

**OBSTRUCTING HUMAN RIGHTS: THE TEXAS-MEXICO BORDER WALL**

The Working Group on Human Rights and the Border Wall  
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**Background and Context**

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## Introduction

In the name of immigration control and national security, the United States has undertaken a massive project to build physical barriers along segments of the border between the United States and Mexico. Unfortunately, the project also involves massive violations of human rights. Although specific details about the project are hard to come by and vary daily, the United States claims that it will install 370 miles of border wall before the end of 2008.<sup>1</sup> Over a hundred miles of wall will be built along the Texas/Mexico border. The construction of the wall along the Texas/Mexico border will destroy important environmental resources, will involve the unfair and discriminatory taking of private property without a clear and fair process and will affect the means of subsistence and way of life of persons living in border communities, including the members of several indigenous groups.

In response to this looming threat, a multi-disciplinary collective of faculty and students at the University of Texas at Austin formed to analyze the human rights impact of the construction of a border wall on the Texas/Mexico border. This project is facilitated through the Rapoport Center for Human Rights and Justice at the University of Texas Law School and is supported by the University of Texas office of Thematic Initiatives and Community Engagement. The Working Group includes faculty and students from the Geography Department, the Anthropology Department, the LBJ School of Public Affairs, the Teresa Lozano Long Institute of Latin American Studies and the Immigration Clinic, Environmental Clinic and Rapoport Center at the Law School. The Working Group is collaborating with affected individual property owners, indigenous communities, environmental groups, Environmental Sciences faculty at the University of Texas at Brownsville and other academics and advocates to carry out work on this project.

The Working Group has conducted extensive research and analysis of the legal, historical, property, environmental, indigenous, community and other impacts of the proposed border wall. In addition, in early May 2008, a delegation of the Working Group travelled to the Rio Grande Valley area of the Texas/Mexico border to conduct fact finding regarding the impact of the border wall on human rights. The group viewed some of the affected areas and properties along the border and met with: property owners, including Dr. Eloisa Tamez and other residents in and near Brownsville as well as residents of the El Granjeno and Los Ebanos communities; officials at the Mexican Consulate in Brownsville, Texas; the President of the University of Texas at Brownsville and other faculty; student and community advocates involved in documenting the effects of the border wall; attorneys with Texas Rio Grande Legal Aid and faculty at the Colegio de la Frontera Norte in Matamoros, Mexico.

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<sup>1</sup> Throughout this paper and the accompanying briefing papers submitted to the Inter-American Commission on Human Rights, we use the terms “fence” and “wall” interchangeably to describe the 18-foot high reinforced barriers designed to halt pedestrian and vehicular passage, which are scheduled to be constructed on the Texas/Mexico border. The statutes that mandate the construction of the barriers use the term “fence,” but the term “wall” is more commonly used by communities along the Texas/Mexico border and impacted property owners and provides an apt description. Photographs of the types of structures to be built can be found at Congressional Research Service Report for Congress, Border Security: Barriers Along the U.S. International Border 42 (May 13, 2008) [hereinafter CRS Barriers Report], attached as Exhibit 3 to this briefing paper.

The Working Group submits these briefing papers to the Inter-American Commission on Human Rights (the “Commission”) with the request that the Commission consider the violations of human rights taking place through the construction of walls along the Texas/Mexico border. These briefing papers focus on the human rights impact of border wall construction on the Texas/Mexico border, although wall segments also have been and will be built along the border between Mexico and the states of California, New Mexico and Arizona. These briefing papers focus on the Texas/Mexico border because: 1) the Working Group enjoys a unique connection to the residents of Texas and the Texas/Mexico border region; 2) the construction of border fencing in Texas presents issues involving the public taking of private land that are not present in the other states where the majority of property along the border is federal land; and 3) the next phase of border wall construction will take place predominantly in Texas. The papers focus most heavily on the area along the Texas/Mexico border known as the Rio Grande Valley, which is located at the southernmost tip of Texas. Much of the border wall construction planned for Texas is scheduled to take place in this area, and residents of this area were the first to contact the University of Texas regarding the severe impact that the border wall will have on their human rights. The papers do nonetheless address border wall construction in other areas of Texas where important human rights issues are raised, particularly in relation to the indigenous communities that live in western Texas.

## **History of the Border Wall**

Historically, the United States and Mexico have not been separated by a physical wall or other barrier along most of the border. Border bridges and official land crossing points have existed at irregular intervals to control and facilitate cross-border movement. These entry points often include some limited fencing or wall in their immediate vicinity, but there has been no attempt until recent years to wall the border elsewhere. This is not surprising, because the border between the United States and Mexico is approximately 2000 miles (3,100 kilometers) long, is irregular in its shape and passes through rough and difficult terrain. From the southmost tip of Texas and the Gulf of Mexico, it follows the winding course of the Rio Grande River to the border crossing at El Paso, Texas, and Ciudad Juárez, Chihuahua; westward from that area it crosses vast tracts of the Sonoran and Chihuahuan Desert and the Colorado River Delta; it goes westward from there to the San Diego and Tijuana border area before reaching the Pacific Ocean.<sup>2</sup>

In 1990, the United States government began to erect physical barriers along the border but only along a short stretch in the San Diego, California area.<sup>3</sup> In 1996, Congress passed immigration legislation known as the Illegal Immigration Reform and Immigrant Responsibility Act (“IIRIRA”) which included in its provisions a grant of broad authority to the government to construct barriers along the border.<sup>4</sup> This legislation also gave the government the power to take land, through condemnation proceedings if necessary, in the vicinity of the international land border when the government deems the land essential to “control and guard the boundaries and

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<sup>2</sup> International Boundary and Water Commission, United States Section, The International Boundary and Water Commission, Its Mission, Organization and Procedures for Solution of Boundary and Water Problems, available at: [http://www.ibwc.state.gov/About\\_Us/About\\_Us.html](http://www.ibwc.state.gov/About_Us/About_Us.html).

<sup>3</sup> CRS Barriers Report at 3.

<sup>4</sup> See IIRIRA, Pub.L. 104-208, Div. C, Section 102(a)-(c).

borders of the United States.”<sup>5</sup> In 2005, Congress passed further legislation, known as the REAL ID Act which, among other things, authorized the Secretary of the Department of Homeland Security (“DHS”) to waive all legal requirements to expedite the construction of border barriers.<sup>6</sup>

Despite this legislation, the United States government did not undertake efforts to build barriers outside of the San Diego area. Then, Congress passed the Secure Fence Act of 2006, which mandated that DHS construct fencing along five separate and specific stretches of the southern border, including several areas in Texas.<sup>7</sup> The statute gave detailed parameters regarding the locations in which the wall was to be built, although it did not clarify the total mileage to be constructed under the law. The legislation still did not envision a border wall along the entire southwest border but did provide significant new impetus for construction of a wall along significant segments of the border.

Pursuant to the Secure Fence Act of 2006, the government constructed about 70 miles of wall along the Arizona/Mexico border in 2007.<sup>8</sup> By late 2007, the government had turned its attention to the Texas/Mexico border and began plans to construct over 100 miles of wall along various stretches of that border by the end of 2008.

As DHS began the process of surveying properties along the Texas/Mexico border to determine which land the government would seek to take for construction of the fence, Congress acted again on the border fence issue. In December 2007, Congress amended the statute on construction of the border wall as part of the Consolidated Appropriations Act, FY2008.<sup>9</sup> The latest legislation, in a turnabout, orders DHS to construct at least 700 miles of fencing along the southern border of the United States but does not dictate where this fencing must be built. Instead, it leaves decisions regarding locations for the fence up to DHS. The legislation does further mandate that 370 miles of the required 700 miles of fencing be constructed by the end of 2008. Importantly, the new law also requires consultation with those affected by the fence, providing that DHS “shall consult with . . . States, local governments, Indian tribes, and property owners in the United States to minimize the impact . . . for the communities and residents located near the sites [where] fencing is to be constructed.”<sup>10</sup> The law also requires that DHS consider alternatives to physical fencing. Despite the new authority for flexibility regarding the location of the wall and the absolute requirement of consultation, DHS has not altered its approach to the border fence in any significant way. DHS has moved forward with its plans to put up expansive segments of wall along the Texas/Mexico border and has vowed to begin physical construction in the summer of 2008.<sup>11</sup>

## **Border Wall Construction Process**

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<sup>5</sup> See *id.*, Section 102(d); 8 United States Code 1102(b).

<sup>6</sup> REAL ID, Pub.L. 109-13, Div. B.

<sup>7</sup> See Secure Fence Act of 2006, Pub.L. 109-367, Section 3, attached as Exhibit 1 to this briefing paper.

<sup>8</sup> Associated Press, 70 Miles of New Border Fencing Almost Complete (Sept. 29, 2007).

<sup>9</sup> Pub.L. 110-161, Div. E, Section 564, attached as Exhibit 2 to this briefing paper.

<sup>10</sup> *Id.* (emphasis added).

<sup>11</sup> The Brownsville Herald, Border Wall Construction Slated to Begin by End of July (May 25, 2008).

The border construction process along the Texas/Mexico border, including the taking of land, has involved various stages and actors. Border wall construction is the responsibility of DHS and specifically the sub-component of DHS entitled U.S. Customs and Border Protection (“CBP”). DHS began seeking temporary access to property along the Texas/Mexico border at the end of 2007 for the purpose of conducting surveys and mapping. Although the access was temporary, it constituted a taking of land, because it required a temporary and partial relinquishment of land ownership rights to DHS. Some property owners voluntarily granted access to their land, although many did so without full knowledge of the consequences to their property or their rights to demand compensation from the United States government for this use of their property.<sup>12</sup> Others refused to grant access voluntarily. DHS successfully sued approximately 60 of those property owners in condemnation proceedings in January and February 2008 to obtain the right to take the land for temporary access purposes.<sup>13</sup> Those sued included individual property owners, city governments that own property, school districts and the University of Texas at Brownsville. Once the government obtained access to land, voluntarily or through condemnation suits, CBP worked with the United States Army Corps of Engineers to conduct land surveys.<sup>14</sup>

DHS is now entering into the next phase of the process. Before it can actually construct border wall segments, it must obtain ownership of the property upon which it wishes to build. DHS, working with the United States Army Corps of Engineers, is currently making offers, mostly in the \$4000-\$10,000 range, for the purchase of land.<sup>15</sup> If property owners do not voluntarily agree to sell portions of their land, DHS initiates condemnation lawsuits. DHS filed about 50 such lawsuits in the month of May 2008 alone.<sup>16</sup> DHS need only formally take the land upon which it actually plans to install the wall, often only a segment of the entire property. However, the wall will, in many cases, also deprive the owners of effective use of other parts of their property not purchased by DHS, because it will be difficult, if not impossible, to traverse the wall and reach property on the other side.

Once DHS obtains title to lands along the Texas/Mexico border, construction of the wall can begin. The government will contract out the work for the construction of the wall and has

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<sup>12</sup> See, e.g., Working Group interview with Idalia Benavidez (May 2, 2008).

<sup>13</sup> See, e.g., *United States of America v. 1.04 Acres of Land and Eloisa G. Tamez*, Complaint in Condemnation, Case 1:08-cv-00044, filed in the United States District Court for the Southern District of Texas on May 28, 2008. We obtained the number of complaints by searching the federal courts’ publicly available electronic database known as PACER for all temporary condemnation actions filed at the beginning of 2008 by the United States in the United States District Courts for the Southern and Western Districts of Texas, which are the courts with jurisdiction over the targeted area.

<sup>14</sup> See CRS Barriers Report, at 20; Correspondence from the Forth Worth District of the United States Army Corps of Engineers to Dr. Eloisa Tamez seeking access to property to perform surveys and site evaluations (Dec. 7, 2007) (on file with the authors).

<sup>15</sup> See Working Group interview with Idalia Benavidez (May 2, 2008); *United States of America v. 0.43 Acres of Land and Estate of Pilar Cabrera*, Declaration of Taking, Case 1:08-cv-194, filed in the United States District Court for the Southern District of Texas on May 28, 2008.

<sup>16</sup> See, e.g., *United States of America v. 0.43 Acres of Land and Estate of Pilar Cabrera*, Declaration of Taking, Case 1:08-cv-194, filed in the United States District Court for the Southern District of Texas on May 28, 2008. We obtained the number of complaints by searching the federal courts’ publicly available electronic database known as PACER for all recent condemnation actions filed by the United States in the United States District Court for the Southern District of Texas, which is the court with jurisdiction over the targeted area.

already begun to invite bids.<sup>17</sup> Private companies will carry out this major government project for profit.

On April 1, 2008, in the midst of significant opposition to the construction of the wall, DHS Secretary Michael Chertoff executed a waiver of 30 environmental and other laws pursuant to his authority granted by federal statute.<sup>18</sup> In addition to key environmental laws such as the National Environmental Policy Act and the Endangered Species Act, Secretary Chertoff waived myriad other laws including, for example, the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act and the American Indian Religious Freedom Act.<sup>19</sup> The waiver announcement lists numerous specific stretches of land along the Texas border with Mexico where the environmental and other laws will now be inapplicable. This waiver thus allows construction on the Texas/Mexico border to move forward without compliance with the numerous procedural and substantive requirements that would otherwise apply to such an extensive project.

The United States government has not been transparent in its plans for the wall along the Texas/Mexico border. It has therefore been extremely difficult for the Working Group, and the public in general, to obtain concrete information regarding planned locations for the wall segments or even the total mileage that the wall will cover along the Texas/Mexico border.

First, the United States government has not even been clear and specific about the total number of miles of wall that it plans to construct. As noted above, the original Secure Fence Act of 2006 set out specific locations for fencing but did not specify the total mileage of fencing it mandated. Calculations of the total mileage involved varied but suggested that the law required upward of 700 miles of wall, and at least one government report concluded that the law required 850 miles of wall.<sup>20</sup> The Secure Fence Act required construction of the wall in priority areas, amounting to over 300 miles, by the end of 2008. The Consolidated Appropriations Act, FY2008 requires at least 700 total miles of wall and mandates the construction of 370 miles of fencing by the end of 2008. Finally, DHS Secretary Chertoff's April 2008 waiver of environmental and other laws to allow for expedited construction applies to approximately 470-490 miles of the border.<sup>21</sup> It is unclear when those 490 miles of barriers are scheduled for construction. The government has alternatively promised to construct 570 or 670 total miles of

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<sup>17</sup> Associated Press, "Army invites companies to bid on border fence work" (May 28, 2008); United States Government Accountability Office, Secure Border Initiative: Observations on Selected Aspects of SBInet Program Implementation 7 n.8, 12 (Oct. 24, 2007) [hereinafter GAO Secure Border Initiative Report], attached as Exhibit 4 to this briefing paper.

<sup>18</sup> Department of Homeland Security, Office of the Secretary, Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, As Amended (April 1, 2008) [hereinafter DHS Waiver Determination].

<sup>19</sup> Id.

<sup>20</sup> See CRS Barriers Report, at 10; Newsweek, Brownsville's Bad Lie (April 26, 2008); The Texas Observer, Holes in the Wall (Feb. 18, 2008); Statement by Representative Bryan Conaway, Library of Congress Congressional Record, "Providing for Consideration of H.R. 6061, Secure Fence Act (Extension of Remarks), September 21, 2006.

<sup>21</sup> Department of Homeland Security, Statement of Secretary Michael Chertoff Regarding Exercise of Waiver Authority (April 1, 2008); The New York Times, Homeland Security Stands by its Fence graphic, available (May 21, 2008).

barrier by the end of 2008.<sup>22</sup> Those numbers lead to further confusion, though, because they include both pedestrian fencing and vehicle barriers that are not designed to prevent pedestrians from passing through the border.<sup>23</sup> The vehicle barriers will presumably not count toward the total mileage of reinforced fencing mandated in the statutes.

Putting aside the government-created confusion regarding the number of miles of wall to be built, the best estimate of total construction of pedestrian fencing planned for the end of 2008 is 370 miles, based on a review of various official statements.<sup>24</sup> The remaining mileage to be constructed in 2008 corresponds to vehicle barriers. As the government asserts that it has already constructed about 170 miles of pedestrian fencing, it appears that the government plans to construct another 200 miles before the end of the year.<sup>25</sup> The waivers signed by the Secretary of DHS designating areas of construction suggest that approximately 130 miles of that new pedestrian fence will be constructed along the Texas/Mexico border with the longest segments placed in the Rio Grande Valley in the southernmost part of Texas.<sup>26</sup>

Second, despite the obvious importance of this information, it is also impossible to determine the exact properties and locations in which DHS plans to build the fence along the Texas/Mexico border. DHS has published no comprehensive maps of planned construction. Selected maps displaying specific segments of the planned wall were originally available on a CBP website as part of the draft environmental impact statements the government prepared before the environmental laws were waived. However, government officials repeatedly stated that those maps were outdated without providing newer maps. The maps have now been removed from the website and are no longer available.

On April 11, 2008, the Working Group filed a Freedom of Information Act request with the U.S. Army Corps of Engineers and with CBP seeking, among other things, copies of all maps showing planned locations for the wall along the Texas/Mexico border. More than six weeks later, we have not yet received the requested maps.

This lack of transparency itself leads to serious concerns about the United States government's commitment to guaranteeing human rights. It also makes it more difficult to

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<sup>22</sup> See GAO Secure Border Initiative Report, at 7; DHS, Fact Sheet: U.S. Department of Homeland Security Five-Year Anniversary Progress and Priorities (March 6, 2008).

<sup>23</sup> See *id.*

<sup>24</sup> See GAO Secure Border Initiative Report, at 7; DHS, Fact Sheet: U.S. Department of Homeland Security Five-Year Anniversary Progress and Priorities (March 6, 2008); CRS Barriers Report, at 10.

<sup>25</sup> See DHS, Fact Sheet: U.S. Department of Homeland Security Five-Year Anniversary Progress and Priorities (March 6, 2008). It is worth noting that it seems unlikely that DHS will meet these goals. To date, DHS only claims to have built 170 miles worth of pedestrian fencing. *Id.* About 80 miles of that construction were built before 2007 and the implementation of the Secure Fence Act. See GAO Secure Border Initiative Report, at 11. In 2007, DHS built only about 75 miles of fence. See *id.* It is difficult to imagine how DHS will nonetheless build 200 miles of pedestrian fencing in 2008, particularly since the Government Accountability Office has concluded that DHS will face greater challenges than it has in the past in constructing fencing in 2008 on the Texas/Mexico border. See *id.* at 3. Of course, the likelihood that DHS will not complete all planned miles by the end of 2008 does not ameliorate the severe impacts of the planned construction. It simply makes it more difficult to know where DHS will start construction and how much it will achieve by the end of 2008, imposing additional uncertainty and stress on affected border residents.

<sup>26</sup> DHS Waiver Determination, Project Areas Attachment.

describe and analyze the specific human rights impact of the government's border wall program. For purposes of the briefing papers, the Working Group relied on information about the planned locations for the border wall available from litigation documents filed against and by affected property owners, the testimony of individuals along the Texas/Mexico border who spoke with the Working Group, the original piecemeal draft environmental impact maps, the geographic locations identified in the DHS waivers of environmental and other laws, and press accounts.

Several important and troubling aspects of the planned locations for construction of the border wall in Texas have nonetheless become clear from the information available. As is described in detail in the briefing papers submitted by the Working Group, the wall is scheduled to be built through sensitive environmental areas, indigenous lands and small private properties but will not run through larger and more lucrative properties owned by businesses. Some of the affected property, such as the land owned by Eloisa Tamez, has been held by families since the 1700s when it was parceled out in land grants by the Spanish crown and has been guaranteed by successive governments and treaties, including the Treaty of Guadalupe Hidalgo. The wall will be constructed on portions of the campus at the University of Texas at Brownsville, effectively dividing the campus into two segments. It will also cut through sites of importance to the lengthy and unique history of the Texas/Mexico border, such as the United States National Historic Landmark site at Fort Brown and ancient cemeteries.

The locations that DHS has selected for the fencing will have a devastating impact on the property of individuals who own land along the border. Residents along the border will lose not only the segment of their properties upon which the wall is built<sup>27</sup> but will also lose access to their property on the other side of the wall. In the Rio Grande Valley, the wall will not closely follow the curving path of the river. Rather, it will be built in straighter line segments, which roughly follow the path of levees previously built to protect against flooding. As a result, large pieces of land along the river banks will be cut off by the wall.<sup>28</sup> Some stretches of fence will be built a mile inland from the river. In a few cases, individual homes or even entire plots of property will end up completely on the southern side of the wall.<sup>29</sup> In many areas, the land is already partially disrupted by the existing levees. However, rather than build on, immediately next to or on the river side of the existing levees, DHS plans to build another barrier away from the river side of the levees. In other words, the wall will leave the levees and additional property on the side of the wall adjacent to the river, and the wall will not be passable at will like the levees.

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<sup>27</sup> Actually, DHS will take possession of the land on which the wall is built and additional land around the wall—another 30 to 60 feet on each side. DHS, Environmental Impact Statement for Construction, Maintenance, and Operation of Tactical Infrastructure: Rio Grande Valley Sector, Texas (Draft) (2007).

<sup>28</sup> See *The Washington Post*, *Border Fence Would Slice Through Private Land* (Feb. 16, 2008) (highlighting several examples in which the wall will make large portions of land unavailable on the Mexico side of the fence; for one property, 25 of 80 acres of farmland would be left on the south side of the wall).

<sup>29</sup> *The Brownsville Herald*, *Living on the wrong side of the fence* (April 26, 2008) (quoting a specialist with the U.S. Army Corps of Engineers). Some have suggested that the United States is essentially ceding territory to Mexico. *Reuters*, *Texas Mayors Threaten Court to Stop Border Fence* (Oct. 12, 2007) (quoting the mayor of Del Rio, Texas). While this suggestion is probably not technically correct, because the official border between the two countries will remain the same regardless of the placement of the wall, it raises important questions about control and sovereignty on the land on the other side of the wall. It is likely that a no-man's land of sorts will be created on the other side of the fence.

For many residents along the border, the inability to reach large portions of their property which abut the river will destroy their livelihood. Many of these residents use these portions of their land to graze and water livestock, to irrigate crops, to enter the river for recreation and transportation and to fulfill other economic purposes. To calm angry property owners, DHS has suggested that it might place gates or doors in the wall at some intervals. However, it has not provided any specific plan for access to property on the other side of the wall. It seems certain that gates, if they are installed, would be placed at some distance from one another, requiring residents to travel lengthy distances outside of their property to enter a gate and turn around to return to their property. Obvious questions are also raised about the nature of the gates. DHS has not explained how the gates will function or whether residents will be required to provide evidence of citizenship to travel around their communities or to enter and exit their own land.<sup>30</sup>

### **Ineffectiveness of the Texas/Mexico Border Wall as an Immigration Control or Anti-Terrorism Measure**

The stated goal of the border wall statutes is to protect and control the border by preventing unlawful entries by intending immigrants, terrorists or drug traffickers.<sup>31</sup> While this goal is presumably lawful, as a matter of international human rights law, the construction of a border wall is not likely to be effective in achieving the objective.<sup>32</sup>

The legislation cites the prevention of terrorism as an important goal of the border fence, and United States government officials repeatedly recite this refrain. One Border Patrol official stated that the wall along the Texas/Mexico border was necessary to prevent the arrival of weapons of mass destruction.<sup>33</sup>

However, government officials have provided no evidence that terrorists are using the Texas/Mexico border to enter the United States. It has been well-established that the 9/11 terrorists entered the country through legal immigration channels, and there have been no

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<sup>30</sup> See The Brownsville Herald, *Living on the Wrong Side of the Fence* (April 26, 2008) (including interviews with several landowners – one with property that will fall completely on the south side of the fence and one with land that will be split in half, leaving the property’s farmland on the other side of the fence-- who sought unsuccessfully for months to obtain assurances from DHS that they would have access to their land after the fence is built); Letter from the Department of the Army to Ms. Rita P. Taylor (April 4, 2008) (on file with the authors) (stating that roadways through the fence would allow access to her property and attaching a map that shows the roadways but does not show how they will connect with her property); Newsweek, *Brownsville’s Bad Lie* (April 26, 2008) (reflecting DHS’ response to questions about access to the golf course at the University of Texas at Brownsville, which will be left on the Mexico side of the wall, as suggesting that plans had not been made for access and that “options might include an electronic gate”); The New York Times, *In Texas, Weighing Life with a Border Fence* (indicating that DHS has told concerned local officials that “there would be some kind of gates through the fence, but what kind and where have yet to be specified”).

<sup>31</sup> See Secure Fence Act of 2006, Pub.L. 109-367, Section 2; 8 United States Code 1102(b).

<sup>32</sup> The Working Group briefing paper on property rights and equal protection assesses at much greater length the failure of the border wall to meet the tests of proportionality and least restrictive measures applicable under international human rights law. Here, we simply hope to analyze briefly the likely effectiveness of the border wall approach.

<sup>33</sup> YouTube, *Brownsville Protests Border Wall*, available at: [http://www.youtube.com/watch?v=GUMFfV\\_qbNM&feature=related](http://www.youtube.com/watch?v=GUMFfV_qbNM&feature=related).

credible reports that terrorists are now more inclined to sneak across land borders.<sup>34</sup> If terrorists were to attempt to cross a land border illegally to enter the United States, it is more likely that they would cross into the United States from Canada, since there are fewer controls on the Canadian border.<sup>35</sup> Because there is no evidence that terrorists seek to enter the United States through the Texas/Mexico border, the construction of a wall along that border will not be effective in preventing terrorism.

Nor will the construction of a wall along the Texas/Mexico border serve as an effective means of preventing or controlling unauthorized immigration. According to official reports of the United States government, prior experiments with the border wall have proven ineffective. The original segment of border wall built in the San Diego area “did not have a discernible impact on the influx of unauthorized aliens coming across the border.”<sup>36</sup> Attempted crossings and apprehensions in the San Diego area decreased only after additional steps were taken, including the dispatch of additional agents and resources, which did not rely on physical barriers.<sup>37</sup> Even after the implementation of increased enforcement strategies in the San Diego area, the government has found “little impact” on overall attempted crossings into the United States and apprehensions.<sup>38</sup> These government reports question the effectiveness of physical barriers as long as there are gaps in the border wall, because the physical barriers simply redirect attempted border crossings to areas in which there is no wall.<sup>39</sup> There are no plans to build a solid border wall, and it seems unlikely (and undesirable as a human rights matter) that a solid border wall will ever be built given the length of the border between the United States and Mexico, the rough terrain it covers and the prohibitive cost. The government has further noted that, while fences that channel immigration into more remote and rough terrain do not effectively deter immigration, they do lead to more migrant deaths.<sup>40</sup> These analyses, by the United States government itself, suggest that the intermittent border wall to be built along the Texas/Mexico border will have little impact on overall unauthorized entries into the United States and will have a deadly effect on immigrants.

Physical barriers are also extremely susceptible to being breached and therefore are not reliable as a means of immigration control. Official government reports note that “in the limited areas where fencing has been erected, there have been numerous breaches of the border fencing and a number of tunnels discovered crossing underneath the fencing.”<sup>41</sup> DHS Secretary Michael

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<sup>34</sup> National Commission on Terrorist Attacks Upon the United States, Staff Statement No. 1: Entry of the 9/11 Hijackers into the United States

<sup>35</sup> Government Accountability Office, Border Security: Security Vulnerabilities at Unmanned and Unmonitored U.S. Border Locations 1-2 (Sept. 27, 2007) (describing unmanned and unmonitored roads crossing the border between the United States and Canada and the ability of government investigators posing as unlawful border crossers to move freely along the Canada/U.S. border).

<sup>36</sup> See CRS Barriers Report, at 3

<sup>37</sup> Id. at 3, 13. The government uses numbers of apprehensions near the border as a proxy for number of attempted crossings and as a means of assessing the effectiveness of immigration control programs.

<sup>38</sup> Id. at 17.

<sup>39</sup> Id. at 32.

<sup>40</sup> Id. at 40 (“on average 200 migrants died each year in the early 1990s, compared with 472 migrant deaths in 2005”).

<sup>41</sup> Id. at 32;

Chertoff has acknowledged that fencing is likely to be breached and that tunnels have been built to get around it in some areas where it is already in place.<sup>42</sup>

The United States government has all but recognized that a wall is an inadequate tool for stemming unauthorized border crossings. DHS Secretary Michael Chertoff has acknowledged that physical barriers are largely symbolic and are not “a cure-all.”<sup>43</sup> DHS has stated that it understands control of the border to require the “ability to consistently (1) detect illegal entries into the United States; (2) identify and classify these entries to determine the level of threat involved; (3) respond to these entries; and (4) bring events to a satisfactory law enforcement resolution.”<sup>44</sup> Yet, the function of a wall is simply to put a physical halt, usually temporary, to an attempted border crossing and then make the crossing more difficult or deflect it elsewhere. The physical barrier does nothing to detect illegal entries or allow for categorization of the persons entering and does not respond to any entries through apprehension or other law enforcement resolution. The interposition of a wall is a method that avoids actual contact between potential border crossers and United States government officials. By its terms, it fails to fulfill the requirements of an effective system for border control as defined by the United States government itself.

The primary failure of the wall, though, is that it focuses on the physical border in the south of the United States as the crux of immigration control. Yet, the reality of immigration and individual and government decision-making takes place in the interior of the United States, suggesting that the channeling of resources toward physical barriers along the border will be ineffective in addressing immigration issues. Over half of the undocumented immigrants in the United States arrived legally by entering at an official land border or airport port of entry.<sup>45</sup> These immigrants later fell out of status or violated their status and joined the undocumented population. In fact, statistical and anecdotal information suggests that unauthorized border crossings have decreased in the past several years along the Texas/Mexico border and elsewhere.<sup>46</sup> This trend suggests that factors, such as the drooping economy and interior immigration enforcement actions, have had the greatest impact and that physical barriers are unnecessary and miss the target in addressing unauthorized immigration issues.

The core of the unauthorized immigration issue is the failure of the current United States immigration system to reflect the reality of global migration, to recognize the needs of United States employers and immigrant workers and to protect the human right of immigrant families to avoid separation. Currently, the immigration system provides almost no route for hard-working immigrants to obtain lawful status. The few immigrants wishing to work or rejoin their families

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<sup>42</sup> CNN, Chertoff to Hunter: Border Fence “Overly Simplistic” (July 1, 2007); The New York Times, Homeland Security Stands by its Fence (May 21, 2008).

<sup>43</sup> The New York Times, Homeland Security Stands by its Fence.

<sup>44</sup> GAO Secure Border Initiative Report, at 4 n.3.

