DMIA Task Force

DATA MANAGEMENT IMPROVEMENT ACT (DMIA) TASK FORCE
SECOND ANNUAL REPORT TO CONGRESS

December 2003

U.S. Department of Homeland Security
Washington, DC 20528

Homeland Security

A MESSAGE FROM THE UNDER SECRETARY

The Data Management Improvement Act Task Force, created by Congress in June 2000 and formally established in January 2002, is nearing completion of its second year of operation. During 2003, the Task Force has continued to fulfill its statutory mandates without pause throughout the transition period during which the Department of Homeland Security was established.

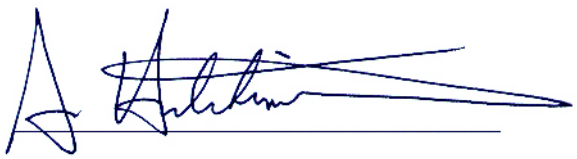
During this reporting period, the Task Force focused primarily on: Port-of-Entry (POE) facility and infrastructure issues and the development of recommendations to facilitate traffic flow; identifying and enhancing cooperation and coordination mechanisms among the public and private sectors, and state, federal and local agencies and affected foreign governments; and analyzing a variety of information technology systems within and outside the Department of Homeland Security, that support border management efforts from both a security and traffic facilitation aspect, as well as developing a conceptual border management system.

The Task Force, comprised of federal, state and local government officials and representatives from private sector organizations, has devoted a great deal of time and effort during the past year to fully understand the myriad and unique border management activities and issues, and has developed feasible, workable recommendations toward their enhancement and efficiency.

The detailed content of this year's report is indicative of the vested interest - on the part of the Task Force members and the industries and organizations for which they speak - in facilitating traffic flow at the POEs while strengthening and improving our national security.

A great deal of work has been completed by the Task Force over the past two years and their input will prove invaluable as we move forward in improving the various aspects of current border management activities and processes.

It is my distinct pleasure to deliver this report to Congress.



Asa Hutchinson
Under Secretary
Border and Transportation Security
Department of Homeland Security

Appendices

The Immigration and Naturalization Service Data Management Improvement Act (DMIA) of 2000 created an Attorney General's Task Force to evaluate and make recommendations on how the flow of traffic at United States airports, seaports and land border Ports-of-Entry (POE) can be improved while enhancing security. The bill creating the Department of Homeland Security (DHS) in November 2002 transferred these responsibilities to the Secretary, DHS. Statutory mandates include evaluations and recommendations on: an electronic entry/exit system; enhancing information technology (IT) systems and data collection/sharing; facilities and infrastructure issues; and how to increase cooperation between public and private sectors, among federal and state/local agencies and with affected foreign governments.

The DMIA Task Force, chaired by the Attorney General's designee and by the Secretary of DHS' designee later in 2003, is comprised of 17 representatives from six federal agencies, two state and local government groups, and nine private industry trade and travel organizations (see Appendix A, Task Force Components). Members of the Task Force were chosen to represent those agencies and organizations with the expertise necessary to find solutions to ensure the continued free flow of goods and people across our borders while addressing increased security concerns.

The Task Force is required to report to Congress on its findings, conclusions, and recommendations in accordance with statutory mandates of the DMIA 2000. After being chartered, the DMIA Task Force officially began work with the first meeting on February 20, 2002. The first Task Force report to Congress in December 2002 focused primarily on recommendations for an electronic entry/exit system, currently known as the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) Program. The report can be viewed at the DMIA Task Force website under border management at www.immigration.gov.

The Task Force focused its work in 2003 on the other statutory requirements, concentrating on three main areas for this report to Congress:

- **Cooperation and Coordination**: The Task Force examined these issues at various levels and developed recommendations for increasing and improving cooperation and coordination between public and private sectors, among federal, state/local governments and with affected foreign governments.

- **Facilities and Infrastructure**: The Task Force studied current infrastructure, deficiencies, and increased traffic demands and identified potential improvements to meet the requirements for overall security while improving the flow of traffic at POEs.

- **Information Technology Interoperability:** IT consultants from Los Alamos National Laboratory (LANL) continued with their in-depth analyses of border management systems, interoperability, and other data management considerations with a goal of increasing effectiveness and information sharing among appropriate entities.

Many issues and questions arose while the Task Force explored the complexities of increasing cooperation and coordination among public and private sectors; facilities and infrastructure issues; and how to increase the effectiveness of and leverage IT systems. The Task Force

also considered how to optimize the use of other resources, personnel, and changes in processing procedures.

The Task Force considered all of these issues in the broader scope of border management and also with a close eye on developments with the US-VISIT program and the impact those changes might bring.

Some of the issues and questions that the Task Force deliberated included:

- How, when and to what extent would the new DHS affect border operations;
- Would facilitation of travel and commerce be subsumed in a new Department focused on terrorism and security;
- How to integrate multiple, diverse IT systems currently in use by government and industry;
- How technology can assist, but must be implemented in conjunction with changes and synthesis of processes in order to be most effective;
- What kind of infrastructure can be built in a land border environment where different entities own the land and different countries control the access;
- Infrastructure issues at air and sea POE where, in most instances, the existing space for arrival/entry is inadequate and airport check in space is even more constrained due to the new Transportation Security Administration requirements for security;
- Expansion of initiatives that expedite known, enrolled, low-risk travelers/goods in order to better focus enforcement assets on those posing a higher or unknown risk;
- Resource issues including funding for infrastructure, initiatives, equipment and technology, and staffing issues;
- Coordinating with partners, stakeholders, and industry; and finally
- The importance of outreach and a proactive message from government and industry to explain any new procedures so as not to hamper travel and commerce to the U.S.

The Task Force gathered information on the areas of interest for this year's report by:

- Receiving briefings from representatives of various agencies on select topics;
- Making site visits to POEs and related field offices throughout the U.S., Canada and Mexico, including the U.S. Consulate General in Ciudad Juarez.
- Holding stakeholder meetings and talking with industry and government representatives in various locales around the country; and
- Convening on a regular basis to discuss findings.

As the Task Force began its second year of work in January 2003, DHS was being formed from 22 separate agencies and began to merge these entities in March 2003. The Task Force was impacted in that the chair and many members' agencies were being moved and the responsibility for border management was shifted to the new Department. A great deal of effort was being expended by all those involved to ensure as smooth a transition as possible by March 1, 2003, and to avoid any disruptions at the borders.

The ramifications of the unification of these disparate agencies were apparent at every site the Task Force visited between April and August 2003. The move of so many agencies to DHS created many new issues this year in terms of logistics, but also brought about the ability to increase cooperation and coordination by simplifying the chain of command. A consolidation of this magnitude will take considerable time to become seamless, but the Task Force has observed tremendous efforts being made and the considerable benefits of the streamlining in the first year of DHS' existence. The Task Force believes that DHS should continue its efforts to consolidate and streamline all legacy regulations, policies, and procedures to reflect the new responsibilities of the Department.

Similar to findings in 2002, the Task Force again found in 2003 that funding for facilities and infrastructure is a national problem and that critical needs must be prioritized and funding allocated to optimize the flow of legitimate travelers and commerce and provide increased national security. This needs to be coordinated with funding for an appropriate mix of technology, equipment and personnel and an expansion of known, enrolled, low-risk traveler/goods programs, in order to leverage technology, limited resources and maximize the capabilities of limited facilities.

The Task Force considered all the issues that were raised during its work this year and came to a consensus on the following twelve recommendations to address current needs.

1. National and economic security requires that appropriate funding levels be established and adequate funding provided for the facilities and infrastructure. This is critical to handle current and anticipated increases in growth in traffic and to address proposed changes in inspection procedures at the nation's borders.

Fund and develop mechanisms among federal, state, local, and private industry partners for the innovative planning and implementation of facilities and infrastructure.

Where applicable, the use of existing space and infrastructure, both domestic and foreign, should be maximized, including the sharing of facilities among agencies. All possible scenarios and configurations should be employed.

2. The Task Force proposes that a panel be established to develop feasible solutions to address the issues of recruitment and retention within border management agencies, in a holistic manner incorporating issues such as cost of living, housing availability, and other factors in certain geographical areas. The panel should include a variety of members from public and private industry and government organizations to attain a wide range of concepts and possible solutions that would be offered from various perspectives.

3. Congress should review all federal agencies that are conducting inspections at POEs but are not currently part of DHS to ensure coordination of relevant responsibilities.

The Federal Government must apply its policies and procedures so that they are consistent in their respective POE environment.

4. Expand and enhance initiatives that "push back the border" in order to increase national security and the facilitation of the lawful entry of people and goods.

5. Promote, expand, and improve initiatives that identify, enroll, and expedite known, low-risk travelers and cargo. These programs should maximize enrollment and minimize cost to the participant while still ensuring security and the vitality of the programs.

6. Continue to improve communication mechanisms for discussion and coordination among federal, state, and local governments and industry. As appropriate, consult widely with these same entities in the formulation of public policy prior to implementation.

Government and industry must work together to develop an extensive and proactive outreach program to communicate with the traveling public.

7. Establish and fund joint federal, state, and local operation centers to coordinate security and first responder efforts with relevant foreign and domestic governments and industry partners as necessary.

8. Expand and enhance the utilization of passenger analysis units and joint passenger analysis units and assure that they have the personnel and resources to function effectively. Consideration should be given to expanding the participants in the joint passenger analysis units.

9. Information technology systems should be enhanced or designed to ensure compatibility and meet the needs of the end-user. This is to achieve effective communication with federal, state, local, and private industry partners.

10. The Federal Government should create an information technology master plan that employs consistent interfacing and appropriate technologies that still achieves required security and data-sharing needs. Such master plan should:

- **Rigorously assess the value of multiple biometric measures;**
- **Proactively avoid systematic obsolescence;**
- **Ensure the quality of the data that supports database systems;**
- **Ensure "new" systems are designed to easily accommodate change;**
- **Leverage technologies currently available to enhance security and facilitation in the border management systems;**
- **Use a pilot project to rigorously field test systems under operational conditions before major rollout at POEs where significant negative impacts could be felt;**
- **Fund critical IT border management modernization systems;**
- **Fund and equip all border enforcement programs with compatible technologies and equipment; and**
- **Protect respondents from public release of proprietary or confidential information.**

11. Fund an analysis to optimize the best mix of relevant technology and properly trained staff in order to maximize resources and use of facilities.

- **Develop a staffing "maximum wait" formula and fund personnel to meet optimum inspections staffing requirements.**
- **Provide flexibility into the design of FIS processing to allow for future implementation of the latest advances in security technology and electronic information capture, including biometrics, that will speed up processing time and re-evaluate the size of FIS areas within POEs.**

12. Recognizing efforts of the Department of Homeland Security working with the Department of State on the US-VISIT Program thus far, it is recommended that the first phase at air and sea POEs be reviewed and evaluated no later than 6 months after implementation by an independent body. This evaluation must consider the program's effect on national and economic security and international trade and travel. Congress should consider any recommendations from the independent review and evaluation and

also reconsider deadlines for all other entry/exit statutory requirements. It is further recommended that any mandates in this area receive appropriate funding.

The chapters and appendices that follow delve into all these areas in greater detail. The narrative and findings reflect not only those issues explored in 2002/2003, but also the unique combined expertise of the 17 different public and private sector organizations on this Task Force towards protecting our Nation's borders consistent with economic security.

C. Stewart Verdery, Jr.
Chairperson, DMIA Task Force
Assistant Secretary for Border and Transportation Security
Department of Homeland Security

Dominica Gutierrez
Executive Director, DMIA Task Force
Directorate, Border and Transportation Security

The DMIA Task Force members reached consensus on all twelve general recommendations.

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Martha Sardinas
Chief, Information & Systems Liaison, Visa Office,
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A. Background

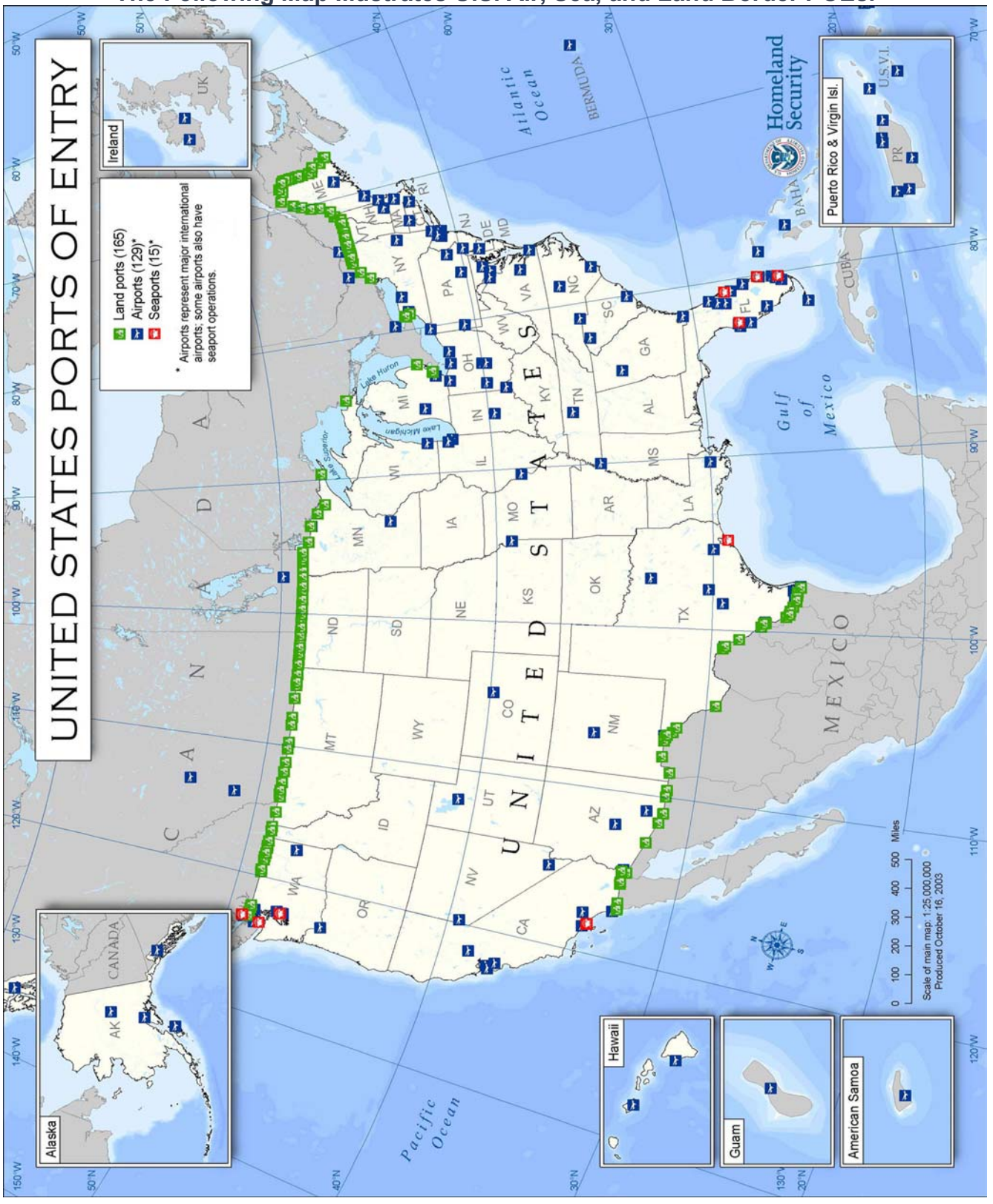
General: The U.S. shares a 5,525-mile border with Canada and a 1,989-mile border with Mexico. Our maritime border includes 95,000 miles of shoreline and navigable waterways as well as a 3.4 million square mile exclusive economic zone. Additionally, there are many international airports throughout the country. All people and goods entering the U.S. legally by air, land, or sea must enter through one of over 300 controlled Ports-of-Entry (POE). A POE is a geographical location, such as an airport, a seaport, or a land or river crossing that is the inspection point for the enforcement of immigration and customs laws and regulations and agricultural import restrictions. According to U.S. Government statistics, over 448 million people passed through POEs into the U.S. in 2002, as well as an enormous volume of trade: $1.4 trillion in imports and $974 billion in exports. This represents a decrease in some areas when compared to 2001[1], but is reflective of the time period, including and immediately following the terrorist attacks on September 11, 2001.

The Administration recognizes the importance of border control. In its Homeland Security Strategy, the White House stated that:

> "America's borders – land, air or sea – are the boundaries between the United States and the rest of the world. The massive flow of people and goods across our borders helps drive our economy, but can also serve as a conduit for terrorists, weapons of mass destruction, illegal migrants, contraband, and other unlawful commodities. The new threats and opportunities of the 21st century demand a new approach to border management. President Bush envisions a border that is grounded on two key principles:
>
> - First, America's air, land, and sea borders must provide a strong defense for the American people against all external threats, most importantly international terrorists but also drugs, foreign disease, and other dangerous items.
> - Second, America's border must be highly efficient, posing little or no obstacle to legitimate trade and travel."[2]

[1] 2001 statistics show over 510 million people, $1.35 trillion in imports, and $1 trillion in exports passing through POEs in 2001.
[2] http://www.whitehouse.gov/homeland/homeland_security_book.html#10. August 26, 2003.

The Following Map Illustrates U.S. Air, Sea, and Land Border POEs.



Economically, it is vital that legitimate traffic (both people and goods) continue to move efficiently across our borders through POEs and that known travelers/goods[3] be facilitated. At the same time, it is critical to our country that undocumented people and illicit goods not be allowed to cross the borders and enter the U.S. Meeting these two needs is a constant challenge for those involved in border management, including the Data Management Improvement Act (DMIA) Task Force.

The Data Management Improvement Act Task Force: The DMIA Task Force was established by the DMIA of 2000 to make recommendations on cross-border traffic, security, and coordination. Task Force members were chosen to represent the broad spectrum of interests related to immigration and naturalization, travel and tourism, transportation, trade, law enforcement, national security, and the environment. The 17 Task Force members include nine from the private sector, two representing state and local governments, five from federal departments, and the chairperson, designated by the Secretary of the Department of Homeland Security (DHS). (See Appendix A, Task Force Components). The DMIA specifically charges the Task Force to evaluate and make recommendations on the following:

1. How to carry out section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) as amended (relating to an electronic, integrated entry/exit data system);

2. How the U.S. can improve the flow of traffic at airports, seaports, and land border POEs through: A) enhancing systems for data collection and data sharing, including the electronic, integrated entry/exit data system, by better use of technology, resources, and personnel; B) increasing cooperation between the public and private sectors; C) increasing cooperation among federal agencies and among federal and state agencies (interpreted to include local government agencies); and D) modifying information technology systems while taking into account the different data systems, infrastructure, and processing procedures of airports, seaports, and land border POEs; and

3. The cost of each of its recommendations.

The DMIA also specifies that "the Attorney General, in consultation with the Secretary of State, the Secretary of Commerce, and the Secretary of the Treasury, should consult with affected foreign governments to improve border management cooperation."[4]

The Task Force's mission is defined by legislation, but the Task Force has also been affected by certain mandates and changes in environment.[5] For example, in 2002-2003, the actions of the Task Force were greatly affected by the development of DHS. Subsequent sections of this chapter describe legislative mandates that affect the mission of the Task Force, including

[3] The term "known traveler/goods" is used throughout this report to refer to people and goods that have undergone certain background checks, increased security measures, and enrolled in programs designed to facilitate low-risk traffic.
[4] This was amended by the bill creating the Department of Homeland Security wherein these responsibilities were transferred to the Secretary, DHS, from the Attorney General.
[5] The DMIA required the establishment of the Task Force within 6 months of its enactment in December of 2000. However, following the change in administration in 2001, the new leadership reviewed the Task Force before giving approval to proceed in the late fall of 2001.

information on the development of DHS and its effect on the Task Force, and the Task Force's initiatives in 2003.

B. Task Force Initiatives

In 2002 the Task Force presented its first report to the Senate and House Judiciary Committees as required by the DMIA. The 2002 report to Congress focused on recommendations for the electronic, integrated entry/exit system (now called the U.S. Visitor and Immigrant Status Indicator Technology [US-VISIT] Program). Updated information on this topic and other issues explored last year are included in Chapter 6 of this report. In 2003 the Task Force focused on three main areas: facilities and infrastructure, cooperation and coordination, and information technology (IT) interoperability.

The Task Force convened in January of 2003 for an administrative and planning meeting. Later in January, the Task Force was briefed on facilities and infrastructure by the Transportation Security Administration (TSA), International Council of Cruise Lines (ICCL), General Services Administration (GSA), Federal Highways Administration (FHWA), U.S. Coast Guard (USCG), Border Station Partnership Council (BSPC), the legacy Immigration and Naturalization Service (INS) Office of Facilities and Engineering, American Association of Port Authorities (AAPA), and Airports Council International--North America (ACI-NA). In addition, Task Force members briefed each other on the past and present cooperation and coordination initiatives of their various organizations regarding border management. At the first public meeting, on February 21, 2003, members decided to schedule several fact-finding trips to different regions (including California, New Mexico, Arizona, Texas, Mexico, Canada, Washington State, and Florida) to collect information for the 2003 report. The 2003 sites build on fact-finding trips in 2002 to Michigan, New York, California, Texas, Virginia, Maryland, Canada, and Mexico. The sites were selected to allow the Task Force the opportunity to observe the greatest variety of facilities, modes of transportation, size and type of POE, and interaction with industry, state and local governments, and communities.

In April, the Task Force made its first 2003 site visit to Los Angeles, Long Beach, and San Diego, California. This fact-finding mission included an overview of facilities and operations at Los Angeles International Airport and briefings and demonstrations of airport operations, facilities, and automated inspections projects from the U.S. Customs and Border Protection[6] (CBP) officials. Task Force members also viewed facilities and operations at the Port of Los Angeles and the Port of Long Beach and were briefed and given demonstrations on seaport operations by CBP and TSA officials, the USCG, officials of the Port of Los Angeles, Port Authority Police, and officials of Carnival Cruise Lines. On May 1, 2003, the Task Force toured San Ysidro and Otay Mesa POEs and was given briefings on land border operations, facilities, and automated inspections projects by CBP officials.

The Task Force's next site visit was to Los Alamos and Santa Fe, New Mexico, in June for a workshop on IT interoperability and border management issues hosted by Los Alamos National Laboratory (LANL). Technical representatives from the many agencies and bureaus that own and operate the systems currently involved in border management were also included

[6] Initially established as the Bureau of Customs and Border Protection.

in the workshop. Lawrence Livermore and Sandia National Laboratories also participated in these briefings. These briefings helped the Task Force understand the complexities as well as the benefits inherent in IT systems.

Later that month, the Task Force visited the CBP field operations office in Tucson and the Nogales and Mariposa POEs in Arizona. The Task Force was briefed and given demonstrations of land border operations, facilities, and automated inspections projects by CBP officials. The Task Force then visited the CBP field operations office in El Paso, the Bridge of the Americas and Paseo del Norte POEs in Texas, and Santa Theresa POE in New Mexico. The Task Force viewed the U.S. Border Patrol's (USBP) El Paso sector and toured the U.S. Consulate in Ciudad Juarez, Chihuahua, Mexico. This visit allowed the Task Force to observe land border crossings and the border control capabilities of the USBP. The Task Force visit to the Consulate enabled Task Force members to observe the visa issuance process. The Task Force then held a stakeholders' meeting in El Paso.

In July members of the Task Force made a site visit to CBP field operations offices in Vancouver, Canada, and Blaine and Seattle, Washington. Members viewed facilities and operations at the CBP field offices at Vancouver International Airport, the Pacific Highway and Peace Arch POEs, Seattle-Tacoma International Airport, the ferry terminal at Pier 69, and the Pier 30 Cruise Terminal in Seattle. The Task Force was briefed and given demonstrations on land border (vehicle and rail) operations, airport operations, seaport operations, facilities, automated inspections projects (NEXUS), and pre-inspections projects from CBP and TSA officials. The Task Force also talked with industry and local government representatives.

In August members of the Task Force traveled to Miami to view facilities and operations of the USCG, Miami Dade Port Authority, Miami International Airport (MIA), and the Port of Miami. The Task Force was given briefings by CBP, ICCL, AAPA, and TSA and talked with industry representatives.

Task Force members' observations from the site visits were compiled and integrated into this report. Based on these observations, the Task Force identified issues regarding facilities and infrastructure, cooperation and coordination, and IT interoperability. The Task Force had a closed meeting, published in the Federal Register, on September 23, 2003, during which members reached consensus on 12 recommendations to address the issues identified that they will send to Congress this year. These recommendations are also included in this report. The Task Force will work through the fall to finalize its report to Congress due on December 31 of this year.

C. PURPOSE OF REPORT

The Task Force is required to submit a report to the Committees on the Judiciary of the House of Representatives and of the Senate containing the findings, conclusions, and recommendations of the Task Force by December 31, 2002, and by December 31 every year thereafter that the Task Force is in existence. Each report will also measure and evaluate how much progress the Task Force has made, how much work remains, how long the remaining work will take to complete, and the cost of completing the remaining work. The first report,

submitted in December 2002, was very well received and can be found in its entirety on the DMIA web site at www.immigration.gov.[7] This year's report details the findings of the Task Force in 2003 and includes recommendations to Congress for the improvement of cooperation and coordination, facilities and infrastructure, and IT interoperability. Subsequent chapters explain each topic in more detail and provide information on resources and updates to issues explored in 2002.

D. LEGISLATIVE MANDATES

Department of Homeland Security (DHS)

In the aftermath of the terrorist attacks against America on September 11, 2001, President George W. Bush decided 22 previously disparate domestic agencies needed to be coordinated into one department to better protect the nation against threats. On November 25, 2002, the President signed the bill creating DHS, and on January 24, 2003, the new Department came into existence. By law the DHS Secretary had one year from the time the Department became effective to bring all of the 22 agencies into the new organization, but most of the larger component parts were required to move into the new Department by March 1, 2003.

The development of DHS was meant to solve many of the border management problems that plagued previous agencies and to streamline coordination and chain of command. The Homeland Security Act of 2002 describes the mission of the Department, in part, as follows:

> "The primary mission of the Department is to:
>
> - Prevent terrorist attacks within the U.S.;
> - Reduce the vulnerability of the U.S. to terrorism . . . ;
> - Ensure that the overall economic security of the U.S. is not diminished by efforts, activities, and programs aimed at securing the homeland;
> - Monitor connections between illegal drug trafficking and terrorism, coordinate efforts to sever such connections, and otherwise contribute to efforts to interdict illegal drug trafficking."

The Department will apply laws that impact who and what enters the U.S. in order to prevent the entry of terrorists while facilitating the legitimate flow of people, goods, and services on which our economy depends. Major initiatives include the following:

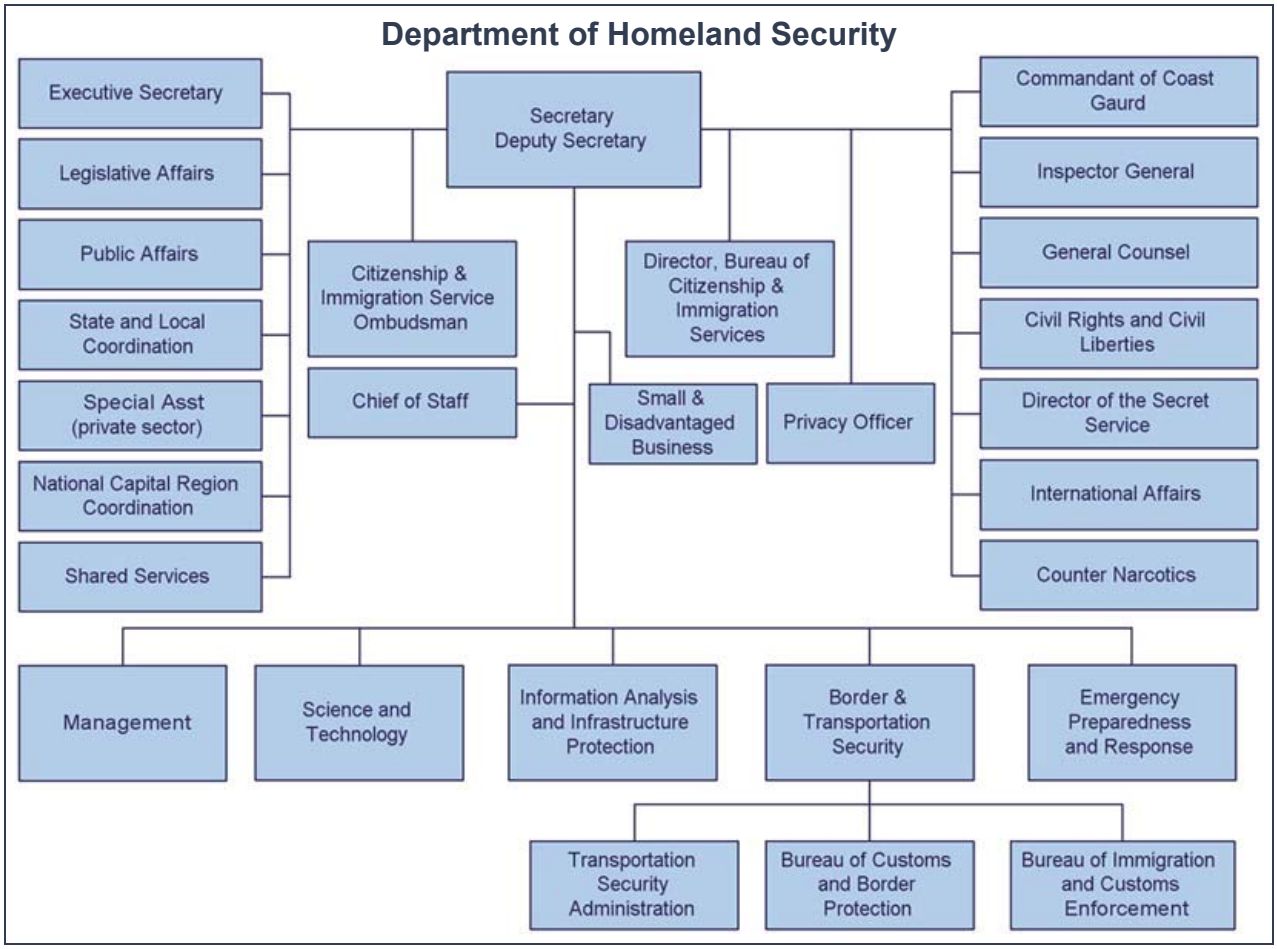
- Ensure accountability in border and transportation security by consolidating the border and transportation security agencies (INS, United States Custom Service [USCS], USCG, TSA, and the Animal and Plant Health Inspection Service [APHIS]) under DHS.[8] The Department will establish visa policies through Department of State (DOS) and coordinate the border control activities of all federal agencies not incorporated within the new Department.

[7] For direct access to the report, the full address is as follows: www.immigration.gov/graphics/shared/lawenfor/bmgmt/inspect/dmia.htm.
[8] These agencies are referred to as "legacy" agencies throughout this report.

- Create “smart borders” that provide better security through risk management, better intelligence, coordinated national efforts, and international cooperation against the threats posed by terrorists and criminal activities. At the same time, the future border will be increasingly transparent to the efficient flow of people, goods, and conveyances engaged in legitimate economic and social activities.

- Reform immigration services by separating legacy INS enforcement and service functions within the new Department. This reform aims to ensure full enforcement of the laws regulating admissions and to improve benefits to applicants.

The agencies or specific functions of agencies that became part of DHS have been organized into five major directorates: Border and Transportation Security, Emergency Preparedness and Response, Management, Science and Technology, and Information Analysis and Infrastructure Protection. The Secret Service and USCG are also located in DHS, remaining intact and reporting directly to the Secretary. In addition, the legacy INS adjudications and benefits programs, part of the U.S. Citizenship and Immigration Services,[9] report directly to the Deputy Secretary.



[9] Initially established as the Bureau of Citizenship and Immigration Services.

Directorate of Border and Transportation Security (BTS): BTS is currently led by Under Secretary Asa Hutchinson and is responsible for maintaining the security of our nation's borders and transportation systems. BTS brings the major border security and transportation operations under one roof, including:

- The USCS (from Department of Treasury);
- Most of the INS (from Department of Justice);
- The Federal Protective Service (from GSA);
- The TSA (from Department of Transportation);
- Federal Law Enforcement Training Center (from Department of Treasury);
- Part of APHIS (from Department of Agriculture); and
- Office for Domestic Preparedness (from Department of Justice).

Section 402 of the Homeland Security Act of 2002 describes the responsibilities of the BTS Directorate in part as:

- "Preventing the entry of terrorists and the instruments of terrorism into the United States;
- Securing the borders, territorial waters, ports, terminals, waterways, and air, land, and sea transportation systems of the United States, including managing and coordinating those functions transferred to the Department at ports of entry;
- Carrying out immigration enforcement functions; . . .
- Establishing and administering rules in accordance with section 428 of the Homeland Security Act governing the granting of visas or other forms of permission, including parole, to enter the U.S.; . . .
- Administering the customs laws of the U.S.;
- Conducting the inspection and related administrative functions of the Department of Agriculture; . . .
- Carrying out the foregoing responsibilities, ensuring the speedy, orderly, and efficient flow of lawful traffic and commerce."

Within BTS there are three bureaus, each with a specific mission: CBP, U.S. Immigration and Customs Enforcement[10] (ICE), and TSA.

U.S. Customs and Border Protection (CBP): CBP is dedicated to securing the borders. This bureau has consolidated incoming agencies into "one face at the border" by establishing a new organizational framework that integrates all of the border agencies into one chain of command. "One face at the border" is the establishment of a single CBP officer who will interact with the traveling public and facilitate the entry of legitimate goods at the nation's POEs, rather than different officers conducting various types of inspections, as was the traditional method. By combining resources, skills, and best practices of the separate agencies into a unified workforce, CBP can maximize efficiency and focus on the priority mission of preventing terrorists and terrorist weapons from entering the U.S. while facilitating lawful traffic.

This "one-stop processing" will soon be in place at the nation's 300 POEs. The first CBP officers will be hired in late September 2003 and begin training in October. Legacy INS,

[10] Initially established as the Bureau of Immigration and Customs Enforcement.

USCS, and Department of Agriculture inspectors have already been joined at POEs. In spring of 2004, these legacy inspectors will be converted to new officer positions and begin cross-training in all new aspects of their jobs. Each workforce brings with it the traditional missions of their legacy agencies—missions ranging from interdiction of illegal drugs to enforcement of trade and immigration laws, to protection of American agriculture from pests and diseases—and they now all also assume the DHS mission. In addition to officers at POEs, CBP also includes USBP, whose agents are responsible for protecting the U.S. border between POEs.

U.S. Immigration and Customs Enforcement (ICE): ICE is dedicated to investigating criminal violations of immigration and customs laws. This agency combined all the investigative functions of legacy USCS and INS, Air and Marine Operations (AMO) from legacy USCS, and the Federal Protective Service into one bureau. This bureau is essentially responsible for interior enforcement, providing air and marine support, and the security of federal buildings. On September 2, 2003, Secretary Ridge announced that the Federal Air Marshal Service (FAMS) will transfer to ICE. The cross-training of FAMS agents and ICE agents will increase the number of agents who can be deployed in the event of a terrorist attack.

Transportation Security Administration (TSA): The recently created TSA, which is now part of the BTS Directorate, has statutory responsibility for protecting U.S. transportation systems to ensure freedom of movement for people and commerce, including day-to-day federal security screening operations for passenger air transportation and intrastate air transportation.

In addition to the three bureaus, the Office of the Under Secretary, BTS, has several components, one of which is the DMIA Task Force. In March 2003, authority for the DMIA Task Force transferred to DHS. A delegation of authority from the Secretary to the Under Secretary for BTS was given in July 2003. Clearly the legislation creating DHS had a profound effect on the DMIA Task Force, but Congress has passed several other pieces of legislation that affect border management and shape the role of this Task Force. Summaries of such legislation follow in chronological order.

North American Free Trade Agreement (NAFTA): The Customs Modernization Act and Informed Compliance Act were enacted as part of NAFTA implementing legislation in December 1993. Most relevant to the Task Force are Title VI –Customs Modernization and Title IV – National Customs Automation Program.

Through passage of this Act, Congress, at the time, supported an effort they considered crucial in providing legacy USCS, now within CBP, with the necessary tools to successfully redesign its processes for the 21st Century. An implementation plan included various initiatives, including three critical areas for legacy USCS internal operations, and the customs operations of the trade community: the Act allowed legacy USCS to develop a fully automated commercial environment, redesign and restructure its core business-related activities, and reevaluate the culture and work practices of its employees.

The central tenet for establishing the Modernization Act was to reduce the paperwork and simplify the processes for the entry of goods into the U.S. Given the rapid increase in the number of goods that enter our country, both for consumption and production, it is essential

that today's CBP develop systems and programs capable of handling higher trade volumes, while at the same time meeting its enforcement and revenue collection responsibilities.

Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA): In Section 110 of the IIRIRA, Congress directed the Attorney General to develop an electronic, integrated entry/exit system to collect records of arrival and departure from every alien entering and leaving the U.S. The provisions of IIRIRA were aimed at adopting stronger penalties against illegal immigration, streamlining deportation processes (subsequently termed "removal process") by curtailing the legal appeal process, and curbing the ability of terrorists to use the immigration process to enter and operate in the U.S. The latter was also addressed in the Antiterrorism and Effective Death Penalty Act in 1996.

Data Management Improvement Act (DMIA): Congress amended Section 110 on June 15, 2000, with the DMIA which revised and expanded the description of the entry/exit system to be implemented under Section 110. The DMIA also included the provisions establishing this Task Force. At a minimum, the DMIA requires that the entry/exit system must integrate the arrival and departure information on certain aliens in an electronic format in the databases of the Department of Justice (including legacy INS) and DOS. The DMIA contains further requirements for matching arrival and departure information and for reports to Congress, using the available data, on alien overstays. The DMIA (Pub. L. 106-215) can be found in its entirety in Appendix B.

The Visa Waiver Permanent Program Act (VWPPA): The VWPPA, passed by Congress on October 30, 2000, also affected DMIA Task Force activities. The VWPPA specifies procedures for adding countries to the Visa Waiver Program (VWP) and for country removals. A major provision in the VWPPA requires the Attorney General to develop and implement an entry/exit system that will collect a record of arrival and departure for every alien admitted under VWP who arrives and departs by sea or air.

Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT Act): On October 26, 2001, Congress passed additional legislation affecting entry/exit control. In Sections 414 and 415 of the USA PATRIOT Act, Congress respectively addressed visa integrity and security and participation by the "Office of Homeland Security" in the entry/exit development and implementation process. Section 414 specifically states that the Attorney General should:

- Fully implement the electronic, integrated entry/exit system for airports, seaports, and land border POEs with all deliberate speed; and
- Immediately begin establishing the private and public membership task force required by DMIA to study and make recommendations on an entry/exit system and related border matters.

Most importantly, this legislation added two new considerations: the "utilization of biometric technology" and "the development of tamper-resistant documents readable at POEs." The requirement for biometric technology significantly raises the bar on the development and cost for a viable entry/exit system.

Aviation and Transportation Security Act: On November 19, 2001, Congress passed the Aviation and Transportation Security Act of 2001, which substantially enhanced the security of the aviation and transportation industries. The statute established TSA within the Department of Transportation (DOT) to be responsible for security in all modes of transportation, including:

- Civil aviation security, and related research and development activities;
- Security responsibilities over other modes of transportation that are exercised by DOT;
- Day-to-day federal security screening operations for passenger air transportation and intrastate air transportation;
- Policies, strategies, and plans for dealing with threats to transportation;
- Domestic transportation during a national emergency, including aviation, rail and other surface transportation, maritime transportation, and port security; and
- Management of security information, including notifying airport or airline security officers of the identity of individuals known to pose a risk of air piracy or terrorism or threat to an airline.

Specifically relevant for purposes of the entry/exit system, Section 115 required that within 60 days of the passage of the law, passenger-carrying air carriers must electronically transmit passenger and crew manifest data, with specific data elements, to the legacy USCS via the Advance Passenger Information System (APIS).

Legacy USCS, in cooperation with the legacy INS and the airline industry, initiated development of APIS as a voluntary program in 1988 to collect biographical information from air passengers prior to departure for the U.S. from foreign locations. The Aviation and Transportation Security Act of 2001 made the electronic transmission of advance passenger information (API) mandatory. In January 2003, legacy INS proposed a rule that required sea carriers to send API information. CBP will have a final rule on API published in December 2003.

The Enhanced Border Security and Visa Entry Reform Act of 2002 (BSA): The BSA was enacted on May 14, 2002. The major provisions of the BSA that pertain to the Task Force work are:

- Authorization for the appropriation of $150 million to legacy INS for improvements, expansion, and utilization of technology for border security and facilitating the flow of commerce and people at POEs;
- Requirement for the development of an interoperable law enforcement and intelligence data system (known as “Chimera”);

- Elimination of the existing statutory requirement that the inspection process take no longer than 45 minutes at airports (however, port managers still use this standard as a goal);

- Mandate that all visas and travel and entry documents issued by the Attorney General and the Secretary of State be machine-readable, tamper-resistant, and use biometric identifiers by October 26, 2004;[11]

- Requirement that readers and scanners that allow biometric comparison and authentication of all travel and entry documents be installed at all U.S. POEs;

- Requirement that manifest requirements be clarified and enhanced to include mandatory address while in the U.S. and electronic submission; and

- Mandatory transmission of electronic manifests to an immigration officer (now CBP officer) by all commercial vessels or aircraft transporting any person arriving or departing the U.S.

Trade Act of 2002: Section 343(a) of the Trade Act of 2002 enacted on August 6, 2002, requires that the Secretary develop final regulations by October 1, 2003, that provide for the mandatory collection of electronic cargo information by the legacy USCS (now part of CBP), either prior to the arrival of the cargo in the U.S. or its departure from the U.S. by any mode of commercial transportation (sea, air, rail, or truck). Under section 343(a), as amended, the information required must consist of that information about the cargo which is determined to be reasonably necessary to enable CBP to identify high-risk shipments so as to prevent smuggling and ensure cargo safety and security pursuant to the laws that are enforced and administered by CBP.

Under section 343(a), as amended, the requirement to provide particular cargo information to CBP is generally to be imposed upon the party likely to have direct knowledge of the required information. However, where doing so is not practicable, CBP must take into account how the party on whom the requirement is imposed acquires the necessary information under ordinary commercial practices, and whether and how this party is able to verify the information it has acquired. Where the party is not reasonably able to verify the information, the proposed regulations must allow the party to submit the information on the basis of what it reasonably believes to be true.

The Trade Act also requires CBP to take into consideration the remaining parameters set forth in the statute, including:

- The existence of competitive relationships among parties upon which the information collection requirements are imposed;

[11] In this regard, interagency agreement has been reached to initially use two fingerprints and a photograph as the standard biometric identifiers. DOS has a comprehensive plan for deployment of fingerprint enrollment equipment to all visa-issuing posts, which will phase in the fingerprint requirement for visa applicants in order to meet the October 26, 2004, deadline.

- Differences among cargo carriers that arise from varying modes of transportation, different commercial practices and operational characteristics, and the technological capacity to collect and transmit information electronically;

- The need for interim requirements to reflect the technology that is available at the time of promulgation of the regulations for purposes of the parties transmitting, and CBP receiving and analyzing, electronic information in a timely fashion;

- That the use of information collected pursuant to these regulations is to be only for ensuring cargo safety and security and preventing smuggling and not for determining merchandise entry or for any other commercial enforcement purposes;

- The protection of the privacy of business proprietary and any other confidential cargo information that CBP receives under these regulations, with the exception that certain manifest information is required to be made available for public disclosure under 19 U.S.C. 1431(c);

- Balancing the likely impact on the flow of commerce with the impact on cargo safety and security in determining the timing for transmittal of required information;

- Where practicable, avoiding requirements in the regulations that are redundant with one another or with requirements under other provisions of law; and

- The need, where appropriate, for different transition periods for different classes of affected parties to comply with the electronic filing requirements in the regulations.

The 24-Hour Rule: On October 31, 2002, the legacy USCS promulgated a regulation (RIN 1515-AD11) to be effective December 2, 2002: *Presentation of Vessel Cargo Declaration to Customs Before Cargo Is Laden Aboard Vessel at Foreign Port for Transport to the United States*. The purpose of this regulation, as required by the Trade Act of 2002, is to stipulate "Advance Presentation of Vessel Cargo Manifest to Customs,…pursuant to 19 U.S.C. 1431(d), for any vessel subject to entry under 19 U.S.C. 1434 upon its arrival in the United States, Customs must receive the vessel's cargo manifest (declaration) from the carrier 24 hours before the related cargo is laden aboard the vessel at the foreign port. The proposed rule also enumerated the specific informational elements that would need to be included in the submitted cargo."[12]

Maritime Transportation Security Act (MTSA): Enacted November 25, 2002, the MTSA directs the Secretary of the department in which the USCG operates to prepare a National Maritime Transportation Security Plan for deterring and responding to a transportation security incident. Provisions of the Act increase reporting requirements for vessels and ports, and allow the Secretary of Homeland Security to prescribe conditions for vessels from foreign ports to enter the U.S. The Act also directs the development of a cargo tracking system.

[12] 67 FR 66319

DHS announced the publication of regulations July 1, 2003, requiring sectors of the maritime industry to implement measures designed to protect America's ports and waterways from a terrorist attack. These regulations significantly strengthen the security of our ports by requiring preventive security measures and plans to deter threats and provide a framework for response in the event of an attack. The interim final rules are effective as of July 1, 2003. They will be replaced by final rules by October 25, 2003. Responsibility for implementing the Act transferred with the USCG from DOT to DHS.

The regulations build on a comprehensive port security strategy and range of enhancements directed by the President following the September 11, 2001, terrorist attacks and implement significant portions of MTSA. By requiring completion of security assessments, development of security plans, and implementation of security measures and procedures, these regulations will reduce the risk and mitigate the exposure of our ports and waterways to terrorist activity.

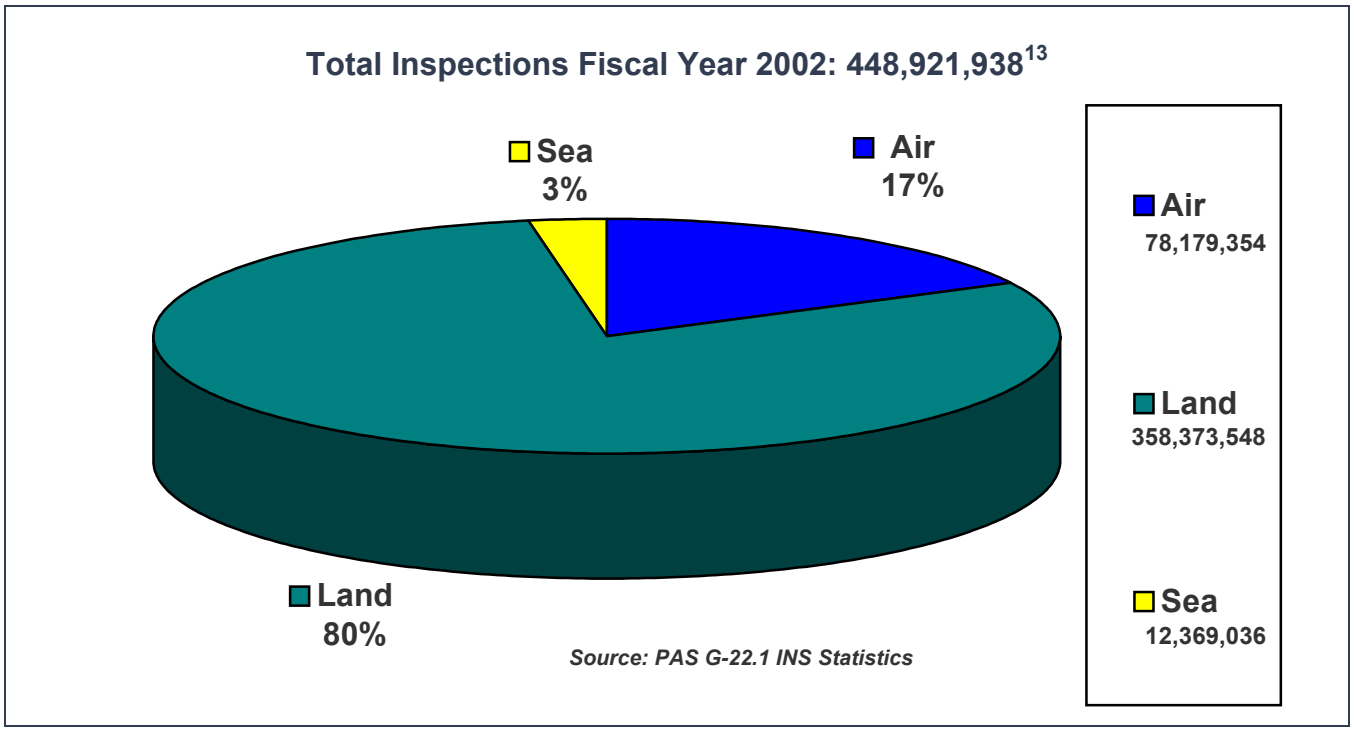
The regulations focus on those sectors of maritime industry and port facilities that have a higher risk of involvement in a transportation security incident and require measures that have three scalable security levels. Measures may include passenger, vehicle, and baggage screening procedures; security patrols; establishing restricted areas; personnel identification procedures; access control measures; and/or installation of surveillance equipment.

The regulations amend other sections of the Code of Federal Regulations to implement Automatic Identification System (AIS) requirements for certain vessels, as required by MTSA. AIS is a system of equipment and technologies that automatically sends detailed ship information to other ships and shore-based agencies. Installing AIS equipment on certain vessels traveling in our waters will allow comprehensive, virtually instantaneous vessel tracking and monitoring, increasing security and safety in our shipping channels and our awareness of maritime activity. The regulations were developed through interagency teamwork within DHS (USCG, TSA, and CBP) and with DOT's Maritime Administration.

A. Overview

The DMIA mandates that this Task Force evaluate how the U.S. can improve the traffic flow at air, sea, and land POEs. One of the most critical considerations in doing this is port facilities and infrastructure. Data from CBP indicate significant deficiencies in port infrastructure at all three types of POEs to support current levels of traffic and processes. The Task Force saw many positive attributes and efforts while on site visits to multiple locations at air, sea, and land POEs but also identified both port-specific and common issues, which may result in operational and facilitation delays and inhibit the potential for future growth. Port-specific issues are discussed throughout this chapter and are particularly important because, while POEs do have certain commonalities, each POE is unique. Some of the common issues include: space, design and environmental constraints, insufficient resources, and the need to consolidate federal inspection services (FIS) requirements to reflect the new DHS structure at the POEs.

To understand the facilities and infrastructure issues, it is important to first consider the volume and types of traffic passing through POEs. The following chart depicts the total inspections by type of POE.

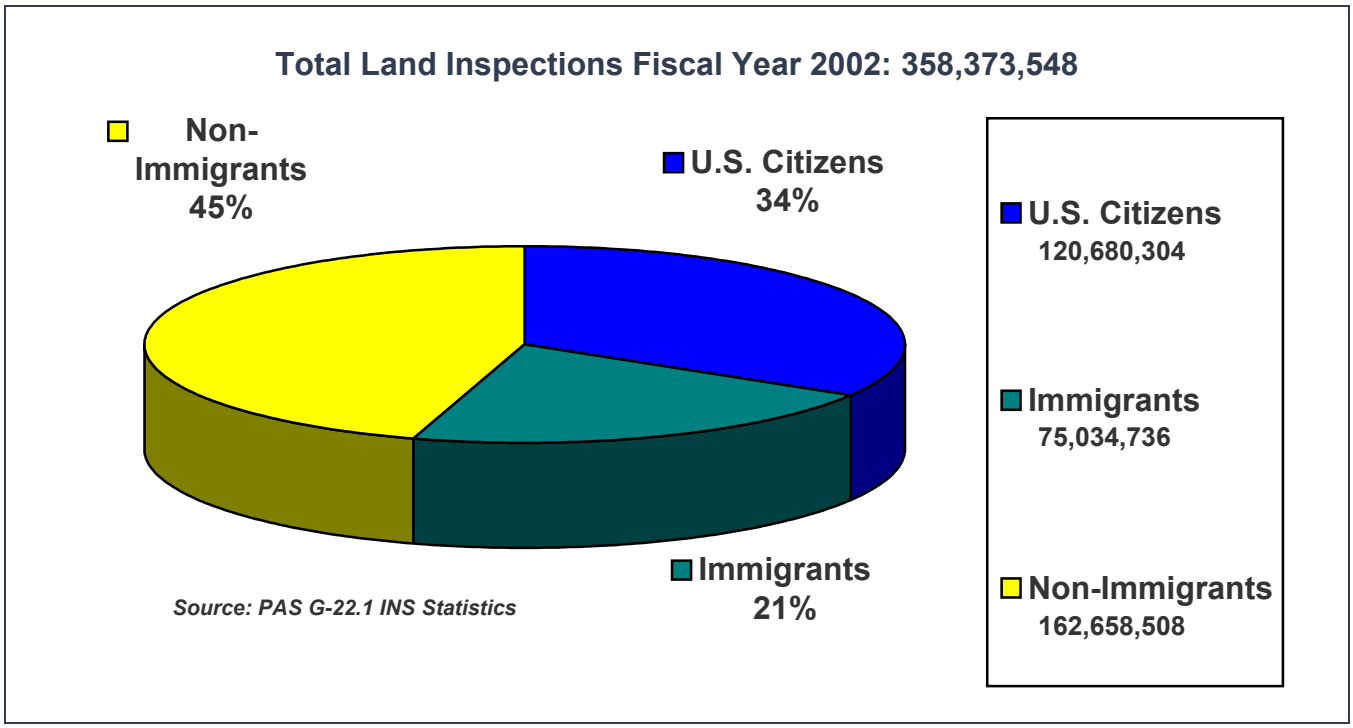


As the preceding chart clearly shows, the vast majority of inspections take place at land border POEs. On our land borders, the advent of the Canada-U.S. Free Trade Agreement (in 1989) and NAFTA have caused the volume of traffic at our land borders to increase significantly. From 1994 to 2001, total U.S./Canada surface trade increased more than 55 percent from $223 billion to $347 billion, while U.S./Mexico surface trade increased more than 127 percent

[13] Air numbers include 4,250,082 departure inspections from Guam, the U.S. Virgin Islands, and Puerto Rico.

from $88 billion to $201 billion.[14] Yet investment in port facilities and border and transportation infrastructure has increased only minimally relative to the growth in trade.

Transportation studies conducted by many groups show significant deficiencies in roads, rails, bridges, and tunnels connecting to POEs. Border studies show deficiencies in inspection facilities and infrastructure to support increasing traffic flows (resulting in increased delays and wait times over the last decades). Internal federal agencies report deficiencies in facilities to support increasing personnel needs. FHWA is presently undertaking studies of trade and passenger flows, capacity, and investment requirements of POEs and their connections to the rest of the country.

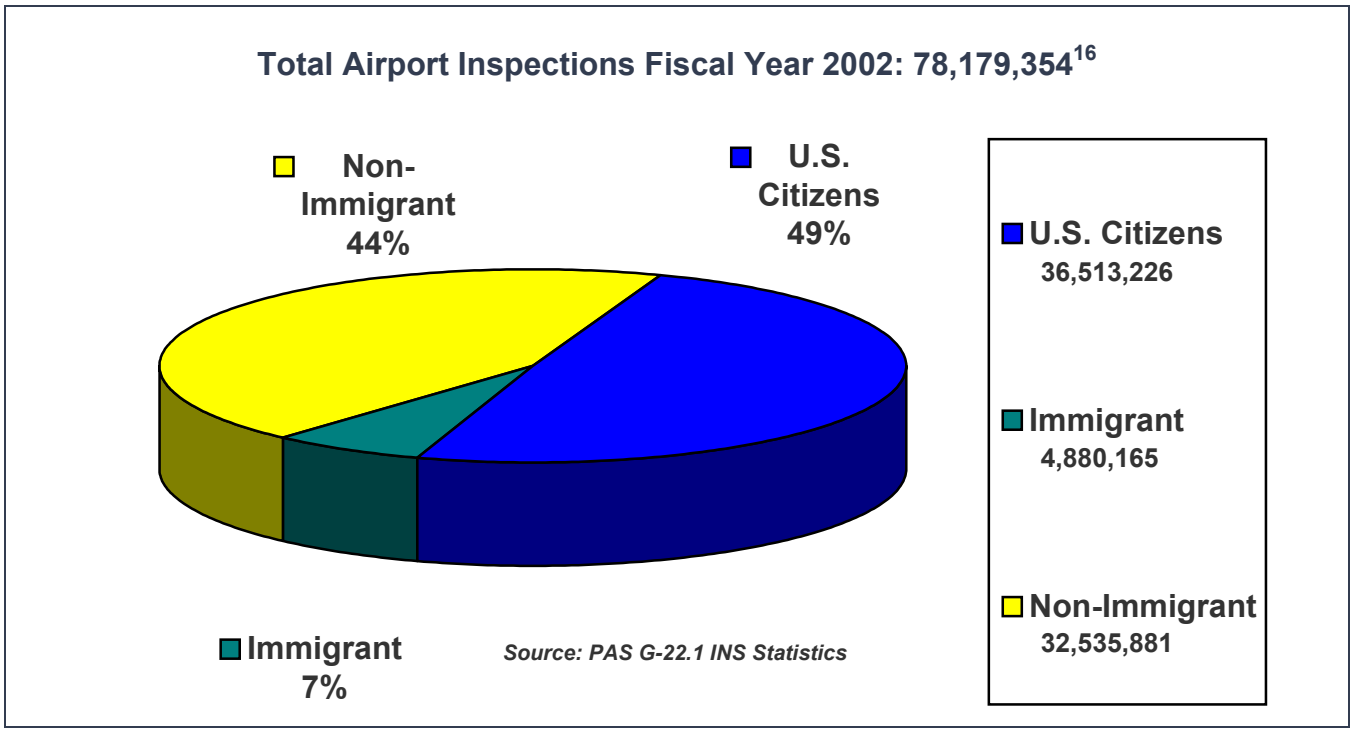


As at land POEs, facilities at airports have not kept up with growth in traffic. According to ACI-NA, total U.S. passenger system activity (domestic and international enplanements) is scheduled to increase 46 percent in the next 12 years. International passenger traffic on U.S. air carriers is expected to surge 73 percent, from 55 million to 95 million by 2013. To accommodate this growth, the U.S. needs the equivalent of 10 new airports similar in size to those in Los Angeles or Dallas/Forth Worth, or the equivalent of the combined total activity of the top 16 U.S. large hub airports.[15]

The CBP has over 130 active projects in various stages of planning and design, of which 46 airports and 21 seaports are actively engaged in final design, construction bidding, or nearing construction completion for final inspections and acceptance. The Air and Sea Ports-of-Entry Program assists in the strategic planning and programming efforts, determines facility and security requirements, inspects and assesses current facilities for compliance, does technical

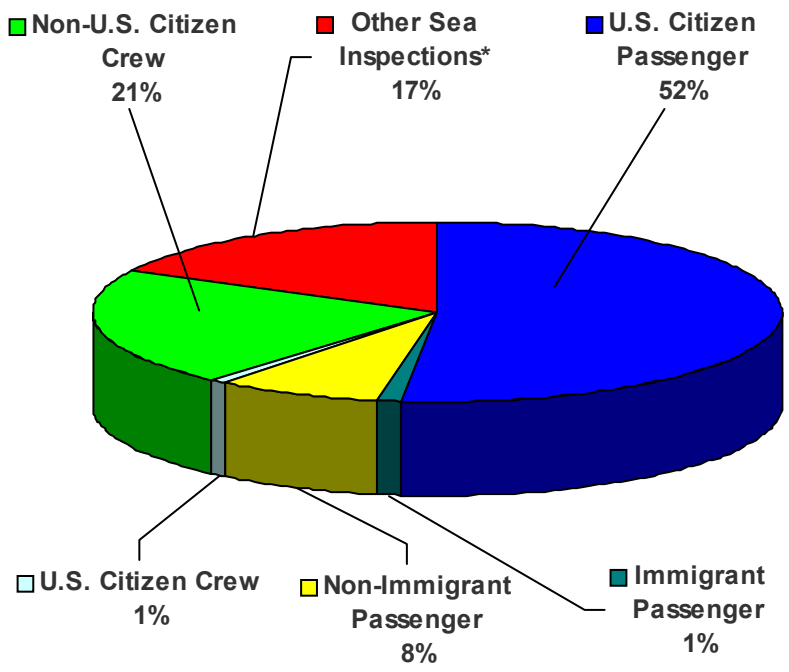
[14] U.S. Bureau of Transportation Statistics. Includes imports and exports for all surface modes.
[15] Airports Council International-North America, *The Economic Impact of U.S. Airports,* 2002 at http://www.aci-na.org/docs/US_Econ_Impact.pdf.

reviews of proposed construction documents, provides on-site construction progress monitoring, and reports to the Director, Field Operations for the specific POE.



Like land POEs and airports, seaports also require infrastructure improvements. According to AAPA, U.S. seaports expect to spend just over $9 billion in infrastructure investment between 1999 and 2003 to meet growing cargo and cruise traffic.[17]

[16] Includes 4,250,082 departure inspections from Guam, the U.S. Virgin Islands, and Puerto Rico.
[17] American Association of Port Authorities, "Port Fact" at http://www.aapa-ports.org/industryinfo/portfact.htm.



**Cargo inspections cannot be extracted from the 2,150,247 other sea inspections total which include inspections from cargo vessels, ferries, private vessels, and military vessels, etc.*

Source: PAS G-22.1 INS Statistics

Clearly facilities and infrastructure is an area of major concern for anyone studying border management issues. In addition to increases in volume, the incorporation of the US-VISIT program into the standard processes at POEs must provide for adequate infrastructure and facilities so that it will not adversely impact the flow of traffic in and out of facilities (recommended in the Task Force's 2002 DMIA Report to Congress).[18] This chapter describes in general terms what the facilities at air, land and sea POEs consist of, shortfalls in facilities and infrastructure given current and projected traffic, specific issues observed on site visits to various POEs, and, in some areas, suggested process, flow, or traffic management changes to facilitate the entry of legitimate persons and goods through the ports.

