

A PLANNING RESPONSE TO MIGRANT DEATHS IN SOUTHERN  
ARIZONA:

SURVEYING THE POLITICAL LANDSCAPE TO DETERMINE  
FEASIBILITY OF EXPANDING CELLULAR COVERAGE

by

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## EXECUTIVE SUMMARY

In 1994, under the Clinton Administration, the U.S. changed its border enforcement policy and strategy. Since then, the Border Patrol's budget and manpower has increased significantly. The Border Patrol makes hundreds of thousands of apprehensions of undocumented migrants every year, and hundreds of thousands of migrants eventually escape detection and make it to the interior of the country.

The current border enforcement strategy is known as the "Gatekeeper Complex" and is underpinned by the philosophy of "prevention-through-deterrence." In the 90s, enforcement was refocused to preventing undocumented immigration through the major urban areas of El Paso and San Diego and then through smaller border towns like Naco, Douglas, and Nogales. The Border Patrol believed that by deterring migration through urban areas where it was easiest to evade detection and pushing it into more rural environments, migration would become too risky and therefore undocumented immigration would decrease. They also believed that if migrants did choose to cross the border in remote rural areas it would give agents the tactical advantage allowing them to more easily detain and deport the migrants. The government also predicted that migrant deaths would increase.

Migrant traffic has shifted from urban areas into rural areas; however, the overall number of migrants crossing the border has remained relatively constant. Much of the migration has shifted into the remote and harsh desert of southern Arizona. The result has been an overall rise in the number of migrant deaths along the entire southwest border, with the greatest increase occurring in the Tucson Sector. In 1998 the Border Patrol reported 7 deaths in the Tucson Sector. By 2005, the Border Patrol reported nearly 200. Humanitarian aid groups in Tucson reported that the number was closer to 300. In fact, both numbers are probably low, because it is

widely believed that many bodies are never found and therefore never counted.

Humane Borders is a volunteer-based humanitarian aid group in Tucson, Arizona dedicated to saving migrant lives by maintaining over eighty water stations along known migrant trails in southern Arizona. Currently, it is investigating the feasibility of a project to expand cell phone coverage along migrant corridors in an effort to reduce migrant deaths. The idea was conceived of after mounting evidence that migrants were traveling with cell phones and were calling emergency numbers to initiate life-saving rescues in the desert.

For this report I identified and interviewed potential project stakeholders to determine support and opposition for a project to expand cell phone coverage, advantages and disadvantages of increasing cell phone coverage, barriers to implementing such a project, and other pertinent information. The interviews are documented, summarized, and analyzed to determine the feasibility of developing and advancing a project to expand cell phone coverage. Finally, policy recommendations are made to help any organization that would like to undertake such a project. The following is a synopsis of the recommendations found at the conclusion of Chapter 4:

- Work around protected lands when installing cell phone infrastructure, avoiding potential legal and bureaucratic barriers.
- Near public lands, investigate the feasibility of locating cell phone infrastructure on or near existing infrastructure including roadways, communications towers, and buildings.
- Determine feasibility of installing cell phone infrastructure along the Highway 286 corridor and around Buenos Aires National Wildlife Refuge and Coronado National Forest on private land, an area with many recorded deaths.
- Investigate feasibility of installing cell phone infrastructure on state trust land and BLM land.
- Form a formal coalition that supports expanding cell phone coverage including business groups, economic development organizations, and cell phone service providers.
- Create a concrete plan to expand cell phone coverage.
- Determine how to advance a cell phone expansion project on the other public lands covered in this report.

## **I. UNITED STATES BORDER POLICY: A DEADLY PATH**

### **The Problem**

In 1994 the United States (U.S.) changed its enforcement strategy on the United States-Mexico border. The U.S. Border Patrol unveiled Operation Gatekeeper in the San Diego Sector to showcase the new strategy of “prevention-through-deterrence.” (Nevins 2002). The operation ushered in an era of increases in government spending in an attempt to gain “operational control” over the border (Performance and Accountability Report - Fiscal Year 2005 2005). The new strategy was intended to reduce the number of undocumented migrants entering the U.S. through its border with Mexico. The Border Patrol uses apprehension statistics to measure the success of its enforcement strategies (a more in-depth explanation is given later in this chapter). Soon after the change in 1994, the number of apprehensions in the El Paso Sector fell from an average of 800 a day to 150 a day (Nevins 2002). The San Diego Sector accounted for 42 percent of apprehensions in 1994, yet accounted for only 17 percent of apprehensions by 1998 (Nevins 2002). However, as traffic decreased in San Diego and El Paso, other sectors saw migrant traffic increase. The Tucson Sector experienced under 100,000 apprehensions in 1993, but by 2000 experienced over 600,000 (U.S. Border Security and Migration - Immigration Statistics 2004). In the twelve years since the “Gatekeeper Complex” was instituted, the government has proven its ability to shift migrant traffic from one area of the border to another, but has not demonstrated the ability to significantly reduce the number of undocumented migrants entering the country (Nevins 2002). Another major consequence of this policy, and the most important to this report, is the increase in the number of migrant deaths that have occurred along the entire southwest border, and especially in the Border Patrol’s Tucson Sector, since the institution of the

“Gatekeeper Complex.” Both the absolute number of deaths and share of deaths increased in the Tucson Sector. In 1999, 241 deaths were reported along the entire southwest border. The number reported in 2003 climbed to 334. To compare, in 1998, 4.3 percent of migrant deaths along the southwest border occurred in the Tucson Sector, and by 2005, 216 out of the 472 migrants that died along the southwest border, or 46 percent, died in the Tucson Sector. That constitutes nearly a doubling of migrant deaths along the entire southwest border between 1999 and 2005, and ten-fold increase in migrant deaths in the Tucson Sector from 1998 through 2005 (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated 2006).

In response to the humanitarian crisis, this report explores the feasibility of project to expand cell phone coverage in southern Arizona along migrant trails to reduce migrant deaths. This idea grew out of mounting evidence of migrants traveling with cell phones and the increasing numbers of migrants rescued after calling emergency services. Increasing cell phone coverage along remote migrant routes in southern Arizona could be an effective way to reduce migrant deaths. A stakeholder analysis based on interviews with institutional stakeholders explores topics including the support, opposition, barriers, advantages, disadvantages, and other opinions about developing and carrying out a project to increase cell phone coverage in southern Arizona. Finally, policy recommendations are provided to advance the project.

## **The History of the U.S.-Mexico Border**

For centuries people have crossed the lands that are now separated by the border between Mexico and the U.S. In 1848 the Treaty of Guadalupe Hidalgo secured peace between Mexico and the U.S. and established a new international boundary between the two countries (Nevins

2002). Then in 1853, the U.S. acquired more land through the Gadsden Purchase that encompassed a small portion of present day southwest New Mexico and southern Arizona (Nevins 2002). The border, as established by the Treaty of Guadalupe Hidalgo and the Gadsden Purchase, stretches from the Pacific Ocean between San Diego, California and Tijuana, Mexico, to the Gulf of Mexico between Brownville, Texas and Matamoros, Mexico for a total of more than 1,952 miles (The International Boundary and Water Commission 2006). The new border did not change the traditional circular flow of people back and forth across those lands. Due to minimal regulation and enforcement the border was porous, allowing for goods, legal and illegal, as well as people to cross back and forth with relative freedom (Nevins 2002).

### **The History of the Border Patrol and Immigration Policy**

The Immigration Act of 1924 established the first quota system restricting the number of immigrants that could enter the U.S. each year and required that all immigrants have visas to enter the country. Its passage immediately created unauthorized immigration of Europeans through Canada and Mexico because there were no restrictions on entrants from those two countries. The Border Patrol was created to help deal with this new issue and received its powers as a police force through the Immigration Act of 1925 (Nevins 2002). From this time forward, the mission of the Border Patrol would disrupt long standing social networks that spanned the border and continue to play an important role in border culture (Nevins 2002).

Today, one of the Border Patrol's primary duties is preventing and detecting illegal entry along the border between U.S. ports of entry. The Border Patrol is divided into twenty-one sectors. The U.S.-Mexico border (also referred to as the "southwest border" in this report), the focus of this report, is divided into nine sections and receives the majority of the Border Patrol's

manpower and resources. In September 1998, there were nearly 8,000 Border Patrol agents, of which 7,400 or 93 percent were posted on the southwest border (Illegal Immigration: Status of Southwest Border Strategy Implementation 1999). As of June 2006, the total number of Border Patrol agents had risen to approximately 11,600 (DHS: Fact Sheet: Securing Our Nation's Borders 2006).

Another important piece of legislation, The Immigration Control and Reform Act (IRCA) of 1986, was designed to dramatically reduce the number of undocumented immigrants entering the U.S. by legalizing nearly three million that were already here, increasing enforcement measures on employers who hired undocumented workers, and increasing border enforcement. After the passage of IRCA the number of apprehensions initially declined, but by 1989 had begun to rise again. IRCA did not reduce illegal immigration as advertised, and was seen as a failure (Nevins 2002).

### **A New Philosophy for Border Policy**

The Border Patrol traditionally focused its efforts on apprehending undocumented migrants in the U.S. just after they crossed the border or once they were already in the interior of the country (Cornelius 2001). In 1993 two things happened that would begin to change the face of border policy and set the stage for the current crisis on the border (Cornelius 2001). One was the release and adoption by the Clinton Administration of recommendations from the report entitled "Systematic Analysis of the Southwest Border," known as the Sandia Report (Illegal Immigration: Southwest Border Strategy Results Inconclusive and More Evaluation Needed 1997). The report was released by the federally funded Sandia National Laboratories, an organization normally dedicated to military research (Border Control: Revised Strategy is

Showing Some Positive Results 1994). The study recommended that the Border Patrol focus on preventing unauthorized entry instead of apprehending undocumented immigrants once inside the country (Cornelius 2001). To accomplish this, the report advocated the use of multiple physical barriers and advanced electronic surveillance equipment (Illegal Immigration: Southwest Border Strategy Results Inconclusive and More Evaluation Needed 1997). The philosophy came to be known as “prevention-through-deterrence” (Cornelius 2001).

