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THESIS

**RE-CASTING THE U.S.-MEXICO
BORDER SECURITY NET**

by

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March 2014

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BORDER SECURITY NET**

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Submitted in partial fulfillment of the
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ABSTRACT

The terrorist attack in 2001 left the United States with a sense of vulnerability and generated both demand and need to protect the nation. Fortifying the border has created diminishing returns. In addition, it has created negative side effects and unintended consequences that undermine the very nature and reason for installing border fences. Immigrants have been forced into the hands of criminal organizations and are more vulnerable now than in the past. Building a wall has deterred some illicit activity, but it does not deter the motivational factors. By hardening the borderline, the U.S. has issued a challenge, practically daring anyone to attempt entry though immigration has been reduced, drug trafficking organizations (DTOs) have picked up the gauntlet thrown by the United States and are finding ingenious methods to overcome and bypass the tightening border controls. Determined and motivated people will continue to find a way, even if it takes multiple times to find loopholes and weakness in the border. Border policy has resulted in unintended consequences, specifically, attracting DTOs, stimulating innovation, creating sophisticated networks within the black market arena, and rendering the fence obsolete. The cost effectiveness of current border security practices have reached the culminating point. Policymakers need to find alternative solutions, because current methods are unsustainable.

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LIST OF ACRONYMS AND ABBREVIATIONS

ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
BMI	Binational Migration Institute
CBO	Congressional Budget Office
CBP	U.S. Customs and Border Patrol
DEA	U.S. Drug Enforcement Agency
DHS	Department of Homeland Security
DTO	Drug Trafficking Organization
FBI	Federal Bureau of Investigations
ICE	U.S. Immigrations and Customs Enforcement
INS	Immigration and Naturalization Service
MMFRP	Mexican Migration Field Research Program
MMP	Mexican Migration Project
MPI	Migration Policy Institute
NFAP	National Foundation for American Policy
NPR	National Public Radio
POE	ports of entry
SBI	Secure Border Initiative
UAMC	University of Arizona Medical Center
UCSD	University of California, San Diego
USBP	U.S. Border Patrol

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I. RE-CASTING THE U.S.-MEXICO BORDER SECURITY NET

A. MAJOR RESEARCH QUESTION

After the eye-opening events of September 11, 2001, homeland security became a major focus of the United States government. Specifically, an increased emphasis was placed on securing the U.S. borders, including improving the security framework and policies to prevent another terrorist attack, including defensive barriers.¹ A principal argument often debated by the opposition to defensive barriers is that the cost of security has become too expensive and has created unintended consequences.² For example, in 2012 463 illegal immigrants were found dead in the desert; they died trying to enter the United States.³ This is the result of the “funnel effect” created by the militarization of the United States-Mexico border: an increased number of physical barriers and personnel, high-tech infrastructure, fortified highway checkpoints, and other security enhancements have merged to deflect unauthorized immigrants away from highly trafficked and relatively safe urban areas and into remote and dangerous sections of hot, waterless desert.⁴ Opponents of border walls debate the opportunity cost associated with building defensive barriers and argue that the money would be better spent on alternative solutions, such as an open border, immigration reform, and targeting drug organizations.⁵ This thesis will analyze the return on investment and unintended consequences associated with establishing defensive barriers on the U.S.-Mexico border to answer the question: how cost effective is the U.S.-Mexico defensive barrier as a solution?

¹ White House, *National Security Strategy for Combating Terrorism* (Washington, DC: White House 2003), 24–25, 27.

² Tony Payan, “Border Security and (Mis-) Management,” *Houston Chronicle*, July 29, 2013, <http://blog.chron.com/bakerblog/2013/07/border-security-and-mis-management/>.

³ U.S. Customs and Border Protection, *U.S. Border Patrol Southwest Border Deaths by Fiscal Year* (Washington, DC: U.S. Customs and Border Protection, 2013).

⁴ Raquel Rubio-Goldsmith, Melissa M. McCormick, Daniel Martinez, and Inez M. Duarte, *The “Funnel Effect” and Recovered Bodies of Unauthorized Migrants Processed by the Pima County Office of the Medical Examiner, 1990–2005* (Tucson, AZ: Binational Migration Institute, University of Arizona, 2006), 30.

⁵ Adam Isacson and Maureen Meyer, *Beyond the Border Buildup: Security and Migrants along the U.S.-Mexico Border* (Washington DC: Washington Office of Latin America, 2012), 32, 47–49.

B. IMPORTANCE

U.S. politicians have primarily focused on using hard-power resolutions to create a hardened U.S.-Mexico border through the construction of fences and to increase the number of border agents within the last two decades.⁶ The strategy of creating tall and intimidating barriers is a form of deterrence and directs people to the ports of entry (POE) locations.⁷ The ability to make “another to act in ways in which that entity would not have acted otherwise,” according to Ernest Wilson, is the definition of hard power.⁸ Defensive barriers are a symbolic representation of the state’s capacity to control its borders. Additionally, Michael Fisher, U.S. Border Patrol Chief, describes a secure border as “living free from fear in their (border communities) towns and cities. For other American communities, it means enjoying benefits of a well-managed border that facilitates the flow of legitimate trade and travel.”⁹ However, defensive barriers could create a false sense of security because U.S.-Mexican border fortifications are not 100 percent effective or efficient against neither illegal immigration nor drug smuggling. The increase in U.S.-Mexico border agents and the building of defensive barriers still have vulnerabilities that drug trafficking organizations (DTOs) can exploit.¹⁰

Understanding the complex security dilemma is necessary to protect the United States and to determine how the methods to achieve security could be improved. No individual approach can achieve an impeccable and flawless solution that will protect the U.S., but increasing the overlap of security policies could increase their effectiveness. Assessing how current policies are mitigating risk will assist in understanding the

6 Edward Alden, “Immigration and Border Control,” *Cato Journal* 32, no 1 (Winter 2012), 107.

7 Marc Rosenblum, *Border Security: Immigration Enforcement between Ports of Entry* (Washington, DC: Congressional Research Service, 2013), 4.

8 Ernest J. Wilson, “Hard Power, Soft Power, Smart Power,” *The Annals of the American Academy of Political and Social Science* 616, (March, 2008): 114.

9 House of Representatives Subcommittee on Border and Maritime Security, *What Does A Secure Border Look Like?* (Washington, DC: U.S. House of Representatives, 2013), <http://www.hsdl.org/?view&did=732013>, 2.

10 United States Department of Justice defines Drug Trafficking Organizations as, “Complex Organizations with Highly Defined Command-and-Control Structures that Produce, Transport, and/or Distribute Large Quantities of One or More Illicit Drugs.” *National Drug Threat Assessment 2010*, accessed January 18, 2014. www.justice.gov/archive/ndic/pubs38/38661/dtos.htm.

problem and identifying the gaps in border security. The comprehension of these security gaps is essential to create and put in place efficient solutions and standards of measurement to produce a more holistic and effective resolution to address the situation.

This thesis will raise awareness and potentially promote the initial steps to change the current U.S. philosophy on border security. All taxpayers and the U.S. government have an investment in U.S. security and should care about security in North America, especially those living close to the border regions. If successful, this thesis will analyze the overall effectiveness of defensive barriers on the U.S.-Mexico border.

C. HYPOTHESES AND PROBLEMS

Two possible hypotheses can be formulated based on the literature about defensive barriers. The first hypothesis is that barriers are useful and successful at deterring illegal immigration, drug trafficking, and are cost effective. Defensive barriers are needed to secure America and build what critics call “Fortress America.”¹¹ The second is that barriers are unsuccessful since they become a target for increased illicit activity and create diminished returns. There are various recommendations for alternative solutions, such as immigration reform or targeting DTOs funds, to solving the U.S. security dilemma of illegal immigration and DTOs.

A defensive barrier as the primary security solution generates more problems than it solves; this is because the border security dilemma has created a “wicked problem,” meaning that it portrays a difficult problem that is impossible to solve because it is inconsistent, incomplete, and has dynamic conditions. The problem itself is impervious to a solution and thereby any solution continues to create more dilemmas, which in turn continue to compound rather than solve the problem.¹² Also, barriers arguably encourage DTOs to innovate ways to defeat the system rather than discourage illicit behavior.

¹¹ John J. Noble, “Fortress America or Fortress North America?” *Law and Business Review of the Americas* 15, 3/4 (Summer/Fall 2005): 520; John J. Noble, “A Secure Border? The Canadian View,” in *Immigration Policy and the Terrorist Threat in Canada and the United States*, edited by Alexander Moens and Martin Collacott (Vancouver, BC: Fraser Institute, 2008), 175.

¹² Churchman C. West, “Wicked Problems,” *Management Science*, 14, no. 4 (December 1967): B141–B142.

Another problem is the lack of data on successful illegal entries. Current data collection is based on whom and what is actually caught along the border. For example, the U.S. Border Patrol (USBP) reports annually only the successful apprehensions. The amount of successful violations is unrecorded and this leaves an unknown number that cannot be accounted for when analyzing the cost-benefits of a defensive barrier. The data that can be analyzed include: expenses for building a fence; increases in border patrol manpower; and the increase in the amount of both personnel and contraband confiscated. Without the actual data, opportunity costs are skewed.¹³ The preliminary hypothesis is that fences are not effective in curbing illegal immigration or drug trafficking.

D. LITERATURE REVIEW

1. Fences Are Necessary

In response to illegal immigration and counter-narcoterrorism, the border fence subject has arguments for and against the effectiveness of its deployment along the border. First, a fence has a valuable effect on deterring illegal immigration and drug trafficking along the U.S.-Mexico border.¹⁴ Paul Staniland argues that the first step to stopping unwanted border crossings is to contain the problem by building and maintaining a defensive barrier—a fence—which would increase the risk and cost to those trying to infiltrate America by increasing the difficulty of succeeding at infiltrating.¹⁵

Eventually, the cost of crossing the defensive barrier will outweigh the benefits.¹⁶ Jonathan Rynhold analyzed the conflict of a security wall between Israel and the West Bank in Palestine. Although a defensive barrier may not be the ideal solution, “however, if implemented wisely, the barrier could turn out to be the best means available.”¹⁷ David

¹³ Tefvik Nas, *Cost-Benefit Analysis: Theory and Application* (Thousand Oaks, CA: SAGE Publications, 1996), 64.

¹⁴ Paul Staniland, “Defeating Transnational Insurgencies: The Best Offense is a Good Fence,” *The Washington Quarterly* 29, no 1 (Winter 2005): 22.

¹⁵ *Ibid.*, 31.

¹⁶ *Ibid.*, 31–32.

¹⁷ Jonathan Rynhold, “Israel’s Fence: Can Separation Make Better Neighbors?” *Survival* 46, no. 1 (Spring 2004): 72.

Makovsky remarks that the fence has reduced terrorist infiltration greatly in Israel. Even though it is not a hundred percent effective, the fence is still seen as a success due to the reduction of attempts. Even with some penetration, the people continue to want defensive barriers for security reasons.¹⁸ After September 11, 2001, this same reason, security, was a driving motivator for the U.S. to fortifying its borders.¹⁹ Since the wall has been built, the U.S. Border Patrol reports that apprehensions have been at an all-time low similar to 1971 statistics; 2011 was the lowest with 340,252 and 2012 the second lowest with 364,768.²⁰ Senator John McCain stated, “The border is not secure. But it’s a lot more secure than it was back in 1986 when we gave amnesty to 3 million people.”²¹

2. Fences Are Unnecessary

The opposing view is that security barriers are not providing an effective tool against counter-narcoterrorism and illegal immigration. Tony Payan agrees, stating “that the border has become even more guarded and tightly controlled” over the last 150 years.²² He argues that since border security has been escalating, there has not been a return on investment. He further states that immigration and drug trafficking are separate issues, but the United States government considers them to be the same, even though drugs are smuggled in differently than people. The unilateral approach of investing billions of dollars into defensive barriers for three separate problems is not a long-term solution, nor is it succeeding.²³ Peter Andreas and Thomas Biersteker investigate different trade-security scenarios for North America and offer a different point of view

¹⁸ David Makovsky, “How to Build a Fence,” *Foreign Affairs*, 83, no. 2 (2004): 55–56.

¹⁹ White House, *National Security Strategy for Combating Terrorism* (Washington, DC: White House 2003), 24–25, 27

²⁰ U.S. Customs and Border Protection, “U.S. Border Patrol Apprehension Statistics Fiscal Year 1925–2012,” accessed August 02, 2013, http://www.cbp.gov/linkhandler/cgov/border_security/border_patrol/usbp_statistics/usbp_fy12_stats/appr_stats_1925_2012.ctt/appr_stats_1925_2012.pdf.

²¹ I-Hsien Sherwood, “Immigration Reform News 2013: Bill Will Create Jobs, McCain Tells Republican Crowds,” *Latin Post*, August 14, 2013, <http://www.latinpost.com/articles/1487/20130814/immigration-reform-news-2013-bill-will-create-jobs-mccain-tells.htm>.

²² Tony Payan, *The Three U.S.-Mexico Border Wars* (Westport, CT: Praeger Security International, 2006), 14–15.

²³ *Ibid.*, 16–17, 19–21, 122.

about borders. At one end, there is the potential scenario for European border style where multi-countries share open borders to create a “Fortress North America,” where Mexico, Canada, and the United States form a unified region with all borders open to each other and increase external security to the North America territory. The opposing option to “Fortress North America” is at the opposite spectrum, to constrict and harden America’s borders to defend only “Fortress America.” Proponents argue that open borders and security can be interlinked for economic regional cooperation. In contrast, border security itself has become a barrier to commerce.²⁴

Brent Sterling’s book, *Do Good Fences Make Good Neighbors*, examines six historical cases of strategic barriers, fences, and walls, and how they are not unique. He highlights how barriers affect the enemy’s strategy, shape politics, and alter strategic balances. In ancient Greece, Sterling illustrates the unintended consequences of Athens’ Long Walls. These walls instilled complacency and overconfidence in the leadership. The physical barrier became either a target for enemies to destroy or channels them to search and exploit for weaker unprotected areas elsewhere. Eventually, all walls are defeated. A wall is a symbol of the country’s vulnerability and its inability to solve a problem. According to Sterling, often walls are built to “muddle through” and evade difficult political decisions.²⁵

In another work, *Border Games* by Peter Andreas demonstrates that “the escalation of border policing has ultimately been less about deterring the flow of drugs and migrants, then about recrafting the image of the border.”²⁶ Through the use of symbols, he argues that the perception of U.S. control of the U.S.-Mexico border is more about power than reducing illegal infiltration itself. Command of the border is a symbol of the state’s control, even though the border has never been successfully managed. The

²⁴ Peter Andreas, “A Tale of Two Borders,” in *The Rebordering of North America*, ed. Peter Andreas and Thomas J. Biersteker (New York: Routledge, 2003), 14–15.

²⁵ Brent Sterling, *Do Fences Make Good Neighbor’s? What History Teaches Us about Strategic Barriers and International Security* (Washington DC: Georgetown Press, 2009), 325.

²⁶ Peter Andreas, *Border Games*, 2nd ed. (Ithaca, NY: Cornell University Press, 2000), xiv.

idea that a border is open to trade, but closed to illegal activities, drug trafficking and illicit immigration, is nothing more than an illusion in a globalized world.²⁷

Stephen Flynn emphasizes how other historic powers have built walls—Maginot Line, Berlin Wall, and Great Wall of China—at an enormous cost, only to fail in the original reason for building a barrier.²⁸ The cost continues to increase because barriers create opportunities for illegal professionals, “coyotes,” to furnish smuggling operations. In addition, as the border becomes fortified, the risk and benefits associated with illicit activities also increase, creating a demand for more experienced criminals than naïve lawbreakers to smuggle drugs through ports of entry.²⁹

In Terry Goddard’s three-part series, “How to Fix a Broken Border,” he states walls do not work because “the cartels have the capacity to go over, under, around, and even through virtually any physical barrier.”³⁰ As Janet Napolitano said, “You show me a 50-foot wall and I’ll show you a 51-foot ladder at the border. That’s the way the border works.”³¹ This demonstrates that alternative solutions are needed more than the defensive barrier response and that politicians are aware of this.

3. Alternative Solutions

As the United States continues to build fences, manpower has also been increased to monitor the border. In fact, it has grown exponentially since 1990s. Different solutions have been brought forward that are better alternatives to building fences. Examples of these are open borders and immigration reform; and the objective of border security should be drug organizations instead of immigrants.

²⁷ Ibid., 7–9.

²⁸ Stephen E. Flynn, “The False Conundrum,” in *The Rebordering of North America*, ed. Peter Andreas and Thomas J. Biersteker (New York: Routledge, 2003), 112.

²⁹ Ibid., 112–114.

³⁰ Terry Goddard, “How to Fix a Broken Border: Disrupting Smuggling at its Source,” May 17, 2012, <http://www.immigrationpolicy.org/perspectives/how-fix-broken-border-three-part-series>, 12.