B. Land Border Facilities

People crossing the borders at land POEs differ from those people passing through airports and seaports in that almost all of the border crossers at land POEs are either from the U.S or the neighboring country, they cross the border frequently, and they are usually familiar with

[18] Recommendation 1 – Appropriate funding levels should be established and adequate funding provided for the facilities and infrastructure necessary for development of an entry/exit system and to address increase growth in traffic across the nation's borders. Where applicable, the use of existing space and infrastructure both domestic and foreign, should be maximized, including the sharing of facilities among agencies. All possible Port-of-Entry (POE) scenarios and configurations should be employed.

requirements concerning their entry into the U.S. Traffic at land borders consists of pedestrians, bicycles, cars, rails, buses, trucks, and other vehicles.

A land border POE may consist of a number of facilities depending on the size and type of traffic inspected. Ports are organized into three main areas: a main building, non-commercial vehicle inspection areas, and commercial vehicle inspection areas. Facilities are designed to maintain operational efficiency and inspector safety.

Main Building

The main building houses the pedestrian processing area, office areas, public counter areas, and enforcement/detainment areas for FIS agencies and support for the port. In addition to the inspections areas for vehicles, land border POEs must also have inspection areas for pedestrian and/or bicycle traffic, which are usually processed together (although San Ysidro has a separate lane for bicycles and the El Paso POEs allow bicycle traffic in non-commercial vehicle lanes). In some cases there is a building with areas for travelers to line up to wait for an inspection. At some locations, as pedestrians enter the inspection area, they pass through screening devices (metal detectors) and are directed to the primary inspection area, which usually consists of counters or booths. A pedestrian inspection is very similar to one conducted in an air- or seaport.

In typical primary inspections, a CBP officer examines a traveler's entry documents, briefly interviews him/her to ascertain the validity of the purpose for entering the U.S., and verifies the traveler's identity with the documentation presented. If the officer determines that the traveler may be inadmissible based on results of the data queries, behavioral observations, documentation, or responses to questions, the person is referred to a secondary inspection process for further inspection.

Separate areas/rooms must be available to conduct secondary inspections. A secondary inspection of individuals can consist of a thorough search of the person, documentation, personal belongings, in-depth interviews, and multiple system queries. At southern land borders, a consular official from Mexico may be present in the secondary area.

General areas within the main building may also include:

- CBP counter/work areas for the collecting of fines and duties, processing of permit applications and fees, and inspection of animal and plant items;
- CBP office areas for vehicle seizure processing; intelligence activities; administrative functions; and training;
- Separate enrollment centers for dedicated commuter lane programs, like the Secure Electronic Network for Travelers Rapid Inspection (SENTRI) and NEXUS;
- CBP Agriculture Plant, Protection, and Quarantine (PPQ) lab and office areas for quarantine and analysis of animal and plant items carried by pedestrians;

- Detainment/enforcement/violator areas for holding detained individuals and processing for removal or prosecution;
- Staff support spaces; and
- GSA areas for management offices for the port and building maintenance support.

Non-Commercial Vehicle Inspection Areas

The non-commercial vehicle inspection area at a land border POE is comprised of primary and secondary non-commercial vehicle inspection areas along with a command center. The non-commercial vehicle primary inspection is normally located next to the main building and consists of several vehicle lanes including DCLs for programs such as SENTRI and NEXUS.

Vehicles approaching the POE enter a primary inspection area that consists of booths staffed by CBP officers who determine admissibility. If the officer determines that a more in-depth inspection is required, the vehicle is directed to the secondary area, which is usually located behind the primary booths.

At most land border POEs, license plate readers have been installed. As the vehicle is in line near the primary inspection booth, the license plate is scanned and read by the computer. The computer then runs an Interagency Border Inspection System (IBIS) check on the plate number. If license plate readers have not been installed, or if the license plate cannot be read, the inspector has to manually input the information as the vehicle approaches the booth.

Once the vehicle arrives at the booth, the plate number and any IBIS results are shown on the primary officer's computer screen. After a check of the screen, the officer conducts their inspection of the occupants and visually assesses the vehicle. If any irregularities are noticed, the vehicle is referred for secondary inspection.

A command center provides support and services for the CBP secondary inspection area, as well as supervision and visual monitoring of primary and secondary. Where there is no command center, the main building serves this function.

The secondary inspection area is located on the U.S. side of the border behind the primary inspection lanes. The primary CBP officer directs vehicles to either enter into the U.S. from the primary inspection area (if they are readily admissible), or to proceed to secondary inspection for further processing or inspection. All vehicle referrals for secondary inspection are sent to the same area. In the secondary area, officers conduct a more thorough inspection of the individual(s) and/or vehicle to determine admissibility and to detect possible smuggling. There may be a small building in the secondary area containing separate restroom facilities for the staff and visitors and office space.

Other secondary facilities may include:

- A permit booth (in larger ports) for those entering the U.S. in a vehicle;
- Vehicle lifts for inspection of the undercarriage of vehicle to search for concealed contraband;
- CBP Agriculture office;
- Booths in secondary area for use by all agencies operating in secondary to perform paperwork and access computer terminals;
- Short stay kennel for holding agency working dogs temporarily; and
- Exit control booth (at larger ports) should be at the exit end of the secondary inspection area to verify that vehicles have cleared inspection.

The following photographs depict various land border POEs and the wide range of access roadways, traffic plazas, buildings, physical layouts, and constraints. Variations in these areas are dependent on the volume and type of traffic typically inspected.

Land Border Ports of Entry

Land Border Points of Entry

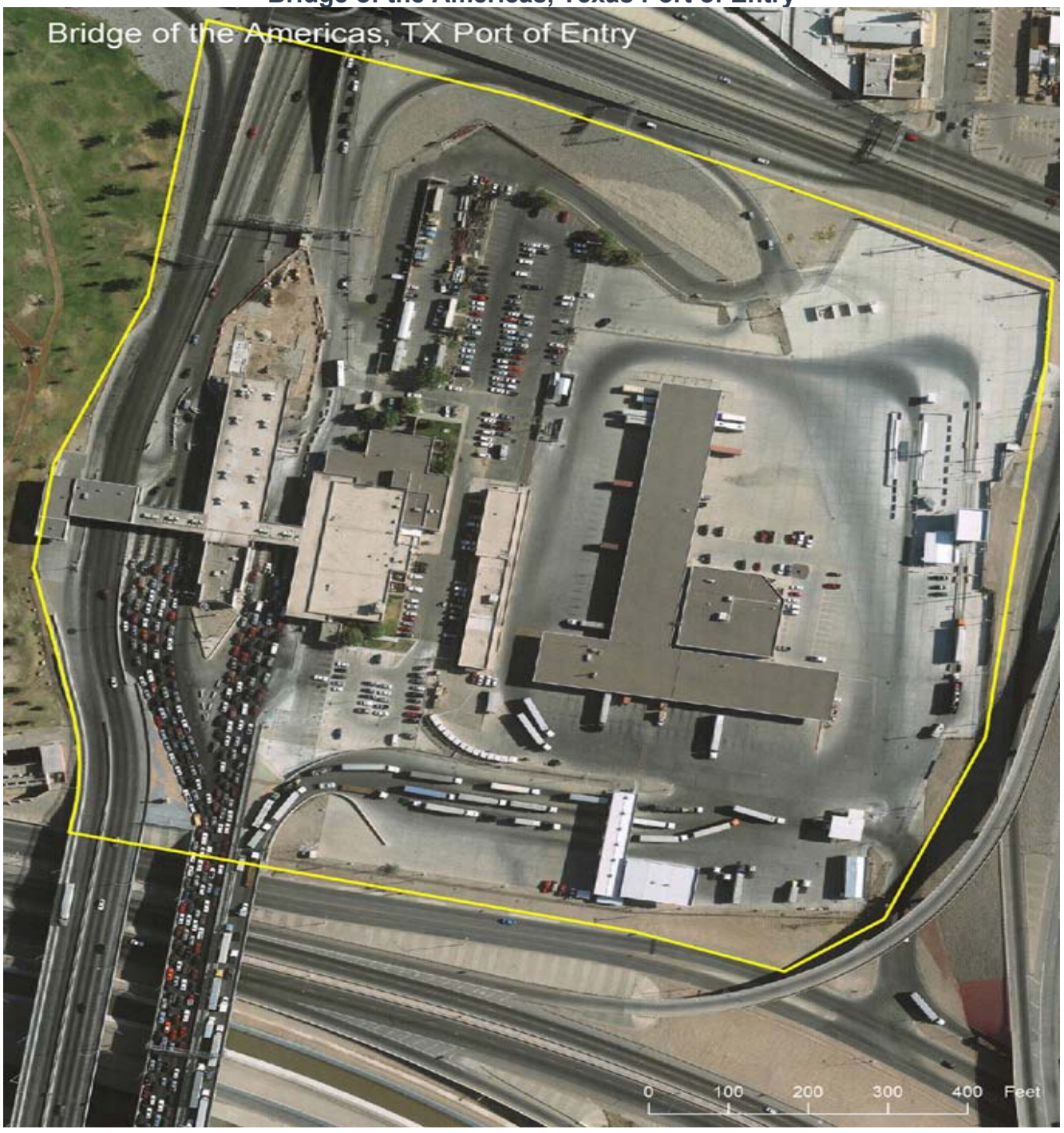
The main building at the Crane Lake POE. Crane Lake, MN.

Non-commercial vehicles entering the U.S. from Mexico through the primary inspection booths at Otay Mesa POE. May 2003

DMIA Task Force members among the produce and the commercial vehicles awaiting inspection at the secondary inspection area. Mariposa POE. June 2003

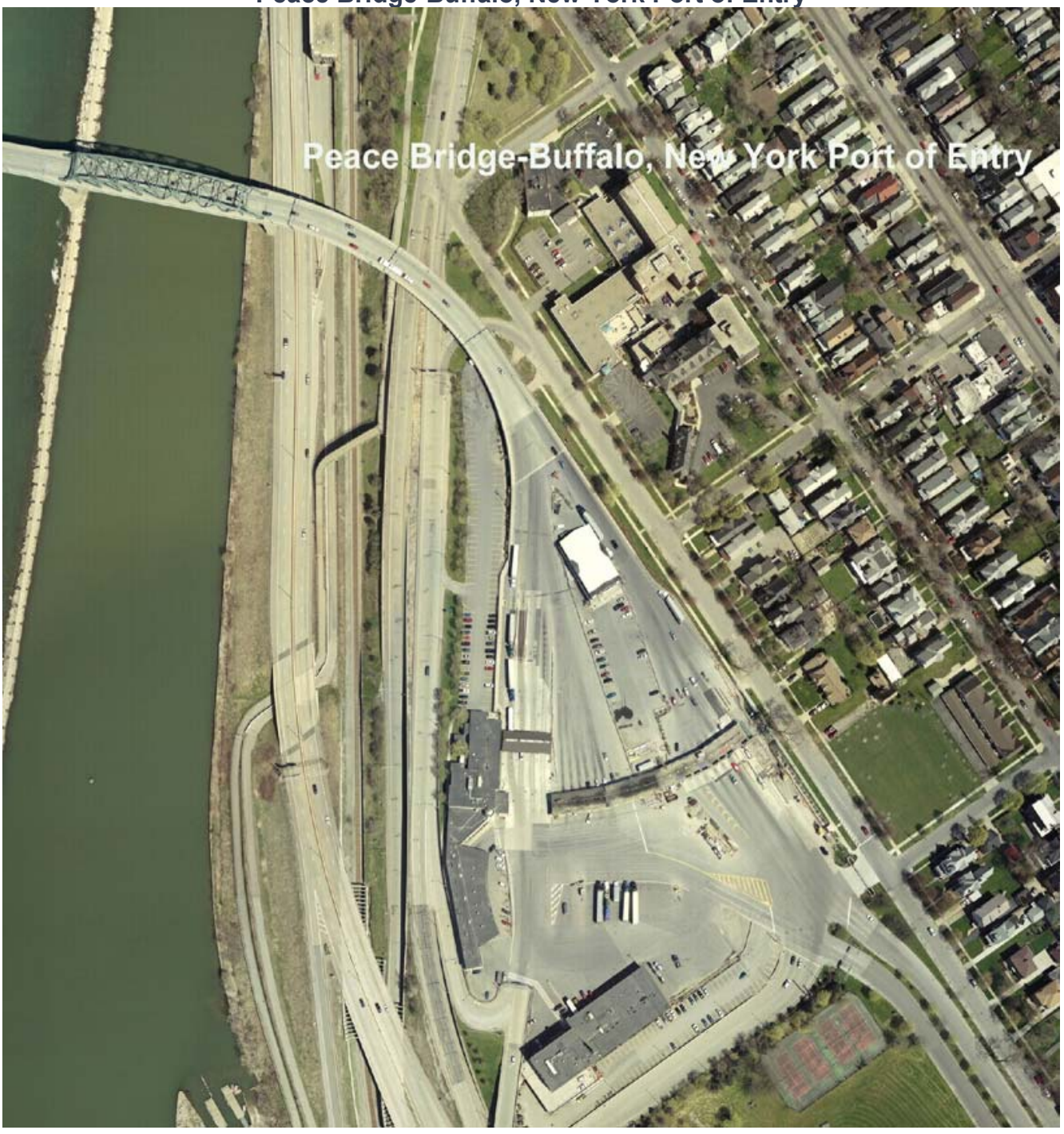
The following aerial photograph of the Bridge of the Americas (BOTA) in El Paso depicts traffic entering the POE from Mexico. Non-commercial vehicles are separated from commercial vehicles, both in access lanes and inspection areas; access lanes flow into larger plazas, and outbound traffic moves in the opposite direction from the U.S. into Mexico.

Bridge of the Americas, Texas Port of Entry

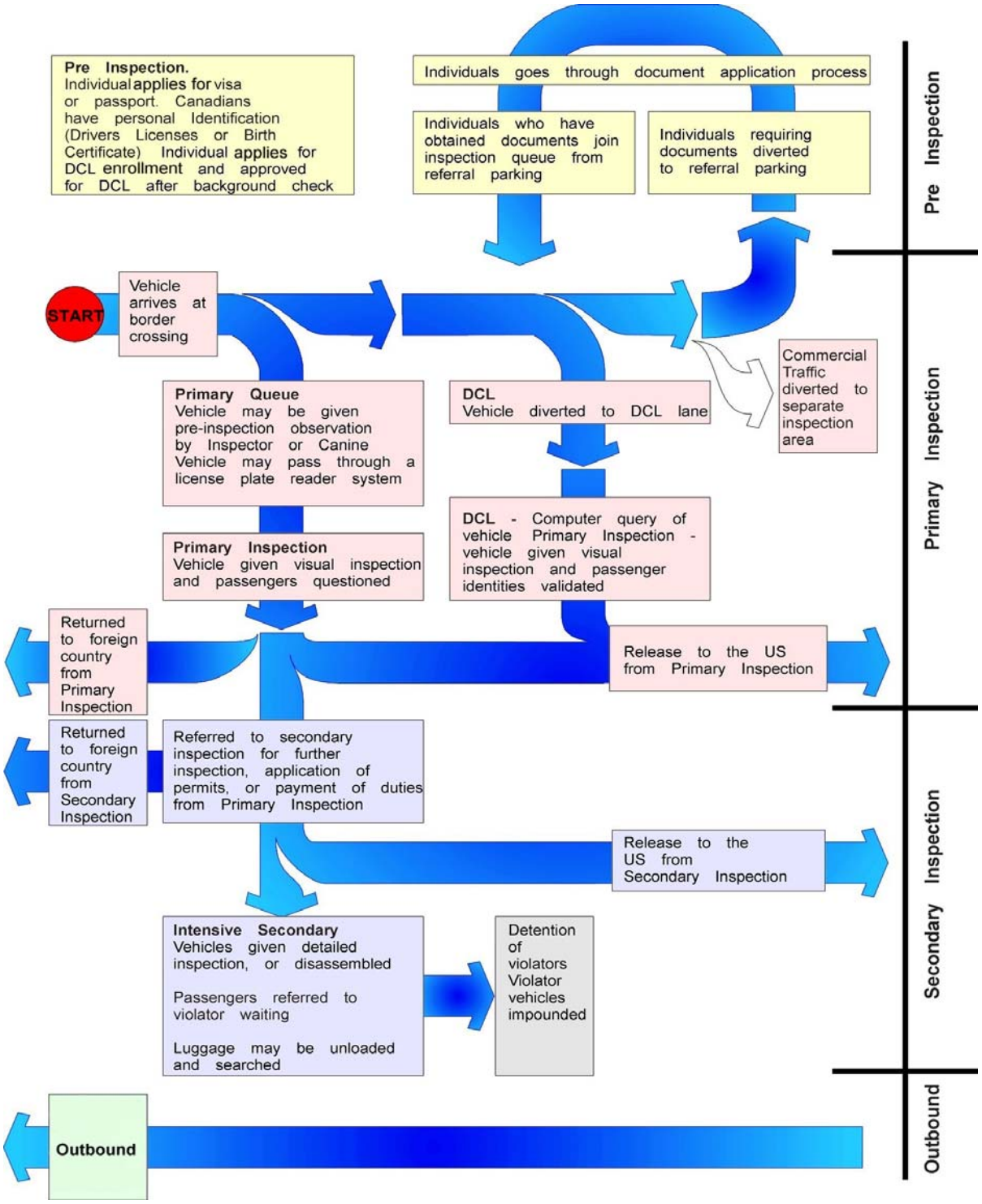


The following aerial photograph of Peace Bridge in Buffalo, New York, depicts traffic entering the POE from Canada. Non-commercial vehicles are separated from commercial vehicles, both in access lanes and inspection areas; access lanes flow into larger plazas, and outbound traffic moves in the opposite direction from the U.S. into Canada.

Peace Bridge-Buffalo, New York Port of Entry



Basic Movement of Non-Commercial Traffic [19]



[19] Legacy INS Office of Administration, Facilities Division. Note: When possible, charts, graphics, and inserts have been changed to reflect new process titles resulting from the formation of the Department of Homeland Security and its various Directorates and Bureaus.

Commercial Vehicle Inspection Areas

In addition to pedestrian and non-commercial vehicles, land POEs must accommodate trucks, buses, trains, and other modes of transport. Some POEs have separate lanes for these types of conveyances; at others, these types of traffic are directed to neighboring areas or dedicated commercial POEs for inspection.

Commercial inspection includes the inspection of cargo imported to, exported from, or transiting through the U.S. Commercial vehicle inspection facilities are provided when a significant number of commercial cargo vehicles cross a particular border location.

Commercial inspection areas consist of primary inspection lanes; a secondary inspection area that includes a commercial lot, staged parking, and commercial docks; and export inspection facilities. Commercial inspection areas should be well defined with fencing and other security measures preventing general access by the public.

Commercial Primary Inspection Lanes

The primary inspection area for commercial vehicles includes the lanes, booths, and a canopy for performing the initial screening of commercial traffic entering the U.S. With the exception of the smallest ports, trucks are routed to a separate primary inspection area from the non-commercial vehicle traffic prior to inspection.

Once the commercial vehicles pass through a primary inspection, those requiring further inspection are sent to the dock or specialty inspection facilities. Upon completion of inspection, they rejoin the rest of the traffic before exiting the port. Commercial traffic should flow in a counter-clockwise direction around the commercial dock to avoid the truck's right-side blind spots.

Commercial Secondary Inspection Area

For secondary inspection, a commercial facility can be located to the right of the primary inspection canopy, with commercial docks on the U.S. side of the building. This allows commercial vehicles to pass through primary, then back up to the dock without turning around. This area normally contains part of the commercial inspection dock to house staff and operations. It includes a supervisor's office, a reception area, a duty-collection counter and a "general order" storage warehouse for detained goods. Larger ports have more specialized areas for performing inspections, including separate offices for the legacy agencies. The building may also contain a CBP Agriculture PPQ laboratory.

The following are functions and facilities in the commercial secondary area:

- **Commercial lot and staging parking:** This area is for vehicles that require only regulatory inspection, document processing, and payment of duties and tariffs, or for those waiting for available dock space.

- **Commercial dock:** Physical cargo inspection is performed at the commercial dock. This dock is a raised platform where trucks unload their goods for viewing by the inspectors. The commercial dock is normally attached directly to the commercial building, allowing inspectors on the dock to have direct access. The dock and commercial building are often arranged in a linear or pinwheel formation. The dock can be attached directly to the main building with commercial building functions located within the main building.

- **Truck Scales:** Truck scales are used to determine the weight of cargo and to determine if the vehicles are within the DOT weight limits for vehicles on U.S. roadways.

- **Bulk Materials Inspection:** Any dry cargo shipped in bulk is unloaded into a concrete bin and inspected.

- **Hazardous Materials Containment Facility**

- **Empty Truck Inspection:** Commercial vehicles without cargo may be inspected for contraband or foreign national smuggling.

- **Vehicle and Cargo Inspection System (VACIS) Truck Inspection:** At some large ports, gamma ray technology is used by CBP to produce x-ray-type images of vehicles and containers. VACIS technology uses a moving source and a moving detector that move along parallel tracks on either side of a stationary vehicle.

- **Pallet X-ray Inspection:** The X-ray machines are located on the dock, in a building, and pallets of cargo are placed by forklift into the machine for an x-ray scan of contents.

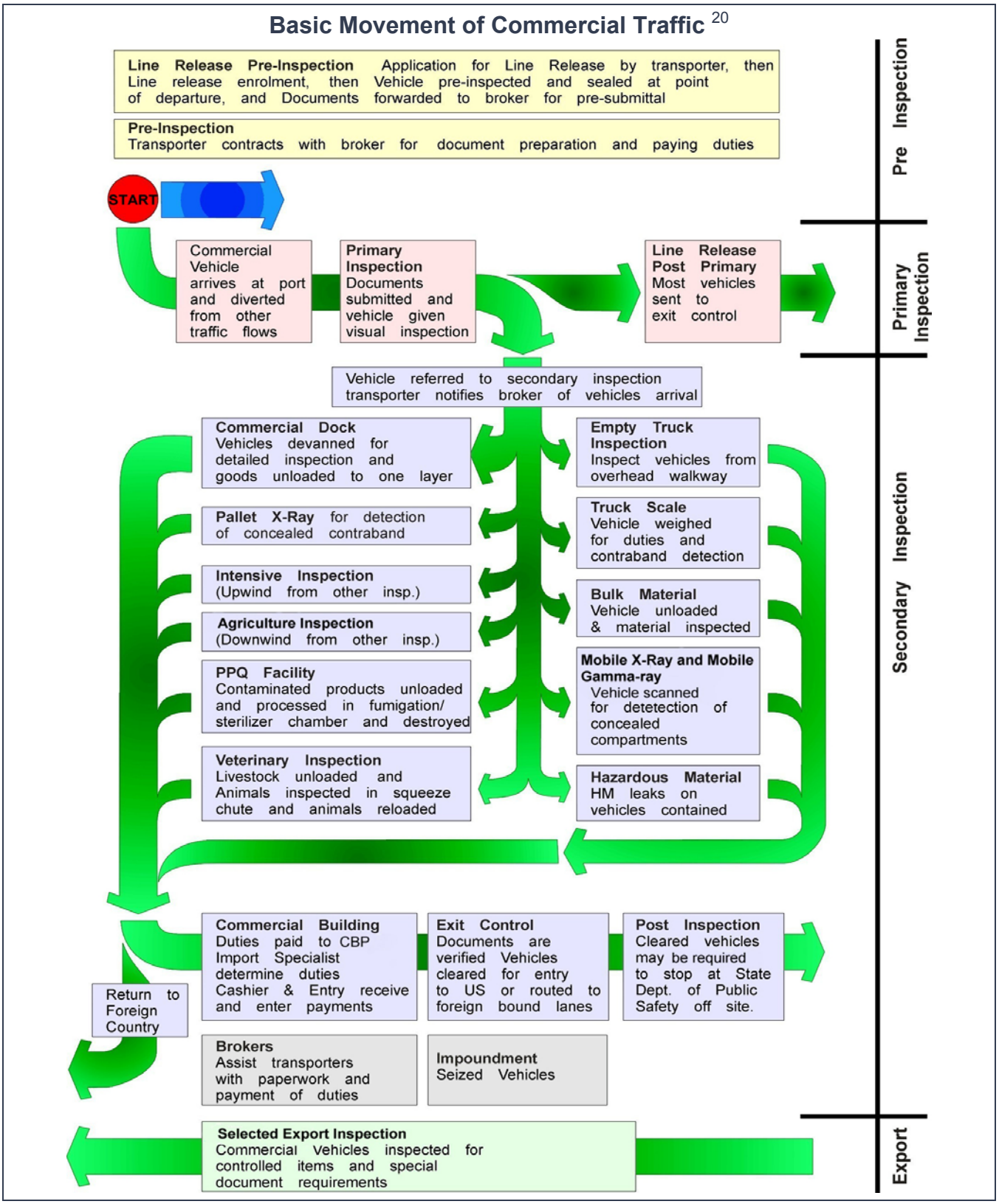
- **Plant Protection and Quarantine Facility:** Designated ports provide specialized facilities for the inspection, testing, and fumigation of plant material imported into the U.S.

- **Exit Control Booth:** A booth may be located at the exit point of the commercial inspection area to ensure vehicles leaving have cleared inspection.

Export Inspection Facilities

While vehicles exiting the U.S. are not generally inspected, some commercial vehicles do require inspection. Such facilities, where they exist, are smaller versions of the commercial inspection facilities, with primary booths, a canopied inspection dock, office structure, and exit control booths. Minor export inspection can be done at the general commercial inspection facilities, though this often represents a problem with traffic flow and control of the vehicle en-route to the border crossing.

Basic Movement of Commercial Traffic [20]



[20] Legacy INS Office of Administration, Facilities Division. Note: When possible, charts, graphics, and inserts have been changed to reflect new process titles resulting from the formation of the Department of Homeland Security and its various Directorates and Bureaus.

Current Land Exit Procedures

Most applicants at the Mexican and Canadian land borders are exempt from issuance of the I-94, *Arrival/Departure Record;* therefore, no entry or exit information is collected from the vast majority crossing at land borders. Those non-immigrants who are required to complete a form I-94 complete the form at entry, pay the $6 fee, and have the form adjudicated by a CBP officer. The applicant is given the departure portion of the form I-94 as proof of status while in the U.S.

The Form I-94 may be issued for a single entry, or, at land border POEs, it may be valid for multiple entries for frequent border crossers. A multiple entry Form I-94 can be issued to any alien who is otherwise admissible and has a need to frequently cross at land border POEs, such as Canadian landed immigrants and Mexican citizens or residents with a valid visa. In addition, nonimmigrant aliens reentering after short trips to Canada or Mexico with an un-expired Form I-94 will get an automatic revalidation and can be admitted for the time remaining.

Currently, the only exit procedure at a land border POE is the collection of the form I-94. The exit information is collected when a traveler returns the departure portion of the I-94. Individuals who are required to submit a form I-94 at entry do not always turn in the departure portion upon exiting the U.S., resulting in inaccurate records in the legacy INS Nonimmigrant Information System (NIIS). Canadian immigration officials collect some departure documents for CBP, and collection boxes for depositing departure form I-94 are in place at some border crossings.

Since October 1, 2002, National Security Entry/Exit Registration System (NSEERS) registrants have been required to report to legacy INS (now CBP) prior to departing the U.S. to enable the agency to verify their departure. Registrants are told where to report and what ports of departure are available to them.[21] Failure to have their departure verified or to meet other registration requirements could render the aliens inadmissible in the future or could preclude them from obtaining another visa in the future.

Current Deficiencies at Land Borders

The following data from CBP illustrate some of the current deficiencies at the land borders.

In FY 2002, 358 million land border entry inspections of people and 11 million inspections of incoming commercial vehicles were conducted at northern and southern land border inspection facilities. Land POE inspection facilities are owned or leased by GSA or other government agencies, or privately owned. Each land border POE is very different due to variations in geography, location, volume, types of traffic, etc., but all land border POEs are experiencing shortfalls in terms of facilities.

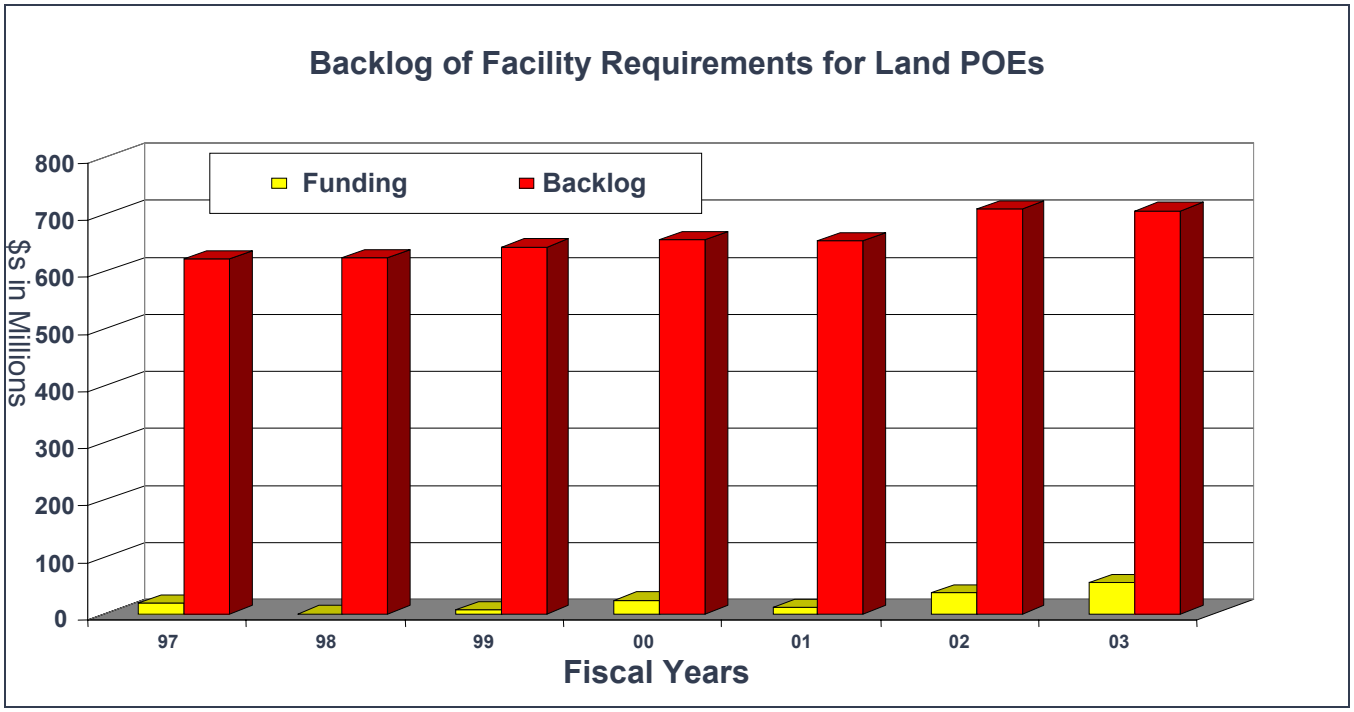
[21] There are 51 land border, 37 air, and 16 sea ports of departure.

The legacy INS Office of Administration reports the following shortages in space for the federal inspection area (that includes pre-primary, primary, secondary, secondary processing, and post-secondary until exit) at land border POEs:

- 64 ports have less than 25 percent of required space;
- 40 ports have between 25 and 50 percent of required space;
- 13 ports have between 50 and 75 percent of the space required; and
- Some existing ports lack any land for expansion.

Resources to expand and improve the infrastructure to support growth in workload and staffing have not kept pace, creating infrastructure weaknesses. CBP reports that there are no updates or changes in these statistics since 2001.

The graph below illustrates the gap between funding provided and actual space required at the land border between Fiscal Year 1997 and Fiscal Year 2003.



Task Force Observations of Land Border POEs

This section includes descriptions of issues, innovative concepts, and facilities that the Task Force observed at land borders during the site visits made this year. The following are some of the issues observed that are generally applicable to all of the land border POEs visited.

Space, Design, and Environmental Constraints: The majority of land border facilities are severely constrained due to space and design limitations. The U.S. is unable to expand existing facilities, as the federal government does not own the majority of adjacent land and property. The U.S. Environmental Protection Agency (EPA) environmental impact and review

processes can make build-out lengthy, expensive, and burdensome. Streamlining the EPA environmental impact and review process would save time and money.

Inadequate Infrastructure at POEs: Ingress and egress infrastructure for land border POEs are often inadequate for expedient processing of travel and trade. Deficiencies in infrastructure are based on current inspection models and methods at most POEs and do not factor in new processes, such as US-VISIT, and any new requirements for additional technology and infrastructure.

The make-up of a land border port is comprised of a number of individual, yet integrated elements, each having its own characteristics and capacity limitations. Those elements needing to be individually considered are:

- Transportation routes feeding a port (normally a road or highway), are usually limited each direction. Capacity constraints are governed by the posted speed limit conditions and volume at peak.

- Approach roadways can vary in the number of lanes in each direction. Capacity constraints are the number of lanes, access ease, traffic lights, presence of cross streets, and entry/exit points along the roadway,(i.e., commercial, duty free) and signage.

- Plaza physical layout, space, the number of booths, the number of lanes can limit capacity. Capacity constraints are layout, traffic patterns, inspection staff available, and capability of processing systems/elements.

- Border crossing lanes, bridges, tunnels, and highways also have varying numbers of lanes. Capacity constraints are the number of lanes, traffic mix and volume, and hours of operation.

Along with the infrastructure, the capacity of a facility also depends on resources, staff, technology, and procedures. To achieve the optimum flow at a port, the use of traffic management, adequate signage, and maximized use of pre-designation processes, such as the Free and Secure Trade Program (FAST), Border Release Advanced Selectivity System (BRASS), Prearrival Processing System (PAPS), etc., for low-risk goods and NEXUS and SENTRI for travelers, will provide for a facilitated entry process (see Chapter 3 for more information on these processes). As of August 2003, approximately 81 percent of vehicles crossing the northern border were passenger cars.[22] An effective way to enhance both economic and physical security is to promote greater participation in these types of voluntary enrollment programs to help the inspection agencies secure valid, safe, and reliable pre-arrival information on both travelers and cargo whenever feasible and cost-effective.

Lack of Space for Facilitation of Pre-enrolled Travelers: Dedicated lanes for the facilitated inspections of known travelers/goods are not proportionate to other POE lanes of traffic. The number of dedicated lanes needed at a POE is contingent on the volume of traffic that consists

[22] Bridge and Tunnel Operators Association Traffic Report 2002-2003.

of known travelers/goods; some POEs need more dedicated lanes or the capability to convert regular lanes back and forth to dedicated lanes as traffic warrants.

Insufficient Roadways: Public highways and roads leading to the POEs, on the U.S. northern and southern land borders, are insufficient on both sides of the border. Some POEs have insufficient pre-arrival work areas to post technology and equipment, which would aid in the facilitation of traffic. An annual time-phased program could be used to systematically provide appropriate approach road upgrades to improve access, conditions, and capacity for passenger and commercial vehicles. FHWA[23] estimates that connections between the National Highway System and intermodal freight facilities such as ports are in need of $2.6 billion and $4.2 billion to maintain physical condition and accommodate expected traffic growth.

Environmental/Safety Issues: The backlogs in traffic as a result of the increased traffic demands at POEs are creating environmental hazards to the traveler waiting in long lines, the officer on the line, and quality of life on both sides of the border. The increased use of new technology sometimes causes concerns for those subjected to the processes. CBP radiation safety officers have addressed concerns regarding large-scale, non-intrusive technology raised by the public.

Need for Improved Coordination with Some Agencies: Commercial travel includes many types of inspections that, if not coordinated, require numerous stops at different locations prior to release into the U.S. There are some federal agencies not merged into DHS that impact certain commercial inspections and need to be better coordinated for the release of goods. Those POEs that worked with the state/local inspection agencies to streamline inspection stops have facilitated entry and saved on space.

DHS should engage with state and local transportation planning organizations and FHWA on long-term border infrastructure needs. It is critical to coordinate the long-range transportation planning that is necessary, not only to receive federal funds, but also to ensure adequate capacity and continuity of the infrastructure beyond the border and port areas.

Insufficient or Ineffective Use of Resources: Many of the known traveler/goods initiatives, which provide for traffic facilitation and increased security, are under-funded and rely on periodic infusions of capital. This undermines the programs' effectiveness and management.

[23] U.S. Department of Transportation, 2002 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance, Report to Congress, January 2003, chapter 25.

Inadequate Technology: Technology could be leveraged and applied for more effective targeting, resulting in quicker unloading, lessening inspection time for commercial vehicles. Likewise, if some screening equipment were mobile, inspections could be done more efficiently.

Non-commercial vehicles entering the U.S. from Mexico await their turn to go through the primary inspection area at the world's busiest land border crossing, San Ysidro POE. May 2003

The following are examples of innovative concepts for facility design and construction projects at POEs that the Task Force observed.

"Turn-Key" Approach: Task Force members visited the Otay Mesa POE on May 1, 2003. The tour included an overview of the primary and secondary processing for vehicles and trucks, the use of SENTRI, and the SENTRI enrollment center. The SENTRI enrollment center was of particular interest, especially the use of a "turn-key" approach to building the new center, which saved time and money. Task Force members also were impressed with the processing center for trucks. While in the vehicle secondary area, Task Force members saw CBP officers conduct a search that resulted in a narcotics seizure.

CBP K-9 team in the background aided in the discovery of marijuana in a non-commercial vehicle attempting to enter the U.S. from Mexico. Otay Mesa POE. April 2003

Otay Mesa, the SENTRI enrollment center, has worked to minimize the backlog of applicants and to make the enrollment process more efficient through improvements in facilities and technology. A senior field manager gave Task Force members an overview of the enrollment center. The center uses 24 contract personnel, an improved telephonic appointment system, and state-of-the-art technology and facilities, which have improved the enrollment process immensely. At one point, there were 15,000 people waiting for an appointment to enroll in the program; currently, the number has been reduced to 1,800. The average time a potential enrollee spends at the enrollment center has been reduced from over an hour to less than 10

minutes. The number of admissions using SENTRI has doubled. The facility itself was remodeled completely in 90 days due to the use of a “turn-key” approach that used an outside contractor in addition to GSA. Although this center is hugely successful, there are still concerns. Among them is the need for support staff (which often is not authorized), constraints due to land capacity, and lack of a regular funding stream for SENTRI.

The Otay Mesa POE is also the closest truck crossing port into the San Diego region. The truck inspection area handles 6,000 trucks a day, up from 1,600 in 1998. There are seven entry gates and BRASS is available with 400-500 trucks a day using it. The facility includes a VACIS system to conduct a non-intrusive inspection on a percentage of the trucks passing through the POE.

Joint Facilities with Canada: The U.S./Canada Accord provided that the two nations would share inspection facilities at numerous locations along the northern border. The result is a more efficient process for the traveler and cost savings for both nations. There are currently two locations that are joint facilities: Oroville, Washington, and Sweetgrass, Montana.

Non-commercial vehicles entering the U.S. from Canada via the shared facility at Sweetgrass, MT. The enclosed walkway above the road marks the international border between the U.S. and Canada. Sweetgrass POE.

The Sweetgrass facility is situated to take advantage of the topography so that the two-level building straddles the U.S./Canada border and has ground access on both stories. Northbound traffic approaches the facility on the east side of the building where Canadian officers conduct inspections at ground level. Southbound traffic approaches the west side of the building, where the second story of the building is also at ground level. There are shared rooms on both the U.S. and Canadian sides. There is a separate cargo building for Canada because of the traffic pattern, and the U.S. cargo area is attached to the main structure. The layout allows for a unique sunken bay for the forklifts to approach the truck from both sides and the rear. A wire mesh fence with electronic gates marks the border across the interior of the building, which prohibits unauthorized access to the other country.

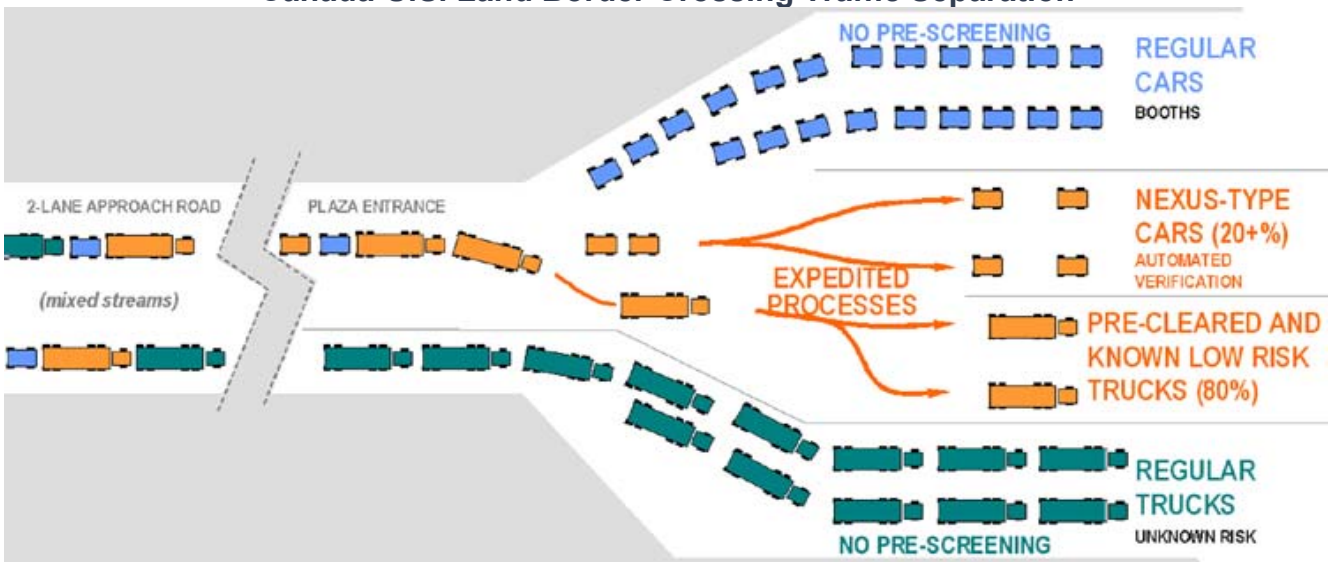
This walkway above the main road at the shared facility in Sweetgrass, MT marks the international border (red chain link fence) between the U.S. and Canada. Sweetgrass POE

Traffic Access to Primary Booths: The management of traffic flow to provide access to the primary processing booths, especially during high-demand periods, is a crucial element in dramatically reducing congestion, costly delay, and environmental discharges of carbon monoxide, hydrocarbons, and nitrous oxide. Physical reality and constraints at the border crossings are factors that must be addressed. Trucks using the new, low-risk, commercial system FAST, other low-risk trucks, and the handling of empties are all currently impeded by the physical inability to reach the primary booth for processing. Empty trucks sitting idle is extremely costly to the shipper and the carrier and also results in wasted fuel and other negative environmental impacts.

Trucks need to be separated so those that are prepared and/or participate in programs for known travelers/goods are processed in tandem without waiting needlessly in a line. Often these trucks must wait behind vehicles that are not prepared and require additional time at the primary booth. Trucks enrolled in programs for known travelers/goods should be authorized to drive in designated lanes of the approach road with cars. The enrolled cars and trucks would then separate from other traffic when they arrive at the plaza entrance for their respective inspection areas. All other trucks should be in the non-designated lanes of the approach road queue and enter the plaza to be processed in the other truck primary booths (if two or more booths are installed) as illustrated in the graphics below.[24] A comparable process could be applied for cars.

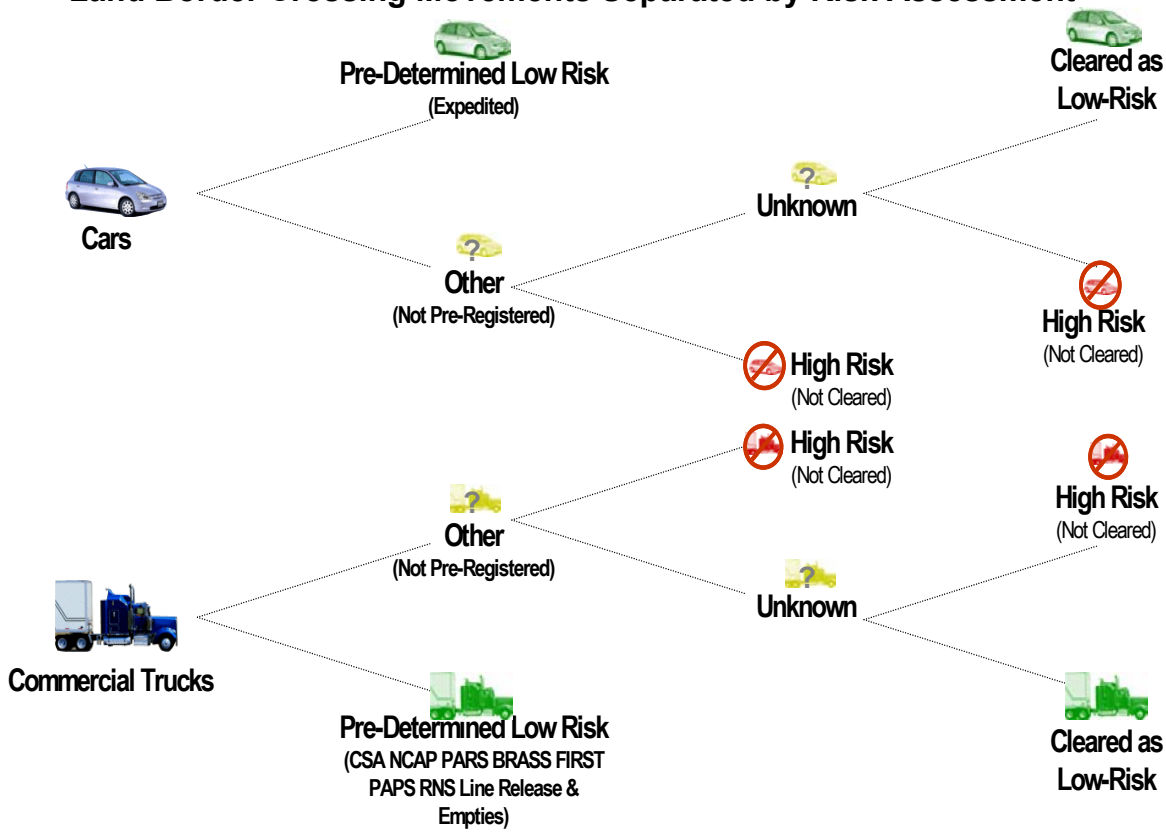
[24] *Perimeter Clearance Strategy*. Available at http://www.intervistas.com/perimeterclearance/

Canada-U.S. Land Border Crossing Traffic Separation



Applicable for Entrance in Either US or Canada And Either In-Country, or In-Other-Country

Land Border Crossing Movements Separated by Risk Assessment[25]

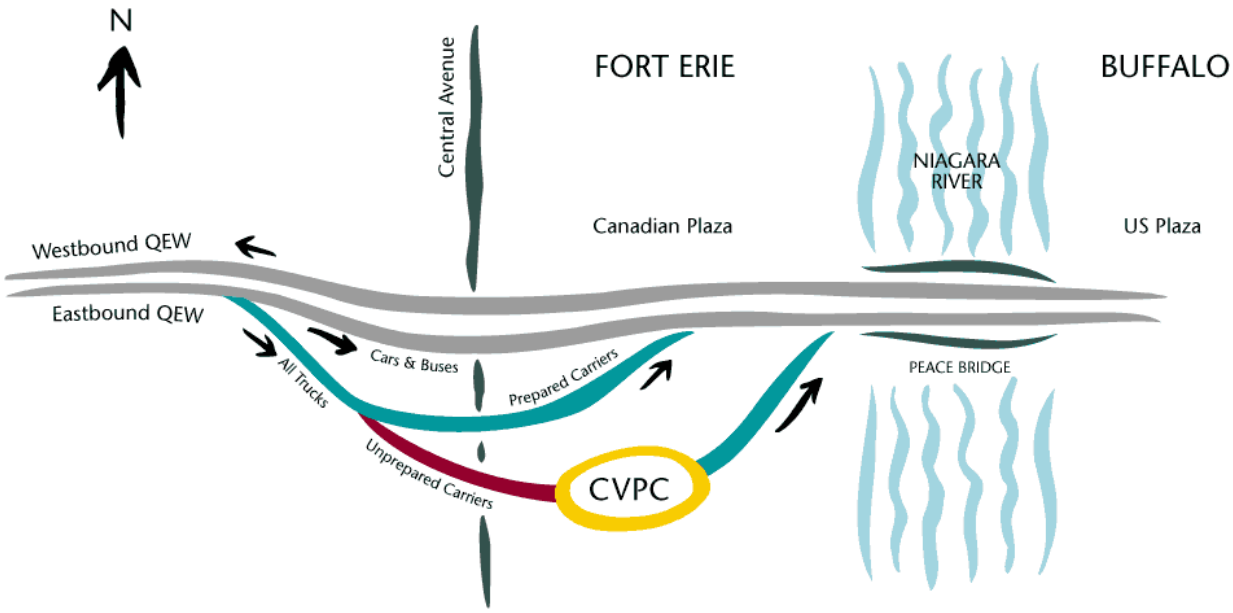


Note: CSA = Customs Self Assessment; NCAP = National Customs Automation Prototype; PARS = Pre-Arrival Review System; BRASS = Border Release Advanced Screening and Selectivity; FIRST = Frequent Importer Release System; PAPS = Pre-Arrival Processing System; RNS = Release Notification System

[25] *Perimeter Clearance Strategy*. Available at www.intervistas.com/perimeterclearance/

Commercial Vehicle Processing System: Depending on the volume of trucks using PAPS, the commercial vehicle processing center (CVPC) should be introduced on approach roads downstream where trucks would stop briefly to have their papers put in order and faxed to their broker. The broker would then transmit this data to CBP while the truck proceeds to the crossing. The truck can then be processed at the primary booth more quickly. If a truck is already participating in PAPS or FAST, it does not have to stop at the CVPC. The use of PAPS, FAST, and a CVPC system can result in more efficient use of limited lanes, bridges, and other crossings and move known travelers/goods more quickly. The CVPC system, as depicted in the diagram that follows, is currently used at the Peace Bridge crossing in Buffalo, New York, and has proved to be effective.

Diagram of Commercial Vehicle Processing Center (CVPC) [26]



[26] http://www.peacebridge.com/cvpc.php

The following are observations of other land border facilities and operations that the Task Force observed.

Train tracks cut through the border (gateway) between the U.S. and Mexico and the downtown area of Nogales, Sonora and Nogales, Arizona. Nogales POE. June 2003.

Nogales: Task Force members visited the Nogales POE on the morning of June 24, 2003. CBP and DOT officials gave them a briefing on the Nogales and Mariposa POEs. During the tour of the Nogales POE, the Task Force observed that a major concern in the POE is constrained facilities and infrastructure. The town of Nogales has grown so much around the port that any type of expansion will be problematic and expensive. Another factor that inhibits any type of facilities and infrastructure expansion and modernization is that the International Boundary between the U.S. and Mexico is only 10 feet from the U.S. CBP primary inspection booths. Task Force members observed that CBP officials were still able to process the pedestrian, private vehicle, and train traffic that went through the port in a very efficient manner, given the challenges that they

Ten feet from the U.S. primary inspection area (in foreground, not shown), red and yellow raised markers on the ground indicate the international border between the U.S. and Mexico as non-commercial vehicles leave Nogales, Sonora to enter Nogales, AZ. Nogales POE June 2003.

face, largely due to strong working relationships among federal, state, and local governments and private industry groups.

Commercial vehicles entering the U.S. from Mexico going through the commercial primary inspection area. This area consists of the large warehouse-type building in the background, where the vehicles are weighed; receive a visual inspection; and get checked for weapons of mass destruction. They then move on to the "superbooths" to present themselves and their paperwork for inspection. Mariposa POE. June 2003

Mariposa: The Task Force visited the Mariposa POE on the afternoon of June 24, 2003. In the briefing earlier in the day at the CBP field office in Nogales, they were told that the Mariposa POE processes the largest amount of agricultural products in the U.S. The Mariposa POE is mainly a commercial port with some private vehicular traffic but, like the Nogales POE, Mariposa is constrained in its facilities and infrastructure. The Task Force was told that in the recent past many of the groups that worked in and around the port were very territorial and did not have good working relationships. The increasing volume of commercial traffic brought these groups together to work out an arrangement. This arrangement became the basis of the excellent working relationship that exists among these federal, state, and local governments and private industry groups today. This relationship is epitomized in the "super booths" in which CBP officials work side-by-side with Arizona DOT officials to efficiently process commercial traffic entering the U.S. from Mexico.

CBP officer using a portable radiation device to detect any traces of radiation on a commercial vehicle entering the U.S. from Mexico. Mariposa POE. June 2003

During the tour of the facilities at Mariposa, the Task Force members were shown some of the new processes and procedures that have been implemented since

September 11, 2001. Foremost among them was the portable radiation detectors that all CBP inspectors were issued as part of their array of gear. Task Force members also observed mobile x-ray and VACIS machines that aid CBP officials in making more thorough, yet unobtrusive, inspections of commercial goods entering the U.S. Finally, the Task Force members witnessed first-hand the importance of the human element in the border management process when they were privy to a drug bust that was the result of a CBP officer's intuition. The officer sent a commercial vehicle for a more thorough secondary inspection based on a "hunch," resulting in the discovery of over 30 kilos of drugs that were hidden in the vehicle.

CBP mobile x-ray unit making an unintrusive inspection of a commercial vehicle in the commercial vehicle secondary inspection area. Mariposa POE. June 2003.

El Paso: The Task Force members visited the El Paso area POEs on June 25, 2003. They were briefed by a senior field manager and staff about the operations, procedures, and challenges that they face at the land borders and airport. One of the points that CBP officials emphasized during the briefing was that given all the challenges, the El Paso-Ciudad Juarez community was able to accomplish a tremendous amount because of the effective working relationships among federal, state, and local governments, private industry, and Mexican officials.

This close working relationship was evident when the Task Force was taken to Bridge of the Americas (BOTA) POE. While the Task Force members were on their way to BOTA, CBP officials were told that there was a bomb threat, and all traffic to and from the U.S. and Mexico was stopped. Bomb threats are not an uncommon occurrence in El Paso. CBP officials maintained constant communication with their Mexican counterparts.

While BOTA was devoid of pedestrian, commercial, and non-commercial vehicle traffic, the Task Force was briefed about the operations at the POE by other CBP officials in a safe area. Due to a treaty between the U.S. and Mexico, use of BOTA is free, which leads to a large volume of traffic, even though other nearby fee-based crossings are quicker. Again, the Task Force observed that the facilities were very constrained. Space was so limited, in fact, that the commercial cargo brokers' offices were in a corner of the secondary inspection area. This placement causes security problems for the POE, as they have to allow public access to those offices through secure areas of the POE. The Texas DOT owns a large, empty lot right next to the POE that commercial vehicles have to go through after leaving the FIS area. Many Task Force members noted that this coordination of process and space might be optimized.

Commercial brokers returning to their modular offices in the commercial vehicle secondary inspection area as commercial vehicles entering the U.S. from Mexico line up on the Bridge of the Americas for their turn at the commercial vehicle primary inspection area. Bridge of the Americas POE. El Paso, TX. June 2003. (This section can be seen in an aerial photo of POE at the beginning of this chapter.)

Empty Texas state Department of Transportation commercial vehicle lot which is adjacent to the Bridge of Americas POE. El Paso, TX. June 2003.

At the end of the Task Force's tour at BOTA, the bomb threat was lifted and traffic across the bridge resumed. The Task Force traveled from BOTA to the dedicated commuter lane bridge at Stanton Street for a tour of the SENTRI facilities. This location is unique as the entire bridge crossing and POE is for dedicated commuter lane traffic only. Task Force members were about leave for the nearby Paseo Del Norte POE when CBP officials were notified of a new bomb threat. As one official remarked, "This is reality here in El Paso."

The next day Task Force members were able to visit the Paseo del Norte Bridge, through which the bulk of pedestrian traffic between El Paso and Juarez passes, although the bridge also processes vehicles. The Task Force observed immigrant and non-immigrant visa processing, Automated Biometric Identification System (IDENT) enrollment, and other secondary inspection functions.

Task Force members observed that the Paseo del Norte facility is older, and the working conditions are less than ideal. The cramped facility has semi-enclosed office areas, but a large part is open to pedestrians entering the POE through small doorways and exiting through a large open area covered with vertical strips of clear plastic, the purpose of which appeared to be to assist in temperature control. Ventilation comes from large fans that do not provide much relief from the oppressive heat. The Task Force spent time observing the pedestrian primary inspection process, and they noticed that the line seemed chaotic, with no queue management to help prepare people for primary inspection, resulting in more time spent at the inspection point rummaging through bags for documents and other items. This lack of queue management contributed to unnecessary delays and increased wait times for all. Private industry organizations that must continually move large numbers of people (for example theme park operators, stadium authorities, etc.) might be a source of assistance for facility owners and designers in addressing queue management and related facilities issues.

Pedestrians at the Paseo del Norte POE line up and present themselves for primary inspection. El Paso, TX. June 2003.

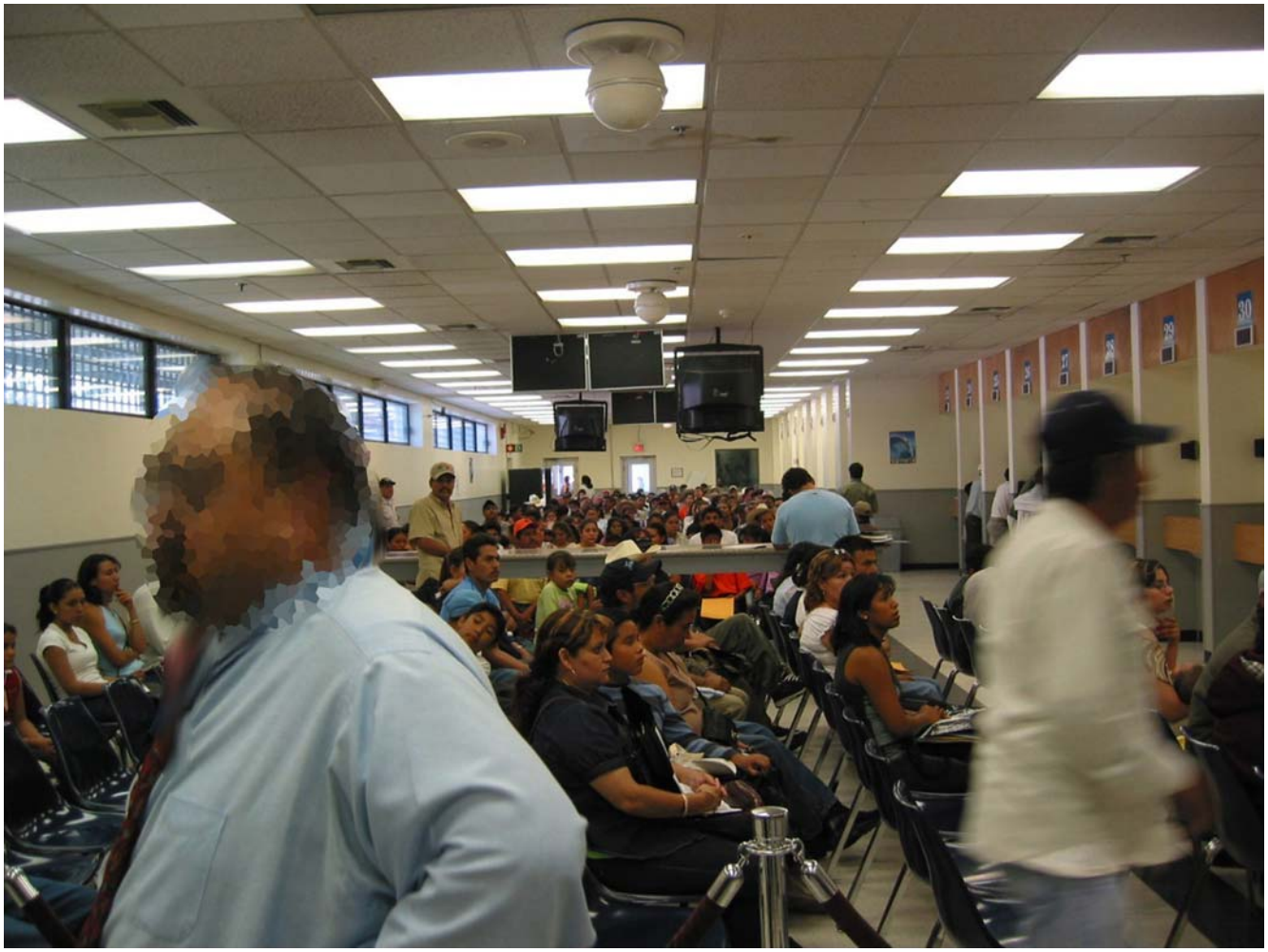
U.S. Consulate General, Ciudad Juarez: While visiting the El Paso area on June 25, 2003, Task Force members were invited to visit the Consulate General, Ciudad Juarez, Chihuahua, Mexico, which is the largest Immigrant Visa (IV) processing center in the world. The Task Force was impressed with the efforts the staff makes and the handling of an immense workload in facilities that are inadequate. The Task Force observed that much of the paper-based process, and the extra space it requires, could benefit by leveraging more technology. The consulate in Juarez services American citizens and foreign nationals. Non-immigrant Visa (NIV) issuance increased from FY 99-FY 01 due to a mandate to replace Border Crossing Cards. During that time, this post issued about 1.5 million replacements, in contrast to 2002 when about 250,000 were issued.

The Consulate General has the largest IV processing center in the world, with an FY 02 IV caseload of over 70,000, as compared with the second highest IV processing post, Manila, which had an FY 02 IV caseload of over 51,000.

Facilities are a major issue at the Consulate in Juarez. There are several separate buildings in the compound that have been gradually added to accommodate growth over the years. There is no longer any room to expand within the compound, and there are no buildings nearby that meet DOS security requirements. The result is a lack of administrative, office, and storage space (for storing files and paperwork). Hundreds of applicants are forced to wait for long periods of time outdoors. The post has made every effort to install awnings, fans, water-cooling systems, and seating to make these areas as comfortable as possible. Changes in the law have required the DOS to take on additional functions to the visa process, such as fingerprinting, compounding the space shortage situation.

The Consulate is also impressive in terms of cooperation and coordination. As a member of the Border Liaison Mechanism, they help develop agendas for regularly scheduled meetings between Mexican and U.S. officials. Border Liaison Mechanism members have been able to respond quickly to developing problematic situations. The Consulate also works with CBP, other U.S. government entities, and Mexican government counterparts to facilitate cross-border initiatives.

Applicants awaiting to be called for the interview portion of the immigrant visa process. U.S. Consulate, Ciudad Juarez, Mexico. June 2003.