<sup>45</sup> Pew Hispanic Center, Modes of Entry for the Unauthorized Migrant Population (May 22, 2006).

<sup>46</sup> The New York Times, Homeland Security Stands by its Fence (May 21, 2008); The New York Times, A Natural Treasure that May End Up Without a Country (April 7, 2008) (quoting the manager of a nature reserve in the Rio Grande Valley as stating that he had seen a notable drop-off in illegal crossings through the reserve in the last decade); see also Melissa del Bosque, The Texas Observer, Holes in the Wall: Homeland Security Won’t Say why the Border Wall is Bypassing the Wealthy and Politically Connected (quoting a security official at the University of Texas at Brownsville as clarifying that unauthorized border crossers do not enter through the university campus).

in the United States, who are fortunate enough to qualify for lawful status, must wait for decades and are forced through expensive and inefficient immigration processing. The system begs for unauthorized immigration to occur. Yet, while immigration reform has been discussed in the last several sessions of Congress, no structural change has been forthcoming. Until this system is changed, no physical border wall will allow the United States government to control and regularize immigration.

The United States government estimates that each mile of border fence will cost approximately 2 to 4 million dollars.<sup>47</sup> The total estimated cost of construction for the next planned 200 miles or so of pedestrian fencing to be completed by the end of this year is approximately \$890 million.<sup>48</sup> At this cost, it seems reasonable to expect an effective strategy for reaching the government's goals regarding immigration control and the prevention of terrorism. Instead, the proposed border wall is only likely to be effective in providing government officials with the political opportunity to say that they have accomplished something concrete, however ineffective.

### **Widespread Opposition to the Texas/Mexico Border Wall**

The United States government's plans to construct a border wall in Texas have generated widespread opposition. The wall will cut through an area in which communities have always viewed themselves as cross-border and transnational in nature. The ties between towns and residents north and south of the Rio Grande River are extremely strong, and residents on the border have traditionally traveled back and forth between Mexico and Texas regularly for social and economic purposes. Many families include both Mexican and United States citizens with family members living on each side of the border and visiting each other regularly.<sup>49</sup> Some border residents even maintain homes in both Mexico and Texas.<sup>50</sup> Others travel back and forth daily to shop and conduct business. Many residents along the Texas/Mexico border see the Rio Grande River "as a meeting point rather than a dividing line," and they see the wall as an affront to the unique border identity and culture that has flourished in communities along both sides of the border.<sup>51</sup> There is no doubt that the wall will disrupt the way of life, culture and economic viability of many communities along the border.

Border residents and politicians have been largely united in their vocal opposition to the wall.<sup>52</sup> The mayor of Eagle Pass, Texas has called the border "useless, expensive and potentially damaging."<sup>53</sup> The president of the University of Texas at Brownsville, Juliet Garcia, has noted

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<sup>47</sup> See CRS Barriers Report, at 27 (quoting the Congressional Budget Office); GAO Secure Border Initiative Report, at 12 (quoting CBP figures).

<sup>48</sup> GAO Secure Border Initiative Report, at 12.

<sup>49</sup> Newsweek, Brownsville's Bad Lie.

<sup>50</sup> Current, Muro del odio: People of the Forgotten River Grapple with the Border Wall (Feb. 27, 2008).

<sup>51</sup> Newsweek, Brownsville's Bad Lie.

<sup>52</sup> See, e.g., AFP, Controversial Border Fence Hot Issue in Texas Primary (Feb. 25, 2008); Houston Chronicle, Hostile Reception for Pro-Fence Congressman in Brownsville (April 28, 2008); Los Angeles Times, A Town Against the Wall (Dec. 17, 2007) ("complaints are heard from El Paso to Brownsville, in river towns only a football field away from sister cities in Mexico, where the prevailing culture has long been bilingual and binational, and where everyone knows someone on the other side"); The Washington Times, Texas cities join suit against Mexico border fence (May 29, 2008).

<sup>53</sup> The Washington Times, Texas cities join suit against Mexico border fence (May 29, 2008).

that the proposed construction on the university's campus of "an 18-foot high steel barrier between two friendly countries" would "destroy the campus climate."<sup>54</sup> Students and public school teachers have announced their opposition to the wall and have organized well-attended protest marches.

Several lawsuits have been initiated against the United States challenging its actions in constructing the wall. Eloisa Tamez, a vocal property owner in opposition to the wall and the taking of her land, initiated class action litigation against DHS, asserting that the government had failed to properly consult with individuals and communities affected by the wall, to consider alternatives to the wall or to negotiate regarding the taking of land.<sup>55</sup> A coalition of mayors from border towns and cities has now joined the litigation.<sup>56</sup> Another lawsuit is currently pending before the United States Supreme Court challenging the constitutionality of the legislation that gave the Secretary of DHS authority to waive environmental and other standards and the Secretary's exercise of that waiver.<sup>57</sup>

The construction of the border wall has evoked ire internationally as well, particularly among otherwise friendly governments in Latin America.<sup>58</sup> Mexico is obviously the country most affected by the construction of the wall. The wall sends a message of antagonism rather than cooperation to Mexico and necessarily creates a negative impact on diplomatic relations between the two countries. In addition, numerous treaties between the United States will likely be affected by the construction of the wall. These treaties govern, for example, access to and control of the Rio Grande River and use of water as well as environmental protection along the border.<sup>59</sup>

The Mexican government has made its opposition to the wall clear. The government's official position states: "The government of Mexico reiterates its rejection of this [border wall] project, because it does not correspond to the climate of cooperation and joint responsibility that should exist between our countries, nor does it offer a solution to address effectively the problems that we share in the border area."<sup>60</sup> The Mexican government has received support from Canada and other member states of the Organization of American States for its objections

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<sup>54</sup> UTB/TSC, UTB/TSC Hosts Border Wall Subcommittee Meetings (April 28, 2008), available at [blue.utb.edu/newsandinfo/BorderFence%20Issue/03\\_19\\_2008UpdatedBorderFenceInfo.htm](http://blue.utb.edu/newsandinfo/BorderFence%20Issue/03_19_2008UpdatedBorderFenceInfo.htm).

<sup>55</sup> Tamez et al v. Chertoff et al, Complaint #08-CV-0555, filed in the United States District Court for the Southern District of Texas; Dallas Morning News, Rio Grande valley resident blocks seizure of her land for border fence (Feb. 7, 2008); Rio Grande Guardian, Tamez Sues Chertoff (Feb. 19, 2008).

<sup>56</sup> The Washington Times, Texas cities join suit against Mexico border fence (May 29, 2008).

<sup>57</sup> Rio Grande Guardian, South Texas Environmental Groups Sue DHS over Chertoff Waivers (May 29, 2008); *Defenders of Wildlife v. Chertoff*, Case 07-1180, petition for writ of certiorari filed with the United States Supreme Court.

<sup>58</sup> Even President Mikhail Gorbachev, former leader of the Soviet Union, has expressed his opinion questioning the wisdom of the wall. See YouTube, Gorbachev on the U.S./Mexico Border Wall, available at <http://www.youtube.com/watch?v=qGk2iec8v7Y>.

<sup>59</sup> See, e.g., Boundary Treaty of 1970; Mexico and United States of America Agreement on Co-Operation for the Protection and Improvement of the Environment in the Border Area (Signed at La Paz, Baja California, on Aug. 14, 1983); Rio Grande Guardian, Marin: 18 Feet Concrete Levee Wall Would Violate Treaty with Mexico (April 21, 2008); IPS, US-Mexico: Border Wall Condemns Jaguars to Extinction (April 30, 2008).

<sup>60</sup> See Ministry of Foreign Affairs of the Government of Mexico, Communiqué 167, El gobierno de México protesta ante autoridades de EUA y gestiona la inmediata remoción de un tramo del muro fronterizo que se construyo en territorio Mexicano (June 25, 2007).

to the wall. In the fall of 2006, the Mexican government presented a declaration against the wall at the Organization of American States that received the support of 27 other countries and also obtained a resolution at the Summit of the Americas –an important gathering of heads of state from the region-- urging the United States to reconsider its decision to build a wall.<sup>61</sup> In February 2008, representatives of the legislatures from Canada and Mexico, meeting in an inter-parliamentary session, set forth an agreement in opposition to the border wall.<sup>62</sup> The Chilean legislature sent its own formal protest in support of Mexico and against the wall to the United States government.<sup>63</sup>

## **Human Rights Impact of the Texas/Mexico Border Wall**

The planned wall along the Texas/Mexico border not only engenders widespread opposition while remaining ineffective in fulfilling the government's immigration control and anti-terrorism objectives, but also violates international human rights law. The Working Group has analyzed and documented, in separate briefing papers accompanying this document, a series of human rights violations taking place as a result of the construction of segments of border wall along the Texas/Mexico border. These human rights violations constitute breaches of the United States' obligations under the American Declaration of the Rights and Duties of Man, interpreted in light of the American Convention on Human Rights and other relevant international human rights norms.<sup>64</sup> The briefing papers address the following issues:

1. Violations of the right to property and equal protection guaranteed under international human rights law. The United States government, in its implementation of plans to construct a wall along the Texas/Mexico border, has not acted rationally in attempting to build a wall that will deprive residents along the border of the right to hold and use their properties. The government has failed to adopt proportional means of meeting its governmental goal of controlling the border, and the construction of a border wall, involving the taking of property, is not the least restrictive means of achieving governmental goals. In addition, the government has not provided justification for its

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<sup>61</sup> International Herald Tribune, Mexico Gets Support of 27 Nations to Attack U.S. Plans for Border Fence in OAS; Special Communiqué of the XVI Summit of the Americas of Heads of State and Government Against the Construction of a Wall on the Mexico-United States Border (Nov. 2006), available at [www.sre.gob.mx/dgomra/cibero/ibero4.htm](http://www.sre.gob.mx/dgomra/cibero/ibero4.htm).

<sup>62</sup> La Crónica, Interparlamentaria Mexico-Canada acuerda condena al muro fronterizo (Feb. 19, 2008).

<sup>63</sup> Proceso.com.mx, Condena el senado de Chile la construcción del muro en la frontera de EU con México (Jan. 2, 2008), available at [www.proceso.com.mx/noticia.html?sec=0&nta=56179](http://www.proceso.com.mx/noticia.html?sec=0&nta=56179).

<sup>64</sup> The American Declaration constitutes a source of international legal obligation for the United States as a member state of the Organization of American States. See I/A Court H.R., Advisory Opinion OC-10/89 Interpretation of the American Declaration of the Rights and Duties of Man Within the Framework of Article 64 of the American Convention on Human Rights, July 14, 1989, Ser. A N° 10 (1989), paras. 35-45; I/A Comm. H.R., James Terry Roach and Jay Pinkerton v. United States, Case 9647, Res. 3/87, 22 September 1987, paras. 46-49. According to the jurisprudence of the inter-American human rights system, the provisions of the American Declaration should be interpreted and applied in the context of ongoing developments in international human rights law and, specifically, in the light of the American Convention on Human Rights and other prevailing international and regional human rights instruments. See, I/A Comm. H.R. Report N° 52/01, Case 12.243, Juan Raul Garza (United States), paras. 88, 89 (confirming that while the Commission does not apply the American Convention on Human Rights in relation to member states that have yet to ratify that treaty, the Convention's provisions may well be relevant in informing an interpretation of the principles of the Declaration); I/A Comm. H.R., Report N° 75/02, Case 11.140, Mary and Carrie Dann (United States), para. 127.

differential treatment of properties along the border as it has not explained why certain lucrative properties are not to be affected by border wall construction. Statistical analysis suggests that the border wall and the necessary taking of property resulting from its construction will disproportionately impact poor Latino immigrant families.<sup>65</sup>

2. Severe degradation of the environment and violations of the government's human rights obligation to evaluate and take into account harm to the environment when undertaking public projects. In its construction of a border wall, the United States government is bypassing numerous domestic laws designed to protect the environment and the people who utilize and enjoy it. The negative impact of the wall on important and scarce natural resources, including the ocelot and other wildlife populations, plants and birds found along the Texas/Mexico border will be severe. The environmental degradation will cause significant harm to the residents of the Texas/Mexico border area who have traditionally held an important connection to the natural resources prevalent in the border area.<sup>66</sup>
3. Violations of the rights of indigenous communities protected under international human rights law. The wall will directly impact the lands of the Lipan Apache, Kickapoo and Tigua (Ysleta del Sur) indigenous communities living along the Texas/Mexico border. Yet, the United States government has proceeded forward in planning for the taking of portions of these lands without engaging in meaningful consultations with members of the affected indigenous communities.<sup>67</sup>

The Working Group has endeavored to work expeditiously to provide the Inter-American Commission on Human Rights with this set of briefing papers, because the United States government is moving forward rapidly and aggressively with its plans to construct the border wall. Each of the human rights issues we raise requires further analysis and development, and the Working Group plans to engage in continued work on the human rights violations caused by the border wall.

## **Conclusion**

Given the gravity of the human rights situation created by the construction of a border wall on the Texas/Mexico border, the Working Group respectfully requests that the Inter-American Commission on Human Rights immediately take notice of the issue and initiate an investigation. We ask that the Commission publicly announce its serious concerns about the human rights violations related to the construction of the border fence during its 132nd period of sessions to be held in Washington, D.C. in July of 2008. Finally, we request that the Commission set a general hearing on the border fence issue to be held during the 133rd period of sessions of the Commission scheduled to take place in Washington, D.C. in October of 2008.

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<sup>65</sup> Ariel Dulitzky, Denise Gilman & Leah Nedderman, Violations on the Part of the United States Government of the Right to Property and Non-Discrimination Held by Residents of the Texas Rio Grande Valley; Jeff G. Wilson, et al., An Analysis of Demographic Disparities Associated with the Proposed U.S.-Mexico Border Fence in Cameron County, Texas.

<sup>66</sup> Lindsay Eriksson & Melinda Taylor, The Environmental Impacts of the Border Wall Between Texas and Mexico.

<sup>67</sup> Zachary Hurwitz & Michelle Guzman, Violations on the Part of the United States Government of Indigenous Rights Held by Members of the Lipan Apache, Kickapoo, and Ysleta del Sur Tigua Peoples of the Texas-Mexico Border.

One Hundred Ninth Congress  
of the  
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Tuesday,  
the third day of January, two thousand and six*

An Act

To establish operational control over the international land and maritime borders  
of the United States.

*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 “Secure Fence Act of 2006”.

**SEC. 2. ACHIEVING OPERATIONAL CONTROL ON THE BORDER.**

(a) IN GENERAL.—Not later than 18 months after the date of the enactment of this Act, the Secretary of Homeland Security shall take all actions the Secretary determines necessary and appropriate to achieve and maintain operational control over the entire international land and maritime borders of the United States, to include the following—

(1) systematic surveillance of the international land and maritime borders of the United States through more effective use of personnel and technology, such as unmanned aerial vehicles, ground-based sensors, satellites, radar coverage, and cameras; and

(2) physical infrastructure enhancements to prevent unlawful entry by aliens into the United States and facilitate access to the international land and maritime borders by United States Customs and Border Protection, such as additional checkpoints, all weather access roads, and vehicle barriers.

(b) OPERATIONAL CONTROL DEFINED.—In this section, the term “operational control” means the prevention of all unlawful entries into the United States, including entries by terrorists, other unlawful aliens, instruments of terrorism, narcotics, and other contraband.

(c) REPORT.—Not later than one year after the date of the enactment of this Act and annually thereafter, the Secretary shall submit to Congress a report on the progress made toward achieving and maintaining operational control over the entire international land and maritime borders of the United States in accordance with this section.

**SEC. 3. CONSTRUCTION OF FENCING AND SECURITY IMPROVEMENTS  
IN BORDER AREA FROM PACIFIC OCEAN TO GULF OF  
MEXICO.**

Section 102(b) of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (Public Law 104–208; 8 U.S.C. 1103 note) is amended—

H. R. 6061—2

(1) in the subsection heading by striking “NEAR SAN DIEGO, CALIFORNIA”; and

(2) by amending paragraph (1) to read as follows:

“(1) SECURITY FEATURES.—

“(A) REINFORCED FENCING.—In carrying out subsection (a), the Secretary of Homeland Security shall provide for least 2 layers of reinforced fencing, the installation of additional physical barriers, roads, lighting, cameras, and sensors—

“(i) extending from 10 miles west of the Tecate, California, port of entry to 10 miles east of the Tecate, California, port of entry;

“(ii) extending from 10 miles west of the Calexico, California, port of entry to 5 miles east of the Douglas, Arizona, port of entry;

“(iii) extending from 5 miles west of the Columbus, New Mexico, port of entry to 10 miles east of El Paso, Texas;

“(iv) extending from 5 miles northwest of the Del Rio, Texas, port of entry to 5 miles southeast of the Eagle Pass, Texas, port of entry; and

“(v) extending 15 miles northwest of the Laredo, Texas, port of entry to the Brownsville, Texas, port of entry.

“(B) PRIORITY AREAS.—With respect to the border described—

“(i) in subparagraph (A)(ii), the Secretary shall ensure that an interlocking surveillance camera system is installed along such area by May 30, 2007, and that fence construction is completed by May 30, 2008; and

“(ii) in subparagraph (A)(v), the Secretary shall ensure that fence construction from 15 miles northwest of the Laredo, Texas, port of entry to 15 southeast of the Laredo, Texas, port of entry is completed by December 31, 2008.

“(C) EXCEPTION.—If the topography of a specific area has an elevation grade that exceeds 10 percent, the Secretary may use other means to secure such area, including the use of surveillance and barrier tools.”.

**SEC. 4. NORTHERN BORDER STUDY.**

(a) IN GENERAL.—The Secretary of Homeland Security shall conduct a study on the feasibility of a state-of-the-art infrastructure security system along the northern international land and maritime border of the United States and shall include in the study—

(1) the necessity of implementing such a system;

(2) the feasibility of implementing such a system; and

(3) the economic impact implementing such a system will have along the northern border.

(b) REPORT.—Not later than one year after the date of the enactment of this Act, the Secretary of Homeland Security shall submit to the Committee on Homeland Security of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate a report that contains the results of the study conducted under subsection (a).

**SEC. 5. EVALUATION AND REPORT RELATING TO CUSTOMS AUTHORITY  
TO STOP CERTAIN FLEEING VEHICLES.**

(a) **EVALUATION.**—Not later than 30 days after the date of the enactment of this Act, the Secretary of Homeland Security shall—

(1) evaluate the authority of personnel of United States Customs and Border Protection to stop vehicles that enter the United States illegally and refuse to stop when ordered to do so by such personnel, compare such Customs authority with the authority of the Coast Guard to stop vessels under section 637 of title 14, United States Code, and make an assessment as to whether such Customs authority should be expanded;

(2) review the equipment and technology available to United States Customs and Border Protection personnel to stop vehicles described in paragraph (1) and make an assessment as to whether or not better equipment or technology is available or should be developed; and

(3) evaluate the training provided to United States Customs and Border Protection personnel to stop vehicles described in paragraph (1).

(b) **REPORT.**—Not later than 60 days after the date of the enactment of this Act, the Secretary of Homeland Security shall submit to the Committee on Homeland Security of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate a report that contains the results of the evaluation conducted under subsection (a).

*Speaker of the House of Representatives.*

*Vice President of the United States and  
President of the Senate.*

## H.R.2764

### Consolidated Appropriations Act, 2008 (Enrolled as Agreed to or Passed by Both House and Senate)

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#### **BORDER SECURITY FENCING, INFRASTRUCTURE, AND TECHNOLOGY**

For expenses for customs and border protection fencing, infrastructure, and technology, \$1,225,000,000, to remain available until expended: *Provided*, That of the amount provided under this heading, \$1,053,000,000 is designated as described in section 5 (in the matter preceding division A of this consolidated Act): *Provided further*, That of the amount provided under this heading, \$650,000,000 shall not be obligated until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure, prepared by the Secretary of Homeland Security and submitted within 90 days after the date of enactment of this Act, for a program to establish a security barrier along the borders of the United States of fencing and vehicle barriers, where practicable, and other forms of tactical infrastructure and technology, that includes:

- (1) a detailed accounting of the program's progress to date relative to system capabilities or services, system performance levels, mission benefits and outcomes, milestones, cost targets, program management capabilities, identification of the maximum investment (including lifecycle costs) required by the Secure Border Initiative network or any successor contract, and description of the methodology used to obtain these cost figures;
- (2) a description of how activities will further the objectives of the Secure Border Initiative, as defined in the Secure Border Initiative multi-year strategic plan, and how the plan allocates funding to the highest priority border security needs;
- (3) an explicit plan of action defining how all funds are to be obligated to meet future program commitments, with the planned expenditure of funds linked to the milestone-based delivery of specific capabilities, services, performance levels, mission benefits and outcomes, and program management capabilities;
- (4) an identification of staffing (including full-time equivalents, contractors, and detailees) requirements by activity;
- (5) a description of how the plan addresses security needs at the Northern Border and the ports of entry, including infrastructure, technology, design and operations requirements;
- (6) a report on costs incurred, the activities completed, and the progress made by the program in terms of obtaining operational control of the entire border of the United States;
- (7) a listing of all open Government Accountability Office and Office of Inspector General recommendations related to the program and the status

of Department of Homeland Security actions to address the recommendations, including milestones to fully address them;

(8) a certification by the Chief Procurement Officer of the Department that the program has been reviewed and approved in accordance with the investment management process of the Department, and that the process fulfills all capital planning and investment control requirements and reviews established by the Office of Management and Budget, including Circular A-11, part 7;

(9) a certification by the Chief Information Officer of the Department that the system architecture of the program is sufficiently aligned with the information systems enterprise architecture of the Department to minimize future rework, including a description of all aspects of the architectures that were and were not assessed in making the alignment determination, the date of the alignment determination, and any known areas of misalignment along with the associated risks and corrective actions to address any such areas;

(10) a certification by the Chief Procurement Officer of the Department that the plans for the program comply with the Federal acquisition rules, requirements, guidelines, and practices, and a description of the actions being taken to address areas of non-compliance, the risks associated with them along with any plans for addressing these risks, and the status of their implementation;

(11) a certification by the Chief Information Officer of the Department that the program has a risk management process that regularly and proactively identifies, evaluates, mitigates, and monitors risks throughout the system life cycle and communicates high-risk conditions to U.S. Customs and Border Protection and Department of Homeland Security investment decision makers, as well as a listing of all the program's high risks and the status of efforts to address them;

(12) a certification by the Chief Human Capital Officer of the Department that the human capital needs of the program are being strategically and proactively managed, and that current human capital capabilities are sufficient to execute the plans discussed in the report;

(13) an analysis by the Secretary for each segment, defined as no more than 15 miles, of fencing or tactical infrastructure, of the selected approach compared to other, alternative means of achieving operational control; such analysis should include cost, level of operational control, possible unintended effects on communities, and other factors critical to the decision making process;

(14) a certification by the Chief Procurement Officer of the Department of Homeland Security that procedures to prevent conflicts of interest between the prime integrator and major subcontractors are established and that the Secure Border Initiative Program Office has adequate staff and resources to effectively manage the Secure Border Initiative program, Secure Border Initiative network contract, and any related contracts, including the exercise of technical oversight, and a certification by the Chief

Information Officer of the Department of Homeland Security that an independent verification and validation agent is currently under contract for the projects funded under this heading; and

(15) is reviewed by the Government Accountability Office:

*Provided further*, That the Secretary shall report to the Committees on Appropriations of the Senate and the House of Representatives on program progress to date and specific objectives to be achieved through the award of current and remaining task orders planned for the balance of available appropriations: (1) at least 30 days prior to the award of any task order requiring an obligation of funds in excess of \$100,000,000; and (2) prior to the award of a task order that would cause cumulative obligations of funds to exceed 50 percent of the total amount appropriated: *Provided further*, That of the funds provided under this heading, not more than \$2,000,000 shall be used to reimburse the Defense Acquisition University for the costs of conducting a review of the Secure Border Initiative network contract and determining how and whether the Department is employing the best procurement practices: *Provided further*, That none of the funds under this heading may be obligated for any project or activity for which the Secretary has exercised waiver authority pursuant to section 102(c) of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1103 note) until 15 days have elapsed from the date of the publication of the decision in the Federal Register.

SEC. 564. IMPROVEMENT OF BARRIERS AT BORDER. (a) Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1103 note) is amended--

(1) in subsection (a), by striking 'Attorney General, in consultation with the Commissioner of Immigration and Naturalization,' and inserting 'Secretary of Homeland Security'; and

(2) in subsection (b)--

(A) in the subsection heading, by striking 'in the Border Area' and inserting 'Along the Border';

(B) in paragraph (1)--

(i) in the heading, by striking 'SECURITY FEATURES' and inserting 'ADDITIONAL FENCING ALONG SOUTHWEST BORDER'; and

(ii) by striking subparagraphs (A) through (C) and inserting the following:

`(A) REINFORCED FENCING- In carrying out subsection (a), the Secretary of Homeland Security shall construct reinforced fencing along not less than 700 miles of the southwest border where fencing would be most practical and effective and provide for the installation of additional physical barriers, roads, lighting, cameras, and sensors to gain operational control of the southwest border.

`(B) PRIORITY AREAS- In carrying out this section, the Secretary of Homeland Security shall--

`(i) identify the 370 miles, or other mileage determined by the Secretary, whose authority to determine other mileage shall expire on December 31, 2008, along the southwest border where fencing would be most practical and effective in deterring smugglers and aliens attempting to gain illegal entry into the United States; and

`(ii) not later than December 31, 2008, complete construction of reinforced fencing along the miles identified under clause (i).

`(C) CONSULTATION-

`(i) IN GENERAL- In carrying out this section, the Secretary of Homeland Security shall consult with the Secretary of the Interior, the Secretary of Agriculture, States, local governments, Indian tribes, and property owners in the United States to minimize the impact on the environment, culture, commerce, and quality of life for the communities and residents located near the sites at which such fencing is to be constructed.

`(ii) SAVINGS PROVISION- Nothing in this subparagraph may be construed to--

`(I) create or negate any right of action for a State, local government, or other person or entity affected by this subsection; or

`(II) affect the eminent domain laws of the United States or of any State.

`(D) LIMITATION ON REQUIREMENTS- Notwithstanding subparagraph (A), nothing in this paragraph shall require the Secretary of Homeland Security to install fencing, physical barriers, roads, lighting, cameras, and sensors in a particular location along an international border of the United States, if the Secretary determines that the use or placement of such resources is not the most appropriate means to achieve and maintain operational control over the international border at such location.'; and

(C) in paragraph (4), by striking `to carry out this subsection not to exceed \$12,000,000' and inserting `such sums as may be necessary to carry out this subsection'.

(b) No funds appropriated in this Act for U.S. Customs and Border Protection `Border Security Fencing, Infrastructure, and Technology' may be obligated unless the Secretary of Homeland Security has complied with section 102(b)(2)(C)(i) of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (8 U.S.C. 1103 note) as amended by subsection (a)(2).

# CRS Report for Congress

## Border Security: Barriers Along the U.S. International Border

Updated May 13, 2008

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Analyst in Domestic Security  
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American Law Division



Prepared for Members and  
Committees of Congress

# Border Security: Barriers Along the U.S. International Border

## Summary

Congress has repeatedly shown interest in examining and expanding the barriers being deployed along the U.S. international land border. The 109<sup>th</sup> Congress passed a number of laws affecting these barriers, and oversight of these laws and of the construction process may be of interest to the 110<sup>th</sup> Congress. The United States Border Patrol (USBP) deploys fencing, which aims to impede the illegal entry of individuals, and vehicle barriers, which aim to impede the illegal entry of vehicles (but not individuals) along the border. The USBP first began erecting barriers in 1990 to deter illegal entries and drug smuggling in its San Diego sector. The ensuing 14 mile-long San Diego “primary fence” formed part of the USBP’s “Prevention Through Deterrence” strategy, which called for reducing unauthorized migration by placing agents and resources directly on the border along population centers in order to deter would-be migrants from entering the country. In 1996, Congress passed the Illegal Immigration Reform and Immigrant Responsibility Act which, among other things, explicitly gave the Attorney General (now the Secretary of the Department of Homeland Security) broad authority to construct barriers along the border and authorized the construction of a secondary layer of fencing to buttress the completed 14 mile primary fence. Construction of the secondary fence stalled due to environmental concerns raised by the California Coastal Commission. In 2005, Congress passed the REAL ID Act that authorized the Secretary of the Department of Homeland Security (DHS) to waive all legal requirements in order to expedite the construction of border barriers. DHS has announced it will use this waiver authority to complete the San Diego fence. The Secure Fence Act of 2006 directed DHS to construct 850 miles of additional border fencing. This requirement was subsequently modified by the Consolidated Appropriations Act, 2008 (P.L. 110-161), which was enacted into law on December 26, 2007. The Act requires the Secretary of Homeland Security to construct fencing along not less than 700 miles of the southwest border.

While the San Diego fence, combined with an increase in agents and other resources in the USBP’s San Diego sector, has proven effective in reducing the number of apprehensions made in that sector, there is considerable evidence that the flow of illegal immigration has adapted to this enforcement posture and has shifted to the more remote areas of the Arizona desert. Nationally, the USBP made 1.2 million apprehensions in 1992 and again in 2004, suggesting that the increased enforcement in San Diego sector has had little impact on overall apprehensions. In addition to border fencing, the USBP deploys both permanent and temporary vehicle barriers to the border. Temporary vehicle barriers are typically chained together and can be moved to different locations at the USBP’s discretion. Permanent vehicle barriers are embedded in the ground and are meant to remain in one location.

A number of policy issues concerning border barriers generally and fencing specifically may be of interest to Congress, including, but not limited to, their effectiveness, costs versus benefits, location, design, environmental impact, potential diplomatic ramifications, and the costs of acquiring the land needed for construction.

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# Border Security: Barriers Along the U.S. International Border

## Background

Within the Department of Homeland Security's (DHS) Customs and Border Protection (CBP), the U.S. Border Patrol (USBP) is charged with securing our nation's land and maritime borders between official ports of entry (POE) to deter and interdict terrorists, weapons of mass destruction, and aliens attempting to enter the country unlawfully. In order to discharge its duties, the USBP deploys personnel, technology, and tactical infrastructure such as vehicle barriers and fencing. Fencing is erected on the border to impede the illegal entry of unauthorized aliens, while vehicle barriers are designed to impede the entry of vehicles but do not impede the entry of individuals. This report will analyze the barriers that are currently being constructed and maintained along the border by the USBP, including historical and future cost estimates and the policy issues involved. Because the current debate has largely focused on the deployment of fencing to the border, this report will focus on the policy issues surrounding the construction of border fencing. However, information concerning the kinds of vehicle barriers being deployed at the border will be provided where available.

