Tech Demos
- Partner government agencies (PGAs)

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### Synthesized Voice of the Customer insights across roles, sectors, and modes of transportation into 6 desired future outcomes

1. **Extending** the functional equivalent of the border
2. **Eliminating** paper and near-paper bottlenecks
3. **More** focused targeting, **less** manual validation
4. **Paving** a smoother path for trade compliance
5. **Enhancing** the vision of the single window
6. **Catalyzing** positive downstream impacts





# Enhancing Trade Experiences

## Cargo Developer Portal Stakeholder Interviews

### 27 Leaders & Experts

- CBP leaders and subject matter experts
- Members of the trade community including:
  - Brokers & carriers
  - Service providers

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### Identified key experience principles and priorities to inform rollout

- **Self-service:** The system and its features enable users to meet their own needs.
- **Flexibility:** The user can learn about the system and take needed actions within the system.
- **Consistency:** There is a clear and uniform path to engage with the system and resources.
- **Informing Rollout:** As the tie between the technical and business sides, CBP client representatives must stay up-to-date on legacy systems and the new system in parallel. To do this, they will remain in lockstep with the Office of Information and Technology to be empowered with the right knowledge and tools.

## Cargo Developer Portal VoC Survey

- ✓ Launched FY24 Q2
- ✓ Distributed to Trade Support Network (TSN) software vendors and Technical Advisory Group (TAG) members
- ✓ Nearly **30** responses received

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### Established a baseline & uncovered relationship between trust in CBP and satisfaction with existing technical capabilities

Respondents trust CBP to work in the best interest of the trade community, though there is room to improve satisfaction with transmitting messages with import data to ACE. This affirms strong motivation for co-design and usability testing between CBP and trade partners throughout development.

CBP will repeat the survey in FY25 and compare results to gauge changes in satisfaction as functionality is released through the Cargo Developer Portal.



GLOBAL INTEROPERABILITY TECH DEMOS:

# Pipeline Oil Case Study

## Quantifying Impacts for CBP and Trade

CBPX developed a case study to showcase a **360° picture** of the impacts of the global interoperability tech demos for both government and trade stakeholders in the pipeline oil sector. To do this, we engaged numerous subject matter experts to:

- **quantify operational impacts and efficiencies**, particularly with respect to **reducing administrative burden**
- **articulate current points of friction and future improvements**

## Key Stakeholder Groups

Global interoperability standards will positively impact many types of stakeholder groups. For the purposes of this case study, we focused on:

### 4 Trade Roles



#### Shipper (Exporter)

Acquires a batch of crude oil and initiates movement of that batch from one location to another.



#### Pipeline Operator (Carrier)

Contracted by the shipper to move a quantity of crude oil from one location to another.



#### Customs Broker

Licensed by CBP to submit and manage border clearance documentation on behalf of the importer.



#### Importer

End customer in the supply chain who is responsible for complying with border clearance requirements.

### 3 CBP Roles



#### Officer

Controls physical movement of product at arrival and destination ports by reconciling independent carrier and importer records for the same shipment.



#### Entry Specialist (Customs Entry Officer)

Serves as the “first stop” for post-release in the Petroleum Center and conducts an initial accuracy check of entry summaries, and issues bills and refunds in support of import specialist decisions.



#### Import Specialist

Conducts a second, more in-depth review of entry summaries and makes post-release decisions in the Petroleum Center.

#### Partner Government Agency (PGA) Spotlight

We also identified impacts for the Energy Information Administration (EIA), a key PGA in the pipeline oil sector.



## PIPELINE OIL CASE STUDY CONTINUED

## Future Improvements & Anticipated Burden Reduction

### FOR CBP & TRADE

#### Modernizing Import Data Sharing & Review

This effort transforms data sharing processes – particularly in the pipeline environment – allowing personnel to **focus more efforts on trend analysis for pre-arrival risk segmentation** rather than data validation.

#### Going Paperless

**Data accuracy increases and administrative burden decreases** when shippers, pipeline carriers, customs brokers, and importers exchange data in near-real time, in the same format, in the same place.

#### Technical Enablement for Green Trade Strategy

The ability to track attributes (e.g., origin, composition, quality) of a single barrel makes it possible to **calculate environmental impact across the product lifecycle**.

#### Reducing Clearance Costs

Source traceability clarifies country of origin for United States-Mexico-Canada-Agreement (USCMA) eligibility, **ensuring qualifying shipments are assigned tariff waivers** and thereby reducing clearance costs for importers.