Applicants awaiting their interview with a Consular Officer. U.S. Consulate General, Ciudad Juarez, Mexico. June 2003.

U.S. Border Patrol, El Paso Sector: On June 25, the Task Force members joined members of the USBP El Paso Sector for a nighttime border tour. The El Paso sector consists of 180 miles of border, 109 miles of which are river. The sector is responsible for a total of 125,000 square miles, has 12 stations, six permanent checkpoints, and 1100 agents. The agents take part in a variety of operations such as traffic checks, K-9 patrols, train checks, horse patrols, among others.

The first part of the tour took the Task Force along a portion of the Rio Grande River that splits El Paso and Juarez. Here the Task Force observed the El Paso sector's line watch duties. As the agents drove along the riverbank, USBP vehicles were strategically and prominently placed along the route to deter the smuggling operators in the area. Much of smuggling and the crime generated by it has become more manageable due to various USBP operations and initiatives with the local community, enforcement authorities, and industry.

The Task Force was then taken into the hilly regions to see firsthand some of the rough terrain that may slow, but does not deter smuggling. At the top of the canyon, the Task Force saw a

truck-mounted infrared camera system that aids in detecting illegal entry across the border. The agent manning the unit that night remarked how much this system has aided in apprehensions of people illegally crossing the border even though this particular unit was an older model. The Task Force members also witnessed a USBP helicopter unit making a routine patrol along the border.

The Task Force then traveled to the Santa Theresa Border Patrol Station to tour the facility and get an overview of the horse patrol. En route to the USBP station, the Task Force members viewed the Santa Theresa POE, a small, yet very modern facility. At the USBP station, the agents showed the Task Force the different equipment that they use, including night vision aides, camera surveillance equipment and monitors, etc. There were many types of equipment that were broken or being "cannibalized" for parts all over the compound. The Task Force was told that this situation existed because much of the equipment cannot stand the rigors of the terrain and replacement equipment does not come down the pipeline fast enough to replace it; this applied to helicopters, four-wheel drive utility vehicles, and some all-terrain vehicles.

Task Force members were very impressed with what they saw and experienced on the border tour with the USBP El Paso sector. The agents maximize their skills and whatever equipment they have at hand to do their jobs the best way possible, but the Task Force also noted that newer, more reliable equipment would significantly help these agents.

A U.S. Border Patrol helicopter near the U.S.-Mexican international border which cuts through these peaks near El Paso, TX. U.S. Border Patrol, El Paso Sector.

U.S. Border Patrol agents on horse patrol. Courtesy of the U.S. Border Patrol.

U.S. Border Patrol sport utility vehicle out on routine patrol. Courtesy of the U.S. Border Patrol.

A U.S. Border Patrol Truck mounted infrared camera system. U.S. Border Patrol, El Paso Sector.

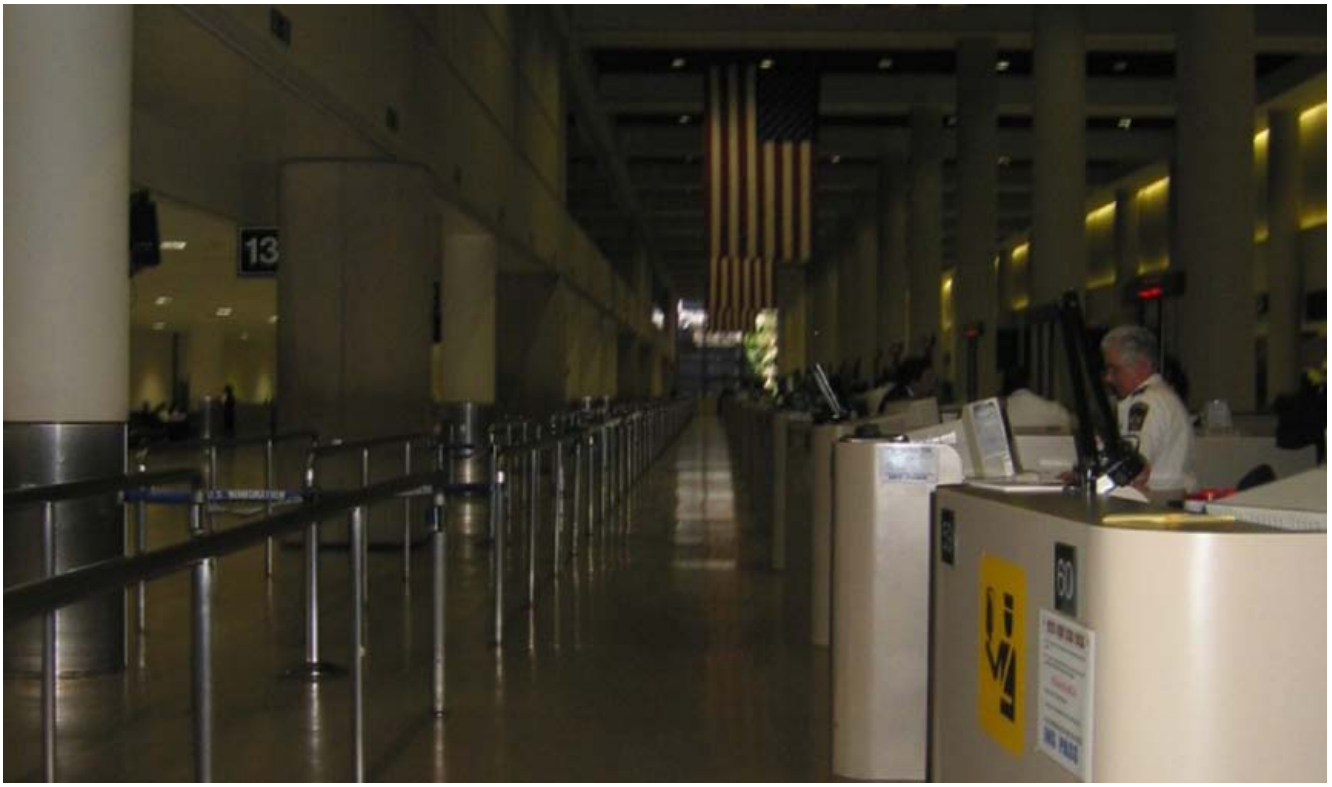
C. Airport Facilities

Aircraft arriving from foreign territories are inspected at POEs designated by legacy INS and USCS (now CBP). Carriers may disembark international passengers only at the 115 designated airports. Although the total volume of passengers is small in comparison to that at land borders, the inspection process is considerably more complex, reflecting the diverse nature of the people seeking admission to the U.S. at these types ports.

CBP officers process international passengers through inspection processing areas contained within a FIS area, which accommodates federal agencies and operates as the functional equivalent of a border. At air POEs in the U.S., the FIS area includes arrival gate vestibules, a secure corridor system, in-transit and VIP lounges, international baggage claim, passenger processing areas, and the FIS agencies' office and support areas. The FIS area is defined as the area from the door of an international arriving aircraft to the end of the inspection area, including all international gates, corridors, in-transit lounges, and inspection areas. The facility must be separated physically and visually from the domestic passenger operations and outside areas. The FIS area is designed so that arriving passengers or crewmembers cannot bypass the inspection area or interact with the public until admitted into the U.S.

The CBP processing area must include areas for customs and immigration inspections, but is currently undergoing review to reflect the new CBP "one face at the border" concept. Facilities are often constrained due to space and design limitations, as only a small percentage of U.S. international airports were constructed in recent years. Passenger processing during peak hours of operation can be delayed due, in part, to an insufficient number of CBP officers, additional security procedures required after September 11, 2001, and to the seemingly unavoidable scheduling of flight arrivals during the peak times preferred by travelers and therefore the aviation industry.

In addition to processing areas, airports must accommodate a command and control facility known as the joint agency coordination center (JACC), which is located directly beyond immigration inspection areas. The JACC, which could remain as a CBP command center, is where officers monitor and control the movement of international passengers and baggage, oversee processing, and coordinate law enforcement activities.

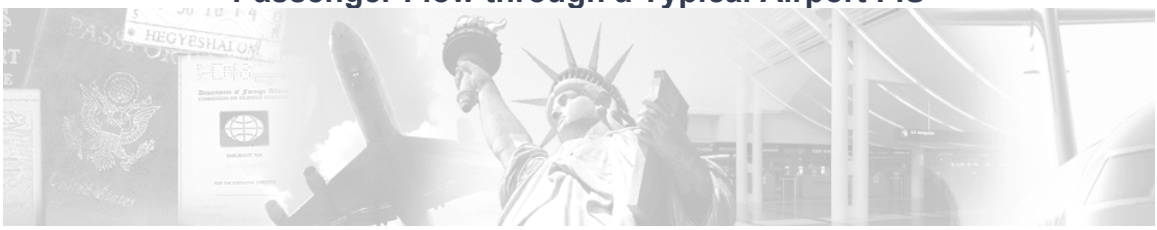


Primary inspection area at Bradley Terminal. Los Angeles International Airport. April 2003.

CBP (legacy) U.S. Customs Service) K-9 unit making their rounds at the baggage carousels at the Miami International Airport. August 2003.

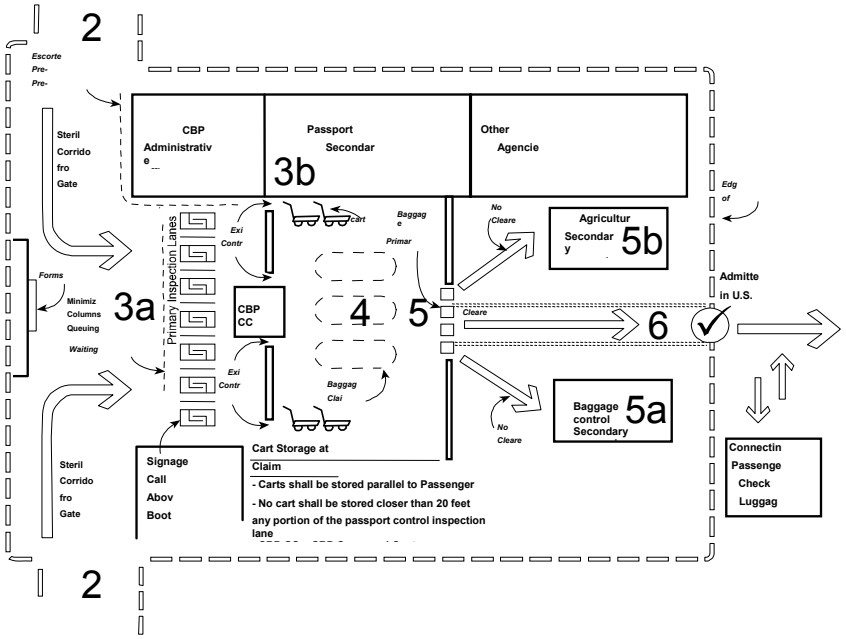
Airport authorities are the airport property owners who lease space to tenants, including air carriers. At the majority of U.S. international airports, planning, design, and construction (including associated costs) are borne by the airport operator and air carriers. The carriers bear these costs through lease agreements and other rates and charges from the airport authority. Also, FIS facilities must be built to CBP requirements as provided by the legacy INS and Customs Airport Technical Requirements (ATRs). These requirements are currently undergoing review as mentioned above to reflect the new CBP paradigm. The following graphic illustrates the passenger flow through a typical airport FIS. [27]

Passenger Flow through a Typical Airport FIS



Arrival Flow

1. Aircraft Arrival
2. Sterile Corridor
3a. Passport Control
3b. Secondary passport control processing
4. Baggage Claim
5. Baggage Control
   5a. Secondary baggage control processing
   5b. Secondary agriculture processing
6. Admittance to the USA



Arrival and Disembarking

Upon arrival of the aircraft, the passengers and crew disembark via the sterile corridor system that connects the aircraft exit door to the primary inspection lanes. The term “sterile” indicates that the design and security measures prevent the possibility of a crewmember or passenger circumventing inspection or the entry of an unauthorized commodity or prohibited items to the U.S.

[27] Legacy INS Office of Administration, Facilities Division. Note: When possible, charts, graphics, and inserts have been changed to reflect new process titles resulting from the formation of the Department of Homeland Security and its various Directorates and Bureaus.

The in-transit lounge is a sterile area located at airports where international-to-international (ITI) passengers arriving from a foreign country await their departure to another foreign country. ITI passengers are not admitted into the U.S. and must be secured in the in-transit lounge. ITI passengers access connecting aircraft via sterile, secure corridors. On August 2, 2003, the Transit Without Visa (TWOV) and ITI program were suspended for reasons of national security. [28]

Joint Agency Coordination Center (JACC): FIS agencies must be able to monitor and control the movement of international passengers and baggage, oversee processing, and coordinate law enforcement activities in a centralized JACC. The JACC position must afford the FIS agencies a clear view of passengers being processed at the primary inspection area and baggage claim area. There should be a 360-degree view of the baggage claim and primary inspection areas from the JACC. The JACC is part of the FIS areas previously mentioned undergoing review as part of the new CBP paradigm and could remain a CBP command center.

Passport Control Inspection Area: The passport control inspection area is where officers examine and screen arriving international passengers to determine nationality and/or admissibility to the U.S. and consists of primary and secondary inspection areas. The passenger areas consist of a forms counter, queuing area, primary inspection lanes (PILs) with booths, and support areas/offices. Queuing refers to the flow and direction of passengers in line for inspection; for example, there may be multiple lines of passengers in front of each set of primary inspection booths or multiple serpentine lines.

All passengers must appear for inspection by a CBP officer with any required passport, visa, or Form I-94. Primary inspection booths are equipped with the inspection tools including: enforcement computers and printers, telephone communications capability, passport readers, and enforcement databases including IBIS and National Automated Immigration Lookout System (NAILS), among others. Travelers approach the booth and their passport is scanned and information is searched through enforcement databases. The primary officer questions the applicant as to the purpose of application for admission, length of planned stay in the U.S., and other questions that the officer deems necessary. The applicant presents a completed admissions form that is signed and dated. If the primary officer approves the admission, the admission form is stamped, indicating the classification of applicant, date, and length of permissible stay. CBP officers must also determine if the traveler has any reporting requirements for merchandise, commercial cargo, currency, or agriculture, or if the traveler is a potential violator of any of these requirements.

If a primary inspection results in questions concerning the admissibility of applicants, they will be directed to either the passport control or baggage control secondary inspection areas, dependent upon their immigration status and type of potential violation. The secondary officers conduct certain types of secondary inspections in interview rooms, when available, so

[28] An interim rule published in the Federal Register August 7, 2003, provided that there is credible intelligence information concerning use of the programs by terrorist organizations. The comment period has ended and, at the time of this writing, the CBP is reviewing the comments and coordinating with other federal agencies as to a final ruling on the re-instatement, modification, or termination of the programs.

detainees are not commingled with the traveling public. The secondary inspection areas include a waiting area, interview rooms, search rooms, passenger processing areas, passenger detention rooms, and support spaces. The secondary inspection determines if applicants are admissible; required to pay duty and/or report currency transmissions; if they are in violation of any laws or regulations; or if they are wanted for arrest or further questioning by any other law enforcement agency.

Baggage Control: When the passenger has been successfully admitted into the U.S. through passport control, they continue to the baggage control area. The baggage delivery system is located between the primary inspection area and the baggage inspections areas. This helps reduce travelers' wait times by allowing time for the bags to be delivered to the terminal while the traveler is being processed for admittance. In the baggage control area, a determination is made by the officers to allow passengers to exit the inspection area with their baggage or to refer them to a secondary area for an agriculture or customs inspection. Once again, officers need adequate counters, inspection booths, interview rooms, search rooms, and support space. With the reorganization of the primary border inspection agencies, there may be a need to reconfigure the traffic flow and the multiple inspection areas to allow for a more unified process; however, as previously stated, the current configuration allows for inspection for immigration purposes while baggage is being transported from the plane to the inspection area. TSA requirements for rechecking connecting international to domestic flight passengers and their baggage has required additional space and, in many cases, impeded already overburdened FIS space and operations.

Current Air Exit Procedures

Air carriers were mandated to provide outbound electronic advance passenger information (API) on all visa waiver passengers and crew by January 1, 2003. The API regulation mandating outbound electronic API on all passengers and crew traveling on commercial aircraft is expected to be published in November 2003 for implementation in January 2004. The use of electronic API manifest information is in addition to the current manual submission of form I-94 as a method for recording non-immigrant travelers entering and exiting the U.S. This latter process is manual and does not employ any advanced information technology. The handwritten I-94 forms are collected from travelers by airline agents or at seaports upon departure. All I-94 forms are entered manually into NIIS and are not matched in an efficient and cost effective manner.

As travelers check in at a counter, ticket agents check for the proper travel documentation, such as a valid passport and onward visa to enter another country. If the departure portion of the form I-94 or I-94W is found in the passport, the agent pulls the form and stamps the back with the departure information and the date of departure. All of the departure form I-94s and I-94Ws are collected, bound together with the form I-92, and submitted as the departure manifest. Air carriers are required to submit departure manifests electronically, ordinarily right after the time of departure. The POE is responsible for reviewing and sorting the departure forms and forwarding them for manual data entry. In addition, POEs must obtain departure schedules and ensure manifests are received for all scheduled departing flights/ships. Those persons registered in the NSEERS program, must report to a port of departure prior to exiting the U.S. as discussed earlier this chapter in current land exit procedures.

Preclearance at Airports

Preinspection is when the immigration inspection of travelers is conducted at the foreign point of departure rather than upon arrival at a U.S. POE. When both the legacy immigration and customs inspection processes are performed jointly at the foreign point of departure, the process is called preclearance. Preinspection and preclearance permit agencies to intercept inadmissible aliens and contraband prior to their arrival in the U.S. Preinspection operations exist in Shannon and Dublin, Ireland. Preclearance operations exist in Aruba, the Bahamas, Bermuda, and at seven sites in Canada.

All preinspection operations exist under bilateral agreements between the U.S. and the host country. These agreements are negotiated by DOS on behalf of the inspection agencies and contain the terms under which the U.S agencies operate in the host country and the protection afforded to agency employees at these locations. The first agreements date from 1974. Legacy INS developed site criteria for the establishment of any new operations. Preclearance operations are funded by the CBP user fee accounts and are subject to the same constrictions as the expansion of stateside operations. Though IIRIRA directed the expansion of preinspection operations, expansion of the program to additional countries is not currently planned due to numerous issues, including reluctance on the part of the host country, cost considerations, and lack of adequate staffing for existing domestic operations.

The preclearance site in Vancouver, British Columbia, Canada, is responsible for the preinspection of all trains and cruise ships departing for the U.S from Canada in that region. Currently only the legacy immigration process is completed for these modes of transportation, which impacts the traveler with a two-stop clearance process. The advent of the “one face at the border” inspection process is intended to provide for a one-stop approach, saving time for both travelers and officers.

Transportation Security Administration (TSA) Facilities

The Aviation Transportation and Security Act of 2001 (ATSA), which established the TSA, also provided for the transfer of screening equipment from air carriers to TSA. It did not provide for the TSA space requirements such as break rooms for screeners and office space for managers. On October 1, 2002, TSA published the TSA Field Office Program Requirements to outline TSA space needs. The TSA requirements are similar to the FIS Guidelines and Technical Standards used by legacy INS and USCS. Unlike these other agencies though, TSA has no regulatory authority to impose these requirements on an airport, so a real estate office was established which, through GSA, leases the required space. The requirements are currently being revised.

TSA is working with the airlines and cruise lines to streamline the inspection processes through programs such as the Miami Synergy Project (which is detailed later in this chapter). It is of considerable interest for those cruise ship passengers and connecting airlines using the airport in that program as each passenger averages 1.4 pieces of checked baggage, and this program facilitates the transport and screening of baggage.

TSA screeners are now going through cross training for both baggage and passenger screening, since each process requires substantially different techniques and equipment. This initiative is commended, as it will beneficially increase the flexibility and capability of screeners.

Task Force Observations of Airports

During the various site visits the Task Force made this year, the Task Force observations of issues that are generally applicable to all of the airports visited. These issues are explained below along with specific observations from MIA.

Constraints due to Design and Space Limitations: Most FIS facilities at U.S. international airports were not designed and constructed to keep up with current levels of commercial passenger and cargo traffic. Further, new inspection processes introduced after September 11, 2001 require additional space, which is not readily available. The nation's airports have limited ability to expand due to space, structural, and funding constraints. The airlines and airport authorities are concerned that many of the policies and designs from the federal agencies developed at a high level often use a "cookie-cutter" approach to airports, without considering the individual differences of airports. Airport owners and operators and government entities should work cooperatively to incorporate innovative solutions, including leveraging automated technologies, to allow maximum use of constrained facilities.

Increased Inspections: With the implementation of enhanced U.S. Visa Waiver requirements and the introduction of US-VISIT at airports, existing infrastructure will not likely support increased queue lengths and processing times. U.S. international airports are currently designed to function only as POEs, not ports of exit. The design of airports must be considered when developing and implementing US-VISIT exit processes. US-VISIT must consider a combination of options, such as increased use of automated technologies in the inspection process, versus the assumption that airport facilities must be redesigned and/or expanded as those options are severely limited. (See Chapter 6 for a more in-depth discussion of US-VISIT.) The mandated baggage inspections conducted by TSA also significantly impact amount of available space.

Consolidating Federal Inspection Services (FIS): Current FIS facilities at U.S. international airports are already constrained to accommodate increased inspection processes and are not designed to meet changes as a result of the "one face at the border" concept. CBP is in the process of developing a unified inspection process, to every extent possible. These changes could result in unknown facilities and infrastructure needs at airports, but hopefully, will also result in efficiencies in use of space. As airport FIS areas are designed for multiple and independent inspection processes, future consideration must focus on streamlining the existing process, optimizing use of existing space, and increasing use of automated technologies in the inspection process.

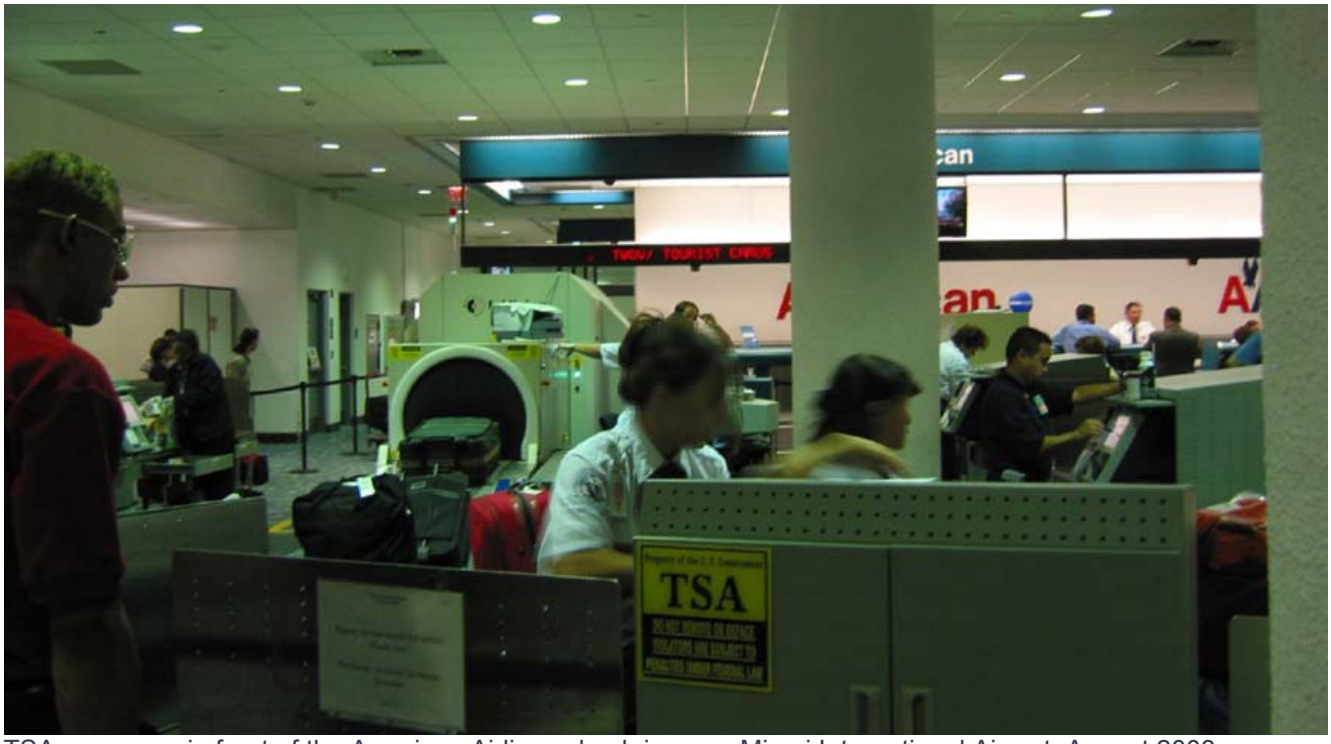
Use of Resources: U.S. international airports provide space to the Federal Inspection Services under approved FIS design requirements. Airports fund, design, construct and maintain facilities, with regular adjustments to meet the needs of the Federal Inspection Services. Airports secure funding for these facilities through rates and charges to the air carriers.

The Role of the Transportation Security Administration (TSA): The baggage mission of TSA has not been allocated sufficient resources and is understaffed. These staffing shortages in certain locations are compounded by inefficient placement of some detection equipment and contribute to ineffective use of already limited space. There is an increasing nexus to the role of TSA in determining the appropriate level and types of security programs related to the transportation of goods and people in and out of the U.S. Though such efforts, such as the Synergy project, are still in the initial phases, there is the possibility of impacts on the future designs of POEs, not just land borders, but at air and sea ports as well.

When the Task Force visited MIA, senior TSA personnel, local airport authorities, and select industry officials gave members an overview and a comprehensive tour. TSA screeners appeared to be effective, but plagued by shortages of resources including staff and space in which to work.

Over 51 million bags a year are checked at MIA by approximately 1,400 screeners, a reduced number as of September 2003. The screeners work passenger screening checkpoints and baggage screening locations (both indoors and out). The screening locations are severely constrained by the physical design of the airport, a circa 1950s core facility. The Task Force observed long lines of passengers waiting to have their baggage inspected by TSA next to the ticket counters; although the screening itself was done efficiently, there was no place for the passengers to line up to wait. Even more startling than the indoor screening areas were the baggage screeners working outside of the airport: some outdoors, others in an underground facility resembling a parking garage. The underground facility had vehicles moving the baggage in and out, creating exhaust fumes, moving belts and equipment were directly overhead, and lighting was insufficient. Outdoor screeners were working in the heat and humidity with inadequate fans; TSA personnel explained that the screening machines couldn't be placed outdoors because they frequently overheat and otherwise break down in the severe outdoor conditions, so screeners were doing mostly manual searches. In both instances, the noise and heat levels made working conditions uncomfortable and difficult.

The Task Force members observed that for reasons of security and increased efficiency, this "in-line" process is preferred; however, significant improvements are warranted. Officials stated that if equipment were more mobile or if passengers could be better routed, some of the problems would be eased. Officials also emphatically stated that airports need unique considerations, not "cookie-cutter" mandates and directives and that airports and airlines need to be included in the decision-making process.



TSA screeners in front of the American Airlines check-in area. Miami International Airport. August 2003.

TSA screeners underneath the Miami International Airport terminal screening checked luggage. Miami International Airport. August 2003.

D. Seaport Facilities

The nature of the seaport environment does not lend itself to traditional inspection facilities, as the majority of seaport inspections are conducted dockside or onboard the vessel. However, there are several inspection facilities that have been built for the inspection of passengers and crew arriving on cruise ships. When cruise lines or cargo vessels arrive at a seaport to which inspectors are not assigned, inspectors from a nearby airport are dispatched to perform the requisite inspection. While the inspectors are not "assigned" to these seaports, the majority of the seaports are staffed under the general airport roster. Shifts are assigned in accordance with various maritime schedules and ship itineraries to ensure inspection activities are covered within available resources.

AAPA commissioned a study, independent of the Task Force work, that provides for various recommendations on passenger/baggage flow, consolidation of function and space and design solutions in the seaport environment. According to this study, the North American passenger cruise industry is a rapidly expanding global industry. With an average growth of 8.4 percent during the last decade, it is playing a major role in the facilitation of passengers to destinations around the world. With capacity projected to increase each year, the future offers extraordinary opportunities and challenges. This increase in capacity is driven by a number of new ships coming into service. Between 2003 and 2006, ICCL member lines are expected to bring over 22 new ships into service. Among these will be mega-liners that can accommodate more than 3,000 passengers as well as smaller, more intimate luxury vessels. These new ships will create a greater demand for North American ports to build a number of new facilities, including mega-terminals that can accommodate the embarkation and disembarkation of thousands of passengers and provide the facilities for passenger and baggage inspections.[29]

Historically, passenger cruise terminals had no immigration processing facilities and only a small area for customs processing. The immigration process was traditionally performed by legacy INS inspectors directly on the vessel at dockside or, in some instances, onboard the ship prior to its return to the U.S. Requirements for customs processing were decided locally by legacy USCS. Both legacy agencies utilized this system until the mid 1990s when legacy USCS published new technical guidelines. At the same time, legacy INS centralized its decision-making process for design approvals to its main headquarters in Washington D.C. Currently, the CBP agriculture inspection requirements are set forth in the Technical Standards for legacy USCS.

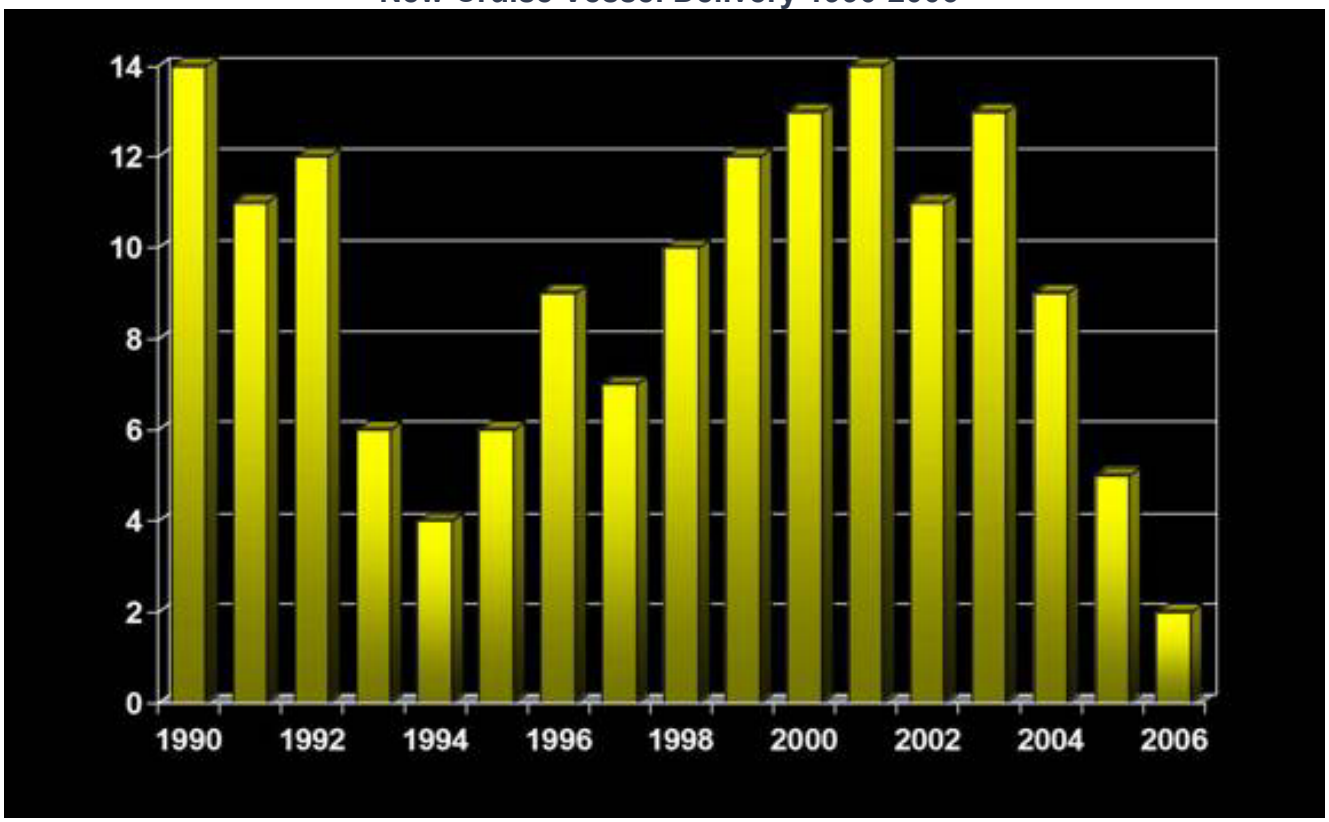
In late 1990, as the size of the cruise ships grew and the passenger numbers increased, legacy INS implemented land-based passenger processing at a limited number of cruise terminals. The limited resources, primarily staffing shortages, of the legacy INS and the need of the cruise industry to quickly turn these large ships around for the next outbound voyage were also factors in trying new processes to speed the inspections. The land-based or airport-style inspection flows were built in some locations for this purpose, allowing the inspectors to have a direct connection to the inspection databases to aid in the inspection process.

[29] Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. Available at www.aapa-ports.org

As the maritime industry continues to grow, cruise lines continue building increasingly large vessels. Over the past several years many new coastal cities have begun hosting cruise ship operations, creating the necessity for more and more airports to temporarily transfer staff to handle new seaport demands. CBP is seeking to integrate the inspection process to realize the greatest utilization of their workforce.

New cruise vessel delivery is the industry indicator of both worldwide and North American demand. The projected delivery of vessels shows a decrease in the next few years, but cruise lines expect to continue to order new vessels in the foreseeable future. The graphic that follows depicts new vessel delivery.[30]

New Cruise Vessel Delivery 1990-2006



Source: B&A, 2003

Facility space for cruise terminals is extremely limited in most areas, yet demand for space continues to increase. Since the creation of one border inspection agency, the future development, retrofitting, or construction of these facilities may require a variety of changes. In the past the requirements were interpreted differently from port to port, but now CBP is looking to create one unified seaport facility requirement with flexibility to meet local needs. The U.S. Government entities and industry must look at creative ways to make use of existing space, including sharing facilities with other agencies where possible.

[30]Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. Available at www.aapa-ports.org

The current requirements for processing passengers cost port authorities and the cruise industry millions of dollars. The placement of a cruise terminal is crucial in that it must accommodate vessel size, which dictates berth size, channel/harbor depth, turning radius, size of shore-side facility. The capability of moving people to transportation, security needs, and the assets required to be deployed by the inspection agencies are also considerations in the placement of a cruise terminal.

Some cruise industry representatives and seaport operators report that the result of the spatial and technical programmatic requirements mandated by the FIS agencies has had a dramatic impact on cruise terminal design and operation and has cost the ports and the cruise industry millions of dollars without adequately addressing the issues or achieving long-term solutions. Instead, it has created a number of problems including:

- Inconsistencies in FIS design standards due to excessive latitude given to staff for interpretation;
- Challenges with existing facilities that lack physical space to increase;
- Increase in construction costs and unexpected change orders, creating a financial strain on many ports; and
- Conflicts between agencies and ports due to under-utilized and under-staffed federal inspection stations in some locations.

With the merger of the legacy agencies into CBP, the “one face at the border” initiative is being incorporated system-wide. Implementation of “one stop” processing strategies continues on a case-by-case basis as existing facilities and passenger traffic are quantified nationwide.

CBP working groups are addressing the development of a unified set of facility design standards over the next year. The new design standards will eliminate programmatic redundancies and maximize space and operational efficiencies in the FIS facilities; they will incorporate and reflect the forward-thinking and new operational procedures of the CBP, together with the cumulative experiences and lessons learned by field agents nationwide. The new standards will also evaluate and integrate the best practices and technology standards available. However, during the interim transition period, the legacy agency facility design standards remain in effect.

Basic Movement of Traffic for Cruise Inspections

Generally, cruise passengers and crew inspection flows are similar to those of airports, but require larger queuing and luggage areas and fewer inspection counter areas, since passengers are predominantly U.S. citizens. There are currently two main designs for inspection of cruise passengers and crew: onboard (traditional style) or in a cruise terminal (airport style). Each has elements of efficiency but there are inherent challenges that go along with them. A third option, an en route inspection, is currently not operational as CBP has suspended all en route inspections due to security and resource constraints.

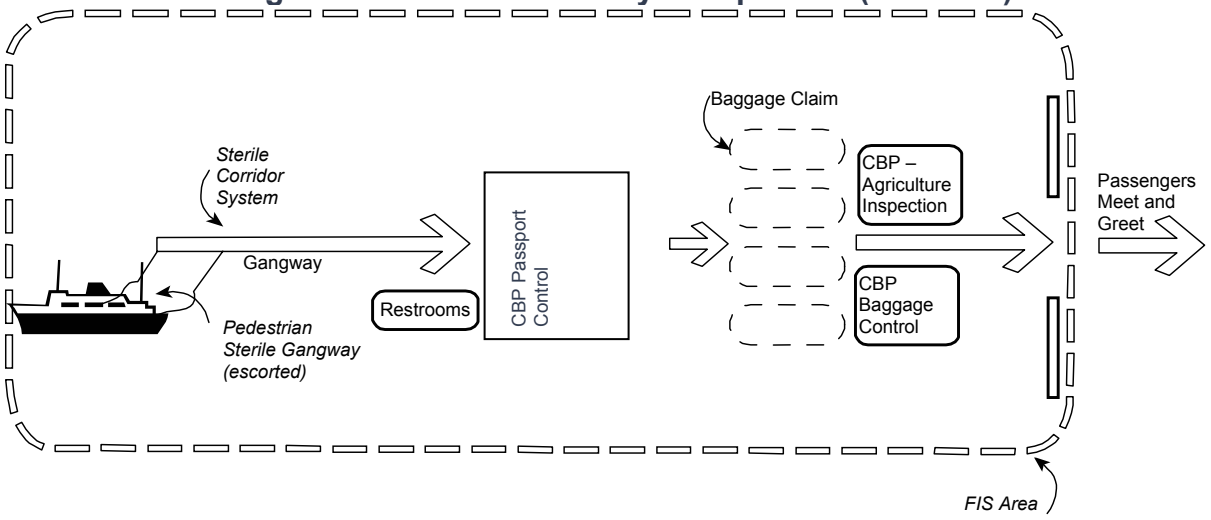
Traditional Inspection: Traditional or dockside inspection of vessels is arranged by the shipping agent with the local CBP office. Inspection must be complete before any other activities commence, such as cargo off-loading, conducting business with ship chandlers, etc. Ordinarily, the CBP officers are at the dock when the ship's gangway is lowered and are the first to board. Others waiting to do business are often directed to refrain from such activities until the inspection is completed to avoid interference with the clearance process. Ships are usually in port for a limited time, incurring substantial charges for stevedores and other related activities. It is critical that the federal inspection procedures are promptly and efficiently handled to avoid needless delays and increases to these costs.

Procedures for inspecting the crew of a cruise ship and a cargo ship are essentially the same, although the crews are considerably larger on a cruise ship. A typical cruise ship has 800-1,500 crewmembers, while a typical cargo vessel has 30-40. Because of the frequency of admission and the size of the crews, CBP policy (the 90-day waiver policy) provides for a modification of the ordinary inspection procedures for returning crewmembers on such vessels. A separate manifest or addendum to the manifest is provided by the master, containing the names of crew who must be inspected. Once the crew inspection has been completed, a Form I-410, Receipt of Crew List, is issued to the master of the vessel, in the same manner as for a cargo vessel. (Cargo processes are discussed in a subsequent section of this chapter.)

Some port facilities have a passenger terminal, with inspection booths provided similar to those at airports. In either case, there are often a large number of passengers requiring inspection in a relatively short period of time. The master or purser of the vessel provides a manifest, usually on Form I-418, *Crew Arrival/Departure Manifest*, of all passengers. A lookout query is required of all passengers, either at the time of arrival or in advance, using APIS. To minimize inspection time, U.S. citizen passengers who departed on the same cruise vessel are not required to report for inspection, but are briefly examined upon disembarkation. An oral declaration of citizenship is usually sufficient, unless further inquiry appears necessary. All other passengers must appear for inspection by a CBP officer at an appropriate location on the ship provided by the master, with any required passport, visa, or Form I-94. As each passenger appears, the manifest is noted with the action taken, executing Forms I-94 as necessary. Once all required passengers have appeared and been inspected, they depart the ship to collect their baggage for clearance.

Upon arrival of the vessel, the passengers and crew disembark (escorted) via sterile gangway into a sterile corridor system, defined as the corridors within the FIS area, connecting the gangway to the PILs. The term “sterile” indicates that the design and security measures prevent the possibility of a crewmember or passenger circumventing FIS agencies’ inspection or the entry of unauthorized commodities or prohibited items to the U.S. This process is the same for all inspection styles.

Passenger Flow – Traditional Style Inspection (Onboard)[31]



Passengers disembarking a cruise ship go through a passport control check, part of the traditional style inspection process. Port of Miami. August 2003.

[31] Legacy INS Office of Administration, Facilities Division. Note: When possible, charts, graphics, and inserts have been changed to reflect new process titles resulting from the formation of the Department of Homeland Security and its various Directorates and Bureaus.

Passengers going through baggage control, part of the traditional style inspection process. Port of Miami. August 2003.

Airport Style Inspection: Some port facilities have a passenger terminal, with inspection booths provided similar to those at airports. (See Passenger Flow through a Typical Airport FIS on page 54.) Similar to an airport, all passengers and those crewmembers that require an inspection are processed off the ship through primary booths. Each booth is equipped with the necessary computers, document readers, and scanners to allow the officer full inspection capability. Currently, cruise ships provide arrival manifests to CBP up to 24 hours in advance through APIS, similar to those submitted by the air carriers. In addition, manifest information is provided to the USCG 96 hours in advance. The inspectors verify the arrival of the passengers and crewmembers through this system.

After completion of the passport control inspection, the passengers collect their baggage from airport-style baggage carousels and proceed through the baggage process.

Airport style inspection process. Royal Caribbean Cruise Line Terminal. Port of Miami. August 2003.

En Route Inspection: CBP has currently suspended all en route inspection operations due to security and resource constraints. However, the process is being described below for informational and historical purposes.

Because of the large volume of passengers and crew on many cruise vessels and the rapid turnaround time required for off-loading passengers from one cruise and loading for the next, cruise lines often request that the immigration inspection be conducted while the ship is en route from the last foreign port back to the U.S. En route inspections shall not be conducted if reasonable and cost effective alternatives exist for conducting the inspection dockside. The inspection of passengers and crew on an en route is completed in the same inspection style as those done in a traditional inspection. They are typically conducted in a large room on board the vessel, during the course of the voyage back to the U.S. CBP officers would join the vessel to conduct the inspections at varying points, depending on the itinerary of the cruise and proximity to the US.

Ferry Operations

The CBP considers ferries to either be land border ferries or seaport ferries. In most cases, as with other types of inspection areas, space for inspection stations is very limited, making expansion of the processing area impossible.

Land Border Ferries: Land border ferries operate with the primary purpose of providing transportation of passengers and/or vehicles as a continuation of a highway from one side of a body of water to another; a service normally attributed to a bridge or tunnel. Since these ferries service an area where it would be reasonable to expect a bridge or tunnel to have been built, these ferry trips are short in duration and are usually near a CBP land border POE. The land border fee for services provisions for the issuance of Form I-94 apply to these ferries, and fees must be collected.

VWP signatory carrier requirements are not applicable for land border ferries. Applicants under the VWP who arrive on these ferries are subject to the issuance of I-94s and the collection of land border fees. Inspection and examination of persons on this type of ferry are conducted in the same manner as all other inspections at a land border POE.

Seaport Ferries: Seaport ferry operations go beyond a quick crossing and are more like other seaport operations. In this category, one could not reasonably expect a bridge or tunnel to be built in place of the ferry operation. These ferry trips, therefore, are usually long in duration, with some lasting several hours. Many cross the open seas and provide overnight lodging, gambling, and/or food service. These ferries often operate near a CBP seaport. All ferry operations that travel to the U.S. from foreign, adjacent islands are considered seaport operations since they meet most of the above criteria.

These ferries must be signatory to the VWP if they intend to transport aliens who will be applying for admission under this program, otherwise they are subject to fines if passengers arrive without visas (from non-contiguous territory). Carriers that choose not to participate in the VWP must ensure that non-immigrant alien passengers have valid visas. Inspection and examination of persons on this type of ferry are conducted in the same manner as all other inspections at a sea POE.

Current Sea Exit Procedures

Vessels were mandated to provide outbound electronic API on all visa waiver passengers and crew by January 1, 2003. The API regulation mandating outbound electronic API on all passengers and crew traveling on commercial vessels is expected to be published in November 2003 for implementation in January 2004. The use of electronic API manifest information is in addition to the current manual submission of form I-94 as a method for recording non-immigrant travelers entering and exiting the U.S. This latter process is manual and does not employ any advanced information technology. The handwritten I-94 forms are collected from travelers at seaports upon departure. All I-94 forms are entered manually into NIIS and are not matched in an efficient and cost effective manner.

As travelers check in at a counter, ticket agents check for the proper travel documentation, such as a valid passport and onward visa to enter another country. If the departure portion of the form I-94 or I-94W is found in the passport, the agent pulls the form and stamps the back with the departure information and the date of departure. All of the departure form I-94s and I-94Ws are collected, bound together with the form I-418, *Crew Arrival/Departure Manifest*, and submitted as the departure manifest. The POE is responsible for reviewing and sorting the departure forms and forwarding them for manual data entry. In addition, POEs must obtain departure schedules and ensure manifests are received for all scheduled departing ships. Those persons registered in the NSEERS program, must report to a port of departure prior to exiting the U.S. as discussed earlier this chapter in current land exit procedures.

Task Force Observations of Cruise Operations

The following are observations of issues and innovative solutions at cruise inspections facilities observed by the Task Force during various site visits.

Space Constraints for Cruise Inspections: Current FIS facilities at U.S. seaports that service commercial passenger cruise lines are often limited in expansion opportunities, as this would result in the loss of commercial property and associated revenue to the port authorities. According to a study conducted by AAPA, new FIS space accounts for 20 to 30 percent of the total construction program of a cruise facility[32].

Turn-Key Approach to Design and Construction: In Seattle, the Task Force saw another example of the turn-key approach they previously had observed at the Otay Mesa SENTRI enrollment center. In this case, a terminal was constructed in just 10 months to accommodate the growing cruise industry in Seattle. Originally, an older terminal was designated to be retrofitted; however, the size of the vessels that were intended for Seattle could not dock at that terminal without extensive dredging of the bay to allow for the draft of the ship. A different location, Pier 30, could support the size of the vessel without change to the bay, but it did not have a terminal in place. The city of Seattle, Port of Seattle, federal agencies, and cruise lines worked jointly, using a turn-key approach to design, construct, and open the terminal at Pier 30. The new facility came in modular pieces and was assembled in 10 months with the gangway completed in 4 months. The Task Force members were impressed with the fast construction and professional appearance of the building, as well as the collaborative efforts of all entities involved.

[32] Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. www.aapa-ports.org

Primary inspection area at Pier 30 at the Port of Seattle, a “turn-key” approach facility that was constructed in 10 months with the cooperation of city, port, and cruise line officials. Port of Seattle. July 2003.

Use of Resources: CBP staffs seaport operations in accordance with cruise line and cargo scheduling and operations. As a result, FIS areas are often utilized only when the ships are scheduled, such as weekends only at some locations. At other locations, they are utilized frequently. The use of FIS spaces typically depends on the level of vessel traffic in any given location and levels of staffing.

According to the study commissioned by AAPA[33], independent of the Task Force work, many of the terminals being built do not have the appropriate staffing levels assigned by the federal agencies to best utilize the space available, leaving FIS spaces frequently unoccupied or underutilized. A review of office needs should be done at cruise facilities to determine whether offices and support spaces are necessary, especially since most cruise passengers are U.S. citizens and manifests have been provided in advance. En-route inspections help reduce the backlog at cruise terminals during peak times, but they are not currently authorized.

[33] Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. www.aapa-ports.org

Consolidating FIS: The continued impact of applying the current design guidelines for FIS in new terminals will require between one and 2.1 million additional square feet of FIS spaces. The overall fiscal impact of these FIS facilities will account for $150 to $300 million in additional construction costs to ports in the U.S.[34] Discussion in Miami resulted in determining that industry uses the legacy INS and USCS Facility Manuals dated October 2002 and 2003 respectively. While these manuals provide excellent insight, it is apparent they need to be updated (for example the legacy INS manual specifies required administration space for FIS activities that now, under DHS, are housed in existing office space nearby). The end result of following the outdated manuals is design of new facilities that are oversized, with administration space that is no longer needed. This extra administration space amounts to significant square footage in the new facilities projected through 2010. These manuals are being updated to reflect the "one face at the border" concept for inspection processes, but these efforts by DHS towards consolidation will take time to fully achieve.

TSA Pilot Programs

Miami Synergy Program: This program is a collaborative effort between TSA, American Airlines, and Royal Caribbean Cruise Lines (RCCL) that was designed to alleviate overcrowding at airport screening areas when cruise ships arrive and passengers are shuttled to the airport to catch departing flights. Cruise ship passengers who are not screened as part of the Synergy program are brought to the airport where they stand in line outdoors (in the heat or rain) for an average of one hour waiting for their baggage to be inspected. Passengers who are screened as part of the Synergy Program take their baggage to a screening location at the seaport where the bags are inspected, and they are issued their airline ticket/boarding pass in an average of 12 minutes. The baggage is transported in bonded vehicles to the airport, and the passengers bypass the long baggage screening lines at the airport.

The Miami seaport off-site baggage screening program is currently running at the RCCL terminal for American Airlines passengers disembarking from one RCCL ship on Saturday and one RCCL ship on Sunday. Some additional passengers are also currently being processed through the terminal four operation after disembarking their cruise ship at terminal three. During the 29 weeks of operation, from February 1 through August 17, 2003, the Miami seaport baggage-screening program has averaged 1,000 passengers and 1,400 pieces of check-in luggage per weekend. TSA staffing limitations and screening equipment allocation/availability are currently the limiting factors to further expansion. The Task Force members were given a demonstration while in Miami of this program and also viewed the outdoor queuing area of MIA.

Vancouver Synergy Pilot: The Vancouver Synergy Pilot Program is a 3-month pilot for U.S. citizens who are passengers aboard RCCL ships who are traveling back to the U.S. aboard Air Canada flights at the end of their cruise. The program was created to enhance the processing of these passengers and their baggage upon completion of their cruise in Vancouver. This process is designed to maintain the sterility of U.S.-to-U.S. domestic baggage movements

[34] Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. www.aapa-ports.org

between cruise ship passengers (who are U.S. citizens) arriving in Vancouver and their departing U.S. precleared flights.

Basic Procedures for Cargo Vessel Inspections

The inspection process for cargo vessels is primarily the same as for cruise lines, but the environment in which the inspections are completed can differ, depending on the vessel. There are two main styles of boardings, dockside and in-stream or at anchor. The inspection processes for both are exactly the same. A dockside inspection involves a CBP officer boarding the vessel after it ties up to a dock at a designated POE. In-stream (or at anchor) boardings are completed when the vessel is anchored away from a dock, and the inspecting officers travel out to the cargo vessel at a mooring, typically on a small launch with the shipping agent. For both security and safety reasons, CBP has suspended in-stream boardings, unless extenuating circumstances exist and the Director, Field Operation approves the boarding.

Large container vessel dockside at the Port of Los Angeles. April 2003.

Prior to a vessel's arrival, a manifest is forwarded to the local CBP office. This manifest must contain the names, dates of birth, citizenship, and travel document information of all crew

and/or passengers, plus the name of the vessel, estimated arrival date, and last three ports of call. The manner of forwarding may be through APIS, e-mail, or fax. Current regulations do not specify transmittal method, although this is expected to change with pending CBP regulations, which require APIS transmissions. Upon receipt of the non-APIS manifest, an IBIS query is conducted. If the vessel is in APIS, a review of the APIS for the vessel is made.

The ship's agent is responsible for contacting the CBP office to arrange for a date, time, and place for the inspection. This is to be done at the earliest opportunity to give sufficient time for scheduling purposes.

CBP takes several factors into consideration when arranging the schedule. The primary factors are the ship's last port(s) of call and/or route, nationality of the crew, prior experiences with the vessel, time and place of arrival, and the results of the APIS query. This information and port policy will dictate the number of inspectors that are assigned for the inspection.

Upon boarding, an I-418, *Crew Arrival/Departure Manifest*, is to be presented by the Master or agent for immigration purposes. This I-418 is then compared with the information that was forwarded and queried earlier. If there are any discrepancies, port policy dictates what action is to be taken. If there are no changes, the inspector will ask the Master to have the crew mustered for the inspection. The crew presents themselves with their documents and completed I-95, *Crewman Landing Permit*, to the inspector. The document information is checked against the I-418 to verify accuracy. If there are any differences, port policy will again dictate the course of action the officer takes. The D-1 (crew non-immigrant visa category) status form I-95 is generally given back to the crewmember with the travel documents returned to the Master.

Upon completion of the inspection, the officer completes the I-418 per regulations, and a copy of the I-418 is made and left on board to be used as a traveling/departure manifest. If there are any crewmembers whose landing has been refused by the officer, an I-259, *Notice to Detain, Deport, Remove of Present Alien*, is completed, ordering that the crewmember is to be detained on board. The ship's Master or agent signs acknowledging receipt of the order. A copy of the I-259 is made with the original given to the Master/agent. Upon return to their office, the CBP officers will fax the I-418 and I-259 to any ongoing U.S. port.

Simultaneous to the inspection for immigration purposes, CBP is also conducting inspections of the cargo for customs and agriculture purposes. As with the crew manifests, the cargo manifest has been previewed prior to arrival and selected for enforcement examinations or release. Physical inspections of the vessel are conducted at this time. Congruent to the CBP inspections, the USCG has also previewed an advance manifest of both the crew and cargo and made their independent decisions for enforcement prior to the ship's arrival in port.

Instream/Anchor Inspections: The overall inspection process onboard does not differ from one done dockside. However, the process in getting to a vessel varies greatly depending on the location of the vessel (Alaska-Pacific Northwest, Great Lakes, Southern California, Florida, etc). In some instances the officer will go out on a "water taxi" with the agent to board the vessel. In others, they will board with the port pilot and ride the ship into the port. In other

areas they may actually take aircraft. As previously mentioned, CBP has suspended instream boardings at this time.

Enforcement Actions: Depending on local port policy and/or staffing abilities, officers will do follow-up visits to vessels that have crewmembers that have been ordered detained on board. These re-inspections serve to verify that the Master has complied with the detention order and none of the crew have deserted or absconded. If a crewmember is found to be off of the vessel, fine proceedings may be initiated.

At some POEs, the officers may patrol areas of the port looking for irregularities or for gathering information. The patrol is conducted in vehicles or watercraft, depending on the equipment available to the local CBP office.

Occasionally, officers will do enforcement boardings with other agencies, primarily the USCG. These joint operations may be conducted at sea or while the vessel is at berth. With the USCG it is almost entirely done while the vessel is at anchor. The main function of the officers during these boardings is to use their expertise in crew documentation and interviewing techniques to detect any irregularities such as stowaways, fraud, and contraband.

The CBP/Immigration canine team is new to seaports. Although the initial training is identical to the land border teams, these dogs and handlers have additional training suited for the seaport environment. There are also CBP canine teams utilized for both customs and agriculture purposes.

CBP (legacy INS) K-9 team inspects some suspicious containers on board a ship.

Task Force Observations of Cargo Operations

The following are observations the Task Force made in the course of various site visits regarding cargo operations and USCG operations.

The Task Force members visited the Ports of Los Angeles and Long Beach on April 30, 2003. The Task Force members were immediately struck by the sheer size of the ports and overwhelming volume. This was evident in a tour of one of the cargo container inspections areas and became even more visible on the USCG cutter tour of both ports.

The Port of Long Beach is one of the world's busiest seaports, a leading gateway for trade between the U.S. and Asia. Long Beach is the U.S.'s second busiest port. Long Beach is the world's 12th busiest container cargo port. If combined, the ports of Long Beach and Los Angeles would be the world's third-busiest port complex, after Hong Kong and Singapore. The value of cargo through the port was $88.8 billion in 2002. 4,526,365 TEUs (twenty-foot-long cargo container units) moved through the port in 2002. The Port of Los Angeles encompasses 43 miles of waterfront, 7,500 (4,200 land and 3,300 water) acres, 27 cargo terminals, 80 shipping lines; 5.6 million TEUs in 2002, 12 cruise lines, and a cargo value of $104.2 billion in 2001.

In briefings by senior CBP and USCG officials, Task force members learned that facility space is a major issue, much has been created by land fill, and all operations are viewed through the paradigm of volume and logistics. Officials indicated that cooperation and coordination is paramount for all the government and industry entities at these ports, otherwise the port simply could not function.

A major concern for government and industry entities involved in port operations is how to identify high-risk cargo and separate it from other cargo that can be moved through quickly. Technology is employed by CBP and other agencies to identify high-risk or suspect cargo. Partnerships such as Operation Safe Commerce and the Container Security Initiative discussed at length in Chapter 3, are effective tools to "push back the border." Both are designed to enhance security and facilitate legitimate trade.

Environmental/Safety Concerns: At the Seattle seaport, the use of VACIS is not maximized, since the longshoremen union does not allow the utilization of a fixed location, as they are concerned over the use of radiation to inspect the containers. CBP has completed a detailed independent study to demonstrate the safety of the VACIS system. The continued use of the VACIS in mobile format is not as efficient and it takes longer and results in greater wear and tear on the vehicle. DHS will also conduct an independent study by a Nuclear Specialist.

Space Constraints for Cargo Inspections: The volume and logistics impact every aspect of cargo inspections. The scarcity of land at a seaport to build a facility to handle high-risk containers is a problem. In order to benefit trade, there is a need to be able to unload as quickly as possible.

Need to Leverage Technology: Lack of an explicit onboard location of manifested containers and available timetables for off-loading of targeted containers for examination is required for facilitation and staffing management considerations. Technology could be leveraged and applied for more effective targeting, resulting in quicker unloading.

Mobile VACIS unit. The arm with the gamma ray sensor overhangs on the opposite side of the container and transmits images as the truck moves along the length of the containers waiting to be screened. Port of Long Beach. April 2003.

The Arm of a mobile VACIS unit. Port of Long Beach. April 2003.

U.S. Coast Guard Operations

During the course of its work in the past year, the Task Force met with USCG officials at the ports of Los Angeles/Long Beach, Miami, and Seattle. The USCG briefed the Task Force members on responsibilities of the USCG, the challenges that each port presented and how they were able to address them. The Task Force boarded USCG vessels in the ports of Los Angeles/Long Beach and Miami and toured the some of the areas in the ports that the USCG monitors and protects. On these tours the Task Force saw firsthand the enormity of the USCG's responsibilities, which in most cases, begins 12 miles out from the U.S.

Los Angeles and Long Beach: In April 2003, Task Force members boarded the USCG cutter *Blacktip* with senior USCG officials for a tour of the Ports of Los Angeles/Long Beach. This USCG tour provided insight into the immense scale of the operational challenges that the USCG faces. The tour covered a portion of the massive port complex and was lined with large container and bulk vessels filled with cargo being off/on loaded to their final destinations. It was also noted to the Task Force that port security is only part of the responsibilities of the USCG, which also includes for search and rescue, law enforcement, marine safety, environmental protection, and mobility on the water. Cargo and port security operations are a

major part of the work for the USCG at the Ports of Los Angeles/Long Beach. They work closely with CBP and others in maritime operations and inspections, including working closely with partners in industry and foreign governments by participating in participating in Operation Safe Commerce and other initiatives to help "secure the supply chain" and be able to clear cargo and vessels further out, before they come to the port.

Leaving the narrow Miami River and some of the tall buildings of downtown Miami behind them, U.S. Coast Guard boats with their guests, The DMIA Task Force, head into the open waters of Miami Bay (foreground not shown) to end the day's tour of the Miami river at the U.S. Coast Guard headquarters at MacArthur Causeway. August 2003.

Port of Miami: The Port of Miami, where the world's busiest cruise operations typically serves 3.4 million people annually in addition to cargo operations; the Task Force saw a different challenge for the USCG when they boarded USCG vessels for a tour on the Miami River in August 2003. The Miami River cuts through the city of Miami and spills into the open waters of Miami Bay. It is narrow and all types of private and commercial vessels compete for space along its banks. The USCG pointed out that the State of Florida and the City of Miami do not classify and consider the river area an actual port and therefore it is not regulated as such. This presents additional challenges for the USCG, in that it tends to be the primary enforcement authority on the waterway, but many of the standard requirements for actual ports are not observed here. One of these challenges was the unregulated traffic along the river. The Task Force members saw plenty of old rusty ships docked alongside small marinas or private property, which the USCG pointed out as needing repairs or abandoned for indefinite periods of time. In fact, the USCG maintains a website listing vessels that are in and out of service. Other types of vessels included small barge-type craft packed to capacity with used cars, mattresses, bicycles, plastic buckets and other goods intended for sale in other countries and small ocean going luxury yachts. Facilities were minimal if any, virtually all are shore-side with vessels often simply docked at back yards of residences, others at small fish markets, others at small marinas or repair facilities. All this traffic and activity went on without any central regulating body in a space that at times was not more than 100 feet wide. CBP officers must regularly conduct inspections of vessels along the narrow waterway, presenting security and safety issues, among others.

DMIA Task Force members are given a tour of the Miami River by the U.S. Coast Guard, where private and commercial vessels compete for space along the narrow and winding waterway that cuts through the city of Miami. August 2003.

Though the Task Force did not go on a tour of USCG operations in Seattle during the site visit there in July 2003, the briefing that they received on port security was consistent with many of the challenges and concerns at Los Angeles/Long Beach and Miami.

General Observations about Coast Guard: General observations from the site visits and briefings include the significant need for better technology to maximize efforts. Traditional landside work (like clearing cargo and supplies bound for cruise ships) could possibly be shifted from USCG to other parts of DHS to allow USCG personnel to focus on waterside activities. USCG could also benefit from a joint operations center for all law enforcement and first responders to effectively coordinate in certain locations. Resources, particularly staffing, technology and other equipment are significant issues for the USCG, particularly in high-risk/high-volume areas.

General Task Force Facilities Observations

The following observations were made by Task Force members during various site visits and apply, in general, to all types of ports (air, land, and sea).

- The expertise of private industry could be used to help optimize the flow of people and goods through facilities. Such areas of expertise can include queuing efficiencies, use of signage, behavioral patterns, communications, and security.