³¹ Marc Lacey, “Arizona Officials, Fed Up with U.S. Efforts, Seek Donations to Build Border Fence,” *New York Times*, July 19, 2011, www.nytimes.com/2011/07/20/us/20border.html?_r=0.

a. Open Border

Stephen Flynn argues that the U.S. escalated reaction to September 11, 2001 “imposes a blockade on its own economy.”³² An open, smart border can protect America’s security and economic interests, especially if the security and open border are compatible, and they strengthen each other. An open border can reduce security risks, unlike a closed border that becomes a target for escalated illegal activities at the border, and a potential terrorist threat. Instead of worrying about a geographic line, cooperative policies should expand the security framework and tactics to catch illicit activity before it reaches the border. Technology and techniques need to be created and implemented to allow people and trade to flow, while stopping terrorism. Instead of looking for “a needle in a haystack,” smart-border technology, such as safeguarding transportation networks, shipment tracking, equipping vehicles with transponders coded to a particular handprint or retina, and detecting abnormalities, could reduce the risk at the border region.³³ Data management and cooperative intelligence should be expanded to manage risk more efficiently. Some expanded incentives include encouraging low-risk everyday travelers to increase cooperation and reduce the need for criminal activity.³⁴

b. Immigration Policy

Authors Massey, Durand, and Malone argue that American politicians are reaching for an unrealistic goal.³⁵ They examine the overall history of U.S. immigration as a complex organism that should not have been revised without understanding the system. Prior to 9/11, the policymakers turned a predictable functioning system into a noisy jalopy that created more unintended consequences that are not in the best interests of either the U.S. or Mexico. The U.S. policy presents a contradiction, because leaders want to keep the border open for trade, yet keep people out; post 9/11 has exacerbated

³² Flynn, “The False Conundrum,” 117.

³³ *Ibid.*, 115–18.

³⁴ *Ibid.*, 122–125.

³⁵ Douglas S. Massey, Jorge Durand, and Nolan J. Malone, *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration* (New York: Russell Sage Foundation, 2002), 2.

this. They highlight that building “Fortress America” is an unrealistic illusion of “smoke and mirrors.”³⁶

In another viewpoint, Eric Olson and David Shirk argue for immigration to be separate from border security. They want to “widen the gates” by creating more work visas for the majority of law-abiding illegal immigrants. They advocate that resources should be spent on tracking systems to monitor visa expirations that labor laws are conforming to.³⁷ Creating a better legal immigration policy could weaken the demand for black-markets, create the seasonal migration cycle again, and generate more U.S. tax revenues. This would allow both CBP and BP to focus more on providing protection from terrorists and drug trafficking organizations than illegal immigration.³⁸

c. Drug Organizations

In Terry Goddard’s three-part series, “How to Fix a Broken Border,” he states that the U.S. needs a broader more effective strategy to securing the border. Instead of wasting resources on building up the border, he recommends targeting and deterring transnational criminal organizations. These organizations are the ones who are innovating and breaching security. As long as a profit can be made through drug or human smuggling, these illicit activities will continue. Since cartels operate as a business, the goal should be to target their money. Instead of targeting immigrants who once caught, will pay the cartels to smuggle them back in, the correct target should be the drug trafficking organizations that are profiting from illegal smuggling. Goddard offers solutions by focusing on customs enforcement, closing loopholes for money-laundering, and on the money itself. Goddard recommends that a bi-national coordinated effort is needed.³⁹

³⁶ Ibid., 6.

³⁷ Eric Olson and David Shirk, “Is More Getting Us Less? Real Solutions for Securing Our Border,” 2011, accessed July 12, 2013, <http://www.immigrationpolicy.org/perspectives/more-getting-us-less-real-solutions-securing-our-border>, 6

³⁸ Ibid., 4, 6.

³⁹ Terry Goddard, “How to Fix a Broken Border: A Three Part Series,” May 17, 2012, <http://www.immigrationpolicy.org/perspectives/how-fix-broken-border-three-part-series>.

d. Measures of Effectiveness

In response to September 11, 2001, Howard Kunreuther used examples to examine how risk assessment models can be interconnected with the risk perception knowledge and to improve risk management opportunities for handling unknown and catastrophic incidents.⁴⁰ Kunreuther concludes that individuals need to be educated on consequences of catastrophic events, to reduce fear and anxiety and so these informed people can allocate funding better.⁴¹ John Mueller and Mark Stewart analyze how the government has spent over one trillion dollars on homeland security since 9/11. Both authors criticize the government for concentrating on worst-case scenarios and focusing on terrorist attack outcomes, rather than risk assessment and risk mitigation. “Risk management decisions seek to reduce the risk in accordance with specified, absolute risk criteria,” but instead, the Department of Homeland Security (DHS) has focused on ranking relative risk and ignoring absolute risk mitigation.⁴² Using case studies, they argue that although there is political pressure to respond to terrorist acts and overreacting is the general response, circumventing overreaction is the most cost-effective act to take. If another devastating event were to occur, the U.S. government needs to enhance its procedures and tactics, and not overstretch itself in the name of security.⁴³

E. METHODS AND SOURCES

This thesis will use process tracing, return on investment analysis, and deductive analysis to study the cost and effectiveness of the U.S.-Mexico border security. Government documents, reports, and directives will be used to trace the growth of the southern border’s budgets and manpower statistics from the creation of the Department of Homeland Security up to 2012. These will be used to establish the baseline of analysis of border security. Lacking reliable data on the number of successful illegal immigrants in a

⁴⁰ Howard Kunreuther, “Risk Analysis and Risk Management in an Uncertain World,” *Risk Analysis* 22, no 4 (2002): 662.

⁴¹ *Ibid.*, 663.

⁴² National Research Council of the National Academies, *Review of the Department of Homeland Security’s Approach to Risk Analysis* (Washington, DC: National Academies Press, 2010), 137.

⁴³ John Mueller and Mark Stewart, “Balancing the Risks, Benefits, and Costs of Homeland Security,” *Homeland Security Affairs* 7, no 16 (2011): 1–2, 17–19.

given year will make it more difficult to measure the infiltration directly. However, the apprehension statistics from the U.S. Border Patrol will be used to determine benefits. This thesis argument will rely mostly on U.S. government sources pertaining to defensive barriers, illegal immigration, border security, and statistical data.

F. THESIS OVERVIEW

This thesis is organized into four main chapters to logically answer the proposed research questions. Chapter I is an overview of the thesis. Chapter II introduces the construction and expansion of the U.S.-Mexico defense barriers. It also reviews the border protection effectiveness by examining the increase in manpower and budget, DHS measures of effectiveness, and the effects and costs of present border security efforts. Chapter III outlines unintended consequences such as: unauthorized immigrants, threats of drug organizations and how DTOs can adapt to overcome barriers. These previous chapters will build the foundations for Chapter IV, which will answer the presented research question.

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II. DEFENSIVE BARRIERS, BORDER AGENTS, AND ILLEGAL IMMIGRATION

A. INTRODUCTION

The United States and Mexico share an almost 2,000-mile border; it is a geographic boundary and the legal jurisdiction territory of both nations. Citizenship and national sovereignty are defined by borders.⁴⁴ The border is both a natural boundary that partially follows the path of the Rio Grande River (Figure 1) and an arbitrary man-made “line in the sand” boundary. The majority of this border is desolate and rugged landscape that is susceptible to dangerous climate conditions. Historically, the southern border is known for drug smuggling and illegal entry.⁴⁵ Officially, there are 24 ports of entry shared between the four U.S. border states of Texas, California, New Mexico, and Arizona.⁴⁶ A “port of entry” is a specifically chosen area where Customs and Border Patrol (CBP) agents “accept entries of merchandise, clear passengers, collect duties, and enforce the various provisions of CBP and related laws.”⁴⁷ The traditional problems along the southern border have been related to arms trafficking, drug violence, illegal entry, and drug smuggling and challenges continue to affect U.S. border security. According to the U.S. Customs and Border Patrol (CBP), the border is where terrorism, drug trafficking, and smuggling meet, but it is currently still unknown for terrorist activity.⁴⁸ The combination of rugged terrain, open areas, coastal waters, and rivers provide the perfect conditions for illegal activities. Prior to September 11, 2001, these challenges were handled by individual agencies.

44 Daniel M. Smith, *The American Diplomatic Experience* (Boston, MA: Houghton Mifflin Company, 1972), 130; Judith A. Warner, *U.S. Border Security: A Reference Handbook* (Santa Barbara, CA: ABC-CLIO, 2010), 1.

45 Warner, *U.S. Border Security*, 2.

46 Warner, *U.S. Border Security*, 2; U.S. Customs and Border Protection, “Locate a Port of Entry,” accessed December 10, 2013, <http://www.cbp.gov/xp/cgov/toolbox/contacts/ports/>.

47 U.S. Customs and Border Protection, “Ports of Entry and User Fee Airports,” accessed October 19, 2013, <http://www.cbp.gov/xp/cgov/toolbox/contacts/ports/>.

48 U.S. Customs and Border Protection, *Secure Borders, Safe Travel, Legal Trade: U.S. Customs and Border Protection Fiscal Year 2009–2014 Strategic Plan* (Washington, DC: U.S. Customs and Border Protection, 2009), 9.

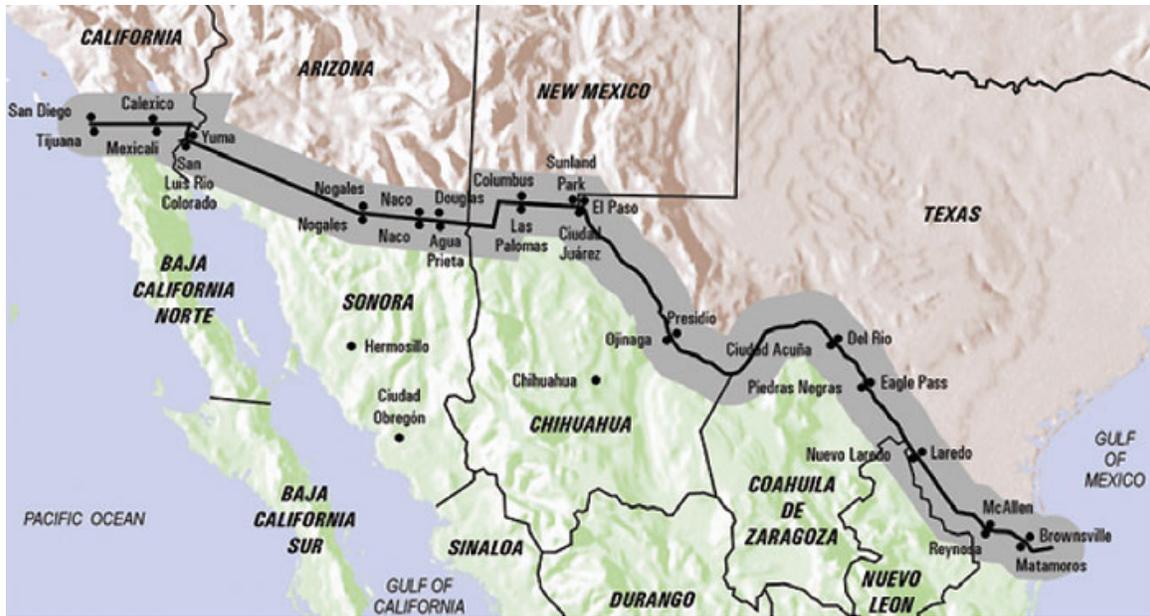


Figure 1. U.S.-Mexico border with sister cities⁴⁹

After 9/11, Department of Homeland Security (DHS) was created by the Homeland Security Act of 2002. This law reorganized federal government organizations by collapsing and combining existing agencies and creating of new agencies under the one umbrella of the DHS and thereby reducing fragmentation.⁵⁰ The Customs and Border Protection (CBP) is an example of this reorganization; it was established by consolidating 22 agencies into one organization. Agencies such as the U.S. Customs Service, U.S. Border Patrol and others were merged to form the CBP. The Border Patrol's primary mission is to protect the United States by reducing the possibility that dangerous people and capabilities enter the nation between the ports of entry.⁵¹ The U.S. has attempted to fortify its defenses on the border in order to prevent drug trafficking and migration.⁵²

49 "In 2010 California-Mexico Border Saw 93 Million Inspections, 90 Tons of Drugs and 41,000 Apprehensions," *Latino Daily News*, February 24, 2011, www.hispanicallyspeakingnews.com/latino-daily-news/details/in-2010-california-mexico-border-saw-93-million-inspections-90-tons-of/5544.

50 Warner, *U.S. Border Security*, 28.

51 U.S. Customs and Border Protection, "CBP Mission Statement," accessed November 11, 2013, <http://www.cbp.gov/xp/cgov/about/mission/guardians.xml>.

52 Warner, *U.S. Border Security*, 10.

The four U.S. border states are divided into nine different sections (see Figure 2).⁵³ Comprising these section are various border stations. Despite being the smallest section of border, San Diego was the busiest area in the 1990s for illegal immigration and most of the apprehensions occurred in this area of the southern border. It is argued by border fence advocates that the security measures put in place in during this time period were effective. Using the success of the 1990s, the federal government again turned to these defensive measures in the following decade to continue safeguarding the U.S.-Mexico border. Yet, a closer analysis is essential to determine if these updated type of defensive barriers are successful; specifically, what methods are responsible for the decrease in illegal immigration and why. This chapter will analyze the utilization and effectiveness of specific defensive measures along the U.S.-Mexico border. This will include security measures such as assembling fences and the increase in U.S. Border Patrol (USBP) personnel from 2001 to 2012.

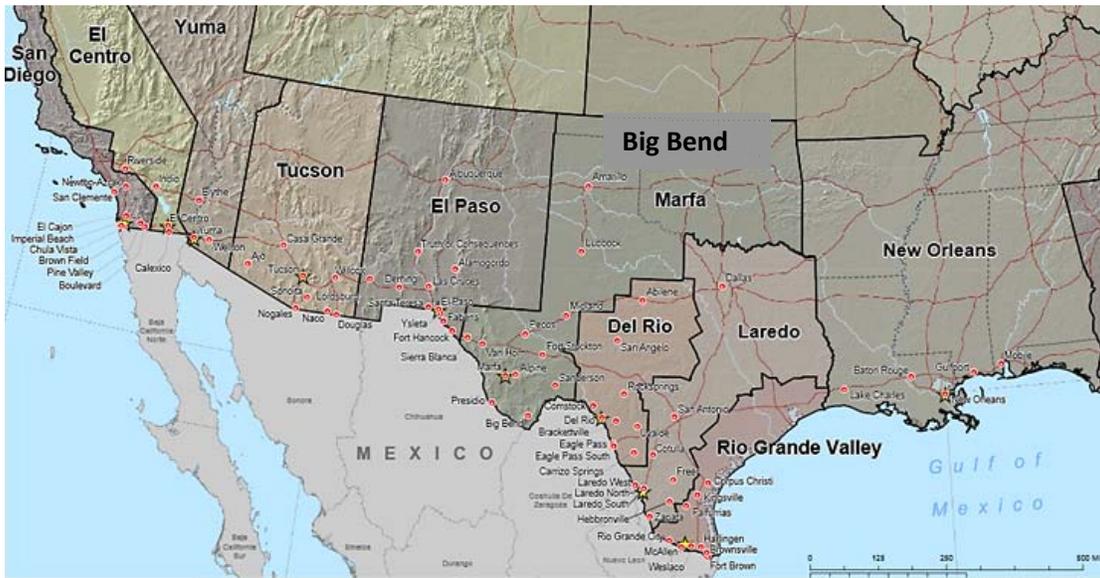


Figure 2. Southwest Border Patrol sections.⁵⁴

⁵³ Richard M. Stana, *Secure Border Initiative: Observation on the Importance of Applying Lessons Learned to Future Projects* (Washington DC: Congressional Research Service, 2008), 4.

⁵⁴ U.S. Army Corp of Engineers, Engineering and Construction Support Office, “Office of Border Patrol—Sectors and Stations,” January 18, 2014, <http://ecso.swf.usace.army.mil/maps/SectorP.pdf>.

There is a lack of reliable and accurate data on the exact number of illegal immigrants that successfully enter into the United States every year. This means that there is no way of directly measuring illegal immigration into the United States. Apprehensions are currently based only on the number of attempted illegal entries captured each fiscal year, and these numbers are skewed. This data does not take into account repeat offenders, and illegal migrants are known to try and cross the border multiple times. Therefore, these occurrences are included into the total reported apprehension statistics and are not a true reflection of the actual number of people caught.⁵⁵ This also means that the success rate cannot be calculated accurately, due to the unknown exact number of annual illegal entries. The fluctuation in reported apprehensions can be interpreted in different ways. For example: 1) the rise in apprehensions could reflect a higher number of attempts by illegal immigrants and a standard success rate, or 2) an indication of a fixed number of illegal immigrants attempting entry and increased in success percentage in apprehensions due to security measures, like an increase in border agents, new technology, or new fence construction.

