

Executive Summary Backgrounder

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Safeguarding America's Sovereignty: A "System of Systems" Approach to Border Security

James Jay Carafano, Ph.D.

Any effective solution for reducing illegal border crossings and the unlawful population in the United States must address all three aspects of the problem: internal enforcement of immigration laws, international cooperation, and border security. Internal enforcement and international cooperation are essential to reducing and deterring the flood of illegal entrants into the United States, making the challenge of securing America's borders affordable and achievable.

However, these initiatives will not be enough. A reduced flow at the border does not promise an absence of threat. The border will always need to be secured against terrorists and transnational criminals (e.g., human, drug, and arms smugglers). The federal government must do a better job of protecting the nation from these 21st century dangers.

Homeland Security Secretary Michael Chertoff recently announced the Secure Border Initiative (SBI), a "vision" for securing America's borders. However, the plan does not appear to go far enough in providing the "transformation" that the secretary touted in a speech announcing the Secure Border Initiative.

The current "layered systems" approach to U.S. border security is inadequate and is still entrenched in the Department of Homeland Security's mindset. A layered defense suggests that the border can be secured by multiple security features, with each layer backing up the others so that no layer has to be perfect.

The problem is that the layered approach does not prioritize investments. Not all layers are of equal value. In fact, investments are often based more on politics than on sound strategy. The most powerful stakeholders and influential advocates tend to get their priorities funded first and best. Meanwhile, the United States has underinvested in the most important components of the system, such as infrastructure (e.g., adequate bridges and roads) at the points of entry.

Furthermore, there is no substantive requirement that systems work together. To fix the problem, the Administration must build a "system of systems" that welds all of the nation's border assets into a single coherent security enterprise that deploys the right asset to the right place at the right time to do the right thing. To create system-of-systems security, the Administration and Congress will need to make key investments in infrastructure, organization, technology, and resources and support these investments with legislation and policy reform. The Secure Border Initiative is a first move in the right direction, but more needs to be done.

This paper, in its entirety, can be found at:
www.heritage.org/research/homelanddefense/bg1898.cfm

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The Way Forward. The DHS's Secure Border Initiative is a good step toward securing the U.S. borders in the 21st century. However, while the SBI is called "transformational," it still needs to embrace a network-centric strategy. More needs to be done. The Administration and Congress should:

- **Develop** a more ambitious strategy for investment in border infrastructure;
- **Integrate** federal border, immigration, and visa operations into a single operational agency;
- **Invest** in critical technological programs like the Coast Guard's Deepwater program, US-VISIT, and an integrated civilian air-ground intelligence, reconnaissance, surveillance, and law enforcement capability for the DHS;
- **Undertake** legislation and policy reforms that promote state, local, and volunteer cooperation

and empower federal officials to enforce immigration laws aggressively; and

- **Develop** the analytical capabilities to inform resource decisions and public policy choices.

Conclusion. Simply strengthening the current "layered systems" approach to U.S. border security will not secure the border. Congress and the Administration need to make key investments in infrastructure, organization, technology, and resources and then support these efforts with appropriate legislation and policy reform.

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Background

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However, these initiatives will not be enough. A reduced flow at the border does not promise an absence of threat. The border will always need to be secured against terrorists and transnational criminals (e.g., human, drug, and arms smugglers). The federal government must do a better job of protecting the nation from these 21st century threats.

Homeland Security Secretary Michael Chertoff recently announced the Secure Border Initiative (SBI), a "vision" for securing America's borders. However, the plan does not appear to deliver the "transformation" that the secretary touted in a speech announcing the Secure Border Initiative.¹

The current "layered systems" approach to U.S. border security is inadequate and is still entrenched in the DHS mindset.² A layered defense suggests that the border can be secured by multiple security features, with each layer backing up the others so that no layer has to be perfect.

Talking Points

- The current "layered systems" approach to border security is inadequate, and efforts to strengthen this approach will not secure the border.
- However, a "system-of-systems" approach would address the two main challenges of border security: screening the entry and exit points and securing the border between points of entry.
- A system-of-systems approach means much more than buying high-tech equipment. To create system-of-systems security, Congress and the Administration need to make key investments in infrastructure, organization, technology, and resources and then support these efforts with appropriate legislation and policy reform.
- Any border security initiative that does not address all of these issues will simply fall short. The Secure Border Initiative is a first step in the right direction, but it is not enough.

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Furthermore, there is no substantive requirement that systems work together.³ To fix the problem, the Administration must build a “system of systems” that welds all of the nation’s border assets into a single coherent security enterprise that deploys the right asset to the right place at the right time to do the right thing. To create system-of-systems security, the Administration and Congress will need to make key investments in infrastructure, organization, technology, and resources and support these investments with legislation and policy

reform. The Secure Border Initiative is a first step in the right direction, but more needs to be done.

Border Crossing Blues

Securing America’s border will require adequately addressing two significant challenges, which concern both legal and illegal border crossing.