- Facilities that have potential for expansion need to be identified and funding provided to upgrade and enhance current facilities.

- Current facilities manuals need to be updated to reflect the integrated organization of DHS. A national strategy and standards for facilities should be developed in consultation with state and local government and industry partners along with key stakeholders. Such standards should allow for differences at each POE and designs should provide for future needs.

- Decisions about facilities at POEs should be collaborative and include government, owners, users, and stakeholders.

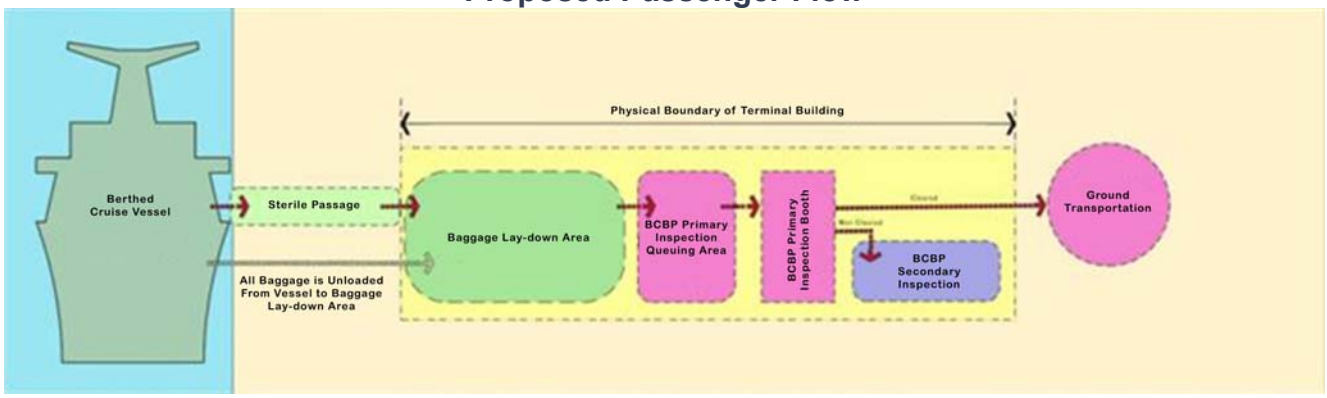
- Public/private partnerships could be used for new and/or expanded facilities.

- The consolidation of legacy inspection agencies into CBP supports the integration of passenger processing into a single area, reducing processing time and the need for separate inspection areas. The consolidation of agencies and spaces in facilities can reduce square footage needed at ports, saving money. For example, the AAPA commissioned a study that found that such consolidation could lead to increased efficiencies in many areas.

- CBP is also looking at these issues through its “one face at the border” concept. CBP working groups are addressing the development of a unified set of facility design standards over the next year. The new design standards will eliminate programmatic redundancies and maximize space and operational efficiencies in the FIS facilities; they will incorporate and reflect the forward-thinking and new operational procedures of the CBP, together with the cumulative experiences and lessons learned by field agents nationwide. The new standards will also evaluate and integrate the best practices and technology standards available. However, during the interim transition period, the legacy agency facility design standards remain in effect.

The flowchart below, from the AAPA-commissioned study illustrates a proposed passenger flow in such a consolidated port.[35]

Proposed Passenger Flow



Strengths

- Fulfilling the Goals of the BCBP
  - Unifying all three agencies into a single entity.
- Reduction of Terminal Space
- Reduction of Passenger Queuing
- Consolidation of FIS Man-Power
- Reduction of Support Spaces
- Single Agency for Design Approval

E. Conclusion

The Task Force considered all of the issues and ideas presented during the various site visits, meetings, and briefings regarding facilities, infrastructure, and access to them, and agreed upon the following recommendations:

Recommendation #1

National and economic security require that appropriate funding levels be established and adequate funding provided for the facilities and infrastructure. This is critical to handle current and anticipated increases in growth in traffic and to address proposed changes in inspection procedures at the nation's borders.

Fund and develop mechanisms among federal, state, local, and private industry partners for the innovative planning and implementation of facilities and infrastructure.

Where applicable, the use of existing space and infrastructure both domestic and foreign, should be maximized, including the sharing of facilities among agencies. All possible scenarios and configurations should be employed.

[35] Bermello, Ajamil & Partners, Inc. for the American Association of Port Authorities. *The Impact of Federal Inspection Service Facilities at Cruise Terminals*. www.aapa-ports.

Recommendation #5

Promote, expand, and improve initiatives that identify, enroll, and expedite known, low-risk travelers and cargo. These programs should maximize enrollment and minimize cost to the participant while still ensuring security and the vitality of the programs.

Recommendation #11

Fund an analysis to optimize the best mix of relevant technology and properly trained staff in order to maximize resources and use of facilities.

- **Develop a staffing "maximum wait" formula and fund personnel to meet optimum inspections staffing requirements.**
- **Provide flexibility into the design of FIS processing to allow for future implementation of the latest advances in security technology and electronic information capture, including biometrics, that will speed up processing time and re-evaluate the size of FIS areas within POEs.**

A. Overview

In addition to activities at POEs, effective border management is an integrated effort that can be impacted by activities and issues far removed from the POEs themselves. Furthermore, everyone involved in border management recognizes the need to "push back the borders" or "secure the supply chain" so that elements of inspection can take place before a person or goods reach a POE, increasing security and facilitation. Border management is impacted by expansive borders between POEs that are the jurisdiction of the USBP, international issues that affect the movement of people and goods to the border and POEs, and state/local issues. Changes in any of these areas can have an impact on traffic flow at POEs and the quality of life in the communities surrounding them. Cooperation and coordination among governments, agencies, local stakeholders, industry, and travelers is critical in improving border security and facilitating the flow of legitimate traffic through POEs.

The DMIA specifies that the Task Force evaluate how the flow of traffic can be improved at POEs by increasing cooperation between the public and private sectors and among federal and state agencies (interpreted to also include local agencies). The statute also states that it is the sense of Congress that the Attorney General (now the Secretary, DHS), in consultation with the Secretary of State, the Secretary of Commerce, and the Secretary of the Treasury, should consult with affected foreign governments to improve border management cooperation. The Task Force is in a unique situation to address the issues of cooperation and coordination since it includes representatives from federal, state, and local governments as well as representatives from a broad range of private industries (aviation, maritime, land border groups, travel and tourism, and trade and commerce). The Task Force has optimized its various areas of expertise and interest in considering a wide range of cooperation and coordination mechanisms.

The Task Force went on fact-finding trips to many field locations during 2003 and saw some of the successes and challenges being met locally, regionally, nationally, and internationally by managers and line personnel. Everywhere the Task Force traveled, it was immediately obvious that people were intent on increasing cooperation and coordination. Whether these efforts were the result of necessity, as with the consolidation of federal agencies, or for the advancement of a joint interest, the results were unmistakable. The Task Force saw many successful examples of cooperation and coordination during its fact-finding trips, but also identified areas where these efforts could be increased and some "gaps" where further efforts are needed. For example, preliminary indications from 2002 and experiences in 2003 show that more systematic mechanisms are needed to coordinate with private industry in certain areas. The Task Force has identified issues and made recommendations based on them, as well as developing a model for a successful cooperation and coordination mechanism. These are discussed in detail later in this chapter.

In addition to the information gathered on site visits, the Task Force had to consider the significant effects of legislation in increasing cooperation and coordination in recent years. The USA PATRIOT Act required coordination with the Office of Homeland Security, and later the Homeland Security Act, establishing DHS, brought about even further coordination and cooperation by bringing together different agencies into one Department. Additionally, there are already various mechanisms in place among agencies and governments for coordination

on a variety of issues, as well as some sharing of data. Some of these mechanisms have produced specific agreements, and others provide opportunities for dialogue and joint solutions to common issues. Some are on a national/international level and others are on a regional or local level. Some address enforcement issues, others facilitation, and still others a combination of both; all are part of effective border management.

In 2003, the formation of DHS had a major effect on those federal agencies that work to secure our borders. INS, USCS, APHIS, TSA, USBP, and USCG are among the agencies that were integrated into the new Department, either in whole or in part. (Further information on select programs and organizations is available in Appendix D.) In general, the Task Force has observed a positive response to the shift to one, centralized Department rather than several disparate agencies. There are still difficulties in harmonizing processes and operations, but the streamlined chain of command has simplified many tasks, and the overall feeling is one of cooperation. The following section details the new organization of DHS, some of the accomplishments since its inception, and details concerning some of the agencies working to secure the borders.

B. Federal Intergovernmental Cooperation

Development of the Department of Homeland Security

Perhaps the most significant catalyst for change and increasing cooperation and coordination has been the creation and establishment of the new DHS. The effects were evident in 2003 as the new Department was established in January, and agencies began to transfer personnel and responsibilities beginning in March. A cornerstone of the DHS philosophy revolves around a commitment to partner closely with other federal agencies, state and local governments, first responders, law enforcement entities, and private industry to ensure the security of the U.S.

DHS Border Protection Agencies

In January of 2003, Asa Hutchinson, Under Secretary, BTS, stated that better coordination of the various agencies responsible for protecting our borders is a key to the success of the BTS mission. As discussed in Chapter 1, border inspections and security were previously the responsibility of agencies from three different departments: INS and USBP in the Department of Justice, USCS in the Department of Treasury, and APHIS in the Department of Agriculture. Additionally, both INS/USBP and USCS conducted criminal investigations, often resulting in duplication of effort. BTS has created two new bureaus that each has a single mission: CBP dedicated to securing borders and facilitating the movement of legitimate trade and travelers, and ICE to investigating criminal violations of immigration and customs laws.

CBP brings together the border protection and inspection functions of INS/USBP, USCS, and APHIS to focus exclusively on securing borders and facilitating the movement of legitimate trade and travelers. ICE merges the investigative and enforcement duties of USCS, INS, and the Federal Protective Service (FPS) to focus exclusively on the criminal investigations and enforcement of the nation's immigration and customs laws throughout the U.S., including locating and removing aliens who are in the U.S. illegally and securing federal buildings. On September 2, 2003, Secretary Ridge announced that the Federal Air Marshal Service (FAMS)

will transfer to ICE. The cross-training of FAMS agents and ICE agents will increase the number of agents who can be deployed in the event of a terrorist attack. This realignment of FAMS will enhance security by, "helping law enforcement agencies—federal, state, and local—to investigate and respond quickly to incidents at the nation's airports and increase their ability to communicate swiftly and efficiently with DHS personnel involved in screening passengers and cargo, leading to comprehensive coverage of the aviation environment."[36]

The BTS Directorate is also responsible for securing our nation's transportation systems, which move people from our borders to anywhere in the country within hours. The recently created TSA, which is a bureau within the BTS Directorate, has statutory responsibility to protect U.S. transportation systems to ensure security and freedom of movement for people and commerce, including day-to-day federal security screening operations for passenger air transportation and intrastate air transportation.

The consolidation of all these agencies and responsibilities will take a significant amount of time to become efficient in terms of operations and scale. However, in the short period of time since its inception, DHS and its key components have accomplished a great deal, particularly in the areas of increasing cooperation and coordination.

Select BTS accomplishments since March 2003 include:

- Streamlined public and intra-agency processes related to inspections, detention, removal, and enforcement by bringing most federal inspection services within the CBP, in effect, providing "one face at the border."

- ICE combined all the investigative functions of legacy USCS, INS, and the FPS into one bureau. ICE has taken steps to provide a single point of contact within DHS for U.S. Attorneys and other law enforcement agencies.

- Working with other federal agencies and private industry, TSA took steps to improve customer service by coordinating screening across different forms of transportation. For example, passengers who are disembarking from cruise ships in Miami can now have their baggage screened for their flight home right at the dock as they depart from their cruise. (See Chapter 2 for further information on this initiative, called the Synergy Project.)

- In July of 2003, CBP engaged in Operation Portwatch, the first major joint operation between the Office of Field Operations and USBP under CBP. This operation, in the Port of Tampa, also involved the USCG and FBI, and drew on the strengths of each agency, leading to the identification and arrest of numerous illegal aliens and U.S. citizens for violations ranging from criminal and administrative immigration violations to criminal possession of drugs and firearms.

[36] Press release from speech at the American Enterprise Institute in Washington, D.C.

- The Canine Detector Dog Working Group was established to develop a transition plan for integrating the canine programs of legacy USCS, INS, Agricultural Quarantine Inspection, and USBP into CBP. Each agency brings a distinct mission and culture to CBP based on their core legacy missions. The primary mission of the CBP canine program will be to detect and prevent terrorists and terrorist weapons from entering the U.S. with the traditional missions of the legacy agencies secondary. All four legacy agencies were represented in the working group by subject matter experts who provided program and technical information from their respective legacy agency. (More information on canine programs is provided in Appendix D.)

- CBP and ICE established cooperative mechanisms among air and marine operations and a process to coordinate deployment of ICE/Air and Marine Operations air assets and pilots to support CBP/USBP sectors in the augmentation of ongoing and enhanced border security efforts.

- Operation "Green Quest," a multi-agency task force led by ICE, continued its efforts to dismantle the financial infrastructure of Al Qaeda and other terrorist organizations. Under Project Shield America, ICE agents partner with U.S. manufacturers and exporters to guard against illegal arms exports.

- ICE launched a special operation to identify and remove persons with unknown or questionable identities with access to restricted areas of military installations. The effort called Operation Joint Venture, resulted in 37 arrests, 28 of whom were removed from the U.S.

- TSA inaugurated the Federal Flight Deck Officer Training Program. The first class concluded on April 19th, with 44 pilots certified to carry firearms in the cockpit as Federal Flight Deck Officers. The training was conducted at DHS's Federal Law Enforcement Training Center in Glynco, Georgia.

Ongoing Coordination Efforts among Federal Agencies

- **CBP/USBP Joint Operations:** During the summer of 2003 through August, elements of CBP, Office of Field Operations and USBP, worked joint operations at several checkpoint locations in Texas utilizing mobile VACIS gamma ray equipment. This cooperative effort resulted in the initiation of over 45 criminal cases, seizure of over 3,000 pounds of marijuana and over 80 pounds of cocaine, and the arrest of over 50 illegal aliens. (See Chapter 5 for VACIS images of several seizures.)

- **National Infrastructure Security Committee (NISC):** After the events of September 11, 2001, DOT established NISC to review security concerns across all modes of transport. NISC is comprised of the modal administrators of DOT's operating administrations. Six initial action groups were established: maritime, surface, rail, hazardous material, pipeline, and transit to address the security concerns within each mode. In order to focus on issues that cut across all modes (such as credentialing, communications and containers), three additional groups were established. All of these groups have worked extensively with other governmental departments (e.g., CBP co-

chairs the container working group) and with the respective industries to develop recommendations on infrastructure and supply chain security.

- **Tourism Policy Council:** Currently the Secretary of Commerce leads the Tourism Policy Council consisting of over 15 federal agencies and offices for coordinating policies and issues impacting travel and tourism. Membership includes DOS, CBP, and DOT.

- **Passenger Analysis Unit (PAU):** Most air and sea POEs have established a PAU to identify and assess potential inadmissible entrants destined for the U.S. by collecting and analyzing advance passenger information in several forms, in accordance with strict guidelines, using the best available technology and applications. Under CBP, PAU functions at many POEs have become jointly staffed with officers from legacy INS and USCS. This integration has strengthened the ability of PAUs to identify persons of interest for enforcement purposes. Since their inception, PAUs have made a major contribution in operational and tactical advanced information which produces leads for CBP inspectors engaged in field enforcement activities.

Task Force Observations of Intergovernmental Cooperation

During various site visits the Task Force made the following first-hand observations regarding federal intergovernmental cooperation and coordination.

San Ysidro: Task Force members visited the San Ysidro POE, the largest land border crossing, on May 1, 2003. The tour of San Ysidro POE included an overview of the primary and secondary processing for vehicles and pedestrians, the port enforcement processing center, and the use of SENTRI. Task Force members were particularly struck by the efforts being made in the areas of cooperation and coordination and communication during the transition to DHS at this very busy POE.

Senior level CBP managers provided the Task Force with an overview of the operations at San Ysidro and some of the challenges and accomplishments since the move to DHS. The feeling at San Ysidro was that the new organizational structure under DHS had already shown some success; for example, policy decisions are made more quickly and in a more responsive manner.

At the same time, the challenges in bringing together different agencies were apparent to the Task Force, especially in the area of coordination in communications. Communications remained a major issue at San Ysidro at the time of the visit (60 days into the consolidation into DHS), since employees from legacy agencies were still using radios and cellular equipment that were incompatible with each other and/or used different frequencies. CBP managers had devised an interim solution for local communication, pending a more permanent resolution. In order for the legacy agencies to successfully become integrated, more cross-training is needed for the inspectors, and the three legacy inspection agencies need to become more streamlined (at the time of the visit, they still had separate supervisors, pay systems, and budgets). There were still some gaps in coordination among “teams” from legacy agencies

working on projects that overlap. Locally, personnel had found temporary solutions for these issues.

The Task Force observed similar local cooperation and ingenuity at virtually every port, station, and office they visited this year. The Task Force was told on a site visit that as a result of the events of September 11, 2001, and the March 1, 2003, merger to DHS, there is a unanimous consensus that there is a greater level of cooperation among the legacy services and cooperation with other security, enforcement, and intelligence-related agencies.

Seattle: On July 23, 2003, the Task Force visited the Seattle CBP field office and was given an overview of the airport and seaport operations. The merger of the agencies under DHS is flowing relatively smoothly due to a prior working relationship between them. They have begun to work even more closely; legacy USCS inspectors have already been cross-trained and are able to conduct primary inspections at the airports and seaports. Despite the streamlined workforce, facility issues still remain a factor. The Task Force toured the Seattle International Airport and observed space constraints in the primary and secondary inspection areas.

Miami: The Task Force traveled to Miami in August of 2003 for its final site visit. Members were given an overview by CBP, one of the topics of which was the operational merger of legacy agencies to DHS. This gave the Task Force an idea of how the "one face at the border" mission was progressing six months after the shifting of legacy agencies to DHS. In Miami, the operational merger has been successful to date in terms of personnel, while problems remain in the areas of facilities and IT interconnectivity. Now, under DHS, there is a unity of command; there are interim port directors who are responsible for the entire port (there are 5 ports in the Miami area). Benefits of this unity include:

- Outbound operations brought legacy INS and USCS together and increased the scope; they now find more violations;
- Primary inspection is moving towards unification; legacy USCS officers will be working primary lines along with legacy INS officers; and
- Cargo is moving toward one-stop inspection.

The Task Force observed a PAU at MIA. The PAU operates by the sharing of information between airlines and federal agencies then conducting joint operations with state and local organizations, where appropriate. CBP in Miami advised the Task Force that this PAU is responsible for approximately one-third of all seizures at Miami International Airport. They have expanded efforts and launched a Joint Passenger Analysis Unit (JPAU) with Canadian officers as part of the "30-Point Plan" agreement between the U.S. and Canada. There is more information about these initiatives later in this chapter.

At MIA, legacy INS and USCS utilize a joint operation control center (JOCC) within the FIS area. This center allows all officers to be proactive in addressing potential terrorist threats and to coordinate a response or make decisions on common issues in a timely manner.

Task Force members observed, in MIA, legacy Customs canine units checking for drugs, chemicals, and explosives. The Task Force also saw Agriculture's Beagle Brigade who demonstrated their ability to sniff out food products in baggage that could be carrying unwanted pests and other materials that could pose a risk to U.S. agriculture. The Task Force is aware of the need for more canine units, and this need is discussed further in Chapter 5.

CBP (legacy U.S. Customs Service) K-9 unit checking baggage coming down an outdoor conveyor belt. Miami International Airport. August 2003.

CBP (legacy APHIS) K-9 team. "Beagle Brigade," demonstrating their prowess in searching for food products among luggage being brought into the U.S. by international travelers. Miami International Airport. August 2003.

CBP agriculture specialist among some of the produce that was confiscated, with some assistance by the "Beagle Brigade," during the past 24 hours from international travelers entering the U.S. Miami International Airport. August 2003.

C. Cooperation Among Federal, State, and Local Governments

Effective coordination between federal, state, and local governments is a vital link in homeland security and helps increase effectiveness in border security. The creation of DHS provides an opportunity to change the character of the interaction between the Federal Government and their state and local partners. Traditionally, in matters of security, the Federal Government has assumed primacy over other non-federal agencies and has not provided state and local agencies with the full range of information and support. Secretary Ridge has stated repeatedly, that "homeland security is not a federal priority, but a national priority,"[37] meaning that all levels of government must be involved in securing the homeland. DHS has already been able to expedite distribution of millions of dollars in grant monies, largely supporting first responder and enhanced security efforts, to states, counties, and cities.

With the creation of the Department, a new Office of State and Local Coordination was established in the Office of the Secretary to be the conduit for policy interaction, information sharing and coordination of activities between the governmental partners. Prior to the creation of the new Department, these functions were handled by the White House's Office of Homeland Security through their intergovernmental staff.

Ongoing Coordination Efforts with State and Local Governments

- **Coordination with Local Law Enforcement:** The CBP Office of Field Operations and USBP coordinated with New York law enforcement officers to incorporate 120 New York State Troopers into border security efforts between the POEs. State Troopers will have a supporting role in front line activities.

- **Law Enforcement Support Center (LESC):** One of the primary ways the legacy INS and now ICE assists state and local law enforcement is through the LESC, located in Burlington, Vermont. The primary mission of the LESC is to help other law enforcement agencies determine if a person they have contact with, or have in custody, is an illegal, criminal, or fugitive alien. The LESC provides a continuous link between federal, state, and local officers and the databases maintained by the DHS and others, and is available 24 hours a day, seven days a week.

- **The Border Station Partnership Council (BSPC):** BSPC is comprised of multiple federal agencies working with other government and private entities as appropriate. The BSPC was created because there was a need to look at land border facilities as part of a collaborative infrastructure system (which includes access to the POEs), enhance the coordination of planning processes, centralize border station planning management, improve communication on border management issues, and coordinate among public and private entities.

  The BSPC also plans to engage in the sharing of shrinking resources to manage the border infrastructure program in a cost-effective manner and to participate in information

[37] National Association of Counties Homeland Security Task Force meeting, October 25, 2001.

exchange and clearinghouse of program initiatives. The BSPC's long-range plan is to establish a comprehensive plan and methodology that identifies and measures critical border initiatives to determine FIS priorities.

Task Force Observations of Cooperation among Federal, State, and Local Governments

While on various site visits, the Task Force made observations of cooperation among governments.

Los Alamos: The Task Force observed an excellent example of cooperation and coordination while in Los Alamos, New Mexico. LANL developed a new "first responders" plan after devastating forest fires nearly overran that facility in May 2000, as well as the surrounding community and forestlands. LANL, one of the world's largest scientific centers, covers 43 square miles and employs more than 10,000 people, a driving force of the local and state economy. The surrounding community is home to more than 18,000 people, vast acreages of national forest, and pueblo land. As the first responder's plan was developed, every federal, state, and local agency with any responsibility for the protection of LANL and surrounding areas was included. The planning, development, and building of a new Emergency Operations Center (EOC) under regular control of LANL's emergency response team was done jointly. This new EOC includes facilities and offices capable of handling representatives from all response agencies, and while the facility was being planned, the decision was made to include Los Alamos County's Public Safety Answering Point (PSAP, or 911 answering facility) within the structure. By taking this extraordinary step, LANL had immediate physical, as well as electronic access to emergency communications. The EOC benefits from the Los Alamos County presence, and the County now has greater access to an important "first responders" facility.

Quincy Library Group: A coordinated process for consultation like the "Quincy Library Group" process in Northern California is another useful model of cooperation and coordination. In 1992, frustrated over a stalemate over timber management, a county commissioner and a local environmentalist convened a meeting at the Quincy, California, library of the broadest array of the community—including unions, timber companies, local businesses, the school district—virtually every sector. Each was asked to state their core values—those that were inviolate. Everyone agreed that any consensus agreement would value and protect all of these core values.

After many sessions, they were able to fashion a "win-win" agreement that integrated environmental health and economic wellbeing, without damaging the core values of any participant. This achievement was so extraordinary, the combined group went to Washington, D.C., and was successful in lobbying to get legislation enacted to implement their plan over the U.S. Forest Service's objection. This protection of interests allowed the group to establish trust, and fostered an open, and ultimately successful, negotiation that benefited all.

El Paso: The Task Force has observed that coordination among federal officials and local interests is often a function of the personality of the officials more than a skill set. The Task Force saw this in El Paso where there is a strong cooperative mechanism in place. Attendees at the stakeholders' meeting, convened by local officials at the request of the Task Force,

made it clear that Ciudad Juarez and El Paso are together a community, and the economic and social well-being of their bi-national community depends on the ease of crossing the border. The general feeling was that communities on both sides are suffering economically, and any increase in security measures that further delays crossings impact citizens on both sides of the border. Participants at the meeting were quick to point out the cooperative efforts in place in their community, while expressing concern about lack of responsiveness from Washington.

Locally, in El Paso/Ciudad Juarez, government agencies collaborate with the private sector using monthly steering committee meetings. The SENTRI program there was a collaborative effort in which the bi-national community was invited to participate. In fact, community input was so persuasive in El Paso, that the Stanton Street Bridge POE became the dedicated commuter bridge crossing instead of another location where federal officials had originally intended the SENTRI lanes to be placed. Federal officials live in and are part of the community, have a vested interest, and have developed trust.

D. Cooperation Between Government and Industry

The Task Force has observed the effectiveness and recognizes the potential of partnerships between government and industry. Essentially, structured agreements whereby investments in technology, infrastructure, security, etc., are made by the parties involved result in better security and facilitation of goods and people. This section describes some of these efforts to increase cooperation and coordination by creating partnerships between government and industry. These efforts increase security by making industry and government partners in border protection. Examples of such partnerships include Operation Safe Commerce (OSC), Customs-Trade Partnership Against Terrorism (C-TPAT), the 24-Hour Rule, Free and Secure Trade (FAST), and the Automated Commercial Environment (ACE).

Operation Safe Commerce (OSC)

As part of the Department's effort to secure cargo as it moves through ports, Secretary Ridge announced $58 million in funding for OSC[38], a pilot program in coordination with DOT that brings together private business; ports; and local, state, and federal representatives to analyze current security procedures for cargo entering the country. The program's objective is to evaluate procedural, technological, and process improvements to improve the security and integrity of containers through the supply chain. The ports of Seattle, Tacoma, Los Angeles, Long Beach, and the Port Authority of New York/New Jersey are participating in the pilot program. Seventy percent of the oceanborne container movement in this country originates or terminates at these locations.

OSC is an innovative public-private partnership dedicated to enhancing security throughout international and domestic supply chains while facilitating the efficient cross-border movement of legitimate commerce. This initiative began in New England as a local public-private partnership where federal, state, and local law enforcement entities and key private sector

[38] www.tsa.gov/public/display?theme=88. Accessed 10/7/03.

entities combined efforts to design, develop, and implement a means to test available technology and procedures in order to develop secure supply chains. The OSC New England initiative analyzed a supply chain shipment between Eastern Europe and New Hampshire. The full container shipment was fitted with onboard tracking sensors and door seals. It was constantly monitored through the various transportation modes as it traveled through numerous countries and government control functions.

The second phase of OSC will distribute grants to the above-mentioned ports to identify specific supply chains along particular trade routes and analyze every aspect of the supply chain from packaging to delivery for vulnerabilities. Based on their analysis, the ports will propose plans to improve security throughout the supply chain. Finally, these potential solutions to improve container security will be tested in an operating environment.

How OSC Will Work: OSC will demonstrate what is needed to ensure that parties associated with commercial shipping exert reasonable care and due diligence in packing, securing, and manifesting the contents of a shipment of goods in a container. In addition, OSC will demonstrate various methods of ensuring that the information and documentation associated with these shipments is complete, accurate, and secure from unauthorized access. The project will ultimately gauge the security of the supply chain with these new procedures in order to determine their viability. This is essentially the concept referred to as "securing the supply chain."

The Task Force observed OSC at the Port of Los Angeles (POLA). In an attempt to stop any potential problem containers before reaching the U.S., they are shifting select parts of the inspections process overseas prior to arrival. An MOU has been signed with Hong Kong and Singapore for cooperation and advance screenings/inspections of containers bound for the Port of Los Angeles.

OSC Management: An executive steering committee is responsible for the management and success of OSC. It consists of at least one representative from the following organizations: U.S. DOT, Under Secretary for Transportation Policy (Co-Chair); DHS, CBP Deputy Commissioner (Co-Chair); DHS, Transportation Security Administration; U.S. DOT, Office of Intermodalism; DHS, USCG; DOS (S/CT); U.S. Department of Commerce; U.S. Department of Justice (DAG); and Office of Homeland Security.[39]

Customs-Trade Partnership against Terrorism (C-TPAT)

The legacy USCS started C-TPAT, an anti-terrorism initiative that engages the trade community in a cooperative relationship with CBP. Under the C-TPAT initiative, CBP works with importers, carriers, brokers, and other private industry groups to create a seamless, security-conscious environment throughout the entire commercial process. By providing a forum in which the business community and government agencies can exchange anti-terrorism ideas, concepts, and information, both the government and business community increase the security of the entire commercial process from manufacture to distribution. This program underscores the importance of employing best business practices and enhanced security measures to eliminate the trade's vulnerability to terrorist actions.

[39] www.tsa.gov/public/display?theme=88. July 7, 2003

Seven of America's Fortune 500 companies helped legacy USCS develop the program: BP America, Daimler-Chrysler, Ford, General Motors, Motorola, Sara Lee, and Target. More than 4,000 companies have already signed C-TPAT agreements.

How C-TPAT Works: Under this program, businesses must conduct comprehensive self-assessments of their supply chain using the security guidelines developed jointly with legacy USCS, and they must familiarize companies in their supply chain with the guidelines and the program. In short, these businesses must provide specific and relevant information about their trucks, drivers, cargo, suppliers, and routes to CBP. As a C-TPAT member, companies may become eligible for expedited processing and reduced inspections. A benefit of C-TPAT membership is a single point of contact for C-TPAT matters.

At the unveiling of C-TPAT, CBP Commissioner, Robert C. Bonner said, "The message should be clear. If a business takes steps to secure its cargo against terrorism, we will give it the 'fast lane' through the border. . . . Business wins, government wins, and most importantly, the American people win."[40]

24-hour Rule

The “24-hour Rule” requires an advance cargo declaration from sea carriers and became effective on December 2, 2002. In February, 2003, the initial phase of the enforcement began, with "no-load" directives for violations[41].

How the 24-hour Rule Works: CBP uses the cargo information to identify and eliminate potential terrorist threats before a vessel sails from a foreign port to U.S. seaports, rather than after a vessel and its cargo arrive in the U.S. The 24-hour rule requires sea carriers and non-vessel operating common carriers (NVOCC) to provide CBP with detailed descriptions of the contents of sea containers bound for the U.S. 24 hours before a container is loaded on a vessel.

In the preliminary stages of implementation, ports experienced some cargo delays due to post-arrival issues. During this time, CBP continuously worked with industry at all levels to resolve these issues by forming a working group with the Commercial Operations Advisory Committee (COAC), implementing training sessions for industry, and creating a special bill in the Automated Manifest System (AMS) that CBP expects to make available to industry in December 2003. This programming in AMS was developed by group consensus with the carriers and NVOCCs.

Free and Secure Trade Program (FAST)

The FAST program is a bilateral initiative between the U.S. and Canada designed to ensure security and safety while enhancing the economic prosperity of both countries. In developing this program, Canada and the U.S. have agreed to harmonize, to the greatest extent possible,

[40] www.cbp.gov. July 7, 2003
[41] A "no-load" directive means that CBP has instructed an ocean shipping line not to load a container at a foreign port for delivery to the U.S.

their commercial processes for clearance of commercial shipments at the border. This will promote free and secure trade by using common risk-management principles, supply chain security, industry partnership, and advanced technology to improve the efficiency of screening and clearing commercial traffic at our shared border.

FAST Objectives: FAST is an ambitious program in terms of scope and the speed of implementation. For the U.S. and Canada, and commencing in September 2003 for the U.S. and Mexico, the initiative's promises to revolutionize the processing of transborder trade. FAST objectives include:

- Increase the integrity of supply chain management by offering expedited clearance to carriers and importers enrolled in C-TPAT, or Canada's Partners in Protection (PIP).

- Streamline and integrate registration processes for drivers, carriers, and importers, minimizing paperwork and ensuring only low-risk participants are enrolled as members.

- Expedite clearance of low-risk transborder shipments by reducing CBP information requirements, dedicating lanes at major crossings to FAST participants, using common technology, and physically examining cargo transported by these low-risk clients at the lowest levels possible.

- Act as a catalyst for CBP and the respective Canadian and Mexican Customs to integrate and enhance technologies (for example, transponders employed on both sides of the border) to make it even easier to clear low-risk shipments and mitigate the cost of participation for FAST partners.

- The initial phase of FAST for U.S. and Mexico-bound commercial shipments is scheduled to begin in El Paso in the fall of 2003, with additional locations to be operational by January 2004.

Automated Commercial Environment (ACE)

The current system of tracking and processing imports, the Automated Commercial System (ACS), is outdated and expensive to maintain. ACS was designed for trade levels of more than a decade ago, and the volume of trade since then has increased dramatically. The Modernization Act mandated that legacy USCS establish a plan to answer this problem. The Automated Commercial Environment (ACE) is the plan they established. ACE is a vastly improved and expanded automated processing system for imports and eventually for exports. The development of ACE has been a major undertaking and continues to face obstacles in being finalized and operational.

ACE moves CBP from a transaction-based approach to using an account-based system founded on compliance measurement and predicated on reengineered ways of doing business. Companies coordinating with CBP create mutually beneficial outcomes, including raised compliance, minimized data requirements at time of release, and the ability to make payments on a periodic basis. The benefits of this approach include standardization, shorter

processing time, more efficient information collection and dissemination, and greater opportunities to fulfill the agency's enforcement mission.

Ongoing Cooperation Efforts between Government and Industry

- **North American Trucking Industry:** The North American trucking industry has been working to improve the efficiency, safety, and security of cross-border trucking movements for more than a decade. With the increasing trade levels among Canada, Mexico, and the U.S., the trucking industry has worked to improve not only international trade operations, but also the efficacy of border facilities and government systems that clear cargo, vehicles, and drivers as they operate across North America's common borders. However, further investments in border infrastructure, both physical and technological, are greatly needed to improve the speed, safety, and security with which cargo moves throughout our three countries.

- **The Aviation Security Advisory Committee (ASAC):** (ASAC) was established to advise and assist the Federal Aviation Administration (FAA) on its development and implementation of civil aviation policy, procedure, and regulation. Upon the creation of TSA, the ASAC charter was transferred from FAA to TSA. In 2003, the ASAC established several working groups to focus on critical aviation security arenas, including cargo and general aviation. CBP, ACI-NA, and Air Transport Association are ASAC Members.

- **The Maritime Security Advisory Committee:** The Committee was established by the Maritime Transportation Security Act and is sponsored by the USCG. A Federal Register Notice has solicited applicants for the Committee and the selection process is currently underway.

- **The Airport/Seaport User Fee Advisory Committee:** Formerly known as INS Immigration User Fee Advisory Committee, this Committee was established to advise and assist the legacy INS (now CBP) on its development and implementation of immigration policy, procedure, and regulation specific to the air POE and sea POE environment. This committee was also established as passengers subjected to immigration inspection at air and sea POEs must pay a user fee for such an inspection. User fee revenues fund the majority of air and sea inspection activities. This is opposite from the land border POEs where the majority of individuals crossing the border locally are not required to pay a user fee for inspection. ACI-NA, Air Transport Association, and ICCL are committee members.

- **Cargo Handling Cooperative Program (CHCP):** The CHCP, sponsored by the Maritime Administration, seeks to increase the productivity of marine freight transportation companies through cargo-handling research and development. The CHCP, conceived as a public/private partnership, was designed to foster research and technology development among its members and to actively pursue innovative cargo-handling developments to increase the productivity and cost effectiveness of cargo operations.

- **Intermodal Freight Technology Working Group (IFTWG):** The IFTWG works to apply intelligent transportation system technologies to improve freight and equipment visibility throughout the global intermodal logistics chain, to optimize asset utilization, and to reduce costs. It also works to understand and plan for the behavioral, organizational, and process changes associated with intermodal technology implementation. IFTWG has established extensive partnerships through initiatives, products, and funding within the intermodal and international stakeholder community and is actively involved in prototyping solutions for efficient cargo movement. Their model deployments and programs are designed so that they can be applied to the global marketplace and can provide tangible benefits to both the public and private sectors.

Task Force Observations of Cooperation between Government and Industry

During the site visits that the Task Force made this year, members made many observations. The following are some of the examples of cooperation between government and industry that the Task Force observed.

Vancouver/Seattle: In Seattle, the Task Force saw many examples of government and industry working together to facilitate passenger and cargo inspections. Task Force members toured the Pier 30 Cruise Terminal, a newly constructed facility that was built in 10 months using the "turnkey approach" (further information on this approach is included in Chapter 2 of this report). The cruise terminal was a joint project of the city of Seattle, the Port of Seattle, federal agencies, and cruise lines and is a solid example of cooperation between government and industry and what such efforts can be accomplish.

The Task Force also toured Pier 69 where the Victoria Clipper Passenger Ferry docks and saw the passenger inspection process. The owners of the facilities have purchased security devices in anticipation of government mandates to do so. They have on-site x-ray machines, radiation pagers, and have installed cameras on the dock. This is a good example of government communicating early with industry, and industry integrating new processes with a minimum of disruption.

During the Vancouver/Seattle site visit the Task Force observed a CBP targeting unit identifying high-risk cargo, in part by utilizing the 24-hour rule. Targeting was done, not only on U.S.-bound cargo, but also on freight remaining on board (FROB), which must also be manifested. The targeting unit was able to concentrate its efforts on high-risk cargo due to cooperative efforts in implementing the 24-hour rule, benefiting the carrier and the officers. Canadian officers also worked at the cargo facility with U.S. officers, jointly sharing information and increasing effectiveness.

Another example of government and industry cooperation that the Task Force observed in Vancouver and Miami is the Synergy Project which is discussed in-depth in Chapter 2. This effort between TSA, American Airlines, and RCCL benefits the travelers, cruise lines, airports, and government agencies.

E. Cooperation With Foreign Governments

As efforts continue to foster cooperation and coordination among various government and industry entities within the U.S., the Task Force is cognizant of the importance of increasing cooperative efforts with foreign governments. Cooperative relationships with foreign governments make security possible and ensure economic vitality. As stated earlier, it is accepted that "pushing back the border" so that elements of inspection can take place before a person or goods arrives at the border increases security and facilitates the movement of legitimate people and goods; initiatives that attempt to do this can only be implemented with the cooperation of foreign governments. Likewise, the management of the physical border can only be successful with the cooperation of the countries on both sides. Chapter 2 of this report contains information about preclearance and preinspection operations that exist in some locations; similarly, there are initiatives in place that pre-screen containers before they reach U.S. ports through agreements with foreign governments. In addition to these initiatives, the U.S. has many ongoing efforts with foreign governments that aim to address security issues while moving legitimate traffic through POEs. The following section provides an overview of efforts and initiatives along with Task Force observations in the area of cooperation with foreign governments.

The Container Security Initiative (CSI)

CSI is an existing CBP program incorporating side-by-side teamwork with foreign port authorities to identify, target, and search high-risk cargo. Since nearly 70 percent of all U.S.-bound sea containers pass through 20 major seaports around the globe, the program focused on these 20 ports[42] in the first phase. CSI has now moved into its second phase and has expanded to strategic locations beyond the initial 20 major ports. In June 2002, the World Customs Organization passed a resolution that will enable ports in all of the 161 member nations to begin development of programs similar to CSI.

In January 2002, the legacy USCS launched CSI to prevent global containerized cargo from being exploited by terrorists. This initiative enhanced the security of sea cargo which is a vital link in global trade. Some 200 million sea cargo containers move annually among the world's top seaports, and nearly 50 percent of all U.S. imports arrive by sea. CSI consists of four core risk management elements:

- The use of intelligence and automated information to identify and target high-risk containers;
- The prescreening of containers identified as high-risk before they arrive at U.S. ports;
- The use of detection technology to quickly prescreen high-risk containers; and
- The use of smarter, tamper-evident containers.

[42] Top 20 foreign ports (exports to U.S.): 1. Hong Kong; 2. Shanghai; 3. Singapore; 4. Kaohsiung; 5. Rotterdam; 6. Pusan; 7. Bremerhaven; 8. Tokyo; 9. Genoa; 10. Yantian; 11. Antwerp; 12. Nagoya; 13. Le Havre; 14. Hamburg; 15. Spezia; 16. Felixstowe; 17. Algeciras; 18. Kobe; 19. Yokohama; 20. Laem Chabang.

These core elements are meant to intensify the targeting and screening of containers before they are sent to their final destinations, to include national security factors in targeting, and to provide additional outreach to U.S. industry for cooperation, idea generation, and data collection.

Benefits of CSI include:

- Increased ability to intercept terrorist weapons;
- Increased security of the global trading system;
- Facilitation of legitimate trade;
- Protection of port infrastructure; and
- International reciprocity.

The cooperative nature of CSI helps enforcement and facilitation. CSI partners work with CBP to develop best practices. Cooperative targeting with foreign partners results in: better information, which improves targeting and decisions; fewer containers being identified as high-risk (for better facilitation); and high-risk determination based on more complete information.

How CSI Works: CSI involves placing CBP team members at major foreign seaports to work with the host government to identify and target high-risk containers for pre-screening. The host government conducts screening while the U.S. CSI team observes.

Since CBP Commissioner, Robert C. Bonner first announced CSI in January 2002, CBP has reached agreements with foreign governments representing 19 of the top 20 ports (in terms of volume of cargo shipped to the U.S.). CSI will become operational at other ports soon, and agreements with additional countries are imminent. Commissioner Bonner announced in June that CSI is operational at the ports of Gothenburg, Sweden, and Felixstowe, England, bringing the total number of operational CSI ports to 13. CSI is already operational in Rotterdam, Le Havre, Bremerhaven, Hamburg, Antwerp, Singapore, Yokohama, Hong Kong, Vancouver, Montreal, and Halifax.

On June 12, 2003, Secretary Ridge announced phase two of CSI, "The Container Security Initiative has emerged as a formidable tool for protecting us from the threat of terrorism," said Secretary Ridge. "Now that we have almost achieved our goal for CSI at nearly all of the top 20 ports we will be expanding CSI to other ports that ship substantial amounts of cargo to the United States and that have the infrastructure and technology in place to participate in the program."[43]

[43] www.dhs.gov accessed October 7, 2003.

Ongoing Coordination Efforts with Foreign Governments

- **International Air Transport Association/Control Authorities Working Group (IATA/CAWG):** IATA/CAWG is a multi-government effort representing 22 countries, primarily from Western Europe, the U.S., Canada, and the Pacific Rim. IATA/CAWG is concerned with continuing an open and informal dialogue between the control authorities and the represented international air carriers. To accomplish this, IATA/CAWG holds two meetings each year in varied locations. Topics of interest to both the carriers and governments are discussed, including such issues as the transportation of inadmissible passengers by international carriers, carrier liability, fraud trends, technological developments relating to international travel and document examination, statutory and regulatory developments in member countries, and training.

- **U.S./Mexico Joint Working Committee on Transportation Planning (JWC):** The JWC coordinates various planning processes for border transportation activities. The group is co-chaired by the FHWA Office of Planning and Environment and the Mexican Secretariat of Communications and Transportation (SCT). In addition to FHWA and SCT, JWC membership includes representatives from DOS, the Mexican Secretariat of Foreign Relations, the Departments of Transportation of the four U.S. border states, and the six Mexican border states.

  JWC operates under a Memorandum of Understanding signed October 12, 2000, by former Secretary of Transportation Rodney Slater and former SCT Secretary Carlos Ruiz. It states that the JWC will work on the following topics: border infrastructure needs assessment, geographic information systems, intelligent transportation systems, border technology exchange program, transborder corridor planning, innovative financing, and a coordination system for operation of border POEs.

- **Trans Border Working Group (TBWG):** The TBWG is co-chaired by FHWA Office of Intermodal and Statewide Programs and Transport Canada and works to improve the safe, secure, and efficient movement of passengers and trade across the border. While the TBWG is co-chaired by a federal representative, there is considerable U.S. state and local government and Canadian provincial government involvement on both sides of the border.

  This group is jointly assessing border infrastructure needs along the U.S./Canada border. They met in June 2002 to formalize the group's "Terms of Reference" charter and to develop tasks/activities for the action plan for the coming year. One of the main efforts will be to create a compendium study on border infrastructure needs.

- **The Border Liaison Mechanism:** This is a border alliance mechanism that includes federal, state, and local entities from the U.S. and Mexican sides of the border. Federal agencies collaborate with the private sector to help develop agendas between Mexican and U.S. officials. In addition to monthly steering committee meetings, meetings can be called very quickly to handle situations as they arise. The federal officials who are involved with this group live in and are part of the community, helping build trust with the

public, local officials, and private sector leaders. This helps alleviate the fears in this community that Washington does not listen to local concerns. Their bi-national working group is ideal, as customs/immigration challenges and solutions affect, not only the U.S., but also Mexico. The U.S. consular relationship with CBP and Mexican government counterparts facilitates cross-border initiatives.

- **Joint Passenger Analysis Units (JPAUs):** One point of the U.S./Canada Shared Border Accord was to establish and deploy JPAUs, staffed jointly by Canada and CBP personnel in the U.S. and Canada on a pilot basis.

  A JPAU has existed on a pilot basis at MIA, and in Vancouver since September 30, 2002.[44] Evaluation of the pilot by a private contractor is underway. The completed evaluation will provide the basis for consensus regarding the continuation of existing JPAU units and the establishment of additional units over time.

  The JPAU is designed to enhance the common security and defense of the U.S. and Canada by providing resources for cooperative targeting efforts between each nation's border enforcement entities. JPAUs identify and assess potential inadmissible entrants destined to the U.S. and/or Canada by collecting and analyzing advance passenger information in several forms, in accordance with strict guidelines, using the best available technology and applications. The primary emphasis of JPAU targeting work lies within the realm of counter-terrorism and homeland security.

- **The International Mobility and Trade Corridor Project (IMTC):** The IMTC project was initiated in 1996 to formally and cooperatively identify and promote improvements in the transportation and inspection systems for the "Cascadia Gateway" (British Columbia-Washington State). The goal is to increase cross-border mobility, safety, and security.

  Participants include U.S. and Canadian government officials at the federal, state/provincial, and local levels, along with a diverse group of industry representation. The secretariat is provided by Whatcom Council of Governments for over 70 participating organizations. Objectives of IMTC involve specific identified priorities in infrastructure, planning and data, operations policy and staffing.

- **Smart Border Declaration:** In December 2001, Homeland Security Director Ridge and Canadian Minister of Foreign Affairs Manley signed a Smart Border Declaration, which includes 30 initiatives aimed at enhancing security along our shared border. The Declaration outlines the 30-point action plan[45], based on four pillars, to collaborate in identifying and addressing security risks while efficiently and effectively expediting the legitimate flow of people and goods back and forth across the U.S./Canada border. A key element of this bi-national plan is NEXUS, technology designed to enhance security and improve traffic flow along the U.S./Canada border. NEXUS lanes reduce the wait times for known travelers, and the expanded use of automation and technology enables

[44] Canada Customs and Revenue Agency personnel did not join the Miami JPAU until October 22, 2002, and the Vancouver JPAU until October 28, 2002.
[45] Available at www.canadianembassy.org/border/actionplan-en.asp

officers from both the U.S. and Canada to focus more attention on higher risk traffic. The 30 initiatives are listed below.

1) Jointly develop on an urgent basis common biometric identifiers in documentation such as permanent resident cards, NEXUS, and other travel documents to ensure greater security.

2) Develop and deploy a secure card for permanent residents that includes a biometric identifier.

3) Resume NEXUS pilot project, with appropriate security measures, for two-way movement of pre-approved travelers at Sarnia-Port Huron, complete pilot project evaluation and expand a single program to other areas along the land border. Discuss expansion to air travel.

4) Review refugee/asylum practices and procedures to ensure that applicants are thoroughly screened for security risks and take necessary steps to share information on refugee and asylum claimants.

5) Negotiate a safe third-country agreement to enhance the managing of refugee claims.

6) Initiate joint review of respective visa waiver lists and share look-out lists at visa issuing offices.

7) Finalize plans/authority necessary to implement the Preclearance Agreement signed in January 2001. Resume intransit preclearance at Vancouver and expand to other airports per Annex I of the Agreement.

8) Share API and agreed-to passenger name records on flights between Canada and the U.S., including in-transit flights. Explore means to identify risks posed by passengers on international flights arriving in each other's territory.

9) Establish joint units at key international airports in Canada and the U.S.

10) Review customs and immigration presence and practices at international ferry terminals.

11) Develop jointly an automated database, such as Canada's Support System for Intelligence, as a platform for information exchange and enhance sharing of intelligence and trend analysis.

12) Increase number of Canadian and U.S. immigration officers at airports overseas and enhance joint training of airline personnel.

13) Undertake technical assistance to source and transit countries.

14) Establish complementary systems for commercial processing, including audit-based programs and partnerships with industry to increase security. Explore the merits of a common program.

15) Develop an integrated approach to improve security and facilitate trade through away-from-the-border processing for truck/rail cargo (and crews), including inland preclearance/post-clearance, international zones and pre-processing centers at the border, and maritime port intransit preclearance.

16) Establish criteria, under current legislation and regulations, for the creation of small, remote joint border facilities. Examine the legal and operational issues associated with the establishment of international zones and joint facilities, including armed protection or the arming of law enforcement officers in such zones and facilities.

17) Sign the Agreement on Sharing Data Related to Customs Fraud, exchange agreed upon customs data pursuant to NAFTA, and discuss what additional commercial and trade data should be shared for national security purposes.

18) Jointly target marine intransit containers arriving in Canada and the U.S. by exchanging information and analysts. Work in partnership with the industry to develop advance electronic commercial manifest data for marine containers arriving from overseas.

19) Work to secure resources for joint and coordinated physical and technological improvements to key border points and trade corridors aimed at overcoming traffic management and growth challenges, including dedicated lanes and border modeling exercises.

20) Deploy interoperable technologies in support of other initiatives to facilitate the secure movement of goods and people, such as transponder applications and electronic container seals.

21) Conduct bi-national threat assessments on trans-border infrastructure and identify necessary additional protection measures, and initiate assessments for transportation networks and other critical infrastructure.

22) Finalize Federal Aviation Administration-Transport Canada agreement on comparability/equivalence of security and training standards.

23) Expand Integrated Border and Marine Enforcement Teams IBET/IMET to other areas of the border and enhance communication and coordination.

24) Work toward ensuring comprehensive and permanent coordination of law enforcement, anti-terrorism efforts, and information sharing, such as by strengthening the Cross-Border Crime Forum and reinvigorating Project Northstar.

25) Establish joint teams to analyze and disseminate information and intelligence, and produce threat and intelligence assessments. Initiate discussions regarding a Canadian presence on the U.S. Foreign Terrorist Tracking Task Force.

26) Implement the Memorandum of Understanding to supply equipment and training that will enable the Royal Canadian Mounted Police to access FBI fingerprint data directly via a real-time electronic link.

27) Address legal and operational challenges to joint removals, and coordinate initiatives to encourage uncooperative countries to accept their nationals.

28) Bring into force legislation on terrorism, including measures for the designation of terrorist organizations.

29) Exchange advance information on designated individuals and organizations in a timely manner.

30) Increase dialogue and commitment for the training and exercise programs needed to implement the joint response to terrorism guidelines. Joint counter-terrorism training and exercises are essential to building and sustaining effective efforts to combat terrorism and to build public confidence.

- **22-Point Agreement:** In March of 2002, President Bush and President Fox announced a 22-point agreement[46] to build a smart border for the 21st century. This border will embrace technology and enhanced bilateral cooperation to ensure humane, efficient, and modernized management of the border that joins our peoples and our economies. Measures for strengthening cooperation between the U.S. and Mexico were outlined in an action plan with additional measures to be agreed upon (as appropriate) in the future, to advance the following goals: infrastructure that keeps pace with travel and commerce, the secure flow of people, and the secure flow of goods. The 22 points of the agreement follow.

  1) Develop and implement a long-term strategic plan that ensures a coordinated physical and technological infrastructure that keeps pace with growing cross-border traffic.

  2) Develop a prioritized list of infrastructure projects and take immediate action to relieve bottlenecks.

  3) Conduct vulnerability assessments of trans-border infrastructure and communications and transportation networks to identify and take required protective measures.

  4) Synchronize hours of operation, infrastructure improvements, and traffic flow management at adjoining POEs on both sides of the U.S.-Mexico border.

[46] Available at www.whitehouse.gov/infocus/usmxborder/22points.html

5) Establish prototype smart POE operations.

6) Revitalize existing bilateral coordination mechanisms at the local, state, and federal levels with a specific focus on operations at border crossing points.

7) Explore joint financing mechanism to meet the main development and infrastructure needs.

8) Expand the use of SENTRI dedicated commuter lanes at high-volume POEs along the U.S.-Mexico border.

9) Establish a joint advance passenger information exchange mechanism for flights between Mexico and U.S. and other relevant flights.

10) Explore methods to facilitate the movement of NAFTA travelers, including dedicated lanes at high-volume airports.

11) Reaffirm mutual commitment to the Border Safety Initiative and action plan for cooperation on border safety, established in June 2001. Enhance authorities and specialized institutions to assist, save and advise migrants, as well as those specialized on curbing the smuggling of people. Expand Alien Smuggling and Trafficking Task Force. Establish a law enforcement liaison framework to enhance cooperation between U.S. and Mexican federal agencies along the U.S.-Mexico border.

12) Continue frequent consultations on visa policies and visa screening procedures. Share information from respective consular databases.

13) Conduct joint training in the areas of investigation and document analysis to enhance abilities to detect fraudulent documents and break up alien smuggling rings.

14) Develop systems for exchanging information and sharing intelligence.

15) Enhance cooperative efforts to detect, screen, and take appropriate measures to deal with potentially dangerous third-country nationals, taking into consideration the threats they may represent to security.

16) Expand partnerships with private sector trade groups and importers/exporters to increase security and compliance of commercial shipments, while expediting clearance processes.

17) Continue to develop and implement joint mechanisms for the rapid exchange of customs data.

18) Continue to develop a joint in-transit shipment tracking mechanism and implement CSI.

19) Develop a technology sharing program to allow deployment of high technology monitoring devices such as electronic seals and license plate readers.

20) Continue to develop a joint rail imaging initiative at all rail crossing locations on the U.S.-Mexico border.

21) Expand the ongoing Bilateral Customs Fraud Task Force initiative to further joint investigative activities.

22) Continue joint efforts to combat contraband, including illegal drugs, drug proceeds, firearms, and other dangerous materials, and to prevent money laundering.

Task Force Observations of Cooperation with Foreign Governments

While on various site visits the Task Force made many observations. The following are examples of cooperation with foreign governments that the Task Force observed.

Vancouver: On July 21, 2003, the Task Force members traveled to Vancouver, Canada and toured Vancouver International Airport and Vancouver Rail Station. While at Vancouver International Airport, the Task Force was given a tour of the pre-clearance process, the INSPASS enrollment center, and the Cruise Ship Transit Facility.

Because the nature of pre-clearance is such that the person, as well as luggage, must be inspected prior to boarding, there are safety concerns. Travelers must first go through the immigration process, and proceed to the customs process with luggage that has not been screened by any agency, including airport security. Security and magnetometers are located after the pre-clearance inspection areas; therefore, neither the individual traveler or their luggage has been screened.

The Cruise Ship Transit Facility located in the airport was impressive, and is the only site where ship pre-clearance is conducted. Travelers are transported from the cruise ship to the airport where they proceed through the transit facility for inspection before leaving for their U.S. destination. Their luggage is off-loaded by cruise ship personnel and secured on a bonded vehicle until it arrives at the airport where it is again screened. This facility is only used for U.S. citizens and Lawful Permanent Residents.

The Task Force also boarded the Amtrak in Vancouver destined for Seattle, where the pre-inspection (immigration process), by legacy immigration inspectors, was conducted and luggage was screened. The lack of complete transition to the “one face at the border” concept and the challenges to be overcome were evident at the rail station. Under the current agreement with Canada, only pre-inspection is allowed; therefore, the train had to stop at the Canada/U.S. border where legacy USCS inspectors boarded and conducted a customs

inspection of everyone on board. CBP is currently trying to negotiate with Canada to resolve this issue.

It is the general feeling of the Task Force that pre-inspection of people and goods at the point of origin rather than upon arrival is beneficial in terms of facilitation, and these programs should be continued and expanded, as appropriate if the issues discussed earlier in Chapter 2 can be ameliorated.

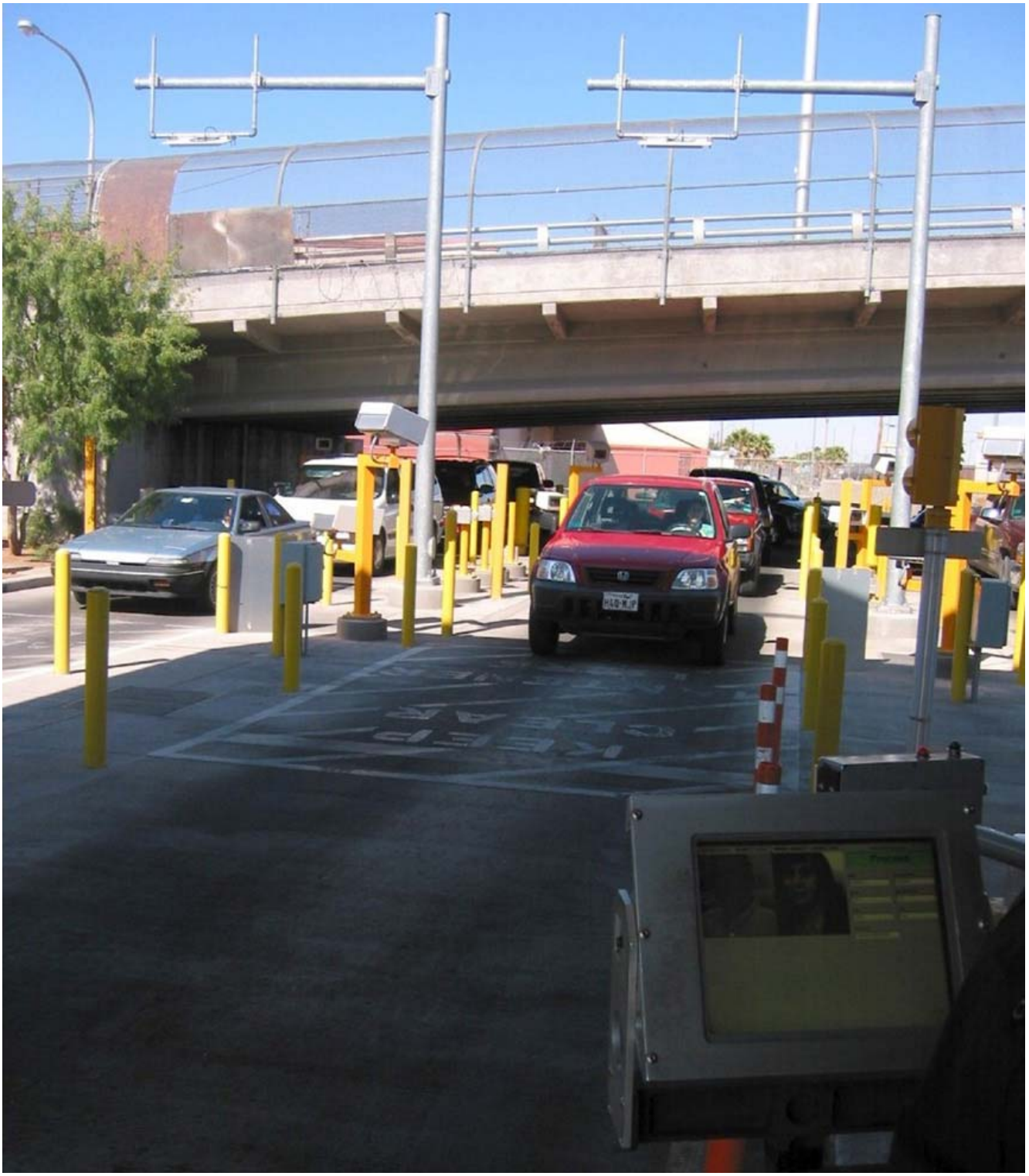
Ciudad Juarez, Mexico: Task Force also saw an excellent example of cooperation with foreign governments while at the U.S. Consulate at Ciudad Juarez, where there is an extensive level of cooperation with, not only Mexican authorities, but with the Mexican and U.S. communities along the border. While the task facing any consular operation can be daunting, Task Force members were impressed by the creativity and results-oriented attitude prevalent among consular staff and their efforts to overcome some of these challenges locally in the Juarez and El Paso communities. One example is the Border Liaison Mechanism discussed earlier in this section.

F. Known Traveler Initiatives

Part of effective border management includes risk management, whereby resources can be optimized to focus on higher risk people and goods, with a lesser degree of focus on lower-risk traffic. While there are various risk management processes utilized by different agencies or bureaus, an area in which there is great commonality involves a concept generally known as "known traveler/goods initiatives."[47] These are essentially collaborative efforts between government and the traveler/shipper involving an enrollment, required background checks, security enhancements, etc. Typically, dedicated or expedited lanes and/or a type of identification (transponder, proximity card) are provided to the enrollee to facilitate his or her border crossing. Examples of these initiatives include SENTRI, NEXUS, FAST, BRASS, C-TPAT, and OSC.

Secure Electronic Network for Travelers Rapid Inspection (SENTRI): SENTRI is an effort to encourage and promote low-risk travel, both pedestrian (scheduled for December 2003) and vehicular, through congested POEs. Approved applicants are issued a SENTRI port pass and a transponder for the enrolled vehicle. SENTRI has proven to be immensely popular on the U.S./Mexican border. SENTRI lanes are located at the San Ysidro, Otay Mesa, and El Paso (Stanton Street Bridge) POEs with almost 60,000 people enrolled as of August 2003.

[47] The term "known traveler/goods" is used throughout this report to refer to people and goods that have undergone certain background checks, increased security measures, and enrolled in programs designed to facilitate low-risk traffic.



SENTRI lanes at Stanton Street dedicated commuter lane bridge between the U.S. and Mexico. Notice the receivers in the lanes above the vehicles, that transmit information to the CBP officer via the screen in the foreground at the primary inspection booth. El Paso, TX. June 2003.