Around this same time, the second major event occurred that led to the change in border policy. As the Clinton Administration was beginning to change border enforcement policy partly based on the Sandia Report, Silvestre Reyes, the regional Border Patrol supervisor of the El Paso Sector in Texas, took unilateral action and experimented with a new enforcement strategy. During Operation Blockade (later known as Operation Hold-the-Line), Reyes stationed Border Patrol vehicles short distances apart for twenty-one miles along the Rio Grande River between El Paso and Ciudad Juarez to intimidate people trying to cross the border illegally (Nevins 2002). The strategy caused apprehensions to fall by 76 percent (Cornelius 2001). Reyes’ experiment was not well received by his bosses at the Immigration and Naturalization Service (INS) nor by the Clinton Administration (Nevins 2002), but because of the perceived success of Hold-the-Line, the INS began to feel pressure to replicate the strategy at other points along the border (Cornelius 2001). This, even after further study revealed that the operation mostly deterred daily commuters who lived across the border in Ciudad Juarez and not migrants coming from points farther south in Mexico migrating to the U.S. interior (Cornelius 2001). Even though the El Paso experiment did not prevent migration to the interior of the U.S., it did set in motion changes in policy that instituted the philosophy of “prevention-through-deterrence.”

## **A Four Phased Approach to Implement New Strategies**

In February 1994 the Attorney General and the INS Commissioner responded to pressure to replicate the perceived success of Hold-the-Line and implement the Sandia Report findings by announcing a strategy of “prevention-through-deterrence” to strengthen immigration law enforcement. The strategy would do the following:

- Concentrate personnel and resources in a four-phased approach starting with the areas of highest migrant activity.
- Increase the time Border Patrol agents spend on border-control activities.
- Make maximum use of physical barriers.
- Identify the appropriate quantity and mix of technology and personnel needed to control the border.

The strategy predicted that shutting down traditional migrant routes through safer urban areas and forcing migrants into rural areas with rough terrain would deter crossers and give agents a tactical advantage to capture migrants. The heightened risk of apprehension by the Border Patrol under the new strategy was supposed to make the cost so high and the risks so great that migrants would no longer try to enter the country undocumented (Illegal Immigration: Status of Southwest Border Strategy Implementation 1999).

The Border Patrol used a four phase approach during which it implemented the strategies listed above. Phase I started in the sectors with the highest levels of migrant activity and phases II, III, and IV expanded over time to areas with less activity. Phase I targeted the San Diego Sector with Operation Gatekeeper in October 1994 and the El Paso Sector with Operation Hold-the-Line. Phase II targeted the Tucson Sector with Operation Safeguard, as well as the Del Rio, Laredo, and McAllen Sectors with other operations. Phase III targeted the remaining three sectors on the southwest border, and Phase IV targeted the Northern border, Gulf Coast, and

coastal waterways (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001).

### **Operation Gatekeeper**

Operation Gatekeeper was the first and most emblematic Border Patrol operation associated with current border enforcement policy because of its size, visibility, new philosophy, and novel enforcement strategies. The operation was inaugurated by Attorney General Janet Reno in San Diego with great fanfare because it officially initiated the new era of the “prevention-through-deterrence” philosophy and the strategies that would be used to implement it. For these reasons Operation Gatekeeper, subsequent operations, and overall border enforcement policy and philosophy is generally referred to using the umbrella term “Gatekeeper Complex” (Scharf 2006).

Operation Gatekeeper was rolled out in three phases, starting with the fourteen miles of border between the Pacific Ocean and the Otay Mesa port of entry in California. The remaining two phases stretched the operation to Yuma, Arizona (Cornelius 2001). The strategies devised to bring to fruition the “prevention-through-deterrence” philosophy included:

- Thousands of agents stationed along a few highly traveled corridors.
- High-intensity stadium-type lighting.
- Ten-foot-high steel fencing along portions of the border.
- Permanent and mobile infrared night scopes.
- Motion-detecting sensors buried in the ground.
- Remote video surveillance systems linked to in-ground sensors.
- New roads to improve the Border Patrol’s mobility.

- A computerized biometric scanning system called “IDENT.”

### **Funding and Implementing the Gatekeeper Complex**

The Clinton Administration authorized a dramatic increase in funding for the INS. Much of the money was routed to border enforcement in an effort to bring unauthorized immigration under control. The INS budget of \$5.5 billion for 2002 was triple the 1993 budget. The number of Border Patrol agents in 1993 doubled to 9,212 agents by 2002 (Cornelius 2001). The Border Patrol was authorized to have 11,000 agents by the end of fiscal year (FY) 2003 (Cornelius 2001). By June 2006, there were approximately 11,600 total agents (DHS: Fact Sheet: Securing Our Nation’s Borders 2006). The time spent by the Border Patrol on enforcement activities between FY 1998 and FY 2000 rose by 27 percent (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). Also, 107 remote video surveillance systems were installed during FY 1999 and FY 2000 for a total of 130 along the southwest border. In 1996, the Attorney General was mandated by the Illegal Immigration Reform and Immigrant Responsibility Act to add 1000 new Border Patrol agents a year for FY 1997 through FY 2000. The Border Patrol Technology Plan released in April 2000 was a five-year plan to guide the addition of new technology on both the northern and southern borders. Most of the cost, estimated to be between \$450 million and \$560 million, was for 1,100 remote video surveillance systems (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001).

### **The Bush Administration Continues the Gatekeeper Complex**

The Bush Administration continued to support the expansion of the Gatekeeper Complex.

In June 2006 a press release outlined infrastructure upgrades along the border including fencing, barriers, lighting, roads, communications equipment, and new stations and bases. President Bush requested, and Congress approved, a \$1.9 billion budget supplement to pay for the projects. Much of the money would go towards building a virtual fence using detection equipment, sensors, cameras, and other high tech tools. The supplement would also allow the Department of Homeland Security (DHS) to purchase 12 new helicopters, 650 new vehicles, and two unmanned aerial vehicles. A total of \$257 million will go to increasing the Border Patrol's detention capacity by 4,000 beds, with a goal to have a total of 27,500 beds by the end of FY 2007. When George W. Bush took office there were 9,096 Border Patrol agents. During FY 2006, the number of Border Patrol agents increased eight percent to 12,349 (DHS: Fact Sheet: Securing America's Borders CBP 2006 Fiscal Year in Review 2006). By the end of 2008, the Border Patrol expects to have 18,319 agents. President Bush signed the appropriations bill to fund the DHS for FY 2007 which appropriated money for 1,500 new Border Patrol agents, 6,700 detention beds, and \$1.2 billion for border fencing, vehicle barriers, technology, and tactical infrastructure (DHS: President Signs FY 2007 Homeland Security Appropriations 2006).

Another major component of the current border enforcement policy is Operation Jumpstart that began implementation in 2006 (DHS: Fact Sheet: Securing America's Borders CBP 2006 Fiscal Year in Review 2006). For up to a two year period as many as 6,000 National Guardsmen (hereafter referred to as "the Guard") will be deployed along the southwest border as a stopgap measure to help the Border Patrol with border enforcement while new Border Patrol agents are hired and trained and new technology is implemented (DHS: Fact Sheet: Securing Our Nations Borders 2006). The Guard cannot, however, apprehend or detain suspects (DHS: Fact Sheet: Securing America's Borders CBP 2006 Fiscal Year in Review 2006). Instead, the Guard

will provide support by replacing Border Patrol agents that have spent much of their time with such tasks as surveillance and intelligence activities, building vehicle barriers, fences, and roads, and training so that these agents will be able to return to patrolling the border (DHS: Fact Sheet: Securing America's Borders CBP 2006 Fiscal Year in Review 2006).

### **The Gatekeeper Complex in Arizona – Migrant Traffic Shifts and Apprehensions Rise**

In Arizona, the Gatekeeper Complex was first instituted in 1994 with Operation Safeguard (Reyes 2002). The operation was launched to respond to the increasing migration in Arizona and focused first on discouraging border crossing in the border town of Nogales and then in the border towns of Naco and Douglas (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). By shutting down the Arizona border towns to migration, the strategy, as predicted, forced migrants into more remote and dangerous rural desert environments. Safeguard did not receive substantial resources until 1999 when Arizona was being overrun with migrants after the routes through San Diego and El Paso were shut down (Cornelius 2001).

