TRANSFORMING LAND BORDER PROCESSING

With changing threats and emerging technologies, CBP is transforming Land Ports of Entry (LPOE) Processing in order to deliver on its mission of improved security, efficiency, and traveler experience.

THREAT ENVIRONMENT & EXTERNAL FORCES

- Increase in Trade and Travel
- Political Pressure
- Increased Funding
- Staffing Challenges
- Changing Border Environment
- Demand for Heightened Security

TECHNOLOGY OPPORTUNITIES

- Biometric technology
- NII technology
- 5G Connectivity
- Mobile Technology
- Computer Learning
- Blockchain
- Fiber Optics

A UNIFIED VISION

To guide Program Manager’s efforts and ensure coordination as programs continue to test and deploy future processing technologies and improve land border operations.

SMART PORT

The next generation of LPOEs will use updated technology and improved processes to:

- Heighten security of the border
- Make processing more efficient
- Improve the customer experience

CBP | Customs and Border Protection
To improve security, efficiency, and traveler experience at LPOEs, Smart Ports will bring land border processing into the future through:

**SMART PORT CAPABILITIES**

**Innovative Technology**
Improves inspectional accuracy and facilitates efficient processing through Biometrics and NII scanners

**Automation & Information Processing**
Reduces Officer administrative burden and the potential for human error through technology and centralized Command Center capabilities

**Advanced Information & Targeting**
Increases domain awareness and threat detection through Pre-submitted information

**Integration & Information Sharing**
Promotes continuous information sharing throughout the entry process to eliminate duplicative efforts

On the land border, people and cargo are processed through one of five different modes of transportation: **Cargo, Pedestrian, Vehicle, Bus, and Rail**

An open technical architecture is the foundation that enables capabilities of the next generation of LPOEs. The architecture allows technologies to communicate and for LPOEs to implement new edge processing capabilities for improved security, efficiency, and traveler experience.
CBP OFO
Non-Intrusive Inspection Technology
**NII TECHNOLOGICAL FOCUS**

**Focus:** Deploy advanced technology to increase scanning capacity, and enhance user’s ability to identify anomalies to interdict contraband.

**Desired Outcomes:**
- Enhance interdiction effectiveness and operational efficiency.
- Increased Officer Safety
- Re-direct Officers to other high-priority missions
- Increase Scanning
- Increase Interdiction
- Streamline Operations
- Remote Imaging Analysis
- Remote Health Monitoring
- Integrate with other CBP Automated Processing Tools

**NII OPERATIONAL LIMITATIONS**

- **Standalone NII Technology** primarily deployed in secondary operations.
- **Multiple User Interfaces** across NII Fleet.
- **Varying Infrastructure** Requirements across POEs.

**THE MISSION & NEED**

- **Enhance Border Security** through multi-layered defenses and advanced technology
- **Facilitate lawful Travel & Trade** to support economic growth.

- Decrease NII processing time to increase throughput or redirect Officers to other priority duties.
- Enhance image analysis capabilities
- Integrate NII technology and data with CBP systems and operations
OVERVIEW

Objective: Increase vehicle throughput without impact to primary operations.

Description:
- Using commercially available Multi-Energy drive through technology, NII imaging could become a pre-primary of primary screening process, with scans occurring before the primary booths.
- Vehicle image packages would flow to site Command Centers to conduct image analysis, identified by license plate or other indicators.

DESIRED CAPABILITIES

- Driver & passenger remain in vehicle
- >75 vehicles per hour
- Under Vehicle Scanning
- Integrated Licensed Plate Reader
- Transmission & backscatter capabilities
- Lower Maintenance Costs
- Smaller footprint
- Mobile platforms to support surge operations

Locations of Tech Demo: Laredo, TX - World Trade Bridge; Brownsville, TX - Veterans Bridge; Savannah, GA - Seaport
DRIVE THROUGH OPERATIONS
COMMERCIAL TRUCK

- Multi-Energy Portal Systems with integrated Under Vehicle Inspection System (UVIS)
- NII data package pushed to Command Center

Port of Entry

- Truck is directed into adjudication staging lanes equipped with signals and signage, while officer in Command Center analyzes the ACE record and NII data.
- Facial biometric immigration check performed.
- A/V communications between Command Center and driver.

- Truck enters POE where license plate and RFID is read as vehicle transits through Radiation Portal Monitor (RPM).
- NII data package is created, linked to license plate and/or RFID.
COMMAND CENTER CONCEPT

COMMON OPERATING ENVIRONMENT

- Unify NII image analysis training for one software package
- Allow capability to demonstrate command center concept
- Provide collaborative platform for ports and field offices to share and exchange NII images
- Provide platform to develop and utilize threat detection algorithms for variety of commodities/threats

PORT COMMAND CENTER

- Video wall for surveillance camera coverage of NII station, Loading Dock, exit gate, Passenger Primary and Secondary
- ACE status boards for queues at LS NII, Loading Dock, Agriculture station, and exit
- Image analysts co-located with ATU for improved communications/targeting
- Queuing of images for multiple analysts
INTEGRATED NII SCANNING
BROWNSVILLE PORT OF ENTRY

The only Port in the country that has every model of transportation.

