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
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
# Increment 2C Implementation Approach

<table>
<thead>
<tr>
<th>Schedule</th>
<th>1/21/05</th>
<th>5/31/05</th>
<th>7/31/05</th>
<th>3/31/06</th>
<th>6/30/06</th>
<th>12/31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
<td>RF Feasibility Study Completion</td>
<td>Phase 1 Simulated POE</td>
<td>Phase 1 POC at POE locations</td>
<td>Phase 2 POC Full Capability at POE locations</td>
<td>Phase 2 Completion at POE locations</td>
<td>Top 50 Land Border POEs Completion</td>
</tr>
</tbody>
</table>

**Functionality**

- **Determine 2C RFID feasibility**
  - Milestone Review Point
  - 2B Enrollment
  - Issuance
  - Record Vehicle Entry
  - Record Vehicle Exit
  - Pedestrian Entry Process
  - Record Pedestrian Exit
  - a-ID Verification
  - Reporting Capability

- **Testing, Research & Development**
  - Milestone Review Point
  - 2B Enrollment
  - Issuance
  - Record Vehicle Entry
  - Record Vehicle Exit
  - Pedestrian Entry Process (GUI Watchlist)
  - Record Pedestrian Exit
  - a-ID Verification
  - Reporting Capability

- **US-VISIT**

- **Design**

- **Analysis**

- **Testing (90 Days)**
  - Deployment

- **Land (ATSL)**
  - Automated Targeting System
  - License Plate Reader (LPR)

**Homeland Security**
RF Feasibility Study

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
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
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
Phase 2 POC Full Capability

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
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
## Recommended POC Locations *

<table>
<thead>
<tr>
<th>Location</th>
<th>State</th>
<th>Vehicle Lanes In</th>
<th>Vehicle Lanes Out</th>
<th>Pedestrian Entry</th>
<th>CY03 Inbound Traffic data</th>
<th>I-94s (FY03)</th>
<th>I-94s Issued under Increment 2B</th>
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</thead>
<tbody>
<tr>
<td>Pacific Highway</td>
<td>WA</td>
<td>6</td>
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<tr>
<td>Nogales East</td>
<td>AZ</td>
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<td>6</td>
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<td>1</td>
<td>1,378,182</td>
<td>92,014</td>
<td>14,008</td>
</tr>
</tbody>
</table>
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