Challenge #1: Screening the Points of Entry and Exit

Hundreds of millions of people cross the U.S. border each year in numbers approaching twice the population of the United States.⁴ The overwhelming majority travel through legal points of entry and exit, such as land border crossing points, airports, and harbors.⁵ Billions of tons of goods, accounting for a third of the U.S. gross domestic product, transit America’s borders as well.⁶

Terrorists and transnational criminals have attempted to exploit every known *legal* means for moving people, goods, and services across U.S.

1. See press release, “Secure Border Initiative,” U.S. Department of Homeland Security, November 2, 2005, at www.dhs.gov/dhspublic/interapp/press_release/press_release_0794.xml (November 2, 2005).
2. As mentioned in the Secure Border Initiative, “DHS will improve border infrastructure in certain areas by increasing physical layers of security.” See *Ibid.*
3. For example, Congress’s requirement (stated in the Enhanced Border Security and Visa Entry Reform Act of 2002) to integrate all visa issuance and monitoring data systems into Chimera (an interoperable, interagency system) has largely been ignored. James Jay Carafano, Ph.D., and Ha Nguyen, “Better Intelligence Sharing for Visa Issuance and Monitoring: An Imperative for Homeland Security,” Heritage Foundation *Background* No. 1699, October 27, 2003, at www.heritage.org/Research/HomelandDefense/BG1699.cfm.
4. In July 2005, the estimated U.S. population was over 295 million. Central Intelligence Agency, *The World Factbook: 2005*, Web ed., s.v., “United States,” at www.cia.gov/cia/publications/factbook/geos/us.html#People (November 15, 2005). The most widely quoted estimate of legal crossing of the U.S. border is 500 million people annually. For example, see National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton and Company, 2004), p. 383. Estimates of annual illegal entry at other than legal points of entry vary widely: 500,000 is a common estimate. Jim Edgar, Doris Meissner, and Alejandro Silva, “Keeping the Promise: Immigration Proposals from the Heartland,” Chicago Council on Foreign Relations, June 10, 2004, at www.cfr.org/publications/immigration/ccfr%20immigration%20task%20force%202004%20report.pdf (November 15, 2005).
5. Travelers holding nonimmigrant visas comprise the majority of individuals entering the United States. Carafano and Nguyen, “Better Intelligence Sharing for Visa Issuance and Monitoring.” Additionally, others obtain immigration visas or are visitors carrying passports from the 27 countries participating in the visa waiver program. James Jay Carafano, Ph.D., and Richard Weitz, “Building the Alliance for Freedom: An Agenda for Improving and Expanding the Visa Waiver Program,” Heritage Foundation *Background* No. 1850, May 6, 2005, at www.heritage.org/Research/NationalSecurity/bg1850.cfm.
6. In 2000, 11.5 million trucks, 2.2 million rail cars, 200,000 ships, and 11.6 million shipping containers crossed borders or entered through 314 American ports, while 80 million air passengers moved in and out of over 18,000 airports. See U.S. Department of Transportation, *Transportation Annual Statistics Report 2000*, BTS01–02, 2001, pp. 1–5, at www.bts.gov/publications/transportation_statistics_annual_report/2000/pdf/entire.pdf (November 15, 2005).

borders. In fact, virtually every known or suspected terrorist has exploited legal opportunities to enter or remain in the United States. Most passed through screening at an established point of entry.⁷

These vulnerabilities make it likely that terrorists will continue to use sophisticated travel methods to enter the United States, including acquiring new passports to hide past travel. They will do this because there is still no viable, reliable means of ensuring that important information on terrorist travel gets to frontline officers.

Effective security at the points of entry and exit is essential not only to keeping bad things and bad people out of the United States, but also to protecting the border crossing cities, key nodes in the networks that connect America to the world of global commerce. This security has to be provided while facilitating the free flow goods, people, services, and ideas that are the lifeblood of the American economy and a key competitive advantage for the United States in the worldwide marketplace.

As the 9/11 Commission rightly noted, “The challenge for national security in an age of terrorism is to prevent the very few people who may pose overwhelming risks from entering or remaining in the United States undetected.”⁸ The most vital

national security mission for U.S. border assets is to identify high-risk people and cargo entering the United States and take appropriate action. Secretary Chertoff’s vision does not appear to address bolstering points of entry.⁹

Challenge #2: Securing the Border Between Points of Entry

While rooting out terrorists and other national security threats at the authorized border crossings must be the top priority, safeguarding the stretches of land, air, and ocean between the points of entry cannot be neglected. The vast expanses of the U.S. border are largely unsecured. Hundreds of thousands cross the southern U.S. border every year, adding to a swelling undocumented work force that could total up to 15 million according to some estimates.¹⁰

Even if reforms dampen the flow of illegal immigration into the United States, America’s unsupervised land and maritime borders will remain an inviting target. Drug smuggling and human trafficking offer some measure of the problem.¹¹ For example, drug shipments into the United States from South America often include tens or hundreds of kilograms of narcotics.¹² The current favorite option of drug smugglers is to employ non-com-