Using the broad powers granted to the Attorney General (AG) to control and guard the U.S. border,<sup>1</sup> the USBP began erecting a barrier known as the "primary fence" directly on the border in 1990 to deter illegal entries and drug smuggling in its San Diego sector.<sup>2</sup> The San Diego fence formed part of the USBP's "Prevention Through Deterrence" strategy,<sup>3</sup> which called for reducing unauthorized migration by placing agents and resources directly on the border along population centers in order to deter would-be migrants from entering the country. The San Diego primary fence was completed in 1993, covering the first 14 miles of the border from the Pacific Ocean. The fence was constructed of 10-foot-high welded steel army surplus landing

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<sup>1</sup> 8 U.S.C. §1103 (a)(5). Although the law still cites to the Attorney General, the authorities granted by this section now appear to rest with the Secretary of DHS. See The Homeland Security Act of 2002, P.L. 104-208, §§102(a), 441, 1512(d) and 1517 (references to the Attorney General or Commissioner in statute and regulations are deemed to refer to the Secretary of DHS).

<sup>2</sup> For more information on the San Diego border fence, please refer to CRS Report RS22026, *Border Security: The San Diego Fence*, by Blas Nuñez-Neto and Michael John Garcia.

<sup>3</sup> For an expanded discussion of the USBP, please refer to CRS Report RL32562, *Border Security: The Role of the U.S. Border Patrol*, by Blas Nuñez-Neto.

mats<sup>4</sup> with the assistance of the Corps of Engineers and the California National Guard. In addition to the 14 miles of primary fencing erected in its San Diego sector, the USBP maintains stretches of primary fencing in several other sectors along the southwest border, including Yuma, Tucson, El Centro, and El Paso.

In 1996, Congress passed the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), which, among other things, explicitly gave the Attorney General broad authority to construct barriers along the border and authorized the Immigration and Naturalization Service (INS) to construct a secondary layer of fencing to buttress the completed 14 mile primary fence.<sup>5</sup> Construction of the secondary fence stalled after 9.5 miles had been completed due to environmental concerns raised by the California Coastal Commission (CCC). In 2005, Congress passed the REAL ID Act, which, among other things, authorized the Secretary of the Department of Homeland Security (DHS) to waive all legal requirements to expedite the construction of border barriers.<sup>6</sup> In 2006, Congress passed the Secure Fence Act, which, among other things, directed DHS to construct five separate stretches of fencing along the southern border totaling 850 miles.<sup>7</sup> This requirement was modified by provisions in Division E of H.R. 2764, the Consolidated Appropriations Act, 2008 (P.L. 110-161), which was enacted into law on December 26, 2007. The Secretary of Homeland Security is now required to construct reinforced fencing along not less than 700 miles of the southwest border, in locations where fencing is deemed most practical and effective.

In addition to border fencing, the USBP deploys both permanent and temporary vehicle barriers at the border. Vehicle barriers are meant to stop the entry of vehicles, but not people, into the United States. Temporary vehicle barriers are typically chained together and can be moved to different locations at the USBP's discretion. Permanent vehicle barriers are embedded in the ground and are meant to remain in one location. The USBP is currently erecting a 150 mile stretch of vehicle barriers in conjunction with the National Park Service near Yuma, Arizona.

## **The San Diego Border Primary Fence**

The USBP's San Diego sector extends along the first 66 miles from the Pacific Ocean of the international border with Mexico, and covers approximately 7,000 square miles of territory. Located north of Tijuana and Tecate, Mexican cities with a combined population of more than two million people, the sector features no

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<sup>4</sup> U.S. Government Accountability Office, *Border Control — Revised Strategy Is Showing Some Positive Results*, GAO/GGD-95-30, January 31, 1995. (Hereafter referred to as GAO Report 95-30.)

<sup>5</sup> See P.L. 104-208, Div. C. IIRIRA was passed as part of the Omnibus Consolidated Appropriations Act of 1997.

<sup>6</sup> P.L. 109-13.

<sup>7</sup> From CBP Congressional Affairs, September 25, 2006.

natural barriers to entry by unauthorized migrants and smugglers.<sup>8</sup> As a result of this geographical reality and in response to the large numbers of unauthorized aliens crossing the border in the area, in 1990 the USBP began erecting a physical barrier to deter illegal entries and drug smuggling. The ensuing “primary” fence covered the first 14 miles of the border, starting from the Pacific Ocean, and was constructed of 10-foot-high welded steel.<sup>9</sup>

## Operation Gatekeeper

The primary fence, by itself, did not have a discernible impact on the influx of unauthorized aliens coming across the border in San Diego. As a result of this, Operation Gatekeeper was officially announced in the San Diego sector on October 1, 1994. The chief elements of the operation were large increases in the overall manpower of the sector, and the deployment of USBP personnel directly along the border to deter illegal entry. The strategic plan called for three tiers of agent deployment. The first tier of agents was deployed to fixed positions on the border. The agents in this first tier were charged with preventing illegal entry, apprehending those who attempted to enter, and generally observing the border. A second tier of agents was deployed north of the border in the corridors that were heavily used by illegal aliens. The second tier of agents had more freedom of movement than the first tier and were charged with containing and apprehending those aliens who made it past the first tier. The third tier of agents were typically assigned to man vehicle checkpoints further inland to apprehend the traffic that eluded the first two tiers. As the Department of Justice Inspector General report notes, “given Gatekeeper’s deterrence emphasis, many agents were assigned to first-tier, fixed positions along the border. These agents were instructed to remain in their assigned positions rather than chase alien traffic passing through adjacent areas. Prior to Gatekeeper, such stationary positions were relatively rare.”<sup>10</sup>

Operation Gatekeeper resulted in significant increases in the manpower and other resources deployed to San Diego sector. Agents received additional night vision goggles, portable radios, and four-wheel drive vehicles, and light towers and seismic sensors were deployed.<sup>11</sup> According to the former INS, between October 1994 and June of 1998, San Diego sector saw the following increases in resources:

- USBP agent manpower increased by 150%;
- Seismic sensors deployed increased by 171%;
- Vehicle fleet increased by 152%.
- Infrared night-vision goggles increased from 12 to 49;

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<sup>8</sup> U.S. Department of Justice, Office of the Inspector General, *Operation Gatekeeper: An Investigation Into Allegations of Fraud and Misconduct*, July 1998, available at [[http://www.usdoj.gov/oig/special/9807/gkp01.htm#P160\\_18689](http://www.usdoj.gov/oig/special/9807/gkp01.htm#P160_18689)].

<sup>9</sup> GAO Report 95-30.

<sup>10</sup> U.S. Department of Justice, Office of the Inspector General, *Operation Gatekeeper: An Investigation Into Allegations of Fraud and Misconduct*, July 1998, at [<http://www.usdoj.gov/oig/special/9807/index.htm>]. (Hereafter referred to as DOJ-OIG Gatekeeper Report.)

<sup>11</sup> DOJ-OIG Gatekeeper Report.

- Permanent lighting increased from 1 mile to 6 miles, and 100 portable lighting platforms were deployed;
- Helicopter fleet increased from 6 to 10.<sup>12</sup>

As a result of the increase in resources and the new strategy that were the main components of Operation Gatekeeper, the USBP estimated in 1998 that the entire 66 miles of border patrolled by the San Diego sector's agents could be brought under control in five years.<sup>13</sup>

## **Sandia National Laboratory Study**

According to CBP, the primary fence, in combination with various USBP enforcement initiatives along the San Diego border region (i.e., Operation Gatekeeper), proved to be successful but fiscally and environmentally costly.<sup>14</sup> For example, as unauthorized aliens and smugglers breached the primary fence and attempted to evade detection, USBP agents were often forced to pursue the suspects through environmentally sensitive areas. It soon became apparent to immigration officials and lawmakers that the USBP needed, among other things, a "rigid" enforcement system that could integrate infrastructure (i.e., a multi-tiered fence and roads), manpower, and new technologies to further control the border region.

The concept of a three-tiered fence system was first recommended by a 1993 Sandia Laboratory study commissioned by the former Immigration and Naturalization Service (INS). According to the Sandia study, the use of multiple barriers in urban areas would increase the USBP's ability to discourage a significant number of illegal border crossers, to detect intruders early and delay them as long as possible, and to channel a reduced number of illegal border crossers to geographic locations where the USBP was better prepared to deal with them.<sup>15</sup> The Sandia study further noted that segments of the border could not be controlled at the immediate border due to the ruggedness of the terrain, and recommended the use of highway checkpoints in those areas to contain aliens after they had entered the country illegally.<sup>16</sup> The study concluded that aliens attempting to enter the United States from Mexico had shown remarkable resiliency in bypassing or destroying obstacles in their path, including the existing primary fence, and postulated that "[a] three-fence barrier

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<sup>12</sup> U.S. Department of Justice, Immigration and Naturalization Service, "Operation Gatekeeper Fact Sheet," July 14, 1998.

<sup>13</sup> DOJ-OIG Gatekeeper Report.

<sup>14</sup> See California Coastal Commission, *W 13a Staff Report and Recommendation on Consistency Determination*, CD-063-03, October 2003 [hereinafter "*CCC Staff Report*"], at 14-16 (stating that construction of the primary fence significantly assisted the USBP's efforts in deterring smuggling attempts via drive-throughs using automobiles and motorcycles).

<sup>15</sup> GAO 95-30, p. 13.

<sup>16</sup> GAO 95-30, p. 13.

system with vehicle patrol roads between the fences and lights will provide the necessary discouragement.”<sup>17</sup>

## Congressional Border Barrier Legislation

As previously mentioned, the INS constructed the primary fencing in San Diego using the broad authority granted to the AG in order to guard and control the U.S. border by the Immigration and Nationality Act (INA).<sup>18</sup> In 1996, Congress expressly authorized the AG to construct barriers at the border for the first time in the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA).<sup>19</sup> This legislation has subsequently been amended on several occasions.

### Section 102 of IIRIRA — Improvement of Barriers at the Border

Section 102 of IIRIRA concerned the improvement and construction of barriers at our international borders. As originally enacted, § 102(a) appeared to give the AG<sup>20</sup> broad authority to install additional physical barriers and roads “in the vicinity of the United States border to deter illegal crossings in areas of high illegal entry into the United States.” The phrase “vicinity of the United States border” was not defined in the INA or in immigration regulations. The section also did not stipulate what specific characteristics would designate an area as one of “high illegal entry.”

As originally enacted, § 102(b) mandated that the AG construct a barrier in the border area near San Diego. Specifically, §102(b) directed the AG to construct a three-tiered barrier along the 14 miles of the international land border of the U.S., starting at the Pacific Ocean and extending eastward. Section 102(b) ensured that the AG will build a barrier, pursuant to his broader authority in §102(a), near the San Diego area, although there is some debate concerning whether IIRIRA required *continuous* triple fencing and roads for the entire 14-mile corridor.<sup>21</sup> IIRIRA § 102(b) also provided authority for the acquisition of necessary easements, required certain safety features be incorporated into the design of the fence, and authorized a

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<sup>17</sup> Peter Andreas, “The Escalation of U.S. Immigration Control in the Post-NAFTA Era,” *Political Science Quarterly*, vol. 113, no. 4, winter 1998-1999, p. 595.

<sup>18</sup> 8 U.S.C. §1103 (a)(5).

<sup>19</sup> P.L. 104-208, §102.

<sup>20</sup> The Consolidated Appropriations Act, 2008 (P.L. 110-161) amended IIRIRA § 102 to expressly refer to the Secretary of Homeland Security, rather than the Attorney General. Although IIRIRA § 102 previously referred to the Attorney General, the authorities granted by this section nonetheless appeared to rest with the Secretary of DHS following the enactment of the Homeland Security Act of 2002. See P.L. 104-208, §§102(a), 441, 1512(d) and 1517 (references to the Attorney General or Commissioner in statute and regulations are deemed to refer to the Secretary).

<sup>21</sup> See CCC, *Staff Report*, *supra* note 14, at pp. 7 nt. 2 and 23 nt. 4.

total appropriation not to exceed \$12 million to carry out the section.<sup>22</sup> The Secure Fence Act of 2006 (P.L. 109-367) amended IIRIRA § 102(b) by *removing* the specific provisions authorizing construction of the San Diego fence (though not the provisions concerning fence safety features, easements, or appropriations) and adding provisions authorizing five stretches of two-layered reinforced fencing, totaling roughly 850 miles, along the southwest border.<sup>23</sup> IIRIRA § 102(b) was again amended by the Consolidated Appropriations Act, 2008 (P.L. 110-161). The Secretary of Homeland Security is now required to construct reinforced fencing along not less than 700 miles of the southwest border, in locations where fencing is deemed most practical and effective.<sup>24</sup> The Consolidated Appropriations Act also amended IIRIRA § 102(b) to authorize the appropriation of “sums as may be necessary to carry out this subsection.” Although IIRIRA § 102(b) no longer contains a specific authorization for the San Diego fence, the project appears permissible under the general fence authorization contained in IIRIRA §102(a).

As originally enacted, IIRIRA § 102(c) waived the Endangered Species Act (ESA) of 1973 (16 U.S.C. §§1531 *et seq.*) and the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. §§4321 *et seq.*), to the extent the AG determined necessary, in order to ensure expeditious construction of the barriers authorized to be constructed under §102. The waiver authority in this provision appeared to apply both to barriers that may be constructed *in the vicinity of the border* and to the barrier that was to be constructed near the San Diego area. The INS (and CBP after 2003) never exercised this original waiver authority, instead choosing to comply with the NEPA and the ESA. The INS published a Final Environmental Impact Study pursuant to NEPA and received a non-jeopardy Biological Opinion from the U.S. Fish and Wildlife Service under the ESA.<sup>25</sup> This waiver authority was expanded in the 109<sup>th</sup> Congress by the REAL ID Act, which will be discussed in greater detail subsequently, and DHS has exercised this expanded waiver authority in order to continue construction of the San Diego border fence, as well as physical barriers and roads along the southwest border.

Section 102(d) also provided the AG with various land acquisition authorities. In 2002, Congress authorized the AG to use INS funds to purchase land for enforcement fences and to construct the fences.<sup>26</sup>

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<sup>22</sup> The actual costs associated with constructing the San Diego fence have been considerably greater than anticipated by IIRIRA and will be discussed in more detail later in this report.

<sup>23</sup> For more detailed discussion of the Secure Fence Act, see *infra* at 29.

<sup>24</sup> For more detailed discussion of the amendments made by the Consolidated Appropriations Act, see *infra* at 26-27.

<sup>25</sup> Department of Homeland Security, *Environmental Impact Statement for the Completion of the 14-mile Border Infrastructure System, San Diego, California* (July 2003) [hereinafter “EIS, San Diego Border Fence”].

<sup>26</sup> P.L.107-273, §201(a).

## Expansion of Waiver Authority under the REAL ID Act

As mentioned above, pursuant to the REAL ID Act of 2005 (P.L. 109-13, Division B),<sup>27</sup> the Secretary of DHS was given broad authority to waive legal requirements that might otherwise delay the construction of the security barriers described under § 102 of IIRIRA. Specifically, the Secretary of DHS is authorized to waive *all legal requirements* necessary to ensure expeditious construction of these security barriers.<sup>28</sup> Such waivers are effective upon publication in the *Federal Register*. Federal district courts are provided with exclusive jurisdiction to review claims alleging that the actions or decisions of the Secretary violate the U.S. Constitution, and district court rulings may be reviewed only by the Supreme Court.

The scope of this waiver authority is substantial. Whereas IIRIRA had previously authorized the waiver of NEPA and ESA requirements, the REAL ID Act authorizes the waiver of *all* legal requirements determined necessary by the Secretary for the expeditious construction of authorized barriers, and only allows judicial review for constitutional claims. This waiver authority appears to apply to *all* barriers that may be constructed under IIRIRA — that is, both to barriers constructed in the vicinity of the border in areas of high illegal entry and to the barrier that is to be constructed near the San Diego area. Furthermore, these claims can only be appealed to the Supreme Court (i.e., there is no intermediate appellate review), whose review is discretionary.

Some have expressed concern with the apparent breadth of the waiver provision and the limited scope of judicial review of waiver decisions. As passed into law, the REAL ID Act waiver provision begins with the arguably ambiguous “notwithstanding any other law” phrase<sup>29</sup> and allows the waiver of all “legal

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<sup>27</sup> For more information on the REAL ID Act, see CRS Report RL32754, *Immigration: Analysis of the Major Provisions of the REAL ID Act of 2005*, by Michael John Garcia, Margaret Mikyung Lee, and Todd Tatelman.

<sup>28</sup> As initially introduced as H.R. 418, the REAL ID Act *required* the Secretary of DHS to waive *all laws* necessary to ensure expeditious construction of the security barriers. H.R. 418 was passed by the House as a stand-alone piece of legislation, but was subsequently attached as an amendment to House-passed H.R. 1268, the emergency supplemental appropriations bill for FY2005. During conference, language was revised in H.R. 1268, so that the Secretary was authorized, but not required, to waive all “legal requirements” (instead of “all laws”) deemed necessary to ensure construction of the security barriers. The conferees also added provisions to the REAL ID Act which made waiver decisions effective upon publication in the *Federal Register*, and permitted federal court review of waiver decisions only in limited circumstances. The conference version of H.R. 1268 was enacted on May 11, 2005.

<sup>29</sup> Some courts, for instance, have found the “notwithstanding” phrase not dispositive in determining the preemptive effect of a statute. See, e.g., *E.P. Paup v. Director*, OWCP, 999 F.2d 1341, 1348 (9<sup>th</sup> Cir. 1993); *Oregon Natural Resources Council v. Thomas*, 92 F.3d 792, 796 (9<sup>th</sup> Cir. 1996). But see *Puerto Rico v. M/V Emily S.*, 132 F.3d 818 (1<sup>st</sup> Cir. 1997); *Schneider v. United States*, 27 F.3d 1327 (8<sup>th</sup> Cir. 1994).

requirements.” Although the term “legal requirement” is not defined, it cannot grant the Secretary the authority to unilaterally waive a person’s constitutional rights.<sup>30</sup>

The provision has been construed by Secretary Chertoff to apply to the waiver of laws in their entirety, along with regulations and requirements deriving from or relating to such laws. Congress commonly waives preexisting laws, but the new waiver provision uses language and a combination of terms not typically seen in law. Most waiver provisions have contained qualifying language that (1) exempts an action from other requirements contained in the Act that authorizes the action, (2) specifically delineates the laws to be waived, or (3) waives a grouping of similar laws. Also common are waiver provisions that contain reporting requirements or restrictions which appear to limit their breadth.<sup>31</sup> One waiver authority that appears analogous to that contained in the REAL ID Act is § 203 of the Trans-Alaska Pipeline Authorization Act, as amended, which authorizes the Secretary of the Interior to waive all procedural requirements in law related to the construction of the Trans-Alaska pipeline and limits judicial review to constitutional claims.<sup>32</sup>

Although some argue that the waiver authority can extend to any law, including those seemingly unrelated to building a fence (e.g., civil rights or child labor laws), the provision is tempered by the requirement that the Secretary must determine the law (subject to the waiver) is necessary “to ensure expeditious construction” of the barriers. In other words, the Secretary may be confined to laws that, in effect, will impede the construction of the fence — not those that only tangentially relate to or do not necessarily interfere with construction. For example, because child labor laws would not prevent the Secretary from expeditiously constructing the fence, it follows that the Secretary does not have the authority to waive these protections. This interpretation is buttressed by the legislative history of the REAL ID Act, which indicates that several Members called for the waiver provision because of laws that were complicating and ultimately preventing the completion of the fence.<sup>33</sup> The decision to waive a law, nonetheless, is solely in the Secretary’s discretion. Until such time that DHS waives an applicable law, however, it must follow all legal requirements normally imposed on federal agencies.

On September 22, 2005, a notice was issued in the *Federal Register* indicating that Secretary Chertoff, acting pursuant to the authority provided under the REAL ID

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<sup>30</sup> “[T]he Constitution is filled with provisions that grant Congress or the States specific power to legislate in certain areas,” Justice Black wrote for the Court, but “these granted powers are always subject to the limitations that they may not be exercised in a way that violates other specific provisions of the Constitution.” *Williams v. Rhodes*, 393 U.S. 23, 29 (1968).

<sup>31</sup> Some of these waiver provisions grant the President or the head of an Executive agency the authority to waive a law[s] if deemed necessary in the *national interest* or in the interest of *national defense*. See, e.g., 10 U.S.C. §1107(a); 22 U.S.C. §2375(d); 29 U.S.C. §793; 42 U.S.C. §6212(b); 42 U.S.C. §6393(a)(2); 50 U.S.C. §2426(e). Examples of waiver authority with a congressional notification element include 15 U.S.C. §719f; 22 U.S.C. §2378; 22 U.S.C. §2371; and 41 U.S.C. §413.

<sup>32</sup> P.L. 93-153, Title II, § 203 (1973); 43 U.S.C. §1652(c)-(d).

<sup>33</sup> 151 Cong. Rec. H557 (daily ed. February 10, 2005).

Act, had exercised waiver authority over various legal requirements in order to ensure the expeditious construction of the San Diego border fence.<sup>34</sup> A listing of laws waived by the Secretary can be found in **Appendix F**. A notice was also published on January 19, 2007, indicating that the Secretary was waiving various legal requirements in order to ensure the expeditious construction of physical barriers and roads in the vicinity of U.S. border area known as the Barry M. Goldwater Range (BMGR), in southwestern Arizona.<sup>35</sup> A listing of the federal laws waived by the Secretary pursuant to this notice can be found in **Appendix G**.

On October 5, 2007, Defenders of Wildlife and the Sierra Club brought suit in the U.S. District Court for the District of Columbia seeking a temporary restraining order enjoining DHS from border fence and road-building activities in the San Pedro Riparian National Conservation Area, located in the vicinity of the U.S. border in southeastern Arizona.<sup>36</sup> On October 10, 2007, the presiding district court judge issued a temporary restraining order (TRO) halting fence construction activities in the Conservation Area, finding the relevant federal agencies had failed to carry out an environmental assessment as legally required. On October 26, 2007, a notice was published in the *Federal Register* indicating that the Secretary of Homeland Security had exercised waiver authority over various legal requirements in order to ensure the expeditious construction of physical barriers or roads through the San Pedro Riparian National Conservation Area (including any and all lands covered by the TRO),<sup>37</sup> thereby enabling the DHS to resume fence construction. A listing of the federal laws waived by the Secretary pursuant to this notice can be found in **Appendix H**. Defenders of Wildlife and the Sierra Club subsequently filed an amended complaint on November 1, 2007, challenging the constitutionality of DHS's waiver authority.<sup>38</sup> On December 18, 2007, the district court issued an opinion rejecting plaintiffs'

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<sup>34</sup> Dept. of Homeland Security, "Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 as Amended by Section 102 of the REAL ID Act of 2005," 70 *Federal Register* 55622-02, September 22, 2005 [hereinafter "DHS Notice"].

<sup>35</sup> Dept. of Homeland Security, "Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 as Amended by Section 102 of the REAL ID Act of 2005 and as Amended by the Secure Fence Act of 2006," 72 *Federal Register* 2535-01, January 19, 2007.

<sup>36</sup> Defenders of Wildlife v. Bureau of Land Management, Case 1:07-cv-01801-ESH (D.D.C. 2007). Plaintiffs' request for a temporary restraining order can be viewed at [[http://www.defenders.org/resources/publications/programs\\_and\\_policy/in\\_the\\_courts/san\\_pedro\\_border\\_wall\\_tro\\_filing.pdf](http://www.defenders.org/resources/publications/programs_and_policy/in_the_courts/san_pedro_border_wall_tro_filing.pdf)].

<sup>37</sup> Dept. of Homeland Security, "Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 as Amended by Section 102 of the REAL ID Act of 2005 and as Amended by the Secure Fence Act of 2006," 72 *Federal Register* 60870-01, October 26, 2007.

<sup>38</sup> Plaintiffs' amended complaint can be viewed at [[http://www.defenders.org/resources/publications/programs\\_and\\_policy/in\\_the\\_courts/san\\_pedro\\_border\\_wall\\_amended\\_complaint.pdf](http://www.defenders.org/resources/publications/programs_and_policy/in_the_courts/san_pedro_border_wall_amended_complaint.pdf)].

constitutional challenge and granting DHS's motion to dismiss the case.<sup>39</sup> Consequently, the plaintiffs have filed a petition for a writ of certiorari to the U.S. Supreme Court, which is still pending.

On April 3, 2008, DHS published two separate notices in the *Federal Register* indicating that the Secretary of Homeland Security had exercised his waiver authority over a panoply of legal requirements regarding the construction of the border fence. The first notice announced the exercise of the waiver authority to ensure the construction of border fencing in Hidalgo County, Texas. A list of the waived laws can be found in **Appendix I**. The other notice waived laws to expedite the construction of fencing on certain lands along the border located in California, Arizona, New Mexico, and Texas. **Appendix J** enumerates the laws waived by the Secretary for this purpose.

## The Secure Fence Act

The Secure Fence Act (P.L. 109-367) was signed into law on October 26, 2006. The Act directed DHS to construct two-layered reinforced fencing and additional physical barriers, roads, lighting, cameras, and sensors along five stretches of the southwest border. CBP has estimated that these stretches of fencing total roughly 850 miles<sup>40</sup> of the southern border. The five stretches of the border that DHS was required to fence were the 20 miles around Tecate, CA; from Calexico, CA to Douglas, AZ; from Columbus, NM to El Paso, TX; from Del Rio, TX to Eagle Pass, TX; and from Laredo, TX to Brownsville, TX. The Act designated the roughly 370 mile portion of the fence between Calexico, CA, and Douglas, AZ, a priority area and directed DHS to ensure that "an interlocking surveillance camera system" is installed along this area by May 30, 2007, and that the fence is completed in this area by May 30, 2008. The Act also designated a 30-mile stretch around Laredo, TX, as a priority area and directed DHS to complete this fencing by December 31, 2008.

The requirements enacted by the Secure Fence Act were modified in the 110<sup>th</sup> Congress by the Consolidated Appropriations Act, FY2008 (P.L. 110-161), which was enacted on December 26, 2007. The Act makes a number of modifications to §102 of IIRIRA, significantly increasing the Secretary of Homeland Security's discretion as to where to construct fencing along the southwest border. Whereas the Secretary was previously required to install roughly 850 miles of reinforced fencing along five stretches of the southwest border, a more general requirement has now been imposed on the Secretary to construct reinforced fencing:

along not less than 700 miles of the southwest border where fencing would be most practical and effective and provide for the installation of additional physical barriers, roads, lighting, cameras, and sensors to gain operational control of the southwest border.<sup>41</sup>

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<sup>39</sup> *Defenders of Wildlife v. Chertoff*, Case 1:07-cv-01801-ESH, 2007 U.S. Dist. LEXIS 92648 (D.D.C. December 18, 2007)

<sup>40</sup> From CBP Congressional Affairs, September 25, 2006.

<sup>41</sup> P.L. 110-161, Div. E, § 564. Unlike under prior law, the Consolidated Appropriations (continued...)

The Act further specifies that the Secretary of Homeland Security is not required to install:

fencing, physical barriers, roads, lighting, cameras, and sensors in a particular location along an international border of the United States, if the Secretary determines that the use or placement of such resources is not the most appropriate means to achieve and maintain operational control over the international border at such location.<sup>42</sup>

The Act also amends the provisions of IIRIRA §102 concerning fence construction in priority areas, by requiring the Secretary of Homeland Security to identify either 370 miles or “other mileage” along the southwest border where fencing would be most practical and effective, and to complete construction of fencing in identified areas by December 31, 2008. This language replaces the prior language of IIRIRA §102 concerning priority areas, which had been added by the Secure Fence Act.

The Consolidated Appropriations Act does not modify the existing waiver provision or limitation on judicial review contained in IIRIRA §102, but does impose new consultation requirements on the Secretary of Homeland Security when carrying out duties under this section, and conditions appropriations under the Act upon compliance with these requirements. Specifically, the Secretary is required to consult with the Secretaries of the Interior and Agriculture, state and local governments, Indian tribes, and property owners “to minimize the impact on the environment, culture, commerce, and quality of life” in areas near where fencing is to be constructed. The Act specifies that this consultation requirement does not create or negate any right to legal action by an affected person or entity.

## **The San Diego Sandia Fence**

In 1996, construction began on the secondary fence that had been recommended by the Sandia study with congressional approval. The new fence was to parallel the fourteen miles of primary fence already constructed on land patrolled by the Imperial Beach Station of the San Diego sector, and included permanent lighting as well as an access road in between the two layers of fencing. Of the 14 miles of fencing authorized to be constructed by IIRIRA, nine miles of the triple fence had been completed by the end of FY2005. Two sections, including the final three mile stretch of fence that leads to the Pacific Ocean, have not been finished.

## **The California Coastal Commission**

In order to finish the fence, the USBP proposed to fill a deep canyon known as “Smuggler’s Gulch” with over two million cubic yards of dirt. The triple-fence

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<sup>41</sup> (...continued)

Act, as enacted, does not specify that reinforced fencing be “at least 2 layers.” See P.L. 104-208, Div. C, § 102(b), as amended by P.L. 109-367, § 3.

<sup>42</sup> Ibid.

would then be extended across the filled gulch. California's Coastal Commission (CCC), however, objected to and essentially halted the completion of the fence in February 2004, because it determined that CBP had not demonstrated, among other things, that the project was consistent "to the maximum extent practicable" with the policies of the California Coastal Management Program — a state program approved under the federal Coastal Zone Management Act (CZMA) (16 U.S.C. §§1451-1464).<sup>43</sup> The CZMA requires federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone to be carried out in a manner that is consistent to the maximum extent practicable with the policies of an approved state management program.<sup>44</sup> If a federal court finds a federal activity to be inconsistent with an approved state program and the Secretary of DHS (Secretary) determines that compliance is unlikely to be achieved through mediation, the President may exempt from compliance the activity if the President determines that the activity is in the "paramount interest of the United States."<sup>45</sup>

According to the CCC, CBP did not believe that it could make further environmental concessions and still comply with IIRIRA. The CCC held that Congress did not specify a particular design in the IIRIRA, and that CBP failed to present a convincing argument that the less environmentally damaging alternative projects it rejected would have prevented compliance with the IIRIRA. Specifically, the CCC was concerned with the potential for significant adverse effects on (1) the Tijuana River National Estuarine Research and Reserve; (2) state and federally listed threatened and endangered species; (3) lands set aside for protection within California's Multiple Species Conservation Program; and, (4) other aspects of the environment. In response to the CCC's findings, Congress expanded the waiver authority in the REAL ID Act, described in more detail below, in order to allow DHS to waive the CZMA, among other things.

