

Border Security Infrastructure

Section 2

For FY 2009, the Bush administration proposed a Department of Homeland Security budget of \$44.3 billion, up 4.5 percent from the \$42.4 billion expected to be spent in FY 2008. Customs and Border Protection spending—which includes funds for the border patrol, electronic surveillance, the border fence, and other infrastructure to secure the border—is slated to increase a whopping 20.6 percent in FY 2009.¹

The Post-9/11 security achievements highlighted in the budget document include

11,000 new Border Patrol agents; increased inspections of cargo containers unloaded at U.S. seaports (82 percent inspected in FY 2006, compared with 48 percent in FY 2004); and “significantly” more buffer zone protection plans for chemical facilities (58 percent in FY 2006, compared with just 18 percent in FY 2005).

We discuss security issues in the sections devoted to port, airport, rail, and other types of infrastructure. This section zeroes in on border infrastructure—the physical barriers and electronic screening devices deployed along the nation’s borders.

Evaluating border security infrastructure is difficult. From an engineering standpoint, there is

simply not enough information to accurately assess the performance of, say, the border fence and electronic surveillance devices deployed with it. While data on apprehensions of illegal border crossers may show a decline along areas of new fencing, this may simply reflect a shift to other, less secure border entry points.

Border Security by the Numbers

1,952 miles of border between U.S. and Mexico
 344.2 miles of border fence constructed by the Department of Homeland Security (DHS) (August 29, 2008)
 \$2 billion DHS spending on border fence and technology (FY 2009)
 \$400 million needed to complete the border fence (FY 2009)
 1.2 million illegal immigrants apprehended by the Border Patrol (2005)
 1 in 5 illegal immigrants apprehended and arrested (2005 estimate)
 11,000 new Border Patrol agents funded since 2001 (2008)
 250 million legal incoming border crossings from Mexico (2003)
 4,500 legal border crossings per hour at San Ysidro, California (2003)

Sources:

Office of Management and Budget (FY2009 budget), Department of Homeland Security, Wikipedia, American Society of Civil Engineers.

Scientific testing of border infrastructure and its ability to prevent, detect, and ultimately discourage illegal border crossings is not feasible. We are left with a description of its physical di-

mensions—which have increased dramatically in recent years—and anecdotal evidence of its efficacy.

The Border Fence

On September 29, 2006, Congress passed the Secure Fence Act of 2006, which authorized, and partially funded, the construction of 700 miles of physical fence/barriers along parts of the southern border. Support for the measure was achieved by assuring opposing parties—the Democrats, Mexico, and the pro “comprehensive immigration reform” minority within the GOP—that Homeland Security would proceed very cautiously.

Michael Chertoff initially authorized only the virtual fence that he favors. Following an eight-

month test period, during which the virtual fence failed to perform effectively, he OKed the physical barrier.

As of August 29, 2008, the Department of Homeland Security had built 190 miles of pedestrian border fence and 154.3 miles of vehicle border fence, for a total of 344.3 miles of fence.

The border fence is not one continuous structure. It is actually a hodge-podge of walls of different designs and sizes, that stop and start, secured in-between with the “virtual fence” that includes a system of sensors and cameras monitored by Border Patrol agents.

Congress has appropriated \$2.7 billion for the fence, but no one really knows how much the entire system—the physical fence and surveillance technology—will cost to build, let alone maintain.

A “state of the art” design—two parallel 15-foot steel and wire fences separated by a 100-yard gap, supplemented by a middle fence, powerful lighting, and sensors to detect illegal border crossers—has been estimated to cost between \$4 billion and \$8 billion dollars. Costs for a standard 10-foot prison chain link fence that would run along the entire 2,000 mile border might be as low as \$850 million. For another \$360 million, the fence could be electrified.²

Some believe a fence is not needed, that the whole U.S.-Mexico border could be sealed with as few as 100 helicopters equipped with night vision/infrared scopes and a few hundred men equipped with state of the art sensors, scopes and other electronics.³

No matter what one may think of the cost, the esthetics, or the political ramifications of the fence, the overarching question must be: Will it work?

Preliminary indications are quite favorable. Two years ago, the Yuma district in southwestern Arizona was the busiest jurisdiction for the entire

U.S. Border Patrol. The 118-mile stretch of border was a well-known gap through which people and drugs flowed north while guns and money flowed south. Scores of people would gather on the Mexican side and dash across a nearly open border. Border Patrol agents grabbed as many as they could; the rest melted away northward.

Then came the state-of-the-art barrier running through the desert. Border Patrol agents in the Yuma district, who had nabbed as many as 800 illegals a day prior to the fence, suddenly had days when they saw no border crossers.⁴

U.S. opponents claim the border fence merely shifts illegal border crossers to unfenced parts of the Mexican border. But Department of Homeland Security Secretary Chertoff stated in Congressional testimony on April 2, 2008, that there was a 20-percent decline in apprehensions along the entire southern border in FY 2007, and that in the first quarter of FY 2008 apprehensions were down 17 percent from the same

period the previous year.

Not all illegals are apprehended, of course. But given the big increase in border patrol agents stationed along the southern border, it is highly unlikely that a *smaller* fraction of crossers would be apprehended this year than last.

Implication: The decline in illegal border crossings may be even greater than the decline in apprehensions suggests.