On the other hand, a reduction could be construed differently. A decrease could indicate flawed USBP practices, such as agents accepting bribes or inadequate deployment of agents at the popular immigration routes. The decrease in the number of assigned agents, in certain border sectors, could be a possible reason for decreased apprehensions. Less agents means fewer people caught trying to cross the border. Moreover, the measure of success could also be incorrect. If the number of border agents is increasing and apprehensions decreasing, then something else could be affecting the numbers. There might be fewer attempts at crossing or illegal immigration might have shifted to a different area. This thesis will indirectly measure illegal immigration by using the annually reported USBP apprehension statistics. A decrease in apprehensions could mean that the security measures are a success. Even though these figures have limitations, it is still the best indicator to measure illegal immigration at this time, and this thesis will carefully utilize it.

⁵⁵ Blas Nunez-Neto and Yule Kim, *Border Security: Barriers along the U.S. International Border* (Washington DC: Congressional Research Service, 2008), 11.

B. BUILDING DEFENSIVE BARRIER

1. The 1990s Fencing Background

The United States government has made progressive efforts to fortify and control its borders. Borders represent the boundaries of a nation's authority and shape its area of control.⁵⁶ The tactic of building defensive barriers along the southern border began in the 1990s with several projects: Operation Gatekeeper, located in San Diego, California (CA); Hold the Line, in El Paso, Texas (TX); Operation Safeguard in Tucson, Arizona (AZ), and Operation Rio Grande, in McAllen, TX. All these programs were designed under the new strategy of "Prevention through Deterrence" to replace the former failing strategy. Fencing was built around urban settings to discourage and deter potential illegal immigration.⁵⁷

The San Diego sector is comprised of eight stations; the double layered fence extends over only two stations, Chula Vista and Imperial Beach.⁵⁸ These two are the epicenter between San Diego's estimated population of 1.1 million and Tijuana's estimated population of 2.2 million people.⁵⁹ Located in this area, San Ysidro, California is the busiest port of entry (POE). The strategy prior to 1990 was to apprehend illegal immigrants after they had crossed the border. This allowed many to escape capture if they were not chased.⁶⁰ To increase their chances of a successful crossing, enormous groups of immigrants would assemble near the border and wait for the cover of night. Crowds ranging from hundreds to thousands would then run across the border and try to blend into the urban neighborhoods. The Border Patrol had countered this technique by

⁵⁶ Warner, *U.S. Border Security*, 1.

⁵⁷ *Ibid.*, 20.

⁵⁸ U.S. Customs and Border Protection, "Imperial Beach Station," accessed November 13, 2013, http://www.cbp.gov/xp/cgov/border_security/border_patrol/border_patrol_sectors/sandiego_sector_ca/stations/sandiego_imperial.xml.

⁵⁹ Joseph Nevins, *Operation Gatekeeper: The Rise of the "Illegal Alien" and the Making of the U.S.-Mexico Boundary* (New York: Routledge, 2002), 80.

⁶⁰ U.S. Government Accounting Office, *Border Control: Revised Strategy is Showing Some Positive Results* (Washington DC: U.S. Government Accounting Office, 1994), 12.

responding with “one-on-one” man hunts, and for every eight migrants that crossed only one was apprehended during this time was a 1 in 8 average of people crossing.⁶¹

This proved to be neither an effective nor an efficient strategy and created a demand for something new. Politicians determined that defensive barriers were needed for several reasons: to deter potential immigrants, give support to border patrol agents, and maintain the integrity of the border.⁶² The first fence, also known as the primary fence, around the city of San Diego, is the busiest known area for cross-border criminal activity, consisted of a 10 foot tall fence. The California National Guard and Corps of Engineers began building the fence in 1990 and completed construction in 1993. The barrier was assembled from steel sheets and extended from the Pacific Ocean 14 miles inland along the San Diego 66-mile southwest border. To improve both visibility during the night and increase the detection ability for the patrolling border agents along the high traffic zone, the fence was equipped with stadium lighting systems.⁶³ In the Imperial Beach and Chula Vista stations, there was a decrease in the Border Patrol’s reported apprehension numbers and a noticeable increase in apprehension in the other San Diego stations during these early years.⁶⁴ The Border Patrol attributed the success to the defensive barrier technique.⁶⁵

2. Illegal Immigration Reform and Immigrant Responsibility Act

The Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) of 1996 permitted the Immigration and Naturalization Service (INS) to build an additional layer behind the San Diego primary fence for reinforcement. In addition, it also granted permission for the Attorney General to construct border defensive barriers. Using the

⁶¹ Ibid., 11–12.

⁶² Ibid.

⁶³ Blas Nunez-Neto and Stephen Vina, *Border Security: Fences along the U.S. International Border* (Washington DC: Congressional Research Service, 2008), 2.

⁶⁴ U.S. Customs and Border Protection, *U.S. Border Patrol Fiscal Year 2012 Statistics: U.S. Border Patrol Southwest Border Section, Total Illegal Alien Apprehensions by Fiscal Year*, assessed November 12, 2013, www.cbp.gov/linkhandler/cgov/border_security/border_patrol/usbp_statistics/usbp_fy12_stats/appr_swb.ctt/appr_swb.pdf.

⁶⁵ Ibid.

Sandia Laboratory's recommendations, the building began in 1999. This additional fence was part of a multilayer fencing system that was recommended by the Government Accountability Office (GAO) to create numerous obstacles in urban settings to discourage illegal crossings, delay crossings, improve detection, and to funnel immigrants to other locations.⁶⁶ This secondary three-layer fence is 150 feet away from the primary fence, 15 feet high, and consists of steel mesh to reduce the finger and toe holds of a would-be climber. The top of the fence is slanted inward towards the climber to increase the difficulty. In more congested areas, an additional third fence is present, a chain linked fence with barbed wire on top.⁶⁷ An all-weather patrol road and lighting were installed between the two fences to assist any vehicles chasing those who scaled the primary wall.

The California Coastal Commission's (CCC) environmental concerns stopped the secondary fence after 9.5 miles were completed.⁶⁸ In 2005, the REAL ID Act gave the Secretary of the Department of Homeland Security (DHS) the power to override any legal obligations in order to finish the construction of the defensive barriers.⁶⁹

3. Fence Act, 2006

On October 26, 2006, the Secure Fence Act was signed into law by President George W. Bush, which enabled DHS to build additional fortifications along the southern border. Two-layered fencing, cameras, lighting, roads, and sensors were some of the additional items added along five areas of the border. The areas to be fenced in were Brownsville, TX, to Laredo, TX; Eagle Pass, TX, to Del Rio, TX; El Paso, TX, to Columbus, New Mexico (NM); Douglas, AZ, to Calexico, CA, and 20 miles around

⁶⁶ U.S. Government Accounting Office, *Border Control: Revised Strategy*, 13; Peter Andreas, *Border Games* (Ithaca: Cornell University Press, 2000), 91.

⁶⁷ Ted Robbins, "Q&A Building a Barrier along the Border with Mexico," National Public Radio, April 2006, <http://www.npr.org/templates/story/story.php?storyId=5326083>.

⁶⁸ Chad Haddal, Yule Kim, and Michael Garcia, *Border Security: Barriers along the U.S. International Border* (Washington DC: Congressional Research Service, 2009), <http://www.fas.org/sgp/crs/homesecc/RL33659.pdf>, 1.

⁶⁹ *Ibid.*, 1–2, 5.

Tecata, CA, equating to roughly 850 miles of fencing.⁷⁰ The 2008 Consolidated Appropriations Act revised the Fence Act, stating that “not fewer than 700 miles of the southwest border, in locations where fencing is deemed more practical and effective.”⁷¹ The CBP website currently reports that as of February 10, 2012, it has completed a total of 651 miles of fence along the southern border. Of these 651 miles, 352 miles are composed of pedestrian fence (for urban areas), and 299 miles are vehicle fence (used more away from urban areas).⁷²

C. THE SOUTHERN BORDER: APPREHENSIONS, AGENTS, AND RISING COSTS

1. Apprehensions

a. Unauthorized Immigrants

The nation’s trepidation over unauthorized immigration has made immigration a major issue in the political arena. In response to voter’s concerns, politicians have increased the number of Border Patrol agents and installed new surveillance equipment.⁷³ The act of crossing the country’s border lacking permission constitutes a criminal offense, and people who try are then labeled “illegal aliens” or “criminal aliens” by the media. The government uses the term “unauthorized immigrants.”⁷⁴ Once captured, the unauthorized immigrants are deported. The latest stage of criminalizing immigration was the 2001 USA PATRIOT Act. This authorizes permission to deport or detain any noncitizen without due process if they present a danger to national security.⁷⁵ Traditionally, the United States has depended on apprehending these migrants at the

⁷⁰ Ibid., 9.

⁷¹ Ibid., 2.

⁷² U.S. Customs and Border Protection, “Southwest Border Fence Construction Progress,” February 10, 2012, http://www.cbp.gov/xp/cgov/border_security/ti/ti_news/sbi_fence/.

⁷³ Jason. Ackleson and Josiah Heyman, “United States Border Security after 9/11,” in *Border Security in the Al-Qaeda Era*, ed. John A. Winterdyk and Kelly W. Sunberg (London: CRC Press 2010), 42–44.

⁷⁴ Warner, *U.S. Border Security*, 20.

⁷⁵ David Cole, *Enemy Aliens: Double Standards and Constitutional Freedoms in the War on Terrorism* (New York: Free Press 2003), 50–51.

U.S.-Mexican border verses arresting them within the interior of the country.⁷⁶ The southern border constitutes the majority of apprehensions 97 to 98 percent.⁷⁷

b. Data Analysis

In general, the statistics reported by the CBP have demonstrated a decreasing percentage of apprehensions from fiscal year (FY) 2001 to FY 2012 (see Table 1)—basically fewer people were being caught.⁷⁸ Figure 3, provided by the *Economist*, shows a visual representation of the difference in apprehensions from 2000 to 2012. Total apprehensions fell by more than 70 percent from FY2001 (with over 1.2 million) to FY 2012 (with 356,873).⁷⁹ The most abrupt decline transpired between 2008 and 2011 when apprehensions fell to 53 percent.⁸⁰ This coincided with the beginning of fencing construction dictated by the Secure Fence Act of 2006. It is difficult to calculate how effective the fence has been in the 2000s because previously mentioned programs were put into place during this time. These programs increased resources across the border, specifically increasing border patrol agents and adding additional equipment to tighten the border. The increase in law enforcement agents has improved the human barrier aspect that coincided with the physical defensive barrier, and the additional equipment has increased the possibility of detecting intrusions.

⁷⁶ Warner, *U.S. Border Security*, 64.

⁷⁷ Global Security, “U.S.-Mexico Border Fence ‘Great Wall of Mexico,’” accessed 10 December 2013, <http://www.globalsecurity.org/security/systems/mexico-wall.htm>.

⁷⁸ Fiscal year (FY) is the accounting period for the federal government. It begins on October 1 and ends on September 30. For example fiscal year 2006 begins October 1, 2005 and ends September 30, 2006. The Secure Fence Act signed October 29, 2006; apprehensions are reported for FY 2007. U.S. Senate, “U.S. Senate Glossary,” accessed January 18, 2014, http://www.senate.gov/reference/glossary_term/fiscal_year.htm.

⁷⁹ *Immigration System: Opportunities for Legal Immigration and Enforcement of Laws against Illegal Immigration before the Committee of the Judiciary, U.S. House of Representatives*, 113th Cong., (2013) (testimony of Muzaffar Chishti), <http://judiciary.house.gov/hearings/113th/02052013/Chishti%2002052013.pdf>.

⁸⁰ *Ibid.*; U.S. Customs and Border Protection, “CBP’s 2011 Fiscal Year in Review,” December 12, 2011, accessed December 11, 2013, www.cbp.gov/xp/cgov/newsroom/news_releases/national/2011_news_archive/12122011.xml.



Figure 3. U.S. Border Patrol sectors difference in apprehension numbers of 2000 and 2012.⁸¹

United States Border Patrol Southwest Border Total Illegal Alien Apprehensions by Fiscal Year												
	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Big Bend	12087	11392	10319	10530	10536	7520	5536	5391	6360	5288	4036	3964
Del Rio	104875	66985	50145	53794	68506	42636	22920	20761	17082	14694	16144	21720
El Centro	172852	108273	92099	74467	55722	61465	55883	40961	33521	32562	30191	23916
El Paso	112857	94154	88816	104399	122679	122256	75464	30312	14999	12251	10345	9678
Laredo	87068	82095	70521	74706	75346	74840	56714	43658	40569	35287	36053	44872
Rio Grande Valley	107844	89927	77749	92947	134186	110528	73430	75473	60989	59766	59243	97762
San Diego	110075	100681	111515	138608	126904	142104	152460	162390	118721	68565	42447	28461
Tucson	449675	333648	347263	491771	439079	392074	378239	317696	241673	212202	123285	120000
Yuma	78385	42654	56638	98060	138438	118549	37992	8363	6951	7116	5833	6500
Total	1235718	929809	905065	1139282	1171396	1071972	858638	705005	540865	447731	327577	356873

Data taken from USBP.

Table 1. Southwest border apprehensions by fiscal year⁸²

⁸¹ "U.S.-Mexico Border: Secure Enough," *Economist*, June 22, 2013, www.economist.com/news/united-states/21579828-spending-billions-more-fences-and-drones-will-do-more-harm-good-secure-enough.

⁸² U.S. Customs and Border Protection, "Total Illegal Alien Apprehensions by Fiscal Year," accessed August 02, 2013, <http://www.cbp.gov/sites/default/files/documents/U.S.%20Border%20Patrol%20Fiscal%20Year%20Apprehension%20Statistics%20by%20sector%20and%20border%20area.pdf>.

Analyzing the statistics reported by the Border Patrol demonstrates that for FY 2006, before the Secure Fence Act was passed, the number of apprehensions were already dropping (as shown in Table 1).⁸³ Apprehensions continued to decline after it was signed into law during FY2007 (see Table 2). Furthermore, these decreases are seen in areas that were without defensive barriers. In other words, Border Patrol's strategy for stopping undocumented migrants was successful in areas without any fencing. The Del Rio, TX, sector had a 66.5 percent decrease. The number of arrests declined 45.3 percent in Rio Grande Valley, TX; these were the lowest apprehension statistics in 15 years.⁸⁴ Prior to 2008, neither of these sectors had any type of defensive barrier.⁸⁵ In Tucson, AZ, fencing was installed soon after the passing of the Secure Fence Act, yet the reductions had begun before the fencing was constructed. From FY 2006 to FY 2011, apprehensions in Tucson decreased by 68 percent.⁸⁶ During this same time, it is estimated that illegal entries decreased by 69 percent.⁸⁷ By analyzing the apprehension data, the change in migration flow can be seen after observing which sector had noticeable differences in apprehensions reported.

The Border Patrol officials have several reasons to explain why the decrease is a success. First, manpower from FY 2006 to FY 2011 increased from 2,600 to 4,200 border patrol agents in Tucson sector.⁸⁸ Second, Operation Jump Start supplemented 9,000 National Guard service members from June 2006 to July 2008.⁸⁹ Third, the Secure Border Initiative (SBI) allowed CBP to spend roughly \$850 million on improving surveillance and other technology. Finally, the installation of pedestrian and vehicle

⁸³ Secure Fence Act was signed October 26, 2006, which fell within fiscal year 2007.

⁸⁴ "Fencing the Border," *New York Times*, May 21, 2008, <http://www.nytimes.com/imagepages/2008/05/21/us/21fencegraphic.ready.html>.

⁸⁵ Ibid.

⁸⁶ U.S. Government Accounting Office [GAO], *Border Patrol: Key Elements of New Strategic Plan Not Yet in Place to Inform Border Security Status and Resource Needs* (Washington DC: U.S. Government Accounting Office, 2012), www.gao.gov/assets/660/650730.pdf, 11–12.

⁸⁷ Ibid.

⁸⁸ Ibid., 13.