2 Cargo Export Lots
2 Cargo Import Lots
4 Land Border Crossings

Veterans Cargo Lot
Daily Avg. 890 trucks

Los Indios Cargo Lots
Daily Avg. 320 trucks

1 International Airport
1 International Seaport
1 International Rail Crossing

42% Empty Conveyances
58% Loaded Conveyances
DRIVE-THROUGH NII VIDEO
NII X-RAY SYSTEMS

Scan and Adjudication time
Avg. 6.5 mins

DRIVE-THRU X-RAY SYSTEMS

Scan and Adjudication time
Avg. 1.7 mins

10 Trucks Wait Time
17 Mins

FIXED X-RAY SYSTEMS

Scan and Adjudication time
Avg. 6.5 mins

10 Trucks Wait Time
65 Mins
Innovation in traveler identity verification will reduce land crossing wait times. CBP is taking lessons learned in the air environment and applying them to land port processing.

To expedite truck driver clearance, CBP will field test:

- **Biometric Matching**
- **Advanced Traveler Data Collection**
- **Automation of Data Collection**
- **Process Innovation**

**BIOMETRIC BENEFITS**

- Verifies traveler identity with improved accuracy
- Eliminates manual processing of travel documents for improved time savings
- Enables CBP Officers to focus on admissibility and enforcement
CBP is also making significant investments in testing and scaling biometric facial recognition technology across the land border in the Cargo, Vehicle, and Pedestrian processing environments.

**CURRENT:**
- Drive through NII-scanning for empty trucks in Brownsville
- Technology demonstration of Traveler Verification Service (TVS)
- Replacing manual processes with automation

**NEXT STEPS:**
- Biometric and NII cargo integration
- Integration of TVS and CBP software systems
- Deployment across the Southwest Border
PARE is paving the way for cargo transformation at Peace Bridge, using electronic manifest submission, contactless payment, and at-speed facial recognition for truckers.

PARE 1.0

CBP and the Buffalo and Fort Erie Public Bridge Authority (PBA) created a verification system to ensure all trucks crossing the Peace Bridge had paid all fees and filed their manifests.

Partnering for Impact

The support of PBA in the PARE Pilot has resulted in the following outcomes for the Peace Bridge:

- **100%** Removal of cash registers from Primary
- **329%** Increase in e-Manifests filed for empty trucks, totaling **48,704**
- **1,000** Officer hours saved through reduced administrative burden
- **+85%** Initial development efforts have allowed CBP to biometrically match truck drivers to their registered traveler profile.

PARE 2.0

UP NEXT:

CBP and the PBA will continue to expand PARE by incorporating facial biometric recognition at Peace Bridge.
CBP OF
Revenue Modernization
REVENUE MODERNIZATION
“Slash the Cash” – Toward a Cashless Port

+ MOBILE COLLECTIONS & RECEIPTS
  - Automates the manual paper receipt process; currently for maritime arrival fees (forms 368 Collections and 1002 Tonnage Tax receipts)
  - Eliminates manual processes; integrates with Cargo and vessel systems; more accessible payment options

+ ELECTRONIC PAYMENT OPTIONS
  - Enables online form applications and fee payments
  - Multiple electronic payment options for external customers: credit/debit cards, Amazon Pay, PayPal
  - Integrates data with ACE and other systems; moves towards cashless port

+ FASTER COLLECTION PROCESSING
  - Upgrade Point of Sale Cash Registers; simplifies cashier process; enhanced capabilities; improved technology
  - Smart Safes streamline cash register close-out and reconciliation; automates seizure counts
MOBILE COLLECTIONS & RECEIPTS (MCR)

WHAT IS MCR?

+ Automates Form 368 receipts
+ Fast electronic receipts
+ New payment options
+ Saves CBPO and Trade / Traveler time

“Slash the Cash Toward a Cashless Port”

Rev Mod rolling out to 108 PORTS issuing maritime Form 368s and Tonnage Tax certificates

Reduces Officer and Trade time by 35% - 40% by automating forms

WHAT IS THE VALUE?

“What is the value?

“Slash the Cash Toward a Cashless Port”

Slashing the cash toward a cashless port.

Automates Form 368 receipts

Saves CBPO and Trade / Traveler time

WHO IS IMPACTED?

CBP Officers; Vessel Entry and Clearance Specialists; Cashiers; Trade and Travel partners

NEXT STEPS:

Currently focusing on rolling out to maritime ports; First wave Houston (June ‘19) and New Orleans

Time and cost savings allows CBP Officers to refocus on mission critical law enforcement and trade facilitation; Maritime ports nationwide; followed by other ports and fees

CBP | U.S. Customs and Border Protection
ELECTRONIC PAYMENT OPTIONS (ePO)

WHAT IS ePO?

- e.cbp.dhs.gov/ecbp
- 24x7 online portal payments
- Enhanced customer experience
- Electronic receipts
- Saves CBPO and Trade / Traveler time

“Slash the Cash Toward a Cashless Port”

25% - 55% Reduction in cash collections over last 2 years

Reduced cash and check processing results in faster processing times at Ports

Payment by credit/debit card, Amazon Pay, PayPal

WHO IS IMPACTED?

CBP Officers; Cashiers; Brokers and other Trade and Travel partners

NEXT STEPS:

Currently focusing on enhanced Broker exam application and fees; Broker License, Annual, Permit, Application, Triennial rolls out through 2021

WHAT IS THE VALUE?

Time and cost savings allows CBP Officers to refocus on mission critical law enforcement and trade facilitation;
Flexibility for CBP Trade and Travel partners;
Broker fees; followed by other fees, taxes and duties