7. A recent study of 94 foreign-born terrorists by Janice Kephart, former counsel for the 9/11 Commission, revealed that virtually all used some form of travel documentation to enter or remain in the United States. Janice Kephart, “Immigration Benefits and Terrorism,” Center for Immigration Studies, September 2005, p. 7.
8. *The 9/11 Commission Report*, p. 383.
9. Michael Chertoff, “Remarks by Homeland Security Secretary Michael Chertoff at the Houston Forum,” U.S. Department of Homeland Security, November 2, 2005, at www.dhs.gov/dhspublic/display?content=4920 (November 10, 2005).
10. Estimates range from 9 million to 15 million. Jeffrey S. Passel, “Estimates of the Size and Characteristics of the Undocumented Population,” Pew Hispanic Center, March 21, 2005, pp. 2–4, at pewhispanic.org/files/reports/44.pdf (November 14, 2005), and Warren Strugatch, “The Changing Face of the Island’s Labor Force,” *The New York Times*, November 14, 2004, Section 14LI, p. 6. For additional estimates and a discussion of the difficulties in estimating the number of unlawful immigrants residing or working in the United States, see Federation for American Immigration Reform, “How Many Illegal Aliens?,” updated February 2005, at www.fairus.org/site/PageServer?pagename=iic_immigrationissuecentersb8ca (November 15, 2005). Visa overstays account for about 2.3 million of the unlawfully present population in the United States. An even smaller number are stowaways or illegal maritime entrants, meaning that the overwhelming remainder entered illegally across one of the two land borders. U.S. General Accounting Office (now Government Accountability Office), *Overstay Tracking: A Key Component of Homeland Security and a Layered Defense*, GAO–04–82, May 2004, at www.gao.gov/new.items/d0482.pdf (November 15, 2005).
11. For example, see U.N. Office on Drugs and Crime, *Global Illicit Drug Trends, 2002* (New York: United Nations, 2002), p. 87, at www.unodc.org/pdf/report_2002-06-26_1/report_2002-06-26_1.pdf (November 15, 2005), and James O. Finckenauer and Jennifer Schrock, “Human Trafficking: A Growing Criminal Market in the U.S.,” National Institute of Justice International Center, at www.ojp.usdoj.gov/nij/international/ht.html (November 15, 2005).

mercial vehicles such as small, fast, private boats with concealed compartments capable of storing 30–70 kilograms of material.¹³

Terrorists might adopt many of the smuggling techniques used by criminals, including surveillance and tracking of Customs and Border Protection and Coast Guard assets, scouting transport routes and target sites, and rehearsing operations.¹⁴ Future opportunities might be limited only by imagination. For example, in February 2002, U.S. authorities discovered an elaborate tunnel almost 300 meters long that had been used to smuggle drugs across the U.S.–Mexican border.¹⁵ In addition, the use of sophisticated methods, violence, and advanced technologies by individuals engaged in these criminal activities is growing.¹⁶

Indeed, as screening at legal points of entry improves, it is likely that terrorists and criminals will increasingly exploit the land and coastline in between them. The United States must have the capacity to control its open borders. In some cases, that will require persistent surveillance of activities along some border areas. In others, it will mean acquiring awareness of threats before they reach the border. In both cases, the right assets must be available to prevent illegal border crossings.

Secretary Chertoff's Secure Border Initiative would improve infrastructure aggressively by "expand[ing] infrastructure systems throughout the border where appropriate to strengthen our efforts to reduce illegal entry to the United States." This includes integrating an extensive system of

surveillance.¹⁷ That is good, but not enough. A systems approach is lacking.

System of Systems

America's borders require enhanced and secured infrastructure, appropriate screening, inspection of high-risk cargo and people, persistent surveillance, actionable intelligence, and responsive interdiction. Combining these instruments into effective border security requires not just integrating assets at the border, but also linking them to all activities involved in cross-border travel and transport, from issuing visas, passports, and overseas purchase orders to internal investigations and the detention and removal of unlawful persons. Such an enforcement architecture could be called a "system of systems" or network-centric approach to border security.

Network-centric operations increase effectiveness by networking sensors, decision makers, and investigation and enforcement assets to achieve shared awareness, increased speed of execution, higher operational tempo, and greater efficiency. In essence, this means linking knowledgeable entities together so that they can share information and coordinate their actions. Such a system might produce significant efficiencies in terms of sharing skills, knowledge, and scarce high-value assets, building capacity and redundancy as well as gaining the synergy of providing a common operating picture and being able to readily share information.

Another way of describing a system of systems is linking everything together so that one can get the

12. U.S. Department of Justice, *National Drug Threat Assessment 2002*, December 2001, p. 20.

13. Office of National Drug Control Policy, *Measuring the Deterrent Effect of Enforcement Operations on Drug Smuggling, 1991–1999*, August 2001, p. 1, at www.whitehousedrugpolicy.gov/publications/pdf/measure_deter_effct.pdf (November 15, 2005).