### FOR PGA: ENERGY INFORMATION ADMINISTRATION (EIA)

#### Streamlined Data Acquisition

Access to real-time transaction data reduces reliance on multiple data inputs for routine import analysis and reporting. With end-to-end supply chain visibility, the EIA can record a snapshot of the data at any time.

#### Movement Toward the Single Window

With CBP serving as the face of trade data collection, CBP and the EIA won't need to meet as frequently – and the EIA can redirect time from data reconciliation to other mission priorities. Trade actors can submit import data one time and rely on the system to route their data to required partner government agencies (PGAs) for compliance, eliminating duplicative data submissions.





PIPELINE OIL CASE STUDY CONTINUED

## Estimated Impacts Quantified For Trade And CBP

For imports of pipeline crude oil from Canada to U.S.

<b>66%</b>	potential <b>reduction</b> in border clearance costs	<b>\$14 billion</b>	in <b>value</b> per fiscal year of pipeline oil evaluated more seamlessly for USMCA eligibility through global interoperability standards
<b>\$110M</b>	potential annual industry <b>savings</b> in tariffs	<b>~3 months "found time"</b>	per fiscal year on USMCA verifications for pipeline crude oil
<b>\$0.05 - \$0.10 per barrel</b>	in reduced tariff costs	<b>Up to 40 days lead time</b>	for data received by CBP prior to arrival of pipeline crude oil imports
<b>\$25M - \$50M</b>	potential annual industry <b>savings</b> in effort	<b>3.25 months returned</b>	to officers at specific CBP ports per year to support other operational priorities due to product traceability enabled by global interoperability standards
<b>\$0.02 - \$0.04 per barrel</b>	in reduced effort <b>costs</b>	<b>65% reduction</b>	in time spent by officers per year on arrival reconciliation tasks at specific CBP ports

Estimated by SVIP Partner **NEOFLOW**



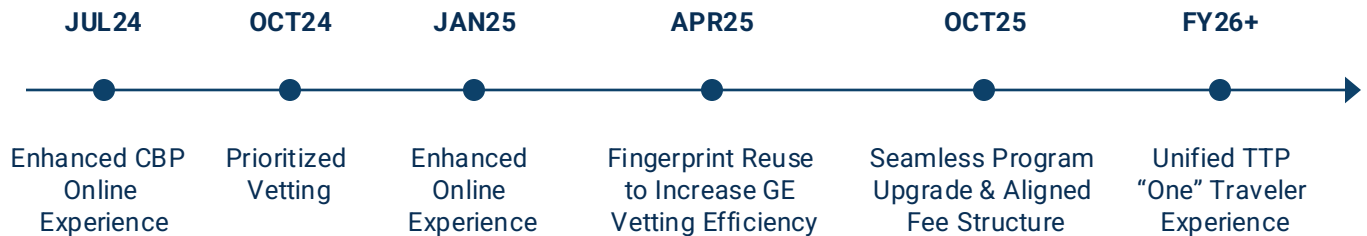


# CBP-TSA Integration Enhancements

DHS, CBP, & TSA partners collaborated on a multi-year Integration Enhancement Roadmap to improve the DHS Trusted Traveler Program (TTP) experience with reimagined application fees, expedited vetting/enrollment, and collaborative data sharing & account ownership.

The TTP customer value proposition shifts from an agency program-specific use case toward alignment with the traveler’s desired benefit and fee value while increasing efficacy and accessibility through a unified experience.

## Traveler Benefit Roadmap



**CBP & TSA envision a unified Trusted Traveler Program (TTP) customer experience** that makes it faster and less expensive for travelers to receive their anticipated benefit (including upgrades) while simplifying enrollment. The single, biometric-based, TTP account solution will result in **improved operational efficiencies** for both CBP & TSA compared to the current programs while **increasing data quality** and overall **security**.

An incremental approach over the next year-plus is required to provide customer and operational value and achieve the desired result by overcoming key challenges such as:

- Designing and developing capabilities with DHS Office of Biometric Identity Management (OBIM) to share **continuously monitored derogatory information** pertinent to CBP TTP programs.