⁸⁹ Ibid.

fencing along the border also contributed to the decline.⁹⁰ During this same time, the areas that had demonstrated an increase in apprehensions were El Centro and San Diego in California. As previously mentioned, these areas have had reinforced defensive fencing for over a decade. San Diego is one of the most fortified areas with its triple fencing. While apprehensions in other unfenced areas were decreasing, San Diego experienced a 20.1 percent increase.⁹¹

United States Border Patrol Southwest Border Total Illegal Allien Apprehensions by Fiscal Year												
Sector	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Big Bend	1.0%	1.2%	1.1%	0.9%	0.9%	0.7%	0.6%	0.8%	1.2%	1.2%	1.2%	1.1%
Del Rio	8.5%	7.2%	5.5%	4.7%	5.8%	4.0%	2.7%	2.9%	3.2%	3.3%	4.9%	6.1%
El Centro	14.0%	11.6%	10.2%	6.5%	4.8%	5.7%	6.5%	5.8%	6.2%	7.3%	9.2%	6.7%
El Paso	9.1%	10.1%	9.8%	9.2%	10.5%	11.4%	8.8%	4.3%	2.8%	2.7%	3.2%	2.7%
Laredo	7.0%	8.8%	7.8%	6.6%	6.4%	7.0%	6.6%	6.2%	7.5%	7.9%	11.0%	12.6%
Rio Grande Valley	8.7%	9.7%	8.6%	8.2%	11.5%	10.3%	8.6%	10.7%	11.3%	13.3%	18.1%	27.4%
San Diego	8.9%	10.8%	12.3%	12.2%	10.8%	13.3%	17.8%	23.0%	22.0%	15.3%	13.0%	8.0%
Tucson	36.4%	35.9%	38.4%	43.2%	37.5%	36.6%	44.1%	45.1%	44.7%	47.4%	37.6%	33.6%
Yuma	6.3%	4.6%	6.3%	8.6%	11.8%	11.1%	4.4%	1.2%	1.3%	1.6%	1.8%	1.8%

Data taken from USBP and table created by author

Table 2. Apprehensions by year and sector and articulated as a percentage of the whole Southwest total⁹²

2. BORDER AGENTS AND BUDGETS

A report by the Migration Policy Institute (MPI) reveals that the volume of the United States immigration enforcement is at an all-time high.⁹³ Spending by both CBP and U.S. immigrations and Customs Enforcement (ICE), the government’s two main immigration enforcement institutions, and the U.S.-VISIT program immigration

⁹⁰ Ibid., 12.

⁹¹ “Fencing the Border,” *New York Times*.

⁹² U.S. Customs and Border Protection, “Southwest Border Sectors: Total Illegal Apprehensions by Fiscal Year,” accessed November 12, 2013, http://www.cbp.gov/sites/default/files/documents/U.S.%20Border%20Patrol%20Fiscal%20Year%20Apprehension%20Statistics%201960-2013_0.pdf.

⁹³ Doris Meissner, Donald M. Kervin, Muzaffar Chishti, and Claire Bergeron, *Immigration Enforcement in the United States: The Rise of a Formidable Machinery* (Washington DC: Migration Policy Institute, 2013), 9.

technology enforcement initiative reached a combined budget of 17.9 billion in FY 2012.⁹⁴ Compared to the former Immigration and Naturalization Service (INS), this is 15 times more than the INS's 1986 budget. This was also a 24 percent increase over combined 2012 fiscal budgets of other federal law enforcement institutions: Drug Enforcement Administration (DEA), Federal Bureau of Investigations (FBI), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), U.S. Marshals Service, and the Secret Service.⁹⁵

The number of border patrol agents has grown increasingly larger from FY 1992 to FY 2012: a 518 percent increase and an increase of 17,305 border agents over two decades.⁹⁶ A large increase occurred from FY 2007 to FY 2011 with the majority of personnel stationed on the U.S.-Mexico border (see Table 3). In FY 2001, the number of agents on the southern border numbered at 9,147 out of the national total of 9,821. This number has more than doubled by FY 2012 with 18,546 of the 21,394 agents located on the southwest border sectors (see Table 4).⁹⁷ The FY 2012 statistics were five times the number of border agents in 1993. This is an 87 percent increase in growth, and it is one of the government's fastest-growing institutions.⁹⁸

94 Ibid., 21.

95 *Immigration System: Opportunities for Legal Immigration and Enforcement of Laws against Illegal Immigration before the Committee of the Judiciary, U.S. House of Representatives*, 113th Cong., 1, (2013) (testimony of Muzaffar Chishti), <http://judiciary.house.gov/hearings/113th/02052013/Chishti%2002052013.pdf>.

96 Erik Lee and Eric L. Olson, *The State of Security in the U.S.-Mexico Border Region* (Washington DC: Woodrow Wilson International Center for Scholars, 2013), 111.

97 The Southern Border Sectors include Yuma, San Diego, Rio Grande Valley (McAllen), Laredo, El Paso, El Centro, Del Rio, Big Bend (Marfa), and as of FY 2010, the Special Operations Group. U.S. Customs and Border Protection, "U.S. Border Patrol Agent Staffing by Fiscal Year," accessed November 16, 2013, www.cbp.gov/linkhandler/cgov/border_security/border_patrol/usbp_statistics/staffing_92_10.ctt/staffing_92_11.pdf.

98 Ibid.

United States Border Patrol Agents on the Southwest Border												
SECTOR	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Big Bend	194	253	230	239	220	246	336	421	682	672	667	693
Del Rio	893	972	950	933	907	935	1138	1427	1682	1650	1626	1655
El Centro	589	683	755	743	684	713	894	1080	1187	1181	1164	1168
El Paso	1086	1122	1188	1094	1330	1741	2251	2506	2712	2752	2738	2718
Laredo	921	969	1025	981	937	926	1206	1636	1863	1858	1871	1879
Rio Grande Valley	1451	1484	1524	1439	1380	1431	1822	2063	2422	2441	2504	2546
San Diego	2004	1807	1972	1651	1562	1671	2019	2328	2570	2594	2669	2623
Tucson	1686	1626	1838	2104	2324	2595	2806	3049	3318	3353	4239	4176
Yuma	323	323	358	331	547	774	825	932	972	987	969	954
Total	9147	9239	9840	9515	9891	11032	13297	15442	17408	17488	18447	18412
Data taken from USBP.												

Table 3. U.S. Border on the Southwest border⁹⁹

USBP Agents Staffing by Fiscal Year												
Fiscal	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Southwest Border Sectors	9147	9239	9840	9506	9891	11032	13297	15442	17408	17535	18506	18546
Nationwide Total	9821	10045	10717	10819	11264	12349	14924	17499	20119	20558	21444	21394
Data taken from USBP.												

Table 4. USBP staffing compared to national total¹⁰⁰

Increases in both USBP personnel and the USBP budget have grown rapidly since the creation of CBP under DHS. Between FY 2005 to FY 2012, CBP funding had increased from \$6.3 billion to \$11.7 billion.¹⁰¹ This was roughly a \$5.4 billion, or 85 percent, increase.¹⁰² As the CBP funding has skyrocketed, so too has the Border Patrol's. In this time, the Border Patrol funding has more than doubled from over \$1.5 billion to

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ U.S. Department of Homeland Security, *FY 2013 Budget in Brief* (Washington, DC: U.S. Department of Homeland Security, 2012), www.dhs.gov/xlibrary/assets/mgmt/dhs-budget-in-brief-fy2013.pdf, 6, 25; U.S. Department of Homeland Security, *Budget in Brief FY 2007*, www.dhs.gov/xlibrary/assets/mgmt/dhs-budget-in-brief-fy2007.pdf, 17.

¹⁰² Doris Meissner, Donald M. Kervin, Muzaffar Chishti, and Claire Bergeron, *Immigration Enforcement in the United States: The Rise of a Formidable Machinery* (Washington, DC: Migration Policy Institute, 2013) 18, www.migrationpolicy.org/pubs/enforcementpillars.pdf.

more than \$3.5 billion (see Figure 4). In 11 years, the USBP budget has tripled from \$1.1 billion to \$3.5 billion (see Table 5). These amounts include annual and supplemental funds requested by both Presidents Bush and Obama.

The information depicted in Table 5 is a reflection of the “Border Security Inspections and Trade Facilitation between POE’s,” for 2004–2012 when INS and USBP were combined to form CBP, and the budget statistics from 2001–2003 are as reported by the USBP.¹⁰³ The USBP data is only a portion of the CBP expenses and salaries within the DHS annual appropriations.¹⁰⁴ These numbers exclude: Border Security Inspections and Trade Facilitation at POE’s (\$2.9 billion in FY 2012), Headquarters Management and Administration (\$1.9 billion), and other CBP funded programs: Air and Marine Interdiction, Operation, Maintenance, and Procurement (\$504 million), Border Security Fencing, Infrastructure, and Technology (\$400 million), and Automation Modernization (\$334 million).¹⁰⁵ Also, it should be noted that Table 5 does not include U.S. Immigration and Customs Enforcement (ICE) funding that equaled roughly \$5.5 billion in expenditures and salaries in FY 2012 or any other federal agencies that are often involved with border security.¹⁰⁶ Basically, this data portrays only the USBP’s operating costs.

¹⁰³ Marc R. Rosenblum, *Border Security: Immigration Enforcement between Ports of Entry* (Washington, DC: Congressional Research Service, 2013), 13.

¹⁰⁴ *Ibid.*, 12

¹⁰⁵ William L. Painter, *DHS: FY2013 Appropriations* (Washington, DC: U.S. Department of Homeland Security, 2012), 33; U.S. Department of Homeland Security [DHS], *FY 2012 Budget in Brief* (Washington, DC: U.S. Department of Homeland Security, 2012), 70.

¹⁰⁶ DHS, *FY 2012 Budget in Brief*, 83.

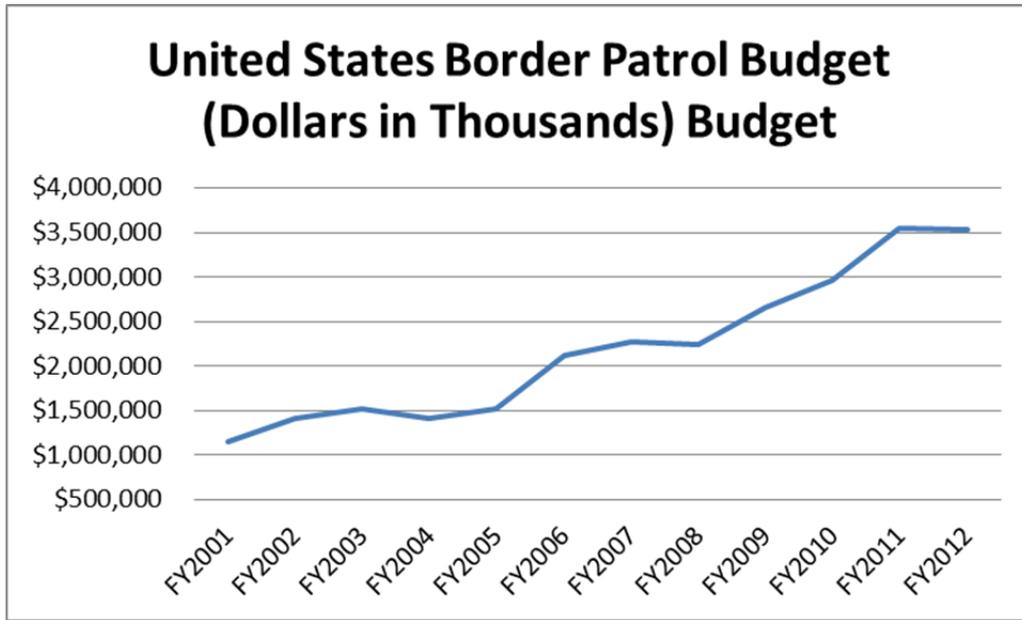


Figure 4. USBP budget growth

United States Border Patrol Budget (Dollars in Thousands)	
Fiscal Year	Budget
FY2001	\$1,146,463
FY2002	\$1,416,251
FY2003	\$1,515,080
FY2004	\$1,409,480
FY2005	\$1,524,960
FY2006	\$2,115,268
FY2007	\$2,277,510
FY2008	\$2,245,261
FY2009	\$2,656,055
FY2010	\$2,958,108
FY2011	\$3,549,295
FY2012	\$3,530,994
Data taken from USBP.	

Table 5. USBP budget from FY2001–FY2012¹⁰⁷

¹⁰⁷ U.S. Customs and Border Protection, “Enacted Border Patrol Program Budget by Fiscal Year,” accessed November 12, 2013, <http://www.cbp.gov/sites/default/files/documents/BP%20Budget%20History%201990-2013.pdf>.

3. Raising the Cost for Fencing and Apprehensions

a. Cost of the Fence

Enforcing America's defensive barrier has a tremendous price tag attached to it, and that price tag has changed over time. In 2006, the Congressional Budget Office (CBO) projected that the border fence would cost \$3 million a mile to build and 15 percent of the total cost to maintain it; however, the CBO did not specify what it used to estimate costs.¹⁰⁸ By September 30, 2007, almost 73 miles of fencing were completed at a cost of roughly \$198 million.¹⁰⁹ CBP completed two miles of vehicle fencing cost \$2.8 million, and one mile of secondary pedestrian fence for around \$3 million.¹¹⁰ The remaining 70 miles consisted of pedestrian type fencing cost \$194 million, which averaged from \$400,000 to \$4.8 million per mile.¹¹¹ By October 31, 2008, 215 miles of fencing had been finished costing almost \$625 million.¹¹² This includes \$214 million spent on completing 75 miles of pedestrian fence, \$334 million on secondary fencing, and \$78 million on vehicle fencing.¹¹³ From FY 2006 to FY 2009, almost \$3.6 billion was spent on building 299 miles of vehicle fence and 352 pedestrian type fences.¹¹⁴ At the end of FY 2010, DHS stated that, since FY 2006, approximately \$4.4 billion was invested in border fencing, lighting, and technology.¹¹⁵

¹⁰⁸ Mark Grabowicz and Sunita D'Monte, *Congressional Budget Office Cost Estimate: Comprehensive Immigration Reform Act of 2006* (Washington, DC: Congressional Budget Office, 2006), 14.

¹⁰⁹ Richard M. Stana, *Secure Border Initiative Fence Construction Costs* (Washington DC: U.S. Government Accountability Office, 2009), 3.

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*, 7.

¹¹² *Ibid.*, 8.

¹¹³ *Ibid.*

¹¹⁴ Global Security, "U.S.-Mexico Border Fence," accessed 10 December 2013, <http://www.globalsecurity.org/security/systems/mexico-wall.htm>.

¹¹⁵ Richard M. Stana, *DHS Progress and Challenges in Securing the U.S. Southwest and Northern Borders* (Washington DC: U.S. Government Accountability Office, 2011), 1.

b. Apprehensions and Cost per Agent

Another observation is that as more resources are integrated into the southern border (money, personnel, technology, etc.) coupled with the decreasing migration, it may result in more assets used in an attempt to tackle a smaller problem. Basically, as more and more is invested into the border (e.g., money, personnel), it is yielding fewer and fewer results, which creates un-proportional result that equates to diminish returns. With the decrease in apprehensions, it means that the ratio of apprehensions to border patrol agents is decreasing. In other words, with more law enforcement, there are fewer people being caught, and the associated cost will continue to increase. The price of sustaining border controls could become unrealistic to maintain, despite successful deterrence reflected by lower apprehension numbers.

This ratio is different for every section because personnel distribution is not even. According to a report by the Washington Office of Latin America, the average number of apprehensions by the Border Patrol was over 300 migrants a year in the 1990s.¹¹⁶ This number has been dramatically reduced to the lowest average of apprehensions in 2011 (at 18) and the second lowest in 2012 (at 19) (see Table 6). During this same years, El Paso averaged 4 and San Diego 16 (2011) and 11 (2012), and both of these were under the national average (see Table 7).¹¹⁷ In addition, for every unauthorized immigrant apprehended, the cost associated has increased (see Table 8).

¹¹⁶ Isacson and Meyer, *Beyond the Border Buildup*, 32.

¹¹⁷ Ibid.

As financing has amplified, the ratio of money to apprehensions has also changed. The cost in FY2012 was just fewer than 10 thousand dollars per arrest, and the price tag is 10 times more than in FY2001, which was almost one thousand dollars per person. Using the historical average inflation rate of three percent per year, an inflation-adjustment assessment can be made for FY2014.¹¹⁸ This approximation would be roughly \$10,500 per arrest. Applying Oregon State University's calculated inflation rate of 2.05 for 2014, the estimated cost would be \$10,100 per person.¹¹⁹ Regardless of which estimate is utilized, the exact number will be unknown until all data is collected for FY 2014. The cost should remain in the five digit figures as money and personal are still allocated to border security. Regardless, this is an ineffective and inefficient way of spending money. It would appear that the cost-per-apprehension is rising and creating a diminishing return. The definition of diminishing return is that if one factor of production (number of workers, for example) is increased while other factors (machines and workspace, for example) are held constant or decreased, the output per unit of the variable factor will eventually diminish. Or "the gain is not worth the pain."¹²⁰

¹¹⁸ City of Lincoln, "Calculating Inflation Factors for Cost Estimates," accessed February 15, 2014, <http://lincoln.ne.gov/city/pworks/engine/dconst/gpp/pdf/inflation.pdf>.