NEXUS: The NEXUS program takes the SENTRI concept even further and allows enrolled known travelers to be expedited at certain northern border crossings. Approved applicants are issued a proximity card with a photo and NEXUS identification. Participants cross the border in a dedicated lane, where they present their identification and proximity card for a limited inspection. NEXUS, a joint program with Canada, has proven to be immensely popular on the U.S./Canada border. NEXUS lanes are located at the following POEs: Peace Arch, Pacific Highway, Point Roberts, Peace Bridge, Rainbow Bridge, Ambassador Bridge, Windsor Tunnel, and Blue Water Bridge. Nexus has almost 50,000 participants enrolled as of August 1, 2003.

Signs indicating the NEXUS-only lanes and instruction for drivers and passengers in non-commercial vehicles entering the U.S. from Canada. Blaine POE. July 2003.

INS Passenger Accelerated Service System (INSPASS): INSPASS is one of the older known traveler initiatives; however, it is still in use at many airports today. Participants are pre-enrolled and a hand geometry biometric is captured. Participants, in effect, inspect themselves upon arrival at an INSPASS-equipped POE by submitting to a hand geometry biometric verification and database check. INSPASS, as mentioned, is an older system, and while based on a sound concept, it has not kept pace with technological developments. Since it is currently the only known traveler program of this kind available at international airports, the program remains in place until it can be replaced by newer technologies or processes. INSPASS was originally deployed at these international airports: Los Angeles, Miami, Newark,

New York (JFK), San Francisco, Washington-Dulles, and pre-clearance sites in Canada at Vancouver and Toronto. INSPASS has 18,000 enrolled.

Free and Secure Trade (FAST) Program: The FAST Program is a joint effort between U.S. and Canadian customs to harmonize C-TPAT and its Canadian counterpart, Partners in Protection (PIP), under the FAST program. Although registration in PIP and in C-TPAT independently will likely be necessary for carriers to get expedited clearance by customs officers on both sides of the border, the goal of FAST will be to minimize the burden on participants of having to register for both programs. Although still under discussion, once registered for both programs, carriers may submit information required for both programs through a single registration.

The Border Release Advanced Selectivity System (BRASS): BRASS tracks and releases highly repetitive shipments at certain land border locations. CBP scans a bar code into a personal computer, verifies that the bar code matches the invoice data, enters the quantity, and releases the cargo. The cargo release data is transmitted to ACS, which establishes an entry and the requirement for an entry summary and provides Automated Broker Interface (ABI) participants with release information.

Prearrivel Processing Systems (PAPS): PAPS is a system that facilitates the crossing of enrolled carriers by separating them from trucks who do not participate before they reach the POE. Carriers who participate in PAPS can proceed directly to the U.S. primary inspection point without waiting behind others who still need to complete paperwork. While goods are still in Canada:

- The carrier affixes a unique bar code to each commercial invoice and truck manifest.
- The bar coded invoice(s) are then faxed to the appropriate U.S. customs broker.
- The U.S. customs broker prepares a border cargo selectivity entry in ACS.
- The carrier then proceeds to the U.S. border with the bar coded invoice(s) and manifest. At the primary inspection, the officer wands the bar code with a light pen and receives instant notice whether to examine the cargo based on the bar code. A "No Exam" notice allows the carrier smooth travel into the U.S.

Bar code processing is now available to all carriers crossing the Peace Bridge into the U.S.

Task Force Observations of Known Traveler/Goods Initiatives

San Ysidro/Otay Mesa: The Task Force observed the SENTRI Program at San Ysidro and Otay Mesa during the site visit there in May 2003. The SENTRI Program has been very successful, and personnel at both POEs were supportive of the program. There are over 42,000 people enrolled in the SENTRI program at San Ysidro and Otay Mesa, and 10 percent of the total traffic at San Ysidro is SENTRI traffic. Since its inception, there have only been 2-3 enforcement actions. Currently, there are two (out of 24) lanes dedicated to SENTRI traffic,

but the feeling is that at least two more lanes are needed. Otay Mesa has one dedicated lane and houses the SENTRI enrollment center. Currently there is no consistent funding for the SENTRI program, so its managers must rely on periodic infusions of funds for operation and enhancements.

El Paso: The Task Force visited a third SENTRI site in El Paso, Texas, in June 2003. The Stanton Street Bridge is a northbound crossing for SENTRI users only. The Task Force observed that the traffic was flowing with no visible delays, but Task Force members felt that the SENTRI Program was not being used to the greatest extent possible due to high fees to access the lanes. The Task Force believes that these issues must be explored in conjunction with the government of Mexico to maximize enrollment and minimize costs to the participants.

Vancouver Canada: The Task Force saw INSPASS first-hand at the Vancouver International Airport. The INSPASS enrollment center there processes 400 new applicants and 700 renewals yearly (as of July 2003). Approximately 300 travelers a day use INSPASS at Vancouver in contrast with the 12,000 travelers who do not. The INSPASS inspection is an automated self-inspection at a designated kiosk next to the primary inspections booths. There are concerns that enrollees are not able to see those kiosks until after they're waited in line with the general public, in effect undermining the purpose of the INSPASS concept. At times when INSPASS kiosks are not operational, due to connectivity problems, INSPASS members are routed to a designated primary booth for inspection.

Pacific Highway and Peace Arch: On July 22, 2003, the Task Force traveled to the Washington State land border and toured the Pacific Highway and Peace Arch POEs. The NEXUS enrollment center, located at the Pacific Highway POE, is staffed with both CBP officers and Canadian officers. The Task Force was impressed with the two-week turnaround for enrollment in the program. The Pacific Highway and Peace Arch POEs both have NEXUS lanes. When the Task Force members toured the Pacific Highway POE, a lack of proper signage designating the NEXUS lanes, as one approaches the port, was evident.

The Task Force believes that known traveler/goods programs should be promoted and expanded, perhaps with a coordinated outreach program. Some considerations in doing so are:

- Flexibility at local levels to accommodate enrollment services consistent with local needs (i.e., some offices may need different hours due to the nature of traffic, others may need to coordinate with adjacent ports, etc.);

- Standardization and installation of easily recognized signage far enough in advance to avoid delays caused by last-minute lane changes;

- Flexibility to adjust existing lane usage to convert from regular to DCL lanes and back wherever practical to meet changing traffic needs;

- Expansion of current programs, where warranted, to include other modes of transportation such as cruises, ferries, and upgrades to airport programs;

- Promotion of benefits of enrollment in these types of programs through education, advertising, and other outreach methods to increase enrollment and process more eligible, low-risk traffic quickly. This is especially significant for POEs with often limited and congested facilities and access infrastructure; and

- While having separate efforts enables flexibility and resourcefulness, they need to be coordinated and integrated so that complementary solutions are developed and industry is not faced with a weltering array of requirements and programs.

G. Outreach

Of all the issues explored by the Task Force involving cooperation and coordination, the issue of more proactive, coordinated outreach is by far the one most often raised by industry and local community leaders. The Task Force has heard repeatedly throughout their site visits that outreach is a critical need, requiring more effort and vital to the economic security of many industries, communities, and the nation as a whole.

Senior officials have made very visible efforts to improve processes and services as well as security. Websites are used, town hall meetings are held across the country, and other methods of outreach are utilized daily by officials. An example of a successful outreach initiative is the DHS Ready Campaign. The Ready Campaign is a national multimedia public information program designed to give Americans the basic tools they need to better prepare themselves and their families to "Be Ready."

However, Task Force member observations and experiences indicate that a more systematic, integrated approach between government agencies and their partners in the border management arena could be utilized to more effectively communicate.

Task Force Observations of Outreach

The following are general observations that Task Force members made concerning outreach.

- The development and implementation of the US-VISIT program generates many new requirements. The Departments of State and Homeland Security need to communicate these changes directly to the general public, both here in the U.S. and abroad. These communication requirements are particularly important for the passenger side of travel. With tens of millions of visitors every year, the federal government must make a concerted effort to educate the international traveling public about these new changes. No policy will work if the people it affects do not know what they need to do to comply. Without such communication, front line inspectors will be swamped by travelers (who do not always understand English) with no idea of what they are supposed to do upon arrival. Or worse yet, they will not even bother to visit the U.S.

- Timing is particularly important in regards to international travelers. The average international traveler books their trip to the U.S. two to three months in advance. International tour operators, who sell package trips to the U.S., purchase their tour

elements 12 to 18 months in advance. International organizations planning to hold their conferences and conventions in the U.S. do so as much as three years in advance. The earlier international travelers, tour operators, and organizations learn of changes in requirements, the better they will be able to incorporate those changes into their itineraries and avoid disruptions. Ultimately, an educated traveler can make a big difference in the efficiency of any entry/exit system. Government and industry must work together to develop an extensive and proactive outreach program to communicate with visitors to the U.S.

- An excellent example of an outreach program is TSA's "Prepare for Takeoff" campaign that was run in the fall of 2002 in advance of the busy Thanksgiving Day travel. TSA prepared handouts, signage, and education packets on the new baggage screening requirements; they reached out to industry organizations, companies, and made a concerted effort to have the news agencies announce the new requirements. Because of this intensive education campaign, domestic travelers were prepared for the new baggage requirements.

- Routinized system template, i.e., checklist of people and organizations that need to be "touched" should be used. Such a template should make clear what the nature of communications should be. A phone message is not sufficient to meet the test of communication. (See information later in this chapter about a model concept for cooperation and coordination.)

- Government and industry must work together to develop an extensive and proactive outreach program to communicate with visitors to the U.S.

The Task Force feels that part of successful outreach is a matter of leveraging the communication channels already available to federal, state, and local governments and industry to improve outreach and communications to travelers and the business communities both in and out of the U.S. The following avenues of communication, although not all-inclusive, represent some of the expertise of the Task Force organizations that they employ successfully, and are available and could be leveraged to enhance outreach.

Travel Industry Association of America (TIA): As the umbrella organization that represents all segments of the U.S. travel and tourism industry, TIA is well positioned to be the lead private sector organization to initiate activities to increase cooperation, coordination, and communication in the area of traveler facilitation. Any new rules or procedures for international travelers planning to visit the U.S. can be communicated to overseas private sector companies and international travelers through a variety of TIA programs and communications channels such as the following:

- Formal relationships with Visit USA Committees in 40 countries;
- Participation with the World Tourism Organization;
- The International Pow Wow ®, a premier international marketplace show for travel;

- Web sites: www.tia.org and www.seeamerica.org;
- E-Newsline newsletter;
- Direct work with international media throughout the world; and
- Committees (Marketing, Communications, Government Affairs, National Council of State Tourism Directors, etc.).

Department of State (DOS): In April 2003, DOS created and went live with a new web site (www.unitedstatesvisas.gov), which is described as "an official source of information about U.S. visa policy and procedures." Travelers are encouraged to, "Use this site to learn about the visa application process, understand current requirements, and get updates on recent developments." The site will be made available in five additional languages other than English: French, Spanish, Arabic, Russian, and Chinese. This web site links to the main DOS web site at travel.state.gov for additional detailed information on visa and travel issues.

DOS consular offices in U.S. embassies and consulates abroad provide visa and other travel information directly to international travelers, and such information is also available on web sites of embassies and consulates. DOS officers in Washington participate in outreach activities across the U.S. to provide expert visa and related information to interested parties, such as American Immigration Lawyers Association, the Association of International Educators, local chambers of commerce, trade organizations, etc.

Department of Commerce: The Communications Committee of the Tourism Policy Council could be used to initiate communications with industry regarding changes and consideration of changes to the US-VISIT program, documentation requirements for international travel to and from the U.S., and other related issues. This Committee would also coordinate with the U.S. Chamber of Commerce, TIA, the National Governors Association, the National Association of Counties, the International Association of Convention and Visitor Bureaus, the U.S. Conference of Mayors and any other industry-related organizations that could help ensure clear communications with the traveling public.

The Office of Travel and Tourism Industries in the U.S. Department of Commerce serves as the Secretariat for the Tourism Policy Council and could be the central point of coordination for a proactive communication plan which would incorporate communications as federal notices are prepared, regulation guidelines are being considered, or as mandated changes are being imposed.

The Department of Commerce can also use the commercial service officers throughout the world (at 151 offices in 83 countries) and throughout the U.S. (at 105 U.S. domestic offices) to communicate information. These officers already interact with the in-market Visit USA Committee comprised of private sector representatives of tourism-related businesses. The officers work closely with the consular officers in-market, and their link to the private sector brings the added value of input and assistance as policies are being considered or even implemented.

U.S. Customs and Border Protection (CBP): CBP is actively involved in outreach to both the traveling public and the industry. CBP encourages traveler's feedback on their experiences through the use of comment cards. CBP comment cards are available at all POEs, on-line at the CBP website, and provided to the traveler after every secondary baggage examination. A CBP Passenger Service Representative is available to assist travelers with CBP issues and concerns at large airports. Through many of its initiatives, such as FAST, CBP relies significantly on industry participation in the process to assess the effectiveness and recommend improvements.

The Canadian/American Border Trade Alliance (Can/Am BTA): The Can/Am BTA provides a bi-national forum mobilizing an effective and responsive public/private partnership focus on U.S./Canadian border and border crossing capabilities. Can/Am BTA does the following:

- Interacts on a regular basis with federal, state, provincial, and local government officials;
- Holds conferences in Ottawa every May and Washington, D.C. every September involving U.S./Canadian officials and industry to discuss current issues and initiatives;
- Holds regional conferences and events at differing locations;
- Conducts trade corridor and border gateway meetings involving major north/south corridor and gateway related organizations; and
- Coordinates best practices and priorities along the northern border.

The Border Trade Alliance (BTA): The BTA prides itself on its numerous collaborative efforts with various segments of the public and private sectors as the organization strives to improve border regions' quality of life. BTA holds numerous regional forums each year in border communities where, in a town-hall-style setting, they facilitate dialogue between key decision makers and border community residents who are most impacted by border policy.

BTA also consults with industry when their initiatives may affect border communities and the trade community. This includes commenting on new technology to be deployed at the border and facilitating interaction with the users of that technology.

In fiscal year 2001 the organization earned a federal grant to assess the future health of the Southwest border region in the areas of small business development, affordable housing, and the bridging of the digital divide. In preparing that assessment, the BTA convened numerous focus groups comprised of such key stakeholders as bankers and homebuilders. The organization also collaborated closely with FannieMae and the Rio Grande Valley Empowerment Zone.

Finally, the BTA is often called upon as a sounding board for Members of Congress as they draft legislation affecting the U.S./Canada and U.S./Mexico borders. BTA is seen as a respected source of opinion on cross-border affairs on Capitol Hill.

National Association of Counties (NACo): NACo publishes a bi-weekly newspaper, *County News,* with a base circulation of 26,000 county addresses. It is estimated that nearly 40,000 additional officials read it when delivered. It is also provided electronically through e-mail distribution and appears on the NACo website. The NACo website receives 450,000 hits and over 48,000 page views each day. Through NACo's *Leadership Letter to the Board of*

Directors (distribution 200) and the *Legislative Bulletin* (distribution 1,000), county officials are regularly provided with information affecting their counties. NACo is also able to reach out to the Large Urban County Caucus (which represents the 100 largest counties in America) and the Rural Action Caucus (which represents the 2,489 rural counties).

Airports Council International—North America (ACI-NA): ACI-NA offers the pre-eminent North American airport forum for the exchange of ideas and information. Its staff is headquartered in Washington, D.C., and Ottawa, Canada, providing ACI-NA with direct access to the federal government, industry partners and related aviation associations. As a member association, ACI-NA helps its members develop common positions and communicate them among the government, the press and the general public. The mission of ACI-NA states that ACI-NA shall identify, develop, and advance common policies and programs for the enhancement and promotion of airports and their management that are effective, efficient, and responsive to consumer and community needs.

Air Transport Association: Headquartered, in Washington, D.C., the Air Transport Association develops common positions and communicates them, providing an interface between its members and various government, media, public, and private-sector organizations, representing its members on major aviation issues in the technical, legal, and political arenas. Its activities are designed to advocate, support, and facilitate measures that enhance aviation safety, ensure efficiency, foster growth, and protect the ability of the airline industry to invest in the future, in order to meet the needs of its customers.

National Governors Association (NGA): The federal government should consult with states whenever federal legislation or agency actions impact the flow of commerce and traffic along U.S. land borders. Governors (particularly those in border states) are essential partners to the implementation of "Smart Border" improvements designed to increase the safety, security, and efficiency of border crossings; to improve border safety and security by distinguishing between low- and high-risk traffic; and to support the deployment of systems and staff resources to expedite the former and scrutinize the latter. With the ongoing implementation NAFTA, it is equally important for federal, state, provincial, and local governments to collaborate when providing adequate transportation infrastructure and secure processing at border crossings. Specifically, governors call on the federal government to deploy the best possible border crossing technologies; to increase customs and immigration staffing at key border crossings for secure and effective handling of increasing volumes of commercial and tourist traffic; to create joint inspection facilities to speed the flow of low-risk commercial traffic; and to otherwise create innovative transportation infrastructure and technologies to facilitate the safe, secure, and efficient flow of trade across our borders.

American Association of Port Authorities (AAPA): The AAPA regularly partners with other associations in pursuit of common goals. An example of this partnership is a training seminar that was hosted by ICCL, the Florida-Caribbean Cruise Association and AAPA to discuss the implementation of new international security requirements. The seminar was held June 25-27, 2003, in Jamaica to help our international members prepare for implementation of the International Ship and Port Facility Security Code (ISPS) in July 2004. The ISPS Code provides a standard global security framework that will enable ports, shipping companies, and

governments to operate on equal preparedness and response levels. The IMO developed the ISPS Code to implement maritime and port security regulations in response to heightened security issues since September 11, 2001.

International Council of Cruise Lines (ICCL): ICCL, Cruise Lines International Association, North West Cruiseship Association, and Florida-Caribbean Cruise Association have formed a joint communication initiative to educate the public and travel agents about the multifaceted, global nature of the North American cruise industry. A key component of this initiative is to inform and educate travel agents on changing government issues that their customers will need to know relating to new identification and visa requirements, and security and safety procedures at ports and onboard vessels. This information provides travel agents with the tools to respond to customer/prospect inquiries.

H. Model Concept for Cooperation and Coordination

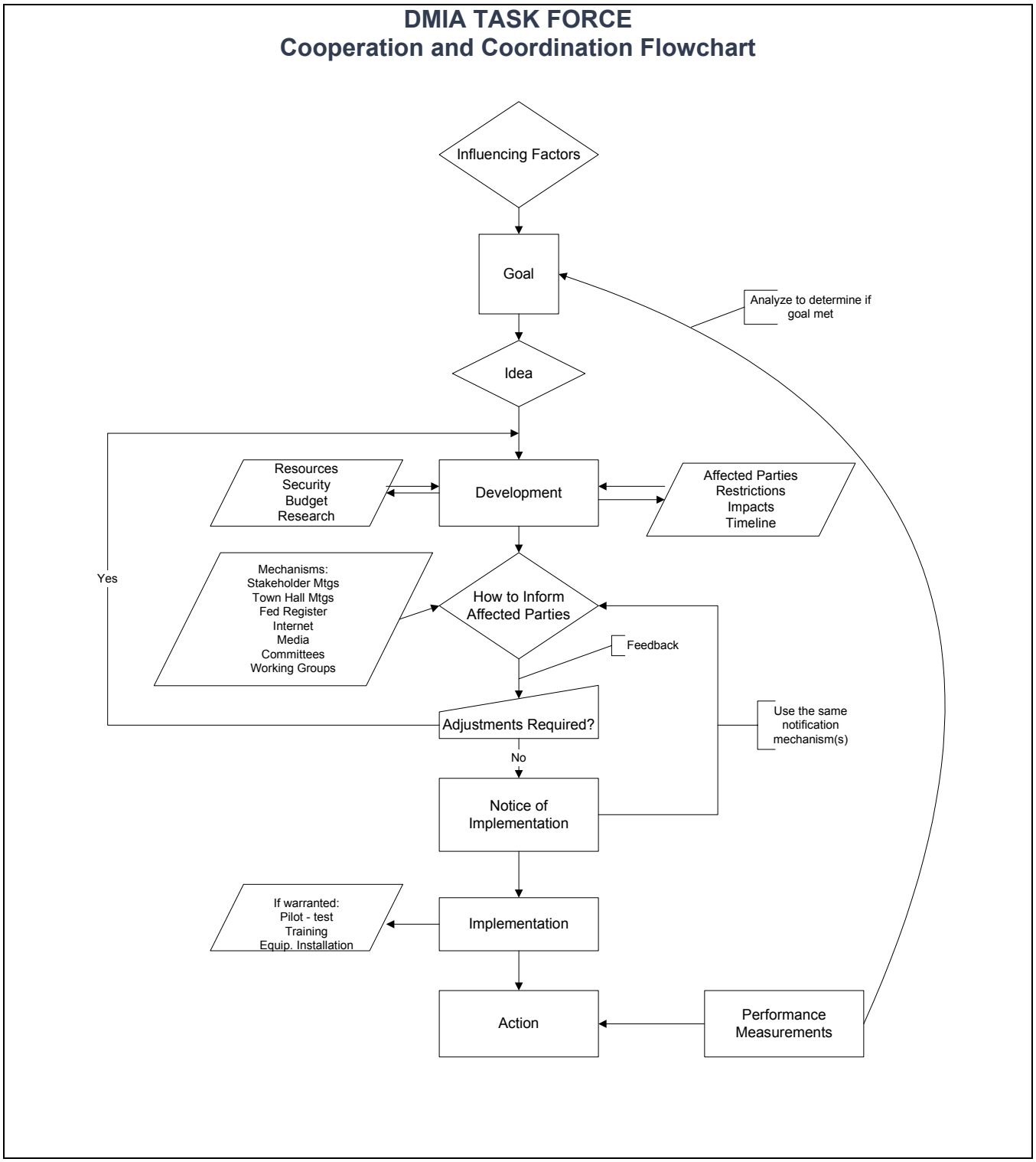
Cooperation and coordination is critical at many levels. On a national level, DHS was established to unite the incoming agencies in the mission of protecting the U.S.; on an international level, governments must work together to ensure the safety of cargo and travelers. Successful cooperation and coordination at every level includes effective coordination with partners and stakeholders in state and local governments, private industry, and communities.

How Cooperation and Coordination Works

Successful cooperation and coordination can be accomplished by identifying existing organizations and individuals who have proven track records and achievements in their areas and enlisting them where appropriate to provide joint or alternative solutions to challenges.

The Task Force has developed the following flowchart that demonstrates a model for effective cooperation and coordination mechanisms. Effective mechanisms start by considering the influencing factors that identify the particular situation or need to determine the goal of the mechanism. An idea is formed, and then developed through research and consideration of influencing factors. Next, the outreach phase begins, which includes feedback and adjustments based on this feedback. Only then is the idea implemented, using a pilot when necessary. The process concludes with performance measurements that evaluate how well the action met the purpose or goal of the mechanism.

The flowchart below illustrates this process and is followed by an example of how it can be implemented.



Using the Process, the Nogales Cyberport Project

The following narrative on the Nogales CyberPort Project[48] illustrates how the preceding model can be used as a template, adjusting as necessary to accommodate the issue or circumstances, for successful cooperation and coordination.

The Nogales CyberPort Project was derived from creative input from bi-national industry and agency stakeholders and detailed analyses of legal, logistical, and commodity-flow issues. Sponsored by the Arizona Department of Transportation and conducted by the University of Arizona Office of Economic Development, the CyberPort is multinational in its approach and considers the impacts of cross-border traffic at the local, state, and regional levels.

Influencing Factors: Recent threats to homeland security encouraged a redesign of the port to incorporate the latest and most technologically advanced inspection and detention methods to ensure a safe and secure border while facilitating the flow of commerce between the U.S. and Mexico. U.S.-Mexico trade has increased significantly since the NAFTA agreement was signed, but trade through Arizona has not grown at the same rate as the entire U.S.-Mexico border trade. The Arizona Governor's CANAMEX Task Force commissioned the Nogales CyberPort Project in order to position the state into a national and global leader in the trade flow process; a primary focus was looking at possible improvements with the Nogales POE, a principal gateway for U.S.-Mexico trade.

Goal: The goal of the CyberPort in Arizona is to increase the capacity of Nogales, San Luis, and Douglas to serve as safe, secure, and efficient gateways between the U.S. and Mexico.

Idea: The CyberPort concept optimizes a mix of consolidation and decentralization of border-crossing procedures at locations throughout the trade-flow process where each is the most appropriate, efficient, and effective. The CyberPort concept integrates the modernization of technology, logistics, and infrastructure along with reforms in the procedural and regulatory environment.

Development: The CyberPort concept began with the identification of basic guiding principles and an organizational framework for the ideal U.S.-Mexico trade-flow process by a group that consisted of 12 project partners and 12 invited port experts.

Outreach: Constant outreach and feedback from a variety of agencies and organizations throughout the development of the CyberPort process was done to assure that the concept is able to meet the wide range of needs by a multitude of stakeholders.

Notice of Implementation: Pending

Implementation: Pending

[48] Further information available at www.oed.arizona.edu

I. Conclusion

The Task Force considered all of these issues and has the following specific recommendations:

Recommendation 3

Congress should review all federal agencies that are conducting inspections at POEs but are not currently part of DHS to ensure coordination of relevant responsibilities.

The Federal Government must apply its policies and procedures so that they are consistent in their respective POE environment.

Recommendation 4

Expand and enhance initiatives that "push back the border" in order to increase national security and the facilitation of the lawful entry of people and goods.

Recommendation 5

Promote, expand, and improve initiatives that identify, enroll, and expedite known, low-risk travelers and cargo. These programs should maximize enrollment and minimize cost to the participant while still ensuring security and the vitality of the programs.

Recommendation 6

Continue to improve communication mechanisms for discussion and coordination among federal, state, and local governments and industry. As appropriate, consult widely with these same entities in the formulation of public policy prior to implementation.

Government and industry must work together to develop an extensive and proactive outreach program to communicate with the traveling public.

Recommendation 7

Establish and fund joint federal, state, and local operation centers to coordinate security and first responder efforts with relevant foreign and domestic governments and industry partners as necessary.

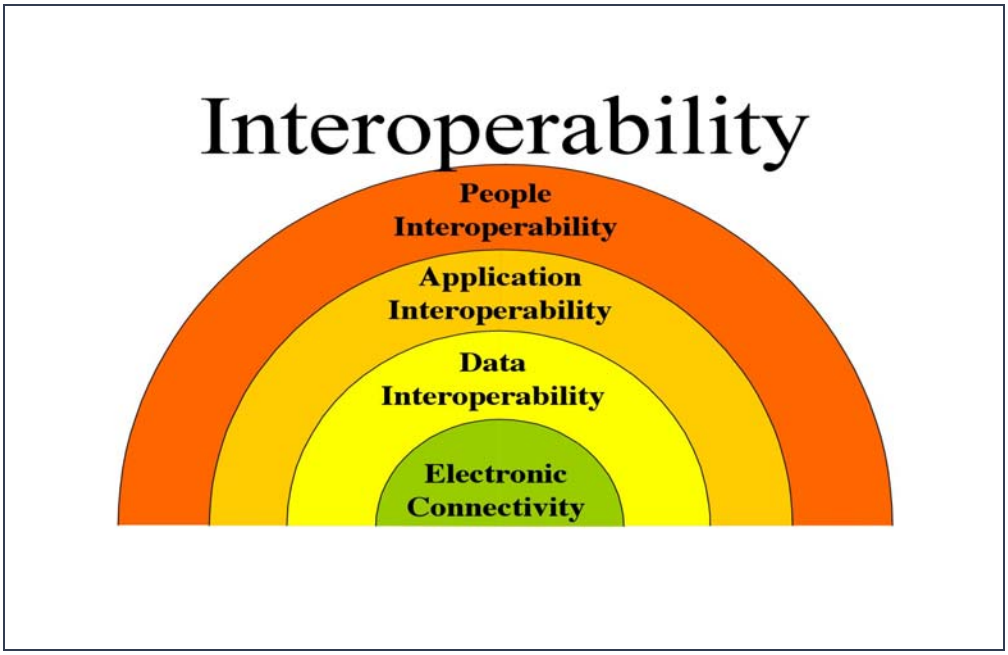
Recommendation 8

Expand and enhance the utilization of passenger analysis units and joint passenger analysis units and assure that they have the personnel and resources to function effectively. Consideration should be given to expanding the participants in the joint passenger analysis units.

A. Overview

The DMIA of 2000 mandated the Task Force to evaluate and make recommendations on enhancing information technology (IT) systems and data collection/sharing. In June 2002, the DMIA Task Force contracted IT consultants from Los Alamos National Laboratory (LANL) to examine IT systems involved in border management and provide suggestions for a more effective use of technology. They have reviewed 50 key systems from DHS, DOS, and DOJ. A summary of these findings and concepts is included as Appendix F of this report.

In June 2003, LANL hosted a workshop on interoperability and decision support for U.S. border management. Technical representatives from agencies involved in border management, Task Force members, and congressional staff attended. Researchers from the three National Nuclear Security Administration (NNSA) laboratories, Lawrence Livermore, Los Alamos, and Sandia made presentations. The object of the workshop was to bring together Task Force members and individuals who represent the agencies involved in border management with researchers of interoperability and decision support technologies. One of the desired goals was to reach some common ground when referring to these technologies and how they might be used in border management. The workshop was broken into several key sessions focusing on data, application, and people interoperability along with other technologies that might be applicable in this domain. Electronic connectivity was discussed briefly in recognition of the fact that it is the first step of the interoperability process. Each step depends on the prior step to work.



Electronic Connectivity: Electronic connectivity is the communication hardware backbone. The first step in the interoperability process is the ability for two or more systems to exchange information electronically. To do this, the network and communication infrastructure must be in place. Many technologies facilitate this type of communication, but the internet protocol (IP)

dominates. Security layers and access control mechanisms can be laid upon the IP foundation. Most of these solutions lie in dedicated hardware.

High-level statement: Electronic connectivity should to be rapid, consistent, and decentralized.

Data Interoperability: Data interoperability includes data access, format, standards, definitions, quality, etc. Information systems represent data in many different ways, often with different names, structures, and models for the same data. Data interoperability breaks down these independently structured information systems and allows access to their data. Data integration is an automated method for querying across multiple databases in a uniform way. Achieving this integration requires mapping necessary information from each legacy system into a common plan and transforming the information so that when a user queries, the data integration system reformulates it into a query for all the data sources and executes it.

High-level statement: Successful data interoperability depends on standards, quality, and robust search/access technologies.

Application Interoperability: Application interoperability refers to system structures that enable, permit, encourage, monitor, and direct diverse application environments to work together. In application integration, individual applications become components of a larger infrastructure, a framework that can use "middleware"[49] to mediate between the systems and connect the components. Independently designed applications are made to work together to resolve syntactic and semantic differences, organize data, conduct pattern analyses, and find connections in databases of disparate information.

High-level statement: Application interoperability will be enabled through highly functional linkages, careful attention to constraints, and well-designed implementation projects.

People Interoperability: People interoperability refers to the capability of the users, data collectors, and auditors to readily access, interpret, and apply the information provided by relevant sources. Tools alone are not the solution. The people using the tools create the solution. The concepts, software, and hardware are high on the list of importance; however, the role of the human being cannot be replaced. Tools equip human beings to make the critical decisions by filtering, integrating, and/or presenting the data, eliminating the noise, and modeling and simulating systems and scenarios. Making more information available is not an improvement if analysis bottlenecks prevent decision makers from acting on the information in an appropriate and timely manner.

High-level statement: Cooperation and coordination between organizations involved in and affected by U.S. border management activities will enable the nation to take advantage of technological improvements, to address consequential security issues, to maintain international trade health, and to enable the success of end-users, people.

[49] Middleware is software and/or applications used to mediate between systems, providing for interoperability.

B. Findings

Summary Evaluation of IT Systems

The LANL technical team was assigned the tasks of evaluating specific performance and application characteristics of the information systems currently deployed as part of U.S. border management operations. The specific performance areas of interest to the DMIA Task Force include the following:

1. **Purpose:** Clear outline of the purpose(s) for each individual system;
2. **Interface:** How, or if, each system interfaces with other systems in use;
3. **Prospect/Feasibility of Continued Use:** Determine the prospect of continued use of each individual system in context of overall border management systems;
4. **Duplication/Overlapping:** Identify duplicate or overlapping functions or responsibilities among the systems;
5. **Technological Obsolescence:** Determine which systems currently are, or will soon be obsolete. Systems judged to be technologically obsolete should be carefully considered for upgrade, enhancement, or replacement as part of the routine course of responsible system stewardship;
6. **Integration:** Determine (a) which systems are integrated (either fully or partially and (b) which systems could be modified or enhanced and ultimately could become integrated; and
7. **Biometrics:** Determine (a) which systems currently employ biometrics and (b) which systems could employ biometrics.

Discussion of Findings

The evaluation characteristics outlined above touch on important and consequential issues of effective border management operations. The fundamental goals of border management systems are to eliminate the possibilities of activities, persons, equipment, and/or materials breeching U.S. borders with the intent to do grave harm, to facilitate the flow of legitimate enterprise activities, while protecting the privacy of the individual(s). The LANL technical team assessed each system selected for evaluation in light of this goal—knowing the stated purpose of the system and understanding the significance of its purpose relative to the overall border management goals.

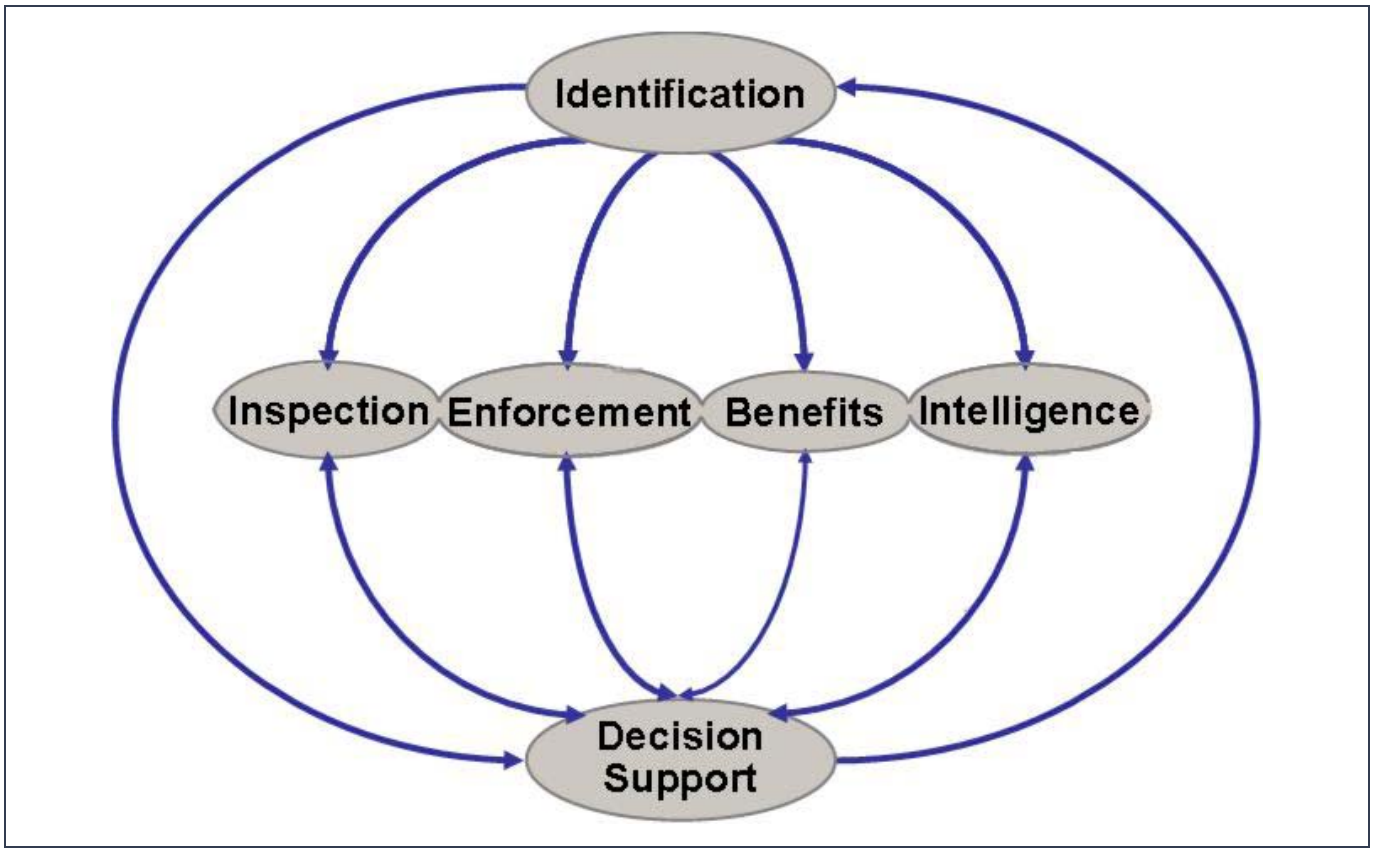
Purpose

As discussed earlier, the 50 individual systems have been identified for evaluation relative to the performance characteristics summarized above. The relatively large number of systems suggests that a purpose-based categorization would help to better organize our detailed assessment. The 50 systems fall naturally into eight specific categories or domains, representing the general purpose they serve. We have placed the systems in the most appropriate domain category, although some of the systems could fall in more than one

functional domain category. The eight categories including the systems assigned thereto are as follows:

- **Identification:** Systems that assist in establishing or determining the identity of persons.
- **Inspections:** Systems that help to verify the identity of persons wishing to enter the county.
- **Enforcement:** Systems that provide case management for violations of U.S. law by foreign nationals.
- **Benefits:** Systems that track and maintain the status of non-immigrants applying for various services or benefits.
- **Intelligence:** For the purposes of this report, systems that analyze information, often drawing and assembling “lookout” records that would result in more detailed inspection.
- **Decision Support:** Systems that provide analysis from enterprise data.
- **Cargo:** Systems that address the importation and movement of cargo.
- **United States Coast Guard (USCG):** Systems that monitor commercial vessels and USCG operations.

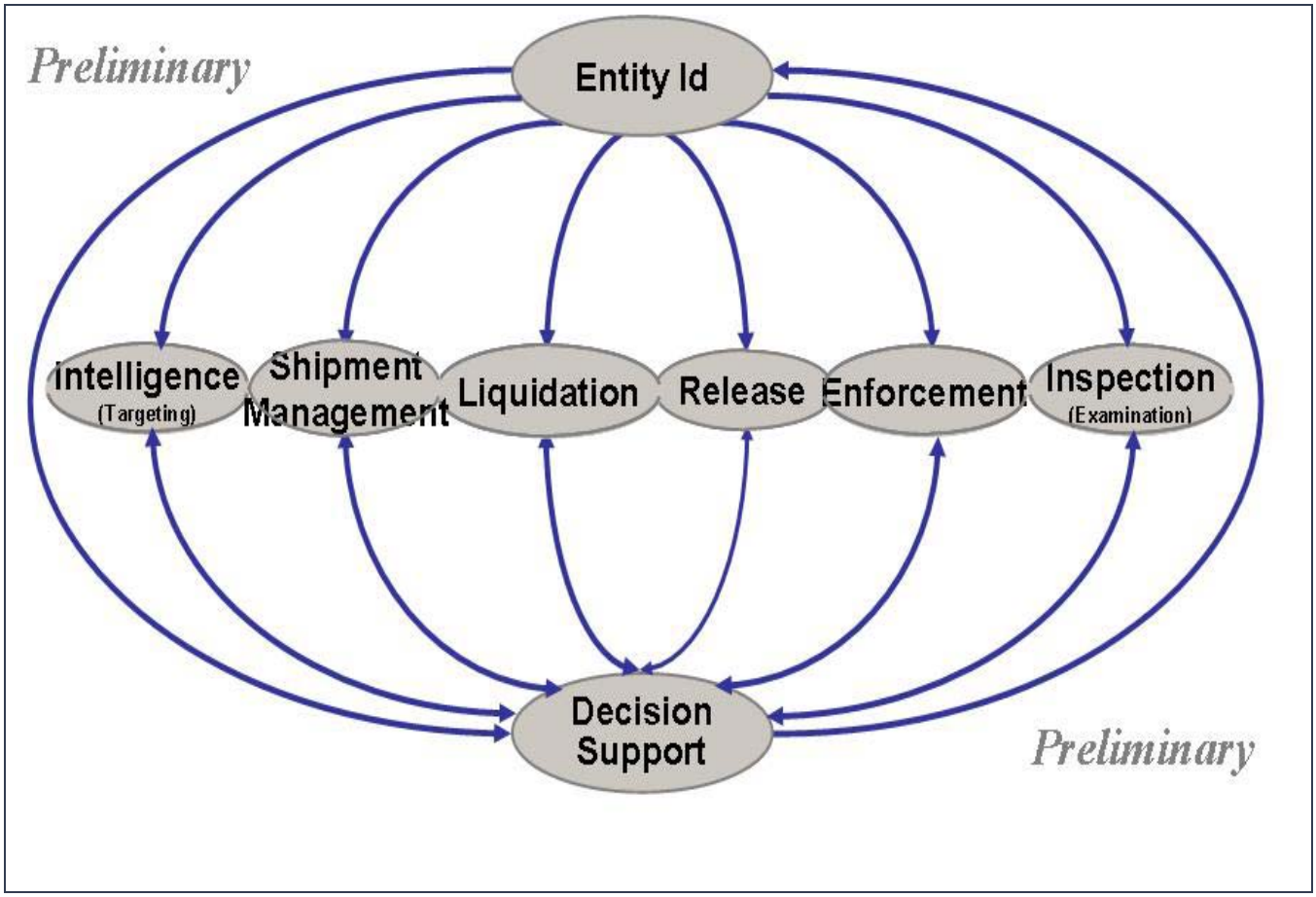
The following diagram illustrates a conceptual interrelationship between the functional domains of the traveler systems.



For the cargo systems, a similar conceptual system is in an early draft stage. It contains many categories similar to the traveler system, and it recognizes the fact that the two systems overlap in several areas. **This work is very preliminary at this time**. The categories for cargo systems are as follows:

- **Entity ID:** Systems that support and maintain the creation of electronic identification of organizations and other entities associated with cargo importation.
- **Inspection/Examination:** Systems that support the inspection and/or examination process of cargo.
- **Enforcement:** Systems that deal with case management when laws have been violated while importing cargo through the border.
- **Release:** Systems that handle the information associated with the release of cargo once it has been inspected and/or examined.
- **Liquidation:** Systems that deal with the transactions for the liquidation or payment of import duties.

- **Shipment Management:** Systems that allow the preparation of all required documentation to import cargo.
- **Intelligence (Targeting Systems):** For the purposes of this report, systems that analyze patterns and trends to identify cargo requiring more detailed inspection.
- **Decision Support:** Systems that provide analysis from enterprise data.



LANL will continue to explore these cargo systems with the appropriate entities to further a conceptual interface for these cargo systems and, where appropriate, overlaps with the conceptual traveler systems.

Interface

The systems evaluated show a wide range of interrelationships. For example, a criminal history information system shares information with a number of agencies, including the FBI, various criminal justice agencies, and appropriate courts. Information from inspection operations is subsequently transferred to an enforcement system, a decision support system, a benefits system, another intelligence system, and an identification system.

Prospect/Feasibility of Continued Use

The LANL technical team used the design and software implementation of each system to evaluate feasibility of continued use. Exceptional design enables systems to accommodate changes and enhancements and incorporates industry standard technologies. Four systems are noted for their **exceptional** design, software implementation, and overall usability. Two specific systems could be reasonable candidates for continued use if they were to receive software upgrades. Updating this software to a more modern operating system would be reasonably straightforward.

Some of the system managers the LANL technical team interviewed spoke of plans to upgrade and enhance system performance capabilities. It is assumed that timely improvements will be made to these systems as scheduled.

Duplication/Overlapping

Duplication and/or overlapping characteristics imply that certain systems serve the same purpose, replicate certain functionalities, or have been replaced with other capable systems. It is not surprising that a number of these systems are considered obsolete. It is reasonable to expect that the functionality of obsolete systems has migrated to other, more modern systems and, therefore, overlap with them.

Some identification systems and some lookout databases appear to have a natural clustering of overlaps. It is likely that their functionality is better served by integrating them. Two systems have a closely shared relationship, suggesting consolidation of these two systems should be investigated.

Technological Obsolescence

Obsolescence is a state or condition relative to the “modernity” of the technology compared to current, best practices. It is misleading to assume that because certain systems are deemed technologically obsolete that they should be quickly removed from service, that they are less than adequate, or that they are “pitifully weak” systems. Systems can be fully satisfactory in terms of the information they provide while at the same time technologically obsolete. The nature of obsoleteness means that systems judged to be technologically obsolete should be carefully considered for upgrade, enhancement, or replacement as part of the routine course of responsible system stewardship.

We evaluated the information systems relative to their technical and/or design obsoleteness. Systems were considered **technologically obsolete** if the hardware supporting the system is no longer routinely maintained by private industry, and/or the operating system has been generally replaced by more comprehensive capabilities. The **design** of a system is considered obsolete if the model of the procedures and data does not accommodate changes and enhancements. For example, if the design of a system does not permit the straightforward and/or cost-effective changes/additions of normal business rules, then the system is deemed obsolete.

The majority of systems the LANL technical team determined to be obsolete have technological deficiencies. However, two systems are uniquely obsolete in both design and technology. Because modern capabilities have replaced a number of these systems, it may be prudent to develop a plan for removing/replacing these systems in an orderly fashion. The systems considered "partially" obsolete merit immediate upgrading.

Integration

Integration means that the systems function together in a unified manner to accomplish the objectives of border management activities. The system integration characteristics of each of the systems were determined based on generally good business practices, overall security requirements, and unified system performance expectations. A total of 20 systems are judged as **adequately[50] integrated;** nine systems are judged as **partially[51] integrated**; and nine are judged as **minimally[52] integrated**.

- Of the currently **adequately integrated** systems, three have the potential for limited integration in the future. All of the other systems that are currently adequately integrated can be incrementally integrated as required for the foreseeable future.

- Only two of the systems currently **partially integrated** offer the potential for a more comprehensive level of integration.

- Five of the **minimally integrated** systems can be integrated well beyond what they are now.

- Two of the systems that are not currently integrated may be more fully integrated.

Biometrics

Biometrics is the automated methods of identifying or authenticating the identity of living persons based on physiological or behavioral characteristics. Biometrics includes facial photographs, fingerprints, hand geometry, voice recognition, and many other unique human identifiers. Fourteen existing systems incorporate at least some degree of biometrics as part of the system configuration.

The biometric information most of the systems use includes photographs or fingerprints. All of these systems have significant potential for greatly expanded use of biometric identifiers. Although the advantages of multiple biometric information sets have not been rigorously quantified, it appears that biometric diversity may enhance the quality of person identification and/or validation systems. (Refer to Consideration 3 later in this chapter.)

[50] Adequately integrated systems are blended together in a manner consistent with the operational expectations of the sponsoring organization.
[51] Partially integrated systems have a limited degree of integration within the operational domain that they were designed to serve. They could be more effectively integrated today.
[52] Minimally integrated systems have not been systematically integrated.

Observations

Observation 1: Transfer/exchange diversity limits information quality.

The wide range of data transfer connections could seriously hamper the timeliness and availability of critical information to the relevant systems. The potential propagation of errors, the variations of definitions among the systems, the limitations imposed by law, the differing system priorities, and the lack of centralized oversight help create this limitation.

Observation 2: As anticipated, essentially all of the systems examined manage/manipulate information.

With few exceptions, the systems of interest do indeed acquire, maintain, and post large amounts of information. It is worth noting that the fundamental technology by which information management is accomplished differs little between the various systems. Most are built upon linear data construction techniques together with “key word” searchable file structures.

Observation 3: Obsolete systems are notably populated by overlaps and duplications.

The majority of systems determined to be obsolete also have overlapping or duplicative operational capabilities. This implies that system overlaps are at least partially attributable to unmitigated obsolescence. Experience has shown that system-wide inefficiencies are more likely to occur if effective modernization strategies are not routinely implemented.

Observation 4: Most systems are obsolete because of platform problems.

Almost without exception, obsolete systems are implemented using outdated technologies, i.e., mainframe computational systems. The likely consequences of technological obsolescence may include significant maintenance costs, extremely limited interoperability, and little, if any, adaptability.

Observation 5: Most systems are or readily could be integrated.

Over 80 percent of the systems evaluated were found to be at least “minimally” integrated and, almost without exception, system-by-system implementation technologies do not prevent integration enhancements. This is very good news; however, it is noted that domain-wide “functional integration” needs to be evaluated because it is much more consequential than individual “system-by-system integration.”

Observation 6: Biometric identifiers have been implemented across a broad range of appropriate applications. Most systems are designed to accept biometrics in a reasonably straightforward manner.

There are no glaring deficiencies relative to the use of biometric identifiers. There is the obvious opportunity to enhance the use of biometrics within most of the systems to improve the quality of person identification results.

Observation 7: The efficacy of the information ultimately posted by each individual system is inseparably coupled to the quality of the data resident in the system's data sources.

The successful application of the information management capabilities summarized in this report ultimately depend on the accuracy, completeness, timeliness, and relevancy of the source data upon which these capabilities are built.

Observation 8: Four systems have exceptional design, software implementation, and overall usability.

These systems clearly represent exceptional information technology implementation. These systems should form the core element from which evolving information systems are derived to meet the demands of the future.

Observation 9: Modern communication technologies have not been fully exploited by any of the border management systems.

Modern information technologies have developed remarkably diverse and useful techniques for communicating complex information to people. These technologies include digitized voice transmissions, animations, graphics, tabulations, iconic representations, multidimensional virtual environments, three-dimensional engineering plots, geographically correct simulations, site-specific GPS-connected locators, etc. Many of these technologies offer communication environments that are selectable by the end-user. Consequently, the end-user can select the communication environment(s) that works best for his/her situation. In fact, the selection process can be keyboard activated (the traditional approach), voice activated (keyed to individual voice patterns), or activated by specific person biometrics such as eye-retina movement.

Observation 10: Robust information technologies depend on robust infrastructures for successful implementation.

Even the best of information technologies cannot be realized if the infrastructure upon which it is deployed is less than adequate. **The current support infrastructure is not sufficiently robust to sustain broad information technology deployment.** (Specific, localized elements, however, are somewhat adequate.) Infrastructure elements include high-speed, high-capacity transmission systems (including satellites), workstations, data storage and access systems, ergonomically compliant communication hardware, information input/output systems, and security-compliant encryption systems.

Observation 11: Technological obsolescence is not a small problem. A third of the systems have notable technology and/or design modernization challenges.

Information systems that become obsolete are not necessarily useless or unsatisfactory. Operational systems that are technologically obsolete reflect as much on the attitude and style of the organizational support managers as it does on the system itself. Getting along with "old" technology is risky. Old systems tend to be well suited for operational conditions that no

longer exist. Old systems are not likely to be prepared for surprise situations, emergencies or rapidly changing national priorities. One-of-a-kind technologies are very costly (in more than just dollars) to repair, maintain, and, ultimately, to replace.

Considerations

Consideration 1: Personal privacy information must be rigorously protected.

It is essential to the successful implementation of modern IT systems that the privacy of personal information and all associated data be scrupulously protected from unauthorized access, use, disclosure, or manipulation. Access control technologies should be used to (1) verify authorized users; (2) detect and track unauthorized access; (3) monitor information manipulation activities; (4) encrypt information transfers; and (5) encrypt information electronically stored.

Administrative controls include authorization documentation, routine investigations/audits, ID badges, background checks, password controls, two-person rules, and physical access controls.

Suggested Actions:

- Determine and verify applicable personal privacy laws, policies, procedures and requirements;
- Develop and validate personal privacy implementation plans;
- Extensively field-test privacy controls;
- Implement privacy control system; and
- Routinely maintain, evaluate, test, modify, and upgrade system.

Consideration 2: Consistent with privacy considerations, address the security advantages of understanding the consequences of persons' and organizations' long-term behavior.

If the full benefits of modern information technologies are to be realized, it is absolutely essential to track and assess activity patterns of individuals over relatively long periods of time (more than 25 years), recognize and understand person-by-person behavior patterns, and track person-to-person linkages, contacts, and often subtle interrelationships. Highly integrated, domain-wide systems should be designed and built to assess the implications of long-term behavior patterns.

Suggested Actions:

- Establish agreements between relevant agencies;
- Develop, accept, verify, validate, and implement information standards;
- Develop and/or modify applications;
- Deploy system-wide;
- Evaluate, maintain, and upgrade routinely; and
- Maintain consistency with privacy considerations.

Consideration 3: Determine the security implications of interagency integration schemes.

The integration condition of the systems reported herein was determined based solely on each individual system. Extensive analysis should be performed of the security implications associated with broad, system-to-system integration. It is believed that domain-wide integration across many agencies and organizations has the greatest security value to border management operations. The extent to which domain-wide integration may play an important role in security enhancement must be robustly defined before chartering major programs with the intent to upgrade the performance of the nation's technology-enabled security systems.

Suggested Action: Evaluate simultaneously with actions suggested under Consideration 2, above.

Consideration 4: Rigorously assess the value of multiple biometric measures.

It is not clear that multiple biometric benchmarks actually improve person identification, detection, and/or validation. Factors affecting this include varying levels of technological maturity and the intended use of the biometric. Rigorous analyses should precede a national commitment to large scale, domain-wide biometric deployments to do the following:

- Carefully assess which biometric technologies actually add value [combined as well as individualized biometric technologies];
- Determine the breadth of domain-wide deployment that makes sense;
- Recommend implementation strategies based on population characteristics;
- Estimate implementation costs (capital, operating, and maintenance) as a function of implementation strategy; and
- Recommend a long-term plan for taking advantage of biometric technologies when they become available.

Suggested Actions:

- Perform analyses of biometric applicability as outlined above;
- Validate LANL technical team assertion that biometrics offer the most return on investment for two situations, i.e., self-identification at enrolled POEs and identification of high-risk person;
- Evaluate and validate biometric advantages within other border management environments; and
- Support maintenance upgrade activities particularly as the science of biometrics matures.

Consideration 5: Proactively avoid systematic technological obsolescence.

Dealing with technological obsolescence is an ongoing challenge facing industry, academia, and government agencies. Planning that includes the routine assessment, justification, and the ultimate **timely** upgrade (or removal) of key information systems should be an integral part of all operational activities, funding strategies, and organizational responsibilities associated with homeland security assignments. **Technological obsolescence should not be permitted for systems essential to the security of the nation.**

Suggested Actions:

- Identify well-maintained systems;
- Determine proven maintenance strategies;
- Coalesce exceptional maintenance strategies into prioritization principles;
- Maintain, upgrade, or replace systems per principle-based guideline; and
- Routinely assess/improve robustness of maintenance implementation strategies.

Consideration 6: Ensure the quality of the data that supports database systems.

The value of information is inseparably coupled to the legitimacy of the data upon which the information is extracted. The quality of the data sources supporting the information technologies must be managed in partnership with border management system improvements. Data verification and validation technologies should be rigorously assessed, developed, and deployed in concert with modern information management strategic upgrades.

Suggested Actions:

- Identify, categorize, and evaluate data sources;
- Identify and/or specify technological assets for data source verification and validation;
- Develop data quality management strategic plan;
- Execute data quality plan, document lessons learned; and
- Routinely assess/improve data management quality processes, technologies, and implementation of strategic plans.

Consideration 7: Streamline access to information.

Access to relevant information in a timely fashion is an essential element of border protection operations. Systems designed to provide the necessary information should avoid complex interconnections and the current excessively diverse data sources. Standardization of information protocols including centralization of data quality maintenance and the dissemination infrastructure should be part of the organizational improvements established by DHS. Modern communication technologies should be extensively deployed to enhance information clarity to all frontline decision makers such as USBP agents and CBP officers.

Suggested Actions:

- Identify and prioritize data access and interconnection requirements;
- Determine optimum standardization approaches;
- Coordinate with data quality management systems per Consideration 6, above;
- Develop strategic implementation plan for communication technology deployment;
- Implement plan to maintain, upgrade, and replace systems and support infrastructure as required; and
- Routinely assess strategy based on feedback from "the field," on research and development progress, and on national priorities.

Consideration 8: Ensure "new" systems are designed to easily accommodate change.

The development of a national strategy for applying modern information technologies to border management issues is an essential part of achieving national security objectives. It is anticipated that "new" data systems, applications, and other tools will be deployed as a result of an integrated approach to border management activities in the future. Every effort should be made to assure that "new" systems are designed with change in mind. For example, the business rules and/or processes that determine how entry is to be accomplished should not be hard-coded into new or upgraded information technology tools.

Suggested Actions:

- Form integrated systems development strategy matching the national strategy for modernizing information technology applications;
- Set design standards for information tool design and deployment consistent with adaptive data management concepts;
- Provide development guidelines based on software quality assurance principles; and
- Provide incentives for meeting adaptive design standards and quality assurance principles.

C. Task Force Observations of Information Technology

In the course of various site visits, the Task Force made the following observations in the area of IT interoperability.

- Concerns include privacy issues and balancing enforcement and commerce.
- Public concern with government handling of personal and proprietary data has resulted in legislation and judicial decisions to prohibit the release and use of many kinds of sensitive information about individuals and businesses. Information systems must include safeguards against inappropriate use and release of such information to be consistent with the law.
- Technology advances needed at seaports to address projected increase in cargo container volume. Leverage technology to help law enforcement differentiate between legitimate and suspicious cargo.
- Agencies need to share information in a responsible way, with appropriate levels of access. Currently, exchange of information is limited and not all information can be shared electronically.
- New/improved systems' interaction with private sector partners, who may have differing technology levels, need to be reviewed. Systems should use consistent interfacing using appropriate technologies that still achieve required security and data-sharing needs.
- At security and trade admissibility decision points, real-time, all-inclusive data availability is paramount with no exceptions.
- The ultimate goal in terms of documentation is a secure, machine-readable, multi-faceted document capable of storing multiple biometrics for an individual.
- Entry-exit/US-VISIT is a critical component of a broader DHS strategy, and any system that is designed or perceived as a stand-alone system simply will not fit into a post-September 11, 2001, world.
- Training, enrollment, and maintenance costs must also be considered and funded as part of any costs associated with use of biometrics.
- All major technology enhancements/additions must be field tested in rigorous conditions before major operational rollout at POEs where significant negative impacts could be felt.
- Private sector users should be involved, to the extent possible/practicable, in the design and development phases of any IT investments that will require interface with them, so

that compatibility issues can be resolved early, and significant immediate capital investments by the private sector can be avoided.

- Encourage use of synthetic environments, using off-the-shelf technology, in the federal border management system. Synthetic environments will assist in the identification of best practices and weaknesses of border management systems, policies, and procedures prior to implementation and integration into border management. It could benefit not only inspections process and border management, but also as simulation for POE emergency events, security threat scenarios, and first responders. Synthetic environments can be developed with the use of facility blue prints, digital images, and laser measurement.

- Promote the standard use of middleware, as it enhances and maintains interoperability between systems. Prototype studies should be undertaken to asses the issues faced with the use of middleware in the border management domain.

- Encourage border management agencies to research and utilize historical data and analysis to determine likely patterns and/or mitigate threat or threat assessment. Data mining is central to this effort. Data mining is the set of technologies that allows the extraction of information patterns embedded in records or other facts on a data set. These technologies not only allow the identification and extraction of these patterns, but also allow the data to be presented in a usable fashion by decision-makers in the domain.

- Consider the use of image-understanding technology to assist with border management and possibly preclude the need for significant staffing increases between POEs. The technology utilizes remotely mounted or unmanned cameras to analyze captured images, look for objects or events of interest, and perform object recognition, tracking, region-of-interest recording, and economical storage and transmission of selective object information. While this technology is still in its infancy, it has several applications deemed suitable for border management and inspections activities.

- Visual Ergonomics have to be taken into account and their impact on the design of “user centric” interfaces needs to be well understood for implementation on future systems. “Visual ergonomics” can be defined in two different ways: first, is the physical environment between the display and the worker; second, is the design and comprehensibility of information provided to a user. The defense establishment has done a lot of work in this area, particularly as it relates to cockpit activity for next-generation jet fighters. Visual ergonomics is one of the many aspects of people interoperability of how people and systems interface. Human factor studies provide valuable data for implementing good user-centered design and visual ergonomics.

D. Conclusions

The Task Force considered all these issues and has the following specific recommendations:

Recommendation 9

Information technology systems should be enhanced or designed to ensure compatibility and meet the needs of the end-user. This is to achieve effective communication with federal, state, local, and private industry partners.

Recommendation 10

The Federal Government should create an information technology master plan that employs consistent interfacing and appropriate technologies that still achieves required security and data-sharing needs. Such master plan should:

- **Rigorously assess the value of multiple biometric measures;**
- **Proactively avoid systematic obsolescence;**
- **Ensure the quality of the data that supports database systems;**
- **Ensure "new" systems are designed to easily accommodate change;**
- **Leverage technologies currently available to enhance security and facilitation in the border management systems;**
- **Use a pilot project to rigorously field test systems under operational conditions before major rollout at POEs where significant negative impacts could be felt;**
- **Fund critical IT border management modernization systems;**
- **Fund and equip all border enforcement programs with compatible technologies and equipment; and**
- **Protect respondents from public release of proprietary or confidential information.**

A. Introduction

The Task Force is required to develop costs associated with the recommendations put forth in its annual reports. This chapter provides specific information about identifying critical operational shortfalls, developing feasible solutions, and where possible, developing accurate resource requirements to address the needs. Specific cost data cannot be provided at this time in the areas of technology, facilities and infrastructure, and staffing, due to uncertainties in the scope of work to be accomplished by DHS in coordination with appropriate entities, as its restructuring and consolidation efforts progress.

The establishment of DHS and the subsequent merger of 22 various agencies have created a department of some 180,000 employees and an annual operating budget of over $30 billion. The new organization brings together those agencies responsible for securing the nation's borders and transportation systems, including POEs and waterways, improving immigration services, and preparing for and responding to national emergencies. In addition to combining a wide variety of people and activities, the component agencies brought with them their myriad operating policies and procedures as well as their respective resources (personnel, equipment, property, appropriated funds and fee accounts).

While the Task Force interacts with many of the offices, directorates, and bureaus within DHS, this section of the report will focus primarily on resource issues within BTS, which directs the primary border management activities and operations.