- **Congressional** concerns including legislation, policy, Paperwork Reduction Act (PRA), Privacy Impact Assessments (PIA), etc.
- Ensuring financial viability for both CBP GE & TSA PreCheck® programs through an **aligned enrollment fee** structure.
- CBP and TSA gaining **FBI authorization** and developing the technical capabilities to **reuse fingerprints** and identity verification captured during the unified application experience and those originally captured for TSA PreCheck enrollment for reuse upon traveler opt-in to Global Entry application.
- Assessment of **market/traveler value proposition** to justify costs and validate approach associated with each phase.



# Global Entry Future Vision

Global Entry (GE) has approximately 14 million trusted travelers, furthering CBP's mission to safeguard our borders. It is designated by the Office of Management and Budget (OMB) as one of 71 designated High Impact Services across the government.

In collaboration with multiple offices and programs, CBPX set out to **define an easily expansive program vision that amplifies CBP's mission to preserve national security and protect our borders and streamlines the experiences of the trusted travelers and officers** through continuous innovation.



## Inputs

- ✓ 31 stakeholders engaged
- ✓ 20 stakeholder and user interviews facilitated
- ✓ 9 interviews with the traveling public facilitated
- ✓ 2 port visits conducted
- ✓ 1 in-person co-creation workshop conducted

## Outputs

119

Ideas and recommendations generated

01

Current processes defined

08

Personas created

## Future State Journey Map

The journey map follows a GE target persona, the parent traveler, as she successfully navigates the future state Global Entry program from enrollment and renewal to using her benefits at the airport. The map identifies **areas of impact** for CBP, including:

- **Reduced administrative burden**
- **Increased time to mission**
- **Cost savings**
- **Increased national security & integrity**
- **Improved communication & transparency**
- **Modernized technology & Artificial Intelligence (AI)**

*“The opportunity to participate in this session is very **valuable** and **necessary**. Also, sharing ideas and feedback between all the stakeholders allows us to make the **TTPs** more **efficient**.”*

**-Trusted Traveler Program Stakeholder**



# Trusted Traveler Program Robotic Process Automation for Congressional Casework



CBP’s Office of Congressional Affairs (OCA) receives hundreds of Trusted Traveler Program (TTP) inquiries every week from Members of Congress. Sent on behalf of constituents, this casework typically concerns the status of TTP applications, and results in multiple follow-up inquiries as applications wait for adjudication.

CBPX connected OCA with the Office of Field Operations (OFO)/TTP and the Office of Information Technology (OIT)/Chief Technology Officer to explore a Robotic Process Automation (RPA) solution, also known as a bot, to streamline and improve OCA’s ability to manage a high volume of TTP-related casework. The bot queries the TTP-Internal system for constituent application status data and generates automated e-mails, keeping congressional offices updated with the status of constituent applications. Initial results indicate:



**54% decrease**  
in initial entry time  
for status requests under  
optimal conditions



**100% decrease**  
in follow-up status requests



**322 hours**  
saved annually  
upon introduction

Because CBP continues to receive record numbers of new and renewal TTP applications, the average processing time for Global Entry applications under manual review is 13 months, with NEXUS and SENTRI applications taking even longer.

Congressional offices frequently request updates on constituent applications, and while OCA is committed to responding, congressional casework best practices recommend sending follow-up inquiries every 20 days. The prolonged TTP application processing times, combined with multiple follow-ups, often results in 19 or more inquiries for a single application. This volume, and limited staff availability, strained OCA’s ability to provide timely responses to inquiries on constituents’ TTP applications.

The Robotic Processing Automation bot, OCA’s electronic solution, is a force multiplier, delivering an initial automated email to congressional offices followed by scheduled and tailored automated updates every 15 days until action on a constituent’s TTP application is complete.

*The RPA process significantly enhanced OCA’s ability to provide timely TTP application information to our congressional partners, helping them meet their constituent responsibilities. By automating routine correspondence, the bot allows OCA personnel to focus on more complex inquiries and enhances our overall engagement with Congress.*

**Ben Andrews**  
OCA Chief of Staff



# Enhancing Trusted Traveler Program Online Experiences



In partnership with the Office of Information Technology (OIT)/Passenger Systems Program Directorate (PSPD), TSA CX, and Office of Field Operations (OFO)/Trusted Traveler Program (TTP), and Traveler Communication Center (TCC), CBPX took an iterative approach to optimizing TTP content across cbp.gov and ttp.dhs.gov. CBPX met bi-weekly with a steering committee of invested stakeholders to collaborate on these website updates. Research included 18 interviews with travelers and TTP stakeholders. The goal is to improve the websites with user-informed feedback that will enable travelers to more easily make the best program decision that meets their travel requirements.