¹¹⁹ Robert Sahr, "Consumer Price Index Conversion Factors to Convert to 2012 Dollars," Oregon State University, accessed February 15, 2014, <http://oregonstate.edu/cla/polisci/sahr/sahr>.

¹²⁰ Dictionary.com, s.v., "Diminishing Returns," accessed: January 05, 2014, [http://dictionary.reference.com/browse/diminishing returns](http://dictionary.reference.com/browse/diminishing%20returns).

Apprehensions per Border Agent												
Fiscal Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Southwest Border Staff	9147	9239	9840	9506	9891	11032	13297	15442	17408	17535	18506	18546
Apprehensions	1235718	929809	905065	1139282	1171396	1071972	858638	705005	540865	447731	327577	356873
Average	135	101	92	120	118	97	65	46	31	26	18	19

Table 6. Southwest average apprehensions per border agent¹²¹

Average Apprehensions per United States Border Patrol Agents on the Southwest Border												
SECTOR	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Big Bend	62	45	45	44	48	31	16	13	9	8	6	6
Del Rio	117	69	53	58	76	46	20	15	10	9	10	13
El Centro	293	159	122	100	81	86	63	38	28	28	26	20
El Paso	104	84	75	95	92	70	34	12	6	4	4	4
Laredo	95	85	69	76	80	81	47	27	22	19	19	24
Rio Grande Valley	74	61	51	65	97	77	40	37	25	24	24	38
San Diego	55	56	57	84	81	85	76	70	46	26	16	11
Tucson	267	205	189	234	189	151	135	104	73	63	29	29
Yuma	243	132	158	296	253	153	46	9	7	7	6	7

Data taken from USBP and table created by author.

Table 7. Average number of apprehensions along the Southwestern border by sector¹²²

¹²¹ U.S. Customs and Border Protection, "Total Illegal Alien Apprehensions by Fiscal Year," accessed August 02, 2013, <http://www.cbp.gov/sites/default/files/documents/U.S.%20Border%20Patrol%20Fiscal%20Year%20Apprehension%20Statistics%20by%20sector%20and%20border%20area.pdf>; U.S. Border Patrol, "Border Patrol Agents Staffing By Fiscal Year," accessed November 16, 2013, <http://www.cbp.gov/sites/default/files/documents/U.S.%20Border%20Patrol%20Fiscal%20Year%20Staffing%20Statistics%201992-2013.pdf>.

¹²² U.S. Customs and Border Protection, "Total Illegal Alien Apprehensions by Fiscal Year;" U.S. Border Patrol, "Border Patrol Agents Staffing By Fiscal Year."

Cost per Apprehension			
Fiscal Year	Budget (in Thousands)	Apprehensions	Average Cost
FY2001	\$1,146,463	1235718	\$927.77
FY2002	\$1,416,251	929809	\$1,523.16
FY2003	\$1,515,080	905065	\$1,674.00
FY2004	\$1,409,480	1139282	\$1,237.17
FY2005	\$1,524,960	1171396	\$1,301.83
FY2006	\$2,115,268	1071972	\$1,973.25
FY2007	\$2,277,510	858638	\$2,652.47
FY2008	\$2,245,261	705005	\$3,184.74
FY2009	\$2,656,055	540865	\$4,910.75
FY2010	\$2,958,108	447731	\$6,606.89
FY2011	\$3,549,295	327577	\$10,834.99
FY2012	\$3,530,994	356873	\$9,894.26
Data taken from USBP and table created by author.			

Table 8. Average cost of apprehensions per unauthorized immigrant¹²³

D. CONCLUSION

The 1,954-mile stretch of the U.S.-Mexico border area is a massive geographic region, and the majority of it is mountainous and dangerous isolated desert type terrain. It represents a gigantic challenge to both countries to manage the space. The United States has responded to this complex security puzzle with defensive barriers and increased manning and financial support. With the 69 percent decrease in illegal entries from FY2006 to FY2011, it is uncertain whether the defensive barriers are paying off.¹²⁴

With the additional staffing and fence length, it can be suggested that the fencing did contribute in deterring illegal migration and pushing the flow eastward, however, to what extent is unknown.¹²⁵ It can be argued that it is the overlap of the human factor and

¹²³ U.S. Customs and Border Protection, "Enacted Border Patrol Program Budget by Fiscal Year," accessed November 12, 2013, <http://www.cbp.gov/sites/default/files/documents/BP%20Budget%20History%201990-2013.pdf>; U.S. Border Patrol, "Total Illegal Alien Apprehensions by Fiscal Year."

¹²⁴ Tracy Conner, "Price Tag for 700 Miles of Border Fencing: High and Hard to Pin Down," *NBC News*, January 15, 2014, <http://usnews.nbc.news.com>.

¹²⁵ Chad Haddal, Yule Kim, and Michael Garcia, *Border Security: Barriers along the U.S. International Border* (Washington DC: Congressional Research Service, 2009), 11, 13.

the defensive barriers have tightened the border. The constructed fencing around urban areas has assisted in diverting illegal migrants to more deserted areas, where law enforcement agents have an advantage in catching the potential border crossers. Though migration patterns are anything but predictable in general, it would appear that the United States has already reached and arguably surpassed the point of diminishing returns in regard to border security. If the current trends continue on their present path, any more increases in the border security could result in even smaller returns of investment. Current statistics demonstrate on the southern border one border agent averages less than 20 apprehensions at a cost of roughly \$10,000 each; that is a \$200,000 average annual price tag for one border agent effort. On the surface, it does appear that the security measures are working, but the costs associated with this security blanket are high. History shows that as long as the government stays on its current path, the price will only continue to increase. This concern raises the issue that the U.S. needs to look for better cost-effective alternative solutions and include possible options that are focused away from the U.S.-Mexican border.

III. DEFENSIVE BARRIERS AND UNINTENDED CONSEQUENCES

A. INTRODUCTION

On May 10, 2011, in a speech about immigration in El Paso, President Barack Obama stated, “the (border) fence is now basically complete.”¹²⁶ The president is referring to the fact that 649 miles of the 652 miles mandated by Congress are completed.¹²⁷ The CBP claims that it operationally controls 874 miles, and of this, 129 miles is under full control while the rest are considered “managed.”¹²⁸ In reality, the 1,969 mile long border only has 651 miles fenced in.¹²⁹ The majority of completed fencing consists of vehicle barriers, barbed-wire, and inadequate provisions to effectively prevent or detour anyone determined to cross illegally. Thus, the border is still porous and open in remote environments, which are equipped with less sophisticated defensive barriers.¹³⁰ One would think a meticulously fabricated fence should have deterrence properties to adequately effect both illegal smuggling and unauthorized immigration activity. However, people are creative and adaptive. A determined person will find holes in any system including cutting and climbing over, going around, or even under a barricade. The barrier is a stationary object and cannot physically respond or do anything other than just be if a determined individual wants to infiltrate the United States. Even if

¹²⁶ Jake Tapper and Jason Ryan, “Fact Check Desk: President Obama’s Speech on Immigration Reform,” *ABC News*, May 10, 2011, <http://abcnews.go.com/blogs/politics/2011/05/from-the-fact-check-desk-president-obamas-speech-on-immigration-reform/>.

¹²⁷ Richard Stana, *Border Security: Preliminary Observations on Border Control Measures for the Southwest Border* (Washington, DC: U.S. Government Accountability Office, 2011).

¹²⁸ Paul Bedard, “Border Patrol Controls Just 44 Percent of South,” *US News*, February 16, 2011, <http://www.usnews.com/news/washington-whispers/articles/2011/02/16/border-patrol-controls-just-44-percent-of-south>.

¹²⁹ Byran Roberts, Edward Alden, and John Whitley, “Managing Illegal Immigration to the United States: How Effective is Enforcement?” Council on Foreign Relations, May 2013 <http://www.cfr.org/immigration/managing-illegal-immigration-united-states/p30658>, 18.

¹³⁰ Robert L. Maril, *The Fence: National Security, Public Safety, and Illegal Immigration along the U.S.-Mexican Border* (Lubbock, TX: Texas Tech University Press, 2011), 174, 177.

the fence is equipped with sensors and cameras, which have limitations, it is still unable to prevent a penetration, only alert authorities and possibly slow the person down.¹³¹

Despite the hype about the effectiveness of border defenses, there are still negative side-effects associated with border security. Border fences have been labeled the cause of migrant deaths, injuries, and increased human rights violations. According to an article in *Business Week*:

“Border fences don’t keep people out—they just slow them down,” muses Jesús Rodríguez, a 15-year Border Patrol veteran, after the Jan. 23 chase near Sasabe, Ariz., one of the most popular crossing points for migrants trying to get to prized jobs as cooks, nannies, and construction workers. “People who want to get into the U.S. really badly won’t let something like a fence get in the way.”¹³²

No matter how many miles of fence are constructed, how many agents patrol the border, or despite how up-to-date technology is, motivational factors such as willpower, perseverance, or money continue to influence illegal border crossings. This chapter will analyze the unintended consequences of fortifying the U.S.-Mexico border by examining how immigrants and drug smugglers adapt and innovate to overcome the U.S. border security and the negative outcomes of redirecting flow patterns.

B. IMMIGRANTS

In a survey conducted by Pew Research Center, the current estimate of unauthorized migrants residing within the United States is around 11.7 million.¹³³ Even though 25 to 40 percent of these are people who entered legally on tourist or student visas, they stayed after the visa expired, which makes them both undocumented migrants

¹³¹ Ibid., 170.

¹³² Geri Smith and Keith Epstein, “On the Border: The ‘Virtual Fence’ Isn’t Working,” *Business Week*, February 6, 2008, <http://www.businessweek.com/stories/2008-02-06/on-the-border-the-virtual-fence-isnt-working>.

¹³³ Julia Preston, “Number of Illegal Immigrants in U.S. May Be on Rise Again, Estimates Say,” *New York Times*, September 23, 2013, <http://www.nytimes.com/2013/09/24/us/immigrant-population-shows-signs-of-growth-estimates-show.html>.

and unauthorized residents.¹³⁴ Even so, the security emphasis is still placed on securing the border.¹³⁵ As the federal government increases border security, the result has been tighter control of some areas along the border. Tighter security has potentially exposed unauthorized migrants more harm than not.

For example, unauthorized migrants are more likely to contact smugglers or coyotes and engage in documentation forgery than not.¹³⁶ It is estimated that 75 percent of illegal aliens use falsified documents to gain employment.¹³⁷ Most job-related identity theft occurs in states with high illegal immigration.¹³⁸ In addition, migrants have an increased chance of becoming crime victims than non-migrants because they are intentionally avoiding law officials and often have large quantities of money on them.¹³⁹ Also, more would-be border crossers are now pushed into more remote and deserted areas along the border. Though the likelihood of detection is reduced, so is the possibility of surviving the journey for migrants because they are exposed to hyperthermia, hypothermia, dehydration, and possible drowning.¹⁴⁰ It can be argued that the U.S. government's border security efforts have adversely affected unauthorized migrants mortality rates and increased the probability of resorting to criminal activity.¹⁴¹

¹³⁴ *Effects and Effectiveness of U.S. Border Security Measures-Testimony for Committee on Homeland Security and Governmental Affairs Hearing on 'Border Security: Measuring Progress and Addressing the Challenges*, 113th Cong. (2013) (testimony of David Shirk) <http://www.hsdl.org/?view&did=733428>, 21

¹³⁵ Ibid.

¹³⁶ Marc R. Rosenblum and William A. Kandel, *Interior Immigration Enforcement: Programs Targeting Criminal Aliens* (Washington, DC: Congressional Research Service, 2012).

¹³⁷ Ronald Mortenson, "Illegal, but Not Undocumented," *Backgrounder*, June 2009, <http://www.cis.org/sites/cis.org/files/articles/2009/back809.pdf>, 1.

¹³⁸ Ibid., 1.

¹³⁹ Debra Hoffmaster, Gerald Murphy, and Shannon McFadden, *Police and Immigration: How Chiefs are Leading Their Communities through the Challenges* (Washington, DC: Police Executive Research Forum, 2010).

¹⁴⁰ American Public Health Association, "Border Crossing Deaths: A Public Health Crisis along the U.S.-Mexico Border," November 10, 2009, <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1385>.

¹⁴¹ Karl Eschbach, Jacqueline Hagan, and Nestor Rodriguez, "Death at the Border," *International Migration Review* 33, no. 2 (1999): 430–454.

1. Death Rate

On paper, as reported by the USBP statistics, it appears that the number of people trying to enter illegally into the United States has declined; yet the reported migrant deaths have not decreased in relation. From FY 2007 to FY 2011, illegal crossing attempts have dropped by 62 percent. As illegal traffic has either slowed, or diverted, the associated death rates has stayed consistent; however, the proportion of apprehensions to fatalities has increased.¹⁴² In FY 2012, Border Patrol reported finding 463 individuals dead, as opposed to 320 in FY 2002 (see Table 9).¹⁴³ There has been a significant increase of death to live interceptions from 0.029 percent in FY2002 to 0.13 percent in FY 2012 (see Figure 5). Though the numbers appear small, it is an indication that when attempted, border-crossing is dangerous. It is also problematic to see an increase in number of deaths; especially as apprehensions are declining and immigration is being reported as net zero or less.¹⁴⁴ These increases in fatalities also suggest that the border fence is not as effective as it is intended to be and that there is an inhumane price associated with border security.

¹⁴² Carolina Moreno, "Border Crossing Deaths More Common as Illegal Immigration Declines," *Huffington Post*, August 17, 2012, http://www.huffingtonpost.com/2012/08/17/border-crossing-deaths-illegal-immigration_n_1783912.html.

¹⁴³ U.S. Customs and Border Protection, "Southwest Border Sectors: Southwest Border Deaths by Fiscal Year," accessed November 16, 2013, <http://www.cbp.gov/sites/default/files/documents/U.S.%20Border%20Patrol%20Fiscal%20Year%20Statistics%20SWB%20Sector%20Deaths%20FY1998%20-%20FY2013.pdf>.

¹⁴⁴ Jeffery Passel, D'Vern Cohn, and Ana Gonzalez-Barrera, "Net Migration from Mexico Falls to Zero and Perhaps Less," Pew Hispanic Center, April 23, 2012, <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>, 6.

Fiscal Year	Apprehensions	Deaths
2001	1235718	340
2002	929809	320
2003	905065	338
2004	1139282	328
2005	1171396	492
2006	1071972	454
2007	858638	398
2008	705005	385
2009	540865	420
2010	447731	365
2011	327577	375
2012	356873	463

Data taken from USBP and table created by author.

Table 9. Apprehensions and border deaths by fiscal year¹⁴⁵

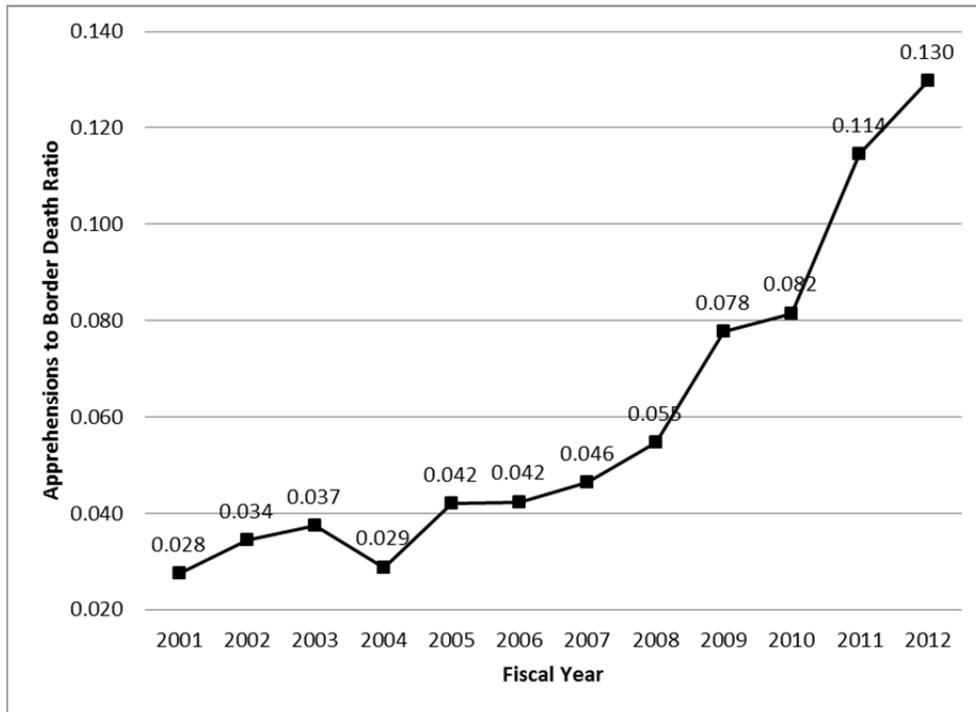


Figure 5. Apprehensions to death percentage

¹⁴⁵ U.S. Customs and Border Protection, "Southwest Border Sectors;" U.S. Customs and Border Protection, "Total Illegal Alien Apprehensions by Fiscal Year."