Environmental Impact

The border fence is being built without regard to its environmental impact. This is because in 2005 the Real ID Act gave the Secretary of Homeland Security “Notwithstanding any other provision of law,” authority to waive all legal requirements he deems necessary to ensure “expeditious construction” of the barriers and roads. Secretary of Homeland Security Chertoff has used this power to “waive in



An illegal alien climbs a barrier at the Arizona border.

their entirety” the Endangered Species Act, the Migratory Bird Treaty Act, the National Environmental Policy Act, the Coastal Zone Management Act, the Clean Water Act, the Clean Air Act, and the National Historic Preservation Act, to extend triple fencing through the Tijuana River National Estuarine Research Reserve near San Diego.

The Real ID Act further stipulates that his decisions are not subject to judicial review, and in December 2005 a federal judge dismissed legal challenges by the Sierra Club, the Audubon Society, and others to Chertoff’s decision.⁵

The environmental damage done by illegal aliens crossing into the U.S. from Mexico is arguably far more extensive than that resulting from construction of the border fence. Has the Sierra Club taken this into account? Why not?

Illegal Infrastructure

While the U.S. builds a fence across much of the border, many illegals are taking a different route. Underground. Authorities have discovered dozens of illegal tunnels across the international border in recent years. Smuggling of drugs, weapons, and immigrants takes place daily through these underground passageways.

Illegal immigrants have breached drainage systems all the way along the border, from El Paso to San Diego. Most of the subterranean drainage tunnels are of the claustrophobic crawl-through variety that prevents large-scale incursions. One tunnel, actually a system of two half-mile passages connecting Tijuana with San Diego, is by comparison a superhighway.

Once open waterways, the tunnels stretch for miles under the downtown streets of both cities, zigzagging roughly parallel to each other. In the smaller one, called the Morley Tunnel, an ankle-

high stream of raw sewage and chemical runoff from factories in Mexico usually flows. The neighboring Grand Tunnel is up to 15-feet high and wide enough to fit a Humvee. It has a concrete floor and electricity. Dozens of illegal immigrants can travel through it at one time.

Above ground, double fences, sensors, and stadium lighting clearly separate the two cities. Underground, they are linked of necessity by the system built decades ago to channel monsoon rains.

The drainage tunnels doubled as smuggling routes from the beginning. For many years, gangs of children took control of the passages.

The Border Patrol periodically stems the underground influx of illegal immigrants and drugs by installing heavy steel doors, surveillance cameras, and sensors. But heavy rains often produce floods that tear down the barriers. Then the

smugglers re-enter, rip down the cameras, and destroy the lights and sirens used to discourage incursions—permitting the chaotic human inflow to resume.

In a recent six-month period, Border Patrol agents apprehended 1,704 illegal immigrants in the tunnels, a nearly five-fold increase from the previous six months.

As the border fence reaches full length, we expect underground illegal infrastructure will grow also.

Legal Border Crossings

In early 2008, U.S. Customs and Border Protection officers stopped taking verbal declarations of citizenship from travelers entering the country. All travelers, including U.S. citizens, must now show a valid passport or other authorized documents when entering the U.S. at sea and land ports of entry.



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The change, according to the U.S. Department of State and Department of Homeland Security, will strengthen border security and facilitate entry into the United States for both legitimate citizens and foreign visitors.

The logistics of this move are daunting. More than 325 million border crossings are recorded every year—about 250 million at the Mexican border and 75 million from Canada. About 80 percent are “day trippers” or commuters—people who live in one country and work or shop in another.

The border crossings are so large that they must be put in context: On average, 29,000 people *per hour* enter the U.S. from Mexico.

Long delays, common under the old verbal declaration system, are expected to worsen under the new protocol. Federal authorities are betting that new electronic screening infrastructure will ease the crunch.

The State Department is developing a passport card—a wallet-sized card that would be cheaper and more convenient than standard passports but would meet the new security requirements. The Department of Homeland Security is working with border states to develop an “enhanced driver’s license” that would be an acceptable alternative to passports for U.S. citizens.

Both cards will have radio frequency identification, or RFID chips, which can identify the holders as they approach border checkpoints. The chips will not transmit personal information, according to Customs and Border Protection (CPB). They will only contain a unique number that the CPB can automatically scan and compare to those in law enforcement databases.

Not so fast! People knowledgeable in credit card fraud matters say the new passport card will be easy to counterfeit: just remove the photograph with solvent and replace it with one from an unauthorized user. The cards should have been designed with special optical security strips—devices that “have never been compromised,” says a former chief intelligence officer for Immigration and Customs Enforcement (ICE). In selecting the RFID card, the State Department favored speedy processing over national security.⁶

But even completely secure cards would rely on government databases to flag individuals on terrorist watch lists. How secure are those databases? Can they be compromised by insiders? By foreign hackers?

Cyber infrastructure may be the weakest link in U.S. border security. ■

Endnotes

1. <http://www.whitehouse.gov/omb/budget/fy2009/pdf/budget/dhs.pdf>.
2. <http://www.globalsecurity.org/security/systems/mexico-wall.htm>.
3. Wikipedia.
4. David Von Drehle, “A New Line in the Sand,” *Time*, June 30, 2008, pages 28-35.
5. http://en.wikipedia.org/wiki/United_States%E2%80%93Mexico_barrier.
6. Bill Gertz, “Passport Cards Called Security Vulnerability,” *The Washington Times*, May 16, 2008.