## SUCCESS METRICS

- ✓ One understood location for the public to complete tasks (learn about the programs, apply, look up membership info, ask questions, etc.)
- ✓ Improved decision-making and efficiency in selecting programs
- ✓ Fewer inquiries to the TCC and CBP Information Center (CIC) and decreased TSA referrals to CBP websites due to program confusion
- ✓ Increased self-service ability

## TRAVELER INTERVIEW THEMES

- Clarify where to navigate for TTPs and TSA*
- Better define Mobile Passport Control (MPC)*
- Make it easier to compare all 5 programs*
- Streamline Global Entry and Mobile Passport Control (MPC) landing pages*
- Reduce cognitive overload*

## ACCOMPLISHMENTS

- 16** Website enhancements implemented
- 19** User-informed recommendations
- 10** ttp.dhs.gov enhancements implemented
- 06** cbp.gov enhancements implemented
- 08** Updated page designs/wireframes

In advance of the FY24 summer travel rush, the TTP Integration Steering Committee **implemented 16 initial enhancements** on ttp.dhs.gov and cbp.gov. Thank you to the committee for your collaboration and leadership to craft these enhancements.



# Field Research at Dulles Airport

In June, CBPX visited Dulles to collect in-person feedback from both travelers who used the Global Entry (GE) mobile app at re-entry and the officers who facilitated it. Results, recognition, and recommendations were shared with implementation owners.



## Insights From Officers & Travelers

### INSIGHTS FROM OFFICERS:

- Pleased with how **easy and fast** it is to facilitate travelers using the GE mobile app, specifically having the number at the top of the photo for easy ID
- **Requested implementation of a declarations feature** in the GE mobile app like the one in Mobile Passport Control (MPC)

### INSIGHTS FROM TRAVELERS

- Consistently pleased and satisfied with GE benefits – repeatedly described as **“simple” “so easy” “fast” “excellent” “convenient”**
- Aware of the GE mobile app through **word of mouth / signs at the airport** rather than from CBP
- Issue with the lines if they had to wait or be in the same line as portal users
- Fine with limited communications from CBP, but **would like clear updates for renewals and program updates**, like the app
- Some travelers mixed up GE mobile app and MPC

## User-informed Recommendations

1. Send out targeted communications about the GE mobile app to GE members
2. Maintain a line committed just to GE mobile app users to emphasize the benefits of having it
3. Add a declarations “yes or no” question into the app to reduce questioning by the officer

### OUTCOMES

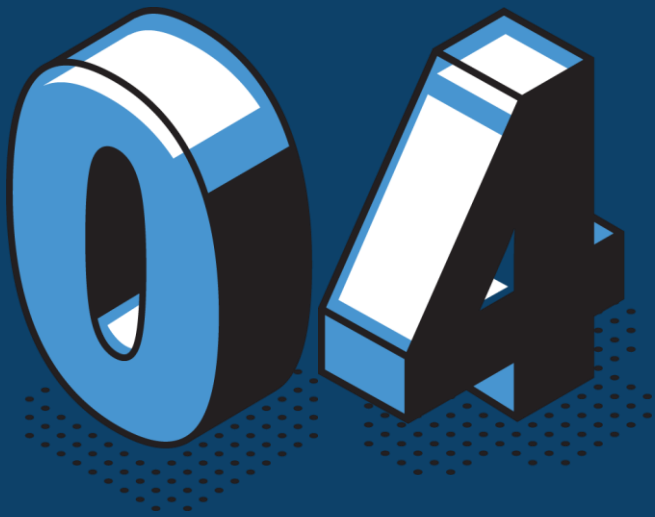
**03** User-informed recommendations

**08** Travelers surveyed

**02** Officers surveyed

**F I E L D**  
**R E S E A R C H**





# CBPX Capability Spotlight

OFFICE OF INFORMATION TECHNOLOGY  
& CBPX INITIATIVES:

## Spotlight on Usability Testing

*“Having participated in now 3 usability testing sessions, these are incredibly valuable. I am a usability testing convert! We have uncovered things that I wasn't aware of that will make us way better prepared when we actually pilot and launch.”*

**Darren Bishop**  
Tech Services Desk Program Manager

### Usability Testing on Information Collections

DHS required usability testing on **the 24 information collection forms** that were up for renewal in FY24 as part of the Paperwork Reduction Act (PRA).