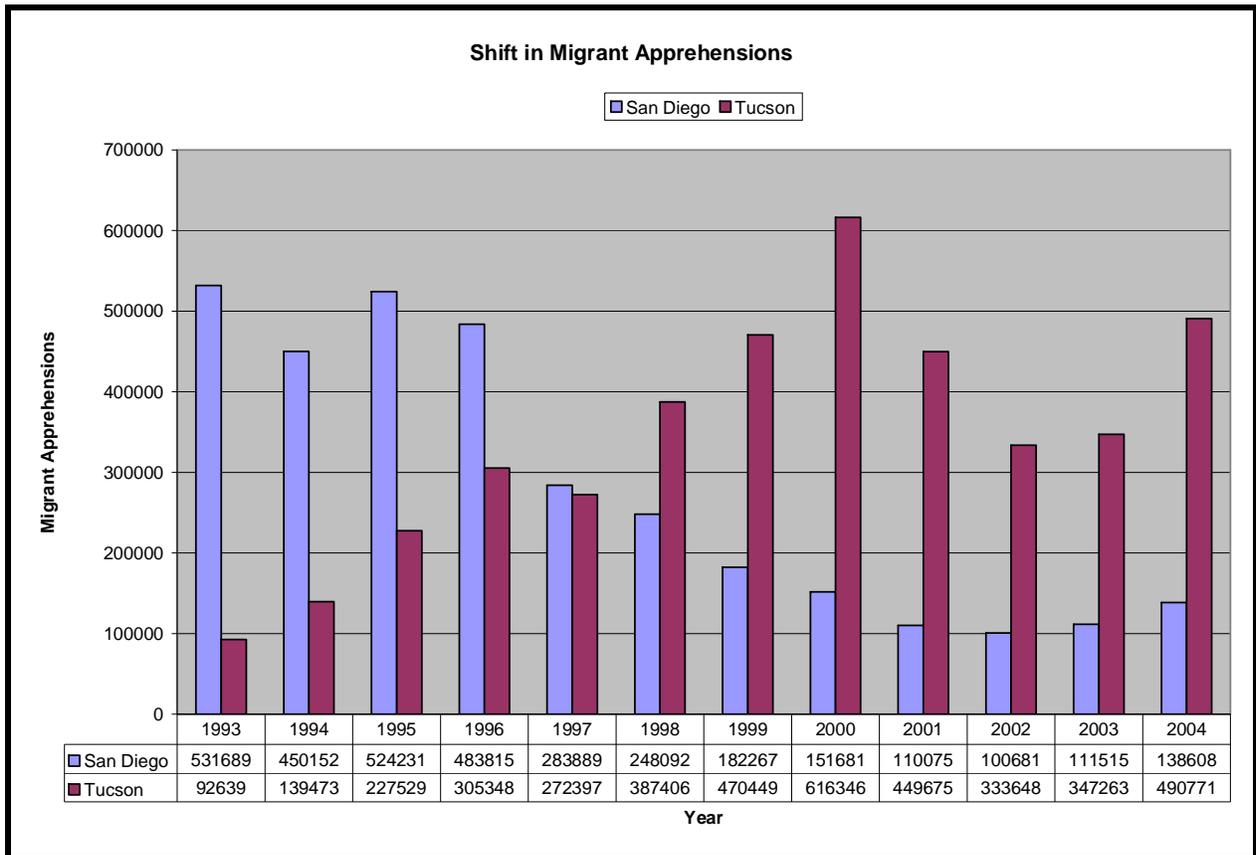
Following Operation Safeguard, the Arizona Border Control (ABC) Initiative was launched on March 16, 2004 (LoMonaco 2005) to gain “operational control” of the Arizona border. Not only did it focus on undocumented immigration, but it focused on anti-terrorism measures and deterrence of all types of cross-border smuggling (DHS: Fact Sheet: Arizona Border Control Initiative – Phase II 2005). Many additional resources were brought to bear including 60 additional Border Patrol agents trained in search, rescue, and remote tactical operations (DHS: Fact Sheet: Arizona Border Control Initiative 2004) and the permanent reassignment of 200 Border Patrol agents, bringing the total number of agents in the Tucson

Sector to over 1900 by 2005. Also included was the use of Unmanned Aerial Vehicles (UAVs), four new helicopters, and one million dollars in new sensor technology (DHS: Fact Sheet: Arizona Border Control Initiative 2004). On March 30, 2005, Phase II of the ABC was announced and continued to escalate enforcement efforts in Arizona with increased technology, air surveillance, and Border Patrol agents (DHS: Fact Sheet: Arizona Border Control Initiative – Phase II 2005).

Although Operations Gatekeeper and Hold-the-Line began to discourage immigration in San Diego and El Paso respectively, migration did not stop. Traffic merely shifted to other areas along the border. Arizona saw a sharp increase in border crossings as demonstrated by the number of apprehensions by the Border Patrol. See Figure 1 for a comparison of apprehensions in the San Diego and Tucson Sectors between 1993 and 2004.

The Border Patrol uses apprehension statistics to measure the effectiveness of its operations. In 1993, of all the apprehensions made by the Border Patrol on the southern border, less than ten percent were in Arizona. In the Tucson Sector alone during FY 2004 there were 490,000, apprehensions, representing 43 percent of total apprehensions along the U.S.-Mexican border. When apprehension numbers from the other sector in Arizona, Yuma, are combined with the Tucson Sector apprehension statistics, they account for more than half of all apprehensions on the border. For the seven years prior to 2004, the Tucson Sector had the highest number of apprehensions of any sector in the nation (Winograd 2004).

**Figure 1 Tucson and San Diego Apprehension Statistics**



**Source: U.S. Border Patrol**

**Results of Operation Gatekeeper along the U.S.-Mexico Border**

The objectives of the Gatekeeper Complex were to shut down traditional smuggling routes, most of which were in urban areas, especially El Paso and San Diego (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). The strategy intentionally forced migration into smaller border towns and finally into remote areas that were more difficult and dangerous to cross. The Border Patrol had many assumptions about how the new strategy would affect migration on the southern border. It expected that harsh rural terrain, like that found in Arizona, would deter migrants from attempting the journey in the first place. It

also felt that rural areas would give them a tactical advantage for apprehending migrants (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). The Border Patrol anticipated that as resources were focused on specific areas of the border the number of apprehensions would initially rise drastically. As the operation matured the number of apprehensions would begin to decrease as migration moved to other areas of the border (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001).

Some other assumptions made by the Border Patrol were:

- More migrants will try to enter illegally through ports of entry.
- Smugglers fees charged to migrants will increase.
- Smuggling techniques will become more sophisticated.
- The number of migrants making multiple crossing attempts after being apprehended will decrease.
- Violence at the border will abate (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001).

There is evidence that some of these assumptions have been not come true (Illegal Immigration: Southwest Border Strategy Results Inconclusive and More Evaluation Needed 1997). For instance, violence at the border has not abated (Marizco 2007) and there is no conclusive evidence that the number of migrants making multiple crossing attempts after apprehension has decreased (Winograd 2004). The Border Patrol's statistics and the analysis of those statistics have been roundly criticized and will be discussed below. For this report, the most pertinent unintended consequence of the Border Patrol's strategy is the sharp increase in the number of migrant deaths in the Tucson Sector (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated 2006).

The Border Patrol almost exclusively uses apprehension statistics to judge the effectiveness of its operations. For example, the total number of apprehensions made in a year is simply the total number of times that the Border Patrol apprehends a migrant. The same person may be apprehended trying to cross the border multiple times in a year, but the Border Patrol records each time that migrant is apprehended as a separate apprehension. Particularly in an area where enforcement is heavy, migrants may be apprehended multiple times (each time recorded as a separate apprehension) before actually making it to the interior of the country (Winograd 2004). As described in more detail below, after being apprehended, the majority of migrants are dropped off by the Border Patrol in a Mexican border town and cross the border repeatedly until they successfully evade apprehension (Borowitz 2007). The way that the Border Patrol interprets apprehension statistics makes it appear that by cracking down on a particular sector and increasing apprehensions, they are successfully reducing undocumented migration. When migrants are apprehended they are processed in the IDENT system that identifies them and creates a record of that person that is accessed every time he or she is apprehended. The Government Accounting Office and other watchdog groups have been very critical of the way that the Border Patrol measures success, and recommended that a more comprehensive approach be used to more accurately evaluate operations to give a clearer picture of what is really happening on the ground (Illegal Immigration: Status of Southwest Border Strategy Implementation 1999) (Cornelius 2001). See Figure 2 for the estimated number of entries, apprehensions, and deaths from 1998 through 2004.

**Figure 2 Entries, Apprehensions, and Deaths**

Year	<u>Estimated number of undocumented entries</u>		<u>Number of</u>	<u>Deaths during Border</u>
	Total	Mexican Nationals	<u>apprehensions along</u> <u>the southwest border</u>	<u>Safety Initiative (BSI)</u>
1998	668000	507000	1516680	254
1999	656000	496000	1537000	241
2000	667000	530000	1643679	372
2001	549000	437000	1235717	328
2002	450000	378000	929809	322
2003	451000	369000	905065	334
2004	562000	459000	1139282	328
Percent change from				
1998 to 2004	-15.9%	-9.5%	-24.9%	29.1%

Sources: Passel and Suro, 2005; U.S. Border Patrol; and GAO analysis of BSI data.

After migrants are processed after being apprehended most agree to “voluntary repatriation,” which means that they are transported by the private security corporation Wackenhut (under contract with the Border Patrol) to ports of entry and released just on the other side of the border in Mexico (Borowitz 2007). Since most migrants are coming from the interior of Mexico or from other countries, they do not return to their places of origin. Most migrants that are caught and released cross the border as many times as it takes to eventually avoid apprehension. When migrants agree to voluntary repatriation they do not go before a judge for a deportation hearing. There is little incentive to return home because most have made a

significant financial investment to get to the border and do not face incarceration regardless of how many times they are apprehended crossing into the U.S. Eventually most migrants avoid detection and continue on to the interior of the country (Winograd 2004).

