



# **Executive Brief**

**Increment 2C Proof of Concept**

**January 4, 2005**



# **US-VISIT**

# Overall 2C Goal & Objectives

---

The goal of Increment 2C is to enhance the initial operating capabilities as implemented through Increment 2B at land ports of entry through the issuance of a unique automatic identifier that is capable of being read automatically, passively, and remotely during subsequent exit and reentry by US-VISIT enrolled travelers.

## **Increment 2C must meet the following objectives:**

Support the statutory mandates to implement an integrated, automated entry/exit system that records the arrival and departure of aliens; verifies aliens' identities; and authenticates aliens' travel documents through comparison of biometric identifiers.

Improve the current ability to monitor overstays through enhancing exit and re-entry capability

Provide a solution that does not impede the free flow of legitimate travelers and commerce

Add value to the border management process



Homeland  
Security

**US-VISIT**

# Why is 2C Different from Previous Releases?

---

## Need to Quantify the Unknown

### Working Environment

- Multiple modes of transportation
- Weather is a key influencing factor
- Vehicle based primary query system
- No advance information about travelers at land ports

### Technical Infrastructure

- Integration of multiple technologies (hardware integration vs. software integration)
- Requirement to read RFID in vehicle at speed on exit
- Build integration from vehicle to person
- Adds more functionality but any solution must remain within the current primary inspection wait time

### Competing Human Capital resources

- 8 concurrent active increments

### Traveler Participation

- Traveler independently responsible for ensuring read and record of A-ID vs. traveler receiving direction from an officer. All actions must ensure the safety of all travelers.

### Facilities Infrastructure

- Aggressive timeline on design and construction requirements are being based only on today's information
- Assumes that the current facility infrastructure can accommodate RF equipment
- No exit infrastructure exists
- The higher potential than other Increments for environmental impacts requires more detailed analysis and directly affects the implementation schedule

### Political Environment

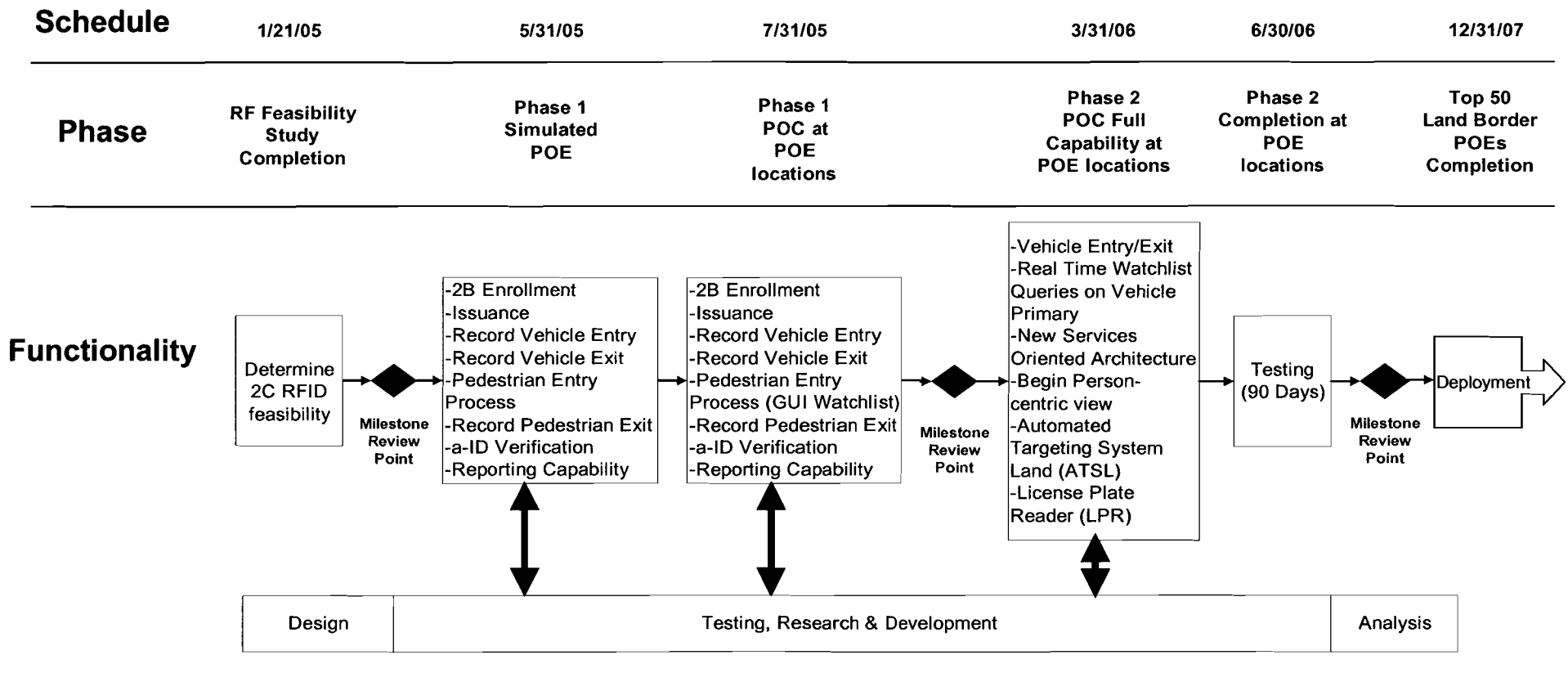
- Border communities fear of impeding border movement and progress