CBPX is supporting the product teams who own these information collection requests to learn about and conduct usability testing. Ultimately, this will create a flexible and scalable usability testing approach that CBP product owners can embed into their processes.

CBPX assisted with usability testing for both digital and non-digital forms.

### What is Usability Testing?

Usability testing involves evaluating a product or service by testing it with representative users. By observing people's experiences using CBP products, we can evaluate how easy or difficult it is to use our services and make targeting improvements based on our findings. This method **enables smooth adoption, mitigates risk, and reduces burden** both for CBP support teams and end users—all by putting the human at the center of our programs.





# Usability Testing Integration into the Office of Information Technology's Software Process

The CBP Experience (CBPX) Division developed this initiative to establish a standardized and comprehensive approach to usability testing within CBP. By embedding usability testing early in the Software Development Life Cycle (SDLC), both digital and non-digital products are more likely to meet the highest standards of user experience. This approach fosters collaboration between product owners and development teams, ensuring consistency, quality, and efficiency across all projects.

## Key Accomplishments

- **Gap Analysis:** CBPX conducted a thorough review of existing OIT policies, Agile process documentation, and SecDevOps practices, identifying gaps where usability testing could improve user experience.
- **Usability Testing Implementation:** CBPX introduced usability testing during the design and prototyping stages, with ongoing testing in development and post-launch phases. This allowed for early identification of usability issues, ensuring product alignment with user expectations.
- **Usability Testing Partnerships:** CBPX coached OIT personnel on usability testing a new live agent chat feature for the help desk. As a result of the usability tests, CBPX and OIT identified critical design modifications that will improve the usability of the functionality.
- **Application-Specific Usability Testing:** Usability testing has been applied to various applications, including Electronic System for Travel Authorization (ESTA), Decal & Transponder Online Procurement System (DTOPS), and other online systems, to identify areas for improvement and enhance user functionality.

## Key Benefits

- **Improved User Satisfaction:** Testing revealed key areas for improving user satisfaction and engagement.
- **Cost Efficiency:** Early detection of issues helped avoid costly redesigns after launch.
- **Informed Decision-Making:** Real user feedback guided product development, ensuring user needs were at the forefront of design decisions.

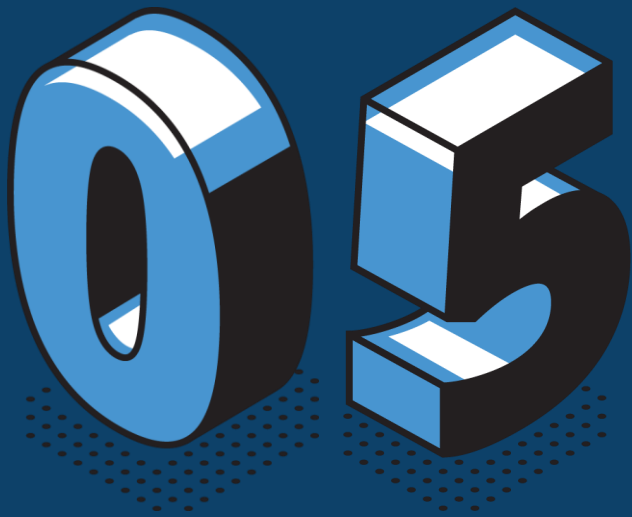
*It's fantastic that you're doing [usability testing]. I often tell people that I know who aren't involved in Customs that Customs does a better job than most in dealing with their constituency and being open to feedback."*

**Importer**



## NEXT STEPS FOR FY25

- **Expand Testing:** Continue integrating usability testing across all stages of the SDLC for future projects.
- **Cross-Department Collaboration:** Encourage collaboration between development, UX/UI, and product teams to integrate testing into all phases.
- **Leadership Support:** Advocate for resources and leadership support to formalize usability testing as a key component of the development process.