## **Current Status of the San Diego Triple Fence**

As previously discussed, DHS announced in September 2005 that it was applying its waiver authority established by the REAL ID Act to facilitate the completion of the San Diego fence.<sup>46</sup> The military has now begun the process of upgrading and rebuilding the San Diego border fence. Congress appropriated \$31 million in FY2007 for construction of the remaining 4.5 miles of the San Diego

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<sup>43</sup> See CCC, *Staff Report*, at 5-7. After California's Coastal Management Plan was approved by the National Oceanic and Atmospheric Administration pursuant to the CZMA in 1977, apparently all federal activities affecting coastal zone resources in California became subject to the CCC's regulatory purview.

<sup>44</sup> 16 U.S.C. §1456(c).

<sup>45</sup> 16 U.S.C. §1456(c)(1)(B).

<sup>46</sup> DHS Notice, *supra* note 35.

fence.<sup>47</sup> DHS has begun construction on the final 4.5 miles of the San Diego fence, beginning the process of filling in the area known as Smuggler's Gulch.<sup>48</sup>

## The San Diego Fence and USBP Apprehensions

Apprehension statistics have long been used as a performance measure by the USBP. However, the number of apprehensions may be a misleading statistic for several reasons, including the data's focus on events rather than people<sup>49</sup> and the fact that there are no reliable estimates for how many aliens successfully evade capture. This makes it difficult to establish a firm correlation between the number of apprehensions in a given sector and the number of people attempting to enter through that sector. While caution should be taken when attempting to draw conclusions about the efficacy of policy initiatives based solely on apprehensions statistics, *they remain the most reliable way to codify* trends in illegal migration along the border.

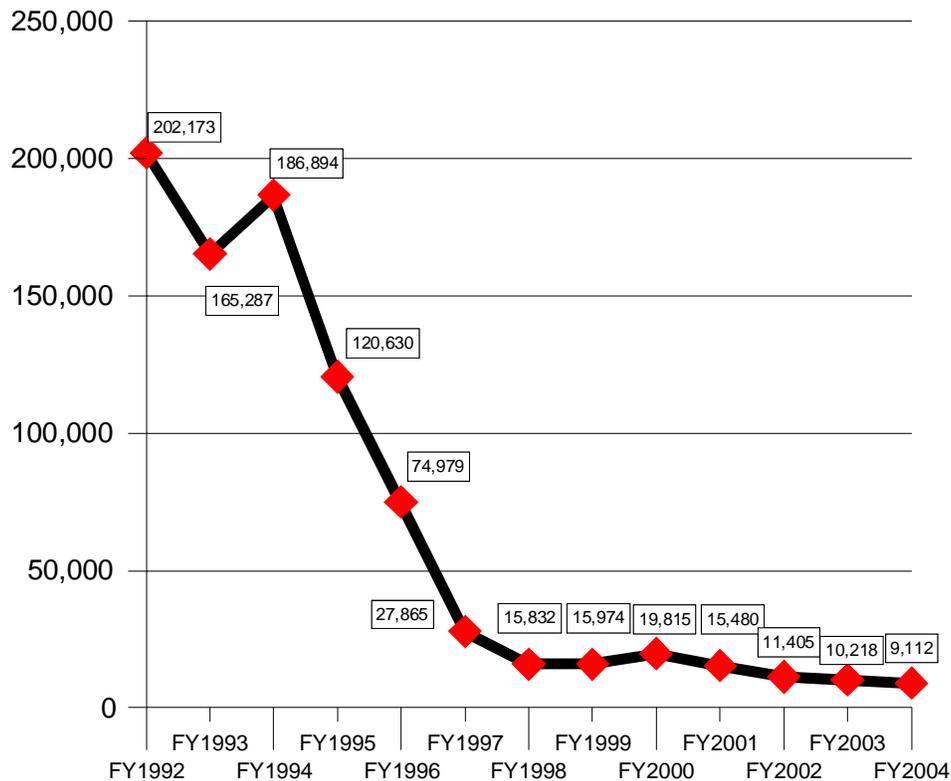
The San Diego fence spans two border patrol stations within the San Diego sector: Imperial Beach station and Chula Vista station. As previously noted, the primary fence was constructed in those two stations beginning in FY1990; the secondary fence was constructed beginning in FY1996. **Figure 1** shows the stark decrease in apprehensions at the Imperial Beach station *from* FY1992 *to* FY2004. The majority of the decrease occurred in the four year period from FY1995 through FY1998 and coincided with Operation Gatekeeper, which as previously noted combined the construction of fencing along the border with an increase in agents and other resources deployed directly along the border. For the period from FY1998 to FY2004, apprehensions at the Imperial Beach station averaged about 14,000 each year.

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<sup>47</sup> H.Rept. 109-699, p. 130.

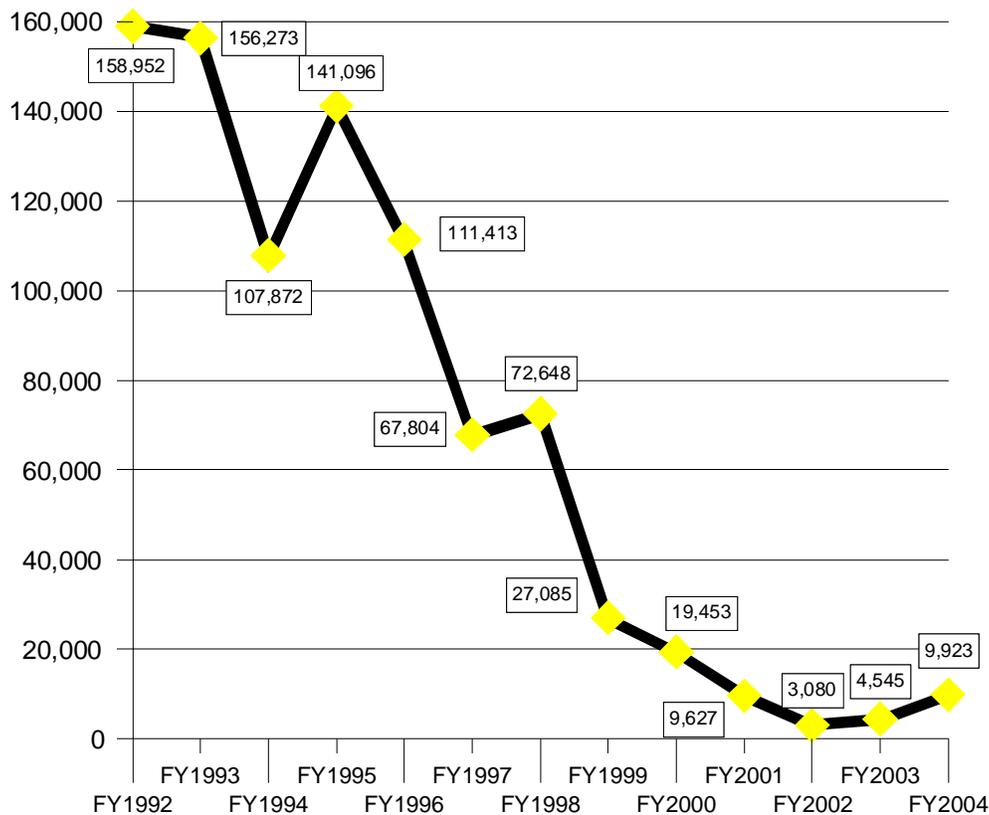
<sup>48</sup> Interview with CBP Congressional Affairs, January 26, 2006.

<sup>49</sup> If the same person is apprehended multiple times attempting to enter the country in one year, each apprehension will be counted separately by the USBP in generating their apprehension statistics. This means that apprehension statistics may overstate the number of aliens apprehended each year.

**Figure 1. Imperial Beach Station Apprehensions**

**Source:** CRS analysis of CBP data.

**Figure 2** shows the apprehensions at the Chula Vista station over the same period of time. The trend in apprehensions at Chula Vista is somewhat similar to Imperial Beach, with overall apprehensions dropping significantly *from* FY1992 *to* FY2002. Apprehensions increased slightly from FY2002 to FY2004, but remain far below their early 1990s levels. Interestingly, the rate of decline in Chula Vista in the mid-1990s lagged behind the rate of decline in Imperial Beach station during this period. This suggests that as enforcement ramped up in Imperial Beach station, unauthorized migration shifted westward to Chula Vista. From FY1992 to FY1998, for example, apprehensions decreased by 92% in Imperial Beach, but only by 54% in Chula Vista. From FY1998 through FY2001, apprehensions leveled off in Imperial Beach, averaging around 16,000 a year, but continued to decline at Chula Vista, from 72,648 in FY1998 to 3,080 in FY2002. Overall, the trend indicates the following: as enforcement measures, in this case including fencing, were deployed — first focusing on Imperial Beach, and later extending to Chula Vista — the flow of unauthorized migration pushed eastward. The drop in apprehensions occurred first in Imperial Beach, and then later pushed eastward to Chula Vista.

**Figure 2. Chula Vista Station Apprehensions**

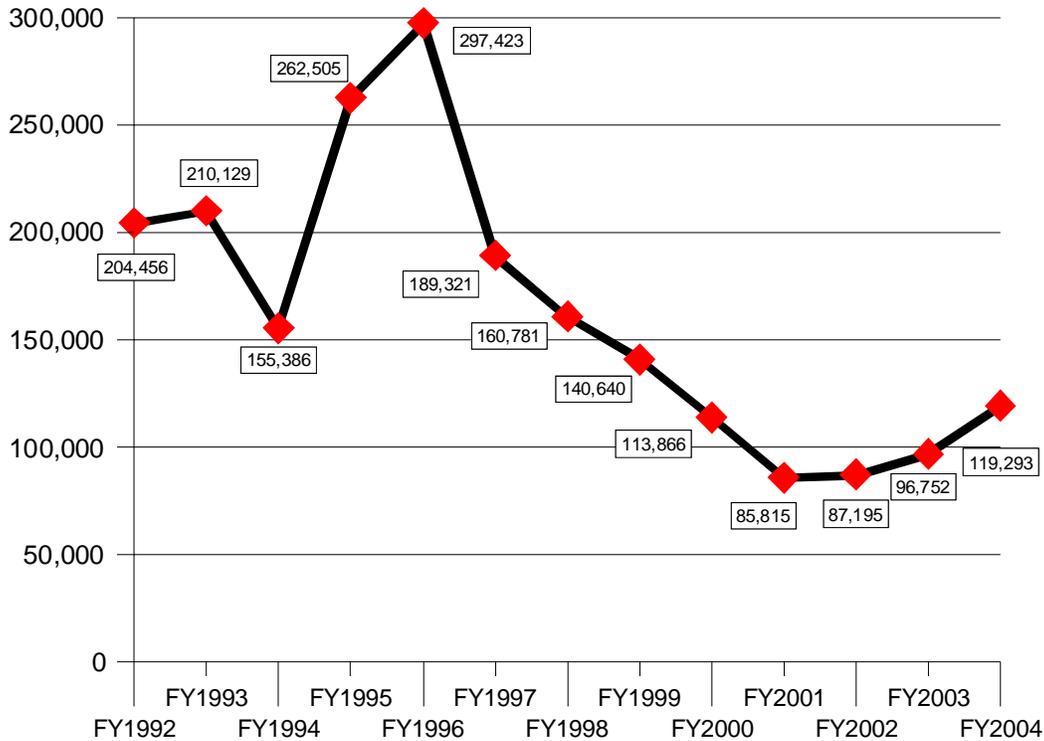
**Source:** CRS analysis of CBP data.

**Figure 3** shows the aggregate apprehensions made at the other San Diego sector stations, excluding Imperial Beach and Chula Vista. Those stations are El Cajon, Campo, San Clemente, Temecula, and Brown Field. **Figure 3** shows that at the time apprehensions were beginning to decline in Imperial Beach (starting in FY1995) and Chula Vista (starting in FY1996), apprehensions at other San Diego sector stations almost doubled. This suggests that as enforcement efforts increased in the two westernmost stations, including the installation of fencing and the deployment of additional agents, the flow of illegal migration pushed eastward to the other stations in the San Diego sector. While apprehensions declined in the non-fenced stations of the San Diego sector from FY1997 to FY2001, the rate of decline was not as steep as the rate of decline at the stations where fencing was deployed. Overall, the decline in apprehensions in the rest of the San Diego sector has lagged behind the decreases in Imperial Beach and Chula Vista: from FY1992 to FY2004, apprehensions in the other San Diego sector stations decreased by 42%, compared to decreases of 95% in Imperial Beach and 94% in Chula Vista. In FY2003 and FY2004, apprehensions increased slightly in the rest of San Diego sector, possibly in response to the increasing USBP focus on the Tucson sector in Arizona.<sup>50</sup> It seems, then, that the

<sup>50</sup> For more information on overall apprehension trends, please refer to CRS Report RL32562, *Border Security: The Role of the U.S. Border Patrol*, by Blas Nuñez-Neto.

installation of border fencing, in combination with an increase in agent manpower and technological assets, has had a significant effect on the apprehensions made in the San Diego sector. This in turn suggests that fewer unauthorized aliens are attempting to cross the border in the San Diego sector as a result of the increased enforcement measures, including fencing, manpower, and other resources, that were deployed to that sector.

**Figure 3. Apprehensions at San Diego Sector Stations, Excluding Imperial Beach and Chula Vista**

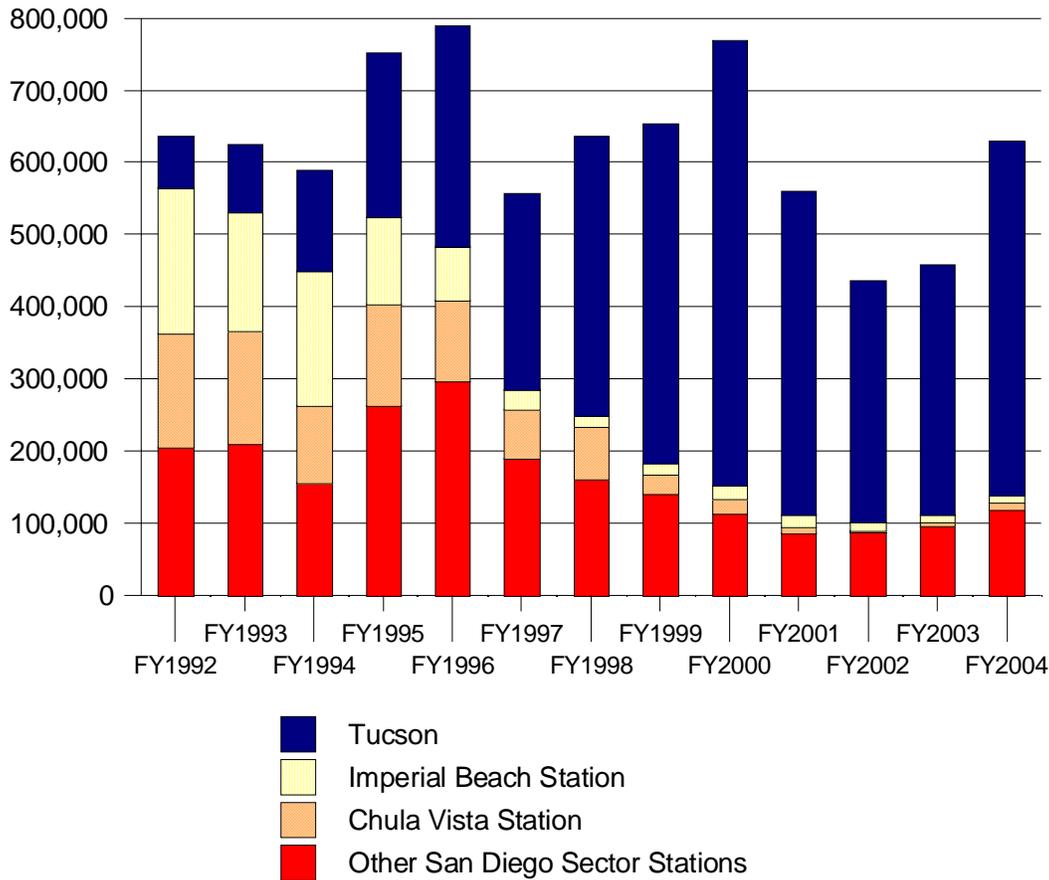


Source: CRS analysis of CBP data.

**Figure 4** shows overall San Diego sector apprehensions, breaking out the Imperial Beach and Chula Vista stations, and compares them to the apprehensions made at the Tucson sector between FY1992 and FY2004. The data used to create this graph can be seen presented in table form in **Appendix E**. **Figure 4** shows that in FY1992, Imperial Beach and Chula Vista accounted for 64% of all apprehensions made in the San Diego sector; by FY2004 the two stations accounted for only 14% of all apprehensions made in the sector. However, as apprehensions declined in Imperial Beach and Chula Vista stations and San Diego sector as a whole over the late 1990s and early 2000s, apprehensions in the Tucson sector in Arizona increased significantly over this period. Over the 12-year period between 1992 and 2004, overall apprehensions in the San Diego sector declined by 76%. However, as apprehensions were decreasing in the San Diego sector, they were increasing in other sectors further east. This increase was most notable within the Tucson sector in Arizona, where apprehensions increased six-fold (591%) between FY1992 and FY2004. As **Figure 4** shows, overall apprehensions in the San Diego and Tucson sectors combined have averaged roughly 620,000 yearly since FY1992, with the San

Diego sector accounting for the lion’s share during the early 1990s and the Tucson sector accounting for the majority in the early 2000s. This provides further indication that the construction of the fence, combined with the increases in manpower in the San Diego sector, changed the patterns of migration for unauthorized aliens attempting to enter the country illegally from Mexico.

**Figure 4. Apprehensions at San Diego Sector Stations and Tucson Sector**



Source: CRS analysis of CBP data.

As **Figures 1-4** show, the increased deployment of agents, infrastructure, technology, and other resources within the San Diego sector has resulted in a significant decline in the number of apprehensions made in that sector. Nationally, apprehensions made by the USBP grew steadily through the late 1990s, only to decline in the early 2000s. However, in 1992 the USBP apprehended 1.2 million unauthorized aliens; in 2004, the USBP also apprehended 1.2 million unauthorized aliens.<sup>51</sup> While the increased enforcement in the San Diego sector has resulted in a shift in migration patterns for unauthorized aliens, it does not appear to have decreased the overall number of apprehensions made each year by USBP agents. As previously noted, apprehensions statistics can be somewhat misleading, but they nevertheless remain the best way to codify trends in unauthorized migration along the

<sup>51</sup> CRS analysis of CBP data.

border. However, it is impossible to ascertain solely by looking at apprehensions statistics how many unauthorized aliens are attempting to enter the country illegally, because it is unclear how many individuals evade being captured by the USBP each year.

## Border Barrier Construction

The USBP has been constructing and maintaining barriers along the international land border since 1991. These barriers have historically been limited to selected urban areas as part of the USBP's overall strategy of rerouting illegal migration away from urban areas towards geographically isolated areas where their agents have a tactical advantage over border crossers. Two main types of border fencing have been constructed: primary fencing located directly on the border along several urban areas; and Sandia fencing, also known as secondary or triple fencing, in San Diego. Additionally, the USBP has begun installing permanent vehicle barriers in various segments of the border. Vehicle barriers are designed to impede the entry of vehicles while allowing individuals and animals to cross the border freely. As such, they have a lower environmental footprint than border fencing.

### Steps Prior to Construction

Several considerations come into play whenever the USBP contemplates construction along the border. There are a number of steps that must be taken before the construction process can begin. These steps include, but are not limited to, determining what the environmental impact of the construction will be; acquiring the land needed for the fence; acquiring the materials that will be used for the fence; and securing the assistance of the Corps of Engineers and the National Guard for the construction process. The role the Corps of Engineers plays in assisting the USBP with the entire process of constructing border fencing, including acquiring materials, will be discussed subsequently in the construction process section. This section will cover the issues associated with environmental assessments and land acquisition.

**Environmental Impact Assessments.** Land along the southwest border supports a number of animals and plants and provides habitat to many protected species. The U.S. Fish and Wildlife Service, for example, reported that a total of 18 federally protected species have the potential to be found along certain sections of the California border.<sup>52</sup> In Arizona, at least 39 federally endangered, threatened, or candidate species can be found living along its border.<sup>53</sup> More than 85% of the lands directly along the Arizona border are federal lands, much of it set aside to protect wilderness and wildlife. For example, the Organ Pipe Cactus National Monument, the Cabeza Prieta National Wildlife Refuge, and the Buenos Aires National Wildlife Refuge can all be found adjacent to the border. The southwest border region is

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<sup>52</sup> EIS, San Diego Border Fence.

<sup>53</sup> Defenders of Wildlife, *On the Line — The Impacts of Immigration Policy on Wildlife and Habitat in the Arizona Borderlands*, 2006, p. 26. (Hereinafter, Defenders of Wildlife, *On the Line*.)

considered a fragile environment, susceptible to harm from even the slightest changes to the ecosystem.<sup>54</sup>

Many are concerned with the geographic footprint and subsequent environmental impacts of both illegal immigration and USBP activities. Until the early 1990s, the USBP's enforcement activities along the border were nominal and the environmental consequences of illegal crossings went largely unnoticed. As illicit trafficking escalated, however, so did the USBP's activities and enforcement footprint, including the construction of fencing and other barriers. Although the San Diego fence reportedly reduced the number of aliens attempting to drive across the open border (and consequently the enforcement footprint to stop such activities), it did little to block the flow of foot traffic.<sup>55</sup> Illegal aliens often damage habitat by cutting vegetation for shelter and fire, causing wildfires, increasing erosion through repeated use of trails, and discarding trash.<sup>56</sup> Environmentalists claim that the USBP's enforcement activities, including the pursuit of illegal aliens, use of off-road vehicles and construction of roads and fences, compound the degradation.<sup>57</sup> The REAL ID Act will allow the DHS Secretary to waive any legal requirements needed to expedite the construction of border fencing. Until such time that DHS waives an applicable law, however, it must follow all legal requirements normally imposed on federal agencies, including, for example, NEPA documentary requirements.

**Land Acquisition.** The construction of a fence along the border necessarily requires the government to acquire some type of interest in the land. The San Diego border fence, for example, is to extend approximately 150-feet north of the international boundary.<sup>58</sup> Current immigration law authorizes the Secretary of DHS to contract for and buy any interest in land adjacent to or in the vicinity of the international land border when the Secretary deems the land essential to control and guard the border against any violation of immigration law.<sup>59</sup> It also authorizes the Secretary to accept any interest in land along the border as a gift and to commence condemnation proceedings if a reasonable purchase price can not be agreed upon. With respect to the San Diego border fence, the law requires the Secretary to promptly acquire such easements as necessary to implement the statute.<sup>60</sup> If DHS exercises its eminent domain powers, it must provide just compensation as required

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<sup>54</sup> Eilene Zimmerman, SFGate.com, *Border protections imperil environment — Last wilderness area south of San Diego could be damaged*, February 27, 2006, at [<http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/02/27/MNG2GHFBFL1.DTL&type=printable>].

<sup>55</sup> EIS, San Diego Border Fence, at 1-10.

<sup>56</sup> *Id.* at 1-11.

<sup>57</sup> See generally, Defenders of Wildlife, *On the Line*, p. 26.

<sup>58</sup> Letter from Peter C. Sornsen, Acting Field Supervisor, U.S. Dept. of the Interior, to James Caffrey, Acting Director, Facilities & Engineering Division, Immigration and Naturalization Service, Re: Endangered Species Consultation for the Proposed 14-Mile Border Infrastructure System (July 1, 2003) (on file with author).

<sup>59</sup> 8 U.S.C. §1103(b).

<sup>60</sup> 8 U.S.C. §1101 note (b)(2).

by the Constitution. In the case of the San Diego fence, construction of the final 4.5 miles continues to be held up as DHS acquires the necessary land.

DHS is authorized to acquire new interests in lands under the INA. However, the federal government may already own some land along the border pursuant to presidential proclamations made long ago. In 1907, President Roosevelt reserved from entry and set apart as a public reservation all public lands within 60-feet of the international boundary between the United States and Mexico within the State of California and the Territories of Arizona and New Mexico.<sup>61</sup> Known as the “Roosevelt Reservation,” this land withdrawal was found “necessary for the public welfare ... as a protection against the smuggling of goods.” The proclamation excepted from the reservation all lands, which, as of its date, were (1) embraced in any legal entry; (2) covered by any lawful filing, selection or rights of way duly recorded in the proper U.S. Land Office; (3) validly settled pursuant to law; or (4) within any withdrawal or reservation for any use or purpose inconsistent with its purposes. A similar reservation was made by President Taft in 1912, for all public lands laying within 60-feet of the boundary line between the United States and Canada.<sup>62</sup> This proclamation states that the customs and immigration laws of the United States could be better enforced and the public welfare thereby advanced by the retention in the federal government of complete control of the use and occupation of lands abutting the international boundary lines. The proclamation also provides exceptions similar to those described in the Roosevelt Reservation.

## **Border Fence Construction Process and Funding**

CBP has, in the past, constructed the majority of border fencing under a Memorandum of Agreement (MOA) with the ECSO (Engineering and Construction Support Office) of the U.S. Army Corps of Engineers (Corps). ECSO manages several components of the construction process for CBP, including planning and acquisition of real estate; drafting the environmental protection plan; designing the project and formulating the engineering costs; overseeing the construction process; and enforcing the appropriate warranties. On most of the tactical infrastructure projects, National Guard units and military units from the Department of Defense (DOD) Joint Task Force North provide the labor. DOD uses these projects as part of their training regimen, leveraging their ability to deploy tactical infrastructure and thereby providing zero labor costs to CBP.<sup>63</sup> The funding for land acquisition and

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<sup>61</sup> 35 Stat. 2136. The reservation also extends sixty-feet from the margin of any river that forms the international boundary. This language, however, does not apply to lands that abut the Rio Grande River in Texas since there are no federal “public lands” in Texas. Title to most of the western territories was obtained by the United States from foreign powers through purchase and treaty. Generally, the terms of acquisition provided for recognition of the few existing private property rights, but granted title over the vast non-private lands to the United States. Texas was an exception; it was admitted by annexation in 1845, and retained title to all its public lands. See *United States v. Denver*, 656 P.2d 1, 5 n.2 (Co. 1982).

<sup>62</sup> 37 Stat. 1741.

<sup>63</sup> Department of Homeland Security, Congressional Budget Justifications for Fiscal Year (continued...)

fence materials comes out of the CBP construction account within the DHS appropriation. Specific funding for fence construction is rarely identified in the conference reports, though it typically has been identified within the DHS (and previously the former INS) Congressional Budget Justifications.<sup>64</sup> **Table 1** shows the overall amount appropriated for the USBP construction account, and the specific amounts identified for tactical infrastructure within that account, since FY1996. Appropriations for fencing and other border barriers has increased markedly over the past five years, from \$6 million in FY2002 to \$647 million in FY2007. The FY2008 appropriation, according to CBP, would include \$196 million for fence construction.

**Table 1. Border Patrol Tactical Infrastructure Appropriations**  
(millions of dollars)

Fiscal Year	Construction Account (total)	Tactical Infrastructure Construction
2008	1,225 <sup>a</sup>	196 <sup>a</sup>
2007	1,500 <sup>b</sup>	647 <sup>b</sup>
2006	298	93
2005	92	15
2004	89	14
2003	235	23
2002	128	6
2001	133	3
2000	100	9
1999	90	4
1998	76	8
1997	10	4
1996	25	4

**Sources:** For FY2006, the amounts appropriated for construction and tactical infrastructure were identified from the FY2007 DHS Congressional Budget Justifications. For FY2004-FY2005, the amounts appropriated for construction and tactical infrastructure were identified from the FY2006 DHS Congressional Budget Justifications. FY2003 construction and tactical infrastructure funding was identified from the FY2005 DHS Congressional Budget Justifications. FY1996-FY2002 tactical infrastructure funding was identified in the FY2003 INS Congressional Budget Justifications; funding for FY1998-FY2000 includes San Diego fencing as well as fencing, light, and road projects in El Centro, Tucson, El Paso, and Marfa. FY2001 and FY2002 construction funding identified from the

<sup>63</sup> (...continued)

2007, pg. CBP Construction 20. Hereafter referred to as DHS FY2007 Justifications.

<sup>64</sup> FY2006 is an exception. Within the conference report, \$35 million was identified for the Southwest Border Fence and \$35 million was identified for the construction of vehicle barriers and other border infrastructure in Tucson sector. H.Rept. 109-241.

FY2002 INS Congressional Budget Justifications. FY2000 construction funding identified from the FY2001 INS Congressional Budget Justifications and H.Rept. 107-278. FY1999 construction funding identified from P.L. 105-277. FY1998 construction funding identified from P.L. 105-119. FY1997 funding identified from P.L. 104-208. FY1996 construction funding identified from P.L. 104-134.

**Notes:** In FY2003 immigration inspections from the former INS, Customs inspections from the former customs service, and the USBP were merged to form the Bureau of Customs and Border Protection within DHS. As a result of this the data for years prior to FY2003 may not be comparable with the data for FY2004 and after. The USBP construction account has been used to fund a number of projects at the border, including fencing, vehicle barriers, roads, and USBP stations and checkpoints. In FY2007, the appropriations committee created a new Border Security Fencing, Infrastructure, and Technology (BSFIT) account within the CBP. This account funds the construction of fencing, other infrastructure such as roads and vehicle barriers, and border technologies such as cameras and sensors. Border fencing and infrastructure construction was transferred from the USBP Construction account to the new BSFIT account.