Homeland  
Security

**US-VISIT**

# Increment 2C Implementation Approach



Homeland Security

**US-VISIT**

# RF Feasibility Study

Completed:  
January 21, 2005

---

## **Objectives**

Perform feasibility of RFID solution for Increment 2C

Investigate RFID vendor enhancements

Validate technological capability for vehicle exit “at speed”

Meet business requirements

Select RFID vendor for the technology for the Increment 2C Proof of Concept

Provide direction for Increment 2C technical requirements concerning RF technology (e.g. configuration, connectivity, security, etc.)

## **Dependencies on Results**

Acquisition of RF equipment

Vendor selection as well as quantity of RF equipment

Environmental Compliance

Potential environmental impact of RF technology, business process, and construction (power, frequencies, socioeconomics, historic structures etc.)

Facilities Impact

Recommended configuration options of RF equipment (location of antennas, readers, gantry, poles, cabling, etc.)

Permitting requirements

Mission Based Impact

Input into desired level of visitor involvement, e.g. cards to be held up, sleeves provided for visitors to hang on window, no activity required, etc.

Provide data to determine which form factor to use, e.g. new RF-enabled card or RF-enabled I-94



Homeland  
Security

**US-VISIT**

# Mock Port of Entry

Timeframe:  
November 2004 – May 2005

---

## **Testing Environment**

Intended to replicate physical, operational and technical requirements

Existing test lane designed to test a variety of RFID products to determine optimal configuration

Eventually need to simulate integration as well as provide operational input

- License Plate Readers with RFID

- Primary Display

- Watch List Query

Test numerous alternatives and future technologies without impact to live operations

## **Key Decisions Required by the Design Phase in January 2005**

Department-wide solution for ongoing research and development as technology evolves

Pursue options

- Procure new site locally (not viable for 5/31)

- Explore other agency test labs (this option will not replicate physical environment)

- Use FLETC

  - Must determine impact to ongoing training efforts at Glynco facility

Take down Raytheon test lane

- Need to determine appropriate time to switch to new mock POE



Homeland  
Security

**US-VISIT**

# Phase 1 Proof of Concept (POC)

Starts:  
July 31, 2005

---

Increment 2C encompasses 4 major business processes. The Proof of Concept (POC) provides two critical 2C business functionalities within each process:

## A-ID Issuance and Verification (in Secondary)

- Builds on 2B enrollment process to issue RFID to traveler

- Supports periodic A-ID verification and reporting capabilities

## Pedestrian Primary

- Records A-ID upon pedestrian entry and performs automated watchlist check against existing systems