14. *Ibid.*, p. 14.

15. Kevin Sullivan, "Tunnel Found Under Border with Mexico," *The Washington Post*, February 22, 2002, p. A13.

16. U.N. Office for Drug Control and Crime Prevention, *Global Report on Crime and Justice* (Oxford: Oxford University Press, 1999); National Intelligence Council, *Global Trends 2015: A Dialogue About the Future with Nongovernment Experts* (Washington, D.C.: U.S. Government Printing Office, 2000), p. 41, at www.cia.gov/cia/reports/globaltrends2015/globaltrends2015.pdf (November 15, 2005); National Security Council, *International Crime Threat Assessment*, December 2000, at clinton4.nara.gov/WH/EOP/NSC/html/documents/pub45270/pub45270index.html (November 15, 2005); and U.S. General Accounting Office, *International Crime Control: Sustained Executive-Level Coordination of Federal Response Needed*, GAO–01–629, August 2001, at www.gao.gov/new.items/d01629.pdf (November 15, 2005).

17. Press release, "Secure Border Initiative."

right assets to the right place at the right time to do the right thing. Put even more simply, a system of systems means knowing what the system knows and being able to act on that information.

One example of a network-centric approach to border security would be the creation of “person-centric immigration files,” information systems that link all relevant transactions to an identifiable individual.¹⁸ The current system is “application-centric,” meaning that files are organized by application, not by person, thereby permitting rampant fraud through multiple applications, assumed identities, and assorted other illicit practices. Given the more than 30 databases scattered across a host of departments and agencies that might contain relevant information, it is no wonder that the system often fails.

A person-centric approach would provide everyone in the system with the means to track people, not just to sift through documents. With more complete information at their disposal, immigration, border, and investigation officials will make better decisions about entry, enforcement, and immigration benefits. Combining such a system with other systems, such as those that record biometric measurements¹⁹ to identify individuals accurately, would further limit fraud and other deceptions used to circumvent border screening.

Establishing network-centric systems will require developing and implementing an overarching architecture that describes how assets are linked together and what and how knowledge is shared. Implementing a systems approach will necessitate creating information systems, practices, policies, and organizational designs that facilitate coordinated action.

Why a System of Systems

A network-centric approach makes sense for a number of reasons. Given the tens of thousands of miles of land and sea border to guard and the mil-

lions of people and supply shipments to monitor, it is unrealistic to believe that there will ever be enough assets available to secure everything, everywhere.

A systems approach allows for focusing resources on the greatest risks. Such an approach could better:

- Address data management issues,
- Provide interoperable communications and information sharing,
- Establish closer ties among multiple federal agencies as well as state and local governments,
- Ensure cooperation between public and private entities,
- Allocate scarce resources, and
- Enhance the efficiency and effectiveness of processes and practices.

In short, a system-of-systems architecture emphasizes getting the most security possible from both existing and future capabilities.

A systems solution for border security promises more capability than simply increasing the capacity of existing border enforcement mechanisms would provide. In fact, experience shows that such approaches simply do not work. For example, throughout the 1990s, shoring up the southwest border was the number one priority in immigration policy. As a result, the U.S. Border Patrol was doubled from about 4,000 agents to about 8,000 agents. However, as Cato Institute analyst Douglas Massey concluded in a recent study:

Increased border enforcement has only succeeded in pushing immigration flows into more remote regions. That has resulted in a tripling of the death rate at the border and, at the same time, a dramatic fall in the rate of apprehension. As a result, the cost to U.S. taxpayers of making one arrest along

18. U.S. Department of Homeland Security, Office of Inspector General, “USCIS Faces Challenges in Modernizing Information Technology,” September 2005, at www.dhs.gov/interweb/assetlibrary/OIG_05-41_Sep05.pdf (November 15, 2005).

19. Biometrics are methods of identifying a person based on physiological or behavioral characteristics, including the person’s face, fingerprints, hand geometry, handwriting, iris, retina, veins, and voice.

the border increased from \$300 in 1992 to \$1,700 in 2002, an increase of 467 percent in just a decade.²⁰

Just throwing money at the problem will not secure the border. Likewise, a systems approach to border security means much more than buying high-tech equipment. It will require deliberate and thoughtful improvements in infrastructure, organization, resources, and technology, supported by appropriate legislation and policy reform. Any border security initiative that does not address all of these will simply come up short. A systems approach will not work if it does not have the right stuff to link together.

Infrastructure Investment

Investments in infrastructure at ports and land border crossings are vital to network-centric security. However, the primary object should not be to harden infrastructure against terrorist attacks. Trying to turn every port and crossing site into a little Maginot Line is a losing strategy. Like the French defenses for World War II, this approach would be both very expensive and likely to fail because an innovative enemy will find a way around the defenses.

Rather than attempting to eliminate every vulnerability, most infrastructure is best protected by securing the system as a whole by linking infrastructure protection to counterterrorism operations and law enforcement that focus on stopping threats.