- a. In FY2008, Congress appropriated \$1,225 million for BSFIT in the Consolidated Appropriations Act (P.L.110-161). According to CBP, \$196 million will be used for border fencing.<sup>65</sup>
- b. The BSFIT appropriation in the FY2007 DHS Appropriation Act was \$1.2 billion (see H.Rept. 109-699). Combined with the \$300 million already appropriated in the emergency supplemental, the overall BSFIT appropriation for FY2007 was \$1.5 billion. The appropriators did not offer guidance on how this funding was to be allocated between these different purposes. According to CBP, \$647 million will be obligated for fencing in FY2007.<sup>66</sup>

In FY2009, the Administration requested \$775 million for the deployment of SBInet-related<sup>67</sup> technologies and infrastructures in FY2009, a decrease of \$450 million over the FY2008-enacted level of \$1,225 million.<sup>68</sup> Within the FY2009 request, the Administration is proposing to allocate \$275 million for developing and deploying additional technology and infrastructure solutions to the southwest border. An additional \$410 million is requested for operations and maintenance of the cameras, sensors, and fencing that will have been constructed by the end of calendar year 2008 with prior-year funding.<sup>69</sup> It does not appear that this request would include funding for new fencing or vehicle barriers at the border. Instead, the Administration notes that this funding will cover the costs associated with operating and maintaining the technologies that have been deployed to the border as part of the SBInet program, as well as the 370 miles of fencing and 300 miles of vehicle

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<sup>65</sup> From e-mail correspondence with CBP, July 27, 2007.

<sup>66</sup> From e-mail correspondence with CBP, July 19, 2007.

<sup>67</sup> SBInet is the technological and infrastructure component of the Secure Border Initiative (SBI), a multifaceted approach to securing the border. In its FY2007 budget submission, DHS asserted that it had “developed a three-pillar approach under the SBI that will focus on controlling the border, building a robust interior enforcement program, and establishing a Temporary Worker Program.” *DHS FY2007 Justification*, p. CBP S&E 4.

<sup>68</sup> The FY2008 total enacted appropriation of for SBInet was \$1,225 million; this total included an emergency appropriation of \$1,053 million. However this may be somewhat misleading because the FY2008 request for the account, which had been fully funded by both the House and Senate Committees on Appropriation, was \$1,000 million. The amount of additional funding (above the request) provided in FY2008 was thus \$225 million and not \$1,053 million.

<sup>69</sup> *DHS FY2009 Justification*, p. CBP BSFIT 11.

barriers, which are scheduled to be completed by the end of calendar year 2008 with funding appropriated in FY2007 and FY2008. Most of the fencing that will be constructed in 2008 will be contracted out; the Corps and the National Guard will be involved mainly in the project to finish the San Diego fence.<sup>70</sup>

Under the MOA, once CBP purchases the materials and acquires the land, the Corps of Engineers undertakes the engineering studies and provides the manpower and machinery that are used to install the fencing. The actual manpower is typically provided by the State National Guard (the California National Guard, for example, constructed much of the San Diego fence), although occasionally the military, and sometimes the USBP, are involved in the construction.<sup>71</sup> The Corps of Engineers funding comes from the Department of Defense Drug Interdiction and Counter-Drug Activities Account. **Table 2** shows the funding for the “Southwest Border Fence” sub-account within this DOD Account, from FY1997 to FY2006. As previously noted, however, much of the new fence construction currently taking place is being done by private contractors.

**Table 2. DOD Funding for the Southwest Border Fence**  
(millions of dollars)

Fiscal Year	DOD Funding
2008	1.2
2007	N/A
2006	3.5
2005	N/A
2004	4.0
2003	4.7
2002	5.0
2001	5.0
2000	4.0
1999	3.0
1998	4.0
1997	5.0

**Source:** FY2008, H.Rept. 110-434; FY2007, H.Rept. 109-676; FY2006, H.Rept. 109-359; FY2005, H.Rept. 108-622; FY2004, H.Rept. 108-283; FY2004, H.Rept. 107-732; FY2002, H.Rept. 107-333; FY2002, H.Rept. 106-945; FY2000, H.Rept. 106-371, FY1999, H.Rept. 105-746; FY1998, H.Rept. 105-265; FY1997, H.Rept. 104-724.

**Notes:** N/A means not available. No funding was identified for border fencing in the FY2007 DOD Conference report, H.Rept. 109-676. The House Committee had recommended \$8 million for this activity in H.Rept. 109-504, while the Senate Committee had not recommended any funding for it in

<sup>70</sup> From conversations with CBP Congressional Affairs, March 13, 2008.

<sup>71</sup> From interviews with CBP, November 30, 2005 and September 13, 2006, and the Corps of Engineers, November 29, 2005.

S.Rept. 109-292. FY2005 funding for the “Southwest Border Fence” sub-account was also not identified in the DOD Conference Report, H.Rept. 108-622. The House Committee had recommended \$7 million for this sub-account in H.Rept. 108-553; while the Senate Committee had not recommended any funding for it in S.Rept. 108-284.

## Types of Fences and Barriers

The USBP currently uses three main types of barriers along the border: primary fencing immediately on the international border, Sandia fencing behind the primary fencing, and vehicle barriers meant to stop vehicles, but not people on foot, from traversing the border. While other forms of primary fencing, such as bollard fencing<sup>72</sup> and picket fencing,<sup>73</sup> have been constructed in limited areas,<sup>74</sup> historically the agency has largely focused on using the landing mat fencing as a primary fence and the Sandia fence as a secondary fence.

**Landing Mat Fencing.** Landing mat fencing is composed of army surplus carbon steel landing mats which were used to create landing strips during the Vietnam War. The landing mats form panels 12 feet long, 20 inches wide, and 1/4 inch thick, which are welded to steel pipes buried 8 feet deep every 6 feet along the fence. Each mile of fencing requires the use of 3,080 panels.<sup>75</sup> There are about 5 miles of surplus landing mat fencing remaining as of 2006.<sup>76</sup> According to the USBP, sites that feature landing mat fencing include the following USBP stations: Campo, CA; Yuma, AZ; Nogales, AZ; Naco, AZ; Douglas, AZ, and El Paso, TX.<sup>77</sup>

In a 1999 study which was commissioned by the INS and performed under a Memorandum of Understanding, the Corps of Engineers predicted that construction costs for the landing mat fencing would range from \$388,005 to \$431,117 per mile.<sup>78</sup>

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<sup>72</sup> Bollard fencing is comprised of vertical installations of solid concrete, metal spheres, or large posts, embedded into the ground at small enough intervals as to be impassable. Bollard fencing is difficult to compromise but expensive to install. See **Appendix A** for a depiction of bollard fencing.

<sup>73</sup> Picket fencing is comprised of metal stakes set sufficiently close together as to be impassable. See **Appendix A** for a depiction of picket fencing.

<sup>74</sup> Roughly 13 miles of these alternate forms of fencing have been constructed to date, according to an interview with CBP Congressional Affairs on September 13, 2006.

<sup>75</sup> U.S. Army Corps of Engineers, Construction Engineering Research Laboratories, *Engineering Life-Cycle Cost Comparison Study of Barrier Fencing Systems*, USACERL Technical Report 99/28, February 1999, p. 14. Hereafter referred to as Corps of Engineers Study.

<sup>76</sup> Interview with CBP Congressional Affairs, September 13, 2006.

<sup>77</sup> Telephone conversation with CBP, November 30, 2005.

<sup>78</sup> The Corps of Engineers used 1997 dollars in their study. For the purposes of this report, the numbers predicted by the Corps were adjusted to 2005 dollars using the Gross Domestic Product (GDP) deflator, available at [<http://www1.jsc.nasa.gov/bu2/inflateGDP.html>]. This website appears to be no longer operating; however, GDP deflator tables are also published by the Bureau of Economic Adjustment (BEA) at the Department of Commerce and are

(continued...)

This estimate includes the cost of materials, despite the fact that the landing mat fencing constructed to date has been comprised of army-surplus panels acquired by CBP at no cost. As previously noted, however, only about 5 miles of surplus landing mat fencing material remains available. Maintenance costs per year could vary widely depending on the number of breaches the fence undergoes. Low levels of damage to the fence would result in low annual repair costs, while a large number of breaches could result in stretches of fencing needing to be replaced. Per mile, the Corps of Engineers estimated that yearly maintenance costs would probably range from \$1,742 to \$17,753.<sup>79</sup> The Corps of Engineers noted that the net present value<sup>80</sup> of the fence after 25 years of operation would range from \$5.4 million and \$8.3 million per mile depending on the amount of damage sustained by the fencing each year.

**Sandia Secondary Fence.** The secondary fence proposed by the Sandia study has only been constructed over roughly 9.5 miles of the 14 miles in the original plan due to environmental concerns voiced by the California Coastal Commission. As previously discussed, P.L. 109-13 included language that will allow waiver of all legal requirements determined necessary by the Secretary of DHS for the expeditious construction of authorized barriers and only allows judicial review for constitutional claims. On September 14, 2005, DHS announced it is applying its new waiver authority to complete the San Diego fence.<sup>81</sup> DHS is currently estimating that it will cost an additional \$66 million to finish the San Diego fence, bringing overall costs for this 14 mile-long project to \$127 million. Additionally, DHS notes that it will use a mix of DOD resources and private contractors to finish the fence, and that the cost of using contractors is included in the request.<sup>82</sup>

The Sandia fence, as it has been constructed in the San Diego sector, is a secondary fence constructed behind the primary fence. Enough space is left between

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<sup>78</sup> (...continued)

available at [<http://bea.gov/bea/dn/nipaweb/TableView.asp?SelectedTable=13&FirstYear=1997&LastYear=2005&Freq=yr>]. The actual predictions made by the Corps for constructing and maintaining primary fencing, in 1997 dollars, were \$341,584 to \$379,538 per mile for construction costs, and \$1,534 to \$15,629 per mile per year in maintenance costs. The 25-year life-cycle costs for constructing and maintaining landing mat fencing were predicted to range between \$4,725,572 and \$7,340,098 per mile in 1997 dollars.

<sup>79</sup> Corps of Engineers Study, p. 21.

<sup>80</sup> Net present value is a term used by the Corps of Engineers in their life cycle costs analyses for construction projects. It amortizes the future costs of a project and shows what the entire costs of the project will be. In this case, these numbers represent 25 year predictions and have been adjusted from 1997 dollars to 2005 dollars using a GDP Deflator

<sup>81</sup> DHS published a *Federal Register* notice on September 22, 2005, declaring the waiver of, in their entirety, (1) the National Environmental Protection Act (42 U.S.C. 4321 et seq.); (2) the Endangered Species Act (16 U.S.C. 1531 et seq.); (3) the Coastal Zone Management Act (16 U.S.C. 1451 et seq.); (4) the Federal Water Pollution Control Act (33 U.S.C. §§1251 et seq.); (5) the National Historic Preservation Act (16 U.S.C. §§470 et seq.); (6) the Migratory Bird Treaty Act (16 U.S.C. §§703 et seq.); (7) the Clean Air Act (42 U.S.C. §§7401 et seq.); and (8) the Administrative Procedure Act (5 U.S.C. §§551 et seq.).

<sup>82</sup> DHS FY2007 Justifications, p. CBP Construction 18.

the two fences to accommodate an access road. The secondary fence is an angled two-piece fence. The fence is vertical up to ten feet high, and then extends out at an angle towards the climber. This prevents climbing by using gravity and the weight of the climber against them. The Corps of Engineers estimated that Sandia fencing costs per mile would range from \$785,679 to \$872,977 for construction and \$953 to \$7,628 per mile yearly for maintenance. Additionally, the Corps of Engineers study notes that the Sandia fence would possibly need to be replaced in the fifth year of operation and in every fourth year thereafter if man-made damage to the fence was “severe and ongoing.” For this reason, in the study the Corps of Engineers noted that the net present value of the fence after 25 years of operation, per mile, would range from \$11.1 million to \$61.6 million.<sup>83</sup>

## Other Border Barriers: Vehicle Barriers

The USBP utilizes various different types of barriers to impede vehicles from crossing into the United States from Mexico. Some of these barriers are temporary and can be moved to different locations when needed, others are permanent barriers. The main purpose of vehicle barriers is to prevent smugglers from easily driving their vehicles across the border.

**Permanent Vehicle Barriers.** Permanent vehicle barriers, as their name suggests, are not designed to be moved but rather are permanent installations. Permanent vehicle barriers are typically steel posts, or bollards, that are excavated 5 feet deep and inserted into a poured concrete base. The posts alternate in above-ground height in order to dissuade individuals from forming a ramp over the barrier. They are spaced so as to allow foot and animal traffic but not vehicular traffic. The USBP recently began building permanent vehicle barriers in the Yuma sector, with a substantial stretch slated to be built along the Organ Pipe Cactus National Monument. When linked with the 30 miles of vehicle barriers built by the National Park Service, a USBP spokesman reportedly noted that the total 123 mile length of the project “will form the largest continuous physical barrier along the border in the nation.”<sup>84</sup>

In the FY2007 DHS Congressional Budget Justifications, DHS notes that the Yuma vehicle barrier project would take until at least 2010 (and possibly longer) to complete if CBP continued to use the Corps of Engineers and other military personnel to construct the barriers. Instead, CBP proposes hiring commercial contractors to build 39 miles of vehicle barriers in the Yuma sector, or almost half of the project’s 93 mile total.<sup>85</sup> CBP is projecting that the project will be completed

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<sup>83</sup> The numbers used by the Corps of Engineers were cited in 1997 dollars. They have been adjusted to 2005 dollars using the GDP deflator cited above. The actual costs per mile in the Corps of Engineers Study were: \$691,680 to \$768,533 for construction, and \$839 to \$6,715 for maintenance. Net Present Value after 25 years in 1997 dollars ranged from \$9.73 million to \$54.23 million. Corps of Engineer Study, pp. 3 and 23.

<sup>84</sup> Jonathan Athens, “Officials say OK to Border Fence,” YumaSun.com (July 20, 2005) available at [<http://sun.yumasun.com/google/ysarchive14980.html>].

<sup>85</sup> DHS FY2007 Justifications, pg. CBP Construction-7. CBP project length does not (continued...)

by FY2011, and that the overall project costs will be \$116 million.<sup>86</sup> This means that, overall, the project will cost roughly \$1.25 million per mile. The National Park Service has spent \$11.1 million to construct 18 miles of permanent vehicle barriers in Organ Pipe Cactus National Monument, and has obligated, but not yet spent, an additional \$6.6 million in FY2005 funding to complete the remaining 13 miles of the project.<sup>87</sup>

**Temporary Vehicle Barriers.** Temporary vehicle barriers are typically built from welded metal, such as railroad track, but can also be constructed from telephone poles or pipe. These barriers are built so that they cannot be rolled or moved manually; they can only be moved with a forklift or a front-end loader. They are usually built at USBP stations and transported to areas of high vehicle entry, where they are placed and chained together.<sup>88</sup> The main advantage of the temporary vehicle barriers is their ability to be redeployed to different areas to address changes in smuggling patterns. The main disadvantage of these barriers is that they are easier to compromise than permanent vehicle barriers.

## Current Status

In FY2007, DHS unveiled a new program, called SBInet,<sup>89</sup> that will deploy a mix of personnel, technology, infrastructure, and response assets in order to “provide maximum tactical advantage in each unique border environment.” While SBInet has been billed as a nationwide initiative, its initial rollout has been confined to the southwest border. As part of SBInet, DHS awarded a contract to Boeing to serve as the project’s lead technology integrator.

The SBInet program has included the construction of barriers as part of its approach to securing the border. Boeing, in conjunction with the Sandia National Laboratory, created a Fence Lab program to test the efficacy of 8 different fence designs.<sup>90</sup> In FY2007, CBP constructed a total of 76 miles of border fencing bringing the overall fencing at the border to 154 miles. In FY2008 through the end of the calendar year, CBP is planning to construct an additional 216 miles of fencing;

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<sup>85</sup> (...continued)

include the 30 miles of vehicle barriers maintained by the National Park Service.

<sup>86</sup> DHS FY2007 Justifications, pg. CBP Construction-18. It is unclear why the project is predicted to take less time with contractors, and yet the overall completion date for the construction is predicted to be 2011.

<sup>87</sup> From the National Park Service, February 9, 2006. The National Park Service notes that 30 miles of permanent vehicle barriers are being built at the Organ Pipe Cactus National Monument, and one mile is being built in the Coronado National Monument.

<sup>88</sup> U.S. Department of Justice, Immigration and Naturalization Service, *Final Environmental Assessment U.S. Border Patrol Temporary Vehicle Barriers Naco and Douglas, Arizona*, November 2002.

<sup>89</sup> SBInet forms part of the Secure Border Initiative, which DHS has billed as a multifaceted approach to securing the border. DHS FY2007 Justifications, pg. CBP S&E-4.

<sup>90</sup> Department of Homeland Security, Customs and Border Protection, “Fence Lab To Test Effective Low Cost Solutions,” *Secure Border Initiative Monthly*, April 2007.

this would bring the overall fencing at the border to 370 miles by the end of calendar year 2008.<sup>91</sup> Through early April, 2008, CBP had constructed an additional 18 miles of fencing, bringing the total mileage of fencing constructed at the border to 172.<sup>92</sup> The fencing that has been constructed thus far as part of SBInet has been primary fencing, and a few different designs have been used, including bollard fencing. While the National Guard was involved in some of the construction in FY2007, much of it was undertaken by contractors. In 2008, the majority of the fence construction will be done by contractors.<sup>93</sup>

In FY2007, CBP constructed 110 miles of vehicle barriers. Through early April in 2008, CBP had constructed an additional 32 miles of vehicle barriers, bringing the total vehicle barrier mileage to 142. CBP plans to build 158 additional miles of vehicle barriers by the end of calendar year 2008; this would bring the overall total mileage of vehicle barriers at the border to 300.<sup>94</sup>

In testimony before the Appropriations Committee, the Government Accountability Office (GAO) noted that CBP's goal for fencing and vehicle barrier deployment in 2008 "will be challenging because of factors that include difficulties acquiring rights to border land and an inability to estimate costs for installation."<sup>95</sup>

## Legislation in the 110<sup>th</sup> Congress

The issue of border security continues to be of interest to the 110<sup>th</sup> Congress. The following sections describe a representative selection of the legislation enacted or considered by Congress concerning barriers at the border.

### Enacted Legislation

As previously noted, the Consolidated Appropriations Act of 2008 (P.L. 110-161) made significant changes to the Secure Fence Act. The Act gives DHS discretion as to where fencing should be erected along the border, requires that 700 miles of reinforced fencing be constructed, and designates 370 miles as a priority area that must be constructed by December 31, 2008. In addition, the Act provides a total of \$1,225 million for SBInet. This represents an increase of \$225 million over the Administration's request, and the amounts recommended by the House and Senate-

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<sup>91</sup> Presentation given by Rowdy Adams, SBI Deputy Executive Director, Department of Homeland Security, at the Border Management Summit, October 23, 2007.

<sup>92</sup> From CBP Congressional Affairs, March 13, 2008,

<sup>93</sup> Ibid.

<sup>94</sup> Presentation given by Rowdy Adams, SBI Deputy Executive Director, Department of Homeland Security, at the Border Management Summit, October 23, 2007.

<sup>95</sup> Testimony of GAO Director of Homeland Security and Justice Issues Richard Stana, in U.S. Congress, Committee on Appropriations, Subcommittee on Homeland Security, *DHS Has Taken Actions to Strengthen Border Security Programs and Operations, But Challenges Remain*, 110<sup>th</sup> Cong., 2<sup>nd</sup> Sess., March 6, 2009. Hereafter referred to as *GAO Border Security Testimony*.

passed versions of the bill. Of the \$1,225 million provided by P.L. 110-161, \$1,053 million is designated as emergency funding, and \$172 million is comprised of regular appropriations.<sup>96</sup> The \$1,225 million is apportioned as follows: \$1,088 million for development and deployment (\$1,053 million in emergency funding, and \$35 million in regular appropriations); \$73 million for operation and maintenance; and \$64 million for program management. Funding for the construction of the border fence is included in the development and deployment activity in the BSFIT account. However, it is important to note that other items, such as the deployment of cameras and sensors to the border, are also funded under this activity. Currently available authoritative documentation does not provide funding details below the activity level. Therefore, the portion of this funding that would be specifically directed to the border fence cannot be precisely determined. However, according to CBP Congressional Affairs, the President's \$1,000 million FY2008 request for BSFIT included \$196 million in fence-related funding.<sup>97</sup> P.L.110-161 also withholds \$650 million of the funding provided for SBInet until an expenditure plan is received and approved by the House and Senate Appropriations Committees.

## Proposed Legislation

In addition to the Consolidated Appropriations Act, a number of bills have been introduced in the 110<sup>th</sup> Congress that included provisions relating to the construction of border fencing. Although the following analysis is not intended to provide a comprehensive list of every bill introduced that had fencing provisions, it does provide an overview of the main types of fence-related bills that have been introduced and their overarching themes.

Prior to enactment of the Consolidated Appropriations Act, a number of other bills were introduced in the 110<sup>th</sup> Congress that would expand or underlined the Secretary of Homeland Security's authority to construct fencing at the border. H.R. 4192, H.R. 3638, and H.R. 2954 would direct the President to construct the fencing authorized by the Secure Fence Act. S. 2348 would authorize \$3 billion in emergency funding for a variety of border security purposes, including the construction of 700 miles of fencing. S. 2294 and S. 1984 would call for the construction of 700 miles of fencing and 300 miles of vehicle barriers within two years of enactment. S. 1269 would call for the construction of double layer fencing along the border from the Pacific Ocean to the Gulf of Mexico. S. 330 would call for replacing existing fencing in Tucson and Yuma sectors with double layer fencing and constructing a total of 370 miles of fencing and 500 miles of vehicle barriers along the border.

The issue of barriers at the border has also been of interest to the 110<sup>th</sup> Congress as a component of the larger immigration debate. During May and June 2007, the Senate considered a number of comprehensive immigration reform measures (S.

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<sup>96</sup> The FY2008 appropriation for DHS included some funding that was designated as emergency spending in addition to the regularly appropriated funding. For more information about this, please refer to CRS Report RL34004, *Homeland Security Department: FY2008 Appropriations*, Coordinated by Jennifer E. Lake and Blas Nuñez-Neto.

<sup>97</sup> From e-mail correspondence with CBP, July 27, 2007.

1348, S.Amdt. 1150 to S. 1348, S. 1639), though cloture was unable to be achieved on any of these proposals. Both S.Amdt. 1150, as amended, and S. 1639, as introduced, included language concerning fencing at the border that was similar to that which was ultimately enacted as part of the Consolidated Appropriations Act for FY2008.<sup>98</sup>

Some comprehensive immigration reform proposals considered also included provisions requiring that the construction of border barriers serve as a trigger mechanism for broader immigration reform to occur. S.Amdt. 1150, as introduced, would require the construction of 370 miles of fencing and 200 miles of vehicle barriers before some provisions relating to legalization, adjustment of status, and temporary workers could take effect. In addition, S.Amdt. 1150 would amend §102 of IIRIRA to expressly authorize the construction of the San Diego fence. During the initial Senate floor debate for S.Amdt. 1150, S.Amdt. 1172 was adopted by unanimous consent and amended the trigger mechanisms to require 300 miles of vehicle barriers. S. 1639, as introduced, included similar language to S.Amdt. 1150, as amended, concerning barriers at the border. S. 1639 would require DHS to construct 370 miles of fencing and 300 miles of vehicle barriers as part of the trigger mechanisms required before some provisions relating to legalization, adjustment of status, and temporary workers could take effect. S. 1369 would also expressly authorize the completion of the San Diego fence.

A number of bills that have been introduced in the second session of the 110<sup>th</sup> Congress would amend the changes to the Secure Fence Act that were enacted by the Consolidated Appropriations Act of FY2008. H.R. 5568 would insert the word “physical” before all previously enacted occurrences of the word “fencing” (e.g., in the Secure Fence Act and §102 of IIRIRA). S. 2712 would require that the 700 miles of reinforced fencing authorized by the Consolidated Appropriations Act be completed by December 31, 2010. H.R. 5124 would require that the fencing constructed under the Act’s authorization be double layer, at least 14 feet tall, and be completed within six months of the bill’s enactment. In addition, the bill would prohibit DHS from counting fencing in existence prior to January 1, 2008, toward the 700-mile total. H.R. 4987 would replace the 700-mile requirement enacted by the Consolidated Appropriations Act and replace it with language, similar to that in the original Secure Fence Act, requiring five specific stretches of fencing to be constructed. H.R. 4960 would repeal the consultation requirement enacted by the Consolidated Appropriations Act.

Lastly, several introduced bills include other fencing provisions not directly related to the construction of fencing. H.R. 5728 would establish a Border Improvement Trust Fund and allow taxpayers to designate \$5 (\$10 for joint filers) from their annual income tax returns for this fund. The fund could be used to pay for costs associated with constructing and maintaining fencing and barriers at the border. S. 2709 would impose a minimum sentence of five years for any alien convicted of damaging fencing or infrastructure (including cameras and sensors) at the border.

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<sup>98</sup> See S.Amdt. 1168 (adopted by unanimous consent and modifying S.Amdt. 1150 to S. 1348); S. 1639, § 103.

## Legislation in the 109<sup>th</sup> Congress

The 109<sup>th</sup> Congress enacted three pieces of legislation concerning border fencing, and considered several more. The REAL ID Act (P.L. 109-13), as previously noted, expanded DHS' waiver authority to expedite the construction of border fencing. The Secure Fence Act of 2006 (P.L. 109-367) directed DHS to construct five stretches of border fencing totaling roughly 850 miles.<sup>99</sup> The FY2007 DHS Appropriations Act (P.L. 109-295) provided \$1.2 billion for the installation of fencing, infrastructure, and technology along the border; \$31 million of this total was designated for the completion of the San Diego fence.<sup>100</sup> In addition to these Acts, a number of bills with fencing related provisions were passed by the House and the Senate. H.R. 4437, which would have directed DHS to construct five stretches of fencing along the border, was passed by the House on December 16, 2005. S. 2611, which called for 370 miles of fencing to be constructed, was passed by the Senate on May 25, 2006. S.Amdt. 4788 was added to the Department of Defense Appropriation bill, H.R. 5631, on August 2, 2006, and would have appropriated \$1.8 billion to the National Guard for the construction of border fencing. H.R. 5631 was passed by the Senate on September 7, 2006; however, this fencing provision was stripped from the bill during conference.

P.L. 109-295, the FY2007 DHS Appropriations Act, provided \$1.2 billion in funding for border fencing, infrastructure, and technology; combined with the supplemental appropriation provided by P.L. 109-234, the conferees noted that DHS would have \$1.5 billion for border infrastructure construction in FY2007.<sup>101</sup> The conferees directed DHS to submit an expenditure plan for this funding within 60 days of the bill's enactment, and withheld \$950 million of the funding until the plan is received and approved by the House and Senate Committees. However, the Act did not place any restrictions on how DHS is to apportion this appropriation between fencing, infrastructure, and technology.

In addition to the bills discussed above, there were a number of bills in the 109<sup>th</sup> Congress that would have expanded the current fencing and other forms of barriers at the international land border. Some of these bills would have required fencing to be constructed along the entire southwest border, others would have identified particular stretches of land which would receive fencing, and still others would have called for studies to determine whether fencing is a cost-effective way of securing the border.<sup>102</sup>

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<sup>99</sup> From CBP Congressional Affairs, September 25, 2006.

<sup>100</sup> H.Rept. 109-699, p. 130.

<sup>101</sup> For more information about DHS Appropriations, please refer to CRS Report RL33428, *Homeland Security Department: FY2007 Appropriations*, Jennifer Lake and Blas Nuñez-Neto, Coordinators.

<sup>102</sup> Bills with border fencing language in the 109<sup>th</sup> Congress included H.R. 418, H.R. 1268, H.R. 4083, H.R. 4312, H.R. 4313, H.R. 4437, H.R. 5067, H.R. 5456, H.R. 5631, H.R. 6061, S. 1916, S. 2049, S. 2061, S. 2117, S. 2368, S. 2377, S. 2454, S.Amdt. 3192, S. 2611, S. 2612, S. 3564, and S.Amdt. 4788.

## Issues For Congress

Congress may consider a number of policy issues concerning the construction of barriers along the border, including, but not limited to, their effectiveness, overall costs compared with benefits, possible diplomatic ramifications, unintended consequences, and the locations in which they are to be constructed. Although these issues apply to all potential barriers at the border, due to the focus on border fencing in the current congressional debate, this section will focus its analysis on the potential policy issues surrounding the construction of fencing at the border.

### Effectiveness

Proponents of border fences point to the substantial reduction in apprehensions along the San Diego sector as tangible proof that fences succeed in reducing cross-border smuggling and migration where they are constructed.<sup>103</sup> Opponents attribute part of the decrease in apprehensions to the increase in manpower and resources in the sector and, pointing to the increase in apprehensions in less-populated sectors, contend that the fence only succeeds in re-routing unauthorized migration and not in stopping it.<sup>104</sup> The USBP, for its part, states that border fencing is a force multiplier because it allows its agents to focus enforcement actions in other areas. The USBP has also stated that the fencing constructed in urban areas has helped reroute unauthorized migration to less populated areas where its agents have a tactical advantage over border crossers. As previously noted, the number of USBP apprehensions in 2004 were almost identical to the number of apprehensions in 1992; the main difference is that San Diego accounted for the majority of apprehensions in 1992, whereas in 2004 Tucson and Yuma sectors accounted for the majority of apprehensions.

A possible issue for Congress concerns the overall effectiveness of border fencing, especially if it is not constructed across the entire border in question. In the limited urban areas where border fencing has been constructed, it has typically reduced apprehensions. However, there is also strong indication that the fencing, combined with added enforcement, has re-routed illegal immigrants to other less fortified areas of the border. Additionally, in the limited areas where fencing has been erected, there have been numerous breaches of the border fencing and a number of tunnels discovered crossing underneath the fencing. It stands to reason that even if border fencing is constructed over a significant portion of the land border, the incidences of fence breaches and underground tunnels would increase. Possible policy options to address these issues could include mandating that border fencing be highly tamper-resistant or directing CBP to invest in tunnel-detection technologies.

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<sup>103</sup> For the views of supporters of border fencing, refer to “We Need a Fence,” available at [<http://www.weneedafence.com/>], and Thomas Sowell, “Let’s Get Our Terms Straight,” available at [<http://www.annistonstar.com/opinion/2006/as-insight-0402-0-6d01s3130.htm>].

<sup>104</sup> For the views of opponents of border fencing, refer to Eilene Zimmerman, “Against the Wall,” *Salon*, December 12, 2005, at [[http://dir.salon.com/story/news/feature/2005/12/12/border\\_wall/index.html](http://dir.salon.com/story/news/feature/2005/12/12/border_wall/index.html)], and Molly Ivins, “Another Brick in the Wall,” available at [<http://www.annistonstar.com/opinion/2006/as-insight-0402-0-6d01s3130.htm>].