B. Staffing

The combining of several agencies to provide a comprehensive and consistent national security/border management function has resulted in duplicative and overlapping efforts, particularly at the management and support levels, at both Headquarters and field locations. The Department is making significant advances in its efforts to restructure, identify, and address duplication and overlap and to develop consistent policies and operational practices. It is not surprising at this point in the development of DHS that separate supervisors (although often consolidated via interim managers), budgets, practices, policies, etc., exist. Insufficient staffing, equipment, facilities, etc., still must be addressed. These and other issues directly related to the restructuring effort are being examined, as appropriate.

While the merging of agency functions and resources is, for all intents and purposes complete, there is a need for detailed analysis and informed decision-making in terms of identifying and addressing resource requirements and deficiencies under the new structure. Insufficient staffing at and between land border POEs, airports, and seaports has been a long-standing issue. Each site visit completed by the Task Force revealed staffing deficiencies in varying degrees in all three bureaus with responsibility for border management activities (ICE, CBP, and TSA). Deficient staffing levels exist for three basic reasons:

- A lack of funding to support an appropriate level of staffing;

- Difficulty attracting, hiring, and retaining quality staff, for which there are many contributing factors; and

- Economies and efficiencies have yet to be realized by the merger of 22 organizations into DHS and by the consolidation of certain functions.

Staffing Levels, Deficiencies, Funding, and Related Issues

The following issues regarding staffing have been identified:

- **Staff Levels:** Until 2001, legacy USCS had essentially the same number of inspectors on the northern land border as they had in the 1980s and were processing six times the commercial activity. The southern land border, while short-staffed, has received some additions from legacy USCS prior to the events of September 11, 2001. The level of inspections staff at airports and seaports, while not optimal, is somewhat better in terms of filled and funded positions, due in part to the collection of user fees (both legacy USCS and INS) that support the staffing levels.

  While historic gaps in inspection staffing continue to exist, it is anticipated that once the merger of organizations and consolidation of functions are fully implemented and accurate needs identified, the staffing deficiencies will be addressed. Consequently, the FY 04 budget request transmitted to the Congress by DHS does not specifically address these staffing needs. Legacy INS did initiate a successful inspector recruitment campaign, but immigration activities at U.S. international airports are not staffed to levels as prescribed in the legacy INS workforce analysis model (WAM). Although CBP airport officers (comprised of legacy USCS and INS inspectors) are funded from passenger and conveyance user fees, the decline in international travel following the events of September 11, 2001, has resulted in insufficient funding for recruiting and hiring additional inspectors.

  During the mid-1990s, and prior to the September 11, 2001, terrorist attacks, legacy INS received staffing increases of some 9,000 positions among its various programs (Border Patrol, Inspections, Investigations, Detention and Removal, support, etc.) The vast majority of these staffing increases were assigned to the southern land border. Legacy INS interior enforcement and immigration services positions remain severely understaffed. While post-2001 northern land border inspection personnel have been increased, the levels remain significantly lower than the needs reflected in the WAM.

- **Deployment of Staff:** Existing commercial and non-commercial vehicle primary booths need to be staffed at most times, especially at peak times to avoid congestion and costly delays. While increases in DHS customs and border protection inspection staff have occurred in the post-September 11, 2001, era, current observations found staffing was not yet deployed at certain POEs to achieve this absolutely essential objective.

- **Support Staff:** Although support positions are requested in each year's budget they typically are not authorized nor is funding provided. Funding for either permanent support positions or contract support would preclude the need for law enforcement staff

(officers/agents) to perform administrative duties, allowing them to devote 100 percent of their time to their primary responsibilities.

- **Cost Estimates:** The methodology used to develop costs associated with new hires is inaccurate and inconsistent across the legacy agencies that comprise the new Department. The cost estimates for new hires within legacy INS were routinely low, creating a ripple effect that resulted in shortfalls in many non-personnel areas as well as the need to "balance" the number of funded positions versus the training, tools, and support needed to sustain the additional positions.

- **Canine Teams:** All border management staff have expressed the need for additional canine teams. CBP officers require four dogs per flight to perform customs screening activities properly and in a timely manner, yet often they are working with one. Each dog is trained to detect one specific type of contraband (money, drugs, explosives, etc.); each task requires the appropriately trained dog. Agriculture's Beagle Brigade is utilized to sniff out food products in baggage that could be carrying pests or other unwanted materials. Legacy INS and USBP canines are trained to detect concealed humans and narcotics.

- **Cost of Living:** There is increasing difficulty hiring and retaining staff at all levels in many areas due to the high cost of living and unavailability of affordable housing.

- **Standards of Living:** There remains a lack of housing in many remote border areas. The Task Force also has identified non-existent or substandard community services to support family needs such as schools, medical care, recreational services, etc., all of which are needed to sustain a healthy lifestyle and attract quality staff.

- **Quality of Staff:** There are inconsistent, incomplete, and lengthy processes utilized among and within the agencies to identify prospective new hires and perform appropriate background/security checks.

- **Pay Parity among Component Agencies of the New Department:** DHS has established a working group to review pay/benefits/overtime and other aspects of compensation to develop a consistent pay and benefits package.

As previously mentioned, insufficient staffing is universally recognized as one of the most critical issues that needs to be addressed. CBP officers from legacy USCS and INS are, for the most part, both present at POEs. They are cross-trained to perform each other's work. At the land border POEs legacy INS and USCS inspectors have historically worked side-by-side on primary inspections with each having a specialized secondary inspections area. At the larger air- and seaports, separate immigration and customs inspectors inspect the traveler and goods and cargo. DHS, specifically CBP, is developing a training and implementation plan to support the "one face at the border" concept. The new basic training course for CBP officers, which combines legacy INS, legacy USCS, and legacy Agriculture inspector training into a single course (replacing the three legacy courses) is scheduled to begin October 1, 2003, and will be 12 weeks in length. The basic CBP officer course will continue to take place at the CBP academy located at the Federal Law Enforcement Training Center in Glynco, Georgia. The

cost for the 12-week course is approximately $7,000 per student and includes travel, housing, and meals at the academy and miscellaneous supplies and equipment specific to his or her training. There also are substantial non-training costs incurred to fully equip and prepare a new officer for duty (hiring and recruitment, background investigations, uniforms, body armor, weapons, IT equipment and software, vehicles, etc).

Advanced training is provided throughout an inspecting officer's career as needed to enhance and provide new skills. Advanced training courses vary in length and are delivered nationwide. The cost is based on the travel and per diem costs for the host city. Some advanced courses are conducted at the CBP academies and can be provided for approximately $1,500 per student for a one-week course. However, most advanced training is conducted elsewhere and provides the officer with hands-on training at high-volume POEs. Costs are dependent upon the length of the course and the costs of travel and per diem. The cost of a two-week course ranges from approximately $2,500 to $3,000 per student.

CBP will begin implementing a unified primary inspection for U.S. citizens and lawful permanent residents and consolidated counter-terrorism secondary inspections at airports around the country. Significant cross-training is being provided to ensure effective implementation of both components. Airport primary represents the first step; more cross-training will be provided to address additional modes in the future. A strategic plan is being created to outline all additional cross-training to be provided to meet officer needs.

The Task Force has observed at many of the POEs visited that CBP is aggressively moving toward the one face at the border concept, both in terms of cross-training activities at the academy and at the operational level. Once the one-officer concept is fully implemented, the impact on staffing could be significant and positive, allowing more flexibility in meeting staffing shortages and needs.

Enhancements to and deployment of additional technology, including that being developed for implementation by US-VISIT, could also impact staffing requirements. The identification and deployment to all POEs of more advanced technologies may increase productivity and accuracy; however, changes in other inspection processes could increase inspection times and require additional staffing even with the use of the use of newer technologies. As additional and more modernized equipment is procured, training the users is a critical element to ensure the equipment is used appropriately and that the user is able to comprehend the information provided. All of these factors need to be considered when determining staffing requirements.

Should a decision be made, however, to hire additional staff prior to performing an in-depth analysis of the actual need, the Task Force reiterates its recommendation from the 2002 report of a phased hiring approach to address current, critical staffing shortages. This approach would allow the opportunity for a complete analysis of staffing requirements, while addressing some of the most critical shortfalls identified. A phased approach should also prevent most, if not all, of the issues previously encountered by TSA in terms of identifying and addressing appropriate staffing levels.

The staffing and personnel issues identified in this report do not take the various threat levels into consideration. Clearly, if the threat level is heightened for any period of time, there will be an immediate and adverse impact on resources.

Task Force Observations on Staffing

- **Increased Staff during Peak Demand:** CBP should institute a policy assigning staffing to operate all available booths during peak demand, especially throughout the summer months. For example, the Pacific Highway POE has three truck booths entering the U.S. Current staffing limits operation to two booths at all times (8 a.m. to midnight) and three booths can be operated only three hours a day, causing substantial backup and serious congestion/delay. Additional staff should be added immediately to allow the third truck booth to operate at all demand times. This is especially important since currently there are no FAST trucks operating at this POE, but there will be in the near future.

- **Consider Dedicated Staffing at Sea POEs:** Dedicated marine units conducting inspections of passengers and cargo exist only at two seaports. Occasionally, resources are exchanged between airports and seaports in those two locations, consistent with peak periods and other work conditions. However, the majority of POE seaport inspections and operations personnel are staffed from airports. Currently, inspectors from nearby locations travel back and forth to the seaports, since there is no dedicated staff, on an as-needed basis to perform the necessary inspections. The Task Force proposes that dedicated marine units may need to be established at other key or high volume seaports to optimize efficiency.

- **Determine Accurate Staffing Requirements under the new DHS Structure:** In order to determine the extent of the staffing problem, an analysis of these newly merged staff must be performed to: determine current staffing levels under the new structure; identify staffing deficiencies by individual location; and, identify the economies and efficiencies realized by the merger of 22 organizations to DHS and the consolidation of certain functions. An accurate, reliable, and accepted methodology to determine appropriate staffing should be developed and utilized consistently. The analysis also should include cost comparisons of permanent support staff versus contact support staff, or use of CBP officers for administrative work.

  The analysis could be performed by contactors with expertise in workforce modeling and personnel utilization, similar to the previously used WAM, but more accurate and flexible than the WAM. Once appropriate levels are identified, funds should be made available to meet the requirements.

- **Develop and Utilize Methods to Address Peak Inspections Requirements:** A "maximum wait" staffing formula should be developed that would utilize on-call personnel. Once the maximum acceptable wait time is reached or the number of vehicles or persons waiting in line meets unacceptable levels, another line/booth/queue would be opened.

- **Increase the Number of Canine Teams:** Expanding the use of canines to assist in screening is a concept embraced by various types of CBP officers (legacy INS, USCS, and Agriculture). They perform an invaluable law enforcement function that cannot be duplicated, and are a cost-effective and efficient tool used in the border management arena. All three legacy agencies that have merged into CBP utilize canines to assist in their inspection activities (more information on these programs is included in Chapter 3 and Appendix D of this report). There are many differences among each legacy agency's canine program, from the purchase of the animal to its training and welfare. For instance, Agriculture obtains their canines from shelters and rescue groups, while those used by legacy INS inspectors are purchased from various breeders; both legacy USCS and Agriculture canines are housed in kennels, while those of legacy INS stay with their handler. These are all part of the issues being resolved with the merge of the three legacy agencies into DHS.


CBP (legacy INS) K-9 team pictured with illicit drugs hidden in a tire of a non-commercial vehicle attempting to enter the U.S.

The costs associated with deploying one canine team (one dog, one officer) vary widely as well. For example, legacy INS estimates the cost of one canine team to be approximately $43,000 which includes the purchase of the canine and veterinary care as well as a retrofitted vehicle. It does not include salary and benefits costs for the handler (officer). Additional costs are incurred for training dogs and handlers, instructor costs, and canine training equipment. An estimated $56,000 is required for each training class of 15-20 students and dogs. Legacy USCS has developed a canine enforcement officer "position model" that includes the officer's salary and benefits, space, communications, equipment, supplies, vehicle, etc., as well as veterinary care, canine supplies, training, and associated equipment. The total amount required for the position is approximately $185,000, most of which would recur annually. Agriculture inspectors are unable to provide accurate costs associated with their canine teams as the canine functions and expenses are controlled locally and vary widely.

CBP (leagacy APHIS) K-9 team “discovers” hidden fruit among some checked baggage, in a demonstration for DMIA Task Force members. Miami International Airport. August 2003.

C. Equipment/Technology Requirements

The availability and use of current, state-of-the-art equipment and technology throughout all border management activities is paramount to ensuring smooth traffic flow (people and goods) and enhancing security. Resource constraints coupled with the historical need to deploy a given system quickly to address an emerging critical issue, have resulted in equipment inconsistencies and technological incompatibilities within the legacy agencies. These issues now exist in their entirety within the new Department and create an even larger issue in terms of interoperability and data management/sharing among the agencies that comprise the DHS.

The inconsistencies in terms of the types of equipment in use and the extent of their deployment are widespread. For example, and as mentioned in the 2002 report, document readers are not available at each POE, yet they greatly facilitate the inspections process; seaport inspectors have very limited technologies available to them to perform inspections, and what is available to them is usually dated information; and the technologies used to facilitate known travelers/goods are deployed at a limited number of locations but in reality should be more widely deployed.

While the components of DHS have worked together in the past to develop and deploy various systems and technologies to facilitate the flow of traffic at the POEs, these types of efforts typically are funded as pilot programs that in many instances become a part of permanent operations, but rarely receive appropriated or earmarked funding. As a result, funds are often diverted from other projects or functions to maintain or expand such programs.

The following issues in the area of equipment and technology have been identified:

- **Limited Availability of Funds:** Due to limited funds, there are many "make do" pieces of equipment, programs, and systems that will require substantial funds to render them effective, efficient, and interoperable, allowing timely access to all appropriate databases currently "stovepiped" in a number of agencies now needing to operate as one.

  Insufficient or discontinued funding streams to maintain, expand, and upgrade various projects or technologies that facilitate inspections processes are an ongoing problem. These processes include, but are not limited to, known traveler/goods programs. Other examples include continued funding to maintain and/or upgrade systems as well as operational funding to support basic information technology needs (computers, software, upgrades, etc.) While funds were made available for the development, procurement, and implementation of projects, resources to maintain, expand, and enhance the projects are not provided. The initial investment for these projects was significant, but without continued funding, these once-valuable tools become ineffective or obsolete and the investment a waste. The continued lack of funding has resulted in increased resource requirements in other areas (staffing, overtime, and maintenance costs).

- **U.S. Border Patrol Equipment:** USBP has been quite successful in its efforts to increase staff. Having the proper equipment would greatly enhance their efforts to secure the border, provide a safer working environment, and possibly reduce the number of additional staff needed as a result of the force multiplier technologies that are available. Additional funding should be secured for the purchase and maintenance of various types of equipment. The Task Force has identified additional equipment and technology requirements to support USBP operations, including helicopters, VACIS systems, vehicles, Integrated Surveillance Intelligence Systems (ISIS) expansion, infrared cameras, and mobile Fingerprint Storage and Identification System/Integrated Automated Fingerprint Identification System (IDENT/IAFIS) machines.

- **Biometrics Capture:** While the type and extent of use of biometric information continues to be a contentious issue, whatever the outcome, the cost to develop the technology and capture and access the information will be significant. Currently, biometric data (specifically fingerprints and photographs) are captured, stored, and accessed under only a few circumstances—most of which are enforcement related.

  Once the decision as to who will capture the biometric is made, resources will be required for equipment and also for the space needed to support the activity. Additional funding should be made available to support additional staff – either permanent or

contract – to assist with this activity. Funding also should be made available for both initial and ongoing training for users of all technology related to the biometric.

- **Communications Devices:** There is a critical need for portable electronic communication and information devices, particularly in light of the merging of separate agencies that previously had no means of inter-communication. In some instances, communications within each of the legacy agencies, even prior to the merger, were inconsistent and used incompatible equipment. Various types of communications equipment have been deployed across the board, resulting in issues regarding the use and availability of radio frequencies and mixed communications technologies. Consistent, compatible, and fully deployed communications devices would assist all CBP officers in performing their requisite duties. This requirement exists in all three POE environments (air, land, sea).

Task Force Observations of Equipment/Technology

- **Determine an Appropriate Mix of Equipment/Technology and Staffing:** The impacts of new technology, streamlined processes, known traveler/goods programs, improved training, etc., need to be examined to determine the most efficient and effective mix of tools (equipment/technology) and staffing. The result of this analysis may impact on staffing levels as well.

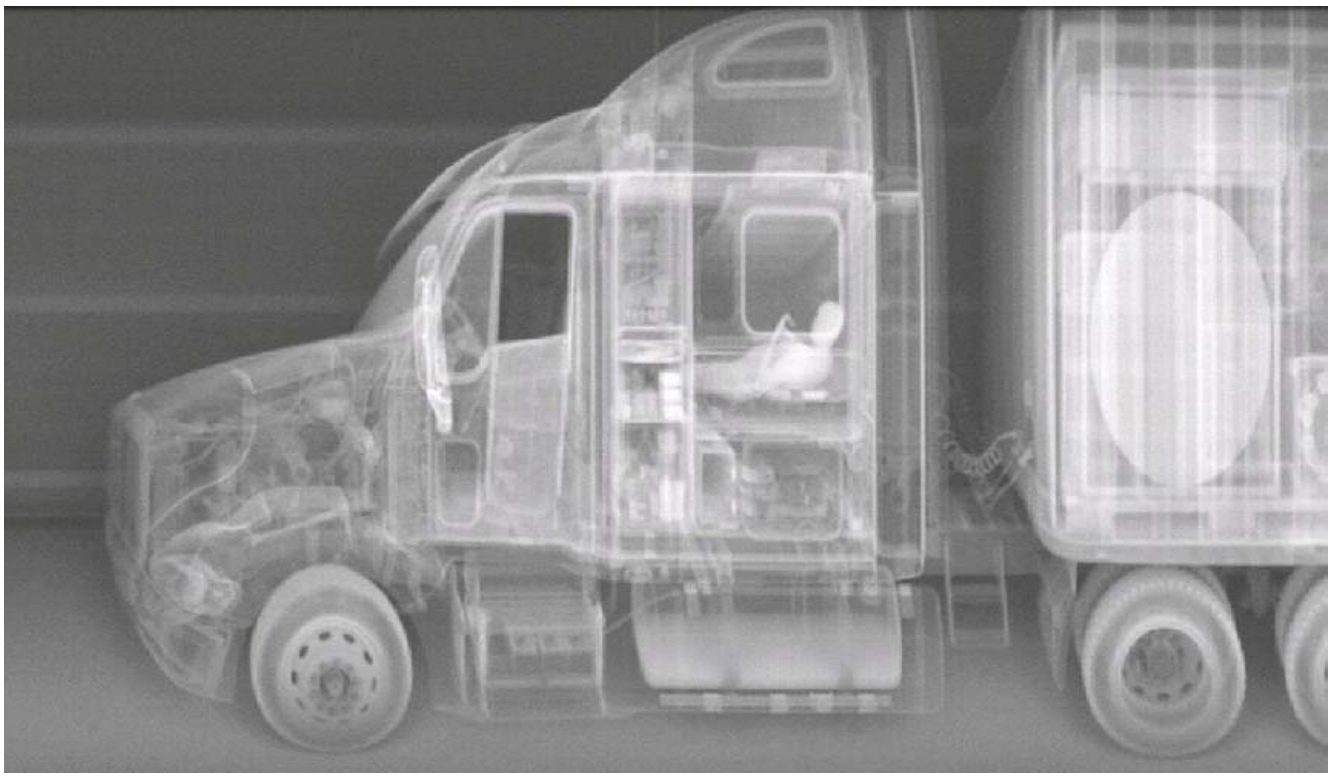
  If personnel are properly outfitted with the tools needed to perform their work, and proper, periodic training is mandatory, productivity should increase while the need for additional staff may decrease.

- **Equip all POEs with Compatible Technologies and Equipment:** It is critical that funds be appropriated for the purchase of equipment and technology for use at all POEs. There currently is no consistency in terms of what equipment is available and utilized for inspection and other border activities.

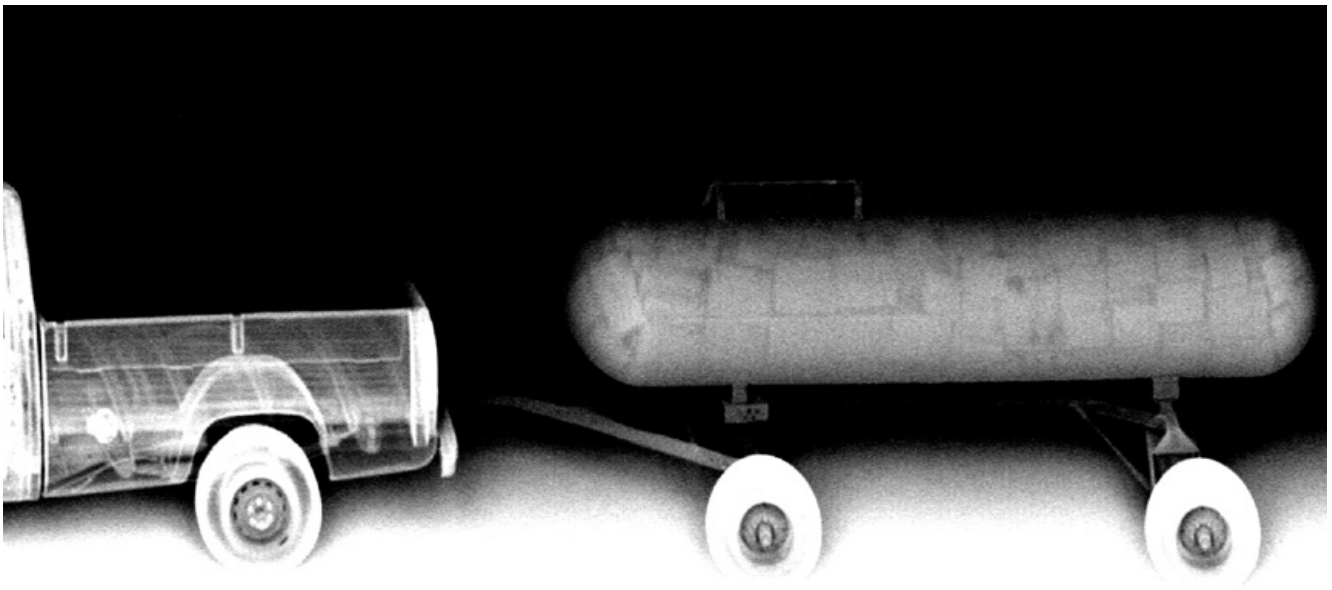
- **Provide Additional Funding for Border Patrol Equipment and Technology Requirements:** Until recently, USBP equipment and technologies consisted of old, ineffective systems and assets requiring extensive maintenance. The deployment was totally inconsistent among sectors and offices. The very nature of USBP activities requires a strong, modern vehicle fleet (watercraft, vehicles, aircraft) and consistently deployed and current technologies and systems. Additional funding should be secured for the purchase and maintenance of various types of equipment. The estimated purchase price of each item identified is as follows:

Vehicles (SUV)	$60,000 to $80,000
VACIS Machines	$1.9 million; annual maintenance: $230,000
RVS	$220,000-$400,000
Infrared Cameras	$18,000
Mobile IDENT/IAFIS	$ 4,000
Helicopters	$2 to $5 million

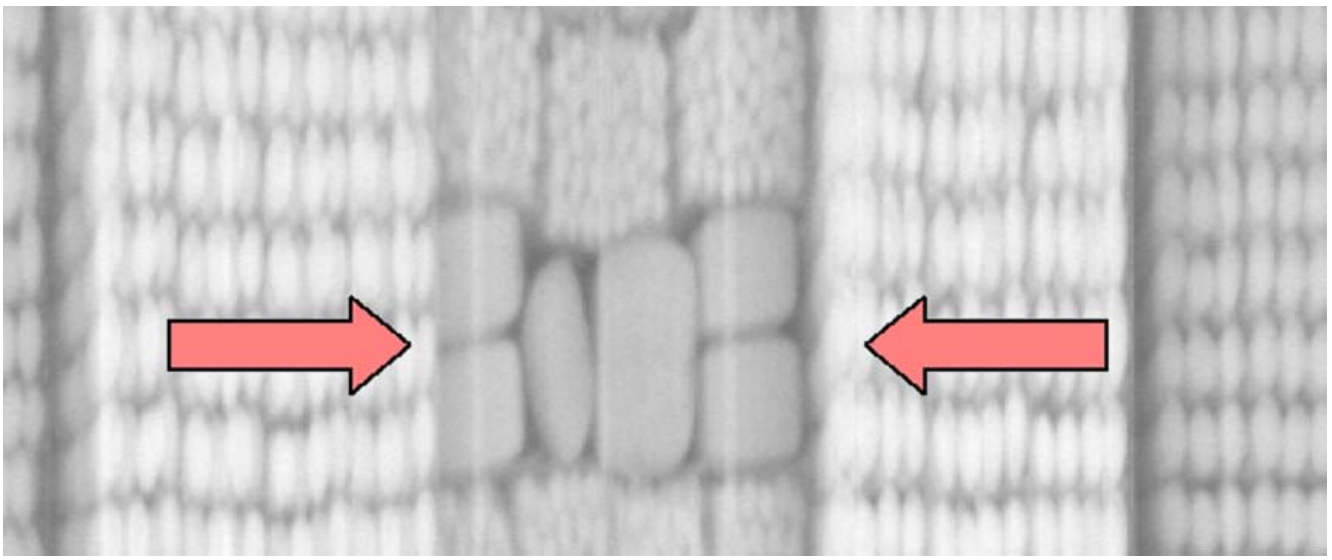
Maintenance costs and periodic replacement costs, based on GSA standards, must be addressed as well. Otherwise, a one-time infusion of funding for these purchases will be for naught if the equipment cannot be properly maintained and/or replaced on a regular schedule.



Sarita Border Patrol checkpoint alien apprehension: CBP mobile VACIS unit revealed one subject hidden in the sleeper area of the cab after the driver gave consent for secondary x-ray inspection. Courtesy of the U.S. Border Patrol.



Fort Hancock Border Patrol Station Narcotic Seizure: Sensor activation, driver nervousness, and Border Patrol K-9 alert sent the truck and the ammonium nitrate gas tank to the Fabens Border POE for secondary inspection. With the consent of the driver, a VACIS x-ray inspection was done and located 3,320 pounds of marijuana in the ammonium nitrate gas tank. Courtesy of the U.S. Border Patrol.



Sarita Border Patrol checkpoint drug seizure: Driver nervousness and U.S Border Patrol K-9 unit alerted and indicated to the trailer portion of the rig, sending the commercial vehicle to the secondary area. With the driver's consent, a CBP mobile VACIS unit did an unobtrusive inspection that revealed large rectangular objects in the load that was not consistent with the other cargo. 364 pounds of marijuana was found concealed in the center of a pallet of limes. Courtesy U.S. Border Patrol.

Remote cameras are placed high above the terrain in order to give the Border Patrol the ability to visually monitor sections of the border 24 hours a day. El Paso Sector. U.S. Border Patrol.

U.S. Border Patrol Command Center where Border Patrol agents monitor the border via strategically placed remote cameras 24 hours a day. El Paso Sector, U.S. Border Patrol.

- **Full Deployment of Consistent Portable Communications and Information Devices:** Funding should be made available for the purchase and full deployment of portable communication/information devices. This includes live access to current

databases and direct communications capabilities and technologies. The equipment would support direct, unhampered communications among all CBP officers, and their state/local partners as appropriate. This is especially critical for effective responses to security and emergency situations and would prove invaluable in addressing officer safety issues.

- **Full Completion of Automated Commercial Environment (ACE) Project:** The legacy USCS ACE project (now a CBP project) estimated at approximately $1.4 billion, began to receive annual appropriations of $300 million (now in its third year) in FY 03. This critical project must be funded to completion in order to reap the full benefits (another $600 million over the next two years). In addition the International Trade Data System (ITDS) development is underway as part of ACE.

- **Expand and Enhance Known Traveler/Goods Technologies and Systems:** Government and industry worked together to develop and deploy the technology and infrastructure needed to facilitate and enhance the inspection of known travelers/goods. These technologies have proved to be reliable and secure and have been most successful in facilitating traffic flow where they are deployed. It is critical that funding be appropriated to purchase the necessary equipment and technology to expand these joint initiatives.

- **Maximize the Use of Space:** Enlisting the assistance of private industries that have experienced – and resolved – similar issues should be considered.

- **Prioritization:** Prioritize projects, develop accurate cost estimates for each, including maintenance costs, upgrades and replacements if needed. Finish one project at a time, based on the prioritization and funding provided rather than funding bits and pieces of various projects, which usually results in the completion of none.

- **Funding for State and Local Governments:** Since the September 11, 2001, terrorist attacks, local governments have expended well over $7 billion in security costs for critical infrastructure, including POEs and airports. These expenditures often create funding shortfalls in other state and local programs. DHS has been working to provide grants and other funding to cover these security and first responder costs.

- **Communications Interoperability:** In the area of communications interoperability, the Department of Justice's National Task Force on Interoperability estimated that the currently unfunded cost of nationwide interoperability ranged from $18 to $60 billion. In September 2003, DHS announced that over $79 million is being made available to help communities develop interoperable communications systems. The funds would support the development of pilot projects that will use equipment technology to increase communications interoperability among the federal, state, and local agencies; fire service; law enforcement; and emergency medical service providers. At the site visits to the Ports of Los Angeles and Long Beach, the USCG briefed the Task Force that virtually all of the landside port security was provided by the County of Los Angeles' Sheriff's Department and/or the City of Los Angeles police department. At the Miami site visit, Task Force members were briefed that all law enforcement and perimeter

security at the airport and seaport is provided by the Miami-Dade Sheriff's Department. Communications between the federal agencies and any incident "first responders" is critical.

D. Facilities and Infrastructure Requirements

The current state of existing facilities and infrastructure, or the lack thereof, has been a long-standing issue, existing long before the initial concept of entry/exit activities. The inability or failure to address these issues results in out-dated and unsafe facilities, poor, sometimes hazardous, working conditions, and a growing inability to support or facilitate traffic flow (people, cargo, goods, vehicles) and ensure appropriate levels of security.

Issues such as who owns a particular facility, space limitations within existing facilities, and limits on available land create significant complications when attempting to develop viable solutions. Increased security measures at airports have created issues in terms of space requirements for explosive detection systems and space for additional staff required for baggage screening and other activities. The prospect of adding additional inspections staff, regardless of the type of POE, only exacerbates the issue.

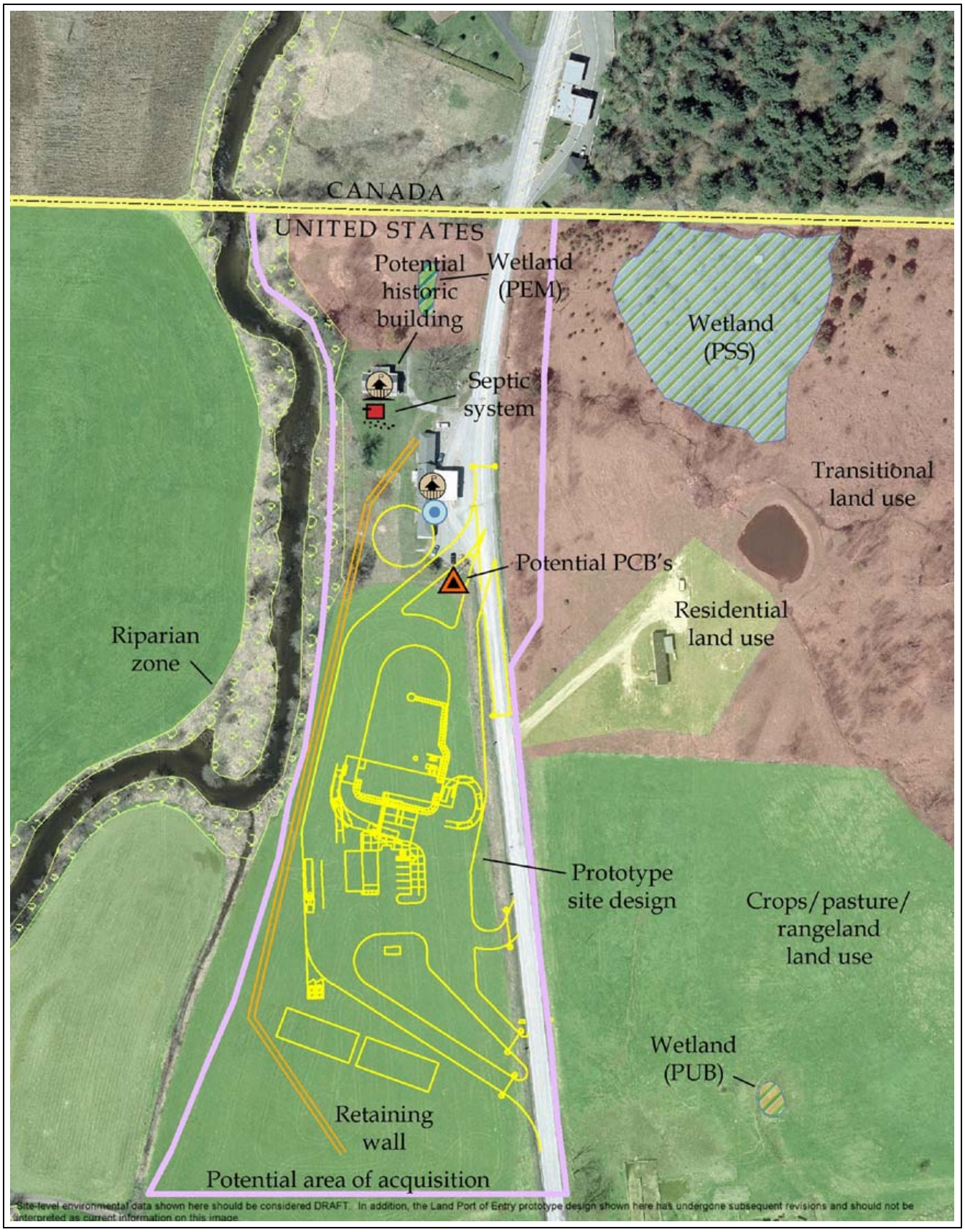
Legacy INS, along with various federal inspection services and the GSA, has completed the first phase (data-collection and creation) of the Geographic Information System (GIS) for land POEs. This phase involved obtaining high-resolution aerial photography of all sites and creating GIS-compatible data directly from the imagery. The next phase of the work involves quality assurance/quality control of the data, and tying data to the spatial locations. Collection of data to add to the GIS has been ongoing since the project began, and will be a constant feature in the future.

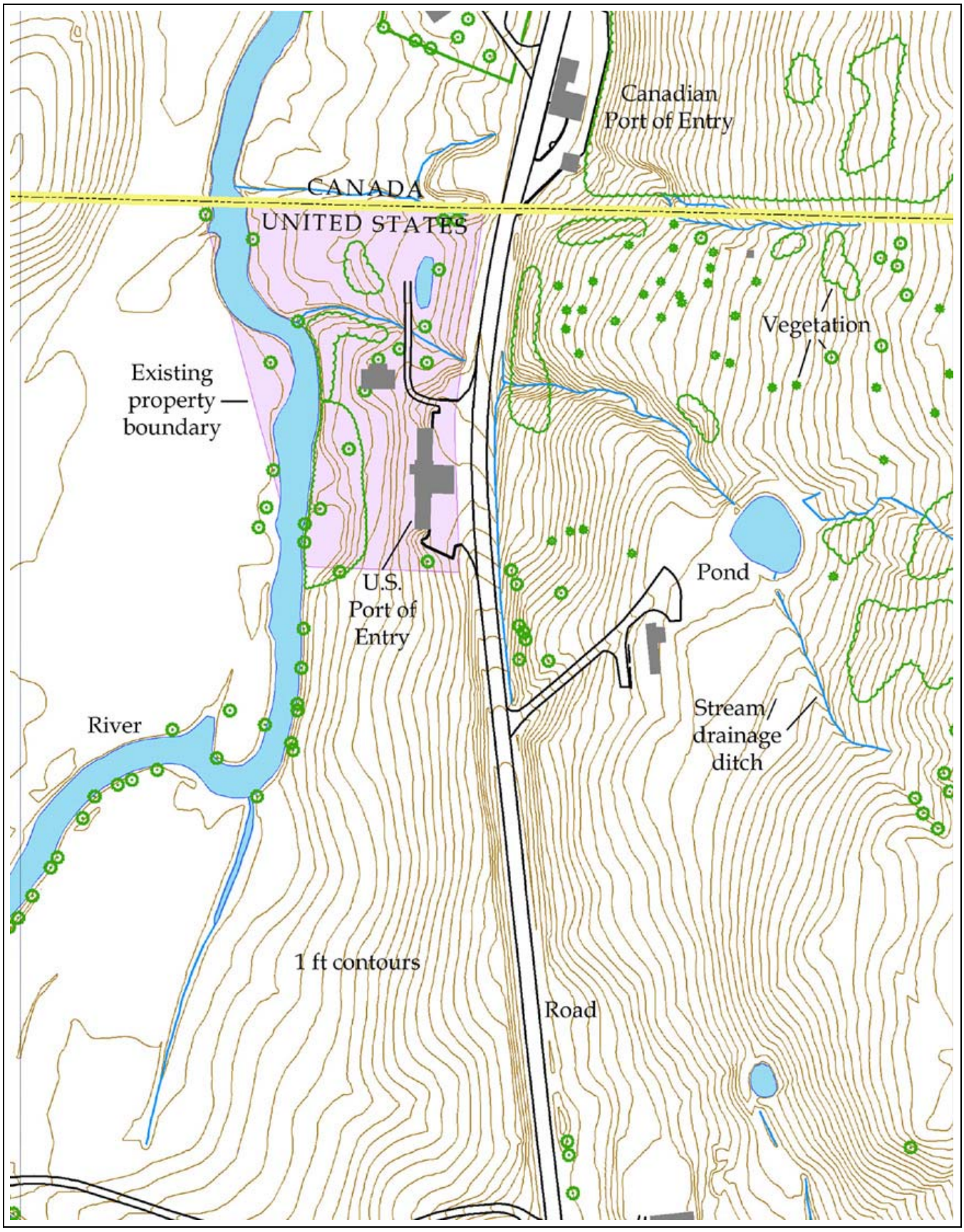
Thus far, the GIS data collected have been used to aid in the development of new prototype port designs, as well as for many informational requests. Environmental data collected and added to the GIS have allowed for better, more informed decisions about the placement and orientation of prototypes so as to avoid or minimize the impact to natural and cultural resources. The data created have allowed Computer Aided Design and Development (CADD) designers and traffic modelers to design and model port modifications. Parcel ownership information collected has allowed users to identify adjacent property holders.

A great deal of work and analysis has been completed in an effort to address land border crossings (roads, bridges, access lanes, and other infrastructure); however, the physical and financial constraints, unless resolved, preclude much in the way of significant positive change. The GIS work performed thus far provides invaluable information on the POEs that will be needed to make decisions on changes to current port configurations or to make port expansions. The costs will vary widely and the period of time needed to make any substantial changes would be phenomenal under current processes. While no comprehensive evaluation of the cost of an exit infrastructure has yet been made, it is likely to be significant. The Department of Homeland Security Appropriations Bill, 2004 (House Report No. 108-169) indicates that “the final price tag may reach $10 billion” to fully implement US-VISIT. The exact costs are unknown at this time, since many factors will influence the final implementation.

The following three aerial photos depict some of the GIS technology and capabilities that have been employed in the land border infrastructure analysis. The first photo shows an aerial view of the West Berkshire, Vermont POE and the surrounding terrain. The second photo includes overlays of environmental areas, the border line, and other infrastructure notations. The third photo depicts the topography and relevant notations of the same area.


West Berkshire, Vermont


CANADA
UNITED STATES
Potential historic building
Wetland (PEM)
Wetland (PSS)
Septic system
Transitional land use
Potential PCB's
Residential land use
Riparian zone
Prototype site design
Crops/pasture/ rangeland land use
Wetland (PUB)
Retaining wall
Potential area of acquisition
Site-level environmental data shown here should be considered DRAFT. In addition, the Land Port of Entry prototype design shown here has undergone subsequent revisions and should not be interpreted as current information on this image.


Canadian
Port of Entry
CANADA
UNITED STATES
Vegetation
Existing
property
boundary
U.S.
Port of
Entry
Pond
River
Stream/
drainage
ditch
1 ft contours
Road

Facilities space for all three modes of travel is an issue that probably will not be resolved. Even if the financial constraints are removed, the physical and some cooperative issues remain. We must maximize the use of technology, known traveler/goods programs and advanced, accurate risk-management practices and techniques. Government and industry must coordinate efforts to maximize existing facilities. More detailed information on facilities issues and requirements is included in Chapter 2 of this report. It is assumed that changes to current entry (and any exit) activities will require some facility modification.

Miami Synergy Program: Expansion of a joint TSA/private industry effort, the Miami Synergy Program, to address facility and space issues is being explored at the Miami seaport. This program, which began as pilot and has since been extended indefinitely, enables the participating passengers to clear the baggage screening process in an average 12 minutes as compared to the hour-plus average for the same process at the airport. Miami TSA has allocated 20 screening personnel and six screening machines to the Royal Caribbean Cruise Lines terminal for American Airlines passengers. The cost of the TSA personnel and additional consumable expenses is approximately $3,500 per weekend. In addition, American Airlines pays $10,000 for the bonded trucks used to transport the baggage. During its initial 29 weeks of operation, the program has managed to relieve 5 to 8 percent of the 15,000 cruise ship passenger overload that Miami International Airport experiences each weekend.

The benefits of expanding the two additional terminals on weekends would well exceed the costs of such an expansion. This would require an additional 16 screening personnel and the redeployment of six screening machines. The total cost of such an expansion, not including the price of redeploying the machines, would increase by approximately $4,000 dollars per weekend in personnel and consumables. However, with additional airlines waiting to participate, this program can be extended to include many new customers who would otherwise be ineligible. It is expected that with the expansion to three terminals and the inclusion of additional airlines, up to 40 percent of the weekend cruise ship passenger overload could participate in the seaport-screening program.

Appropriations to address facility issues have been a minimal percentage of that needed at seaports, airports, and southern and northern land border POEs, although facilities for some new crossings have been constructed on the southern land border. There is a multi-agency Border Station Partnership Council that has a five-year land border station facilities plan (prioritized by year) which is presented to Congress for funding. Legacy USCS completed a POE Infrastructure Assessment Study needs analysis in June of 2000, for the northern and southern land borders, specifically identifying $784.3 million for entry and working conditions project needs by location with an unfunded gap of $558 million.[53]

Highway connections to POEs, especially at land border POEs and airports, are often on local roads that are not designed or maintained to handle heavy traffic. The Federal Highway Administration (FHWA) conducted a study of these intermodal connectors for freight, and estimated that the backlog of investment needs just to maintain intermodal freight connectors was over $2.5 billion. The investment needs to accommodate expected increases in freight volumes were estimated at more than $4.2 billion. Legislation pending in Congress to

[53] USCS Ports of Entry Infrastructure Assessment Study Report, June 2000.

reauthorize the highway program includes provisions to increase funding of intermodal freight connectors.[54]

Six years ago the U.S. DOT created the first ever specified funding for trade corridors and border gateways, including it in the Transportation Equity Act for the 21st Century (TEA 21) legislation. It was comprised of approx. $700 million over six years (approximately $120 million a year). Funds were to be awarded to specific project proposals submitted to the U.S. DOT. Projects submitted for the annual $120 million available exceeded $2.2 billion (appropriated funds to requested needs equaled 5 percent).[55]

In addition to funding infrastructure, DOT supports research on the application of intelligent transportation systems (ITS) technology. DOT's ITS Joint Program Office has funded over $1 million per year for intermodal freight research and field operations since 2000.

E. Conclusion

The Task Force considered all of these issues and has the following specific recommendations:

Recommendation 2

The Task Force proposes that a panel be established to develop feasible solutions to address the issues of recruitment and retention within border management agencies, in a holistic manner incorporating issues such as cost of living, housing availability, and other factors in certain geographical areas. The panel should include a variety of members from public and private industry and government organizations to attain a wide range of concepts and possible solutions that would be offered from various perspectives.

Recommendation 11

Fund an analysis to optimize the best mix of relevant technology and properly trained staff in order to maximize resources and use of facilities.

- **Develop a staffing "maximum wait" formula and fund personnel to meet optimum inspections staffing requirements.**
- **Provide flexibility into the design of FIS processing to allow for future implementation of the latest advances in security technology and electronic information capture, including biometrics, that will speed up processing time and re-evaluate the size of FIS areas within POEs.**

In addition, components of the resource issues discussed in this chapter are included in the other recommendations throughout this report.

[54] 2002 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance, Report to Congress, USDOT, 2003, chapter 25.
[55] FHWA/USDOT Presentation, September 2002.

A. US-VISIT Program

In the spring of 2003, Secretary Ridge and Under Secretary Hutchinson launched The United States Visitor and Immigrant Status Indicator Technology (US-VISIT) Program. (Formerly known as entry/exit). The US-VISIT Program is a DHS priority that implements the following legislation:

- Section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996;
- The Data Management Improvement Act;
- The Visa Waiver Permanent Program Act;
- The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act; and
- The Enhanced Border Security and Visa Entry Reform Act.

According to DHS, the US-VISIT Program will strengthen the management of the pre-entry, entry, status, and exit of foreign nationals who travel to the U.S. The goals of the program are to enhance national security and facilitate legitimate trade and travel to the U.S. consistent with privacy considerations. This program is intended to provide government officials with specific information about who is entering the country and who is staying past their period of authorized admission. According to DHS, the implementation of US-VISIT will strengthen our border management programs by:

- Providing DOS officers improved access to data relevant to determination of visa eligibility;
- Providing the technology to improve detection of fraudulent documentation through automated capture and processing of data contained in travel documents;
- Providing for capture and processing of biometric data to improve precision of traveler identification;
- Improving data integration and systems interoperability to improve the quality of data available to border officers, law enforcement agencies, and intelligence agencies in terms of accuracy, consistency, completeness, and timeliness; and
- Improving the identification and reporting on alien visitors who have overstayed the legal duration of their visits or violated their immigration status.

The first major deadline for US-VISIT is December 2003, focusing on air- and seaports, and accordingly has been the focus of the Program to date. Under US-VISIT, border officers at air and some sea POEs will have the capability to access and review the visa information, including the photograph, during a visa holder's entry into the U.S. This capability will enable

the officers to verify the identity of the visa holder against the visa photograph and the passport photograph during their inspection for entry into the U.S. Additionally, border officers will capture the biometric (two index fingerprints and photograph) to verify and lock a visa holder's identity. The US-VISIT system will also compare the captured fingerprint against a fingerprint watch list. This will be an enhancement to the existing name check or biographical lookout check. The US-VISIT program will have the capability to capture biometrics, confirm the identity of travelers, and search against both a biographical and biometric watch list to prevent document fraud, identity theft, and unauthorized travelers from entering the U.S.

As of this writing, options for exit at air and sea POEs are being explored. The next major deadline is December 2004 for implementation at certain land border POEs. As previously mentioned, the focus at the time of this writing has been in the air and sea environments to meet the December 2003 deadline.

The General Accounting Office (GAO) Report[56] completed in September 2003 outlines 10 concerns relative to the implementation of the US-VISIT program. Some of these concerns are inherent to the program, and others are a product of the program's relatively emergent state of governance and management. Concerns from the report include the following observations:

- US-VISIT is critical to the DHS mission in preventing the entry of persons who pose a threat to the U.S.;
- It is large in scope and complex;
- There are daunting statutory milestones;
- US-VISIT will be a costly undertaking;
- Performance of initial increments of the US-VISIT system depend on the performance of existing systems that are to be interfaced;
- The emergent program office is currently not at full capabilities;
- The emergent governance structure is currently not at full capabilities;
- Operational impacts of new technologies and industry standards are not yet available;
- Facilities and infrastructure pose serious challenges; and,
- Lessons to be learned from the first implementation date of December 31, 2003 and adjusted for future milestones are not yet quantifiable.

The GAO report can be viewed in its entirety at www.gao.gov.[57]

[56] GAO report number GAO-03-1083, *Homeland Security: Risks Facing Key Border and Transportation Security Program Need to Be Addressed*. September 19, 2003.
[57] GAO Report: www.gao.gov/cgi-bin/getrpt?GAO-03-1083

The Task Force spent all of last year assessing the challenging entry/exit issues provided its recommendations in its 2002 Report to Congress. The full text of those recommendations follows in the next section and the report can be viewed in its entirety at www.immigration.gov.[58] The Task Force was also briefed by the US-VISIT program throughout its work this year on interrelated issues of facilities and infrastructure, IT interoperability, and increased cooperation and coordination. Many of the Task Force members, both from government and industry are working closely with the US-VISIT program on implementation issues for the December 31, 2003 milestone.

The Task Force recognizes that there are still many issues to be resolved in the implementation of an entry/exit system and the US-VISIT Program. Accordingly, the Task Force has the following recommendation for 2003 as an addition to the nine recommendations submitted on entry/exit in the 2002 report:

Recommendation 12

Recognizing efforts of the Department of Homeland Security working with the Department of State on the US-VISIT Program thus far, it is recommended that the first phase at air and sea POEs be reviewed and evaluated no later than 6 months after implementation by an independent body. This evaluation must consider the program's effect on national and economic security and international trade and travel. Congress should consider any recommendations from the independent review and evaluation and also reconsider deadlines for all other entry/exit statutory requirements. It is further recommended that any mandates in this area receive appropriate funding.

B. Task Force Findings From 2002

In its 2002 work and report to Congress, the Task Force engaged in thoughtful and extensive debate on issues to address entry/exit challenges. The Task Force considered such issues as:

- Whether exit should be interpreted as a full mirror image of the current entry process and infrastructure, a simple matching of data in a database, or a point on the continuum between the two;

- What kind of infrastructure can be built in a land border environment where different entities own the land and different countries control the access;

- Infrastructure issues at air and sea ports where, in most instances, the existing space for arrival/entry is inadequate. Airports are also struggling to absorb the newly mandated Transportation Security Administration requirements for security;

[58] DMIA Task Force 2002 Report to Congress: www.immigration.gov/graphics/shared/lawenfor/bmgmt/inspect/dmia.htm.

- The issue of current documentary requirements for U.S. citizens as well as non-citizens, which presents a myriad of challenges, not only from a technical perspective, but also from security, facilitation, and diplomatic perspectives;

- Integration of multiple diverse IT systems currently in use by government and industry; and finally

- The importance of outreach and a proactive message from government and industry to explain any new procedures so as not to hamper travel and commerce to the U.S.

The development of the entry/exit system requires the coordination and systematic review of the relationships with the other laws recently enacted that impact national security data systems and functions. Additionally, though not focused on in great detail, the Task Force also recognized new challenges that a successful entry/exit system would create. These include how enforcement entities will handle overstays once they are identified by the new system, and whether they have the resources to do so; the inter-relationship between entry/exit and stay activities related to benefits while in the U.S.; and the closing of the information loop in providing DOS with departure and related information for use in the visa issuance processes.

The Task Force members agreed in principle and reached consensus on nine general recommendations, although there are some areas where there are differing opinions.

The nine general recommendations on which the Task Force reached consensus in 2002 follow:

1. **Appropriate funding levels should be established and adequate funding provided for the facilities and infrastructure necessary for development of an entry/exit system and to address increased growth in traffic across the nation's borders.**

   Where applicable, the use of existing space and infrastructure both domestic and foreign, should be maximized, including the sharing of facilities among agencies. All possible Port-of-Entry (POE) scenarios and configurations should be employed.

2. **Provide adequate staffing to effectively operate POEs and efficiently implement and manage entry/exit systems and processes.**

3. **The entry/exit system should be developed and implemented in cooperation and coordination with foreign governments and other stakeholders.**

   The U.S. government must uniformly apply inspection policy such that inspection procedures are consistent in their respective POE environment.

4. **The U.S. Government should expand the use of initiatives to facilitate the entry/exit of known low-risk traffic.**

5. **The U.S. government must identify information technology, including biometrics, to enhance border security systems and facilitate cross border traffic. The technology should be interoperable with all federal, state, and local law enforcement agencies.**

6. **The development and the implementation of the entry/exit system should enhance the quality of life in affected communities in such areas as the environment, trade and tourism.**

7. **The entry/exit system should include and enhance current inspection processes so that required arrival and departure data is collected only once by the U.S. government and disseminated to appropriate users.**

   As part of the entry/exit development process the U.S. government, in coordination with stakeholders, must conduct pilot programs prior to full deployment to determine their impacts measured against pre-established benchmarks.

8. **If changes to documentary requirements are proposed, the U.S. government must consult with affected stakeholders, in particular local communities, state and local governments and the private sector, concerning the impact of such changes on the environment; security; legitimate trade, commerce, travel; and foreign relations.**

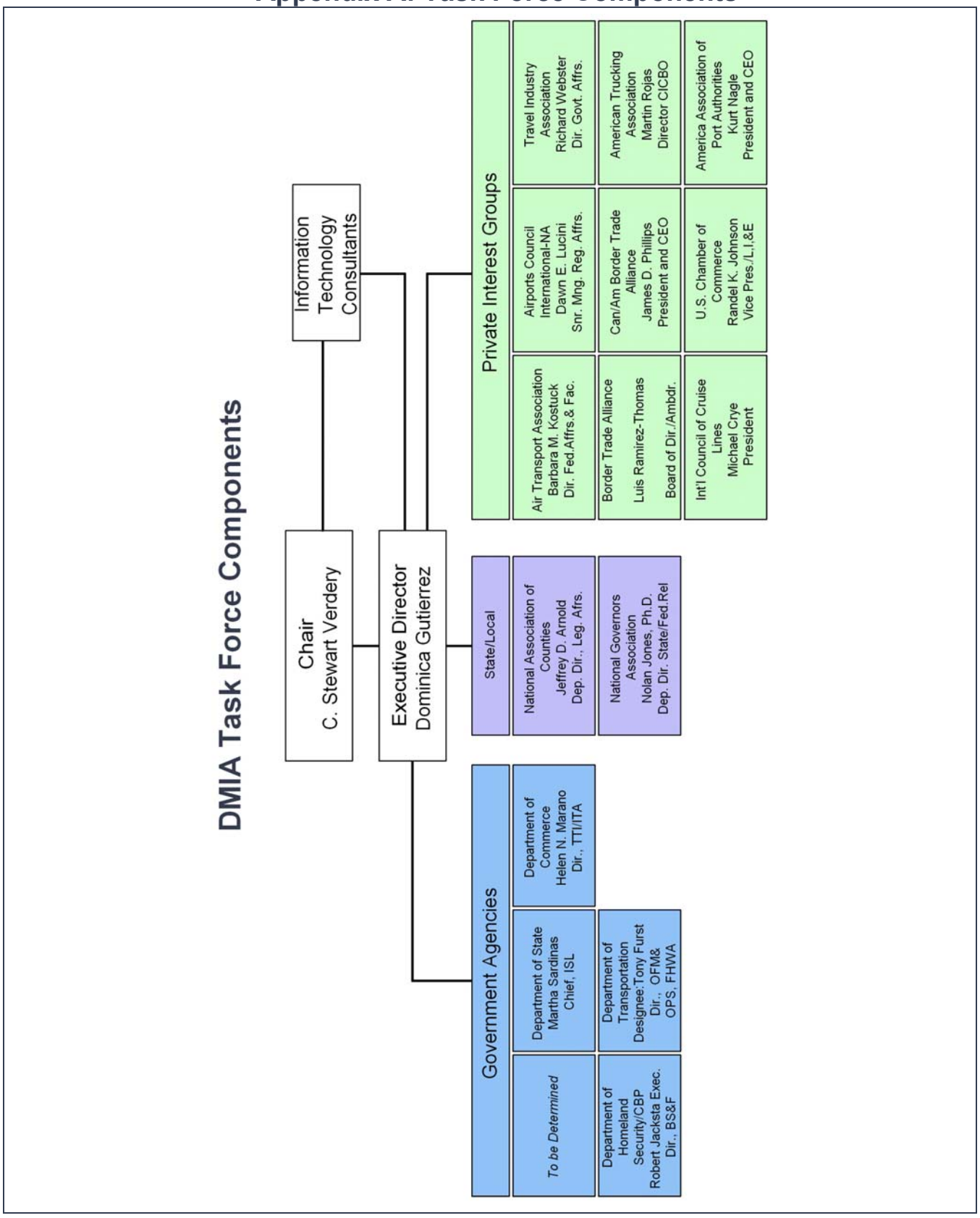
   The U.S. government should continue to work in conjunction with industry and other governments to develop more secure documents which facilitate travel, particularly as technology evolves and biometrics play a larger role.

9. **As the entry/exit requirements develop into an electronic collection format, it is imperative to ensure compliance with current data collection requirements and continue to provide necessary travel statistics.**

   As the entry/exit requirements change for the U.S., it is imperative that an effective coordinated communications outreach program be developed to ensure not only the compliance of the traveler but also a proactive message from government and industry to explain any new procedures so as not to hamper travel and commerce to the U.S.

Several government agencies received additional appropriations through the fiscal year 2002 Emergency Supplemental Appropriations Act that was passed shortly after the events of September 11. Both legacy INS and legacy USCS received an influx of positions and/or funding to support and strengthen northern border operations. These resources provided an immediate but interim response to the much larger issue of improving traffic flow and strengthening border security at all POEs. The recommendations presented by the Task Force provide a comprehensive overview of the enormity of these issues and begin to identify the resources needed for their implementation.

Appendix A: Task Force Components



The Canadian/American Border Trade Alliance (Can/Am BTA): The Canadian/American Border Trade Alliance, formed in 1992, is a transcontinental, bi-national, broad-based organization with participation from all 27 states (Washington to Maine including Alaska) on or near the U.S./Canada Border and the Canadian Provinces. Can/Am BTA participants include members from border trade, border crossing and transportation segments including producers, shippers, brokers, mode transportation providers, bridge and tunnel operators, chambers of commerce, business and trade corridor associations and economic development and government agencies. The combined network involves over 60,000 companies and organizations in their individual memberships. The Can/Am BTA acts, as one of its prime focuses, to resolve issues, problems and needs border-wide to achieve appropriate border crossing practices, policies and resources at the U.S./Canada borders.

American Trucking Associations: The American Trucking Associations is the national trade association of the trucking industry. American Trucking Associations is a federation of affiliated state trucking associations, conferences, and other organizations that together include more than 37,000 motor-carrier members, representing every type and class of motor carrier in the country. American Trucking Associations represents an industry that employs nearly 10 million people, providing one out of every 14 civilian jobs. This includes the more than 3 million truck drivers who travel over 400 billion miles per year to deliver to Americans 86 percent of their transported food, clothing, finished products, raw materials, and other items.

American industrial and commercial enterprises are able to compete more effectively in the global marketplace due to the benefits of safe and efficient trucking. Truck transportation is the most flexible mode for freight shipment, providing door-to-door service to every city, manufacturing plant, warehouse, retail store, and home in the country. Trucks are the only providers of goods to 75 percent of American communities. Five percent of the nation's gross domestic product, roughly $600 billion, is created by truck transportation. Actions that affect the trucking industry's ability to move its annual 8.9 billion tons of domestic freight and our international operations with Canada and Mexico have significant consequences for our country's economic wellbeing.

U.S. Chamber of Commerce: The U.S. Chamber of Commerce is the world's largest business federation, representing more than 3 million businesses and organizations of every size, sector, and region, including membership of international corporations and businesses. The Chamber has membership in all 50 states and 95 American Chambers of Commerce (AmChams) abroad. Through this federation, the Chamber is engaged at all levels of government on border issues, through its state and local chambers at the local levels, nationally in Washington, D.C., and internationally through our AmChams and involvement in multilateral meetings and conferences, including interactions with all of the major embassies in Washington and U.S. embassies and consulates around the world. Chamber members sit on many task forces and advisory councils to local, state, and federal governments, including the DMIA Task Force, and the Chamber chairs the Americans for Better Borders coalition of over 80 member organizations and companies that helped craft the Data Management Improvement Act, the Enhanced Border Security and Visa Entry Reform Act, and other significant border-related legislation.

Airports Council International-North America (ACI-NA): ACI-NA was first established as the Airport Operators Council in 1947, today it is the "Voice of Airports" representing local, regional, and state governing bodies that own and operate commercial airports throughout the U.S. and Canada. ACI-NA is the largest of six worldwide regions of Airports Council International (ACI), based in Geneva, Switzerland. ACI's other regions include Europe, Asia, Pacific, Africa and Latin America/Caribbean.

The mission of ACI-NA states that ACI-NA shall identify, develop and advance common policies and programs for the enhancement and promotion of airports and their managements that are effective, efficient and responsive to consumer and community needs. One of the premier airport associations, ACI-NA offers the pre-eminent North American airports a forum for the exchange of ideas and information. Its staff is headquartered in Washington, DC, and Ottawa, Canada, providing ACI-NA with direct access to the federal government, industry partners, and related aviation associations.

As a member association, ACI-NA helps its members develop common positions and communicate them among the government, the press, and the general public. We are recognized as the authoritative voice of airports, and represent airports that carry 98 percent of all passenger traffic and almost all cargo traffic throughout North America. Over 380 aviation-related businesses are also associate members of ACI-NA.

Air Transport Association of America, Inc.: Founded in 1936, the Air Transport Association of America, Inc., is the oldest and largest airline trade association in the U.S. Its U.S. members account for 95 percent of the passenger and cargo traffic carried by U.S. scheduled airlines. The Air Transport Association serves its member airlines and their customers by: assisting the airline industry in continuing to provide the world's safest system of transportation; transmitting technical expertise and operational knowledge among member airlines to improve safety, service, and efficiency; advocating fair airline taxation and regulation worldwide, ensuring a profitable and competitive industry; and by developing and coordinating industry actions that are environmentally beneficial, economically reasonable, and technologically feasible.

Border Trade Alliance (BTA): Since 1986, the Border Trade Alliance has been a leading authority on international trade and commerce throughout North America. The organization is a grassroots, non-profit organization that provides a forum for discussion and advocacy on border issues as varied as customs procedures, immigration, infrastructure, and the environment. A network of public and private sector representatives from the United States, Mexico and Canada, the BTA's core values include a commitment to improving the quality of life in border communities through trade and commerce and a commitment to work as a community-based grassroots organization.

National Association of Counties (NACo): NACo, the only national organization that represents county governments in the United States. With its headquarters on Capitol Hill, NACo is a full-service organization that provides an extensive line of services including legislative, research, technical, and public affairs assistance, as well as enterprise services to its members. The association acts as a liaison with other levels of government, works to improve public understanding of counties, serves as a national advocate for counties and

provides them with resources to help them find innovative methods to meet the challenges they face.