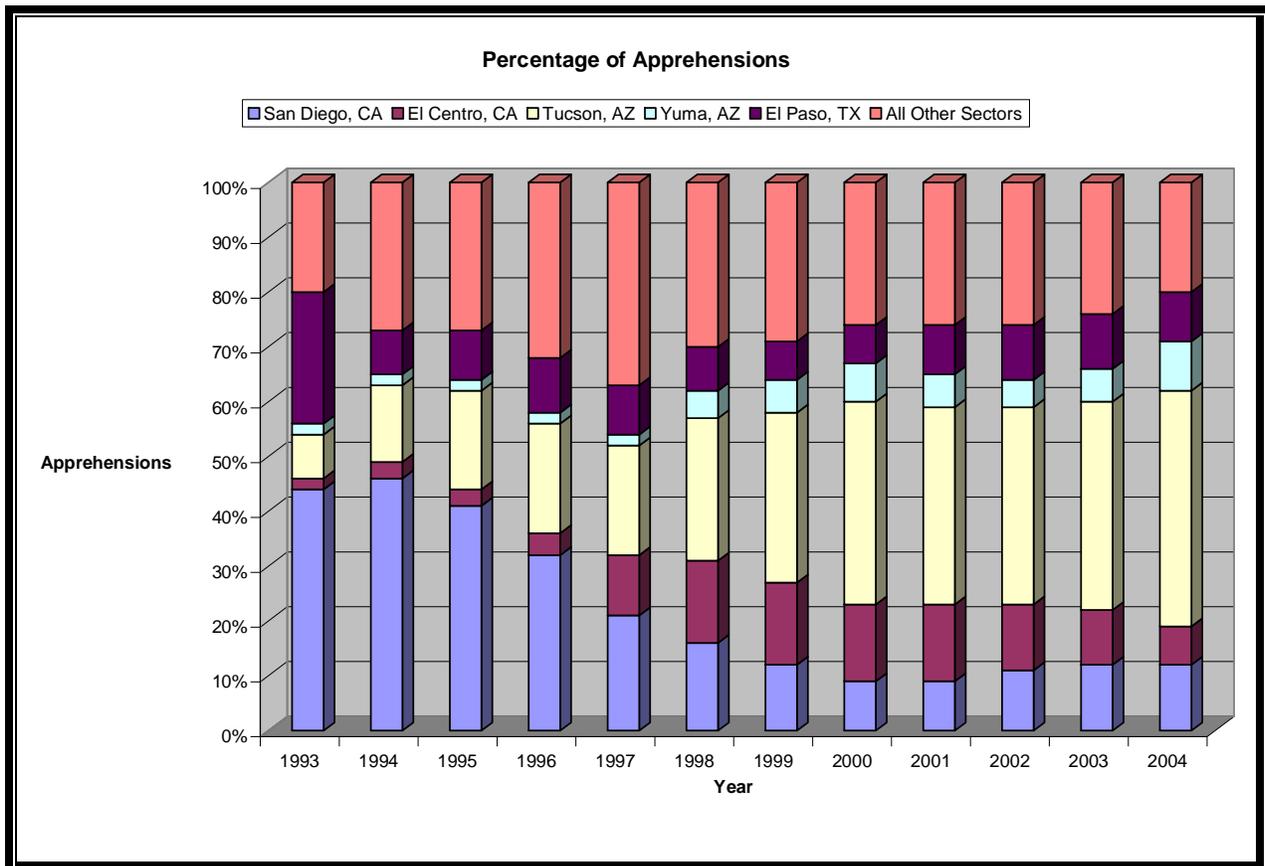
The Government Accountability Office (GAO) attempted in several reports to evaluate the overall effectiveness of the Gatekeeper Complex strategy, but found that the information provided by the Border Patrol was insufficient to determine whether the goal of the prevention of undocumented immigration through deterrence strategies were achieving the desired results (Illegal Immigration: Status of Southwest Border Strategy Implementation 1999). From FY 1994 the number of apprehensions along the southern border increased 68 percent to an all time high in FY 2000 of over 1.6 million (Cornelius 2001; INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). The Border Patrol only releases the number of apprehensions, but does not reveal the number of times that an individual migrant is apprehended. Due to this and other factors it is difficult to determine more detailed information about undocumented immigration.

As predicted by the Border Patrol, border crossing became more difficult, and smugglers fees for transporting migrants across the border and to other parts of the U.S. increased. For example, in 1999 a normal charge to be smuggled from Douglas, Arizona to Phoenix, Arizona was \$150. By the summer of 2000 the cost had increased to between \$800 and \$1,300. By 2004 it could cost upwards of \$3,000 (Migrant Smugglers: Friend or Foe? 2004). Even with such sharp increases in smuggling fees, migrants are still willing to pay. Often times family members already in the U.S. pay the fees to the smugglers who aid other family members in crossing the border. Once in the U.S., migrants can earn enough money to repay the costs (Cornelius 2001).

## Border Enforcement Policy Leads to Migrant Deaths

By the late 1990s it was clear, based on the number of apprehensions, that migrant traffic had shifted from El Paso and San Diego to other more remote and dangerous areas along the border, especially the Tucson Sector in Arizona (see Figure 3).

**Figure 3 Percentage of Apprehensions by Sector**



Source: U.S. Border Patrol

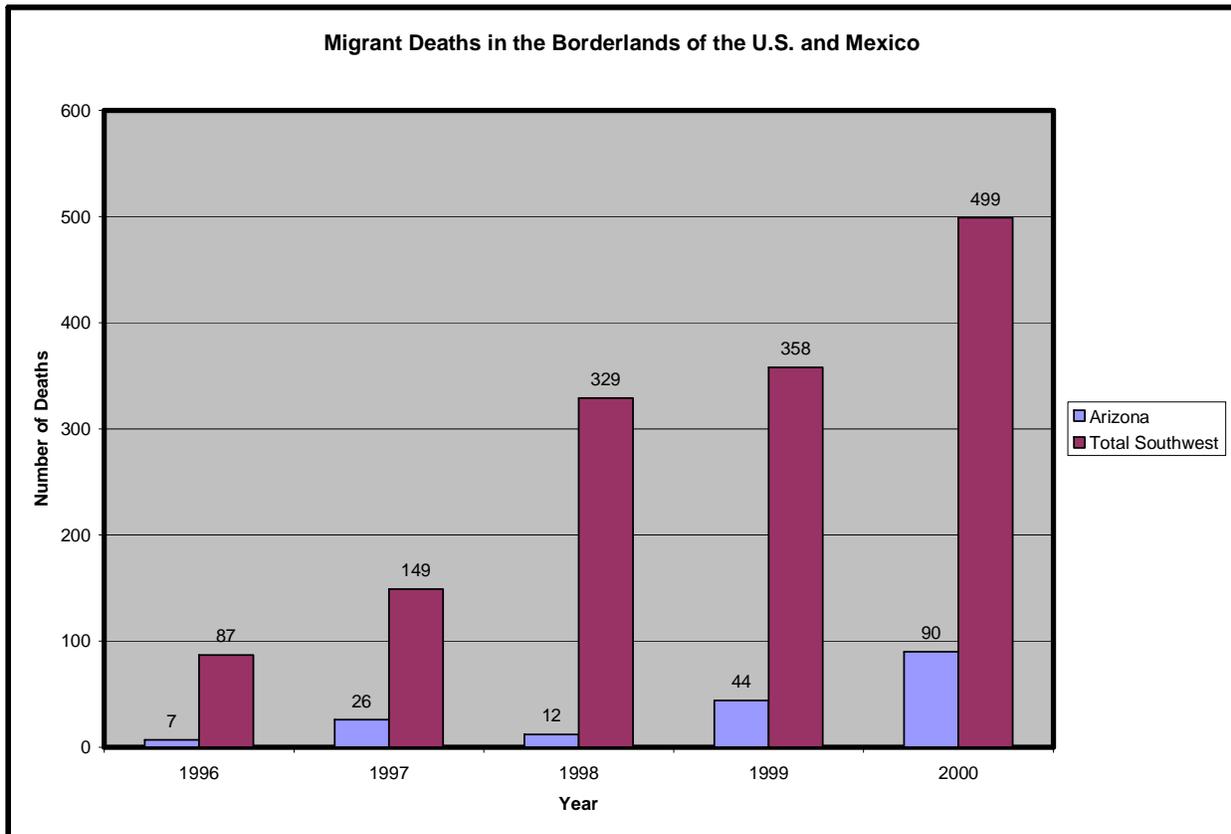
However, as Figure 2 depicts, the Gatekeeper Complex did not significantly reduce the number of migrants attempting to cross the border (INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years 2001). In 1995, San Diego accounted for forty percent

of all apprehensions with 524,231. By 2000, it only accounted for nine percent of apprehensions with 151,681. After Operation Hold-the-Line in El Paso and Operation Gatekeeper in San Diego caused apprehensions to decline in those areas, the percentage of apprehensions in Arizona rose by 351 percent between 1994 and 2000. The Border Patrol in Tucson reported a record 616,000 apprehensions in 2000 which was a 170 percent increase over 1995 (Cornelius 2001). From 1998 through 2004, the Tucson Sector had the highest percentage of migrant apprehensions of any of the Border Patrol sectors.

As the prevention-through-deterrence strategy shifted migration from other parts of the border, a flood of migrants flowed into the dangerous desert of the Tucson Sector. The Federal Government did not provide the necessary resources, including Border Patrol agents, to adequately seal the border. The lack of resources allowed the border to remain porous (Scharf 2006) in Arizona, inviting migrants to cross there as the Border Patrol's enforcement strategy had intended. A major consequence, shown in Figure 4, of the current border enforcement regime, and the one most pertinent to this report, is the rise in the number of migrants dying while crossing the border into the U.S., especially in the Tucson Sector.

The overall number of deaths per year in the late 1980s along the U.S.-Mexico border declined through the early 1990s. However, border-crossing deaths began increasing in 1995, a year after the institution of Operation Gatekeeper, and had doubled by 2005. During this period the number of illegal entries into the U.S. remained relatively constant (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated 2006). In 1998 there was a total of 254 border-crossing deaths. 2003 saw the number rise to 334. And by 2005 the total was 472 (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have

**Figure 4 Migrant Deaths in the Borderlands of the U.S. and Mexico**



**Source: Cornelius**

Not Been Fully Evaluated 2006). Since 1995 more that seventy-five percent of the doubling in deaths can be attributed to increases in deaths occurring in the Tucson Sector. According to data from the Border Patrol’s Border Safety Initiative (BSI) there were eleven deaths in 1998 in the Tucson Sector compared to 216 in 2005 (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated 2006).