## Costs

Because border fencing is a relatively new and limited phenomenon along the U.S.-Mexico border, there is a dearth of information concerning its overall costs and benefits. The Corps of Engineers study predicted that the costs of constructing a double layer fence consisting of primary fencing and Sandia fencing would range from \$1.2 million to \$1.3 million a mile, excluding the costs of land acquisition. The Corps of Engineers also predicted that the 25-year life cycle cost of the fence would range from \$16.4 million to \$70 million per mile depending on the amount of damage sustained by the fencing.<sup>105</sup> If significant portions of the border were to be fenced, reducing the areas along which individuals could cross the border, it may stand to reason that the fencing will be subjected to more breaches and other attempts to compromise than the fencing that has already been constructed. This may mean that the costs of maintaining border fencing that is widely deployed in the future will be higher than they have been thus far for the limited deployment. The Corps estimates do not include the costs of acquiring the land or most labor costs, since construction would be done by DOD; these could well turn out to be significant expenses if private contractors are used to construct the fencing as per DHS' FY2007 Congressional Budget Justifications. The Congressional Budget Office (CBO) has estimated that border fencing would cost \$3 million a mile to construct and that maintenance would total roughly 15% of the overall project costs per year.<sup>106</sup> However, the CBO does not elaborate on what is included in those estimates. DHS predicts that the San Diego fence will have a total cost of \$127 million for its 14-mile length when it is completed — roughly \$9 million a mile. Construction of the first 9.5 miles of fencing cost \$31 million, or roughly \$3 million a mile, while construction of the last 4.5 miles of fencing is projected to cost \$96 million, or roughly \$21 million a mile.<sup>107</sup> However these costs may be somewhat misleading due to the following factors: construction of the fence was delayed for an extended period of time; the remaining construction involves filling a relatively large gulch which may be more complex than the average stretch of border; and DHS is

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<sup>105</sup> As previously noted on pages 19-21, these numbers reflect Corps figures for the construction and 25-year life cycle costs associated with erecting primary landing mat and secondary Sandia fencing along the border. The Corps study used 1997 dollars, which have been adjusted by CRS using a GDP deflator to 2005 dollars. The actual predictions made by the Corps for constructing and maintaining primary fencing, in 1997 dollars, were \$341,584 to \$379,538 per mile for construction costs, and \$1,534 to \$15,629 per mile per year in maintenance costs. The 25-year life-cycle costs for constructing and maintaining landing mat fencing were predicted to range between \$4.73 and \$7.34 million per mile in 1997 dollars. The actual predictions made by the Corps for constructing and maintaining Sandia fencing, in 1997 dollars, were: \$691,680 to \$768,533 per mile for construction, and \$839 to \$6,715 per mile for maintenance. The 25-year life cycle costs for constructing and maintaining Sandia fencing were predicted to range between \$9.73 million to \$54.23 million per mile in 1997 dollars. Corps of Engineer Study, p. 3 and pp. 21-23.

<sup>106</sup> Congressional Budget Office, *Congressional Budget Office Cost Estimate: S. 2611 Comprehensive Immigration Reform Act of 2006, as passed by the Senate on May 25, 2006*, August 18, 2006, p. 14, at [<http://www.cbo.gov/ftpdocs/75xx/doc7501/s2611spass.pdf>].

<sup>107</sup> From the DHS FY2006 and FY2007 Congressional Budget Justifications.

proposing to use private contractors to expedite the construction process which may increase the labor costs and thus may increase the overall project costs.

Some have argued that building fences on the border is too expensive and would consume funding that would be better spent on hiring additional agents or deploying additional technologies to the border.<sup>108</sup> Others maintain that the costs of fencing are negligible compared to the costs of illegal immigration, and that fencing has been proven effective at decreasing illegal immigration in those areas where it has been deployed.<sup>109</sup> The USBP has testified that “for border control, for border security, we need that appropriate mix. It’s not about fences. It’s not about Border Patrol agents. It’s not about technology. It’s about all of those things.”<sup>110</sup> At issue for Congress is how best to allocate scarce border security resources while safeguarding homeland security. Does border fencing represent the best investment of border security funding, and what is the appropriate mix of border security resources? How much will maintaining border fencing cost in the future, and which agency will be responsible for this maintenance? Will using private contractors to expedite the construction of border fencing increase or decrease the costs?

## Fence Design

Congress mandated the design of the border fence in San Diego in IIRIRA. Many different fence designs could be deployed to the border, and each have their relative strengths and weaknesses. Concrete panels, for example, are among the more cost-effective solutions but USBP agents cannot see through this type of fencing; the USBP testified about their preference for fencing that can be seen through, so as to identify the activity occurring on the Mexican side of the border and thus preserve their tactical advantage over potential border crossers, and to better avoid potential rockings<sup>111</sup> or other violent incidents. Sandia fencing has been effective in San Diego and can be seen through, but is among the more expensive fencing options. Bollard fencing has been effective in its limited deployment and can also be seen through, but is also expensive to install and to maintain. Chain link

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<sup>108</sup> See Jason Ackleson, “Fencing in Failure; Effective Border Control is Not Achieved by Building More Fences,” *Immigration Policy in Focus*, Vol. 4, Issue 2, April 2005, available at [[http://www.aifl.org/ipc/policy\\_reports\\_2005\\_fencinginfailure.asp](http://www.aifl.org/ipc/policy_reports_2005_fencinginfailure.asp)].

<sup>109</sup> For a series of examples, see Parapundit, *Immigration Border Control Archives*, available at [[http://www.parapundit.com/archives/cat\\_immigration\\_border\\_control.html](http://www.parapundit.com/archives/cat_immigration_border_control.html)].

<sup>110</sup> Testimony of Kevin Stevens, Senior Associate Chief of Customs and Border Protection, in U.S. Congress, House Homeland Security Committee, Economic Security, Infrastructure Protection and Cyber Security Subcommittee, and House Government Reform Committee, Criminal Justice, Drug Policy, and Human Resources Subcommittee, *Fencing the Border: Construction Options and Strategic Placement*, 109<sup>th</sup> Cong., 2<sup>nd</sup> sess, July 20, 2006. Hereafter referred to as: *Fencing the Border* hearing, July 20, 2006.

<sup>111</sup> Rockings refer to the phenomenon of individuals on the Mexican side of the border hurling stones and other items over the fence at USBP agents and vehicles. In the Yuma sector, for example, agents patrolling along the fence are deployed in armored vehicles known as “war-wagons” to protect themselves from rockings and other forms of assault, which are common in that area. Information obtained during a CRS site visit to Yuma sector in August 2005.

fencing is relatively economical, but more easily compromised.<sup>112</sup> If fencing is to be constructed along the border, an issue concerns what kinds of fencing should be constructed in order to maximize its deterrent effect and its utility to the USBP while minimizing the costs associated with its construction and maintenance.

## Fence Location

The USBP has testified that border fencing is most effective for its operational purposes when deployed along urban areas.<sup>113</sup> In these areas, individuals crossing the border have a short distance to cover before disappearing into neighborhoods; once they have entered neighborhoods it is much more difficult for USBP agents to identify and apprehend unauthorized aliens. Also, from populated areas it is relatively easy for unauthorized aliens to find transportation into the interior. For these reasons, all of the border fencing constructed by the USBP to date has been built in urban areas abutting the border, such as San Diego, Nogales, and El Paso. In rural areas, the USBP testified that it has a tactical advantage over border crossers because they must travel longer distances before reaching populated areas. According to CBP, fencing is manpower intensive because agents must continually check the fence for breaches and for illegal activity. This does not represent a problem in urban areas, because the USBP stations are typically located near the border in those areas. In some of the more rural areas of the border, where the nearest towns and USBP stations may be many miles away from the border, this would mean that agents would need to spend much of their working day commuting from the nearest USBP station to the fence location.<sup>114</sup> Additionally, because the border fencing constructed to date has been built along urban areas it has been relatively easy to house the individuals involved in its construction. If border fencing is extended into the more remote areas of the border, the costs of its construction may increase due to the need to bring the individuals and goods needed to build the fence to these areas for extended periods of time. Lastly, some areas of the border are prone to severe weather effects, such as flash flooding, that could compromise any permanent structures constructed there.

A very practical issue concerns what areas of the border should be fenced. Should fencing be restricted to urban or semi-urban areas in order to give the USBP a tactical advantage over border crossers, or should fencing be constructed along any geographical area of the border that features large numbers of unauthorized immigration? In rural areas, should fencing be limited to areas of high illegal entry in order to impede individuals from crossing the border, or should fencing be constructed as a deterrent in any area, even those featuring low levels of illegal entry? Should fencing be deployed in sectors where the distance between the nearest USBP station and the fence requires agents to spend most of their day commuting? Should fencing be deployed to the northern border as well as the southwest border? Will building fencing along more remote or environmentally harsher areas of the border increase the construction costs?

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<sup>112</sup> *Fencing the Border* hearing, July 20, 2006.

<sup>113</sup> *Fencing the Border* hearing, July 20, 2006.

<sup>114</sup> Interview with CBP Congressional Affairs, September 13, 2006.

## Land Acquisition

There are a number of issues associated with the acquisition of the land that would be required for border fencing. Much of the land along the California and Arizona border is owned by the federal government; however most of the land along the Texas border is owned by private individuals. What will the costs of acquiring the land to construct border fencing be, and have these costs been factored into estimates of border fencing costs? Will eminent domain be used to confiscate land from individuals who do not wish to have fencing built on their lands?

The reservations made by Presidents Roosevelt and Taft may have kept substantial parcels of land within the federal domain, depending mostly on the amount of public lands at the time and valid existing claims. CRS was not able to determine how many valid claims and land patents exist, if any, or the number of private developments that may be encroaching on the reservations. Nonetheless, it appears that only those who qualify under an exception or were provided land by statute have valid fee title claims within the reserved strip. If lands were mistakenly granted, sold, or transferred to private parties, these conveyances could be void because, as a general rule, rights can not be acquired in lands actually embraced in a legally valid withdrawal.<sup>115</sup> Compensation under the Fifth Amendment for private landowners may not be owed if private claims are not legitimate. Because the proclamations do not cite any supporting authority, some question the President's implied or inherent constitutional powers to issue them.<sup>116</sup> Others may argue that they conflict with the exclusive mandate given Congress by the Property Clause of the Constitution to regulate and dispose of federal property.<sup>117</sup> An issue for Congress may include whether these proclamations are, in fact, valid, and if so what actions are appropriate to take in the instances where individuals own land within the reservation's boundaries. Assuming the proclamations are valid, the reservations may provide the first 60 feet of necessary space for fence construction in many areas. However, the two layer fencing constructed to date includes 150 feet of land between its layers. An issue for Congress may involve whether to confine border fencing to

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<sup>115</sup> Charles F. Wheatley, *Study of Withdrawals and Reservations of Public Domain Lands*, at Vol. III, at A-7 (1969); *see also* *Steel v. Smelting Co.*, 106 U.S. 447, 453 (1882) (observing that the patent, like the deed of an individual, is inoperative if the government never owned the property, or had previously conveyed it, or had reserved it from sale); *United States v. Fennell*, 381 F. Supp. 2d 1300 (D. N.M. 2005). *Cf.* *United States v. California*, 332 U.S. 19, 39 (1947) (finding the federal government's paramount rights in the three-mile belt along the California coast were not lost by reason of the conduct of its agents or the acquiescence of such agents in California's claim of title).

<sup>116</sup> *See United States v. Midwest Oil*, 236 U.S. 459, 471 (1915) (upholding the President's authority to make land withdrawals on the basis of implied acquiescence in such withdrawals by Congress), *repealed by* 43 U.S.C. §1714. The President's constitutional inherent withdrawal power derived from three theories — residual Executive power, stewardship, and constitutional necessity. *See* Wheatley, *Study of Withdrawals*, at Vol I, at 134. In *Midwest Oil*, the Court noted that by 1910, the President had implemented at least 252 executive orders making reservations for useful, though non-statutory purposes. *Id.* at 471.

<sup>117</sup> U.S. CONST. Art. IV, §3, cl.2.

the 60-foot easement reserved by the proclamations, or whether to acquire the additional 90 feet of land that would be needed to construct Sandia-style fencing.

A corollary issue may involve the authority of DHS to construct border fencing along tribal lands. The Arizona desert along the Tohono O’odham reservation has become one of the most heavily trafficked border areas in the country, and the USBP has been restricted in its operations in the reservation due to tribal concerns.<sup>118</sup> The Tohono O’odham have reportedly vowed to fight the construction of fencing on tribe-owned land, citing environmental and cultural concerns.<sup>119</sup> Under current law, the Secretary of the Interior may grant rights-of-way over and across tribal land, provided the Secretary receives prior written consent of the tribe.<sup>120</sup> If the tribe does not consent, DHS may look to its new waiver authority to construct a fence across tribal lands. It is unclear, however, whether the expanded waiver that was given to the Secretary of DHS would allow (or was intended to allow) the Department to override the statutory authority given to another federal agency. Ultimately, federal government holds all Indian lands in trust, and Congress may take such lands for public purposes, as long as it provides just compensation as required by the Fifth Amendment.<sup>121</sup>

## Diplomatic Ramifications

The governments of Mexico and Canada have both voiced concern about the United States constructing barriers along the international border. Mexican President Vicente Fox has come out strongly against the construction of border barriers on numerous occasions, stating his belief that these projects isolate the two nations, create frustration and misunderstandings, and do not solve the underlying problems that lead individuals to enter the United States illegally. Mexican Press Secretary Rubén Aguilar Valenzuela stated his government’s belief that “history has also taught us that a wall is never the solution to problems and that all walls eventually get torn down.”<sup>122</sup> The Mexican government has reportedly forwarded numerous diplomatic notes to the White House registering its complaints against the possible expansion of border fencing. The Canadian government has also reportedly voiced concern over legislative proposals that would require a study of fencing options along the northern border, citing the difficulties of fencing the northern border and the fact that

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<sup>118</sup> The USBP has been prohibited from building permanent camera installations and from paving access roads leading to and along the border. Information obtained during a CRS site-visit to the Tohono O’odham reservation, August 2005.

<sup>119</sup> Randal Archibald, “Border Fence Must Skirt Objections From Arizona Tribe,” *New York Times*, September 20, 2006.

<sup>120</sup> 25 U.S.C. §324.

<sup>121</sup> *United States v. Sioux Nation of Indians*, 448 U.S. 371 (1980).

<sup>122</sup> Mexican Government Press Release, “Crecimiento con Calidad: El Presidente Vicente Fox encabezará la cena de gala de la XI Cumbre Anual Hemispheria San Pedro 2005: Rubén Aguilar, Vocero de Presidencia,” May 12, 2005. Translation by CRS. Available at [<http://www.presidencia.gob.mx/actividades/crecimiento/?contenido=18195&pagina=31>].

the U.S. government has never discussed such a plan with Canadian authorities.<sup>123</sup> Deputy Assistant Secretary for Immigration and Customs Enforcement John P. Clark reportedly stated during Congressional testimony that the proposed expansion of border fencing “harkens back to the Chinese wall and the Berlin Wall, not the message we want to send to the Mexican government, the Canadian government, and the rest of the world.”<sup>124</sup> There are a number of possible issues for Congress to consider involving the potential diplomatic ramifications of constructing barriers along the border: Do the gains in border security outweigh the risk of alienating Mexico and Canada? Should the Mexican or Canadian government’s opinions or wishes be taken into account when border fencing is concerned? Given the need to coordinate intelligence and law enforcement activities at the border, should maintaining cordial working relationships with Mexico and Canada take precedence over sealing the border with physical barriers?

## Environmental Considerations

A great deal of debate has been around the environmental impacts of border fencing. The addition of fences along the southwest border, according to some, could harm sensitive environments, adversely affect critical habitat for protected species, and block migratory patterns for animals. Indeed, these concerns were among the many voiced by the CCC in its objection to the completion of the San Diego border fence. After immigration officials, the CCC, and the environmental community could not agree on a fence design, Congress passed waiver language in the REAL ID Act that allows the Secretary of DHS to waive all “legal requirements” necessary to ensure expeditious construction of the barriers and roads in the vicinity of the U.S. border. The Secretary used this provision to waive a number of primarily environmental laws (see **Appendix A**) in order to complete the San Diego border fence. DHS maintains, however, that it will follow “best management practices” throughout construction and will be “mindful of the environmental impacts” that might occur.<sup>125</sup> Nonetheless, the Secretary’s broad waiver authority has many worried about potential fence projects along other areas of the southwest border. Some argue that a fence along the Arizona border could be especially destructive to endangered jaguar and Sonoran desert pronghorn populations that usually roam this area because it would fragment native habitat and ultimately reduce gene pools.<sup>126</sup> Officials from the U.S. Fish and Wildlife Service, however, have said that it is too early to speculate about the potential impact of a border fence on wildlife

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<sup>123</sup> Beth Gorham, “Canada Balks at U.S. Plan for Border Fence,” *Canadian Press*, December 17, 2005, at [<http://www.canada.com/nationalpost/story.html?id=6c13f3fd-bdfb-4346-99ef-3f01f870c801&k=60592&p=1>].

<sup>124</sup> Eunice Moscoso, “Border Fence Would Cost Millions, Not Work Critics Say,” *Cox News Service*, November 9, 2005.

<sup>125</sup> Eilene Zimmerman, SFGate.com, *Border protections imperil environment — Last wilderness area south of San Diego could be damaged*, February 27, 2006, available at [<http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/02/27/MNG2GHFBFL1.DTL&type=printable>].

<sup>126</sup> Id; Defenders of Wildlife, *On the Line*, pp. 16-19.

migration.<sup>127</sup> Others note that unauthorized migration negatively impacts the environment, and believe that the construction of fencing could actually have a beneficial impact for protected lands if it reduces the number of unauthorized migrants traversing through environmentally sensitive lands.

As Congress debates immigration reform and the addition of new border fences, Members will undoubtedly be called upon to balance national security interests with environmental protections. Because there does not appear to be a clear consensus on the environmental impacts of border fencing, there is some interest in a study of the issue.<sup>128</sup> The effects of the San Diego border fence, for example, may help scientists better understand and predict potential environmental consequences elsewhere. Should fencing be expanded along the southwest border, Congress may be interested in environmentally sensitive alternatives to normal fencing and whether they can effectively limit illegitimate cross-border traffic. Some argue that vehicle barriers may be less intrusive because they allow unimpeded wildlife movement but can limit damaging vehicular traffic.<sup>129</sup> Congress may also call on the Secretary to cooperate or coordinate certain activities with the environmental community, since the Secretary could waive many environmental requirements.<sup>130</sup>

## Legal Considerations

The building of barriers along the international border has raised a number of legal issues. Most stem from requirements posed by environmental laws. Before the passage of the REAL ID Act waiver provision, for example, the Sierra Club and other environmental groups challenged, under the National Environmental Policy Act, the federal government's plan to complete the San Diego border fence.<sup>131</sup> The lawsuit alleged, among other things, that the government's final environmental impact statement did not address the entire 14-mile border infrastructure system and inadequately addressed the parts that were evaluated. After Secretary Chertoff exercised the waiver authority, the court dismissed the environmentalists' lawsuit in December 2005.

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<sup>127</sup> Chuck Mueller, Dailybulletin.com, *Experts say border fence would hurt bighorn sheep* (August 14, 2006) available at [[http://www.dailybulletin.com/news/ci\\_4177153](http://www.dailybulletin.com/news/ci_4177153)]. Reports also indicate that a constant flow of illegal aliens into the native habitat for these animals interferes with their use of certain lands and survival. See Defenders of Wildlife, *On the Line*, p. 18.

<sup>128</sup> Indeed, §129 of S. 2611, passed by the Senate in the 109<sup>th</sup> Congress, called on the Secretaries of the Interior, Agriculture, Defense, and Commerce, and the Administrator of the EPA to assess the environmental impacts, including the impact on zoning, global climate change, ozone depletion, biodiversity loss, and transboundary pollution, of physical barriers along the southern international land and maritime borders.

<sup>129</sup> Defenders of Wildlife, *On the Line*, p. 35; Anne Minard, National Geographic News, *U.S. Immigration Law Could Harm Desert Animals, Critics Say*, (March 31, 2006) available at [[http://news.nationalgeographic.com/news/2006/03/0331\\_060331\\_desert\\_fence.html](http://news.nationalgeographic.com/news/2006/03/0331_060331_desert_fence.html)].

<sup>130</sup> See generally, Defenders of Wildlife, *On the Line*.

<sup>131</sup> *Sierra Club v. Ashcroft*, No. 04-CV-272, (S.D. Cal. February 10, 2004).

With respect to the Secretary's use of the waiver authority, the provision allows legal redress only for constitutional violations and limits review to the district courts of the United States (though the Supreme Court retains discretionary appellate review over district court decisions). In essence, an individual could not sue DHS for bypassing the environmental impact statement requirements of the National Environmental Policy Act (a law it has waived) because that would be a statutory violation, but an individual could sue for the taking of property without "just compensation" as provided by the Fifth Amendment. Should a district court make a ruling, that decision can only be appealed if the petitioner files a petition for a writ of certiorari to the Supreme Court and the Court, in its discretion, chooses to grant certiorari. In other words, there is no intermediate appellate court review guaranteed as of right to a petitioner. Appeal directly from a district court to the Supreme Court rarely appears in law.<sup>132</sup> Still, when Congress determines a particular class of cases to be of great public import, it is not unprecedented for it to require prompt review in the highest court of the land. As previously discussed, the Sierra Club and Defenders of Wildlife brought suit in the U.S. District Court for the District of Columbia in late 2007, challenging the constitutionality of the waiver authority provided to the Secretary of Homeland Security by the REAL ID Act, but the court rejected plaintiffs' constitutional challenge and dismissed the claim.<sup>133</sup> Consequently, the plaintiffs have filed a petition for a writ of certiorari to the U.S. Supreme Court, which is still pending.

## Unintended Consequences

Considerable evidence shows that the USBP's historical strategy of "Prevention through Deterrence," whereby agents and resources including border fencing and other barriers have been concentrated along urban areas and areas traditionally featuring high levels of illegal entry, has succeeded in changing the flow of illegal migration. While San Diego, CA, and El Paso, TX, were historically the two sectors that featured the most apprehensions and the highest levels of illegal immigration, since the mid-1990s and the advent of Operations Gatekeeper and Hold the Line in those sectors, the more remote geographical areas of the Arizona border have become the hot-spots for illegal migration into the United States. One unintended consequence of this enforcement posture and the shift in migration patterns has been an increase in the number of migrant deaths each year; on average 200 migrants died each year in the early 1990s, compared with 472 migrant deaths in 2005. Another unintended consequence of this enforcement posture may have been a relative increase, compared with the national average, in crime along the border in these more remote regions. While crime rates in San Diego and El Paso have declined over the past 15 years, the reduction in crime rates along the more rural areas of the border have lagged behind the national trends. Another unintended consequence of the border fencing has been the proliferation of tunnels dug underneath the border. In San Diego, where the double-layer Sandia fencing has been constructed, smugglers

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<sup>132</sup> Laws that allow a district court ruling to be appealed directly to the Supreme Court include 13 U.S.C. §141 (illegal use of census data); 15 U.S.C. §29 (Sherman Act violations); 18 U.S.C. §700 (flag desecration violations); 42 U.S.C. §1971 (voting rights violations); and 42 U.S.C. §2000a-5 (civil rights violations).

<sup>133</sup> See *supra* at 10.

have dug numerous tunnels underneath the border fence. One such tunnel was almost a kilometer long and was built from reinforced concrete — evidence of a rather sophisticated smuggling operation.

A possible issue for Congress to consider as it debates expanding the existing border fencing is what the unintended consequences of this expansion could be. Given the re-routing of migration flows that have already occurred, are DHS and the relevant border communities prepared to handle the increased flow of illegal migration to non-reinforced areas? Is DHS prepared to deal with an increase in the phenomenon of cross-border tunnels and other attempts to defeat the purpose of the fencing? What will the impact on crime rates be along the unreinforced areas of the border? Will USBP agents be required to spend some of their patrolling time guarding the fence?

## Appendix A. Examples of USBP Border Fencing



*Bollard fence*



*Landing mat fence*



*Picket or decorative fence*



*Sandia fence*

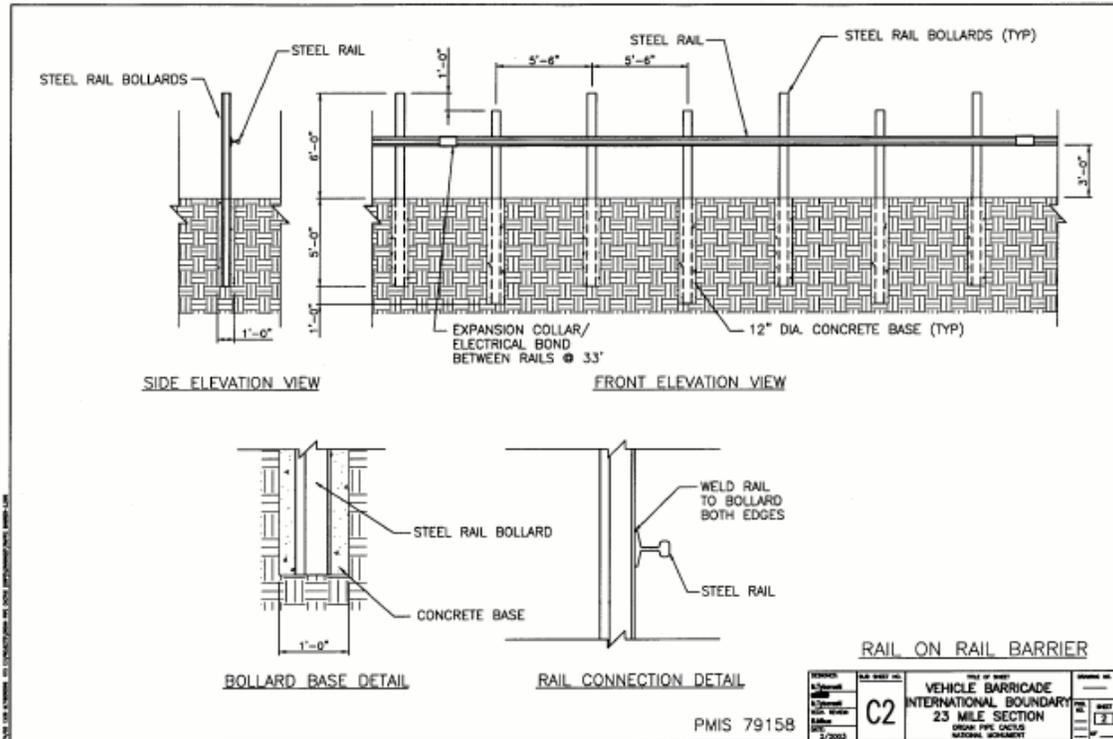
**Source:** U.S. Department of Justice, Immigration and Naturalization Service, *Environmental Assessment for Infrastructure Within U.S. Border Patrol Naco-Douglas Corridor Cochise County, Arizona*, August, 2000, p. 1-13.

## Appendix B. The San Diego Fence



**Source:** U.S. Department of Homeland Security; *Environmental Impact Statement for the Completion of the 14-Mile Border Infrastructure System San Diego, California*, July 2003.

## Appendix C. Permanent Vehicle Barrier Schematic



**Source:** U.S. Department of the Interior, National Park Service, *Proposed Vehicle Barrier Environmental Assessment*, April, 2003.

## Appendix D. Permanent Vehicle Barriers



**Source:** CBP Congressional Affairs.

### Appendix E. Data from Figure 4

	FY1992	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004
Other San Diego Sector Stations	204,456	210,129	155,386	262,505	297,423	189,321	160,781	140,640	113,866	85,815	87,195	96,752	119,293
Chula Vista Station	158,952	156,273	107,872	141,096	111,413	67,804	72,648	27,085	19,453	9,627	3,080	4,545	9,923
Imperial Beach Station	202,173	165,287	186,894	120,630	74,979	27,865	15,832	15,974	19,815	15,480	11,405	10,218	9,112
Tucson	71,036	92,639	139,473	227,529	305,348	272,397	387,406	470,449	616,346	449,675	333,648	347,263	490,827

**Source:** CRS Presentation of CBP data.

## Appendix F. Legal Requirements Waived by DHS for the Construction of the San Diego Border Fence

Laws Waived	General Requirements
National Environmental Policy Act (NEPA) 16 U.S.C. §§ 4321 <i>et seq.</i>	Under NEPA, an environmental impact statement must be prepared for “every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment.” If an agency is uncertain whether an action’s impacts on the environment will be significant, it usually prepares an environmental assessment (EA). An EA is carried out to clarify issues and determine the extent of an action’s environmental effects. NEPA also has public notice and comment requirements.
Endangered Species Act (ESA) 16 U.S.C. §§ 1531 <i>et seq.</i>	Section 7 of the ESA mandates that each federal agency consult with the Fish and Wildlife Service (FWS) or National Marine Fishery Services (NMFS), depending on the listed species involved, to ensure that its actions are “not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of” designated critical habitat. Once consulted, FWS or NMFS must, if listed endangered species might be affected, prepare a <i>biological opinion</i> to determine the actual impact of the proposed action. Mitigation measures could be required.
Costal Zone Management Act (CZMA) 16 U.S.C. §§ 1451 <i>et seq.</i>	The CZMA requires federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone to be carried out in a manner that is consistent to the maximum extent practicable with the policies of an approved state management program. The federal agency must submit a consistency determination to the applicable state agency.
Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251 <i>et seq.</i>	Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt.
National Historic Preservation Act (NHPA) 16 U.S.C. §§ 470 <i>et seq.</i>	In accordance with the NHPA and its implementing regulations, 36 CFR Part 800, sites determined to be eligible for inclusion in the National Register of Historic Places must be protected, either through avoidance or other mitigative action, from direct and indirect impacts. The NHPA also has procedural requirements, including public notice and comment.

Laws Waived	General Requirements
Migratory Bird Treaty Act (MTBA) 16 U.S.C. §§ 703 <i>et seq.</i>	Section 2 of the MTBA sets out the types of prohibited conduct and states: “Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means, or in any manner, to pursue, hunt, take, capture, kill, attempt to do these acts, [or] possess ... any migratory bird, [or] any part, nest, or eggs of any such bird...” Violations of the MTBA may result in civil or criminal penalties.
Clean Air Act (CAA) 42 U.S.C. §§ 7401 <i>et seq.</i>	The Clean Air Act requires the Environmental Protection Agency to establish minimum national standards for air quality, known as National Ambient Air Quality Standards (NAAQS), and assigns primary responsibility to the states to assure compliance with the standards. Areas not meeting the standards, referred to as “nonattainment areas,” are required to implement specified air pollution control measures. Federal actions located in NAAQS nonattainment areas must comply with the federal general air conformity rule set forth by the CAA and codified in 40 CFR Part 51. The general conformity rule requires federal agencies to ensure that actions undertaken in nonattainment or maintenance areas are consistent with the applicable state plan. The states administer the CAA through a comprehensive permitting program.
Administrative Procedure Act (APA) 5 U.S.C. §§ 551 <i>et seq.</i>	The APA establishes the general procedures that an agency must follow when promulgating a legislative rule. An agency must publish a notice of proposed rulemaking in the <i>Federal Register</i> , afford interested persons an opportunity to participate in the proceeding through the submission of written comments or, at the discretion of the agency, by oral presentation, and when consideration of the matter is completed, incorporate in the rules adopted “a concise general statement of their basis and purpose.” A final rule must be published in the <i>Federal Register</i> “not less than 30 days before its effective date.”