Priority #1: Funding the Right Investments

Infrastructure investments should be focused on constructing an effective system of systems. Points of entry and exit must have the physical assets to support screening, inspection, and gathering, evaluating, and sharing critical information.²¹ In addition, adequate infrastructure—including bridges and roads, especially road networks that connect to rail terminals, seaports, and airports—is essential to providing the capacity, redundancy, and flexibility required to ensure that the free flow of trade and travel is not disrupted. This is particularly vital at the small number of transit nodes that handle most of the cross-border traffic.²²

Priority #2: Addressing the Land Border First

While all border crossing sites require significant investment, land border crossing infrastructure should be given high priority. They are the most congested and the most vulnerable to

20. Douglas S. Massey, "Backfire at the Border: Why Enforcement Without Legislation Cannot Stop Illegal Immigration," Cato Institute *Trade Policy Analysis* No. 25, June 13, 2005, at www.freetrade.org/pubs/pas/tpa-029.pdf (November 15, 2005). Similarly, the Congressional Research Service concluded in a recent report that budget and manpower for the U.S. Border Patrol have tripled over the past 10 years. Apprehensions peaked at 1.6 million in 2000 and declined steadily to 905,065 in 2003. The report concluded that while the decline could be attributed to the "prevention through deterrence" strategy, which seeks to deter illegal border crossings by increased enforcement, the results might also reflect a downturn in the U.S. economy that offered fewer employment opportunities. In either case, it is clear that deterrence at the border alone has not significantly altered patterns of migrant labor. Blas Nunez-Neto, "Border Security: The Role of the U.S. Border Patrol," Congressional Research Service *Report for Congress*, RL32562, September 7, 2004, p. 9.
21. For example, even before 9/11, the General Accounting Office found that inspection space and inadequate roads connecting ports of entry were among the most significant factors contributing to northbound congestion at the border. U.S. General Accounting Office, *U.S.–Mexico Border: Better Planning, Coordination Needed to Handle Growing Commercial Traffic*, GAO/NSIAD-00-25, March 2000, p. 14, at www.gao.gov/archive/2000/ns00025.pdf (November 15, 2005).
22. For example, about 70 percent of Canada–U.S. cross-border truck traffic goes through just six crossing points. On the southern border, Laredo, Texas, is the gateway for 43 percent of the total tonnage moving across the U.S.–Mexico border. Likewise, nearly 95 percent of all non–North American foreign trade arrives by ship, but 50 of the over 350 U.S. ports account for 96 percent of all cargo tonnage, and 25 ports account for 95 percent of all container shipments. U.S. House of Representatives, *Maritime Transportation Act of 2002*, H. Rpt. 107-777, p. 4; National Chamber Foundation, "Trade and Transportation: A Study of North American Port and Intermodal Systems," U.S. Chamber of Commerce, March 2003. In 2000, the top 20 U.S. gateway airports accounted for 90 percent of nonstop international air travel to and from the United States. See U.S. Department of Transportation, Bureau of Transportation Statistics, "Overseas Travel Trends," at www.bts.gov/publications/us_international_travel_and_transportation_trends/overtrends.html (November 15, 2005).

delays and disruption.²³ Joint assessments by American, Canadian, and Mexican officials estimate that infrastructure shortfalls total about \$24 billion.²⁴

Priority #3: Balancing Risks and Rewards

Establishing priorities and providing revenue for these investments is not solely or, in many cases, even primarily a federal responsibility. For example, local governments own most of the 26 motor vehicle crossings on the Texas–Mexico border.²⁵ Likewise, airports and seaports are owned and operated by a mix of public and private entities. An investment strategy will require better public–private partnerships, including targeting national transportation trust funds so that they are spent on national priorities rather than pork-barrel projects.

One possible solution could be to turn back the trust funds, such as the federal Highway Trust Fund, to the states or to allow states to opt out of the program in return for agreeing to meet a series of quantitative performance criteria.²⁶ Additionally, rather than relying heavily on subsidized public funding of infrastructure, investments should focus on “project-based” financing that shifts the risks and rewards to the private sector.²⁷ In either case, a national infrastructure

investment and prioritization strategy has to be part of the systems enterprise.

Organizational Innovation

Facilitating cooperation between multiple agencies is always difficult. The U.S. government has a poor track record in coordinating operations, integrating information technology systems, and harmonizing policies across multiple agencies and departments. Border security is particularly problematic.

Right now, eight mission elements are spread across four departments (Justice, State, Defense, and Homeland Security). Within the DHS, four different agencies—Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), Citizenship Immigration Services, and the Coast Guard—are involved in protecting U.S. borders and managing the flow of people and goods in and out of the United States.

One means for achieving systems integration is to consolidate activities, where it makes sense, under as few organizations as possible. Critical areas to consider are visa issuance and monitoring; land border surveillance; and screening, detention, investigation, and removal.