A report by the National Foundation for American Policy (NFAP) stated that the death rate for illegal immigrants attempting to cross the border in 2012 has risen 27 percent from the previous year.¹⁴⁶ This same NFAP report states if an unauthorized migrant tries to cross the border illegally today, then they are eight times more likely to die than 10 years ago.¹⁴⁷ In 1998, the U.S. Border Patrol began documenting immigrant deaths. The 463 deaths in 2012 is the second largest documented number since 2005, when there were 492 immigrant deaths.¹⁴⁸ From 1998 to 2012, the U.S. Border Patrol has found 5,595 dead bodies.¹⁴⁹ The number of deaths is estimated to be significantly higher due to the inability to account for the decedents that are never found or were reported missing every fiscal year.¹⁵⁰

The Border Patrol has been criticized for this by human rights activists for a few reasons. Activists claim that BP disregards victims in car accidents, bodies found by other law enforcement agencies and officers, and skeletal remnants.¹⁵¹ Some criticize the discrepancies in the method of body counting, where some sectors include guides and smugglers who died and others do not, despite that the “Border Patrol policy is to include all deaths in the 43 counties within 100 miles of the U.S.-Mexico border.”¹⁵² U.S. authorities have countered critics by stating that mortalities on the Mexican side and

146 Stuart Anderson, “How Many More Deaths? The Moral Case for a Temporary Workers Program,” March 2013, <http://www.nfap.com/pdf/NFAP%20Policy%20Brief%20Moral%20Case%20For%20a%20Temporary%20Worker%20Program%20March%202013.pdf>.

147 Ibid.

148 The reported 477 that died in 2012 by the author claims it is a statistic from the USBP. USBP reported in 2012 that 463 deaths were reported. Upon further research, I was unable to find where the additional 14 people came from so I am using the official data reported by USBP. The institute never returned any inquires I made about the difference. U.S. Customs and Border Protection, “Southwest Border Sectors: Southwest Border Deaths by Fiscal Year.”

149 Anderson, “How Many More Deaths?”

150 American Public Health Association, “Border Crossing Deaths.”

151 Chad C. Haddel, *Border Security: The Role of the U.S. Border Patrol* (Washington, DC: Congressional Research Service, 2010), 25.

152 Ibid., 27.

deaths external to the 100 mile zone are outside their operational scope. Also, when local agencies do find bodies they rarely inform the Border Patrol.¹⁵³

University of Arizona's Binational Migration Institute (BMI) reported that fatalities in the Tucson sector have significantly increased since 1990; this corresponds to the border fortification beginnings in California and Texas.¹⁵⁴ Since 2004, in Tucson, the Pima County Office of the Medical Examiner assesses an average of 150 remains a year just from border crossing attempts.¹⁵⁵ BMI's report "suggests migrants are crossing for longer periods of time through more remote areas to avoid detection by U.S. authorities, thus increasing the probability of death" as an explanation of the increase in deaths and lower apprehension statistics.¹⁵⁶ In the American Public Health Association (APHA) policy statement, the border fortification accounts for unnecessary migrant deaths. It states, "The Border Patrol's policy has resulted in the purposeful displacement and diversion of migrants into more treacherous and dangerous zones to cross, such as deserts, rivers, canals, and rugged terrain."¹⁵⁷ This is a *consequence*. It is the price that has and is currently being paid to preserve and maintain the illusion of security. The human rights organization, Humane Border, has recorded where the majority of deaths have occurred along with locations of its water stations on its "Death Map" (see Figure 6). Roughly half of the known deaths occurred in the Tohono O'odham Nation Indian

¹⁵³ Andrea Almond, "How Best to Count Border Deaths?" Associated Press, November 7, 2004, <http://www.chron.com/news/nation-world/article/How-best-to-count-border-deaths-1956784>.

¹⁵⁴ Daniel E. Martinez et al., *A Continued Humanitarian Crisis at the Border: Undocumented border Crosser Deaths Recorded by the Pima County Office of the Medical Examiner, 1990–2012* (Tucson, AZ: The Binational Migration Institute University of Arizona, 2013), 12.

¹⁵⁵ *Ibid.*, 27.

¹⁵⁶ *Ibid.*

¹⁵⁷ American Public Health Association, "Border Crossing Deaths."

Reservation, which is almost 6,000 miles of mountains and desert.¹⁵⁸ In addition, the majority of deaths have occurred two days or 12 miles into the reservation.¹⁵⁹ These deaths are an indicator of failure in the defensive barrier's purpose: deterrence. Migrants are still making it across the border before they die. Also, the location and frequency of where bodies are found designate popular smuggling routes. The increase of migrant deaths raises an ethical dilemma of the value of human life versus protecting the nation's inhabitants. Currently, it appears to be a cost that the country is willing to pay.

¹⁵⁸ Edward Helmore, "'Death Map' of Deserts Aim to Save Lives of Desperate Mexican Migrants," *The Guardian*, June 1, 2013, <http://www.theguardian.com/world/2013/jun/01/map-us-mexico-migrant-deaths-border>.

¹⁵⁹ Ibid.

1999 - 2012 RECORDED MIGRANT DEATHS AND HUMANE BORDERS WATER STATIONS

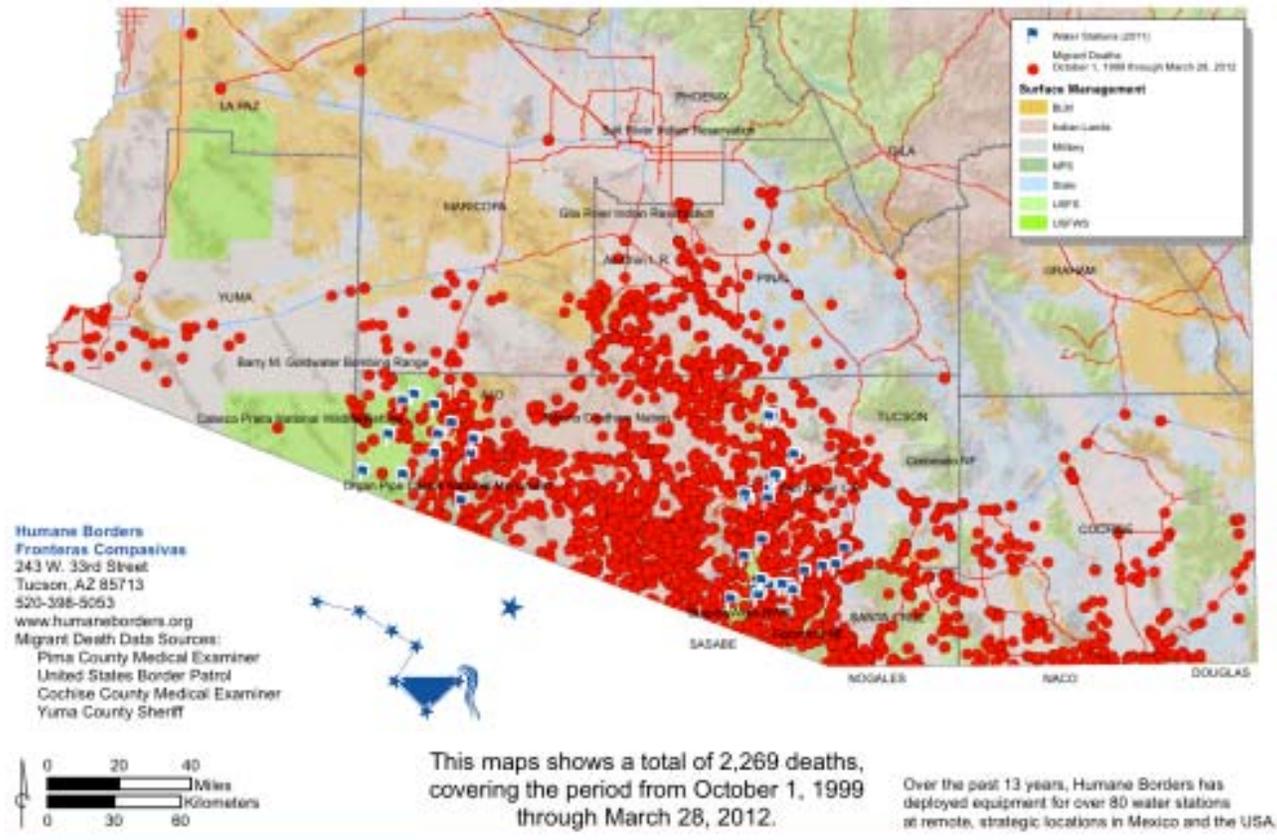


Figure 6. Recorded deaths¹⁶⁰

¹⁶⁰ Humane Borders, “Migrant Deaths, Rescue Beacons, Water Stations 2000–2012,” accessed January 18, 2014, <http://www.humaneborders.org/warning-posters>.

2. Injuries

Besides death, injuries are another of the hidden cost associated with constructing defensive barriers. Every year thousands of unauthorized migrants are treated for injuries in U.S. health centers. The U.S. taxpayers pay over \$4.3 billion to treat unauthorized immigrants, predominantly in free health clinics and emergency rooms.¹⁶¹ Dr. Lynn Gries, a trauma surgeon at the University of Arizona Medical Center in Tucson (UAMC), stated that since 2007, UAMC averages 30 to 50 fence related injured people a year.¹⁶² UAMC is a Level 1 trauma center, where the severely injured are brought. In 2010, a high for fence related injuries, UAMC had 60 people who suffered from spinal injuries, bodies “crumpled like a beer can,” and shattered bones transported in.¹⁶³ UAMC’s Dr. John Ruth, head of orthopedic surgery argues “The wall is a constant source of injuries.”¹⁶⁴ The lucky ones are the patients who suffer from bone compression compared to the ones whose bones shatter, thus sending splinters all throughout the body; the severity of the splintering depends on the impact. ¹⁶⁵ Others end up crippled, paralyzed, or have hands, legs, or feet amputated. These injuries are the result of being pushed by smugglers or falling because the ladder or rope was too short for the area of the wall they were climbing. Once stable, they are deported and are part of the average \$2.5 billion expenditure the U.S. government spends on detention and removal of illegal aliens.¹⁶⁶ This is a small example of just one area of the border, there are many more that are injured everyday while trying to crossover.

¹⁶¹ Neal Asbury, “The Cost of Permanent Patients,” *Moneynews*, May 9, 2013, <http://www.moneynews.com/NealAsbury/Immigration-healthcare-illegal-emergency/2013/05/09/id/503579/>.

¹⁶² Linda Valdez, “The Hidden Costs of Tall Border Fences,” May 25, 2013, <http://www.azcentral.com/opinions/articles/20130523hidden-costs-tall-border-fences.html>.

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.,

¹⁶⁶ Jack Martin, “The Fiscal Burden of Illegal Immigration on United States Taxpayers,” Federation for American Immigration Reform, February 2011, http://www.fairus.org/DocServer/USCostStudy_2010.pdf.

3. Immigration Circularity Broken—Longer Stays

U.S.-Mexico border fortifications, fencing and increased manning, have caused both the risk and cost of border crossing to increase. This effect has generated an immigration prison, meaning that unauthorized immigrants are quasi-locked within the U.S. because of the risks and costs associated with trying to return if they leave for a while. Instead of returning home, immigrants remain within the U.S. because this choice is a lower associated risk. This has ended circularity of the migration cycle and created a more permanent immigration base in America.¹⁶⁷ Douglas Massey posits that the U.S. government destroyed a “well-functioning, predictable system into a noisy, clunking, dysfunctional machine that generated a host of unanticipated outcomes.”¹⁶⁸ One such outcome of increased migrants is that the U.S. government spent roughly \$3.46 trillion in services and benefits for illegal immigrants in FY 2010 *alone*, according to a National Research Council report.¹⁶⁹ In addition, state and local governments paid \$1.94 trillion in the same year.¹⁷⁰ This equates to a total cost of \$5.4 trillion dollars for FY2010 to the American taxpayer; who picks up the bill for the growing number of permanent unauthorized migrants.

C. EXPLOITATION OF MIGRANTS THROUGH HUMAN SMUGGLING, VIOLATION, ABUSE, AND EXTORTION

Increasing border security has created a wicked problem in relation to drug trafficking organization (DTO) operations, specifically smuggling both human and narcotics into the U.S. Tightening of border controls has made it harder and increased the risk associated for smuggling, thereby increasing both cost and potential profit. As risk increases, so does the profit; the cost of doing business is transferred to the consumer in the form of raised price. Bigger profits entices these organizations, which have vast

¹⁶⁷ Randall Hansen and Demetrios G. Papademetriou, “Securing Borders the Intended, Unintended, and Perverse Consequences,” January 2014, <http://www.migrationpolicy.org/research/securing-borders-perverse-consequences>, 9.

¹⁶⁸ Massey, Durand, and Malone, *Beyond Smoke and Mirrors*, 2.

¹⁶⁹ Robert Rector and Jason Richwine, “Fiscal Cost of Unlawful Immigrants and Amnesty to the U.S. Taxpayer,” May 6, 2013, The Heritage Foundation, <http://www.heritage.org/research/reports/2013/05/the-fiscal-cost-of-unlawful-immigrants-and-amnesty-to-the-us-taxpayer>, 5.

¹⁷⁰ *Ibid.*

resources at their disposal, to control access to the border. The involvement of resource rich criminal organizations then makes it harder to prevent crime; consequently, the cycle continues to drive itself.

1. Smuggling

Human smugglers commonly referred to as “coyotes” or “polleros” are often employed by unauthorized migrants (pollos) to enter into the United States.¹⁷¹ The use of coyotes has been on the upswing. From 2005–2007, the average migrant of reliance on these smugglers reached into the 90 percentile and continues to increase as U.S. border security tightens.¹⁷² Majority of the time immigrants have no choice but to hire a coyote; DTOs will kill or beat migrants if they attempt to pass through their “area” without paying.¹⁷³ As the risk of crossing increases, so does the cost that is passed down to the coyote’s customers.

Studies conducted by Princeton University Mexican Migration Project (MMP) and the University of California, San Diego (UCSD) Mexican Migration Field Research Program (MMFRP) indicate that prices began to increase around 1994 and have continued to increase from 1994 to 2002, at roughly 11 percent a year.¹⁷⁴ In 2002, the price was around \$2000. From 2002 and beyond, the two studies differ in the average increase each year, Princeton’s mean was 3.7 percent compared to UCSD’s 1.8 percent increase.¹⁷⁵ The current estimated average cost is \$3,000 to cross the border.¹⁷⁶

The smuggling methods used by coyotes are not always the safest either. On May 2003, in Texas, 19 dead unauthorized migrants were discovered in an airless truck

¹⁷¹ Rosenblum, *Border Security: Immigration Enforcement between Ports of Entry*, 25.

¹⁷² *Ibid.*, 26.

¹⁷³ Damien Cave, “Long Border, Endless Struggle,” *New York Times*, March 2, 2013, http://www.nytimes.com/2013/03/03/world/americas/border-security-hard-to-achieve-and-harder-to-measure.html?_r=0.

¹⁷⁴ Rosenblum, *Border Security: Immigration Enforcement between Ports of Entry*, 26.

¹⁷⁵ *Ibid.*

¹⁷⁶ Jason Beaubien, “Brutal Cartels Make Crossing U.S. Border Even Riskier,” National Public Radio, July 8, 2011, <http://www.npr.org/2011/07/08/137647286/brutal-cartels-make-crossing-u-s-border-even-riskier>.

trailer.¹⁷⁷ In Iowa, migrants have also been found dead in a railway car.¹⁷⁸ According to a National Public Radio (NPR) story, migrants are frequently squeezed into vehicles to the point of near suffocation. Migrants are lucky when smugglers even remember to bring water, much less food while in transit. Carlos, a captured migrant, stated he went five days without food and a day and a half without water before being apprehended by the Border Patrol.¹⁷⁹ Had the 30 person group not been caught, the smugglers would have made over \$90,000 in one week. These are just a few examples of the horrors suffered by migrants.

2. Violating Migrants

For years, transiting immigrants have been at the mercy of others, but the conditions seem to be getting worse. A reason for this is that criminal organizations are intensifying their control and territory in areas where migrants travel. Also, these criminal organizations have expanded their interests outside of drug trafficking and into other areas such as extortion, kidnapping, and human smuggling.¹⁸⁰ Tightened border security has driven up the cost and demand for these organizations, which thrive on making extortion a sophisticated and profitable criminal business.¹⁸¹

a. Kidnapping

Migrants are often kidnapped and detained in “drop houses” until families can pay their ransoms. Due to their vulnerability, these people are easily exploited. Even deported migrants in detention centers are exposed because their clothing, tattoos, and lack of any documentation marks them as targets.¹⁸² Three people were deported to Tijuana, were later they are kidnapped, beaten, and threatened with death, so their families in the U.S.