## Appendix G. Legal Requirements Waived by DHS for the Construction of Physical Barriers and Roads in the Vicinity of the Barry M. Goldwater Range in Southwest Arizona

Laws Waived	General Requirements
National Environmental Policy Act (NEPA) 16 U.S.C. §§ 4321 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Endangered Species Act (ESA) 16 U.S.C. §§ 1531 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Wilderness Act, 16 U.S.C. §§ 1131 <i>et seq.</i>	The Wilderness Act established a National Wilderness Preservation System on federal lands “where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” Within designated wilderness areas, section 4(c) of the Act generally prohibits structures or installations, motor vehicle or other forms of mechanical transport, and temporary roads.
National Historic Preservation Act (NHPA) 16 U.S.C. §§ 470 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Wildlife Refuge System Administration Act, 16 U.S.C. §§ 668dd-668ee.	The National Wildlife Refuge System (NWRS) was primarily established to ensure the conservation of fish, wildlife, and plants. Designated areas may be used for other purposes (e.g., hunting, timber harvest, and grazing) only to the extent that such activities are compatible with the purposes for which the refuge was created. The refuges are managed by the Fish and Wildlife Service.
Military Lands Withdrawal Act of 1999 (P.L. 106-65, 113 Stat. 885 (Oct. 5, 1999)).	The Military Lands Withdrawal Act of 1999 withdrew the lands within the Barry M. Goldwater Range and generally reserved such lands to the Secretaries of the Air Force and the Navy for military purposes. The Secretaries of the Air Force, Navy, and Interior were required to establish an integrated natural resource plan (INRP) which, among other things, provided that “all gates, fences, and barriers constructed on such lands...be designed and erected to allow wildlife access, to the extent practicable and consistent with military security, safety, and sound wildlife management use.”

Laws Waived	General Requirements
Sikes Act, 16 U.S.C. §§ 670 <i>et seq.</i>	The Sikes Act requires the Secretary of Defense to carry out a program providing for the conservation and rehabilitation of natural resources on military installations (e.g., public lands withdrawn or reserved for use by a military department), pursuant to an INRP prepared in cooperation with the Secretary of the Interior.
Administrative Procedure Act (APA) 5 U.S.C. §§ 551 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.

## Appendix H. Legal Requirements Waived by DHS for the Construction of Physical Barriers and Roads in the Vicinity of the San Pedro Riparian National Conservation Area in Southeast Arizona

Laws Waived	General Requirements
National Environmental Policy Act (NEPA) 16 U.S.C. §§ 4321 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Endangered Species Act (ESA) 16 U.S.C. §§ 1531 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Historic Preservation Act (NHPA) 16 U.S.C. §§ 470 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Migratory Bird Treaty Act (MTBA) 16 U.S.C. §§ 703 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Clean Air Act (CAA) 42 U.S.C. §§ 7401 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Archeological Resources Protection Act (ARPA) 16 U.S.C. §§ 470aa <i>et seq.</i>	The Archeological Resources Protection Act generally prohibits the damage, removal, excavation, or alteration of any archeological resource located on public lands or Indian lands, except pursuant to a permit issued by the appropriate federal land manager.
Safe Drinking Water Act (SDWA) 42 U.S.C. §§ 300f <i>et seq.</i>	The Safe Drinking Water Act provides federal authority for the establishment of standards and treatment requirements for public water supplies, control of the underground injection of wastes, and protection of sources of drinking water. Federal agencies involved in certain activities that may contaminate drinking water are subject to all federal, state, and local requirements concerning the protection of water systems to the same extent as any person is subject to such requirements.

Laws Waived	General Requirements
<p>Noise Control Act (NCA) 42 U.S.C. §§ 4901 <i>et seq.</i></p>	<p>Pursuant to the Noise Control Act, the federal government has established standards for maximum sound levels generated from a variety of products. In addition, section 4 of the NCA requires federal agencies, subject to presidential exemption, to comply with federal, state, interstate, and local requirements respecting control and abatement of environmental noise to the same extent that any person is subject to such requirements.</p>
<p>Solid Waste Disposal Act (SWDA), as amended by the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §§ 6901 <i>et seq.</i></p>	<p>Through the SWDA, as amended by RCRA, entities that transport or produce solid or hazardous waste are required to comply with regulations concerning the management, production, and storage of waste. Moreover, each federal agency engaged in any activity resulting, or which may result, in the disposal or management of solid waste or hazardous waste is subject to all federal, state, and local requirements concerning such waste to the same extent as any person is subject to such requirements.</p>
<p>Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. §§ 9601 <i>et seq.</i></p>	<p>CERCLA established broad federal authority to respond to the release or threatened release of hazardous substances. Among other things, it established requirements for closed and abandoned hazardous waste sites, and provided for liability of persons responsible for the release of hazardous waste at these locations. Federal agencies and instrumentalities are subject to these requirements to the same extent as nongovernmental entities, including with respect to liability.</p>
<p>Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §§ 1701 <i>et seq.</i></p>	<p>The Federal Land Policy and Management Act establishes guidelines for the management and protection of federal public lands, as administered by the Secretary of the Interior through the Bureau of Land Management (in coordination with the Secretary of Agriculture with respect to lands in the National Forest System), and imposes procedural requirements for land transfers and exchanges. In developing land use plans, the Secretary is required to consider protection of areas of critical environmental concern and compliance with federal and state pollution control laws. The Secretary of the Interior, with respect to the public lands, and, the Secretary of Agriculture, with respect to lands within the National Forest System, are authorized to grant rights-of-way through such lands to other federal agencies, subject to terms and conditions imposed by the Secretary authorizing the right-of-way.</p>

Laws Waived	General Requirements
Fish and Wildlife Coordination Act (FWCA) 16 U.S.C. §§ 661 <i>et seq.</i>	The Fish and Wildlife Coordination Act generally provides that whenever the waters of any stream or other body of water are proposed to be modified by a federal agency, the agency must first consult with the United States Fish and Wildlife Service, Department of the Interior, and the head of the agency exercising administration over the wildlife resources of the state where the construction will occur, with a view to the conservation of wildlife resources.
Archaeological and Historic Preservation Act (AHPA) 16 U.S.C. §§ 469 <i>et seq.</i>	The purpose of the Archeological and Historical Preservation Act is to provide for the preservation of historical and archeological data which might otherwise be irreparably lost or destroyed as the result of, among other things, any alteration of terrain caused by a federal construction project. If a federal agency becomes aware that its activities in connection with a construction project may cause irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, the agency must notify the Secretary of the Interior. If the Secretary deems such data to be significant and in danger of being irrevocably lost or destroyed, he is authorized to take action to protect and recover it.
Antiquities Act 16 U.S.C. §§ 431 <i>et seq.</i>	The Antiquities Act authorizes the President to declare as national monuments historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest. This land is then withdrawn from any other use. The Secretaries of the Interior, Agriculture, and the Army may issue permits to qualified scientific or educational institutions for the excavation of archaeological sites and gathering of objects of antiquity on lands under their respective jurisdictions. Penalties are provided for damaging resources protected under the Act.
Historic Sites, Buildings, and Antiquities Act (HSBAA) 16 U.S.C. §§ 461 <i>et seq.</i>	The Historic Sites, Buildings, and Antiquities Act declares it the national policy to preserve histories, sites, buildings, and objects of national significance. The Secretary of the Interior, through the National Park Service, is charged with implementing the policy of the HSBAA, including through the acquisition, maintenance, administration of historic sites. Persons who violate any rules or regulations promulgated under the HSBAA may be subject to a fine.

Laws Waived	General Requirements
<p>Arizona-Idaho Conservation Act of 1988 16 U.S.C. §§ 460xx <i>et seq.</i></p>	<p>The Arizona-Idaho Conservation Act established the San Pedro Riparian National Conservation Area, consisting of public lands surrounding the San Pedro River in Cochise County, Arizona. The Secretary of the Interior is responsible for managing the area in a manner that conserves and protects its wildlife and other resources. The Secretary may only permit uses of the conservation area that are determined to further the primary purposes for which the conservation area was established. Except in limited circumstances, motorized vehicles are permitted only on designated roads. Persons who violate the Act or its implementing regulations are subject to a fine and/or imprisonment.</p>
<p>Wild and Scenic Rivers Act 16 U.S.C. §§ 1281 <i>et seq.</i></p>	<p>The Wild and Scenic Rivers Act establishes a National Wild and Scenic Rivers System (System) protecting rivers and adjacent lands with important scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Components of the System are to be administered in a manner that protects and enhances the free-flowing and undeveloped nature of areas covered by the Act.</p>
<p>Farmland Protection Policy Act (FPPA) 7 U.S.C. §§ 4201 <i>et seq.</i></p>	<p>The Farmland Protection Policy Act requires the Department of Agriculture, in cooperation with other federal entities, to develop criteria for identifying the effects of federal programs on the conversion of farmland to nonagricultural uses. Federal agencies are thereafter required to use this criteria to identify farmland that is converted by federal programs and take into account the adverse effects of such programs on the preservation of farmland. Agencies must consider alternative actions, as appropriate, that could lessen such adverse effects.</p>
<p>Administrative Procedure Act (APA) 5 U.S.C. §§ 551 <i>et seq.</i></p>	<p>See <b>Appendix F</b> for description of requirements.</p>

## Appendix I. Legal Requirements Waived by DHS for the Construction of Physical Barriers and Roads in Hidalgo County, Texas

Laws Waived	General Requirement
National Environmental Policy Act (NEPA) 16 U.S.C. §§ 4321 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Endangered Species Act (ESA) 16 U.S.C. §§ 1531 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Historic Preservation Act (NHPA) 16 U.S.C. §§ 470 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Migratory Bird Treaty Act (MTBA) 16 U.S.C. §§ 703 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Clean Air Act (CAA) 42 U.S.C. §§ 7401 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Archeological Resources Protection Act (ARPA) 16 U.S.C. §§ 470aa <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Safe Drinking Water Act (SDWA) 42 U.S.C. §§ 300f <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Noise Control Act (NCA) 42 U.S.C. §§ 4901 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.

Laws Waived	General Requirement
Solid Waste Disposal Act (SWDA), as amended by the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §§ 6901 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. §§ 9601 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §§ 1701 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Fish and Wildlife Coordination Act (FWCA) 16 U.S.C. §§ 661 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Archaeological and Historic Preservation Act (AHPA) 16 U.S.C. §§ 469 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Antiquities Act 16 U.S.C. §§ 431 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Historic Sites, Buildings, and Antiquities Act (HSBAA) 16 U.S.C. §§ 461 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Farmland Protection Policy Act (FPPA) 7 U.S.C. §§ 4201 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Administrative Procedure Act (APA) 5 U.S.C. §§ 551 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.

Laws Waived	General Requirement
Coastal Zone Management Act (CZMA) 16 U.S.C. §§ 1451 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Wildlife Refuge System Administration Act 16 U.S.C. §§ 668dd-668ee	See <b>Appendix G</b> for description of requirements.
Fish and Wildlife Act of 1956 16 U.S.C. §§ 742a <i>et seq.</i>	The Fish and Wildlife Act establishes a comprehensive national fish, shellfish, and wildlife resources policy. The law requires the Secretary of Interior to develop measures for “maximum sustainable production of fish,” make economic studies of the industry and recommend measures to insure the stability of fisheries, take steps “required for the development, management, advancement, conservation and protection of the fisheries resources,” and take steps “required for the development, management, advancement, conservation, and protection of fish and wildlife resources” through research, acquisition of land or water, development of existing facilities, and other means.
Rivers and Harbors Act of 1899 33 U.S.C. § 403	The Rivers and Harbors Act makes it a misdemeanor to discharge refuse into the navigable waters of the United States without a permit. It also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, channel, or other area within the reach of the Act without a permit.
Eagle Protection Act 16 U.S.C. §§ 668 <i>et seq.</i>	The Eagle Protection Act provides for the protection of the bald eagle and the golden eagle by prohibiting the taking, possession, and commerce of such birds.
Native American Graves Protection and Repatriation Act (NAGPRA) 25 U.S.C. §§ 3001 <i>et seq.</i>	The Native American Graves Protection and Repatriation Act requires federal agencies and institutions receiving federal funding to return Native American cultural items and human remains to their respective people. If federal officials anticipate that activities on federal and tribal land might have an effect on American Indian burial, or their activities inadvertently discover such burials, they must consult with American Indian tribal officials as part of their compliance duties.
American Indian Religious Freedom Act (AIRFA) 42 U.S.C. § 1996	The American Indian Religious Freedom Act ensures American Indian groups access to religious sites by directing federal agencies to consult with American Indian spiritual leaders to determine appropriate procedures to protect access and other religious rights.

<b>Laws Waived</b>	<b>General Requirement</b>
Religious Freedom Restoration Act 42 U.S.C. § 2000bb	The Religious Freedom Restoration Act mandates that strict scrutiny be applied when a violation of the Free Exercise Clause of the First Amendment is committed by a federal actor.
Federal Grant and Cooperative Agreement Act of 1977 31 U.S.C. §§ 6303-6305	The Federal Grant and Cooperative Agreement Act governs the use of “non-standard” agreements, such as grants or cooperative agreements offered by federal agencies. This Act imposes standards mandating the use of procurement contracts in some situations while allowing the use of non-standard agreements in other situations.

## Appendix J. Legal Requirements Waived by DHS for the Construction of Physical Barriers and Roads at Various Project Areas Located in California, Arizona, New Mexico, and Texas

Laws Waived	General Requirement
National Environmental Policy Act (NEPA) 16 U.S.C. §§ 4321 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Endangered Species Act (ESA) 16 U.S.C. §§ 1531 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Historic Preservation Act (NHPA) 16 U.S.C. §§ 470 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Migratory Bird Treaty Act (MTBA) 16 U.S.C. §§ 703 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Clean Air Act (CAA) 42 U.S.C. §§ 7401 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Archeological Resources Protection Act (ARPA) 16 U.S.C. §§ 470aa <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Safe Drinking Water Act (SDWA) 42 U.S.C. §§ 300f <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Noise Control Act (NCA) 42 U.S.C. §§ 4901 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.

Laws Waived	General Requirement
Solid Waste Disposal Act (SWDA), as amended by the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §§ 6901 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. §§ 9601 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §§ 1701 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Fish and Wildlife Coordination Act (FWCA) 16 U.S.C. §§ 661 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Archaeological and Historic Preservation Act (AHPA) 16 U.S.C. §§ 469 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Antiquities Act 16 U.S.C. §§ 431 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Historic Sites, Buildings, and Antiquities Act (HSBAA) 16 U.S.C. §§ 461 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Farmland Protection Policy Act (FPPA) 7 U.S.C. §§ 4201 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
Administrative Procedure Act (APA) 5 U.S.C. §§ 551 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
Coastal Zone Management Act (CZMA) 16 U.S.C. §§ 1451 <i>et seq.</i>	See <b>Appendix F</b> for description of requirements.
National Wildlife Refuge System Administration Act 16 U.S.C. §§ 668dd-668ee	See <b>Appendix G</b> for description of requirements.

Laws Waived	General Requirement
Fish and Wildlife Act of 1956 16 U.S.C. §§ 742a <i>et seq.</i>	See <b>Appendix I</b> for description of requirements.
Rivers and Harbors Act of 1899 33 U.S.C. § 403	See <b>Appendix I</b> for description of requirements.
Eagle Protection Act 16 U.S.C. §§ 668 <i>et seq.</i>	See <b>Appendix I</b> for description of requirements.
Native American Graves Protection and Repatriation Act (NAGPRA) 25 U.S.C. §§ 3001 <i>et seq.</i>	See <b>Appendix I</b> for description of requirements.
American Indian Religious Freedom Act (AIRFA) 42 U.S.C. § 1996	See <b>Appendix I</b> for description of requirements.
Religious Freedom Restoration Act 42 U.S.C. § 2000bb	See <b>Appendix I</b> for description of requirements.
Wild and Scenic Rivers Act 16 U.S.C. § 1281 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.
The Wilderness Act 16 U.S.C. §§ 1131a <i>et seq.</i>	See <b>Appendix G</b> for description of requirements.
Otay Mountain Wilderness Act of 1999 P.L. 106-145	The Otay Mountain Wilderness Act designates certain public lands in California as “wilderness” to be protected under the Wilderness Act. Any lands acquired by the United States within the designated area shall become part of the “wilderness area” and subject to the protections of the Wilderness Act.
Section 102(29) and 103 of Title I of the California Desert Protection Act P.L. 103-433, 50 Stat. 1827	The California Desert Protection Act designates certain lands within the Inyo National Forest as “wilderness” to be protected under the Wilderness Act.

Laws Waived	General Requirement
National Park Service General Authorities Act 16 U.S.C. §§ 1a-1 <i>et seq.</i>	The National Park Service General Authorities Act is the organic statute for the National Parks Service. The Act calls for the preservation of certain lands and empowers the National Parks Service to issue regulations and manage these lands.
Sections 401(7), 403, and 404 of the National Parks and Recreation Act Of 1978 P.L. 95-625	The National Parks and Recreation Act designates the Organ Pipe Cactus Sational Monument in Arizona as “wilderness” to be administered under the Wilderness Act.
Sections 301(a)-(f) of the Arizona Desert Wilderness Act P.L. 101-628	The Arizona Desert Wilderness Act designates certain lands in the Havasu National Wildlife Refuge, Imperial National Wildlife Refuge, Kofa National Wildlife Refuge, and Cabeza Prieta National Wildlife Refuge (all in Arizona) as components of the National Wilderness Preservation System to be administered under the Wilderness Act.
National Forest Management Act of 1976 16 U.S.C. §§ 1600 <i>et seq.</i>	The National Forest Management Act is the organic statute for the National Parks Service. It empowers the Secretary of the Interior to administer the national park system.
Multiple Use and Sustained Yield Act of 1960 16 U.S.C. §§ 528-531	The Multiple Use and Sustained Yield Act declares that national forests are for outdoor recreation, range, timber, watershed, and fish and wildlife purposes. It seeks to ensure that the national forest are managed in furtherance of these purposes and in a sustainable manner.
Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §§ 1701 <i>et seq.</i>	See <b>Appendix H</b> for description of requirements.

GAO

Testimony Before the Subcommittees on  
Management, Investigations, and Oversight, and  
Border, Maritime and Global Counterterrorism,  
Committee on Homeland Security,  
House of Representatives

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# SECURE BORDER INITIATIVE

## Observations on Selected Aspects of *SBI*net Program Implementation

Statement of Richard M. Stana, Director  
Homeland Security and Justice Issues





Highlights of [GAO-08-131T](#), a testimony before the subcommittee on Management, Investigation, and Oversight, and Border, Maritime and Global Counterterrorism, Committee on Homeland Security, House of Representatives

## Why GAO Did This Study

In November 2005, the Department of Homeland Security (DHS) established the Secure Border Initiative (SBI), a multiyear, multibillion dollar program to secure U.S. borders. One element of SBI is *SBI<sub>net</sub>*—the U.S. Customs and Border Protection (CBP) program responsible for developing a comprehensive border protection system through a mix of security infrastructure (e.g., fencing), and surveillance and communication technologies (e.g., radars, sensors, cameras, and satellite phones).

The House Committee on Homeland Security asked GAO to monitor DHS progress in implementing the *SBI<sub>net</sub>* program. This testimony provides GAO's observations on (1) *SBI<sub>net</sub>* technology implementation; (2) *SBI<sub>net</sub>* infrastructure implementation; (3) the extent to which CBP has determined the impact of *SBI<sub>net</sub>* technology and infrastructure on its workforce needs and operating procedures; and (4) how the CBP SBI Program Management Office (PMO) has defined its human capital goals and the progress it has made to achieve these goals. GAO's observations are based on analysis of DHS documentation, such as program schedules, contracts, status, and reports. GAO also conducted interviews with DHS officials and contractors, and visits to sites in the southwest border where *SBI<sub>net</sub>* deployment is underway. GAO performed the work from April 2007 through October 2007. DHS generally agreed with GAO's findings.

To view the full product, including the scope and methodology, click on [GAO-08-131T](#). For more information, contact Richard M. Stana at (202) 512-8777 or stanar@gao.gov.

## SECURE BORDER INITIATIVE

### Observations on Selected Aspects of *SBI<sub>net</sub>* Program Implementation

#### What GAO Found

DHS has made some progress to implement Project 28—the first segment of *SBI<sub>net</sub>* technology across the southwest border, but it has fallen behind its planned schedule. The *SBI<sub>net</sub>* contractor delivered the components (i.e., radars, sensors and cameras) to the Project 28 site in Tucson, Arizona on schedule. However, Project 28 is incomplete more than 4 months after it was to become operational—at which point Border Patrol agents were to begin using *SBI<sub>net</sub>* technology to support their activities. According to DHS, the delays are primarily due to software integration problems. In September 2007, DHS officials said that the Project 28 contractor was making progress in correcting the problems, but DHS was unable to specify a date when the system would be operational. Due to the slippage in completing Project 28, DHS is revising the *SBI<sub>net</sub>* implementation schedule for follow-on technology projects, but still plans to deploy technology along 387 miles of the southwest border by December 31, 2008. DHS is also taking steps to strengthen its contract management for Project 28.

*SBI<sub>net</sub>* infrastructure deployment along the southwest border is on schedule, but meeting CBP's goal to have 370 miles of pedestrian fence and 200 miles of vehicle barriers in place by December 31, 2008, may be challenging and more costly than planned. CBP met its intermediate goal to deploy 70 miles of new fencing in fiscal year 2007 and the average cost per mile was \$2.9 million. The *SBI<sub>net</sub>* PMO estimates that deployment costs for remaining fencing will be similar to those thus far. In the past, DHS has minimized infrastructure construction labor costs by using Border Patrol agents and Department of Defense military personnel. However, CBP officials report that they plan to use commercial labor for future fencing projects. The additional cost of commercial labor and potential unforeseen increases in contract costs suggest future deployment could be more costly than planned. DHS officials also reported other challenging factors they will continue to face for infrastructure deployment, including community resistance, environmental considerations, and difficulties in acquiring rights to land along the border.

The impact of *SBI<sub>net</sub>* on CBP's workforce needs and operating procedures remains unclear because the *SBI<sub>net</sub>* technology is not fully identified or deployed. CBP officials expect the number of Border Patrol agents required to meet mission needs to change from current projections, but until the system is fully deployed, the direction and magnitude of the change is unknown. For the Tucson sector, where Project 28 is being deployed, Border Patrol officials are developing a plan on how to integrate *SBI<sub>net</sub>* into their operating procedures.

The SBI PMO tripled in size during fiscal year 2007, but fell short of its staffing goal of 270 employees. Agency officials expressed concerns that staffing shortfalls could affect the agency's capacity to provide adequate contractor oversight. In addition, the *SBI<sub>net</sub>* PMO has not yet completed long-term human capital planning.

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Chairman Sanchez, Mr. Souder, Chairman Carney, Mr. Rogers and Members of the Subcommittees:

I am pleased to be here today to discuss observations on selected aspects of the Secure Border Initiative's *SBI<sub>net</sub>* program implementation.

Securing the nation's borders from illegal entry of aliens and contraband, including terrorists and weapons of mass destruction, continues to be a major concern. Much of the United States' 6,000 miles of international borders with Canada and Mexico remains vulnerable to illegal entry. Although the Department of Homeland Security (DHS) apprehends hundreds of thousands of people entering the country illegally each year, several hundreds of thousands of individuals also enter the United States illegally and undetected. In November 2005, DHS announced the launch of the Secure Border Initiative (SBI), a multiyear, multibillion dollar program aimed at securing U.S. borders and reducing illegal immigration. Elements of SBI will be carried out by several organizations within DHS. One element of SBI is *SBI<sub>net</sub>*. Under *SBI<sub>net</sub>*, the U.S. Customs and Border Protection (CBP) is responsible for developing a comprehensive border protection system.

You requested that we monitor the *SBI<sub>net</sub>* program and provide periodic updates on the status of the program. My testimony today is the first in a series of interim reports on *SBI<sub>net</sub>* implementation and focuses on the following issues:

- *SBI<sub>net</sub>*'s technology implementation;
- *SBI<sub>net</sub>*'s infrastructure implementation;
- the extent to which CBP has determined the impact of *SBI<sub>net</sub>* technology and infrastructure on its workforce needs and operating procedures; and
- how the CBP SBI Program Management Office (PMO)<sup>1</sup> has defined its human capital goals and the progress it has made to achieve these goals.

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<sup>1</sup>The *SBI<sub>net</sub>* PMO is part of the CBP SBI PMO. The *SBI<sub>net</sub>* PMO is responsible for overseeing all *SBI<sub>net</sub>* activities; for acquisition and implementation, including establishing and meeting program goals, objectives, and schedules; for overseeing contractor performance; and for coordinating among DHS agencies.

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To address these issues, we analyzed DHS documents, including program schedules and status reports, and workforce data. We interviewed DHS and CBP headquarters and field officials, including representatives of the *SBI*net PMO, Border Patrol, CBP Air and Marine, and the DHS Science and Technology Directorate. We also visited the Tucson and Yuma, Arizona Border Patrol sectors<sup>2</sup>—two sites where *SBI*net deployment was underway at the time of our review. We performed our work from April 2007 through October 2007 in accordance with generally accepted government auditing standards. (App. I provides a detailed discussion of our scope and methodology.)

We also have work underway to review other components of the *SBI*net program. Specifically, we are conducting work for the House Committee on Homeland Security to assess the development and deployment of *SBI*net's command, control, and communications systems, and surveillance and detection systems and expect to issue a report next year. In addition, we are reviewing DHS's use of performance-based services acquisition, an acquisition method structured around the results to be achieved instead of the manner by which the service should be performed. We expect to issue a report on this effort in January 2008.

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## Summary

DHS has made some progress to implement the first segment of *SBI*net technology, Project 28—a \$20 million project to secure 28 miles along the southwest border, but it has fallen behind its planned schedule. Boeing—the prime contractor that DHS selected to acquire, deploy, and sustain systems of new surveillance and communications technology across U.S. borders—delivered and deployed the system components (i.e., radars, sensors, computers) to the Project 28 site in the Tucson sector on schedule. However, Project 28 is incomplete more than 4 months after it was to become operational—at which point Border Patrol agents were to begin using *SBI*net technology to support their activities, and CBP was to begin its operational test and evaluation phase. According to CBP and Boeing officials, the delays are primarily attributed to software integration problems—such as long delays in radar information being displayed in command centers. In September 2007, CBP officials told us that Boeing was making progress in correcting the system integration problems, but CBP was unable to provide us with a specific date on when Boeing would

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<sup>2</sup>The U.S. Border Patrol has 20 sectors responsible for detecting, interdicting, and apprehending those who attempt illegal entry or smuggle people—including terrorists or contraband, including weapons of mass destruction—across U.S. borders between official ports of entry.

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complete the necessary corrections to make Project 28 operational. CBP reports that it is in the early stages of planning for additional *SBI* technology projects along the southwest border; however, Boeing's delay in completing Project 28 has led CBP to extend timelines for deploying some technology projects scheduled for calendar years 2007 and 2008. CBP reports that it has taken steps to strengthen its contract management for this project.

Deploying *SBI*'s infrastructure along the southwest border is on schedule, but meeting the *SBI* program's goal to have 370 miles of pedestrian fence and 200 miles of vehicle barriers in place by December 31, 2008, may prove challenging and more costly than planned. CBP met its intermediate goal to deploy 70 miles of new fencing in fiscal year 2007 and the average cost per mile was \$2.9 million. The *SBI* PMO estimates that deployment costs for remaining fencing will be similar to those thus far. In the past, DHS has minimized infrastructure construction labor costs by using Border Patrol agents and Department of Defense (DOD) military personnel. However, CBP officials report that they plan to use commercial labor for future fencing projects. The additional cost of commercial labor and potential unforeseen increases in contract costs suggest future deployment could be more costly than planned. Also, while deployment of tactical infrastructure is on schedule, CBP officials reported that meeting deadlines has been challenging because of factors the officials will continue to face, including conducting outreach necessary to address border-community resistance, identifying and completing steps necessary to comply with environmental regulations, and addressing difficulties in acquiring rights to border lands.

The impact of *SBI* on the Border Patrol's workforce's needs and operating procedures remains unclear because the *SBI* technology is not fully identified or deployed. CBP officials expect the number of Border Patrol agents required to meet mission needs to change from the current projections, but until the system is fully deployed, the direction and magnitude of the change is unknown. In addition, for the Tucson sector, where Project 28 is being deployed, the Border Patrol is developing a plan on how to integrate *SBI* into its operating procedures. Moreover, the delays in deploying Project 28 will require revising the *SBI*'s training curriculum, and trainers and operators will be retrained.

The *SBI* PMO tripled in size in fiscal year 2007 but fell short of its staffing goal of 270 employees. Agency officials expressed concerns that staffing shortfalls could affect the agency's capacity to provide adequate contractor oversight. In addition, the *SBI* PMO has not yet completed its long-term human capital planning.

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In their oral comments on a draft of this statement, DHS generally agreed with our findings and provided clarifying information that we incorporated as appropriate.