National Governors Association (NGA): NGA is the collective voice of the nation's governors and one of Washington, D.C.'s, most respected public policy organizations. NGA provides governors and their senior staff members with services that range from representing states on Capitol Hill and before the Administration on key federal issues to developing policy reports on innovative state programs and hosting networking seminars for state government executive branch officials. The NGA Center for Best Practices focuses on state innovations and best practices on issues that range from education and health to technology, welfare reform, and the environment. NGA also provides management and technical assistance to both new and incumbent governors.

American Association of Port Authorities (AAPA): Founded in 1912, the American Association of Port Authorities is a trade association representing the interests of 150 public ports in the Western Hemisphere. Our membership also consists of 300 sustaining members. On behalf of its U.S. members, AAPA is active in Washington partnering with Congress, the Federal Government and other trade associations to advance the interests of public ports. U.S. ports serve vital national interests by facilitating the flow of trade and cruise passengers and supporting the mobilization and deployment of U.S. troops. In the next twenty years, U.S. overseas international trade, 95% of which enters or exits through the nation's ports, is expected to double. As the link between the land and the water, ports continue to update and modernize their facilities not only to accommodate this growth, but also to ensure homeland security.

International Council of Cruise Lines (ICCL): The International Council of Cruise Lines (ICCL) is a non-profit trade association that represents the interests of 15 passenger cruise lines in North America and abroad, and a growing number of cruise industry strategic business partners.

The ICCL participates in the regulatory and policy development process and promotes all measures that foster a safe, secure and healthy cruise ship environment. Under the direction of the chief executives of its member lines, the ICCL advocates industry positions to key local, state, federal authorities, the International Maritime Organization (IMO) and the International Labor Organization (ILO) to develop and strengthen guidelines and regulations. At the federal level, we work closely with many agencies, including the State Department, Commerce Department and various agencies at the Department of Homeland Security, (DHS), which now include the U.S. Coast Guard, the Transportation Security Administration (TSA), and Customs and Border Protection. The ICCL actively monitors international shipping policy and develops recommendations to its membership on a wide variety of issues.

Each year the ICCL commissions an economic study that demonstrates the cruise industry is a significant contributor to the U.S. economy. In the years ahead, it is projected that the cruise industry will continue to grow, providing opportunities for U.S. industries and employees to benefit from the expansion of this business.

Assisted by a staff in Arlington, VA, the ICCL's members include the largest passenger cruise lines that call on hundreds of ports in the U.S. and abroad. The ICCL Associate Members represent the industry suppliers and strategic business partners. Each year the ICCL's overnight cruise ship operators carry more than 10 million passengers on over 100 ships.

Travel Industry Association of America (TIA): TIA has been in existence since 1941. It is a Washington, DC based, non-profit association that represents and speaks for the common interests and concerns of all components of the U.S. travel industry. TIA is a recognized leader in promoting and facilitating increased travel to and within the United States in order to make America the world's number one tourism destination. TIA is the authoritative and recognized source of research, analysis and forecasting for the entire industry and its primary spokesperson to the domestic and international media. TIA's mission is to represent the whole of the U.S. travel and tourism industry to promote and facilitate increased travel to, and within, the United States.

U.S. Department of Commerce (DOC): The DOC promotes job creation, economic growth, sustainable development and improved living standards for all Americans by working in partnership with business, universities, communities and workers to build for the future and promote U.S. competitiveness in the global marketplace by strengthening and safeguarding the nation's economic infrastructure. The DOC keeps America competitive with cutting-edge science and technology and an unrivaled information base providing effective management and stewardship of the nation's resources and assets to ensure sustainable economic opportunities.

U.S. Department of Transportation (DOT): The DOT was established by an act of Congress on October 15, 1966, the DOT's first official day of operation was April 1, 1967. The mission of DOT is to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.

Americans depend on safe, efficient, and secure transportation systems. Whether we travel on roads, boats, rails, or in the air, we rely on our transportation systems to get us where we need to go. These same systems play a supporting role in our national economic well being, making it possible to move goods from place to place -- ensuring our continued success in the global marketplace. The DOT works in tandem with our transportation systems by providing leadership and guidance on behalf of the public.

U.S. Department of State (DOS): The Executive Branch and the Congress have constitutional responsibilities for U.S. foreign policy. Within the Executive Branch, the Department of State is the lead U.S. foreign affairs agency, and the Secretary of State is the President's principal foreign policy adviser. The Department advances U.S. objectives and interests in shaping a freer, more secure, and more prosperous world through its primary role in developing and implementing the President's foreign policy. The Department also supports the foreign affairs activities of other U.S. Government entities including the Department of Commerce and the Agency for International Development. It also provides an array of important services to United States citizens and to foreigners seeking to visit or immigrate to the U.S.

Appendix B: Legislation and Regulation(s) Affecting Border Management

The following is a list of legislative and regulatory mandates that have helped shape the mission and role of the DMIA Task Force, followed by the complete text of the DMIA.

North American Free Trade Agreement (NAFTA), Public Law 103-182, Signed December 18, 1993

Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Public Law 104-208, Signed September 30, 1996

Data Management Improvement Act (DMIA), Public Law 106-215, Signed June 15, 2000

The Visa Waiver Permanent Program Act (VWPPA), Public Law 106-396, Signed October 30, 2000

Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT Act), Public Law 107-56, Signed October 26, 2001

Aviation and Transportation Security Act, Public Law 107-71, Signed November 11, 2001

The Enhanced Border Security and Visa Entry Reform Act of 2002 (BSA), Public Law 107-173, Signed May 14, 2002

Trade Act of 2002, Public Law 107-210, Signed August 6, 2002

The 24-Hour Rule, 67 FR (Federal Register) 66318 (RIN 1515-AD11)
Published in the Federal Register, October 31, 2002 to be effective December 2, 2002

Maritime Transportation Security Act (MTSA), Public Law 107-295, Signed November 25, 2002

Homeland Security Act, Public Law 107-296, Signed November 25, 2002

Immigration and Naturalization Service Data Management Improvement Act of 2000

Pub. L. 106-215 Immigration and Naturalization Service Data Management Improvement Act of 2000

106th Congress
June 15, 2000
114 Stat. 337

———————

[H.R. 4489]

An Act

To amend section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Immigration and Naturalization Service Data Management Improvement Act of 2000”.

SEC. 2. AMENDMENT TO SECTION 110 OF IIRIRA.

(a) IN GENERAL- Section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1221 note) is amended to read as follows:

“SEC. 110. INTEGRATED ENTRY AND EXIT DATA SYSTEM.

“(a) REQUIREMENT- The Attorney General shall implement an integrated entry and exit data system.

“(b) INTEGRATED ENTRY AND EXIT DATA SYSTEM DEFINED- For purposes of this section, the term `integrated entry and exit data system' means an electronic system that--

“(1) provides access to, and integrates, alien arrival and departure data that are--

“(A) authorized or required to be created or collected under law;

“(B) in an electronic format; and

“(C) in a data base of the Department of Justice or the Department of State, including those created or used at ports of entry and at consular offices;

“(2) uses available data described in paragraph (1) to produce a report of arriving and departing aliens by country of nationality, classification as an immigrant or nonimmigrant, and date of arrival in, and departure from, the United States;

“(3) matches an alien's available arrival data with the alien's available departure data;

“(4) assists the Attorney General (and the Secretary of State, to the extent necessary to carry out such Secretary's obligations under immigration law) to identify, through on-line searching procedures, lawfully admitted nonimmigrants who may have remained in the United States beyond the period authorized by the Attorney General; and

“(5) otherwise uses available alien arrival and departure data described in paragraph (1) to permit the Attorney General to make the reports required under subsection (e).

“(c) CONSTRUCTION-

“(1) NO ADDITIONAL AUTHORITY TO IMPOSE DOCUMENTARY OR DATA COLLECTION REQUIREMENTS- Nothing in this section shall be construed to permit the Attorney General or the Secretary of State to impose any new documentary or data collection requirements on any person in order to satisfy the requirements of this section, including--

“(A) requirements on any alien for whom the documentary requirements in section 212(a)(7)(B) of the Immigration and Nationality Act (8 U.S.C. 1182(a)(7)(B)) have been waived by the Attorney General and the Secretary of State under section 212(d)(4)(B) of such Act (8 U.S.C. 1182(d)(4)(B)); or

“(B) requirements that are inconsistent with the North American Free Trade Agreement.

“(2) NO REDUCTION OF AUTHORITY- Nothing in this section shall be construed to reduce or curtail any authority of the Attorney General or the Secretary of State under any other provision of law.

“(d) DEADLINES-

“(1) AIRPORTS AND SEAPORTS- Not later than December 31, 2003, the Attorney General shall implement the integrated entry and exit data system using available alien arrival and departure data described in subsection (b)(1) pertaining to aliens arriving in, or departing from, the United States at an airport or seaport. Such implementation shall include ensuring that such data, when collected or created by an immigration officer at an airport or seaport, are entered into the system and can be accessed by immigration officers at other airports and seaports.

“(2) HIGH-TRAFFIC LAND BORDER PORTS OF ENTRY- Not later than December 31, 2004, the Attorney General shall implement the integrated entry and exit data system using the data

described in paragraph (1) and available alien arrival and departure data described in subsection (b)(1) pertaining to aliens arriving in, or departing from, the United States at the 50 land border ports of entry determined by the Attorney General to serve the highest numbers of arriving and departing aliens. Such implementation shall include ensuring that such data, when collected or created by an immigration officer at such a port of entry, are entered into the system and can be accessed by immigration officers at airports, seaports, and other such land border ports of entry.

“(3) REMAINING DATA- Not later than December 31, 2005, the Attorney General shall fully implement the integrated entry and exit data system using all data described in subsection (b)(1). Such implementation shall include ensuring that all such data are available to immigration officers at all ports of entry into the United States.

“(e) REPORTS-

“(1) IN GENERAL- Not later than December 31 of each year following the commencement of implementation of the integrated entry and exit data system, the Attorney General shall use the system to prepare an annual report to the Committees on the Judiciary of the House of Representatives and of the Senate.

“(2) INFORMATION- Each report shall include the following information with respect to the preceding fiscal year, and an analysis of that information:

“(A) The number of aliens for whom departure data was collected during the reporting period, with an accounting by country of nationality of the departing alien.

“(B) The number of departing aliens whose departure data was successfully matched to the alien's arrival data, with an accounting by the alien's country of nationality and by the alien's classification as an immigrant or nonimmigrant.

“(C) The number of aliens who arrived pursuant to a nonimmigrant visa, or as a visitor under the visa waiver program under section 217 of the Immigration and Nationality Act (8 U.S.C. 1187), for whom no matching departure data have been obtained through the system or through other means as of the end of the alien’s authorized period of stay, with an accounting by the alien’s country of nationality and date of arrival in the United States.

“(D) The number of lawfully admitted nonimmigrants identified as having remained in the United States beyond the period authorized by the Attorney General, with an accounting by the alien's country of nationality.

“(f) AUTHORITY TO PROVIDE ACCESS TO SYSTEM-

“(1) IN GENERAL- Subject to subsection (d), the Attorney General, in consultation with the Secretary of State, shall determine which officers and employees of the Departments of Justice and State may enter data into, and have access to the data contained in, the integrated entry and exit data system.

“(2) OTHER LAW ENFORCEMENT OFFICIALS- The Attorney General, in the discretion of the Attorney General, may permit other Federal, State, and local law enforcement officials to have access to the data contained in the integrated entry and exit data system for law enforcement purposes.

“(g) USE OF TASK FORCE RECOMMENDATIONS- The Attorney General shall continuously update and improve the integrated entry and exit data system as technology improves and using the recommendations of the task force established under section 3 of the Immigration and Naturalization Service Data Management Improvement Act of 2000.

“(h) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to carry out this section such sums as may be necessary for fiscal years 2001 through 2008.”

(b) CLERICAL AMENDMENT- The table of contents of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 is amended by amending the item relating to section 110 to read as follows:

“Sec. 110. Integrated entry and exit data system.”.

SEC. 3. TASK FORCE.

(a) ESTABLISHMENT- Not later than 6 months after the date of the enactment of this Act, the Attorney General, in consultation with the Secretary of State, the Secretary of Commerce, and the Secretary of the Treasury, shall establish a task force to carry out the duties described in subsection (c) (in this section referred to as the “Task Force”).

(b) MEMBERSHIP-

(1) CHAIRPERSON; APPOINTMENT OF MEMBERS- The Task Force shall be composed of the Attorney General and 16 other members appointed in accordance with paragraph (2). The Attorney General shall be the chairperson and shall appoint the other members.

(2) APPOINTMENT REQUIREMENTS- In appointing the other members of the Task Force, the Attorney General shall include--

(A) representatives of Federal, State, and local agencies with an interest in the duties of the Task Force, including representatives of agencies with an interest in--

(i) immigration and naturalization;

(ii) travel and tourism;

(iii) transportation;

(iv) trade;

(v) law enforcement;

(vi) national security; or

(vii) the environment; and

(B) private sector representatives of affected industries and groups.

(3) TERMS- Each member shall be appointed for the life of the Task Force. Any vacancy shall be filled by the Attorney General.

(4) COMPENSATION-

(A) IN GENERAL- Each member of the Task Force shall serve without compensation, and members who are officers or employees of the United States shall serve without compensation in addition to that received for their services as officers or employees of the United States.

(B) TRAVEL EXPENSES- The members of the Task Force shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of service for the Task Force.

(c) DUTIES- The Task Force shall evaluate the following:

(1) How the Attorney General can efficiently and effectively carry out section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1221 note), as amended by section 2 of this Act.

(2) How the United States can improve the flow of traffic at airports, seaports, and land border ports of entry through--

(A) enhancing systems for data collection and data sharing, including the integrated entry and exit data system described in section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1221note), as amended by section 2 of this Act, by better use of technology, resources, and personnel;

(B) increasing cooperation between the public and private sectors;

(C) increasing cooperation among Federal agencies and among Federal and State agencies; and

(D) modifying information technology systems while taking into account the different data systems, infrastructure, and processing procedures of airports, seaports, and land border ports of entry.

(3) The cost of implementing each of its recommendations.

(d) STAFF AND SUPPORT SERVICES-

(1) IN GENERAL- The Attorney General may, without regard to the civil service laws and regulations, appoint and terminate an executive director and such other additional personnel as may be necessary to enable the Task Force to perform its duties. The employment and termination of an executive director shall be subject to confirmation by a majority of the members of the Task Force.

(2) COMPENSATION- The executive director shall be compensated at a rate not to exceed the rate payable for level V of the Executive Schedule under section 5316 of title 5, United States Code. The Attorney General may fix the compensation of other personnel without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates, except that the rate of pay for such personnel may not exceed the rate payable for level V of the Executive Schedule under section 5316 of such title.

(3) DETAIL OF GOVERNMENT EMPLOYEES- Any Federal Government employee, with the approval of the head of the appropriate Federal agency, may be detailed to the Task Force without reimbursement, and such detail shall be without interruption or loss of civil service status, benefits, or privilege.

(4) PROCUREMENT OF TEMPORARY AND INTERMITTENT SERVICES- The Attorney General may procure temporary and intermittent services for the Task Force under section 3109(b) of title 5, United States Code, at rates for individuals not to exceed the daily equivalent of the annual rate of basic pay prescribed for level V of the Executive Schedule under section 5316 of such title.

(5) ADMINISTRATIVE SUPPORT SERVICES- Upon the request of the Attorney General, the Administrator of General Services shall provide to the Task Force, on a reimbursable basis, the administrative support services necessary for the Task Force to carry out its responsibilities under this section.

(e) HEARINGS AND SESSIONS- The Task Force may, for the purpose of carrying out this section, hold hearings, sit and act at times and places, take testimony, and receive evidence as the Task Force considers appropriate.

(f) OBTAINING OFFICIAL DATA- The Task Force may secure directly from any department or agency of the United States information necessary to enable it to carry out this section. Upon request of the Attorney General, the head of that department or agency shall furnish that information to the Task Force.

(g) REPORTS-

(1) DEADLINE- Not later than December 31, 2002, and not later than December 31 of each year thereafter in which the Task Force is in existence, the Attorney General shall submit a report to the Committees on the Judiciary of the House of Representatives and of the Senate containing the findings, conclusions, and recommendations of the Task Force. Each report shall also measure and evaluate how much progress the Task Force has made, how much

work remains, how long the remaining work will take to complete, and the cost of completing the remaining work.

(2) DELEGATION- The Attorney General may delegate to the Commissioner, Immigration and Naturalization Service, the responsibility for preparing and transmitting any such report.

(h) LEGISLATIVE RECOMMENDATIONS-

(1) IN GENERAL- The Attorney General shall make such legislative recommendations as the Attorney General deems appropriate--

(A) to implement the recommendations of the Task Force; and

(B) to obtain authorization for the appropriation of funds, the expenditure of receipts, or the reprogramming of existing funds to implement such recommendations.

(2) DELEGATION- The Attorney General may delegate to the Commissioner, Immigration and Naturalization Service, the responsibility for preparing and transmitting any such legislative recommendations.

(i) TERMINATION- The Task Force shall terminate on a date designated by the Attorney General as the date on which the work of the Task Force has been completed.

(j) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to carry out this section such sums as may be necessary for fiscal years 2001 through 2003.

SEC. 4. SENSE OF THE CONGRESS REGARDING INTERNATIONAL BORDER MANAGEMENT COOPERATION.

It is the sense of the Congress that the Attorney General, in consultation with the Secretary of State, the Secretary of Commerce, and the Secretary of the Treasury, should consult with affected foreign governments to improve border management cooperation.

Approved June 15, 2000.

Appendix C: Minimum Documentary Requirements for Entry to U.S.

DOCUMENTARY REQUIREMENTS (Minimum)			
APPLICANT	**COMING FROM CONTIGUOUS TERRITORY**[59]	**COMING FROM WESTERN HEMISPHERE**[60]	**COMING FROM EASTERN HEMISPHERE**[61]
US CITIZENS[62]	• Verbal declaration or • Proof of citizenship.	• Verbal declaration or • Proof of citizenship.	• Valid passport
Lawful Permanent Residents (passport and visa not required) **Outside the US for less than 1 year.**	• Permanent Resident Card, I-551; or • Expired I-551 with Notice of Action, I-797, indicating card has been extended; or • Expired I-551 presented by USG employee if 1) is a civilian or military employee in possession of official orders; or 2) is the spouse or child of the employee and is preceding or accompanying, or following to join employee or serviceperson within four months of his return to the US; or • Temporary Residence Stamp (ADIT stamp) in passport or I-94; or • Reentry permit, I-327; or • Refugee Travel Document, I-571.	• Permanent Resident Card, I-551; or • Expired I-551 with Notice of Action, I-797, indicating card has been extended; or • Expired I-551 presented by USG employee if 1) is a civilian or military employee in possession of official orders; or 2) is the spouse or child of the employee and is preceding or accompanying, or following to join employee or serviceperson within four months of his return to the US; or • Temporary Residence Stamp (ADIT stamp) in passport or I-94; or • Reentry permit, I-327; or • Refugee Travel Document, I-571.	• Permanent Resident Card, I-551; or • Expired I-551 with Notice of Action, I-797, indicating card has been extended; or • Expired I-551 presented by USG employee if 1) is a civilian or military employee in possession of official orders; or 2) is the spouse or child of the employee and is preceding or accompanying, or following to join employee or serviceperson within four months of his return to the US; or • Temporary Residence Stamp (ADIT stamp) in passport or I-94; or • Reentry permit, I-327; or • Refugee Travel Document, I-571.

[59] Canada and/or Mexico
[60] North America, Central America, South America
[61] Europe, Asia, Australia, Africa, Oceania.
[62] No US Passport required when subject is traveling:

- With a Valid Merchant Marine ID or Air Crewman ID card.
- Member of the US Armed Forces on active duty.
- Under twelve years old, with evidence of U.S.C. at time of entering, and included in the foreign passport of parent.
- Has been authorized by the Secretary of State with waiver of passport requirement.

DOCUMENTARY REQUIREMENTS (Minimum)			
APPLICANT	**COMING FROM CONTIGUOUS TERRITORY**	**COMING FROM WESTERN HEMISPHERE**	**COMING FROM EASTERN HEMISPHERE**
Lawful Permanent Residents (passport and visa not required) **Outside the US for less than 2 years.**	• Reentry permit, I-327; or • Refugee Travel Document, I-571; or • Immigrant visa (SB-1 IV)	• Reentry permit, I-327; or • Refugee Travel Document, I-571; or • Immigrant visa (SB-1 IV)	• Reentry permit, I-327; or • Refugee Travel Document, I-571; or • Immigrant visa (SB-1 IV)
Lawful Permanent Residents **Outside the US for more than 2 years. (*Passport Required unless otherwise noted.)***	• Immigrant Visa (SB-1)	• Immigrant Visa (SB-1)	• Immigrant Visa (SB-1)
American Indian born in Canada with 50%[63] American Indian Blood	• Must be able to prove status. • Exempt from all passport and visa requirements. • Exempt from all grounds of inadmissibility.		
NATO	Armed services personnel entering under NATO STATUS OF FORCES AGREEMENT (SOFA) and armed services personnel attached to NATO allied headquarters in the US are *visa and passport exempt.*		
Canadian Citizen	• Oral declaration and ID; or • Proof of citizenship	• Oral declaration and ID; or • Proof of citizenship • Crewmembers: no I-95	• Valid passport • Crewmembers: I-95 (*The following nonimmigrant classifications require a passport and visa: E1, E-2, K-1, K-2, K-3, K4. See INA Section 101(a).)*

[63] Tribal card without % is unacceptable.

DOCUMENTARY REQUIREMENTS (Minimum)			
APPLICANT	**COMING FROM CONTIGUOUS TERRITORY**	**COMING FROM WESTERN HEMISPHERE**	**COMING FROM EASTERN HEMISPHERE**
British Subjects with Residence in Bermuda or Canada[64]*	• Passport with nonimmigrant visa (NIV): I-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95
British Overseas Territory Citizens of Bermuda	• Oral declaration and ID; or • Proof of citizenship	• Oral declaration and ID; or • Proof of citizenship • Crewmembers: no I-95	• Valid passport • Crewmembers: I-95 (*The following nonimmigrant classifications require a passport and visa: E1, E-2, K-1, K-2, K-3, K4. See INA Section 101(a).)*
Canadian Landed Immigrant **with** British Common Nationality or a citizen of Ireland[65]*	• Passport with NIV: I-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95
Canadian Landed Immigrant **without** Common Nationality[66]*	• Passport with NIV: 1-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95	• Passport with NIV: I-94 • Crewmember: I-95
Mexican Citizen	Border Crossing Card (DSP-150), No I-94 required if in US < 72 hours and/or within 25 miles of the southern land border; or Passport with NIV.	• Passport and Border Crossing Card (DSP-150) as B1/B2 lieu visa, I-94 required. • PP with NIV.	• Passport and Border Crossing Card (DSP-150) as B1/B2 lieu visa, I-94 required; or • PP with NIV.

64 Exempt NIV under the Visa Waiver Program (VWP) when traveling for business or tourism.
65 Exempt NIV under the VWP when traveling for business or tourism.
66 Exempt NIV under the VWP when traveling for business or tourism.
*Effective March 17, 2003.

DOCUMENTARY REQUIREMENTS (Minimum)			
APPLICANT	**COMING FROM CONTIGUOUS TERRITORY**	**COMING FROM WESTERN HEMISPHERE**	**COMING FROM EASTERN HEMISPHERE**
Mexican (citizen) Crewmember on a commercial airplane belonging to a Mexican company	Visa not required if crewmember is employed on an aircraft belonging to a Mexican company authorized to engage in commercial transportation in the U.S. Passport is required.		
Mexican with diplomatic or official passport	No visa requirements as long as bearer is entering the US for 6 months as a visitor in the US. Spouse and dependents under 19 years old who have the same documents and accompany official at the time of entry are also visa and I-94 exempt.		
Mexican citizen entering the US pursuant to **International Boundary & Water Commission Treaty**	No visa and No passport requirement as long as individual is working directly or indirectly on construction, operation, and maintenance of works in the US in accordance with the Treaty.		
Citizens of Freely Associated States (Marshall Islands and Federated States of Micronesia), formerly the Trust Territory of the Pacific Islands.	• Proof of citizenship required. • Exempt passport and visa requirements.		
Transit Without Visa[67] **Please note that this program was suspended on August 2, 2003**	Passport and US NIV are not required as long as individual is being transported in immediate and continuous transit through the US in accordance with INA 238(D). Individual **must be admissible under immigration laws** and meet qualifications.		
Visa Waiver Program[68]	Passport requirement with return/onward ticket or proof of economic solvency.		

[67] Citizens from the following countries **MUST** HAVE A VISA: Afghanistan, Angola, Bangladesh, Belarus, Bosnia-Herzegovina, Burma, Burundi, Central African Republic, China, Colombia, Congo, Cuba, India, Iran, Iraq, Libya, Nigeria, North Korea, Pakistan, Sierra Leone, Somalia, Sri Lanka, Sudan, and Yugoslavia.
The following citizens may use the in-transit lounge if their carrier has an approved in-transit lounge agreement in approved POE: Bangladesh, India, Pakistan, and Sri Lanka.

[68] Nationals of the following countries are in the VWP: Andorra, Australia, Austria, Belgium, Brunei, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

SPECIAL CLASSES
Adjacent Islands[69]: Passport requirement, but no visa requirement for nationals and residents under the following conditions: 1. **Bahamian National or British subject residents of the Bahamas**: A visa is not required if, prior to boarding a carrier to the US, the passenger is pre-inspected in the Bahamas and determined to be admissible by the Bureau of Customs and Border Protection (CBP). 2. **British subject residents of the Cayman Islands or of the Turks and Caicos Islands**: A visa is not required if they come directly from the above islands to a US POE and present a current certificate from the Clerk of the Court showing no criminal record. 3. **National of Great Britain, France, the Netherlands, and nationals of adjacent Caribbean Islands that are independent countries**: A visa is not required if passenger is national of Great Britain, France, the Netherlands, Antigua, Barbados, Grenada, Jamaica, or Trinidad &Tobago; resides in British, French, or Dutch territories located in the adjacent islands; and is proceeding to the US as an agricultural worker or has a valid certificate from the Department of Labor granting employment in the US Virgin Islands. 4. **Nationals and residents of the British Virgin Islands traveling to the US Virgin Islands**: A visa is not required. 5. **Nationals and residents of the British Virgin Islands traveling to the US**: A visa is not required as long as individual is pre-inspected in St. Thomas and determined to be admissible by the CBP.

SPECIAL CLASSES
Guam Visa Waiver Program[70]**:** No visa requirement as long as: • Possess a valid, unexpired passport • Entry into Guam is for 15 days or less • Is a visitor for business or pleasure • Arrives in a signatory carrier • Holds a round trip ticket with a confirmed departure date not exceeding 15 days from date of admission Possess a completed and signed Guam Visa Waiver Information Form (I-736) and I-94.

[69] Anguilla, Antigua, Aruba, Bahamas, Barbados, Barbuda, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Curacao, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Marie-Galante, Martinique, Miquelon, Montserrat, Saba, St. Barthelemy, St. Christopher, St. Eustatius, St. Kitts-Nevis, St. Maarten, St. Pierre, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos and the other British, French, and Netherlands territories or possessions bordering on the Caribbean Sea.

[70] Citizens of the following countries participate in the GVWP: Australia, Brunei, Indonesia, Japan, Malaysia, Nauru, New Zealand, Papua New Guinea, Singapore, Solomon Islands, South Korea, Taiwan (Applies to travel that begin in Taiwan to Guam with no layovers except in a US territory enroute AND are in possession of a Taiwan National Identity Card and a valid Taiwan passport with a valid reentry issued by the Taiwan Foreign Ministry of Foreign Affairs.

Appendix D: Select Organizations and Programs

Agriculture and Quarantine Inspection (AQI)

After a long and distinguished history in the U.S. Department of Agriculture (USDA), approximately 2,600 employees from Animal and Plant Health Inspection Service (APHIS)/Plant Protection and Quarantine (PPQ), Agriculture Quarantine and Inspection (AQI) force became part of DHS' Border and Transportation Security's Bureau of Customs and Border Protection (CBP) on March 1, 2003.

APHIS' efforts to protect American agriculture have long been the first line of defense against the introduction of foreign plant and animal pests and diseases at our Nation's Ports-of-Entry (POE). This critical mission will now be carried out by DHS. Since September 11, 2001, APHIS continues to be on heightened alert against both intentional and unintentional threats to agricultural resources. Creating a consolidated border inspection organization allows for unprecedented information sharing, streamlined services, cross training among specialists, and innovative techniques that weren't previously possible when border inspection was the responsibility of three separate agencies.

To assist DHS in this effort, APHIS/PPQ Beagle Brigade has also moved to the new department within CBP. These highly trained detector dogs sniff the baggage and vehicles of international travelers as they arrive in the United States to identify prohibited agricultural products. APHIS will maintain responsibility for training new members of the Beagle Brigade as well as their handlers. In addition, APHIS will continue to train all CBP Agriculture Specialists in the science of pest and disease detection.

While some safeguarding responsibilities have been transferred to DHS, APHIS will continue to play an important role in preserving America's agricultural resources. In this role, APHIS will work to strengthen and expand its pest detection programs as well as its partnerships with States, industry, and academic institutions. In the event of an agri–terror attack on our homeland, DHS and APHIS will work as partners to safeguard America's food and agricultural resources. DHS will lead the team of first responders to contain and manage the threat while APHIS provides crucial scientific and diagnostic expertise. This expertise will be critical in managing a potential disease outbreak as well as assisting DHS in its investigative and intelligence–gathering efforts to find those responsible for the terrorist attack. Today's world presents new threats to U.S. agriculture, and this partnership creates a stronger line of defense to protect our Nation's agricultural resources.

United State Coast Guard (USCG)

On March 1, 2003 the U.S. Coast Guard became a part of DHS. It remains intact as an organization and reports directly to the Secretary, DHS. The USCG's homeland security mission is more visible today, but it is just as important as it was when the USCG first began protecting our national sovereignty 211 years ago.

In the wake of the September 11 terrorist attacks, the USCG immediately mobilized more than 2,000 reservists in the largest homeland defense and port security operation since World War II. The USCG has increased its vigilance, readiness, and patrols to protect the country's 95,000 miles of coastline, including the Great Lakes and inland waterways.

As part of Operation Noble Eagle[71], the USCG is at a heightened state of alert protecting more than 361 ports and 95,000 miles of coastline, America's longest border. The USCG continues to play an integral role in maintaining the operations of our ports and waterways by providing a secure environment in which mariners and the American people can safely go about the business of living and working freely.

The USCG's homeland security role includes:

- Protect ports, the flow of commerce, and the marine transportation system from terrorism;
- Maintain maritime border security against illegal drugs, illegal aliens, firearms, and weapons of mass destruction;
- Ensure that we can rapidly deploy and resupply our military assets, both by keeping USCG units at a high state of readiness, and by keeping marine transportation open for the transit assets and personnel from other branches of the armed forces;
- Protect against illegal fishing and indiscriminate destruction of living marine resources, prevention and response to oil and hazardous material spills, both accidental and intentional; and
- Coordinate efforts and intelligence with federal, state, and local government agencies.

Federal Bureau of Investigations (FBI)

On July 26, 1908, then-Attorney General Charles J. Bonaparte appointed an unnamed force of Special Agents to be the investigative force of the Department of Justice. The FBI evolved from this small group.

The mission of the FBI is to uphold the law through the investigation of violations of federal criminal law; to protect the United States from foreign intelligence and terrorist activities; to

[71] Operation Noble Eagle refers to U.S. military operations associated with homeland defense and civil support to federal, state and local agencies in the United States, and includes the increased security measures taken after the September 11 terrorist attacks. The operation involves joint agency coordination and cooperation to ensure our nation and borders are protected from future attacks.

provide leadership and law enforcement assistance to federal, state, local, and international agencies; and to perform these responsibilities in a manner that is responsive to the needs of the public and is faithful to the Constitution of the United States.

September 11, 2001 terrorist attacks had a profound impact on the responsibilities of the FBI. The U.S. PATRIOT Act granted new provisions to address the threat of terrorism. The FBI was given responsibility for protecting the American people against future terrorist attacks. On May 29, 2002, Attorney General John Ashcroft issued revised investigative guidelines to assist the FBI's counter terrorism efforts.

To support the FBI's change in mission and to meet newly articulated strategic priorities, the FBI reengineered its structure and operations to closely focus on prevention of terrorist attacks, countering foreign intelligence operations against the U.S., and on addressing cyber crime-based attacks and other high-technology crimes. In addition, the FBI remains dedicated to protecting civil rights, combating public corruption, organized crime, white-collar crime, and major acts of violent crime. The FBI has also strengthened its support to federal, county, municipal, and international law enforcement partners and has dedicated itself to upgrading its technological infrastructure to successfully meet each of its priorities.

United States Border Patrol (USBP)

The USBP, established by an Act of Congress in response to increasing illegal immigration, was officially established on May 28, 1924. As mandated by this Act, the small border guard in what was then the Bureau of Immigration was reorganized into the USBP. The initial force of 450 officers was given the responsibility of combating illegal entries and the growing business of alien smuggling. Today, the USBP has approximately 10,400 agents. The USBP is the mobile uniformed law enforcement arm of DHS. In March of 2003, the USBP began a new chapter in its history by becoming part of the new CBP.

While the USBP has changed dramatically since its inception over 75 years ago, its primary mission remains unchanged: to detect and prevent the illegal entry of aliens into the U.S. There is a direct linkage between the activities of the USBP between POEs and the POEs themselves. Together with other law enforcement officers, the USBP helps maintain borders that work – facilitating the flow of legal immigration and goods while preventing the illegal trafficking of people and contraband. The USBP is specifically responsible for patrolling the 6,000 miles of Mexican and Canadian international land borders and 2,000 miles of coastal waters surrounding the Florida Peninsula and the island of Puerto Rico. Agents work around the clock on assignments, in all types of terrain and weather conditions. Agents also work in many isolated communities throughout the U.S.

All USBP agents spend 19 weeks in training at the U.S. Border Patrol Academy in Glynco, Georgia, or Charleston, South Carolina, which is a component of the Federal Law Enforcement Training Center. Agents are taught immigration law, statutory authority, police techniques, and Spanish. Upon graduation, they spend an additional 24 weeks in on-the-job training, which includes weekly intensive instruction in immigration law and Spanish.

The primary mission of the USBP is the detection and apprehension of illegal aliens and smugglers of aliens at or near the land border. This is accomplished by maintaining surveillance, following up leads, responding to electronic sensor alarms and aircraft sightings, and interpreting and following tracks. Some of the major activities include maintaining traffic checkpoints along highways leading from border areas, conducting city patrol and transportation check, and anti-smuggling investigations. Since 1994, the USBP has made more than 11.3 million apprehensions nationwide, more than the current combined populations (2000 U.S. Census data) of Iowa, Missouri, and Kansas.

The USBP also works closely with state and local law enforcement counterparts, often being the only law enforcement presence in remote areas. Special teams of USBP agents also conduct search and rescue operations in remote areas.

United States Department of State (DOS)

The Department of State manages the United States' international relations, which includes the issuance of international travel documents: passports to U.S. citizens and visas to certain foreign nationals to come to the U.S.

Passport Systems

All domestic passport agencies are equipped with the modern photo-digitized Travel Document Issuance System (TDIS-PD). All passports issued by the domestic passport agencies incorporate the use of printed digital photos and related security devices resulting in greatly improved passport security. TDIS-PD is currently being upgraded with a newer more powerful database (Microsoft's SQL) and capability to integrate with posts abroad, which will allow DOS posts to transfer data electronically for domestic issuance of overseas passport applications. The Passport Records Imaging System Management (PRISM) system permits electronic storage of high-resolution digital color images of passport applications and Consular Reports of Birth Abroad. The decentralized version of PRISM allows users to immediately retrieve electronic records within minutes of passport issuance.

A companion system, the Passport Information Electronic Retrieval System (PIERS), provides a direct electronic index to the PRISM passport application images to DOS Consular Officers and Diplomatic Security agents abroad and passport agencies and passport headquarters staff. Currently, digital color images of passport records from 1996 to the present are stored on PRISM. A back scan project to digitally image paper records of passport applications issued between 1994 and 1998 is underway. Once this project is completed, passport records including photographs will be available for all currently valid passports. DOS expects to complete the project in 2004. In addition, an index record of passport issuances back to 1978 is available.

The Passport Lookout Tracking System (PLOTS) contains an index as well as digital images of approximately 150,000 passport fraud and law enforcement lookouts, and is available worldwide to consular officers and other authorized officials.

Visa Systems

The modernized Nonimmigrant Visa (NIV) System produces a tamper-resistant, machine-readable visa that includes the applicant's photograph, and features a seamless interface with both the DOS' name check system (CLASS) and the Consular Consolidated Database (CCD). In February 2003, DOS deployed the latest release of nonimmigrant visa software with enhanced data collection (25 new data elements) and improved scanning and photo-capture features.

The latest immigrant visa software facilitates data sharing with the Social Security Administration, which is used to provide social security numbers for new immigrants. The Immigrant Visa system is under re-designed to produce an immigrant visa that includes a digitized photo and machine-readable format, which will be piloted in early 2004.

Consular Consolidated Database (CCD)

All visa system activity abroad is replicated and stored in the CCD. All consular posts abroad have access to the CCD, a global database of visa records making it possible to instantly verify U.S. visa issuance or refusal from anywhere in the world.

DOS currently shares issued visa records with DHS inspectors at all Ports-of-Entry, and subsequently with DHS field offices that have access to the Interagency Border Inspection System (IBIS). Recent upgrades to the CCD's interagency connectivity make it technically ready to share visa records, in near real-time, throughout the U.S. government.

Name checks

The Consular Lookout and Support System (CLASS) is the primary automated screening tool for consular officers issuing passports and visas, and CLASS routinely processes over 100,000 name checks daily. CLASS contains linguistic-based algorithms (Arabic, Russian/Slavic, Hispanic) used in querying its data. An Asian algorithm is in the linguistic design stage. CLASS has a database containing over 14 million visa subject lookouts and 3.6 million passport subject lookouts. In 2003, while adding eight million FBI lookouts, DOS upgraded hardware to keep response time efficient.

Biometrics

Changes in the law in regard to biometrics are having significant effects on DOS' travel document issuance. Section 303(b) of the Border Security Act stipulates that by October 26, 2004, the Secretary of State shall issue only visas that use biometric identifiers. Section 303(c) of the Border Security Act establishes certain requirements for travelers from Visa Waiver Program (VWP) countries by which they will need to have passports that incorporate biometric identifiers that comply with standards of the International Civil Aviation Organization (ICAO).

Biometric Passport

At its May 2003 meetings, ICAO adopted facial recognition as the globally interoperable biometric to facilitate machine-assisted identity confirmation at U.S. and other borders. The objective is to ensure that such passports can be "read" by similar equipment worldwide, that they are being used by the person to whom the passport was issued, and that the passport has not been altered. ICAO also provided that fingerprint and iris images could be included in the passport to supplement facial recognition as additional biometrics, at the discretion of the issuing country.

Although the Border Security Act does not specify that U.S. passports must incorporate biometric identifiers, DOS believes that biometrics stored in travel documents provide added security to the authentication of passport data and can enhance the processing and verification of identity of persons at borders. Therefore, DOS has adopted the ICAO standard for use in the U.S. passport and has assembled an interdisciplinary committee to solve the problems inherent in issuing a biometrically enabled passport, consisting of experts from the Bureau of Consular Affairs, the Department of Homeland Security, the Government Printing Office and other offices.

DOS plans to initially produce a small number of biometrically enhanced passports in fiscal year 2005, with the goal of converting the entire U.S. passport process during fiscal year 2006.

Biometric Visa

In order to meet the October 26, 2004, deadline, DOS will undertake an unprecedented global biometric enrollment program for visa applicants. The enrollment will initially be of two fingerprints plus a photograph. Visa-issuing posts in Mexico have been taking visa applicant fingerprints since 1998 for the issuance of Border Crossing Cards through a joint program with the legacy Immigration and Naturalization Service and now with the Department of Homeland Security. The Border Crossing Card program has provided valuable experience for fingerprinting of visa applicants and related issues.

Transportation Safety Administration (TSA)

The Aviation and Transportation Security Act recognized the importance of security for all forms of transportation and related infrastructure elements. This cannot be accomplished by the TSA in isolation and requires strengthened partnerships among Federal, State and local government officials, and the private sector to reduce vulnerabilities and adopt the best practices in use today.

On February 17, 2002, TSA assumed the aviation security screening responsibilities previously performed by the airlines' for over 30 years and is responsible for day-to-day Federal security screening operations for passenger air transportation and intrastate air transportation. This includes: the non-intrusive and if warranted intrusive screening of airport passengers, their luggage, airport employees, and all others needing to pass through security checkpoints.

Infrastructure protection of critical assets such as pipelines and more than 10,000 Federal Aviation Administration facilities is another key mission of the TSA. Along with rail and highway bridges, many other national assets are critical to our economic and national security and vital for the free and seamless movement of passengers and goods throughout the country.

The U.S. transportation system is vast, enabling the free movement of millions of passengers each day. The system includes:

- More than 367 maritime ports, 1,000 commuter rail stations, 429 federalized airports and 600 central bus stations;
- Over 130 million passengers who commute by ferry, and more than six million passengers who take overnight cruise line voyages;
- More than 23 million passengers who ride on Amtrak trains, 61 million passengers who ride on local commuter rails, and over 85 million passengers who ride the Long Island Railroad; and
- An estimated 860 million passengers who ride on over 44,000 over-the-road motor coaches and inner city buses each year.

Canine Units

The Canine programs of legacy U.S. Customs, INS, Agricultural Quarantine Inspection, and the U.S. Border Patrol are now part of CBP. The primary mission of the Canine Units is to detect and prevent terrorists and terrorist weapons from entering the U.S. Legacy U.S. Customs, Agriculture, and INS canine units are deployed within the POE while the U.S. Border Patrol canines are deployed between POEs.

Program Background of Canine Units

The legacy USCS has approximately 700 Canine Enforcement Officers (CEO) including officers in training. 571 CEOs with a detector dog are stationed at 73 POEs to include Hawaii and Puerto Rico, as well as two pre-clearance stations. This total includes 16 anti-terrorism teams (10 explosive teams at 5 locations and 6chemical teams at 3 locations). The current journeyman grade for all CEOs is GS-11. The Canine Enforcement Training Center (CETC) is located in Front Royal, Virginia, and has a capacity of training 180 teams annually with a staff of 40. The average length of the training course is 13 weeks.

The USBP has approximately 334 Border Patrol Agents with a detector dog with an additional 108 teams to be trained in fiscal year 2003. These agents are assigned to 69 stations (includes northern/southern borders & coastal stations). The current journeyman grade is GS-11. The Border Patrol National Canine Facility (NCF) is located in El Paso, TX, and has a capacity of training 120 canine teams with a current staff of nine. The average length of the training course is 11 weeks, with all detector dogs being trained to detect concealed humans and narcotics.

The Inspections Program of legacy INS has 36 canine teams assigned to 15 locations with an additional 15 new inspectors being trained in fiscal year 2003. Legacy INS detector dogs and canine inspectors are also trained at the USBP NCF in El Paso, TX. The legacy INS canine program mission is enhancing their law enforcement efforts to detect concealed humans, as

well as narcotics. The canine budget remains at the headquarters level and is estimated at $866,000 for fiscal year 2003. This budget is for the training of 15 new inspector teams and 5 replacement detector dogs. The canine program's policies and procedures are the same as USBP's.

The Animal & Plant Health Inspection Service (APHIS) has 139 approved Plant Protection & Quarantine (PPQ) Canine Office positions. The current journeyman grade is GS-9. Seventy five detector dog teams are currently deployed at POEs, 38 teams are waiting to be trained at National Detector Dog Training Center (NDDTC) and 26 canine officer vacancies were transferred to DHS. These officers are assigned to select international airports, land borders, mail facilities and cargo areas throughout the U.S. The APHIS Detector Dog program averages about 85,000 seizures of prohibited agricultural products a year. APHIS dogs are housed at USDA approved kennels which meet stringent guidelines. Dogs are procured from "shelters," "rescue groups" and "private donations." APHIS dogs are retired at nine years of age.

All APHIS canine officers are qualified as PPQ Officers (Biology degree or 24 related course credits) and receive New Officer Training (NOT) in Frederick, MD, prior to their canine training. The APHIS NDDTC is located in Orlando, Florida. The NDDTC has a current staff of 12; instructors have degrees or extensive training in detection work and animal behavior. The NDDTC's operating budget for fiscal year 2002 was $1.5 million, which includes all leasing of three facilities. The average length of the training course is 10 weeks with all the detector dogs being trained on 5 basic odors. Additional odors are introduced for detector dogs working in specific ports. Some dogs have been known to recognize nearly fifty odors during their six to nine year careers. The training center conducts 10 scheduled classes of 4 students per class annually (40 teams). They also conduct approximately 10 replacement classes per year.

Appendix E: Acronyms

ACRONYM	DESCRIPTION
AAPA	American Association of Port Authorities
ABI	Automated Broker Interface
ACI-NA	Airports Council International—North America
ACE	Automated Commercial Environment
ACS	Automated Commercial System
ADIS	Arrival Departure Information System
AES	Automated Export System
AIS	Automatic Identification System
AmChams	American Chambers of Commerce
AMO	Air and Marine Operations
AMS	Automated Manifest System
APHIS	Animal and Plant Health Inspection Service
API	Advance Passenger Information
APIS	Advance Passenger Information System
AQI	Agriculture Quarantine Inspection
ARS	Pre-Arrival Review System
ASAC	Aviation Security Advisory Committee
ATR	Airport Technical Requirements
ATSA	Aviation Transportation and Security Act of 2001
BCS	Border Cargo Selectivity
BLM	Border Liaison Mechanism
BOTA	Bridge of the Americas
BSA	Enhanced Border Security and Visa Entry Reform Act
BSPC	Border Station Partnership Council
BRASS	Border Release Advanced Selectivity System
BTS	Border and Transportation Security
CADD	Computer Aided Design and Development
CANACAR	Camara Nacional del Autotransporte de Carga
Can/Am BTA	Canadian/American Border Trade Alliance
CBP	U.S. Customs and Border Protection
CCD	Consular Consolidated Database
CEO	Canine Enforcement Officer
CETC	Canine Enforcement Training Center
CHCP	Cargo Handling Cooperative Program
CL	Computational Linguistics
CLAIMS	Computer-Linked Application Information Management System
CLASS	Consular Lookout and Support System
CLIA	Cruise Lines International Association
COAC	Commercial Operations Advisory Committee
CODIS	Combined DNA Index System
COTS	Commercial-Off-The-Shelf

ACRONYM	DESCRIPTION
CSA	Customs Self-Assessment
CSI	Container Security Initiative
CTA	Canadian Trucking Alliance
C-TPAT	Customs-Trade Partnership Against Terrorism
CVPC	Commercial Vehicle Processing Center
DCL	Dedicated Commuter Lane
DHS	Department of Homeland Security
DIHS	Division of Immigration Health Services
DMIA	INS Data Management Improvement Act of 2000
DNA	Deoxyribonucleic Acid
DOC	U.S. Department of Commerce
DOJ	U.S. Department of Justice
DOS	U.S. Department of State
DOT	U.S. Department of Transportation
DSV	Dynamic Signature Verification
EID	Enforcement Integrated Database
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAMS	Federal Air Marshal Service
FAST	Free and Secure Trade
FBI	Federal Bureau of Investigation
FCCA	Florida-Caribbean Cruise Association
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRST	Frequent Importer Release System
FIS	Federal Inspection Services
FLETC	Federal Law Enforcement Training Center
FPS	Federal Protective Service
FROB	Freight Remaining on Board
GSA	General Services Administration
GIS	Geographic Information System
GPS	Global Positioning System
HRSA	Health Resources and Services Administration
IAFIS	Integrated Automated Fingerprint Identification System
IATA/CAWG	International Air Transport Association/Control Authorities Working Group
IBET/IMET	Integrated Border and Marine Enforcement Teams
IBIS	Interagency Border Inspection System
ICAO	International Civil Aviation Organization
ICCL	International Council of Cruise Lines
ICE	Bureau of U.S. Immigration and Customs Enforcement
IDENT	Automated Biometric Identification System
IFTWG	Intermodal Freight Technology Working Group

ACRONYM	DESCRIPTION
IIRIRA	Illegal Immigration Reform and Immigrant Responsibility Act of 1996
IMO	International Maritime Organization
IMTC	International Mobility and Trade Corridor Project
INA	Immigration and Nationality Act
INS	Immigration and Naturalization Service
INSPASS	INS Passenger Accelerated Service System
IP	Internet Protocol
ISIS	Integrated Surveillance Intelligence Systems
ISPS	International Ship and Port Facility Security
IT	Information Technology
ITDS	International Trade Data System
ITI	International-to-International
ITS	Intelligent Transportation System
IV	Immigrant Visa
JACC	Joint Agency Coordination Center
JCN	Justice Consolidated Network
JOCC	Joint Operation Control Center
JPAU	Joint Passenger Analysis Unit
JWC	Joint Working Committee
LANL	Los Alamos National Laboratories
LESC	Law Enforcement Support Center
MIA	Miami International Airport
MTSA	Maritime Transportation Security Act
MOU	Memorandum of Understanding
NAFTA	North American Free Trade Agreement
NATAP	North American Trade Automation Prototype
NAILS	National Automated Immigration Lookout System
NATO	North Atlantic Treaty Organization
NCAP	National Customs Automation Prototype
NCF	National Canine Facility
NCIC	National Crime Information Center
NDDTC	National Detector Dog Training Center
NIIS	Non-Immigrant Information System
NISC	National Infrastructure Security Committee
NIV	Non-Immigrant Visa
NNSA	National Nuclear Security Administration
NOT	New Officer Training
NSEERS	National Security Entry/Exit Registration System
NVOCC	Non-Vessel Operating Common Carriers
NWCA	North West Cruiseship Association
OSC	Operation Safe Commerce
PAPS	Pre-Arrival Processing System
PAU	Passenger Analysis Unit

ACRONYM	DESCRIPTION
PIERS	Passport Information Electronic Retrieval System
PIL	Primary Inspection Lane
PIP	Partners in Protection (Canadian Program)
PLOTS	Passport Lookout Tracking System
POE	Port of Entry
POLA	Port of Los Angeles
PPQ	Plant Protection and Quarantine
PSAP	Public Safety Answering Point
RCCL	Royal Caribbean Cruise Lines
RCMP	Royal Canadian Mounted Police
RNS	Release Notification System
RVS	Remote Video Surveillance
SCS	Sterile Corridor System
SCT	Mexican Secretariat of Communications and Transportation
SDE	Surveillance Decision Environment
SENTRI	Secure Electronic Network for Travelers Rapid Inspection
TBWG	Trans Border Working Group
TDIS-PD	Travel Document Issuance System-Photo Digitized
TEA-21	Transportation Equity Act for the 21st Century
TECS	Treasury Enforcement Communications System
TIA	Travel Industry of America
TSA	Transportation Security Administration
TWIC	Transportation Worker Identification Card
TWOV	Transit Without Visa
UCD	User-Centered Design
USA PATRIOT Act	Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism
USBP	U.S. Border Patrol
USCG	U.S. Coast Guard
USCS	U.S. Customs Service
USDA	U.S. Department of Agriculture
USPHS	U.S. Public Health Service
US-VISIT	The United States Visitor and Immigrant Status Indicator Technology
VACIS	Vehicle and Cargo Inspection System
VWP	Visa Waiver Program
VWPPA	Visa Waiver Permanent Program Act
WAM	Workforce Analysis Model

Appendix F: IT Report Summary

The DMIA Task Force contracted with independent information technology (IT) consultants to provide a full report outlining how the automated systems currently function in relation to the border management processes and recommendations for a future border management system. The full report also outlines recommended enhancements to current systems that address the various needs of DHS and other relevant agencies and organizations.

Due to the sensitive nature of the information and findings in the full IT report, an IT Report Summary is included as an Appendix in this report. As necessary, the Task Force will brief appropriate officials on the complete IT findings.

INFORMATION TECHNOLOGY CONSULTANT ANALYSIS SUMMARY REPORT 2003

LA-UR-03-7940

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Abstract

The initial section of this report provides a brief background summary and describes the scope of the subject project. General descriptions of Information Technology systems follow. The next portion explains the evaluation methodology of existing Information Technology systems. This section closes with observations and findings of the analysis including recommendations for improving current implementations.

The second section of this report addresses a conceptualized Information Technology system. It begins with a generic description of traveler and cargo components including possible areas of additional functionality. Detailed discussions of the applications of biometric technologies follow. The next discussion focuses on emerging technologies applicable to future Information Technology system functionality. This section of the report closes with recommendations relative to future Border Management Information Technology systems.

Finally, the summary report offers some overall conclusions.

Section 1: Evaluation of Current Information Technology Systems

Introduction

The Immigration and Naturalization Service Data Management Improvement Act (DMIA) of 2000 created a Task Force to evaluate and make recommendations on how to improve the flow of traffic at United States (U.S.) airports, seaports, and land border Ports-of-Entry (POEs) while enhancing security. Statutory mandates include evaluations and recommendations on an electronic entry/exit system; enhancing information technology (IT) systems and data collection/sharing; facilities and infrastructure issues; and increasing cooperation between public and private sectors, among federal and state/local governments, and with affected foreign governments.

Federal agencies responsible for border enforcement, protection, and inspection at over 300 POEs are now a part of the new Department of Homeland Security (DHS). The DHS came into existence as an official cabinet-level department on January 24, 2003, and now includes legacy Immigration and Naturalization Services (INS), legacy U.S. Customs (USCS), U.S. Coast Guard (USCG), the Transportation Security Administration (TSA), and about 18 other federal agencies. Both the legacy INS and legacy USCS are now divided among the border, interior, and services functions within DHS—Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), and Citizenship and Immigrations Services (CIS). During 2003, the Los Alamos technical team (referred to in this report as the team) looked at the border management responsibilities, from an IT perspective, of these and other federal government entities with a role in border management, including the Department of Justice (DOJ) and the Department of State (DOS).

This report analyzes border management functions and related efforts. The systems the report covers include both those that the DMIA Task Force identified in 2002 and those that the team identified during the 2003 reporting period. The team expanded the scope of effort to include additional agencies, bureaus, and systems for a broader assessment of the current border management systems. The team's goal during this reporting period was to research each of these systems to make high-level recommendations on the better use of technology.

The team based its observations in this report on what it has seen, read about, and reviewed. (Some of these observations are unique to a single system, and others apply to border management systems as a whole.) The team developed a set of questions designed to elicit the facts about each system. Team members conducted several different types of interviews, read written documentation about the systems, conducted Web searches, and went on fact-finding site visits to POEs and other locations to see demonstrations of the systems in operation.

The team analyzed the IT systems in each border management functional category using seven factors:

1. Purpose—why does the system exist and what does it do?
2. Feasibility—is the functionality needed?
3. Technological Obsolescence[1]—extensibility, maintenance burden, accessibility.
4. Interface—intercommunications with other systems.
5. Integration—knowledge integration.
6. Overlapped—functional duplication.
7. Biometrics—robustness hierarchy.

These factors support the report's IT recommendations and conclusions for border management and focus on the security impact of each system. In a layered approach, a system's time relationship to protecting the borders determines its security impact; that is, the closer the system is to preventing an unwanted event, the greater the impact. Critical systems are in the final protective ring of border management.

Scope

This report concentrates on the technical analysis of the aggregated systems and attempts to relate them to the border management systems studied in 2002 as well as to incorporate the new areas of study mentioned above. It examines IT systems and related efforts such as enterprise architecture, infrastructure planning efforts, implementation projects, and agreements and standards.

The team's recommendations focus on interfaces among the various systems and the processes that encompass the border management domain (Figure 1):

TSA—Transportation workers identification and infrastructure security at POEs
U.S. Coast Guard—Commercial vessels
Legacy U.S. Customs—Cargo systems/travelers
Legacy Immigration and Naturalization Service Functions—Travelers
Department of State functions—Consular Affairs/visa issuance and documents
Department of Justice, Federal Bureau of Investigation (FBI)—Criminal records

[1] For an explanation of the term technological obsolescence, please see page 9.

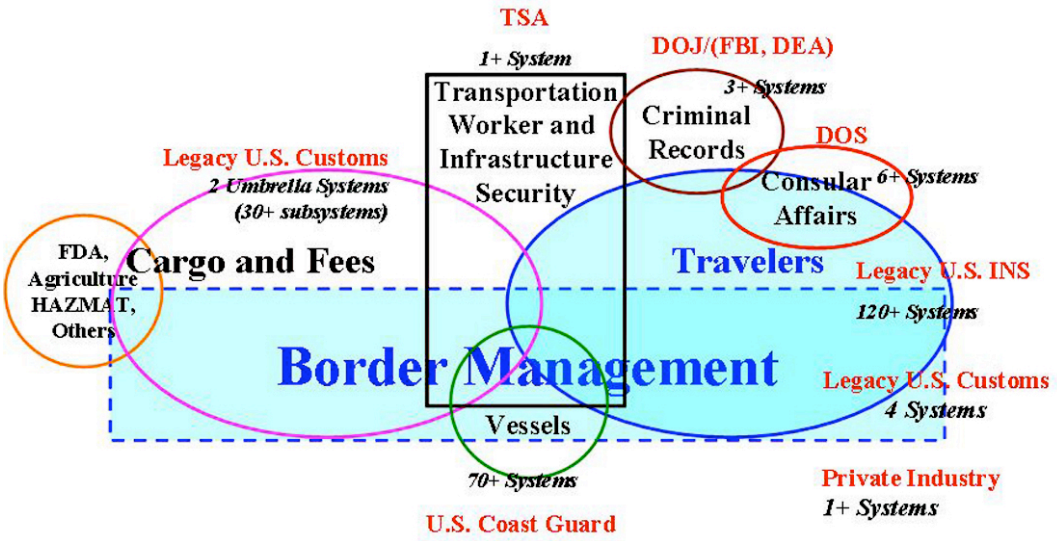

Figure 1. Border management domain.

In 2003, the report's scope has grown to cover this entire range of border management functions. The key players in border management are DHS (with the bulk of these functions), DOJ, and DOS. DHS has several overlapping components that make it necessary for IT systems to interoperate. IT systems in other departments also need to interoperate at a lesser extent.

Under DHS, key border management components are cargo systems, traveler systems, commercial vessels, and transportation workers and infrastructure security.

- Cargo systems deal with the import of cargo to and export of cargo from the U.S.; they manage the physical and financial compliance with the law, as well as mitigating the threats these activities might create. The technical team reviewed two umbrella IT systems and two subsystems.
- Travelers, foreign as well as U.S. citizens, cross the borders of the U.S. The entry and exit of certain foreign individuals merit particular interest. In addition, managing the visits of foreign travelers from the time they request permission to enter and their arrival and subsequent departure from the country is important. Of the 120+ legacy INS systems, the team reviewed 29. In addition, the team reviewed two legacy USCS systems and one private industry system related to travelers.
- The USCG monitors commercial vessels on the waterways. These vessels carry cargo or passengers and may include foreign crewmembers. USCG is the first to physically encounter a vessel before it arrives at a POE. The team reviewed three of the USCG systems.
- Transportation workers and infrastructure security are key concerns especially at POEs because they provide the lifeline for commerce and commercial exchanges that support the economy of this country. The TSA has at least one significant IT effort in the planning stages and one system that was not reviewed in great detail but has a significant role.

Other departments also play important roles in border management.

- DOS' Consular Affairs Offices are the first point of contact for many foreign travelers and issue visas that allow many to board for an inbound trip to the U.S. They can also screen out those ineligible to enter the U.S. The team has reviewed six systems in support of Consular Affairs and visa issuance operations.
- The DOJ FBI's criminal record information provides key information enabling quick identification of individuals with criminal records either by name or by fingerprints. This function also supports background investigations for transportation workers and others. Two systems play a significant role in providing access to this information, and the team reviewed them. The matrix referenced below also lists a third system that the team did not review in depth.

Overall, these entities might use more than 200 systems, so the team has concentrated on the key border management systems to narrow the scope of the report to a manageable set. The key systems for the above components amount to 50 individual systems. Refer to page 33 for a complete matrix of systems reviewed.

Many laws and policies dictate and regulate how the DHS and its border management agencies and bureaus operate and how system requirements are prioritized. It is worth noting that, although the roles of the agencies and bureaus in the new department have been revised, the applicable laws have not been changed at this time. The new agencies and bureaus are still expected to satisfy the old laws and mandates, which are not well aligned with the new department.

Border Management Systems by Department and Bureau

- *Department of State*

  The core applications are built using Power Builder and with Oracle as the database. The application is in a distributed environment. Every post around the world has similar functions and needs access to centralized information. The current implementation relies on Oracle's replication capability and Power Builder's distributed application environment. The software's distributed copies allow for synchronized update of software.

  The database has replication capabilities that allow the mirroring of changes from a local subset to a centralized location, allowing posts to work on their local subset (for efficiency and other advantages) but constantly replicating all changes to the central database, which acts as a data warehouse, collecting data replicated from every post. Posts have access through the central database to data from any other post. Access control procedures are in place.

  Recently, DOS has begun making data from the central database available through Web-based clients so users can reach the server with a Web browser. DOS can also

export its entire data set using the Oracle replication capability. This is a way to share information on a routine basis with users outside of DOS. Additionally, this ability would be ideal for DMIA mining applications.

- *Legacy USCS (DHS)*

  The core systems are large mainframe-based applications. Two large umbrella systems dominate the applications. Both of these applications are a collection of COBOL programs and scripts and associated tables in databases. Collections of these programs, scripts, and tables can be envisioned as named applications. Together, they logically implement some set of business rules. The interface is mainly character-driven screens with heavy use of function keys to provide quick shortcuts to routine operations.

- *U.S. Coast Guard (DHS)*

  Two of the applications rely on the Microsoft implementation development tools and runtime environment. The other application on the secure domain is a Unix-based application soon to be reengineered. Each application has its own database. Both open Microsoft applications can easily share information because of the common tool set.

- *DOJ/FBI (DOJ)*

  The two applications reviewed are unique and complex. Each has its own environment, interfaces, and database engine. They employ commercial platforms with customized applications.

- *Legacy INS (DHS)*

  Most applications are standalone design and use a different tool set, hardware, and software suite. They range from database with character-based screen interfaces to relational databases with Web-based interfaces.