**CBPX Communications**

# Data-Driven Approach via CBPX Dashboards

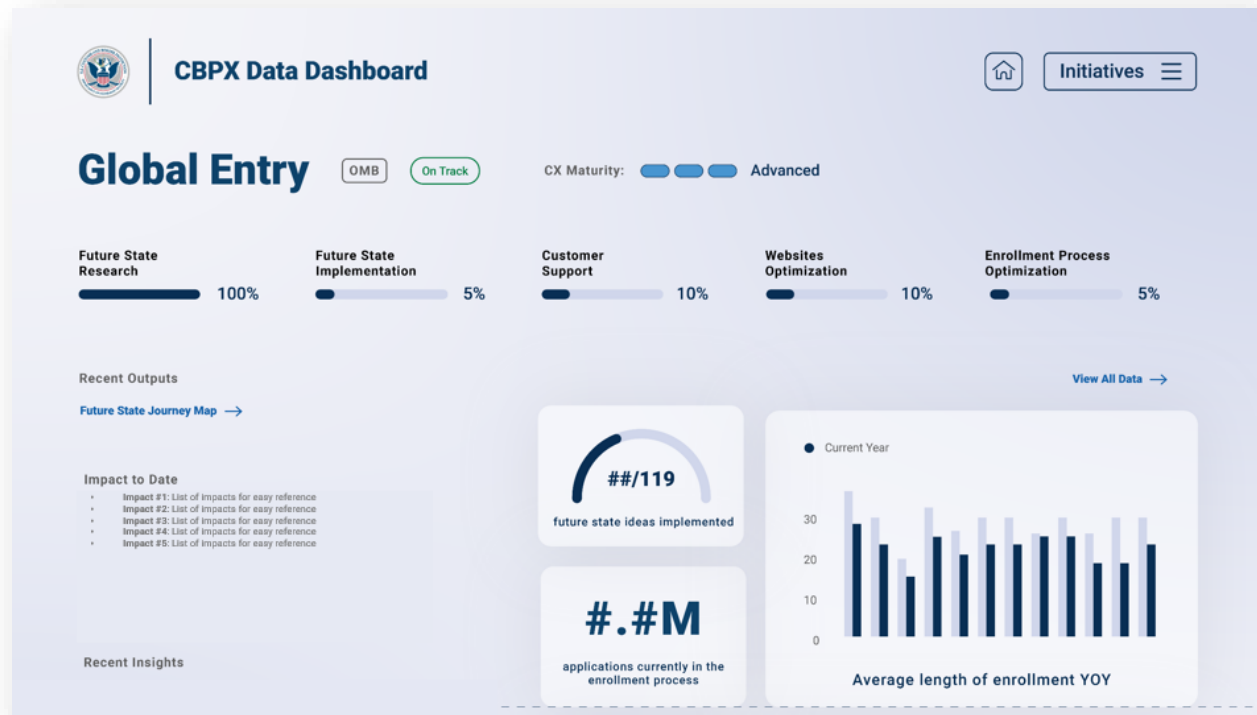
A data-driven approach enables more informed decisions, improves efficiency, and enhances strategic planning by revealing trends and patterns. It allows for accurate performance measurement and better resource allocation.

## Organizational Health Dashboard

- A collection of key metrics for CBP leadership **containing key operational, performance and workforce care indicators.**
- This PowerBI dashboard displays **key performance data to help identify operational and employee pain points so that proactive action can be taken.**
- Utilizing data from a wide variety of sources presents a **holistic view of CBP's agency health.**

## CBPX Data Dashboard

- CBPX created a PowerBI dashboard to provide real-time reporting on our initiatives.
- Taking an iterative approach, the first version of the dashboard includes status updates, insights, and progress on CBPX initiatives.
- In FY25, CBPX will build in **real-time metrics** to provide instant visibility into key measurements, **enabling faster decision-making** and more **agile responses** to issues. This enhances operational efficiency and trend identification.



Example of early prototype for CBPX Dashboard showing Global Entry CX metrics and insights.



# Building Capacity within CBP

One of CBPX's goals is to build capacity within CBP to further mature the agency's ability to deliver experience excellence across, within, and beyond the organization. To accomplish this, CBPX is committed to delivering training, tools, and community to CBP.



## Participating in OMB's Holistic Burden Measurement Tool Pilot

A primary focus area for CBPX is burden reduction. Minimizing the burden that the government places on those who internally and externally engage with its applications and services is one of the most important aspects of providing better customer experiences. This is recognized as a top priority within CBP, DHS, and OMB.

In Q3, CBPX has completed a pilot program with OMB/GSA to test their Holistic Burden Measurement tool. CBPX provided feedback on improving the scalability of the tool and the usability by CBP.