¹⁷⁷ Juan A. Lozano, “Migrant Toll Hits 19 in Texas Case; 2nd Truck Found,” The Associated Press, May 17, 2003.

¹⁷⁸ Amy Lorentzen, “Eleven Found in Rail Car among Thousands of Trespassers Causing Security Concerns,” The Associated Press, October 16, 2002.

¹⁷⁹ Beaubien, “Brutal Cartels Make Crossing U.S. Border Even Riskier.”

¹⁸⁰ Isacson and Meyer, *Beyond the Border Buildup*, 35.

¹⁸¹ *Ibid.*, 41.

¹⁸² *Ibid.*, 36.

would pay a ransom of \$5000.¹⁸³ Often hostages are tortured for phone numbers of their families in the United States. These victims are frequently raped, starved, forced to watch others by executed, and sleep deprived. According to a report in 2011 by the Commission on Human Rights, criminal organizations ransom demands range between \$1,500 and \$5,000, which earns them roughly one million within six months—just from kidnappings.¹⁸⁴ This practice is recurring enough that U.S. law enforcement officials have taken notice, even though the abductions occurs less frequently in the U.S. than in Mexico.¹⁸⁵ According to a report by Isacson and Meyer,

This was confirmed by officials from the Pima County Sherriff's department interviewed in Tucson. Some kidnapped migrants, they noted, are taken from their smugglers by a rival group and held for ransom, a practice some law enforcement agencies term "coyote rips;" other cases involve the same smuggler that transported the migrants across the border refusing to release them from the "drop houses" until their families pay an additional fee, sometimes thousands of dollars more than the original price.¹⁸⁶

In 2009, a house with 30 hostages was found. These migrants were beaten and threatened at gun point and being held for \$5,000; this was a \$1000 more than what they had originally agreed to pay.¹⁸⁷ Phoenix is becoming America's kidnapping capital.¹⁸⁸ Every year law enforcement authorities discover more "drop houses," showing a significant shift in the human smuggling enterprise as these profitable opportunities attract criminal organizations. The tougher border enforcement in Texas and California have created a funneling effect through Arizona's desert with is controlled by these organizations.¹⁸⁹ In a recent study by the University of Arizona, covering from Tijuana to

183 Admin in Americas, "Illegal Immigrants Held Hostage Rescued," *KR Magazine*, November 28, 2012, <http://www.krmagazine.com/2012/11/28/illegal-immigrants-held-hostage-rescued/>.

184 Sibylla Brodzinsky, "Migrant Kidnappings by Criminal Organizations 'Systematic' in Mexico," May 11, 2012, In Sight Crime, <http://www.insightcrime.org/news-analysis/migrant-kidnappings-by-criminal-organizations-systematic-in-mexico>.

185 Isacson and Meyer, *Beyond the Border Buildup*, 41.

186 Ibid., 42.

187 Joel Millan, "Immigrants Become Hostages as Gangs Prey on Mexicans," *Wall Street Journal*, June 10, 2009, <http://online.wsj.com/news/articles/SB124441724453292457>.

188 Ibid.

189 Ibid.

Nuevo Laredo, the authors interviewed 1,113 immigrants in migrant shelters and found seven percent (83) were kidnapped. Of these 83 people, 44 abducted by their guide or coyote, 29 kidnapped within the U.S., 24 of those were kidnapped by gangs, five of them were kidnapped specifically by Los Zetas, and two by Mexican authorities; two of the 83 observed homicides, and six observed rape.¹⁹⁰ 17 percent of the 83 were involved in cyber kidnappings, a kidnapper calls with fabricated information stating a family member was kidnapped in order to extract money.¹⁹¹

b. Abandoned

Betzi Younglas, a Humane Borders volunteer, explains:

people are getting left behind a lot more than they used to. When they see the patrol, they scatter. They'll be lucky to find your coyote again because the first thing the coyotes do is take away anything that might tell you where you are. They want you to be dependent.¹⁹²

Frequently, migrants are told by their coyotes it is only a two to three day walk to Phoenix when realistically it is over a week. Migrants rarely show themselves unless they need assistance; even if migrants are able to call for help, they have unclear knowledge of their location to direct would-be assistants.¹⁹³ Of the University of Arizona study, over a quarter (27 percent) were abandoned by their coyotes while attempting the cross.¹⁹⁴

3. Abuse

a. Border Patrol

The U.S. Border Patrol has come under scrutiny for human rights violations against immigrants by different activists. In 2011, a published report by Arizona's No

¹⁹⁰ Jeremy Slack, Daniel Martinez, Scott Whiteford, and Emily Peiffer, *In the Shadow of the Wall: Family Separation, Immigration, Enforcement and Security* (Tucson, AZ: Center for Latin American Studies University of Arizona, 2013), 20.

¹⁹¹ Ibid.

¹⁹² Edward Helmore, "'Death Map' of Deserts Aim to Save Lives of Desperate Mexican Migrants," *The Guardian*, June 1, 2013, <http://www.theguardian.com/world/2013/jun/01/map-us-mexico-migrant-deaths-border>.

¹⁹³ Ibid.

¹⁹⁴ Slack et al., *In the Shadow of the Wall*, 19.

More Deaths organization, *A Culture of Cruelty*, is based on more than 4,000 interviews of 12,895 people who had been detained by Border Patrol in the border towns of Agua Prieta, Naco, and Nogales.¹⁹⁵ The group detected 12 areas in the Border Patrol's treatment of unauthorized immigrants that needed improvement:

[D]enial of or insufficient water; denial of or insufficient food; failure to provide medical treatment or access to medical professionals; inhumane processing center conditions; verbal abuse; physical abuse; psychological abuse; dangerous transportation practices; separation of family members; dangerous repatriation practices; failure to return personal belongings; and due process concerns.¹⁹⁶

In this group interviewed, No More Deaths reported that 10 percent suffered from physical abuse, including hitting, kicking, chokeholds, and sexual assault by the Border Patrol. Verbal abuse, including racial slurs, was reported by 13 percent of the 12,895, and the majority of people needed medical treatment.¹⁹⁷ Another organization reported in 2010, "7.1 percent of migrants deported by U.S. authorities suffered physical abuse when pursued or detained; 13.7 percent experienced verbal abuse, and 8.3 percent are stripped of their personal possessions."¹⁹⁸ University of Arizona study stated that 11 percent of the 12,895 group reported physical abuse, 23 percent experienced verbal abuse, 45 percent stated while detained they did not get sufficient food, 39 percent had possessions confiscated and never returned.¹⁹⁹ At least 20 people have died allegedly from Border Patrol using excessive force since January 2010. Of those 20 dead migrants, seven were under the age of 21, six were killed while on the Mexican side of the border, eight of the

195 No More Deaths, "A Culture of Cruelty: Abuse and Impunity in Short-term U.S. Border Patrol Custody," September 11, 2011, <http://www.cultureofcruelty.org/wp-content/uploads/2011/09/CultureofCrueltyFinal.pdf>. These areas are in the Tucson sector; refer to Figure 2 in previous chapter.

196 Isacson and Meyer, *Beyond the Border Buildup*, 42.

197 No More Deaths, "A Culture of Cruelty."

198 Isacson and Meyer, *Beyond the Border Buildup*, 42.

199 Slack et al., *In the Shadow of the Wall*, 26.

20 were shot and killed after throwing rocks at Border Patrol officers, and five were American citizens.²⁰⁰

In another incident, agents using a stun gun and a baton struck Anastasio Hernandez-Rojas as he resisted arrest; he died from his wounds in May 2010. A group of Mexican teenagers throwing rocks at an U.S. Border Patrol agent resulted in one being shot and killed in June 2010. A court overturned a lawsuit and stated that the shooting occurred in Mexico, and the 15-year-old boy was not covered under excessive force laws in 2012.²⁰¹ An incident of excessive force occurred this year, as a video recording of a Border Patrol trying to arrest an unauthorized migrant was recorded January 15, 2014.²⁰² This video only shows a portion of what happened, but it does portray the Border Patrol in a negative light. Even though this thesis has only highlighted a few incidents, there appears to be a problem that needs to be addressed.

4. Forced Labor

With tightened security, many smugglers have expanded into human trafficking business to make up the expenses. Immigrants are being used as forced labor, slaves, or even sold into prostitution by criminal organizations.²⁰³ In February 2013, the Mexican army found a tunnel that had 17 immigrants who supposedly had been kidnapped and forced to excavate passageways for three months.²⁰⁴ These immigrants stated that the smugglers promised to help them cross the border, but later smugglers threatened to kill them and their family members if they did not dig. After being abandoned by their

200 James Duff Lyall, "An Agency out of Control: Widespread Border Patrol Abuses in Southwest Border Communities," September 13, 2013, American Civil Liberties Union of Arizona, <http://acluaz.org/sites/default/files/documents/ACLU%20Testimony%20-%20Redefining%20Border%20Security%20-%20James%20Llyall%20-%20Sept%202013,%202013.pdf>.

201 Adriana M. Chavez, "Federal Judge Dismisses Lawsuit against Agent Who Shot, Killed Boy in 2010," *The El Paso Times*, February 18, 2012, http://www.elpasotimes.com/testnewsletter-daily/ci_19987825.

202 Allison Ash, "Man Who Shot Video of Border Patrol arrest of Undocumented Worker Arrested," *ABC 10 News*, January 15, 2014, <http://www.10news.com/news/man-who-shot-video-of-border-patrol-arrest-of-undocumented-worker-arrested-01152014>.

203 Ray Walser, Jena McNeill, and Jessica Zuckerman, "The Human Tragedy of Illegal Immigration: Greater Efforts Needed to Combat Smuggling and Violence," *Backgrounder*, June 2011, 7.

204 Manuel Rueda, "Enslaved Immigrants Dig Tunnel Access Tijuana Border," *ABC News Univision*, March 25, 2013, <http://fusion.net/justice/story/enslaved-immigrants-dig-tunnel-tijuana-border-18037>.

coyote, a family was approached by someone willing to help them. They were held captive and told to pay \$5000 or they would have to work their debt off.²⁰⁵

D. FENCES VERSUS DRUG TRAFFICKING ORGANIZATIONS: OVER, UNDER, THROUGH THE FENCE TO THE UNITED STATES WE GO

DTOs make an estimated \$10 to \$40 billion dollars a year, and the United States is the world's largest drug market.²⁰⁶ As border security has intensified, DTOs have resorted to alternative solutions in order to keep their illicit organizations in business. Another unintended consequence is the Drug Trafficking Organizations' ability to adapt and innovate new ways of infiltrating into the United States. Some of these methods include going over, traveling under, and through the defensive barriers erected by the United States (see Figure 7). The DTOs substantial resources and flexibility allow them to adjust their operations to avoid detection more readily than the U.S. government can produce ways to stop them. In other words, they have more resources and fewer restrictions to have a fast innovation cycle.

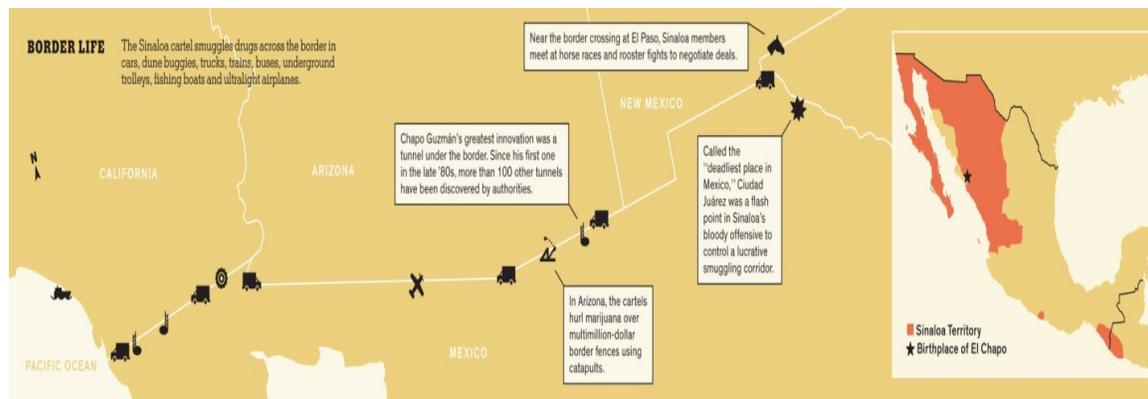


Figure 7. Example of Sinaloa's methods of smuggling²⁰⁷

205 Admin in Americas, "Illegal Immigrants Held Hostage Rescued."

206 Devin Perkins and Anthony Placido, "Testimony: Drug Trafficking Violence in Mexico: Implications for the United States," May 5, 2010, Federal Bureau of Investigations, <http://www.fbi.gov/news/testimony/drug-trafficking-violence-in-mexico-implications-for-the-united-states>.

207 "Border Life," *New York Times*, June 17, 2012, www.nytimes.com/imagepages/2012/06/17/magazine/17cartel_map.html?ref=magazine.

1. Over the Fence

a. Ramps

DTOs have developed several techniques to triumph over defensive barriers. Some common methods are ramps, guns, old-fashioned climbing with or without ropes and ladders. On October 31, 2012, Border Patrol near Yuma, Arizona confiscated a Jeep Cherokee that was left on the wall. Smugglers had attempted to drive over the 14-foot fence using improvised ramps, but became stuck at the vehicles center point due to a steep incline and decline.²⁰⁸ In other incidents, flatbed trucks have been used to backup to vehicle barriers so that drug filled vehicles can be dropped off the back and onto the U.S. side.²⁰⁹

b. Cannons

On February 26, 2013, Mexican police arrested a man who was using an improvised cannon, which looked like a massive potato gun, to launch containers of marijuana over the border fence into California.²¹⁰ These plastic air-powered cannons are able to propel these projectiles, up to 28 pounds a shot, 500 feet beyond the border.²¹¹ Even t-shirt cannons, such as those often used at sporting events, have been known to be used to transport drugs across.²¹²

²⁰⁸ Alan Taylor, "In Focus: On the Border," *The Atlantic*, May 6, 2013, <http://www.theatlantic.com/infocus/2013/05/on-the-border/100510/>

²⁰⁹ Leo Banks, "Let's Climb the Wall," *Tucson Weekly*, June 19, 2008, <http://www.tucsonweekly.com/tucson/lets-climb-the-wall/Content?oid=1091619>.

²¹⁰ Taylor, "In Focus: On the Border."

²¹¹ Curt Stone, Dillon Rand, Angus West, and James Miller, "9 Creative Ways to Smuggle Contraband across Borders," July 3, 2013, *Global Post*, <http://www.globalpost.com/dispatch/news/offbeat/130701/smuggling-schemes-techniques-cocaine-drugs-sperm-cats>; Attila Nagy, "Shockingly Creative Ways Drugs Have Crossed the Border," May 19, 2013, <http://gizmodo.com/5988877/13-shockingly-creative-ways-drugs-have-crossed-the-border>.

²¹² *Ibid.*

c. Catapults

Often simplistically designed catapults have been discovered out in the desert by Mexican law enforcement.²¹³ Former DEA chief of operations Michael Braun stated,

They erect this fence, only to go out there a few days later and discover that these guys have a catapult, and they're flinging hundred-pound bales of marijuana over to the other side. We've got the best fence money can buy, and they counter us with a 2,500-year-old technology.²¹⁴

The incident proved that these organizations are extremely adaptive and that innovating is their best asset. Even ultra-light aircrafts have been confiscated by agents. One such craft, carrying 253 pounds of marijuana, was apprehended in Tucson in December 2008.²¹⁵

d. Ladders and Ropes

Another method seen is the use of ladders and ropes to scale wall sections. There tools that are either brought with the people, or a designated person rides out and hangs them for people to climb and then returns later to collect the ropes. Even screwdrivers are used to as handholds to climb fencing. The prevailing method to scale fencing is for a vehicle to pull up to the fence, people climb onto the roof and jump over.²¹⁶

2. Under the Wall

Joaquin Guzman, known as El Chapo, is the leader of the Sinaloa cartel is said to be an outside-the-box thinker. He is recognized as the first to use underground passageways for smuggle in drug and people into America. According to *New York Times*, article, "Chapo's greatest contribution to the evolving tradecraft of drug trafficking was one of those innovations that seem so logical in hindsight; it's a wonder nobody thought of it before: a tunnel."²¹⁷ El Chapo hired an architect to plan out a tunnel

²¹³ Ibid.

²¹⁴ Patrick Radden Keefe, "Cocaine Incorporated," *New York Times*, June 15, 2013, <http://www.nytimes.com/2012/06/17/magazine/how-a-mexican-drug-cartel-makes-its-billions.html>.

²¹⁵ Nagy, "Shockingly Creative Ways."

²¹⁶ Banks, "Let's Climb the Wall."