As-Is Systems Evaluation

The specific performance areas of border management information systems of interest to the DMIA Task Force include

Purpose—Clear outline of the purpose(s) for each individual system.
Interface—How, or if, it interfaces with other systems in use.
Project/Feasibility of Continued Use—Determine the prospect of continued use for each individual system in the context of overall border management systems.
Duplication/Overlapping—Identify duplicate or overlapping functions or responsibilities among the systems.
Technological Obsolescence[1]—Determine which systems currently are or will soon be obsolete.

[1] See page 9 for a complete explanation of the term technological obsolescence.

Integration—(a) Determine which systems are integrated (either fully or partially) and (b) determine which systems could be modified or enhanced and ultimately could become integrated.
Biometrics—(a) Determine which systems currently employ biometrics and (b) determine which systems could employ biometrics.

The evaluation characteristics outlined above touch on important and consequential issues of effective border management operations. The fundamental goals of border management systems are to eliminate the possibilities of activities, persons, equipment, and/or materials breeching U.S. borders with the intent to do grave harm, to facilitate the flow of legitimate enterprise activities, while protecting the privacy of the individual(s). The team assessed each system selected for evaluation in light of this goal—knowing the stated purpose of the system and understanding the significance of its purpose relative to the overall border management goals.

Purpose

The team has identified 50 individual systems to evaluate by the performance characteristics summarized above. A purpose-based categorization helps to better organize a detailed assessment of such a large number of systems. The 50 systems fall naturally into

Eight specific categories representing the general purpose they serve in the traveler system:

- Identification—Systems that assist in determining the identity of persons.
- Inspections—Inspection systems help accurately verify the identity of persons wishing to enter the country.
- Enforcement—Systems that provide case handling for violations of U.S. law by foreign nationals.
- Benefits—Systems that track and maintain the length-of-stay authorized for nonimmigrants.
- Intelligence—For the purposes of this report, systems that analyze information, often drawing and assembling “lookout” records that would result in more detailed inspection.
- Decision Support—Systems that provide analysis from enterprise data.
- Cargo—Systems that process data for the import of cargo/goods and the liquidation of import duties.
- U.S. Coast Guard—Systems that monitor commercial vessels and USCG operations.

Eight specific categories representing the general purpose they serve in the cargo system:

- Entity ID—Systems that support and maintain the creation of electronic identification of organizations and other entities associated with cargo importation.
- Inspection/Examination—Systems that support the inspection/examination process of cargo.
- Enforcement—Systems that deal with case management when laws have been violated while importing cargo through the border.
- Release—Systems that handle the information associated with the release of cargo once it has been inspected/examined.
- Liquidation—Systems that deal with the transactions for the liquidation or payment of import duties.
- Shipment Management—Systems that allow the preparation of all required documentation to import cargo.
- Intelligence (Targeting systems)—For the purposes of this report, systems that analyze patterns and trends to identify cargo requiring more detailed inspection.
- Decision Support—Systems that provide analysis from enterprise data.

Interface

The systems evaluated show a wide range of interrelationships. For example, a criminal history information system shares information with a number of agencies including the FBI, various criminal justice agencies, and appropriate courts. Entry/exit information from the inspection operations is subsequently transferred to an enforcement system, a decision support system, a benefits system, another intelligence system, and an identification system.

Prospect/Feasibility of Continued Use

The team used the design and software implementation of each system to evaluate feasibility of continued use. Exceptional design enables systems to accommodate changes and enhancements and incorporates industry standard technologies. Four systems are noted for their ***exceptional*** design, software implementation, and overall usability. If two specific systems receive software upgrades, they could be reasonable candidates for continued use. Updating this software to a more modern operating system would be reasonably straightforward.

Some of the system managers the team interviewed spoke of plans to upgrade and enhance system performance capabilities. It is assumed that timely improvements will be made to these systems as scheduled.

Duplication/Overlapping

Duplication and/or overlapping characteristics imply that certain systems serve the same purpose, replicate certain functionalities, or have been replaced with other capable systems. It is not surprising that a number of these systems are considered obsolete. It is reasonable to expect that the functionality of obsolete systems has migrated to other, more modern systems and, therefore, overlap with them.

Some identification systems and some lookout databases appear to have a natural clustering of overlaps. It is likely that their functionality is better served by integrating them. Two systems have a closely shared relationship, suggesting consolidation of these two systems should be investigated.

Technological Obsolescence

Comparing the "modernness" of a system's technology with current, best practice determines whether the system is obsolete. Because certain systems are deemed technologically obsolete does not mean that they should be quickly removed from service, that they are less than adequate, or that they are "pitifully weak" systems; they can still provide fully satisfactory information. However, upgrading, enhancing, or replacing technologically obsolete systems is part of the routine course of responsible system stewardship.

The team considered systems **technologically obsolete** if the hardware supporting the system is no longer routinely maintained by private industry and/or the operating system has been generally replaced by more comprehensive capabilities. The **implementation** of a system is **obsolete** if the model of the procedures and data does not accommodate changes and enhancements. For example, if the implementation of a system does not permit the straightforward addition of normal business rules, then the system is deemed obsolete.

The majority of systems the team judged obsolete have platform deficiencies. However, two systems are uniquely obsolete in both implementation and platform. Because modern capabilities have replaced a number of these systems, it may be prudent to develop a plan for removing/replacing these systems in an orderly fashion. The systems considered "partially" obsolete merit immediate upgrading.

Integration

Integration means that the systems function together in a unified manner to accomplish the objectives of border management activities. The team determined the system integration characteristics of each system based on generally good business practices, overall security requirements, and unified system performance expectations.

Of the currently **integrated** systems, three have the potential for limited integration in the future. All of the other currently integrated systems can be incrementally integrated as required for the near future. Only two of the systems currently partially integrated offer the

potential for a more comprehensive level of integration. Five of the minimally integrated systems can be integrated well beyond their current status. It may be possible to more fully integrate two of the systems that are not currently integrated.

Biometrics

Biometrics is the automated method of identifying or authenticating the identity of living persons based on physiological or behavioral characteristics. Biometrics includes facial photographs, fingerprints, hand geometry, voice recognition, and many other unique human identifiers. Many systems could include more extensive biometric information.

The biometric information most of the systems use includes photographs and fingerprints. All of these systems have significant potential for greatly expanded biometric identifiers. Although the advantages of multiple biometric information sets have not been rigorously quantified, it appears that biometric diversity will enhance the quality of person identification and/or validation systems.

Observations

Observation 1. **Transfer/exchange diversity limits information quality.**

The wide range of data transfer connections could seriously hamper the timeliness and availability of critical information to the relevant systems. The potential propagation of errors, the variations of definitions among the systems, the limitations imposed by law, the differing system priorities, and the lack of centralized oversight help create this limitation.

Observation 2. **As anticipated, essentially all of the systems examined manage/manipulate information.**

With few exceptions, the systems of interest do indeed acquire, maintain, and post large amounts of information. The fundamental technology by which information management is accomplished differs little with the various systems. Most are built upon linear data construction techniques together with “keyword” searchable file structures.

Observation 3. **Obsolete systems are notably populated by overlaps and duplications.**

The majority of systems determined to be obsolete also have overlapping or duplicative operational capabilities. This implies that system overlaps are at least partially attributable to unmitigated obsolescence. Experience has shown that system-wide inefficiencies are more likely to occur if effective modernization strategies are not routinely implemented.

Observation 4. **Most systems are obsolete because of platform problems.**

Almost without exception, technologically obsolete systems use outdated technologies (mainframe computational systems). The likely consequences of obsolescence may include significant maintenance costs, extremely limited interoperability, and little, if any, adaptability.

Observation 5. **Most systems are or readily could be integrated.**

Over 80% of the systems the team evaluated were at least "minimally" integrated, and, almost without exception, system-by-system implementation technologies do not prevent integration. This is very good news. However, domain-wide "functional integration" should be evaluated because it is much more consequential than individual "system-by-system integration."

Observation 6. **Biometric identifiers have been implemented across a broad range of appropriate applications. Most systems are designed to accept biometrics in a reasonably straightforward manner.**

The team found no glaring deficiencies relative to the use of biometric identifiers. Most of the systems have the obvious opportunity to enhance the use of biometrics to improve the quality of person identification results.

Observation 7. **The efficacy of the information ultimately posted by each individual system is inseparably coupled to the quality of the data resident in the system's data sources.**

Successfully applying the information management capabilities in this report ultimately depends on the accuracy, completeness, timeliness, and relevance of the source data upon which these capabilities are built.

Observation 8. **Four systems have exceptional design, software implementation, and overall usability.**

These systems clearly represent exceptional information technology implementation. These systems should form the core element from which to derive evolving information systems to meet the demands of the future.

Observation 9. **Modern communication technologies have not been fully exploited by any of the border management systems.**

Modern information technologies have developed remarkably diverse and useful techniques for communicating complex information to people (digitized voice transmissions, animations, graphics, tabulations, iconic representations, multidimensional virtual environments, three-dimensional engineering plots, geographically correct simulations, site-specific GPS-connected locators, etc.). The end user can select the communication environment(s) that works best for his/her situation.

Observation 10. **Robust information technologies depend on robust infrastructures for successful implementation.**

The current support infrastructure is not sufficiently robust to sustain broad information technology deployment. It does have, however, specific, localized elements that are somewhat adequate. Infrastructure elements include high-speed, high-capacity transmission systems (satellites), workstations, data storage and access systems, ergonomically compliant communication hardware, information input/output systems, and security-compliant encryption systems.

Observation 11. **Technological obsolescence is not a small problem: one-third of the systems have notable technology and/or design modernization challenges.**

Information systems that become technologically obsolete are not necessarily useless or unsatisfactory. Operational systems that are obsolete reflect as much on the attitude and style of the organizational support managers as on the system itself. Getting along with "old" technology is risky. Old systems tend to be well suited for operational conditions that no longer exist. Old systems are not likely to be prepared for surprise situations, emergencies, or rapidly changing national priorities. One-of-a-kind technologies are very costly (more than just dollars) to repair, maintain, and, ultimately, to replace.

Recommendations

Recommendation 1—**Personal privacy information must be rigorously protected.**

It is essential to the ultimate successful implementation of modern IT systems that the privacy of personal information and other associated information be scrupulously protected from unauthorized access, use, disclosure, or manipulation. Modern access control technologies together with administrative controls should be used to ensure that privacy laws, regulations, and public trust expectations are fully met.

Recommendation 2—**Consistent with privacy considerations, address the security advantages of understanding the consequences of persons' and organizations' long-term behavior.**

To realize the full benefits of modern information technologies, it is absolutely essential to (a) track and assess person activity patterns over relatively long periods (>25 years), (b) recognize and understand person-by-person behavior patterns, and (c) track person-to-person linkages, contacts, and often subtle interrelationships.

Recommendation 3—**Determine the security implications of interagency integration schemes.**

The team determined the integration condition of the systems in this report based solely on the individual systems. Domain-wide integration across many agencies and organizations has the greatest security value to border management operations.

Recommendation 4—**Rigorously assess the value of multiple biometric measures.**

It is not clear that multiple biometric benchmarks actually improve person identification, detection, and/or validation. Rigorous analyses should be conducted before making a national commitment to large-scale, domain-wide biometric deployments.

Recommendation 5—**Proactively avoid systematic technical obsolescence.**

Planning that includes the routine assessment, justification, and the ultimate **timely** upgrade (or removal) of key information systems should be an integral part of all operational activities, funding strategies, and organizational responsibilities associated with homeland security assignments.

Recommendation 6—**Ensure the quality of the data that supports database systems.**

The value of information is inseparably coupled to the legitimacy of the data from which the information is extracted. The quality of the data sources supporting the information technologies must be managed in partnership with border management system improvements.

Recommendation 7—**Streamline access to information.**

Access to relevant information in a timely fashion is an essential element of border protection operations. Systems providing the necessary information should avoid complex interconnections and the current excessively diverse data sources. Deploying modern communication technologies will enhance information clarity to all front line decision makers such as USBP agents and CBP officers.

Recommendation 8—**Ensure "new" systems are designed to easily accommodate change.**

The development of a national strategy for applying modern information technologies to border management issues is an essential part of achieving national security objectives. It is anticipated that "new" data systems, applications, and other tools will be deployed as an integrated approach to border management activities in the future. Every effort should be made to assure that "new" systems are designed with change in mind. For example, the business rules and/or processes that determine how to accomplish entry should not be hard-coded into new or upgraded information technology tools.

Section 2: A Future Border Management Domain

The Border Management Domain Today

Travelers

The process for travelers occurs in a step fashion. (In this report, traveler refers to individuals who enter or leave the U.S. at a POE; travelers can be U.S. citizens or foreign nationals.)

- Most foreign travelers get a visa to travel to the U.S. (Citizens of countries in the Visa Waiver Program do not need a visa for most visits less than 90 days.)
- The traveler embarks on an inbound trip on a commercial carrier to the U.S. (Air commercial carriers, by law, must provide Advance Passenger Information [API] when they depart from an overseas port.)
- The traveler arrives at a POE. A CBP officer examines travelers and their documentation. The CBP officer then records the type of admission and length of stay authorized for this visit for foreign travelers. (U.S. citizens are examined to establish citizenship and allowed to proceed, unless customs or agriculture issues arise).
- A foreign traveler might require benefits or other visit management functions while in the U.S., such as reporting a change of address or change of status.
- The foreign traveler departs in a timely fashion. (Those who do not depart, however, create various other challenges.)

The step process is probably very similar for most travelers in the overall concept except cases that require special handling, for example:

- Individuals from certain countries must be registered and their biometrics captured. These individuals must also report their departure—a more strictly controlled process than for the rest of the foreign travelers.

- Another special case occurs when someone attempts to enter the country illegally, many at POEs, but most between POEs. The process for these individuals is not the same as that of legal visitors and may involve returning them to their country of origin.

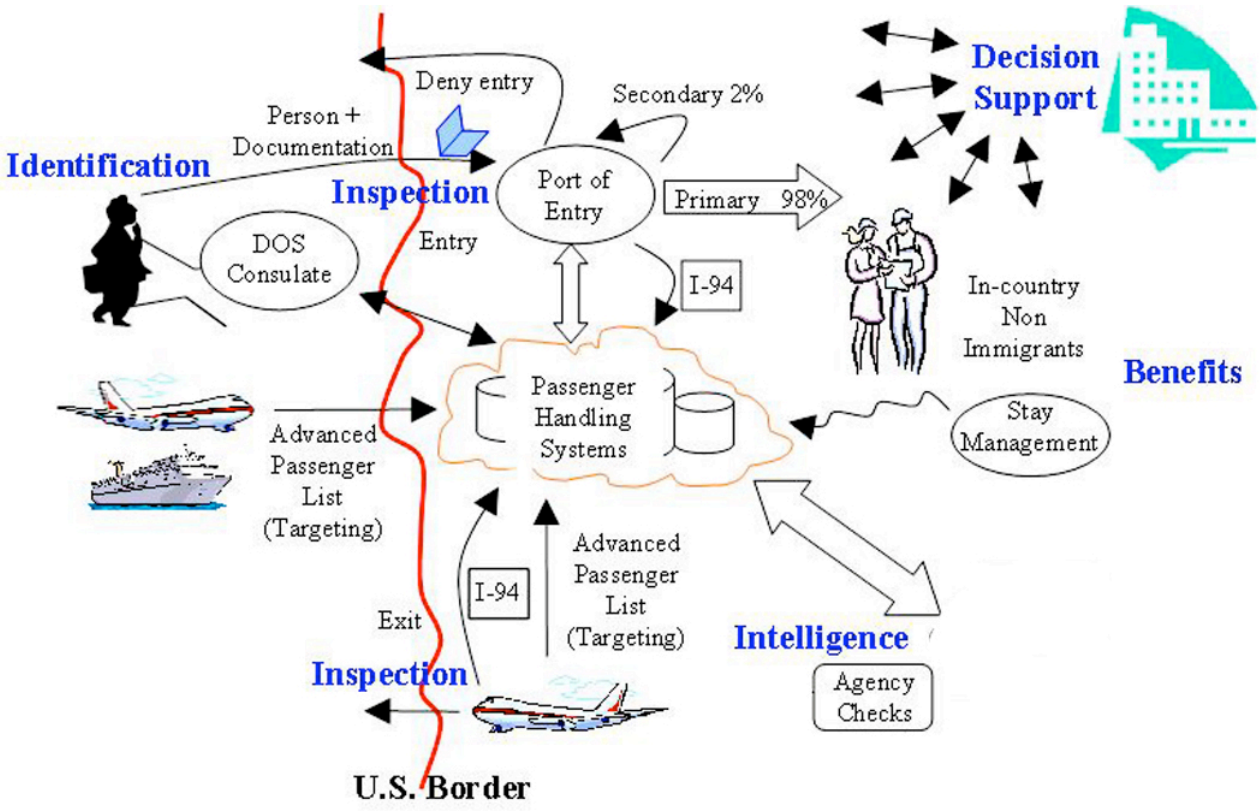

Figure 2. The traveler functional area.

Each of these steps might require a specific set of functions.

- The *identification* function creates a unique electronic identity for the individual and usually generates some kind of documentation. The visa issuance step performs an identification function. A similar function also happens when a U.S. citizen enrolls in a dedicated commuter lane program or when the U.S. Border Patrol captures an illegal alien between the POEs or at a foreign port and enters information about the illegal alien in their tracking system for future reference.

- *Enforcement* functions take place not only between POEs, they can also happen at a POE when an individual presents fraudulent documentation. Such individuals have most likely broken the law and may be removed from the country.

- The *inspection* function is similar—trying to verify the identity of an individual and presenting documents—no matter where it occurs. POEs must have a way to register the inspection event for foreign travelers to enable later visit compliance adjudication.

- The *benefits* function encompasses services such as petitioning for a student visa, adjustment of status, extension of stay, and naturalization of a foreign national.

- The *intelligence* function, for the purposes of this report, analyzes information behind the scenes, often creating “lookout” records that would result in more detailed inspection.

- The *decision support* function provides access to information from all sources while protecting privacy and controlling other access to everything collected in the process. Decision support can also sanitize the data for general reporting requirements or planning purposes.

The team derived a high-level conceptual system, as depicted in Figure 3, from the analysis of the current traveler domain.

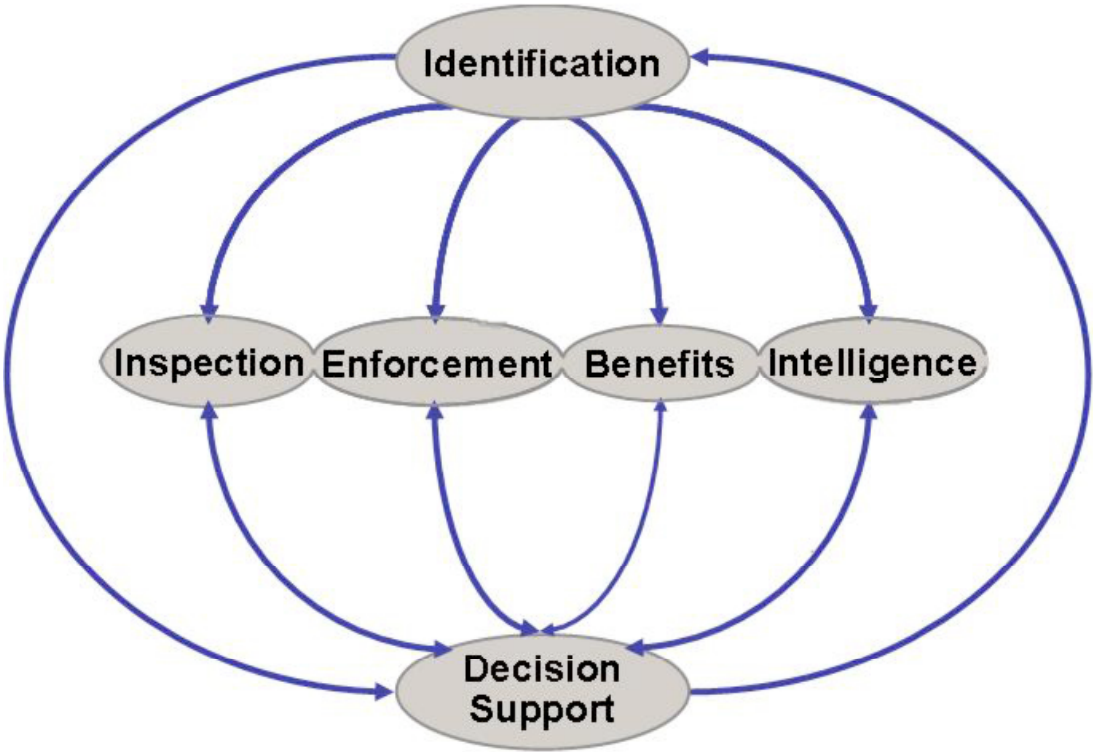

Figure 3. Conceptual IT system.

Cargo

A comprehensive system controls and tracks all commercial goods imported into the U.S. by the cargo process. The automated system receives all data from the time merchandise and goods are prepared for import to the final liquidation of duty fees. It receives the data primarily through electronic data interchange. It tracks the merchandise and processes paperwork requirements for both CBP and the importing community.

The entry process has two basic phases that track and control cargo: physical entry and financial liquidation. Each phase requires a different inspection and uses different system components.

Physical entry process

- *Arriving by sea*—The majority of cargo entering the U.S. arrives by sea, and nearly 50% of the value of all U.S. imports arrives by sea containers. In fiscal year 2002 (FY02), legacy USCS/CBP recorded that 21,285,262 containers entered the U.S. on sea vessels.[1] Starting in FY02, carriers had to submit a cargo declaration 24 hours before loading cargo aboard the vessel at a foreign port. When cargo arrives at a U.S. POE, CBP officers perform nonintrusive x-ray or gamma-ray secondary inspections on cargo based on selection criteria. CBP has a very sophisticated methodology targeting high-risk cargo, coupled with intelligence, enabling them to focus their enforcement resources in this area and to examine 100% of that high-risk cargo. There are also initiatives in place, such as the Container Security Initiative (CSI), that assist in identifying the high-risk cargo and facilitate the processing of low-risk cargo.

- *Arriving by land/rail*—The land POEs process the next highest volume of cargo. In FY02, legacy USCS/CBP recorded 1,430,107 containers entering by truck and 11,129,390 containers entering by rail.[2] A cargo system component tracks and releases highly repetitive shipments at land border locations. A CBP officer scans a bar code and verifies that the bar code matches the invoice data. After verifying the data, the CBP officer releases the cargo, noting only the quantity of items imported, unless he or she determines something is amiss. Having the information electronically greatly facilitates the movement of vehicle traffic and eliminates time-consuming data entry by the CBP officer. CBP uses nonintrusive x-ray or gamma-ray inspection to perform secondary inspections on cargo based on selection criteria.

- *Arriving by air*—Airports handle the smallest volume of cargo. Only 2% by weight of all cargo moves by air worldwide.[3] However, airfreight transport now accounts for well over a third of the value of the world trade in merchandise. The lower decks of passenger aircraft currently carry about 58% of global airfreight. CBP counts air cargo by entries, not by container. Entries can be as large as a car or as small as a widget. The main system can begin to track cargo status when the flight departs from the last foreign airport with a separate component.

Vessels (USCG)

Two important border management roles the U.S. Coast Guard plays are monitoring cargo vessels in the waterways in and around the POEs and providing security. The Coast Guard's IT systems focus on prearrival information. Cargo vessel personnel must notify the USCG of their intent to enter a port 96 hours before arrival and before the vessel enters a 24-mile perimeter. Before a cargo vessel 3000 tons or larger enters the perimeter, it must transmit the information required for cargo, crew and passengers, and the vessel. The USCG will not let a vessel enter the perimeter without the complete set of required information. After receiving the information, the USCG makes a determination

[1] U.S. Customs News, Press Release, June 2002, Office of Public Affairs: http://www.customs.gov/hot-new/pressrel/2002/0604-00.htm.
[2] Ibid.
[3] Ibid.

whether to board a vessel for inspection. Another longer-reaching effort to “secure the supply chain” for cargo is underway. This activity establishes a security monitoring of certain U.S.-bound cargo from the time it is loaded to the time it reaches a POE in the U.S.

Transportation Workers and Infrastructure (TSA)

The primary mission of the TSA is to protect U.S. transportation systems to ensure security and freedom of movement of travelers and commerce. Its responsibilities extend to all modes of travel and include the requisite infrastructure necessary to support a variety of critical transportation activities. The TSA has made significant progress in providing efficient and effective screening for airline passengers, goods, and cargo.

TSA currently is involved in a variety of advanced technology initiatives, one of which is the Transportation Worker Identification Card (TWIC). When fully developed and deployed, TWIC should be a nationwide transportation worker identity solution that verifies the identity of transportation workers, validates their background information, assists transportation facilities with managing their security risks, and accounts for personnel access to transportation facilities and activities of authorized personnel.

Cargo IT System Components

When importers are preparing shipments, a broker component first collects data in the main system. Qualified participants file required import data electronically with CBP. Although participation is voluntary, brokers, importers, carriers, port authorities, and independent service centers currently file over 96% of all entries with this component. CBP officers must enter the remaining 4% of cargo data entries manually.

Before the cargo arrives, a manifest component handles notification of its pending arrival. It also allows for faster identification and release of low-risk shipments and allows participants to transmit manifest data for sea, air, and rail electronically before carrier arrival. CBP can determine in advance whether the merchandise merits examination or should receive immediate release.

When the carrier arrives at the border, the primary inspection consists of presenting forms and documents to CBP officers—Entry Form CF 3461/Alt, invoice, packing list, bill of lading, etc. To expedite the release of cargo during primary inspection, a bar code system tracks and releases highly repetitive shipments at land border locations. The CBP officer only needs to note the quantity of items imported, unless he or she detects that something is amiss. Depending on the type of cargo, other government agencies may need to make additional inspections.

Financial release process

When the inspection is complete and the cargo date of entry is recorded, the Entry Summary form, CF-7501, is created to determine the duty fees. Importers must submit the summary entry form no later than ten days from release. Fees are based on value at date of release. Customs fees, duties, and taxes must be collected. A clearinghouse

component provides a means for filers to handle the payment electronically. Payment authorization can be transmitted to debit the payer's account and credit the agency location code established in the Treasury for CBP for the amount due. Currently 96% of all cargo entries use the CBP clearinghouse component.

"Entry summary selectivity" reviews the entry summary data. This process uses a line item from the entry summary. The system matches national and local selectivity criteria to assess risk by importer and value to determine if duty fees are correct. The selectivity process allows for a more detailed inspection to determine the accuracy of the financial transactions associated with the imported cargo. When the review process is complete and all payments are collected, the cargo is considered liquidated, and cargo processing is finalized.

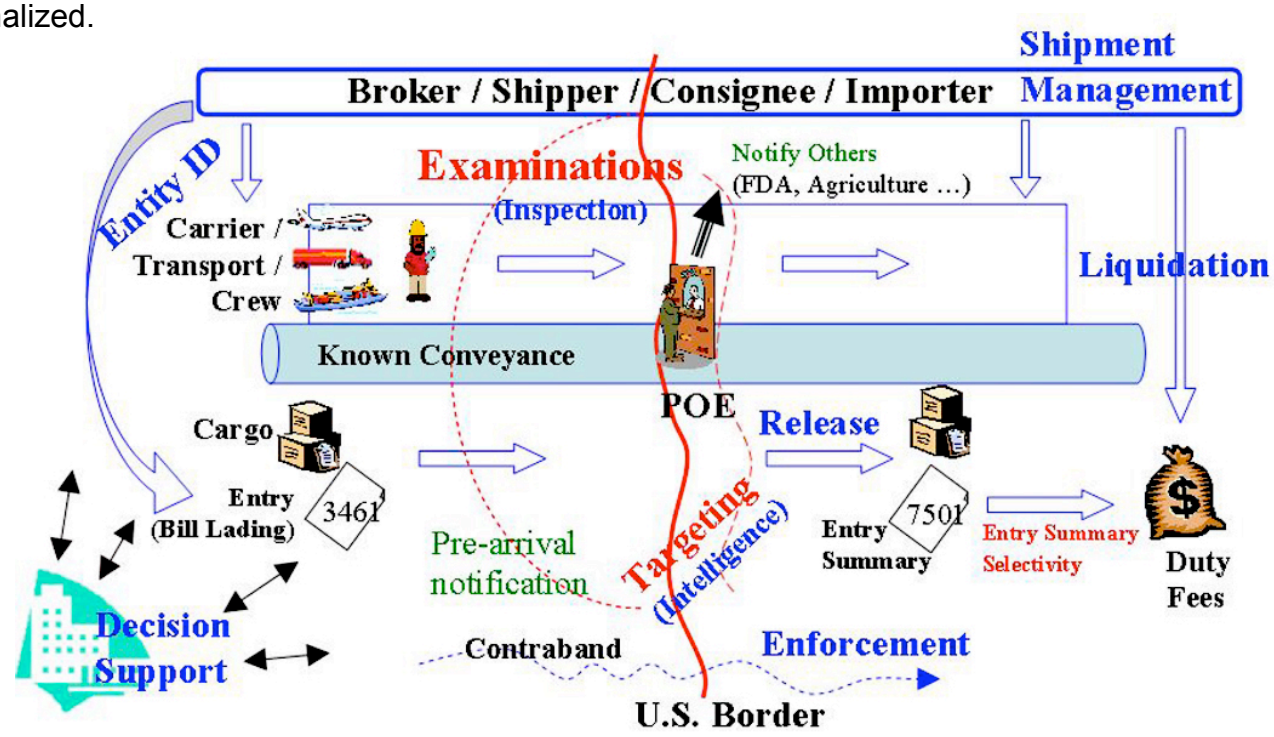

Figure 4. The cargo functional area.

For the cargo systems, a conceptual system (see Figure 5) is in an early draft stage. It contains many categories similar to the traveler system, and it recognizes the fact that the two systems overlap in several areas. This work is very preliminary at this time.

- Entity ID – Systems that support and maintain the creation of electronic identification of organizations and other entities associated with cargo importation.
- Inspection/Examination – Systems that support the inspection/examination process of cargo.
- Enforcement – Systems that deal with case management when laws have been violated while importing cargo through the border.

- Release – Systems that handle the information associated with the release of cargo once they have been inspected/examined.
- Liquidation – Systems that deal with the transactions for the liquidation or payment of import duties.
- Shipment Management – Systems that allow the preparation of all required documentation to import cargo.
- Intelligence (Targeting systems) – For the purpose of this report, systems analyzing patterns and trends to identify cargo requiring more detailed inspection.
- Decision Support – Systems that provide analysis from enterprise data.

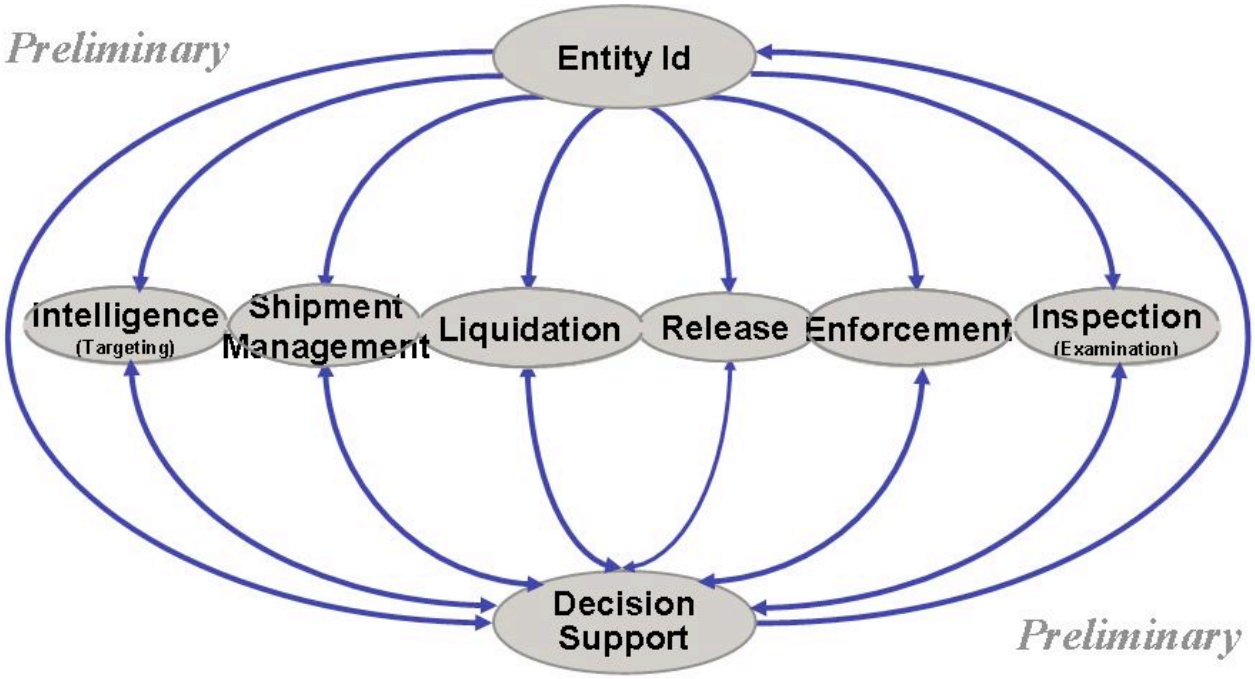

Figure 5. Preliminary cargo conceptual design.

The team will continue to explore these cargo systems with the appropriate entities to further a conceptual interface for these systems and, where appropriate, overlaps with the conceptual traveler design.

IT system components common to both *Traveler* and *Cargo.*

Functional Area	**Component Tasks**
Identification	Collects and updates data to identify the entity crossing the border and associated organizations. The types of entities consist of the traveler and the different roles associated with the traveler, cargo identification, the carrier or vessel on which the cargo is carried, and the Entry filer. (Entry filer is the entity who is responsible for paying the duties for the cargo.)

Inspection/ Examination	Collects and updates data to identify an event, entry and/or exit, at a specific point in time; records the history associated with the crossing event and associated entities.
Enforcement	Collects and updates data for violations of the law. Its primary function is case management for violations of the law.
Intelligence	For the purpose of this report, the common factor for travelers or cargo is that this function "examines data for patterns of interest" to draw actionable traveler lookouts or cargo targeting information.
Decision Support	Integrates the data across the whole enterprise of IT systems and their specific functions; provides data integration and access control to properly protect the data across the enterprise.

Unique to *Traveler:* cargo is that this function

Visit Management/ Benefits	Collects and updates data for length of stay and change of status for the traveler.

Unique to *Cargo:*

Shipment Management	Tracks a shipment and the different entities that make up a unique shipment at a point in time; looks at the cargo, crew, vessel, and entry filer.
Release	Supports the proper computation of duty fees for cargo that has crossed the border and the physical release of the cargo.
Liquidation	Handles the financial processing of the cargo. Duty fees must be paid before a shipment may be released.

Developing Border Management IT Systems for the Future

Work on the conceptual system in this year's report began with modeling the system at a high level to describe the problem domain as a whole. The report now examines the distinct parts of the problem at a lower level of abstraction and breaks the problem into smaller, manageable components, each a collection of general functions. Based on a logical grouping or unique area of operation, the collection of functions represents what tasks each component should perform. The team will describe each component and how the components interconnect with one another. The way to achieve application interoperability is by having a working set of components and a collaboration between those components.

These components of functional areas perform specific tasks within the border management problem domain. The functional area is responsible for managing specific data elements. High-level components depend upon lower-level components, which depend upon components at yet a lower level. The lowest level contains detailed implementations, which themselves depend upon the abstractions. Using this analysis as a blueprint to construct software would require many more levels of detail. However, because the implementation is dependant on the abstraction, this keeps the software implementation flexible.

The conceptual "To Be" system the team recommends is an attempt to provide application integration across the existing IT systems and data management functions within the scope of border management. The IT systems' application integration will consist of a working set of distinct functional areas. The primary border management functional areas have unique system components. Each component encapsulates border management functions that operate on the specific entity, traveler or cargo. Each component can use data from the other components to support its functional area.

Finding the best way to apply abstraction to a problem will aid in the design. Abstraction is the elimination of the irrelevant and the amplification of the essential. The team's conceptual design leverages the current IT systems and interoperates the functional areas. To point out the essential, the team will examine each component and the information it tracks to make the best use of the current border management systems.

As previously mentioned, analysis in the cargo areas is still preliminary and may be revised in the future.

Conceptual System Modeling

The massive flow of people and goods across our borders helps drive our economy but can also serve as a conduit for terrorists, weapons of mass destruction, illegal migrants, contraband, and other unlawful commodities. The new threats and opportunities of the 21st century demand a new approach to border management. President Bush envisions a border that is ground on two key principles:

- First, America's air, land, and sea borders must provide a strong defense for the American people against all external threats, most importantly international terrorists but also drugs, foreign disease, and other dangerous items.

- Second, America's borders must be highly efficient, posing little or no obstacle to legitimate trade and travel.[1]

Economically, it is vital that legitimate traffic (both people and goods) continue to move efficiently across our borders through POEs and known, low-risk traffic be facilitated. At the same time, it is critical to our country that undocumented people and illicit goods not be allowed to cross the borders and enter the country. And, overarching both economic and security expectations, it is absolutely essential that privacy of personal information be scrupulously protected. Meeting the competing needs of commerce, security, and privacy will require a vigilant balancing of priorities.

To arrive at a future concept of how IT systems will help maintain balanced system priorities, we have developed a model of the current border management functions and roles. A discussion of the modeling approach follows.

[1] President George W. Bush, available online at http://www.whitehouse.gov/homeland/homeland_security_book.html#10, August 26, 2003.

Background

Any attempt to construct a complex system should use modeling as a tool to clarify the major goals and intended uses of the system. A model is a preliminary pattern serving as the plan from which an item not yet constructed will be produced. Models are representations and simplifications of reality, and users must apply practical judgment.

Modeling the major concepts and their relationships assists in analyzing the problem domain. Multiple models describe static structures, dynamic behavior, technology usage, and product packaging constraints. With high-level models, a simplified mental model of the problem of border management emerges.

Conceptual Model

In the structural model in Figure 6, boxes with text represent ideas or concepts. The relationships that exist between the ideas or concepts are represented as lines that connect the related boxes and a text label that indicates the nature of the relationship.

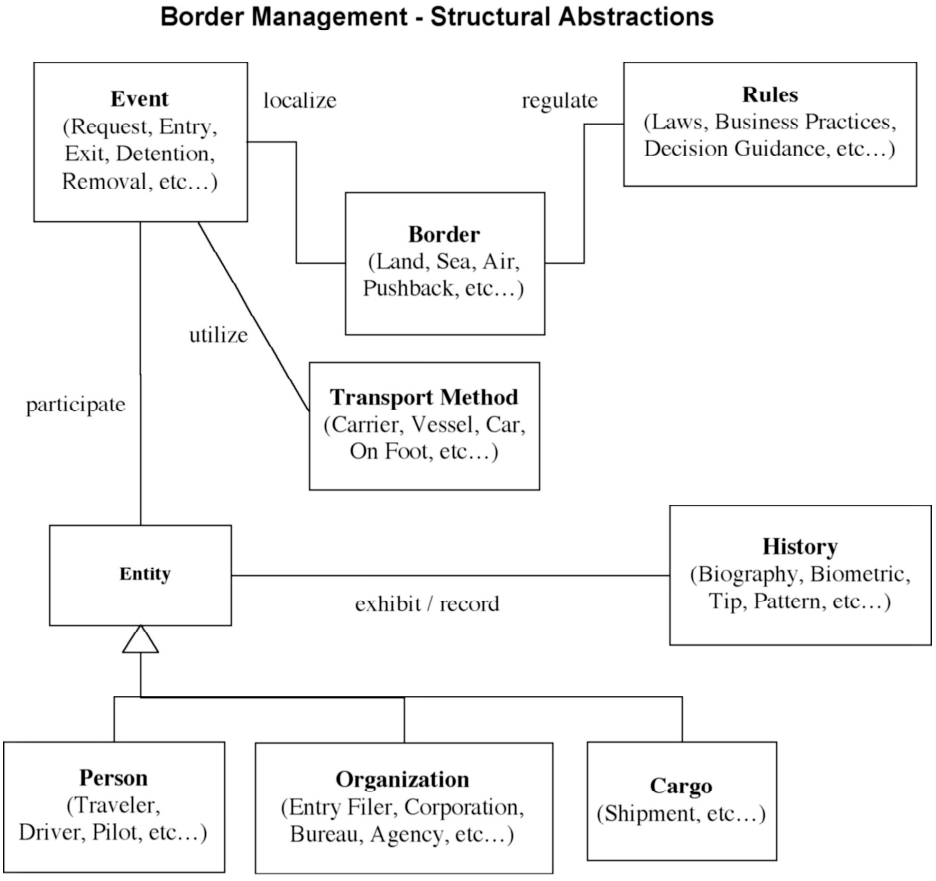

Figure 6. Border management model.

Many more levels of detail would be required before this type of model could be used as a blueprint to construct software. The model merely gives an indication of the size and shape of the challenge of border management.

The team first developed very high level models for facilitating legitimate travel and trade and minimizing risks to the nation resulting from border management activities. Then a lower-level model described assessing reasonable risk during inspection. These models allowed the team to develop the risk assessment matrix shown below.

Inspection Process

Existential Component Risk Criteria

	Scope P = Person C = Cargo	**Low**	**Medium**	**High or Unknown**
Person (Role is traveler or transport operator)	P, C			
Transport (Role is Carrier or vessel)	P, C			
Entry Filer	C			
Cargo (Role is shipment)	C			
Location (Origin, Destination, other…)	P, C			

Temporal Component Risk Criteria

	Scope P = Person C = Cargo	**Low**	**Medium**	**High or Unknown**
Any Event (includes but not limited to border crossings)	P, C			
Visit = Person + Transport + Location	P, C			
Shipment = Trip + Entry Filer + Cargo	C			

Final Risk Determination = Existential Risk Rating + Temporal Risk Rating

Low Risk	Medium Risk	High or Unknown Risk

The three inspection types are

- Prearrival Inspection,
- Point-of-Entry/-Exit Primary Inspection, and
- Secondary Inspection.

Biometrics can help determine Low, Medium, and High or Unknown ratings for the current event and/or entity being inspected and thus the final risk.

Final Risk Determination is **Low**: ⇨ expedite the event. Examples include traveler self-service with fingerprint and cargo carriers with barcode or Radio Frequency identification. See ***Bottleneck Notes*** below.

Final Risk Determination is **Medium**: ⇨ carefully examine the event and all contextual data and make a decision. Human verification of electronic data is necessary (check photo id, capture fingerprints). Human verification of paper documents is also possible.

Final Risk Determination is **High**: ⇨ check the event and all available data electronically and require human verification. This determination is more likely to result in a "disallow event" decision.

Final Risk Determination is **Unknown**: ⇨ the event may not have enough supporting data. An attempt should be made to capture as much electronic data as possible for future use. The event should be moved into one of the other categories if possible. If it is not possible to move the event into another category, it should be treated, by default, as **High**.

Bottlenecks

Figure 7 below shows three places where bottlenecks can occur to negatively affect the Inspection. Which of the three represents the slowest part of the process and what can be done to decrease inspection time?

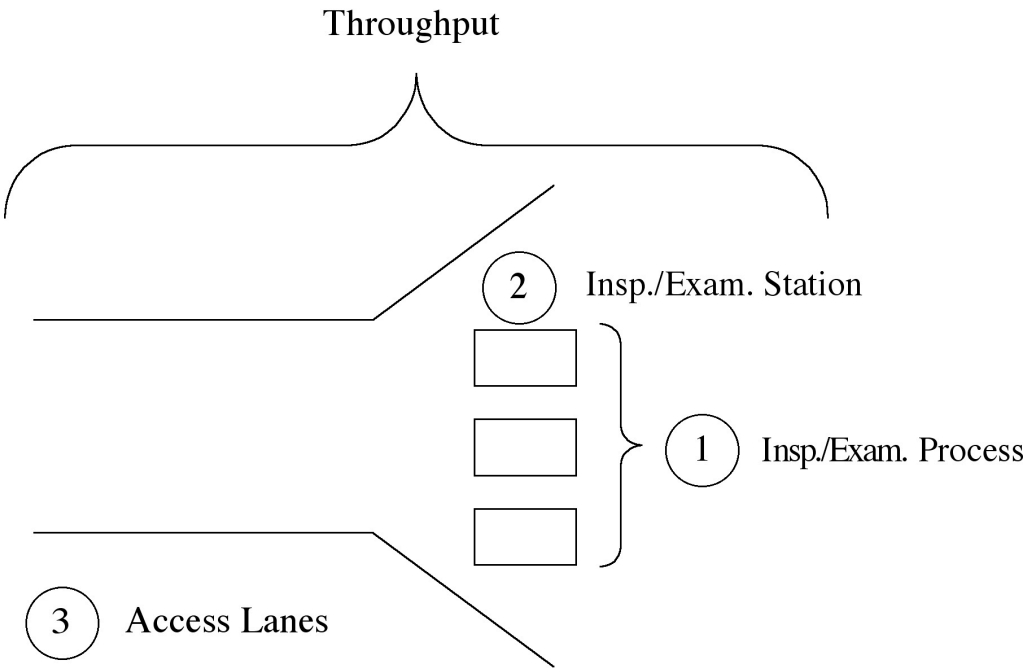

Figure 7. Throughput at border stations.

Maintaining or increasing the quality of the data while complying with all applicable rules (laws, practices, decision guidance) is vital. The goal is to increase throughput without compromising safety and security.

If the access lanes are or cause a bottleneck, and represent the slowest part of the process, then the CBP officer will be idle. Increasing the number of access lanes would be an appropriate response for this situation. (Area number 3 in the diagram)

Otherwise, the inspection process is the bottleneck. If the time required per inspection is efficient, then increasing the number of inspection stations would be an appropriate response (Area number 2 in the diagram). If the time required per inspection is not efficient, then the process itself requires streamlining (Area number 1 in the diagram).

Biometric Identifiers

Using biometrics, an automated method of recognizing a person based on a physiological or behavioral characteristic, depends on being able to measure a characteristic that is particular to the individual and that can give similar results for that individual at future testings. The individual must enroll in the program by providing a sample of the characteristic the system uses for identity checks. The system extracts unique data from the sample and creates a template. When the individual needs access to secure information or a secure area, he or she presents the biometric to a sensor. A computer matches the new sample to the template on file. If the new sample matches within a certain range, access is granted; if the sample does not match the template, access is denied.

Current Use of Biometric Identification

Fingerprint Recognition—The friction ridge patterns of a person's fingerprints form before birth and remain consistent throughout life, barring accidental or intentional damage. Although scientific investigations are ongoing to prove the uniqueness of each person's prints, law enforcement has used fingerprints for identification purposes for over 40 years. The user can provide a flat fingerprint by pressing his or her finger flat against the scanner or a rolled fingerprint by rolling the finger from one edge of the fingernail across to the other. A scanner captures the image of the fingerprint. The image is enhanced to reduce noise from cuts and scars or worn fingerprints and increase the definition of the ridges. Proprietary algorithms extract the features that go into the fingerprint template and create the basis for identification.

Iris Recognition—A person's iris, the colored ring that surrounds the pupil of the eye, develops during gestation and becomes stable early in life; only certain medical procedures can change the nature of the iris. The iris is a complex physical structure rich in features useful for analysis. Each iris is unique; the irises of identical twins and even the right and left eyes of the same person are different. In current technologies for iris recognition, a digital photo is taken, and a computer then uses a special algorithm to analyze the zones of the iris selected for matching.

Hand Geometry—The physical characteristics and bone structure of the hand are distinctive and become stable during a person's early teens. The features of interest are the height and width of the hand's back and fingers; the width, height, and length of the fingers; the shape of the knuckles; and how far apart the joints are. Hand geometry systems measure more than 90 characteristics to develop a template less than 10 bytes large. The user places his or her hand palm down on a metal platen, using its pegs to guide the fingers into the appropriate position. A camera acquires a two- or three-dimensional image of the hand; the system uses the image's information about the physical geometry of the user's hand to create a template, which can be compared with the database to verify the user. This process does not involve fingerprints or palm prints.

Voice Recognition—Voice recognition is a combination physical and behavioral biometric; physical features like the size and shape of the mouth, lips, and nasal passages contribute to the sound of each person's voice, and behavioral factors like age and emotional state also influence how the voice sounds at a given time. The system converts the information into a digital form and analyzes the characteristic pitch, tone, and cadence of the speech.

Signature Recognition—Dynamic signature verification (DSV), using the biometrics of a person's signature to verify identity, has become increasingly popular recently. No two people will have signatures that are identical in all the features captured by DSV. DSV differs from a simple signature or "static" scan because it uses the way the signature is made to verify identity. Although a person's signature may demonstrate slight variations over time, the act of signing is natural, almost reflexive, and very difficult to imitate. The user writes his or her signature on a digitizing tablet or with a special stylus that captures the physical features of the process. The system compares these features—shape, speed, timing, pen pressure, stroke length, and when the pen is lifted off the writing surface—to those of the template on file. The DSV template stores a large amount of information against which the user's signature is checked.

Retina Scanning—The capillary pattern of the retina is unique to each eye, in animals as well as humans. Even identical twins have different patterns. These patterns do not change; unless altered by degenerative diseases like glaucoma and diabetes, the retina remains stable throughout a person's lifetime. The scan captures the capillary pattern of the user's retina. Digitizing the scan produces a 96-byte template that contains up to 400 points of reference.

DNA Recognition—DNA matching does use a physiological characteristic for personal identification. However, DNA differs from most other biometrics in several ways. It compares tangible, physical samples rather than templates generated from impressions, images, or recordings. Also, because not all stages of DNA comparison are automated, the comparison cannot be made in real time. Each person, except for identical twins, has a unique DNA pattern, and DNA does not change during a person's lifetime. Because it requires a physical sample, it cannot be faked or imitated. At this time, select law enforcement forensic investigations are the only regular users of DNA identification.

Facial Scan—Facial recognition identifies a person by looking at the outlines of the eye sockets, the cheekbones, and the sides of the mouth and capturing the image with a camera. Scans must be kept up to date because of the aging process. Two methods, local feature analysis and eigenface, take different approaches to creating facial templates.

Biometric Integration in the Near Future

By January 2004, the US Visitor and Immigration Status Indication Technology System (US-VISIT) will begin using biometric data, including photos and fingerprints, to create an electronic entry/exit system for foreign nationals entering the U.S. to work or study. US-VISIT will absorb the functions of some current systems.

CBP officers will scan the travel documents of foreigners entering the country. Once the officers scan a visitor's photograph and fingerprint, they'll check the visitor against a list of individuals who should be denied entry for a number of reasons, including terrorist connections, criminal violations, and past visa violations. The US-VISIT program expects to have systems/procedures in place to enhance the capture of departure information.

Integration Architecture

The state of identity verification in border management today varies from poor to good. Few of the systems are integrated, and those that are do not operate in real time. Border management systems currently use a variety of software languages, operating systems, networks, and databases, mostly based on older technologies that require high maintenance.

Setting up a new database of biometric signatures could bypass the limitations of the current systems. An algorithm can reduce a biometric identifier to unique, key components known as feature vectors. Identifying the key components within a digital fingerprint, photo, or other digital biometric record provides a unique, encrypted biometric signature. The terms referring to these distinctive points in the signature are minutiae or templates. The small size of the signatures means the database design is also small.

To confirm an identity, the system sends the user's personal identification to the database and retrieves the biometric signature. The user then provides a sample of the biometric identifier. If the signatures match, the user is validated and gains access.

Figure 8 illustrates various attributes for the various types of biometrics described.

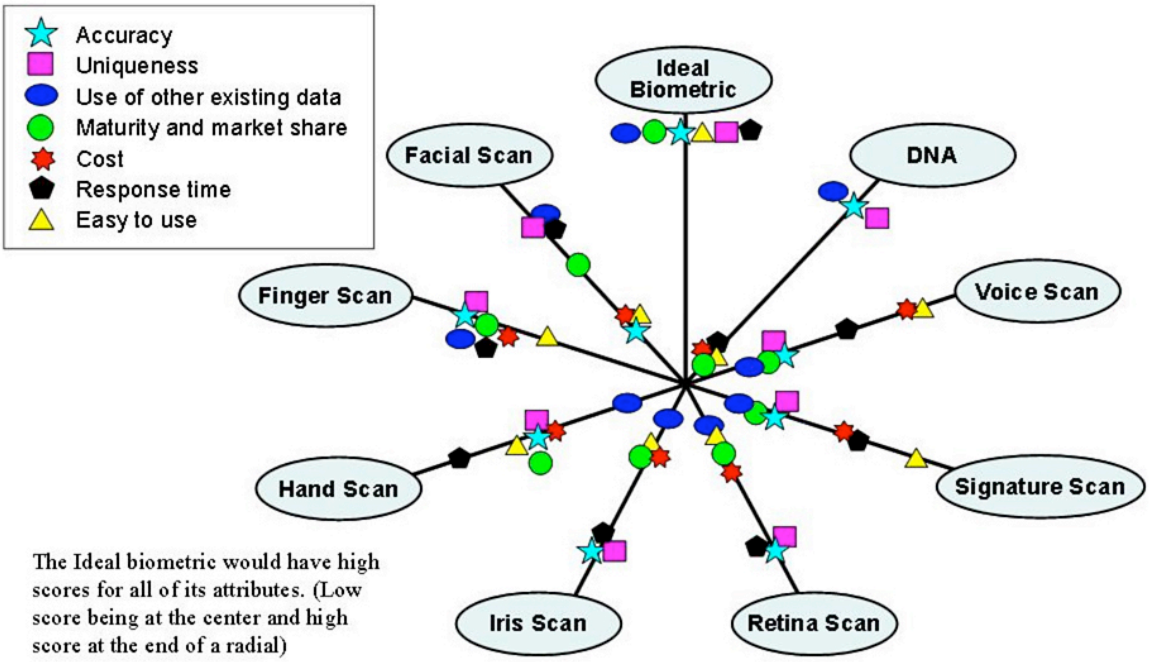

Figure 8. Features of biometric technologies ranked.

New and Emerging Technologies

Interoperability

In June 2003, the Center for Homeland Security at the Los Alamos National Laboratory hosted an Interoperability and Decision Support Workshop. The workshop focused on technological applications that could enhance the effectiveness of the U.S. border management systems. Workshop participants were particularly interested in technologies that could improve system interoperability and decision support needs. Most of the technologies—the results of advanced development activities at the nation's premiere weapons research laboratories—could have direct application to the urgent security needs of the borders of the U.S.

- *Knowledge Integration—Surveillance Decision Environment*

  The goal of a Surveillance Decision Environment (SDE) is to discern and communicate true information signals to appropriate parties from a large variety of sources. Initially, SDE technology may effectively contribute to many of the DHS Inspection, Enforcement, and Identification systems by integrating relevant "knowledge flows" across federal, state, and local governments' environments. As decision support systems mature and broaden, it is likely that SDE could contribute to evolving real-time information integration needs by enhancing critical "situational awareness" functionality.

- *Virtual Interactive Simulation & Inspection Tool*

  The inspection tool technology generates accurate, precision-based three-dimensional (3-D) virtual environments with physics-based objects in a dynamic, interactive environment. Implementation of an interactive simulation system could provide border management experts with a way of experiencing and interacting with 3-D computer-generated “worlds” to determine the most effective security, safety, and operations for complex border management environments. There are also commercially available technologies with some of these attributes that have been used.

- *Integrated Planning and Decision Support*

  Architectures for information unification, integrated planning, and operations support applications in an enterprise environment have been developed. These frameworks provide a secure, distributed execution environment in which confederations of organizations (government, industry, etc.) can bring together information to provide decision-makers with the domain knowledge required to support technology, policy, and program decisions.

- *Computational Linguistics*

  Computational Linguistics (CL) is the science of developing computational algorithms that help minimize confusion and misinterpretation of natural languages. When properly applied to databases and associated text, CL will interpret the information that will allow connections to be established and associations to be traced accurately, particularly in situations involving a great deal of complexity. CL can provide a spectrum of contributions for border management systems, ranging from normalizing terms and validating data through analyzing patterns and extracting information from text.

- *Biometrics*

  Biometrics is the automated method of identifying or authenticating the identity of a living person based on a physiological or behavioral characteristic(s). The use of more than one biometric measure increases the flexibility of the system relative to the wide range of unknown factors associated with human beings. Additionally, the application of multiple biometric devices will allow users to select the metric that best identifies them. Advanced biometrics has direct application to the demanding needs of the evolving border management objectives.

- *Data Integration*

  Integrating heterogeneous systems involves dealing with a large variety of data sources to create a “virtual” data repository. The virtual repository provides an integrated view of multiple data sources. This technology enables the smooth integration of information from various systems to work in a federated, heterogeneous environment. The technology employs interface standards for looking up terms and finding equivalences between many different systems. The integration technology provides a mechanism so many different organizations can implement their own rules to the process of accessing their information.

- *Integrating Heterogeneous Systems Based on Open Standard Service Components*

  Integrating heterogeneous systems involves dealing with a large variety of data sources to create a “virtual” data repository. The virtual repository provides an integrated view of multiple data sources. This technology enables the smooth integration of information from various systems to work in a federated, heterogeneous environment. The technology employs interface standards for looking up terms and finding equivalences between many different systems. The integration technology provides a mechanism so many different organizations can implement their own rules to the process of accessing their information.

- *User-Centered Design (UCD)*

  A software product may do everything it is supposed to do, but if users can't figure out how to use it or find the entire experience unbearable, the product has failed. User-centered design places the people who will ultimately use the software at the center of the design process throughout the project lifecycle. It takes into consideration factors such as perception, memory, learning, and problem solving as people interact with the software. It seeks to answer questions about the users’ expectations, tasks, and goals and then uses that information to direct the design of the software. Eliciting feedback through various methods such as design walk-throughs, card sorting exercises, paper prototyping, and usability tests results in a useful, easy–to-use software product. Research shows that improving the usability of software systems can be highly cost-effective. By considering peoples' needs and evaluating design solutions early in the design process, the project team can improve the design when changes are least expensive to make. One of the many components of UCD is Visual Ergonomics, which deals with issues related to human factors and how to display, present, and visualize information.[1]

[1] For information about visual ergonomics, see Chapter 4 of the Task Force report.

Conclusions

The Los Alamos technical support team spent many hours interviewing information technology experts throughout the border management domain. The team was encouraged by the dedication and technical expertise exhibited by the system operators. Almost without exception, the team found highly motivated persons anxiously pursuing the goals of competent border management operations.

In addition to the ideas and recommendations throughout this IT Summary and in Chapter 4 of the full Task Force report, the team has the following macro level conclusions:

(a) Adequate technology-capable personnel are available within the government to meet the technical requirements associated with enhanced security requirements of the Department of Homeland Security provided these personnel are appropriately leveraged.

(b) Border operations goals are dauntingly diverse and, therefore, present unusually challenging opportunities that cannot be addressed solely through technological means.

(c) Current information technology systems in place are not well suited for the evolving demands currently being placed upon them by the Department of Homeland Security.

(d) The Department of Homeland Security has the opportunity to oversee the confederation of an advanced suite of information technology systems that will meet, and likely exceed, security-related expectations for the coming future.

Matrix of Border Management IT Systems

Domain Category	System Id	System Name	Owner
Identification			
	CCD	Consular Consolidated Database	DOS
	IDENT	Automated Biometric Identification System	DHS
	BCC/LaserVisa	Border Crossing Card	DHS
	IAFIS	Integrated Automated Fingerprint Identification System	DOJ
	ISRS	Image Storage and Retrieval System	DHS
	IV	Immigrant Visa	DOS
	IVIS	Immigrant Visa Information System	DOS
	NIV	Non-Immigrant Visa	DOS
	NSEERS	National Security Entry/Exit Registration System	DHS
	PFM/PRISM	Passport Files Miniaturization / Permanent Image Repository	DOS
	APASS/FASTPASS	Automated Personnel Assisted Security Screening	Private Industry
	INSPASS	INS Passenger Accelerated Service System	DHS
	NEXUS	Dedicated commuter lane inspection system	DHS
	SENTRI	Secure Electronic Network for Travelers Rapid Inspection	DHS
Inspections			
	APIS	Advance Passenger Information System	DHS
	ADIS	Arrival Departure Information System	DHS
	NIIS	Non-Immigrant Information System	DHS
	OARS	Outlying Area Reporting Station	DHS
	RIPS	Record of Intercepted Passengers	DHS

Domain Category	System	Acronym Name or Description	Owner
Enforcement			
	ENFORCE	Enforcement Case Tracking System EREM, EABM, EICMIM	DHS
	NAILS	National Automated Immigration Lookout System	DHS
	ISIS	Integrated Surveillance Intelligence System	DHS/BP
	PALS	Portable Automated Lookout System	DHS
	DACS	Deportable Alien Control System	DHS
Benefits			
	CLAIMS	Computer-Linked Application Information Management System (Main Frame)	DHS
	CLAIMS3	Computer-Linked Application Information Management System (Foreign Visitors)	DHS
	CLAIMS4	Computer-Linked Application Information Management System (Naturalization)	DHS
	SEVIS	Student and Exchange Visitor Information System	DHS
	ISEAS	Interim Student, Exchange and visitor Authorization System	DHS
	RAPS/WRAPS	Refugee, Asylum and Parole System	DHS
Intelligence			
	CLASS	Consular Lookout and Support System	DOS
	LEADS	Law Enforcement Analysis Data System	DHS
	IBIS	Interagency Border Inspection System	DHS
	NADDIS	Narcotic and Dangerous Drugs Information System	DOJ
	NCIC	National Crime Information Center	DOJ
	CAPPS II	Computer Assisted Passenger Prescreening System II	DHS/TSA

Domain Category	System	Acronym Name or Description	Owner
Decision Support			
	ACRIME	Automated front-end to DHS Databases	DHS
	BORDER WIZARD	Facility simulation model	GSA
	CIS	Central Index System	DHS
	EID	Enforcement Integrated Database	DHS
	POMS	POE Office Management System	DHS
	WAM	Workforce Analysis Model	DHS
Cargo / Vessel			
	ABI/ACS	Automated Broker Interface	DHS/CS
	ACE (Umbrella)	Automated Commercial Environment	DHS/CS
	ACS (Umbrella)	Automated Commercial System	DHS/CS
	AMS/ACS	Automated Manifest System	DHS/CS
	BRASS/ACS	Border Release Advanced Selectivity System	DHS/CS
	JMIE	Joint Maritime Information Element	DHS/CG
	MISLE	Marine Information for Safety and Law Enforcement	DHS/CG
	SANS	Ship Arrival and Notification System	DHS/CG