From the late 1980s through the early 1990s, deaths from exposure declined (Eschbach, Hagan, and Rodriguez 2003). However, heat-related deaths usually due to dehydration have increased significantly over the last fifteen years. Evidence shows that the increase is related to

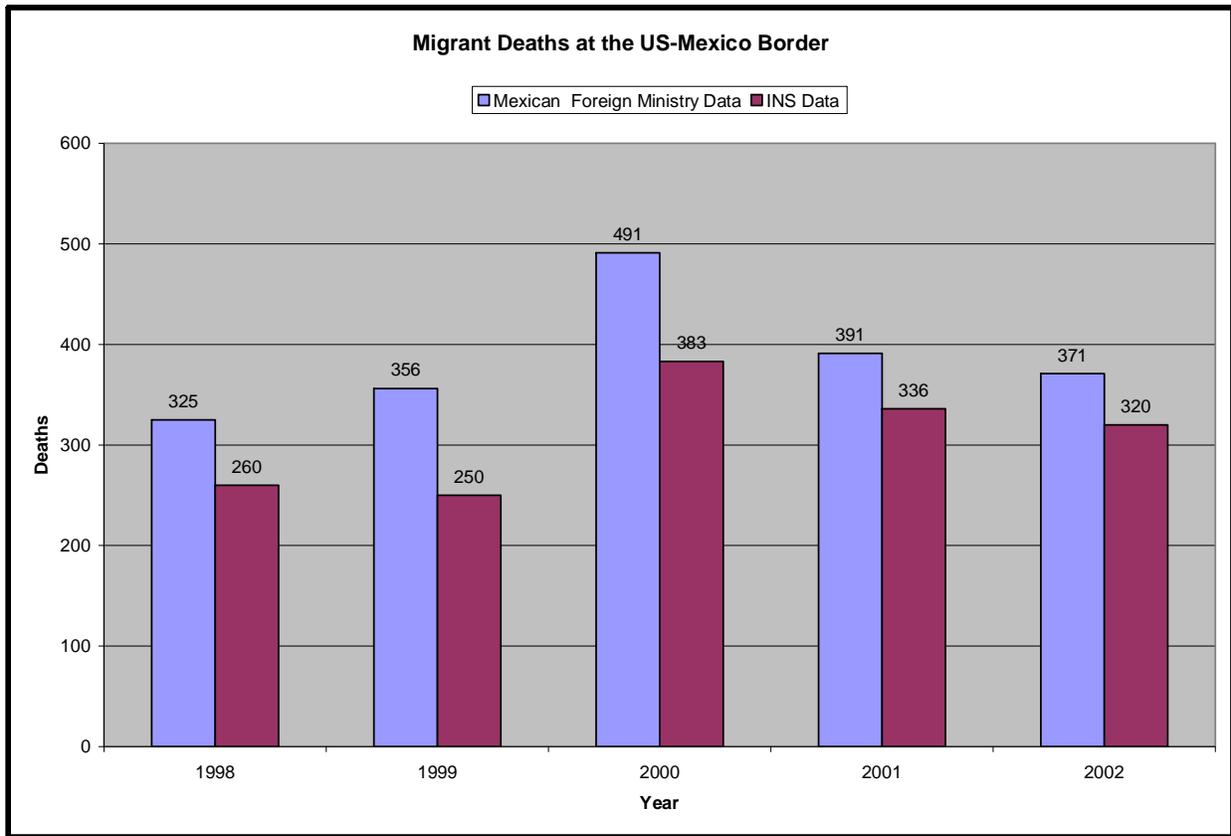
the shift of migrant traffic from the San Diego and El Paso Sectors to the Tucson Sector (Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995 and Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated 2006). According to the Border Patrol, in 1992 and 1993 only 6 deaths along the entire southern border were from exposure. By 2000 that number had increased to 99. As many humanitarian groups and border watchers expected, migrants began to die in large numbers in Arizona, mostly from heat exposure that caused dehydration, especially in the brutally hot summer months.

Many deaths go unreported because many bodies are not recovered because of the remoteness of the areas where migrants cross the border. Also, the number of deaths may have been undercounted by the Border Patrol because there is not one standard methodology for keeping accurate records. Each sector has the discretion to determine how it tracks border deaths. Furthermore, there are many groups and organizations that track migrant deaths along the border. As Figure 5 illustrates, migrant death statistics from government agencies and other non-governmental organizations frequently differ (LoMonaco 2005). Each group uses different definitions and methodologies. Regardless of these differences, all of the statistics demonstrate the overall trend of increasing migrant deaths.

### **The Border Patrol Acknowledges the Rising Death Toll**

The Border Patrol has acknowledged the increase in deaths in several ways, but has not taken sufficient steps to lower the number of border-crossing deaths. In June 1998, the INS launched the Border Safety Initiative (BSI) with the intent of making the border safer for migrants, Border Patrol agents, and border residents via three methods: prevention, search and rescue, and identification. The INS began to monitor and report data on border deaths in an

**Figure 5 Differing Migrant Death Counts**



**Source: Latin American Working Group**

attempt to address safety issues. Several problem areas along the border were identified as being hazardous to border crossers based on migrant death data, so the INS took measures by installing warning signs, lighting, and increasing Border Patrol presence. Additionally, the INS coordinated with Mexican Consuls to erect warning signs in dangerous areas on the Mexican side of the border, and instituted a coordinated media campaign to warn migrants about the dangers of border crossing (BSI Fact Sheet 2005).

Rescue beacons have been installed in some of the most remote and hazardous regions in Arizona in response to 14 migrants that died in the Cabeza Prieta National Wildlife Refuge in June of 2001. The beacons are towers visible from some distance that are equipped with a button

that migrants can push to alert Border Patrol that they are in distress (Carroll 2001). Also, a number of search and rescue units, called BORSTAR, are assigned to each sector. The agents have received training in medical skills, technical rescue, navigation, communication, swift water rescue, and air operations to carry out emergency search and rescue operations. As of October 2005 there were 164 BORSTAR agents (GAO 2006).

The Interior Repatriation Program (IRP), begun in 2004 in conjunction with the Mexican government, returned migrants apprehended in the Yuma and Tucson Sectors on a voluntary basis to their hometowns in the Mexican interior instead of dropping them off in Mexican border towns. The Lateral Repatriation Program (LRP), implemented in 2003, returned migrants caught in Arizona to ports of entry in Texas. The logic behind both programs was to remove migrants from the dangerous desert environment in Arizona so that they would not continue attempting to cross there (GAO 2003).

The Arizona Border Control (ABC) Initiative, mentioned above in this report, also had components meant to address the rising migrant death toll. A media campaign warned migrants of the risks and dangers associated with crossing in the desert. An increase in manpower and infrastructure associated with the program was also seen as a way to better track and rescue endangered migrants to stem the tide of death (GAO 2006). Phase II of the ABC explicitly states one of its goals is to “Further reduce exposure deaths in the West Desert Corridor” (DHS: Fact Sheet: Arizona Border Control Initiative – Phase II). The ABC, however, was an enforcement mechanism first, that acknowledged the rising death toll through secondary small scale strategies. By instituting programs like the Border Safety Initiative, the Interior Repatriation Program, and the Lateral Repatriation Program and installing rescue beacons, the Border Patrol has acknowledged the crisis of migrant deaths that it has helped to create. Current policies

continue with the Gatekeeper Complex model emphasizing escalating enforcement even though the policies have failed to significantly reduce undocumented immigration while increasing migrant deaths. Instead of seeking to change this failing policy, the Border Patrol has instead instituted minor measures focused on migrant safety that appear to be little more than public relations efforts that have had little effect in reducing migrant deaths.

## **II. HUMANE BORDERS AND THE CELL PHONE EXPANSION PROJECT**

### **Humane Borders' Origin and Mission**

Humane Borders was founded in June of 2000 as a 501(c)(4) nonprofit corporation in Tucson, Arizona by Dr. Robin Hoover, pastor of First Christian Church, and other community leaders and concerned citizens in response to increasing migrant deaths in southern Arizona. The board members as of June 2007 were President Mark Townley, Vice-President Paul Fuschini, Treasurer Tim Holt, Secretary Sister Elizabeth Ohmann, Corporate Officer Rev. Randy Mayer, Media Director Rev. Robin Hoover, and Executive Director Sue Ann Goodman. Status as a 501(c)(4) nonprofit corporation allows for political lobbying, but does not allow Humane Borders to receive tax deductible donations (Humane Borders 2007). First Christian Church donates space in its building for Humane Borders' offices. Humane Borders functions almost entirely with the time and effort of volunteers. Executive Director Sue Goodman is paid part time and volunteers many more hours. Humane Borders also frequently has student interns from the University of Arizona that are compensated in part by Humane Borders (Young 2007).

I worked at Humane Borders from August 2005 through May 2007 as a program coordinator to fulfill my service requirement as a fellow in the Peace Corps Fellows Program while seeking my Master's of Science in Planning at the University of Arizona's Planning Degree Program. Each of the four semesters of the program I worked 240 hours, plus 400 hours in the summer of 2006. While employed at Humane Borders, I gave interviews to the media, organized and led educational trips throughout southern Arizona and northern Mexico, gave presentations to groups, managed a fleet of water trucks, and serviced water stations.

Humane Borders' main mission is to reduce the number of migrant deaths caused by U.S.

border policies and border enforcement strategies by establishing, maintaining, and servicing water stations along migrant trails throughout southern Arizona to combat dehydration from heat exposure, the most common killer of migrants. A water station consists of one to six plastic fifty-five gallon drums, most of which are donated by a local soft-drink bottler, placed on metal stands and filled with chlorinated water (Humane Borders 2007). A blue flag on a thirty foot pole stands by the stations to make them visible to migrants (Young 2007). Sixty-five drivers are trained to service the stations in specially designed water trucks. On some public lands, permits allow stations to be placed a day's walk apart. In other areas, stations are located near livestock water tanks to prevent damage to equipment and to deter migrants from drinking foul water (Humane Borders 2007).

Of the more than eighty stations that Humane Borders maintains, most function year-round, but a few function only during the hottest months of the year, May through October, when migrant deaths from dehydration peak. When a station is not in service, it is completely dismantled and stored at the Humane Borders' office. The water stations are all legal and are placed on private property in Cochise and Pima counties and with appropriate permits on public lands in Pima County, Organ Pipe Cactus National Monument, Buenos Aires National Wildlife Refuge, Cabeza Prieta National Wildlife Refuge, and Ironwood Forest National Monument. Water stations are also maintained on land owned by the City of Tucson (Humane Borders 2007).