- Provides Officer with a real time display of the traveler name, photograph, real time biographic watchlist result, biometric watchlist status and A-ID status (e.g. lost or stolen)

## Vehicle Primary

- Records A-ID upon vehicle entry and provides automated entry record

## Pedestrian and Vehicle Exit

- Records A-ID upon pedestrian and vehicle exit and provides automated exit record

POC rolls out to 5 locations



Homeland  
Security

**US-VISIT**

# Phase 2 POC Full Capability

Starts:  
March 31, 2006

---

Phase 2 encompasses the desired end state functionality for 2C and fully integrates A-ID with current land border technology, linking traveler data to vehicle entry/exit data

## Vehicle Primary

Provides full integration with License Plate Readers (LPR) and ATS/Land

Records A-ID upon vehicle entry and performs automated watchlist checks against existing systems

Provides Officer with a real time display of the traveler name, photograph, real time biographic watchlist result, biometric watchlist status and A-ID status as well as LPR watchlist results

## Pedestrian and Vehicle Exit

Records A-ID upon pedestrian or vehicle exit and performs automated watchlist checks against existing systems

When outbound display is activated (e.g., when outbound enforcement operations are to be conducted):

Displays traveler name, photograph, real time biographic watchlist result, biometric watchlist status, and A-ID status

## Technical design migration towards new Services Oriented Architecture (SOA)

The SOA will produce a standard method for applications within DHS to request, access, and process information.

Phase 2 rolls out to same 5 locations as Phase 1



Homeland  
Security

**US-VISIT**



# Top 50 Land Border POEs

Completion:  
December 31, 2007

---

Full deployment to the Top 50 Land Ports of Entry requires an integrated, staggered approach to implement the 2C solution.

The following capabilities are planned for implementation at the Top 50 Land POEs by December 31, 2007:

- Integration of A-ID captures with land border technology

- Linkage of A-ID traveler data to vehicle entry/exit

- A-ID verification and issuance (at Secondary)

- Read and record entry and exit of A-IDs

- Performance of watchlist queries based on an A-ID read and results

- Display traveler biographic information, photo and watchlist results based on A-ID read



Homeland  
Security

**US-VISIT**

# Recommended POC Locations \*

Location	State	Vehicle Lanes In	Vehicle Lanes Out	Pedestrian Entry	CY03 Inbound Traffic data	I-94s (FY03)	I-94s Issued under Increment 2B
Pacific Highway	WA	6	3	0	1,050,850	51,058	4,411
Peace Arch	WA	7	3	0	1,363,918	55,077	3,712
Alexandria Bay	NY	6	3	0	653,398	16,692	983
Nogales East	AZ	6	2	6	2,432,484	125,604	16,100
Mariposa – Nogales West	AZ	4	2	1	1,378,182	92,014	14,008



Homeland Security

**US-VISIT**

# POC Selection Criteria

---

Criterion 1: Eliminate ports where less than 10,000 Form I-94s are processed annually.

Criterion 2: Eliminate ports currently under construction or those that will be under construction in July 2005.

Criterion 3: Select ports to provide various weather conditions, mix of all modes of transportation, and represent northern and southern border conditions.

Criterion 4: Avoid California ports because of the inherently complex regulatory environment.

Criterion 5: Avoid ports that have posted exit speeds above 40 mph.

Criterion 6: Increase the number of locations for testing by using all ports within close proximity.



# Critical Constraints

---

Phase 2 POC Full Capability dependent upon outcomes of milestone reviews, key stakeholder approval

NEPA Schedule is highly accelerated

3 months vs. typical 6 months for documentation

Assumes 1 month public comment period

Final design, procurement and construction of POC cannot begin until NEPA is completed

Permitting and bid/procurement processes are concurrent

Construction assumes 24x7 schedule and is highly accelerated

Outreach

Cost, program schedule impacts and contract modifications

DHS Data Center decisions

Human capital constraints



Homeland  
Security

**US-VISIT**



# Homeland Security