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## Background

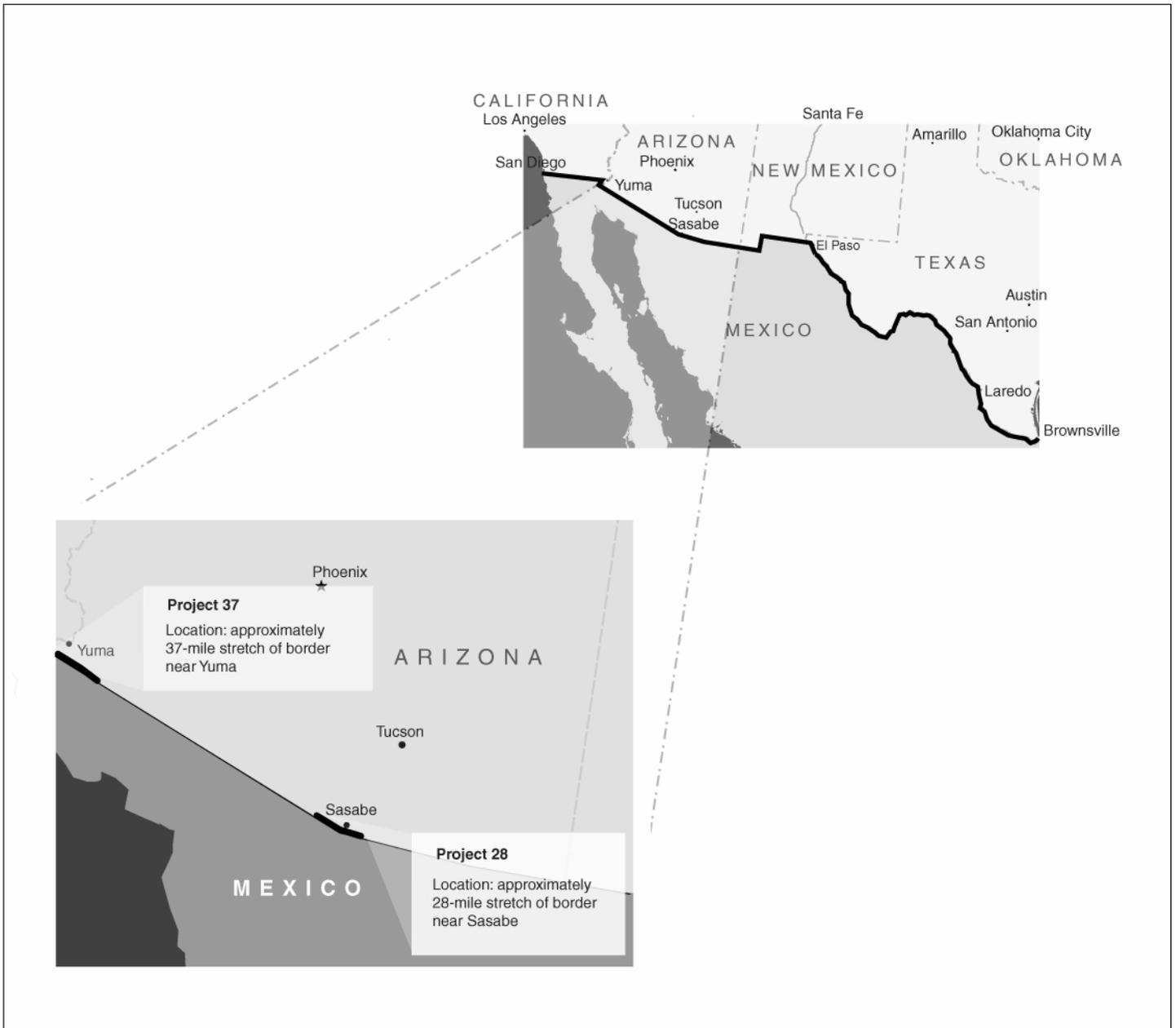
The *SBI*net program is responsible for identifying and deploying an appropriate mix of technology (e.g., sensors, cameras, radars, communications systems, and mounted laptop computers for agent vehicles), tactical infrastructure (e.g., fencing, vehicle barriers, roads), rapid response capability (e.g., ability to quickly relocate operational assets and personnel) and personnel (e.g., program staff and Border Patrol agents) that will enable CBP agents and officers to gain effective control<sup>3</sup> of U.S. borders. *SBI*net technology is also intended to include the development and deployment of a common operating picture (COP) that provides uniform data through a command center environment to Border Patrol agents in the field and all DHS agencies and to be interoperable with stakeholders external to DHS, such as local law enforcement. The initial focus of *SBI*net is on the southwest border areas between ports of entry<sup>4</sup> that CBP has designated as having the highest need for enhanced border security because of serious vulnerabilities. Through *SBI*net, CBP plans to complete a minimum of 387 miles of technology deployment across the southwest border by December 31, 2008. Figure 1 shows the location of select *SBI*net projects underway on the southwest border.

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<sup>3</sup>DHS defines effective control of U.S. borders as the ability to consistently: (1) detect illegal entries into the United States; (2) identify and classify these entries to determine the level of threat involved; (3) respond to these entries; and (4) bring events to a satisfactory law enforcement resolution.

<sup>4</sup>At a port of entry location, CBP officers secure the flow of people and cargo into and out of the country, while facilitating legitimate travel and trade.

**Figure 1: Select SBInet Projects Under Way on the Southwest Border**



Source: GAO analysis; Map Resources (map).

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In September 2006, CBP awarded a prime contract to the Boeing Company for 3 years, with three additional 1-year options. As the prime contractor, Boeing is responsible for acquiring, deploying, and sustaining selected *SBI*net technology and tactical infrastructure projects. In this way, Boeing has extensive involvement in the *SBI*net program requirements development, design, production, integration, testing, and maintenance and support of *SBI*net projects. Moreover, Boeing is responsible for selecting and managing a team of subcontractors that provide individual components for Boeing to integrate into the *SBI*net system.<sup>5</sup> The *SBI*net contract is largely performance-based—that is, CBP has set requirements for *SBI*net and Boeing and CBP coordinate and collaborate to develop solutions to meet these requirements—and designed to maximize the use of commercial off-the-shelf technology.<sup>6</sup> CBP's *SBI*net PMO oversees and manages the Boeing-led *SBI*net contractor team. The *SBI*net PMO workforce includes a mix of government and contractor support staff. The *SBI*net PMO reports to the CBP SBI Program Executive Director.

CBP is executing part of *SBI*net activities through a series of task orders to Boeing for individual projects. As of September 30, 2007, CBP had awarded five task orders to Boeing for *SBI*net projects. These include task orders for (1) Project 28, Boeing's pilot project and initial implementation of *SBI*net technology to achieve control of 28 miles of the border in the Tucson sector; (2) Project 37, for construction approximately 32 miles of vehicle barriers and pedestrian fencing in the Yuma sector along the Barry M. Goldwater Range (BMGR);<sup>7</sup> (3) Program Management, for engineering, facilities and infrastructure, test and evaluation, and general program management services; (4) Fence Lab, a project to evaluate the performance and cost of deploying different types of fences and vehicle barriers; and (5) a design task order for developing the plans for several technology projects to be located in the Tucson, Yuma, and El Paso sectors.

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<sup>5</sup>Boeing employs several companies as subcontractors on the *SBI*net project. These companies provide Boeing with a variety of services. For example, Boeing has used a subcontractor to install laptops into CBP vehicles, while it has used another to develop and deploy mobile sensor towers.

<sup>6</sup>Commercial off-the-shelf is a term for software or hardware, generally technology or computer products, that are available for sale, lease, or license to the general public.

<sup>7</sup>Project 37 consists of three phases, which when complete are to provide control over 37 miles of border in the Yuma sector. The first two phases focus on deployment of tactical infrastructure. The third phase will focus on technology systems.

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In addition to deploying technology across the southwest border, the SBInet PMO plans to deploy 370 miles of single-layer pedestrian fencing and 200 miles of vehicle barriers by December 31, 2008. Whereas pedestrian fencing is designed to prevent people on foot from crossing the border, vehicle barriers are other physical barriers meant to stop the entry of vehicles. The SBInet PMO is utilizing the U.S. Army Corps of Engineers (USACE) to contract for fencing and supporting infrastructure (such as lights and roads), complete required environmental assessments, and acquire necessary real estate.<sup>8</sup>

DHS has estimated that the total cost for completing the deployment for the southwest border—the initial focus of SBInet deployment—will be \$7.6 billion from fiscal years 2007 through 2011. DHS has not yet reported the estimated life cycle cost for this program, which is the total cost to the government for a program over its full life, consisting of research and development, operations, maintenance, and disposal costs.<sup>9</sup> For fiscal year 2007, Congress appropriated about \$1.2 billion for SBInet, about which 40 percent DHS had committed or obligated as of September 30, 2007. For fiscal year 2008, DHS has requested an additional \$1 billion.<sup>10</sup>

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## SBInet Technology Deployment Delays May Increase Schedule Risks

DHS has made some progress to implement Project 28—the first segment of technology on the southwest border, but it has fallen behind its planned schedule. Project 28 is the first opportunity for Boeing to demonstrate that its technology system can meet SBInet performance requirements in a real-life environment.<sup>11</sup> Boeing's inability thus far to resolve system integration issues has left Project 28 incomplete more than 4 months after its planned June 13 milestone to become operational—at which point, Border Patrol agents were to begin using SBInet technology to support

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<sup>8</sup>The SBInet PMO contracted with Boeing Company to construct 32 miles of fencing in the BMGR. Deployment of this fencing has been completed, and the SBInet PMO plans to use USACE to contract for all remaining pedestrian fencing and vehicle barriers to be deployed through December 31, 2008.

<sup>9</sup>GAO, *Missile Defense: Actions Needed to Improve Information for Supporting Key Decisions for Boost and Ascent Phase Elements*, GAO-07-430 (Washington, D.C.: April 2007).

<sup>10</sup>DHS and DOD appropriations bills for fiscal year 2008 that include additional funding for border security are awaiting final action in Congress.

<sup>11</sup>CBP has established performance requirements for SBInet technology. These include requirements for (1) probability of detection; (2) correctly identifying threats; (3) apprehension; (4) system availability; and (5) false alarm rate.

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their activities, and CBP was to begin its operational test and evaluation phase. Boeing delivered and deployed the individual technology components of Project 28 on schedule.<sup>12</sup> Nevertheless, CBP and Boeing officials reported that Boeing has been unable to effectively integrate the information collected from several of the newly deployed technology components, such as sensor towers, cameras, radars, and unattended ground sensors. Among several technical problems reported were that it was taking too long for radar information to display in command centers and newly deployed radars were being activated by rain, making the system unusable. In August 2007, CBP officially notified Boeing that it would not accept Project 28 until these and other problems were corrected. In September 2007, CBP officials told us that Boeing was making progress in correcting the system integration problems; however, CBP was unable to provide us with a specific date when Boeing would complete the corrections necessary to make Project 28 operational. See figures 2 and 3 below for photographs of *SBI<sub>net</sub>* technology along the southwest border.

**Figure 2: Project 28 Mobile Sensor Tower Deployed in Tucson Sector**



Source: GAO.

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<sup>12</sup>Project 28 components include: 9 mobile radar/sensor towers; 4 underground sensors, 70 small hand-held satellite phones for agents to communicate throughout the Tucson sector; and 50 CBP agent vehicles with secure-mounted laptop computers and communications capabilities.

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**Figure 3: At Left, Mounted Laptop Installed in Border Patrol Vehicle; at Right, Project 28 Command and Control Center**



Source: GAO.

The SBInet PMO reported that is in the early stages of planning for additional SBInet technology projects along the southwest border; however, Boeing's delay in completing Project 28 has led the PMO to change the timeline for deploying some of these projects. In August 2007, SBInet PMO officials told us they were revising the SBInet implementation plan to delay interim project milestones for the first phase of SBInet technology projects, scheduled for calendar years 2007 and 2008.<sup>13</sup> For example, SBInet PMO officials said they were delaying the start dates for two projects<sup>14</sup> that were to be modeled on the design used for Project 28 until after Project 28 is operational and can provide lessons learned for planning and deploying additional SBInet technology along the southwest border. According to the SBInet master schedule dated May 31, 2007, these projects were to become operational in December 2007 and May 2008. Despite these delays, SBInet PMO officials said they still expected to complete all of the first phase of technology projects by the end of calendar year 2008. As of October 15, 2007, the SBInet PMO had not provided us with a revised deployment schedule for this first phase.

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<sup>13</sup>The SBInet PMO plans to deploy SBInet projects in three phases. Phase one projects are scheduled between April 2007 and December 2008; phase two projects are scheduled between May 2008 and early 2010; and phase three projects are scheduled to begin in May 2009.

<sup>14</sup>The two projects are Project 37 BMGR phase three technology deployment, and the Texas Mobile System, technology deployment for about 70 miles of border in the El Paso sector.

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CBP reports that it is taking steps to strengthen its contract management for Project 28. For example, citing numerous milestone slippages by Boeing during Project 28 implementation, in August 2007, CBP sought and reached an agreement with Boeing to give it greater influence in milestone setting and planning corrective actions on the Project 28 task order. While CBP had selected a firm-fixed-price contract to limit cost overruns on Project 28,<sup>15</sup> CBP officials told us that the firm-fixed-price contract CBP used for Project 28 had limited the government's role in directing Boeing in its decision making process. For example, CBP and contractor officials told us they expressed concern about the timeline for completing Project 28, but CBP chose not to modify the contract because doing so would have made CBP responsible for costs beyond the \$20 million fixed-price contract.<sup>16</sup> In mid-August 2007, CBP organized a meeting with Boeing representatives to discuss ways to improve the collaborative process, the submission of milestones, and Boeing's plan to correct Project 28 problems. Following this meeting, CBP and Boeing initiated a Change Control Board.<sup>17</sup> In mid-September representatives from Boeing's *SBI*net team and its subcontractors continued to participate on this board and vote on key issues for solving Project 28 problems. Although CBP participates on this committee as a non-voting member, a senior *SBI*net official said the government's experience on the Change Control Board had been positive thus far. For example, the official told us that the Change Control Board had helped improve coordination and integration with Boeing and for suggesting changes to the subcontractor companies working on Project 28.

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<sup>15</sup>A firm-fixed-price contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This contract type places maximum risk upon the contractor and full responsibility for all costs and resulting profit or loss.

<sup>16</sup>In April 2007, CBP and Boeing reached an agreement to modify the terms of the Project 28 contract, increasing it to about \$20.66 million. CBP modified the contract to add several project design requirements that the existing task order did not address.

<sup>17</sup>The Change Control Board is a voting body that represents the interests of program and project management by ensuring that a structured process is used to consider proposed changes and incorporate them into a specified release of a product.

## SBI*net* Tactical Infrastructure Deployment on Track but May Be Challenging and More Costly than Planned

Deploying SBI*net*'s tactical infrastructure along the southwest border is on schedule, but meeting the SBI*net* program's goal to have 370 miles of pedestrian fence and 200 miles of vehicle barriers in place by December 31, 2008, may be challenging and more costly than planned. CBP set an intermediate goal to deploy 70 miles of new pedestrian fencing by the close of fiscal year 2007 and, having deployed 73 miles by this date, achieved its goal. Table 1 summarizes CBP's progress and plans for tactical infrastructure deployment.

**Table 1: Tactical Infrastructure Deployment Progress as of September 30, 2007**

Infrastructure type	Miles in place before SBI <i>net</i>	Miles deployed through SBI <i>net</i>	Total miles in place	Target for 12/31/08	Miles remaining to meet 12/31/08 target
Pedestrian fencing	78	73	151	370	219
Vehicle barriers	57	53	110	200	90

Source: GAO analysis of CBP data.

Costs for the 73 miles of fencing constructed in fiscal year 2007 averaged \$2.9 million per mile and ranged from \$700,000 in San Luis, Arizona, to \$4.8 million per mile in Sasabe, Arizona. CBP also deployed 11 miles of vehicle barriers and, although CBP has not yet been able to provide us with the cost of these vehicle barriers, it projects that the average per mile cost for the first 75 miles of barriers it deploys will be \$1.5 million. Figure 4 presents examples of fencing deployed.

**Figure 4: At Left, SBInet Fencing Being Deployed at Sasabe, Arizona; at Right, SBInet Fencing Deployed at Yuma, Arizona**



Source: GAO.

CBP estimates costs for the deployment of fencing in the future will be similar to those thus far. However, according to CBP officials, costs vary due to the type of terrain, materials used, land acquisition, who performs the construction, and the need to meet an expedited schedule. Although CBP estimates that the average cost of remaining fencing will be \$2.8 million per mile, actual future costs may be higher due to factors such as the greater cost of commercial labor, higher than expected property acquisition costs, and unforeseen costs associated with working in remote areas. To minimize one of the many factors that add to cost, in the past DHS has used Border Patrol agents and DOD military personnel. However, CBP officials reported that they plan to use commercial labor for future infrastructure projects to meet their deadlines. Of the 73 miles of fencing completed to date, 31 were completed by DOD military personnel and 42 were constructed through commercial contracts. While the non-commercial projects cost an average of \$1.2 million per mile,<sup>18</sup> the commercial projects averaged over three times more—\$4 million.<sup>19</sup>

<sup>18</sup>CBP's estimates of non-commercial fencing projects do not include labor costs associated with using government personnel.

<sup>19</sup>According to the Congressional Research Service (CRS), DHS predicts that the San Diego fence will have a total cost of \$127 million for its 14-mile length when it is completed—roughly \$9 million a mile. Construction of the first 9.5 miles of fencing cost \$31 million, or roughly \$3 million a mile, while construction of the last 4.5 miles of fencing is projected to cost \$96 million, or roughly \$21 million a mile. DHS is proposing to hire private contractors to expedite the construction of the remaining 4.5 miles of fencing; according to CRS this fact, and the complexity of the construction, may account for part of the difference in cost.

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According to CBP officials, CBP plans to utilize exclusively commercial contracts to complete the remaining 219 miles of fencing. If contract costs for deployment of remaining miles are consistent with those to deploy tactical infrastructure to date and average \$4 million per mile, the total contract cost will be \$890 million, considerably more than CBP's initial estimate of \$650 million.

Although deployment of tactical infrastructure is on schedule, CBP officials reported that meeting deadlines has been challenging because factors they will continue to face include conducting outreach necessary to address border community resistance, devoting time to identify and complete steps necessary to comply with environmental regulations,<sup>20</sup> and addressing difficulties in acquiring rights to border lands. As of July 2007 CBP anticipated community resistance to deployment for 130 of its 370 miles of fencing. According to community leaders, communities resist fencing deployment for reasons including the adverse effect they anticipate it will have on cross-border commerce and community unity. In addition to consuming time, complying with environmental regulations, and acquiring rights to border land can also drive up costs. Although CBP officials state that they are proactively addressing these challenges, these factors will continue to pose a risk to meeting deployment targets.

In an effort to identify low cost and easily deployable fencing solutions, CBP funded a project called Fence Lab. CBP plans to try to contain costs by utilizing the results of Fence Lab in the future. Fence Lab tested nine fence/barrier prototypes and evaluated them based on performance criteria such as their ability to disable a vehicle traveling at 40 miles per hour (see fig. 5), allowing animals to migrate through them, and their cost-effectiveness. Based on the results from the lab, *SBI*net has developed three types of vehicle barriers and one pedestrian fence that meet CBP operational requirements (see fig. 6). The pedestrian fence can be installed onto two of these vehicle barriers to create a hybrid pedestrian fence and vehicle barrier. CBP plans to include these solutions in a

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<sup>20</sup>Although the REAL ID Act of 2005 gives DHS the authority to waive all legal requirements necessary to ensure expeditious construction of certain specified barriers and roads along the southern border (Pub. L. No. 109-13, div. B, § 102, 119 Stat. 302, 306), DHS officials told us that they only use this authority after they have pursued alternatives.

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“toolkit” of approved fences and barriers,<sup>21</sup> and plans to deploy solutions from this toolkit for all remaining vehicle barriers and for 202 of 225 miles of remaining fencing. Further, CBP officials anticipate that deploying these solutions will reduce costs because cost-effectiveness was a criterion for their inclusion in the toolkit. *SBI*net officials also told us that widely deploying a select set of vehicle barriers and fences will lower costs through enabling it to make bulk purchases of construction and maintenance materials.

**Figure 5: Fence Lab crash testing conducted in May 2007**

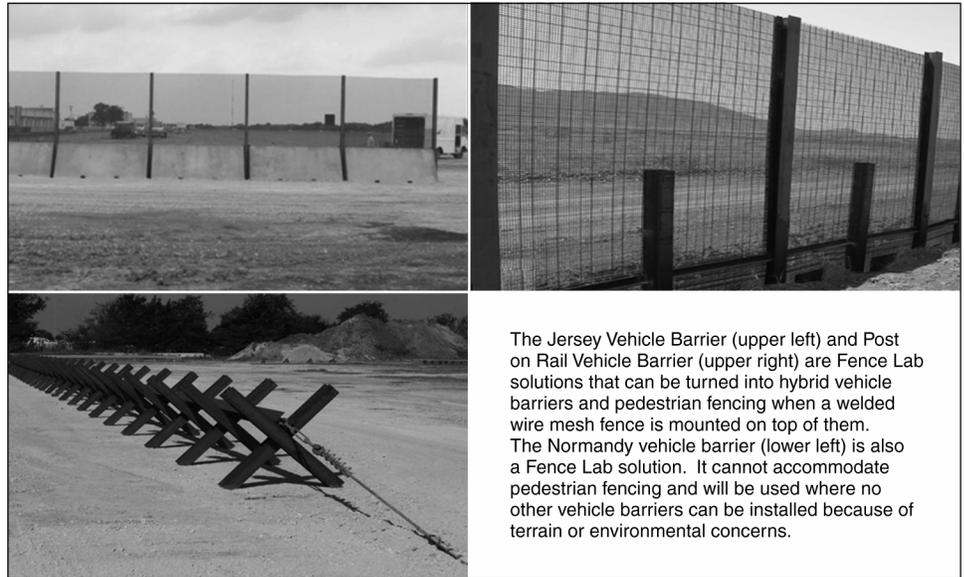


Source: CBP.

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<sup>21</sup> As the *SBI*net PMO uses testing and evaluation to identify tactical infrastructure and technology components that effectively secure the border, the *SBI*net PMO is approving them for inclusion in a master “toolkit” of approved solutions. In addition to vehicle barriers and fences, the toolkit will include technology components such as radars and satellite phones as well as a list of approved vendors. In the future, the *SBI*net PMO plans to choose among its toolkit components to craft border security solutions.

**Figure 6: Vehicle Barriers and Fencing Developed by Fence Lab That Meet Performance Requirements and Are Included in SBInet’s “Toolbox” of Approved Fences and Barriers.**



Source: GAO analysis of CBP data; photos by CBP.

## SBInet Impact on Border Patrol’s Workforce Needs and Operating Procedures Remains Unclear

While SBInet Program officials expect SBInet to greatly reduce the time spent by CBP enforcement personnel in performing detection activities,<sup>22</sup> a full evaluation of SBInet’s impact on the Border Patrol’s workforce needs has not been completed. The Border Patrol currently uses a mix of resources including personnel, technology, infrastructure, and rapid response capabilities to incrementally achieve its strategic goal of establishing and maintaining operational control of the border.<sup>23</sup> Each year through its Operational Requirements Based Budget Program (ORBBP), the Border Patrol sectors outline the amount of resources needed to

<sup>22</sup>SBInet PMO expects SBInet to provide the capability to predict, deter, detect, identify, classify, track, respond to, and resolve border incursion; and the operational enhancements of SBInet will provide efficiencies by reducing the time agents spend performing detection and characterization activities.

<sup>23</sup>CBP defines operational control as the ability to detect, respond, and interdict border penetrations in areas deemed as high priority for threat potential or other national security objectives.

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achieve a desired level of border control.<sup>24</sup> Border Patrol officials state this annual planning process allows the organization to measure the impact of each type of resource on the required number of Border Patrol agents. A full evaluation of *SBI*net's impact on the Border Patrol's workforce needs is not yet included in the ORBBP process; however, the Border Patrol plans to incorporate information from Project 28 a few months after it is operational.

According to agency officials, CBP is on track to meet its hiring goal of 6,000 new Border Patrol agents by December 2008, but after *SBI*net is deployed, CBP officials expect the number of Border Patrol agents required to meet mission needs to change from current projections, although the direction and magnitude of the change is unknown. In addition, in June 2007, we expressed concern that deploying these new agents to the southwest sectors coupled with the planned transfer of more experienced agents to the northern border will create a disproportionate ratio of new agents to supervisors within those sectors—jeopardizing the supervisors' availability to acclimate new agents.<sup>25</sup> Tucson Sector officials stated CBP is planning to hire from 650 to 700 supervisors next year. To accommodate the additional agents, the Border Patrol has taken initial steps to provide additional work space through constructing temporary and permanent facilities, at a projected cost of about \$550 million from fiscal year 2007 to 2011.

The *SBI*net PMO expects *SBI*net to support day-to-day border enforcement operations; however, analysis of the impact of *SBI*net technology on the Border Patrol's operational procedures cannot be completed at this time because agents have not been able to fully use the system as intended. Leveraging technology is part of the National Border Patrol Strategy which identifies the objectives, tools, and initiatives the Border Patrol uses to maintain operational control of the borders. The Tucson sector, where Project 28 is being deployed, is developing a plan on how to integrate *SBI*net into its operating procedures. Border Patrol officials stated they intend to re-evaluate this strategy, as *SBI*net technology is identified and deployed, and as control of the border is achieved.

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<sup>24</sup>The Border Patrol defines five levels of border security ranging from "controlled"—the highest sustainable level of control to "remote/low activity"—the lowest level of control.

<sup>25</sup>GAO, *Border Patrol Costs and Challenges Related to Training New Agents*, [GAO-07-997T](#) (Washington, D.C.: June 2007).

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According to agency officials, 22 trainers and 333 operators were trained on the current Project 28 system, but because of deployment delays and changes to the COP software, the *SBI*net training curriculum is to be revised by Boeing and the government. Training is continuing during this revision process with 24 operators being trained each week. According to CBP officials, Border Patrol agents are receiving “hands on” training during evening and weekend shifts at the COP workstations to familiarize themselves with the recent changes made to the Project 28 system. However, training is to be stopped once a stabilized version of the COP can be used and both trainers and operators are to be retrained using the revised curriculum. Costs associated with revising the training material and retraining the agents are to be covered by Boeing as part of the Project 28 task order; however, the government may incur indirect costs associated with taking agents offline for retraining.

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## SBI PMO Did Not Meet All of Its Staffing Goals and Has Not Yet Completed Long-Term Human Capital Planning

The SBI PMO tripled in size in fiscal year 2007 but fell short of its staffing goal of 270 employees.<sup>26</sup> As of September 30, 2007, the SBI PMO had 247 employees onboard, with 113 government employees and 134 contractor support staff. SBI PMO officials also reported that as of October 19, 2007, they had 76 additional staff awaiting background investigations. In addition, these officials said that a Human Capital Management Plan has been drafted, but as of October 22, 2007, the plan had not been approved. In February 2007, we reported that *SBI*net officials had planned to finalize a human capital strategy that was to include details on staffing and expertise needed for the program.<sup>27</sup> At that time, SBI and *SBI*net officials expressed concern about difficulties in finding an adequate number of staff with the required expertise to support planned activities about staffing that shortfalls could limit government oversight efforts. Strategic human capital planning is a key component used to define the critical skills and competencies that will be needed to achieve programmatic goals and outlines ways the organization can fill gaps in knowledge, skills, and abilities.<sup>28</sup> Until *SBI*net fully implements a comprehensive human capital

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<sup>26</sup>GAO, *SBI*net Expenditure Plan Needs to Better Support Oversight and Accountability, [GAO-07-309](#) (Washington, D.C.: February 2007).

<sup>27</sup>[GAO-07-309](#).

<sup>28</sup>See GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, [GAO-04-39](#) (Washington, D.C.: December 2003) and GAO, *Framework for Accessing the Acquisition Function at Federal Agencies* [GAO-05-218G](#) (Washington, D.C.: September 2005).

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strategy, it will continue to risk not having staff with the right skills and abilities to successfully execute the program.

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## Concluding Observations

Project 28 and other early technology and infrastructure projects are the first steps on a long journey towards *SBI<sup>net</sup>* implementation that will ultimately require an investment of billions of taxpayer dollars. Some of these early projects have encountered unforeseen problems that could affect DHS's ability to meet projected completion dates, expected costs, and performance goals. These issues underscore the need for both DHS and Boeing, as the prime contractor, to continue to work cooperatively to correct the problems remaining with Project 28 and to ensure that the *SBI<sup>net</sup>* PMO has adequate staff to effectively plan and oversee future projects. These issues also underscore Congress's need to stay closely attuned to DHS's progress in the *SBI<sup>net</sup>* program to make sure that performance, schedule, and cost estimates are achieved and the nation's border security needs are fully addressed.

This concludes my prepared testimony. I would be happy to respond to any questions that members of the Subcommittees may have.

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## Contacts and Acknowledgments

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# Appendix I: Scope and Methodology

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To determine the progress that the Department of Homeland Security (DHS) has made in implementing the Secure Border Initiative (SBI) *SBI*net's technology deployment projects, we analyzed DHS documentation, including program schedules, project task orders, status reports, and expenditures. We also interviewed DHS and the U.S. Customs and Border Protection (CBP) headquarters and field officials, including representatives of the *SBI*net Program Management Office (PMO), Border Patrol, CBP Air and Marine, and the DHS Science and Technology Directorate, as well as *SBI*net contractors. We visited the Tucson Border Patrol sector—the site where *SBI*net technology deployment was underway at the time of our review.

To determine the progress that Department of Homeland Security (DHS) has made in infrastructure project implementation, we analyzed DHS documentation, including schedules, contracts, status reports, and expenditures. In addition, we interviewed DHS and CBP headquarters and field officials, including representatives of the *SBI*net PMO, and Border Patrol. We also interviewed officials from the U.S. Army Corps of Engineers and the Department of the Interior. We visited the Tucson and Yuma, Arizona Border Patrol sectors—two sites where tactical infrastructure projects were underway at the time of our review. We did not review the justification for infrastructure project cost estimates or independently verify the source or validity of the cost information.

To determine the extent to which CBP has determined the impact of *SBI*net technology and infrastructure on its workforce needs and operating procedures, we reviewed documentation of the agency's decision to hire an additional 6,000 agents and the progress hiring these agents. We also interviewed headquarters and field officials to track if and how CBP (1) is hiring and training its target number of personnel, (2) it is planning to train new agents on *SBI*net technology, and (3) it will incorporate the new system into its operational procedures, and any implementation challenges it reports facing in conducting this effort.

To determine how the *SBI*net PMO defined its human capital goals and progress it has made in achieving these goals, we reviewed the office's documentation on its hiring efforts related to *SBI*net, related timelines, and compared this information with agency goals. We determined that the workforce data were sufficiently reliable for purposes of this report. We also interviewed SBI and *SBI*net officials to identify challenges in meeting the goals and steps taken by the agency to address those challenges.

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**Appendix I: Scope and  
Methodology**

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We performed our work from April 2007 through October 2007 in accordance with generally accepted government auditing standards.

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