### **Advocating Change through the Media**

Another important mission of Humane Borders is advocating for changes in U.S. immigration policy and border enforcement strategies. Humane Borders calls for the legalization

of undocumented migrants currently in the U.S., the creation of a responsible guest worker program, an increase in the number of visas for Mexican nationals, a demilitarization of the border, support for economic development in Mexico, and more federal aid for local medical service providers, law enforcement, adjudication, land owners, and land managers (Humane Borders 2007). To help achieve its mission, the organization has a very strong media presence, receiving coverage in major news outlets in the U.S. and around the globe (Humane Borders 2007). Humane Borders is a relatively small organization with an annual budget, usually in the range of \$100,000 to \$150,000 (Young 2007). The organization therefore harnesses the power of the media to multiply its impact and to be at the forefront of the immigration dialogue on a local, regional, national, and international level. Humane Borders volunteers, and especially founder Rev. Robin Hoover, frequently give interviews for television, radio, and documentary films, and escort journalists and filmmakers throughout southern Arizona and northern Sonora, Mexico. News outlets frequently contact Humane Borders for comments and opinions about border and immigration issues. Through the media campaign and coverage, Humane Borders educates the world about the realities and complexities of migration in southern Arizona and focuses attention on the human aspect – the migrant – of current border policies. Because of its strong media presence, groups and visitors from around the world hear about Humane Borders and come for extended periods to volunteer their time and explore the realities on the ground by servicing water stations, picking up trash in the desert and at migrant camps, maintaining equipment, attending presentations, viewing documentaries, and crossing the border into Mexico to understand the realities of migration from the Mexican perspective (Young 2007).

## **Death Maps and Warning Posters**

Humane Borders has partnered with the Center for Applied Spatial Analysis (CASA) at the University of Arizona to create several maps (see Appendices 1 and 2) to aid its mission of saving lives. The maps use Global Positioning System (GPS) and other data to help better understand migration patterns and to track migrant deaths. The maps aid Humane Borders' work with land managers and land owners to help understand where to best place water stations to save the most lives and how the placement of the stations has helped to decrease the number of heat related deaths (Humane Borders 2007). The use of Global Information System (GIS) software donated in 2005 by Environmental Systems Research Institute, Inc. (ESRI) enabled Humane Borders to plot water stations and migrant deaths on high resolution maps (Humane Borders 2007). Four smaller maps focusing on specific areas of high migrant traffic in southern Arizona were created as warning posters containing information pertinent to migrant safety. The warning posters are widely distributed in border towns in Sonora, Mexico and include information depicting the distance that a migrant could expect to walk in a day, location of Humane Borders' water stations and Border Patrol rescue beacons, emergency telephone numbers, the most dangerous months for crossing, the locations of reported deaths, and a clear message discouraging migrating across the desert (Humane Borders 2007).

## **Expanding Cellular Telephone Service in Response to Migrant Deaths**

Currently Humane Borders is exploring the possibility of pursuing a project to have cellular telephone towers installed to expand cellular telephone coverage in the southern Arizona desert where it is mostly non-existent. Humane Borders contends that expanding cell phone service to cover some of the most dangerous migrant corridors in southern Arizona would

drastically reduce the number of migrant deaths. The idea for the project arose after evidence began to surface that some migrant guides as well as migrants themselves were traveling with cell phones. Humane Borders volunteers began to find Mexican cell phones and accessories in the desert while servicing water stations and during monthly trash pick-ups (Blue 2005). Also, the U.S. Customs and Border Protection Agency (CBP) reported through press releases on its website that migrants were calling to be rescued using cell phones. As early as 2004, a CBP press release states, "...an undocumented alien in physical distress contacted the local police via the 911 emergency dispatch services via cell phone" (U.S. Customs and Border Protection 2004). A 2005 press release states "...BORSTAR was launched into action yesterday in Tucson Sector when they received a 911 cellular phone call" (U.S. Customs and Border Protection 2005). Another press release says, "Yuma Sector Customs and Border Protection (CBP) Border Patrol agents rescued 12 illegal aliens in distress after a 911 call was made" (U.S. Customs and Border Protection 2006a). Finally, another states, "The caller used his cellular telephone to call the 911 Emergency Line and plead for help." The caller was in a "remote location in the desert" (U.S. Customs and Border Protection 2006b).

Numerous articles from Arizona newspapers have reported rescues initiated by migrants using cell phones to contact emergency services as far back as 2002 (Carroll 2002; Carroll 2005; Huicochea 2005; LoMonaco 2005; Marizco 2005a; Marizco 2005c; Marizco 2005d; Rico 2003; Rotstein 2005; Staff 2003; Stellar, Tim and Ibarra, Ignacio 2002). The Arizona Daily Star reported that as part of the Border Safety Initiative the Border Patrol broadcast public service announcements on radio stations in Mexico advising migrants to call the Border Patrol's special help line number or 911 in case of danger or if in need of rescuing. As a result BORSTAR has received numerous emergency cell phone calls from migrants needing to be rescued. Between

October 1, 2004, and July 15, 2005, cell phone calls from the desert resulted in 176 migrants being rescued (Marizco 2005b). The Border Patrol Search, Trauma and Rescue Team (BORSTAR) carried out 560 rescues in 2004 and 850 in 2005. Out of the 850 rescues, 386 were directly attributed to 38 cell phone calls made to 911 that were relayed to BORSTAR (Blue 2005).

Based on the mounting evidence of migrants using cell phones to initiate rescues, Humane Borders has created a map of southern Arizona, with the help of CASA, showing cell phone coverage as of 2004 as well as the locations of migrant deaths between 2000 and 2004 (see Appendix 1). The map clearly shows that the vast majority of the deaths occurred where there is no cell phone service. Based on the map, Humane Borders has also submitted a proposal in 2005 to DHS to install fifteen cell towers in southern Arizona and three in southern California at an estimated cost of \$7.3 million to cover some of the most dangerous migrant trails and crossing areas. Humane Borders estimates that the project will save the lives of hundreds of migrants (Young 2007).

In 2006, representatives from Humane Borders met with Arizona Governor Janet Napolitano to inform the Governor of the group's current activities as well as to present several priorities, including increased cell phone service, to reduce the number of migrant deaths. The Governor showed interest in the project to expand cell phone service in rural Arizona. Finally, in January 2007, Rev. Robin Hoover attended a meeting between the U.S. Border Patrol and land managers at which the expansion of roads in Cabeza Prieta National Wildlife Refuge by the Border Patrol was discussed. Rev. Hoover raised the idea of expanding cell phone service in these areas and received a positive response from the land managers and a negative response from the Border Patrol representatives (Young 2007).

### **III. METHODOLOGY**

#### **Purpose of Report**

The purpose of this report is to identify a narrowly defined group of stakeholders for a possible project to expand cell phone service. The stakeholders were interviewed and a stakeholder analysis model was used to gain a better understanding of the political landscape. Finally recommendations are made regarding actions that should be taken to facilitate a successful project if undertaken. The issue of immigration in the current political climate is extremely sensitive and divisive. Any project seeking to save the lives of undocumented immigrants requires a skillful negotiation of the political landscape in order to be successful. Using stakeholder analysis to decipher the political landscape helps to determine the feasibility of moving forward with the cell tower project, or whether Humane Borders should focus its resources elsewhere. It also helps to identify supporters and detractors of the project. Furthermore, the interviews have revealed important stakeholders that were not initially identified in this report or by Humane Borders. The stakeholder concept helps to provide a framework for determining who to interview. For an organization like Humane Borders with limited resources and a project dealing with the ultra-sensitive issue of immigration, understanding as many elements of the political landscape as possible is crucial so that the limited resources can be focused as effectively and efficiently as possible for the greatest impact.

Based on some of the broader definitions of stakeholders, there are thousands of possible stakeholders for the Humane Borders cell tower project that could influence or be influenced by the project. Anyone who would use the expanded cell phone service, from local residents, tourists, and undocumented migrants could be considered a stakeholder. Interviewing hundreds

of thousands of stakeholders, most of whom would not have the capacity to engage in the process or affect decision making would be ineffective. The number of stakeholders was narrowed down to a manageable size for this report while still providing a strong initial survey of the political landscape. Some case studies provide excellent examples of dividing stakeholders into groups and winnowing down the number to be interviewed. The concept of institutional stakeholders as used by these studies reviewed below provides a strong framework to identify stakeholders for this project. With the help of Humane Borders, this report narrows down stakeholders to agencies and entities with the greatest stake in migrant deaths and the associated costs – institutional stakeholders. The institutional stakeholders are further categorized into three groups: public land managers, first responders/law enforcement, and policy makers.

Most of the land in the Border Patrol's Tucson Sector where migrants are dying is controlled and managed by government agencies. This includes the vast majority of the land that touches the border with Mexico. Improved cell phone coverage on these government lands will provide the greatest impact in reducing deaths in these remote areas. Since most of the cell towers would likely be placed on or adjacent to land managed by local, state, and federal government entities, these government entities appear to have a large stake in the project.

First responders and law enforcement are the first on the scene in emergencies and disasters. They rely on efficient and comprehensive communications infrastructure to respond as quickly as possible to these situations that include rescuing migrants in distress and processing the bodies of dead migrants. Because first responders and law enforcement rely on communications infrastructure to protect the public health and safety, they comprise another category of institutional stakeholders.

The final category of institutional stakeholders is policy makers. Policy makers represent

the citizens that may be affected by a cell tower project. They gauge on a daily basis the political climate through direct contact with their constituents. Policy makers may also have the ability to pass laws restricting or facilitating increased cell phone coverage.

The results of a stakeholder analysis based on interviews with the identified institutional stakeholders are reported in Chapter 4. To evaluate the efficiency of stakeholder analysis, I review three case studies here. As the case studies demonstrate, stakeholder analysis is an effective tool to predict the impact that stakeholders can have on the success or failure of a project. This method clarifies the values, objectives, attitudes, and interests of the most influential institutional stakeholders of this project. Doing so helps to identify common ground with stakeholders on which to move the project forward, as well as possible conflicts that may alter the course of the project. If conflicts are detected, strategies may be recommended to address them or the project may be put on hold because of insurmountable resistance. The cases illustrate that the goals of the strategies should aim to secure cooperation from diverse social groups that may not otherwise work together or support a project. The stakeholder analysis culminates in recommendations based on the predicted feasibility of the project.