## Standing Up a CBPX Community of Practice

CBPX held its inaugural community of practice meeting with 56 individuals across CBP who serve as champions of customer service as part of their collateral duties. Acting Chief Operating Officer James McCament opened the meeting by speaking about CBP's long legacy of foundational customer service excellence. Acting Director Janet Pence presented material about the vision, accomplishments, and goals of the CBP Experience Division.

CBPX aims to foster and grow the community in FY25, uncovering needs and providing resources and training to increase capacity.



# CBPX Communications

To build awareness about CBPX initiatives and their value to the mission, CBPX documented learnings and impact from our Designated High Impact Service projects.

## Performance.gov & DHS.gov Articles

A case study on CBPX's Global Entry CX work was published on DHS's website and newsletter. To view the article, visit <https://www.dhs.gov/csources/case-studies/cbp-case-study-global-entry>.

An article on CBPX's Vehicle Entrance & Clearance Systems CX initiative was published on Performance.gov. To view the article, visit <https://www.performance.gov/blog/2024-CBP-VECS-streamlining-customer-experience>.

## Mission-Ready YouTube Video

In FY24 Q3, CBPX collaborated with the Office of Public Affairs (OPA) to produce a video that shared highlights from CBPX's work supporting the Vehicle Entrance and Clearance System in FY23.

To view the video, visit CBP's Mission Ready YouTube Series at [https://www.youtube.com/watch?v=ixQjXfk\\_AkE](https://www.youtube.com/watch?v=ixQjXfk_AkE).

*CBP Experience has been a beneficial partner for the Vessel Entrance and Clearance System (VECS) by assisting with both internal and external messaging, developing journey maps, collaboration on strategy, and helping gain traction and support from CBP leadership and industry stakeholders, as well as being a liaison with Office of Management and Budget (OMB) and Congress.”*

**Branch Chief Brian Sale**

## CBPX SharePoint Site

CBPX created an internal website that provides resources for CBP employees to expand their CX skills and knowledge. Employees can visit the [CBPX site](#) within CBP's Office of the Commissioner SharePoint.





# Digital Delivery Demo Day on Capitol Hill

Members of the CBPX team and Vessel Entrance & Clearance System (VECS) product owner Brian Sale proudly presented on the FY23 project at Digital Delivery Demo Day 2024 for Congressional staff and Members of Congress. The team showcased a poster outlining the project's functionalities, goals, and impact.

*Government Service Delivery Improvement Act* co-sponsors Reps. Derek Kilmer and William Timmons invited CBP and other High Impact Service Providers to present their work in this public and on the record event.

Early analysis on VECS indicates a **40-minute reduction for officers** to complete the digitized VECS process.

CX High Impact Service Provider

**Department of Homeland Security**  
**U.S. Customs and Border Protection**

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**Vessel Entrance and Clearance System**

Each day, vessels arrive by sea to the US carrying billions of dollars of consumer goods. Every vessel that arrives must go through the Vessel Entrance and Clearance (VEC) process to ensure that goods and people are entering and leaving the US in compliance with CBP regulations. The process was paper-based and required extensive coordination between vessels, vessel agents, and CBP. It had a high potential for human error and posed heavy administrative and mental burdens for users. CBP has transformed the process, increasing efficiency, reducing burden, and returning time to mission for CBP officers, VEC Specialists, and vessel agents.

**The new Vessel Entrance and Clearance System (VECS) digitizes, automates, and streamlines vessel entrance and clearance, including payment of fees.**

**What we delivered in 2023**

- Piloted application at 70 Ports to **test and learn impacts in real time**
- Conducted interviews, surveys and observational research with vessel agents and CBP officers and agents to **understand pain points and collect ideas for the future state**
- Collected feedback during pilot to **understand and measure impact of VECS application and identify needed improvements and/or new features**
- Developed Journey Maps of current and future state VECS process to **communicate end-to-end vision and value to stakeholders**

**Impact**

<b>300K</b>	<b>\$10.7M</b>	<b>500K</b>	<b>\$27.4M</b>	<b>\$46K</b>
hours/year saved for CBP & VEC Specialists	saved in CBP & VEC Specialist personnel hours	hours/year saved for Vessel Agents	saved in Vessel Agent personnel hours	saved in local storage and transportation costs/year

"This is going to give me back so much time to spend with my family. You're going to get moments with your daughter that I missed with mine."  
**Savannah Vessel Agents**

Poster created by CBPX for Digital Delivery Demo Day.





For more information, contact:

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