Visa Issuance and Monitoring. Congress should consolidate all visa activities in a single

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23. For example, in the wake of the 9/11 attacks, border security was tightened significantly. As a result, many truckers were delayed at border crossings for several hours. Because truckers are permitted to drive only 10 hours per day, significant delays at the border can add an extra day to delivery time. For example, after 9/11, Dairy Queen experienced huge delays in getting key ingredients for its ice cream cakes from Canada, and Ford Motor Company idled five U.S. manufacturing plants because of slow delivery from parts suppliers in Canada. Joseph Marth, “Just-in-Case Operations,” *Warehouse Forum*, Vol. 17, No. 2 (January 2002), at www.warehousing-forum.com/news/2002_01.pdf (November 15, 2005).
24. Jeffrey N. Shane, “Innovative Finance and Border Infrastructure,” speech at FHWA/SCT Border Finance Conference, San Antonio, Texas, August 16, 2005, p. 3, at [ostpxweb.dot.gov/S-3/Data/Border%20Finance%20Conf-San%20Antonio%20\(8-16-05\).pdf](http://ostpxweb.dot.gov/S-3/Data/Border%20Finance%20Conf-San%20Antonio%20(8-16-05).pdf) (November 15, 2005).
25. Several are owned by the state and federal governments, and several are privately owned. Keith R. Phillips and Carlos Manzanares, “Transportation Infrastructure and the Border Economy,” Federal Reserve Bank of Dallas, *The Border Economy*, June 2001, at www.dallasfed.org/research/border/tbe_phillips.html (November 15, 2005).
26. Ronald D. Utt, Ph.D., “Congress Gets Another Chance to Improve America’s Transportation: Should It Be Its Last? (Draft),” Heritage Foundation *WebMemo*, March 7, 2005, at www.heritage.org/Research/SmartGrowth/highway-reauth2005.cfm.
27. Project-based financing focuses on obtaining stand-alone investment from private investors and could include multiple investors, each with a different level of investment, varying rate of return, and different timeline for realizing those returns. Such strategies not only shift risk to the private sector, but also should lead to improved decision making about needed infrastructure investments. David Luberoff and Jay Walder, “U.S. Ports and Funding of Intermodal Facilities: An Overview of Key Issues,” unpublished paper, March 28, 2000.

organization. While the Homeland Security Act of 2002 gave the Secretary of Homeland Security exclusive authority to issue regulations and administer the visa program, consular officers remained part of the Department of State.

This was a mistake. The Bureau of Consular Affairs Office of Visa Services should be placed under the DHS. This would enable the DHS to focus on tightening, improving, and more broadly utilizing the visa function to meet the exigencies of homeland security.²⁸

Border Security and Internal Enforcement.

The creation of the DHS was supposed to consolidate agencies with overlapping missions and better integrate the national border security effort. It has succeeded to some degree. Immigration border inspectors and Border Patrol agents have been merged with most of U.S. Customs and the border inspectors to create Customs and Border Protection. Customs and Immigration investigators and Detention and Removal officers were combined into ICE, which is responsible for “internal enforcement.”

However, the reorganization exchanged one seam in U.S. security for another. Before creation of the DHS, people and goods entering the country were handled under separate systems. There were no common policies, programs, or standards. Dealing with dangers that involved both systems required coordination between two different agencies. Today, travelers and goods are handled by an integrated system, but border operations and interior enforcement are now bifurcated into two different organizations.

Complicating the border security picture is the mission of the Transportation Security Administration (TSA). While most Americans associate the TSA with ground screeners at airports, it also has responsibility for overseeing security in all modes of transportation and the transportation of cargo.

These missions have injected the TSA into border security and created friction with other DHS agencies. Consolidating CBP, ICE, and airport security screening into a single border services agency and transferring the remaining responsibilities of TSA to the critical infrastructure component under the DHS Undersecretary for Preparedness would effectively address all of these issues.²⁹

An optimally organized border services agency would have command over (1) all visa issuance and monitoring activities; (2) integrated border enforcement teams organized on a regional basis that incorporate border screening, detention and removal, and interior enforcement; and (3) a separate intelligence and targeting arm.

Technology Tools

While technology is not a silver-bullet solution for border security, it is essential to building an effective network-centric enterprise. To do that, acquisition must be conducted in a holistic manner. Therefore, the DHS must ensure that major acquisition programs with systems-wide impact are fully integrated into a master plan, are fully funded, and have the leadership and work force necessary to ensure success. Three programs should form the cornerstone of the DHS effort.

Deepwater. U.S. Coast Guard missions touch every aspect of protecting maritime borders. Yet the current funding level for Deepwater, the Coast Guard modernization program, is totally inadequate. Increasing the annual budget for Deepwater to \$1.5 billion per year would not only establish the needed capabilities more quickly, but also garner significant savings in lower procurement costs. Reducing life-cycle expenses by retiring older and less capable systems would realize additional savings.³⁰

Air Operations. The DHS acted correctly by merging ICE's Office of Air and Marine Interdiction

28. Carafano and Nguyen, “Better Intelligence Sharing for Visa Issuance and Monitoring.”

29. James Jay Carafano, Ph.D., testimony before the Subcommittee on Management, Integration, and Oversight, Committee on Homeland Security, U.S. House of Representatives, March 10, 2005, at www.heritage.org/Research/HomelandDefense/tst031005a.cfm.