### **The Stakeholder Concept**

The stakeholder concept was originally conceived of in a business context. The common perception was that the objective of a business or corporation was to increase profits and growth to maximize shareholder value. The stakeholder concept was created when this perception began to change to recognize that businesses actually had wider responsibilities to society (Friedman and Miles 2006). Freeman's watershed work *Strategic Management: A Stakeholder Approach* provides the classic definition of a stakeholder in a business context: any group or individual

who can affect or is affected by the achievement of a corporation's purpose (Freeman 1984).

The stakeholder concept has become popular, gaining attention in many books and journal articles. It has also gained wider acceptance among different types of organizations, including non-governmental organizations (Friedman and Miles 2006), which is pertinent to Humane Borders. In part because of the idea's rise in popularity and the idea's different definitions, there is some confusion about the true meaning and theory behind the word. The confusion has led to criticism of the concept being too vague and too open to interpretation, allowing the word to mean whatever an author wants or needs. One source lists over fifty-five definitions of stakeholders from seventy-five sources (Friedman and Miles 2006).

The definition of a stakeholder as "any group or individual that can be influenced by, or can itself influence, the activities of the organization" reflects the concept's relevance in a non-business context. This definition highlights the idea that consequences, intended or not, of an organization's goals or activities or even consequences not related to the group's goals or activities can create an organization-stakeholder relationship (Friedman and Miles 2006). Two more definitions provide a very broad analysis of a stakeholder and are useful for this report. "Everyone in the community who has a stake in what the company does" (Frederick 1998) and "parties affected by an organization" (Lampe 2001). These definitions provide latitude to researchers to adapt a definition of stakeholder appropriate for their unique research. Later in this chapter the case studies that are reviewed provide examples of how the stakeholder concept has been adapted to particular research scenarios. These cases were selected because they are examples of using stakeholder analysis in a non-business context. They also use stakeholder analysis to analyze the political atmosphere and stakeholder sentiment to make recommendations to advance a project. Finally, the case studies put stakeholders into categories and focus

narrowly on those that could have the greatest impact on a project's success.

## **Stakeholder Analysis**

Stakeholder analysis is a tool used to gauge the importance and influence of key stakeholders that have the ability to fundamentally influence a project's outcome and success. It is most effective in the early planning stages of a project (Quality Guide - Stakeholder Analysis 2003). The tool provides flexibility and is frequently manipulated by researchers and professionals to analyze a research question, project, or conflict. Stakeholder analysis can help:

- Identify people, groups, and organizations (stakeholders) that will be able to affect projects.
- Anticipate whether a stakeholder's influence will be positive or negative.
- Create strategies to elicit support for projects.
- Reduce obstacles hindering project completion (Quality Guide - Stakeholder Analysis 2003).

Neither a definition of stakeholder analysis nor a boilerplate model adequately represents the process. Viewing how other researchers crafted stakeholder analyses based on their particular situations provides the best insight into how to create a stakeholder analysis for this report. Each case study is different and utilizes its own unique stakeholder analysis adapted from models before it, as will this report.

## **Stakeholder Analysis in Australia**

*Participatory tools for coastal zone management: Use of stakeholder analysis and social mapping in Australia* by Rockloff and Lockie considers research being conducted in Australia that attempts to understand conflicts between resource users and the associated issues surrounding coastal zone management. The report defines stakeholders as, "All individuals,

groups, organizations and communities either involved in, or affected by, decisions made to plan and manage coastal resources.” Then it distinguishes between “institutional stakeholders” which are organized groups that represent many interests and have the resources and technical expertise to be effective participants (government agencies, industry, etc.) and “local stakeholders” such as small groups or individuals lacking sufficient resources or organizational capacity to successfully engage in consultative processes and influence decision making.

Stakeholder analysis is a social research method that makes it possible for stakeholders to be better understood. When stakeholders are better understood, conflicts are better understood. This is crucial for effective conflict resolution. As the authors state, “Stakeholder analysis makes issues more visible and clarifies the ways in which the multiple values and objectives of stakeholders converge. This then provides the basis for reform of current participation and decision-making processes.” Furthermore, stakeholder analysis can identify specific conflicts and bring to light attributes of the various participants early in the project planning process to make future success more likely.

This case study uses stakeholder analysis as an effective participatory tool to document the values, interests, attitudes, and aspirations of stakeholders. Furthermore, understanding conflicts among stakeholders was essential to creating an approach to decision-making that ultimately secures cooperation from diverse social groups. Finally, it analyzes the contributions of stakeholder analysis to conflict management (Lockie and Rockloff 2004).

### **Stakeholder Analysis in Brazil**

*Stakeholders’ Perceptions of a Wading Bird Colony as a Community Resource in the Brazilian Pantanal* by Bouton and Frederick uses a stakeholder analysis model to understand the

conflict between resource users and ecosystems in the Brazilian Pantanal, a wetland area. The authors state that, “A stakeholder is an individual or group that has the power to affect, or is in a position to be affected by, management decisions regarding a specific resource.” The analysis is used to inform the design and implementation of management strategies that facilitate the inclusion and cooperation of stakeholders.” The stakeholders are put into different categories based on their level of influence and power to influence the management policy or plan. The authors use stakeholder analysis to better understand the conflict in order to create a management plan. Development of a successful management plan is crucial to manage the multiple uses of the wetlands while at the same time protecting ecosystems and being realistic and equitable for the people living in the area.

The stakeholder analysis is used to identify and focus educational efforts, as well as to predict and avoid potential conflicts between the stakeholders and the conservation objectives of the management plan. Interviewing is the main method to identify and gather information about stakeholders. Interviewees are asked to identify other important stakeholders. Certain stakeholders were excluded and not interviewed; some because of the sensitivity of their activities and others because of the limited time and resources of the researchers. The authors conclude their case study with recommendations for the management plan based on their analyses of the stakeholder interviews (Bouton and Frederick 2003).

### **Stakeholder Analysis in Canada**

*Non-Market Housing Models in Ontario: A Stakeholder Analysis* by Sousa and Quarter uses stakeholder analysis to investigate the restructuring of Ontario’s non-market housing system from 1990 to the present. The author’s acknowledge the wide variety of definitions of

stakeholders. Similar to the previous case studies, the stakeholders are divided into different categories, in this case primary and secondary. An organization cannot survive without the continuing participation of primary stakeholders. This is not true with secondary stakeholders. Interestingly, the authors note that during an organizations lifecycle the status of a primary stakeholder can shift to that of a secondary stakeholder, and vice versa.

Stakeholder analysis is used to identify key stakeholders of an organization or project and their impact on success. Furthermore, commonalities among stakeholders, as well as their roles and influence, frequently become apparent. Finally, stakeholder analysis assesses the current state of the project. This case study adapts the typical stakeholder analysis to fit its particular goals (Sousa and Quarter 2004).

### **Summary of the Case Studies**

The three case studies demonstrate different definitions of stakeholder and adapt them to fit each unique research context. Also, the researchers for all three cases categorize stakeholders in some way to help them focus their research and analysis. Categorizing the stakeholders allows them to be more efficient in their research and more attentive to those stakeholders that they perceive to be most influential. Furthermore, by categorizing the stakeholders, some are determined to be unimportant to the analysis and are therefore excluded. A broad definition of stakeholder that includes nearly any person or group that is affected by a project creates an untenable number of stakeholders for an analysis. The case studies narrow the number of stakeholders to a manageable size in order to reduce distractions from inconsequential stakeholders, thus making the final analysis more meaningful and focused.

The stakeholder analyses in these case studies are undertaken for similar reasons. One

major objective is to help the researchers better understand and clarify current or potential conflicts, or conversely, areas of common interests and values on which to build consensus. Interviewing is a common method used to encourage study participants to express values, objectives, interests, and attitudes. Where the values and attitudes of many stakeholders converge can help researchers determine whether or not a project has potential for success or whether consensus must be built before moving forward. Where they diverge may indicate that a project is not feasible or that the current decision making process or participation needs to be reformed. Furthermore, it may indicate areas where a public information campaign could be focused or whether an alternative course of action may be appropriate. Influential stakeholders in the group are often identified that will be important to the future success or failure of a project. In summary, understanding these elements communicated by stakeholders allow researchers to: understand conflicts, enhance probability of future success, secure cooperation from diverse groups, inform the design and implementation of management strategies, facilitate the inclusion and cooperation of stakeholders, and focus educational efforts. These elements are crucial to the success of a project.

The three case studies provide tested methods and models that can be used to determine the feasibility of a project that expands cell phone coverage in southern Arizona. Based on investigations of their areas of research, the researchers for the case studies determined which stakeholders to interview that they believed would be most effective to meet their project and research objectives. In a similar way, through investigations with the board of Humane Borders I developed a list of stakeholders to be interviewed and separated them into categories. It became apparent that the stakeholders that had been identified were narrowly defined. Many stakeholders were left out because of time constraints. The stakeholders that were chosen by

Humane Borders was sufficient to determine the feasibility of forging ahead with a cell phone coverage expansion project. Based on research about stakeholders and stakeholder analysis, I determined that the narrowly defined groups of stakeholders identified for this report are institutional stakeholders that represent agencies and units of government because they have political power, control access to land, and represent many interests. They have the resources and technical expertise to be effective participants in the success or failure of a future cell phone expansion project. For this report I define stakeholders as public land managers, law enforcement/first responders, and policy makers in southern Arizona. These individuals either manage land or manage or work for agencies that are affected by migrant deaths and could significantly contribute to the success or failure of a project to expand cell phone coverage in southern Arizona. These agencies and entities have a large stake in migrant deaths and the associated costs. The interviewees provide insight into feasibility, a plan of action, and additional stakeholders to include.