²¹⁷ Keefe, "Cocaine Incorporated."

into the United States. It was equipped with hydraulic system, secret levers, and was 200 feet long. To this day, it is still a viable option; entrances to smuggling tunnels are still hidden in plain sight. On July 12, 2012, in Tijuana, one such entrance was found in a warehouse, beneath a bathroom sink. This 220 yard passageway was equipped with lighting and ventilation.²¹⁸ Over a hundred tunnels have been detected since El Chapo's. They have been known to be up to half a mile long, equipped with a rail systems for heavy loads, air-conditioning, lighting, and ventilation.²¹⁹

The latest "super tunnel" discovered was 2.4 miles long from San Diego to Tijuana. It was almost four feet tall, three feet wide, and 35 feet below the surface and connected warehouses.²²⁰ Since 2010, it was the fifth large-scale tunnel found.²²¹ The clay-like earth in the San Diego/Tijuana region makes it easier to excavate and cave-ins are less likely, and there are an abundance of warehouses to hide entrances and smuggling activities.²²²

Smugglers have even penetrated drainage systems that run between different border towns, such as the one from Nogales, Arizona to Nogales, Mexico and all over the border El Paso to San Diego. Border agents found an unfinished tunnel within the drainage system by noticing recently disturbed soil on the floor. Tunnels within the Nogales area are rudimentary, which integrate into the drainage system, compared to the sophisticated "super tunnels" in San Diego. The Nogales tunnels are dug by miners and labors using hand tools, and the dirt is carried out by buckets verses the high-tech tunnels

218 Nagy, "Shockingly Creative Ways."

219 Keefe, "Cocaine Incorporated."

220 Jo Tuckman, "U.S. Shuts Mexican Drug Smugglers' Cross-Border 'Super Tunnel,'" *The Guardian*, November 1, 2013, <http://www.theguardian.com/world/2013/nov/01/us-discovers-mexican-drug-smuggling-tunnel>.

221 Liam Dillon and Ian Lovett, "Tunnel for Smuggling Found under U.S.-Mexico Border: Tons of Drugs Seized," *The New York Times*, October 31, 2013, http://www.nytimes.com/2013/11/01/us/tunnel-for-smuggling-found-under-border-tons-of-drugs-seized.html?_r=0.

222 Tuckman, "U.S. Shuts Mexican Drug Smugglers' Cross-Border 'Super Tunnel.'"

designed by engineers and miners around San Diego.²²³ Even so, since 2009, agents have found over 20 tunnels in this area.²²⁴

3. Around the Border

Another popular and high risk option available to smugglers is to go around the San Diego fence by sea. Often smugglers and immigrants wait for the cover of night, fog, or rain to attempt crossing.²²⁵ Many immigrants attempt to swim through the strong currents in hopes of reaching American beaches. Smugglers have taken to using small vessels; these are often utilized for both drug and human smuggling. These old wooden single engine boats, weighted down by cargo, give them a smaller profile that is difficult to see on radars. Additionally, night vision is limited by distance. Smugglers charge fees ranging from \$7000 to \$10,000 to cross; one boatload can make up to \$200,000 a trip.²²⁶ Lookouts are posted before a boat is scheduled to land, normally close to a road and look for border patrol. Border officials have been noticing the increase in boats over the last few years, and the number of abandoned boats on the U.S. shores has increased. Yet, it is hard to catch every attempt in the 400 square mile of Pacific Ocean that extends from Los Angeles to Tijuana.²²⁷

4. Through the Barrier

In Arizona's deserts, drugs continue to be smuggled in by foot and horseback through the vehicle barriers. Lee Eseman, park manager, says since the vehicle barriers were installed they have seen an increase in people (drug mules) walking drugs through. Eseman remembers seeing "mules" waiting at the border for a drug vehicle to approach.

²²³ Associated Press, "How Cartels use Tunnels to Send Drugs into U.S.," *New York Post*, January 14, 2014, <http://nypost.com/2014/01/14/how-smuggling-tunnels-are-built-used-along-us-border/>.

²²⁴ Rafael Romo, "Smuggler Tunnels Probe for U.S. Border Weakness," *CNN*, February 22, 2011, <http://www.cnn.com/2011/WORLD/americas/02/21/mexico.border.us/>.

²²⁵ Dave Graham, "By Land or By Sea: Tougher U.S. Border Tests Illegal Immigrants," Reuters, March 20, 2013, <http://www.reuters.com/article/2013/03/20/us-usa-immigration-mexico-idUSBRE92J05I20130320>.

²²⁶ Cindy Carcamo, "The New Frontier-Immigration Part 3: How Sea Smuggling Works," September 28, 2012, <http://www.ocreger.com/articles/smuggling-373022-people-sea.html>.

²²⁷ Elliot Spagat, "Illegal Immigrants Turn to the Sea to Slip into U.S.," Associated Press, August 26, 2010, http://www.huffingtonpost.com/2010/08/26/illegal-immigrants-turn-t_n_695612.html.

Drug bales are loaded onto the people's backs; they proceed over the barriers and the "mule" train begins their excursion.²²⁸ These bundles can weigh up to 50 pounds, and the human mules will walk for hours to days.²²⁹ In areas with pedestrian fencing, sections of fencing are cut to make a door or even torn down with a truck and chain. On YouTube, there are videos posted of a people, while only using a vehicle jack, are able to lift a section of the wall. On one video, within five minutes the fence is elevated and a group of people dash underneath it into the U.S. Then, the section is put back in its original place as if it was never disturbed.²³⁰

A tactic that is occurring more frequently is to split groups along various areas along the border. After observing law enforcement patterns through a series of lookouts, one group is sent over to be targeted by the USBP.²³¹ This group is used as a diversion so the other groups can escape. Or other groups of people and drugs are sent across while the Border Patrol is distracted.²³² The diversion group is usually arrested, but drug organizations only lose a portion of cargo while more is able to get through. Sometimes they are able to escape back across the border to try again. Two drug smugglers were able to escape by using, "homemade spikes—nails welded together to pop the tires of Border Patrol truck—and that was all they needed."²³³ These attempts demonstrate that the defensive barrier is porous; otherwise, DTOs would not be trying.

228 Banks, "Let's Climb the Wall."

229 Tracy Connor, "Experts Say Drug Mules are Easy to Find, Hard to Catch," *NBC News*, January 29, 2014, http://usnews.nbcnews.com/_news/2013/05/30/18589533-experts-say-drug-mules-are-easy-to-find-hard-to-catch?lite.

230 "Drug Mules Lift Border Fence with Auto Jack," *YouTube* video, posted by SheriffDever, February 4, 2012, <http://www.youtube.com/watch?v=CAyrTRJzkZs>.

231 Scott Decker, *Drug Smugglers on Drug Smuggling* (Philadelphia: Temple University Press, 2008), 72.

232 Damien Cave, "Long Border, Endless Struggle," *New York Times*, March 2, 2013, <http://www.nytimes.com/2013/03/03/world/americas/border-security-hard-to-achieve-and-harder-to-measure.html>.

233 *Ibid.*

E. FIXING THE FENCES

In FY 2010, there were over 4,000 documented fence breaches that had to be repaired, according to the CBP.²³⁴ Each incident averaged \$1,800 in repair costs and a total cost of over \$7.2 million in breach repairs.²³⁵ Despite these violations, the CBP stated a control increase within the southwest defensive barrier, but the impact of the fencing and other infrastructure could not individually be accounted for.²³⁶ On July 29, 2011, Kellogg Brown & Root Company won a government contract to maintain and repair Arizona's 378 mile border fence. This one year contract cost \$7.7 million and has the possibilities of two one year extensions, for a three year total cost of \$24.4 million.²³⁷

F. CONCLUSION

Enhancements in U.S.-Mexico border security have caused unintended adverse effects. Tightened security has shifted migration patterns away from heavily fortified areas, increased the travel periods, and increased the usage and necessity of human smugglers, instead of deterrence.²³⁸ Increased fortifications have also pushed criminal organizations to find creative solutions to continue making enormous profits off of the demands of the American drug market and those of the unauthorized migrants. Adaptation and innovation are two factors that the United States is unequipped to handle and slow in regards to border security violations. The fact that DTOs are creative, constantly looking for new effective, innovative techniques, or relying on tried-and-true methods to smuggle in their human cargo or drug products over the years is astonishing. Currently, despite how much money or resources the U.S. government invests into the border, it does not appear that this strategy will ever be enough to stop these organizations or people. Criminal organizations are business oriented, if they do not meet

²³⁴ Stana, *Border Security: Preliminary Observations*, 9.

²³⁵ *Ibid.*, 9.

²³⁶ *Ibid.*, 10.

²³⁷ "Repairing Border Fence Can Be Costly," *UPI*, July 29, 2011, http://www.upi.com/Top_News/US/2011/07/29/Repairing-border-fence-can-be-costly/UPI-54541311913225/.

²³⁸ Steven Redburn, Peter Reuter, and Malay Majmundar, *Budgeting for Immigration Enforcement: A Path to Better Performance* (Washington, DC: The National Academies Press, 2011), 34.

the demands, they know that someone else will and the cycle continues. With the belief of employment and other factors, determined unauthorized immigrants will continue to pursue and pay smugglers to achieve entry into the U.S. As long as there is a demand for drugs or smugglers, someone will take the risk to reap the rewards.

The current U.S. strategy and policy solutions for the U.S.-Mexico border have resulted in increases of both morbidity and mortality rates instead of deterring criminal activity. These injuries and deaths represent the actual effectiveness of the border and immigration policies. Border Patrol is only the enforcer of the policy; it is the politicians who need to look at the causes of migration and develop an effective solution instead of pumping more resources into the border. Fortification has also increased the need for coyotes, who exploit these desperate people. The demand for smugglers often leaves immigrants vulnerable to abuse, kidnapping, abandonment, and forced labor. This wicked problem will never end because people, criminals and migrants alike, are determined and willing to what they have to do to get what they want. Unauthorized migrants will continue to enter illegally if they believe they can have a better life in the United States. DTOs will continue to meet the needs of the largest drug market if the profits are there.

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IV. CONCLUSION

A. SUMMARY

The tragic event in September of 2001 left the United States with a sense of vulnerability and created both the demand and need to protect the nation. However, fortifying the border has created diminishing returns, negative side effects, and unintended consequences. The last one undermines the very nature and reason of installing a border fence. Immigrants have been forced into the hands of criminal organizations and are more vulnerable now than in the past. Building a wall may deter some illicit activity, but it does not affect the motivational factors of why people want to cross the U.S.-Mexico border. By hardening the borderline, the U.S. has issued a challenge, practically daring anyone to attempt entry. Even though immigration has been reduced, criminal organizations have picked up the gauntlet thrown by the United States and are finding ingenious methods to overcome and bypass the challenge created by tightening border controls. Determined and motivated people will continue to find a way, even if it takes multiple times to find loopholes and weakness in the border. According to one author, “Walls don’t work simply because people are too inventive in circumventing them.”²³⁹ Border policy has resulted in attracting DTOs, stimulating innovation, and creating sophisticated networks within the black market arena.

B. DIMINISHING RETURNS

The expenditure of supporting, maintaining, and sustaining border control is escalating and diminished returns are mounting. With increased technology, fencing, and personnel the cost associated with apprehending unauthorized immigrants intensifies every year. This ratio will continue if Border Patrol apprehensions statistics persist to dwindle, as apprehensions are already at an all-time low. Conversely, the number of southwest border agents has doubled in less than 10 years. Within the last 11 years, the USBP budget has tripled. It is becoming excessive and ridiculous; the nation averages fewer than 20 apprehensions a year in some sectors and dramatically smaller in other

²³⁹ Michael J. Dear, *Why Walls Won't Work* (New York: Oxford University Press, 2013), 173.

sectors, and at a cost of \$10,000 per arrest, which includes multiple attempts by the same people. If the government continues with its current strategy, increasing personnel and resources investments, the associated costs will continue to escalate.

C. NEGATIVE SIDE EFFECTS / UNINTENDED CONSEQUENCES

Border controls have destroyed the migration cycle between the United States and Mexico, which has resulted in more unauthorized migrants deciding to remain within the U.S. territory. This choice minimizes their risk because the cost of reentry has become too high for them. In addition, human rights violations and border-related death rates continue to accumulate. The border controls have resulted in increased burdens to taxpayers.

The biggest unintended consequence is that the wall has failed to neither prevent nor deter any illicit criminal activity. Access to borderlands and potential profits has drawn the attention of DTOs, who fight for access and control of transportation routes. Human smuggling, kidnapping, and extortion are areas outside of narcotics that have proven profitable for criminal organizations. The border fence only slows them down until they can come up with a resourceful method, to circumvent the defensive barrier, either tried and true, or imaginative and inventive new ones.

D. RESULTS

The results and conclusion of this thesis indicated that the first hypothesis was incorrect and confirmed the second hypothesis. Borders walls and increased USBP personnel both appear to be useful and influence immigration. However, the cost associated with fortifying the border fence along with the expansion of personnel and support are not cost effective, as demonstrated in a previous chapter. In addition, the border security increases have reached a culminating point of diminishing returns. Also, the defensive barrier has been unsuccessful in deterred illicit activity. In fact, the fortification and tightening of border controls have increased the risk and created a demand that has attracted illicit activity. DTOs have expanded their franchises to increase the size of their profits. Border security efforts have encouraged and supported an innovation environment in order to defeat border controls.

E. FINAL THOUGHTS

History demonstrates that walls are not a long-term solution to problems; yet the federal government keeps returning to stringent border fences, such as the Great Wall of China or Berlin Wall, as its primary solution to solve its security dilemma. The U.S.-Mexico border is that of the Maginot Line, an impressive presence that is useless in preventing illegal activity. More fences, manpower, and technology on the U.S.-Mexico border does not appear to be a very effective nor efficient solution to shrink illegal cross border movement. It has done the opposite; it has bolstered an atmosphere and is seen as a challenge for criminal organization's ingenuity to defeat. The majority of border security still is not participating in the prevention of terrorism, only countering trafficking and immigration.

At the end of the day, the cost of maintaining a defensive border fence continues to grow rapidly; this price tag has surpassed the point of accumulation and is creating diminished returns. Any additional increase in border resources would prove to be unnecessary. A fence is merely a Band-Aid covering up the underlying problem of the U.S. government: America needs a better alternative solution to fix illegal immigration and criminal organizations illicit activities. The Border Patrol are not the ones in charge of making the rules; they merely enforce them for politicians, who need to develop a more effective and efficient solution. As of now, it appears that these are risks politicians are will to accept to maintain the illusion of controlling the U.S. border, regardless of the growing cry for immigration reform. Like history has taught, all walls come down.

In addition, the United States and Mexico are attached together by geography, economics, demographics, and history. With the blending of cultures, expanding trade and transportation networking, the continuous daily flow of people across the border, both countries are fundamentally connected. The United States and Mexico need to acknowledge this interdependency and continue to promote bilateral cooperation in regard to immigration reform and reducing drug trafficking organizations.

Currently, the border fence has been effective in deterring some illegal migration, but in respect to a terrorist threat, its effectiveness remains unknown as terrorist

organizations have yet to challenge the defensive barrier. However, it is clear that current border control methods are not adequately addressing the DTO threat. The challenge the U.S. government needs to address are efficiency and effective alternative methods to better use already appropriated resources. Alternative methods such as reforming immigration policy, better visa monitoring systems to reduce the demand for illicit organization, and reestablish the migration cycle. Or the government can shift more resources for targeting drug organizations money.

APPENDIX A. TYPES OF DEFENSIVE BORDER FENCING



Figure 8. Vehicle fencing outside of El Paso²⁴⁰



Figure 9. Vehicle Bollards outside El Paso²⁴¹

²⁴⁰ U.S. Customs and Border Protection, “Photo Gallery” accessed March 11, 2014. <http://www.cbp.gov/newsroom/photo-gallery>.

²⁴¹ Ibid.



Figure 10. Yuma Sector—the truck is dragging tires so USBP can tell when people cross at night.²⁴²



Figure 11. Wire mesh fence outside El Centro²⁴³

²⁴² Ibid.

²⁴³ Ibid.



Figure 12. Landing mat fence in El Centro²⁴⁴



Figure 13. Metal mesh fence in Yuma Sector²⁴⁵

²⁴⁴ Ibid.

²⁴⁵ Ibid.

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APPENDIX B. FENCE BREACHES



Figure 14. Fence breach in Tucson²⁴⁶



Figure 15. Tunnel between Tijuana and San Diego.²⁴⁷

²⁴⁶ Ibid.

²⁴⁷ Alex Cossio, "Mexico-U.S. Tunnel Pictures and Photos," November 30, 2011, News Shopper, http://newshopper.sulekha.com/mexico-us-drug-tunnel_photo_2073722.htm.



Figure 16. Suspected drug smugglers²⁴⁸

²⁴⁸ U.S. Customs and Border Protection, “Photo Gallery.”

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