30. Robin F. Laird, Ph.D., Mark Gaspar, and Dan Proctor, “The Challenges to Developing a Effective Maritime Security Architecture,” in James Jay Carafano and Alane Kochems, eds., “Making the Sea Safer,” Heritage Foundation *Special Report* No. 3, February 17, 2005, pp. 20–27, at www.heritage.org/Research/HomelandDefense/sr03.cfm.

with Border Patrol aviation assets. This consolidation promises to achieve greater efficiency, flexibility, and coordination for domestic airspace security and support operations.

Building greater aviation support capacity and flexibility into the DHS is critical to border security missions, supporting other federal law enforcement activities, and lessening demands on Defense Department air defense assets for homeland security missions. DHS assets also provide aviation law enforcement support to other federal agencies, negating their need to have their own “air forces.” Furthermore, general aviation is the fastest growing aviation sector, and the demand for forces to police the skies is growing.

What the DHS lacks is a suitable modernization plan for these assets as part of a network-centric security enterprise. This plan needs to be more than just an aviation modernization strategy. It needs to include the right complementary set of air, ground, intelligence, reconnaissance, surveillance, and response assets to support border security and interior enforcement.

US-VISIT. The United States Visitor and Immigration Status Indicator Technology (US-VISIT) program will record foreign visitors and workers leaving the country. This automated entry-exit system will rely on numerous information sources, including biometrics, to identify individuals and determine whether they should be admitted to the country. Through numerous processes, such as scanning of machine-readable passports, individual interviews, and fingerprinting of non-immigrant travelers, US-VISIT is intended to track a person's immigration and visa status and alert authorities to expired visas. The collected information can then be checked against federal databases and watch lists.

Full implementation of US-VISIT faces numerous challenges, including meeting technical requirements, ensuring adequate trained personnel, and

obtaining sufficient physical infrastructure to support screening operations and information technology needs.³¹ Additionally, to support network-centric operations, the program must meet the needs of frontline officers. Information available to the Border Patrol needs to include the biometrically based “person-centric immigration files” so that scanning an illegal alien's fingerprint will immediately reveal any prior immigration history along with any current information from the Integrated Automated Fingerprint Identification System (IAFIS), DHS's Automated Biometric Identification System (IDENT), and the National Criminal Information Center (NCIC) data base.

Legislation and Policy Reform

As Congress considers legislation on comprehensive border and immigration security, it should include initiatives that will facilitate network-centric operations.

State and Local Enforcement. The Secure Border Initiative hits the mark in continuing the current policy to enhance relationships with state and local governments. A systems approach to border security requires cooperative relationships among federal, state, and local law enforcement agencies for immigration investigations. While using state and local law enforcement officers to enforce immigration laws has been controversial, such programs can be appropriate.

In June 2002, the Immigration and Naturalization Service (INS) and the State of Florida created a pilot program authorized by federal law that could serve as a model for enhanced and appropriate cooperation. It could be used by any state or political subdivision (e.g., city, county). The program trained selected state and local law officers to assist in domestic counterterrorism immigration investigations. The program's memorandum of understanding was renewed when the INS became part of the DHS.³²

31. Rey Koslowski, “Real Challenges for Virtual Borders: The Implementation of US-VISIT,” Migration Policy Institute, June 2005, p. 2, at www.migrationpolicy.org/pubs/Koslowski_Report.pdf (November 15, 2005).

32. James Jay Carafano, Ph.D., Paul Rosenzweig, and Alane Kochems, “An Agenda for Increasing State and Local Government Efforts to Combat Terrorism” Heritage Foundation *Background* No. 1826, February 24, 2005, at www.heritage.org/Research/HomelandDefense/bg1826.cfm.

Congress should expand the program to include border enforcement, allow states to apply homeland security grants to the program (including overtime costs), and authorize additional ICE agents to support this program.

In addition, the Immigration Reform Act of 1996 (Section 642) prohibits any federal, state, or local government entity or official from preventing its employees from sharing important information with the INS “regarding the citizenship or immigration status, lawful or unlawful, of any individual.” In theory, this law effectively disallows (but does not sanction) so-called sanctuary cities, or local or state laws that block local or state law enforcement from cooperating with federal law enforcement in the area of immigration. As with federal government and state and local government cooperation in enforcing immigration laws generally, there is no need for new legislation. What is needed is for the federal government to prevent the active hindrance by states and localities of those laws being enforced.

State Defense Forces. There is nothing wrong with civilian volunteers wanting to help to secure the border or protect their property. However, if they are to be effective, they need to be part of the system.

There is already an appropriate vehicle for organizing volunteers to support border security under state defense forces (SDFs). States are authorized to raise and maintain SDFs under the U.S. Constitution and U.S. Code Title 32, Section 309. An SDF is under the command of the governor and reports to the state adjutant general. The state constitution and laws prescribe the SDF’s duties and responsibilities. These forces are state troops and are not funded by the federal government. In order for these troops to use armories, train on military installations, and receive in-kind support, states must comply with federal standards for the National Guard. Personnel receive no pay for training but may be paid for active duty under state control.

Border security is an ideal mission for these volunteers. Congress can help by establishing a legislative framework to require appropriate cooperation

on SDF matters among the Defense Department, the Department of Homeland Security, and the state governments.³³

Strengthened and Fully Applied Laws. On the legal side, the U.S. needs legislation that will help systems to operate effectively. For example, expanded use of expedited removal and civil forfeiture laws to alien smuggling cases would help to minimize the time that border agents spend on individual illegal entrants while providing stronger penalties against those seeking to use “stash” houses for smuggled aliens. In addition, except for political asylum claims, Congress should bar those who voluntarily depart or are removed based on expedited removal from receiving U.S. immigration benefits.

The DHS and the Justice Department should propose tougher anti-fraud laws, especially in situations in which document and other forms of illicit travel facilitation are linked to terrorists. Whenever travel documents are verified as fraudulent, they should be confiscated.

Getting the Resources Right

Exactly what resources are needed to gain control of the borders remains unclear. No one really knows how many agents or what types of technologies are needed to support the mission. Little or no information about what resources are needed to achieve an efficient and enforceable border has led to poor use of government money and a cycle of skepticism in Congress about authorizing and appropriating truly necessary sums. Key issues that need to be addressed include:

Boots on the Ground. Nothing can replace border agents, but without analytical modeling to determine what combination of technologies, communications, vehicles, and people is needed, it is all a guessing game. Former INS Commissioner Jim Ziglar testified before the 9/11 Commission that an increase of 20,000 border agents to a total of about 31,700 is needed. However, that number must be matched against the increased efficiency achieved through technologies, the number of agents neces-

33. James Jay Carafano and John R. Brinkerhoff, “Katrina’s Forgotten Responders: State Defense Forces Play a Vital Role,” Heritage Foundation *Executive Memorandum* No. 984, October 5, 2005, at www.heritage.org/Research/HomelandDefense/em984.cfm.

sary to respond to the increased detection, and the impact of other immigration and border security reform.

Fences. The border patrol has incorporated the construction of physical barriers but has concluded that, while barriers in combination with ground enforcement proved effective, they were “fiscally and environmentally costly.”³⁴ Some border security advocates argue that border barriers can be an effective and efficient tool for discouraging illegal border crossing.³⁵ We need better data to determine who is right.

Detention and Removal. Currently, the immigration detention system has 18,000 beds. The 2006 DHS appropriation bill included funding for only 2,000 more beds, bringing the number up to 20,000. This is still not enough. As a result, apprehended unlawfully present persons are often released on their own recognizance until an immigration judge rules on their status. Many abscond before they are deported from the United States.

Addressing the problem requires doing something. One way is to focus on increasing detention capacity, dramatically expanding available bed space. Another is to increase the speed of the process to limit bed-space needs. The most cost-effective means to effect removal must be determined. The United States must end the practice of “catch and release.” The Secure Border Initiative correctly dedicates resources to address this problem to “aggressively...reengineer the removal process.”³⁶ Speedy removal will be an effective deterrent and an important component of network-centric border control.

Today, none of the information needed to answer these and other pressing resource questions exists in a manner that would allow it to be used to make sound policies about the deployment and acquisition of human and technical resources.

The Way Forward

The DHS’s Secure Border Initiative is a good step in securing the U.S. borders in the 21st century.

However, while the SBI is called “transformational,” it still needs to embrace a network-centric strategy. It must serve as a road map to the DHS’s future and inform congressional border and immigration reform efforts.

The Administration and Congress need to start making this vision a reality by:

- **Developing** a more ambitious strategy for investment in border infrastructure;
- **Integrating** federal border, immigration, and visa operations into a single operational agency;
- **Investing** in critical technological programs like the Coast Guard’s Deepwater acquisition project, US-VISIT, and an integrated civilian air-ground intelligence, reconnaissance, surveillance, and law enforcement capability for the DHS;
- **Undertaking** legislation and policy reforms that promote state, local, and volunteer cooperation and empower federal officials to enforce immigration laws aggressively; and
- **Developing** the analytical capabilities to inform resource decisions and public policy choices.

Conclusion

Simply strengthening the current “layered systems” approach to U.S. border security will not secure the border. Congress and the Administration need to make key investments in infrastructure, organization, technology, and resources and then support these efforts with appropriate legislation and policy reform.

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34. Nunez-Neto, “Border Security,” p. 2.

35. For example, see “We Need a Fence,” Web site, at www.weneedafence.com (November 17, 2005).

36. Chertoff, “Remarks by Homeland Security Secretary Michael Chertoff at the Houston Forum.”