### **Identifying Stakeholders for Cell Phone Coverage Expansion Project**

First I identified a group of stakeholders that could provide a strong initial survey of the political landscape in order to make recommendations about moving forward with a project to expand cell phone service in southern Arizona. I consulted with the Humane Borders Board to determine possible stakeholders and to locate contact information. Based on the Board's suggestions, I picked twelve stakeholders to contact for interviews. The stakeholders identified by the Board represented large organizations, and are defined as "institutional stakeholders." I was able to complete ten out of the twelve interviews. A chart with the interview results can be found in Appendix 5.

I was not able to interview a representative of the Tohono O’odham Tribal Council, a significant omission. However, I did interview a member of the Tohono O’odham Police Department. During her interview, Sergeant Anne Miguel provided the contact information for a media representative of the Tohono O’odham Nation (the Nation) who attempted to schedule a meeting with a representative of the Tribal Council for me. I was not able to conduct an interview because of time constraints. The media representative explained that a wildfire on the Nation claimed the attention of the Tribal Council. Finally I ran out of time. A representative of the Tohono O’odham Tribal Council should be consulted regarding the possibility of moving forward with a cell phone coverage expansion project because the Nation has very little cell phone infrastructure and is experiencing increasing numbers of migrant deaths (see maps in Appendices 1 and 2). The participation of the Nation is crucial to the success of a project.

I also attempted to schedule an interview with a representative of the Pima County Sheriff’s Department. I spoke with a number of public relations representatives who continually put off scheduling an interview because they did not feel qualified speaking about a cell phone coverage expansion project. After several recommendations of who to contact at the department and several attempts to schedule an interview, I ran out of time. The Sheriff’s Department should be consulted before moving forward with a project.

During the interviews, several stakeholders that were not interviewed for this report were indicated as stakeholders that should be included when moving forward with a cell phone expansion project. They include the U.S. Coast Guard, the Barry M. Goldwater bombing range, the Federal Aviation Administration, Tohono O’odham utility companies, the Emergency Manager for Pima County, Defenders of Wildlife, the Sierra Club, and the Mexican Consulate.

The maps indicating migrant deaths and cell phone coverage in southern Arizona that

were created through collaboration between the University of Arizona Center for Applied Spatial Analysis (CASA) and Humane Borders were used to help determine who the major institutional stakeholders are in southern Arizona. The eastern most part of the map covers from Coronado National Forest just west of I-19 west to San Diego. The U.S.-Mexico border is the southernmost part of the map and it extends to just north of Phoenix. The map depicts surface management of the land by color code as well as water stations, rescue beacons, migrant deaths, and cell phone coverage. For this project I focused on the land south of I-8 from Coronado National Forest west to the Barry M. Goldwater bombing range.

Anecdotal evidence suggests that cell phone service has expanded very little since the map was first created. The map indicates that most of the cell phone service is along highways. Interstate 10 and Interstate 8 have the most coverage. Interstate 8 is the southernmost Interstate but is out of the range of most migrants walking north through the desert, so cell phone coverage there does little to help migrants in distress. Highway 86 is the main East-West highway in the study area and runs between Tucson and Why across the Tohono O'odham Nation. Many migrants crossing illegally into the U.S. reach this highway. It has very limited cell phone coverage. Two towns along the highway, Sells, population 2799 (U.S. Census Bureau, 2007), the capital of the Tohono O'odham Nation, and the tiny unincorporated town of Why at the crossroads of Highway 86 and Highway 85, have some coverage.

The map clearly shows that the vast majority of the land where migrants have died is controlled by government entities including The Bureau of Land Management, The National Forest Service, The U.S. Fish and Wildlife Service, The National Park Service, The Tohono O'odham Nation, Pima County, and the state of Arizona. Therefore for this report these entities are considered to be institutional stakeholders. Also included were law enforcement and first

responders that operate in the study area and are often responsible for rescuing migrants. These stakeholders are considered to be institutional stakeholders because they are large organizations representing many interests that have the resources and technical expertise to be effective participants in a project to increase cell phone coverage. They can have the greatest influence in making increased cell phone coverage a reality. Citizens and civic groups could influence such a project, but their influence would likely be channeled through the institutional stakeholders identified in this report. These local stakeholders are important for the future of a cell phone expansion project and should not be overlooked when moving forward in the future, but are outside the realm of this report. Ultimately, however, the success of a cell coverage expansion project will be influenced much more by the institutional stakeholders. Interviewing them, therefore, provides a practical starting point for determining whether or not a project expanding cell phone service is feasible.

### **Conducting Interviews**

Once the stakeholders were identified, a set of interview questions (see Appendix 3) was created to elicit their opinions about expanding cell phone coverage. The open-ended questions probed for perspectives on the feasibility of a project to expand cell phone coverage by asking about barriers, support, opposition, advantages, and disadvantages of a project. Humane Borders staff reviewed the questions to determine their usefulness for moving forward with a cell coverage expansion project and approved them as did Dr. Laura Huntoon, committee chair for this report. The purpose of the questions was to document the support or lack of support for expanding cell phone coverage in southern Arizona, advantages and disadvantages for each organization, barriers to executing such a project, and identifying other institutional stakeholders

not included in those originally identified in the study.

I conducted interviews with Enrique Serna, Pima County Deputy Administrator and Lynette Evans, Arizona Governor's Policy Advisor for Regulatory Affairs via telephone, and the other eight were face-to-face. They were scheduled and conducted from May through July of 2007. When possible the interview questions, a letter from Dr. Laura Huntoon, Associate Professor of Planning, and a copy of a map showing the cell phone coverage in 2004 and migrant deaths through 2004 were emailed to the interviewees in advance. For the first two interviews I used a set of twelve questions. After these initial interviews I revised the questions by combining some because some of the questions were redundant. The face-to-face interviews were taped. The interviews averaged about 20 minutes. At the beginning of the interviews each interviewee was explicitly asked to speak as a representative of their agency. All responded frankly to the interview questions. The views expressed were representative of their agencies, but were not official policy recommendations. After completing the interviews, the responses were entered into an Excel spreadsheet (a chart with the responses can be found in Appendix 5) to help compare and analyze the responses.

## **IV. FINDINGS AND ANALYSIS**

### **Border Policy and Stakeholder Responses**

The policies pursued by the U.S. government since 1994 (see Chapter I) have forced migration away from urban areas and into the remote desert of southern Arizona. This rural landscape is the very land managed by the land managers, patrolled by first responders/law enforcement, and administered by policy makers interviewed for this report. The interviewees have been forced to deal with the negative impacts of undocumented immigration and migrant deaths; a virtually impossible task that none of those interviewed were or are adequately prepared for. The vitriolic rhetoric surrounding undocumented immigration seems distant from the practical realities faced by the interviewees that must cope with the current border policies that have led to the destruction of wilderness areas; tons of trash accumulating throughout the desert; stress on state, county, and local services; emergency rescues of migrants; and migrant deaths. The interviewees that support the idea of a project to expand cell phone coverage view it as another valuable tool to enhance their ability to perform their jobs and to reduce migrant deaths on the lands they manage.

### **Interview Findings and Analysis**

Overall the stakeholder interviews indicated widespread support for increased cell phone service in southern Arizona. They also revealed common responses, common ground on which to move forward, possible barriers, and other stakeholders that should be consulted in the future. Three distinct categories of stakeholders emerged: policy makers, including the Office of Janet Napolitano, Governor of Arizona, Pima County, and the Tohono O’odham Tribal Council; first

responders/law enforcement, including the Border Patrol, Rural/Metro Fire Department, Tohono O’odham Police, and the Pima County Sheriff; and public land managers, including the Bureau of Land Management, the U.S. Forest Service, U.S. Fish and Wildlife Service, and the National Park Service. More similarities were apparent within each distinct stakeholder category, however there were similarities in the responses across the categories as well. While many responses were common to the various stakeholders, they each had a unique point of view and usually shared information that no other stakeholder revealed. In this final chapter I first report on each stakeholder category detailing individual responses. Next, I compare and contrast the responses within each group and across the groups. Following that is an analysis of the responses. Finally, I discuss the implications of my findings and analysis and present a list of recommendations to advance a project to increase cell phone service in the southern Arizona desert.

### **First Responder/Law Enforcement Interviews**

The first responders/law enforcement category was broadly supportive of increased cell phone coverage and acknowledged that many areas that they serve lack adequate cell phone service. Increased communication of any kind, including cell phone coverage, is seen as a benefit because public safety, their primary goal, is enhanced when the public can more easily contact emergency services. Increasing cell phone coverage in areas that currently do not have it will make contacting first responders easier, allowing for quicker and more efficient response to emergencies.

There were some nuances in the responses because of the different nature of the first responders. The Tohono O’odham Police Department is faced with a different set of challenges

because of the remoteness and size of the Tohono O’odham Nation and the amount of drug smuggling and undocumented immigration that occurs there. The police often operate in remote areas where their radio communications do not work. Moreover, a large percentage of migrant deaths that occur in the Tucson Sector of the Border Patrol occur on the Nation. Inadequate communication was a major issue for Sergeant Anne Miguel of the Tohono O’odham Police because it poses a serious safety issue for the police in the field, members of the Nation, and migrants. This lack of communication infrastructure makes it more difficult for citizens to report emergencies and for the police to respond in a timely and effective manner. Sgt. Miguel believes that cell phone coverage would help the police respond to emergencies including migrants in distress. She also briefly alluded to the lack of infrastructure on the Nation. This appeared to contribute to her support for expanding cell phone coverage. She did not raise any disadvantages of expanding coverage. Finally, she suggested consulting the Tribal Council and Tohono O’odham utility companies before moving forward with a project.

Chief Les Caid of Rural/Metro Fire Department stated during his interview that the Rural/Metro Fire Department and its sister organization Southwest Ambulance are also concerned with providing quicker and more efficient response to emergencies. Compared to the Tohono O’odham Police, more of the area that Rural/Metro covers has cell phone service, however some areas still do not. Chief Caid stressed that current communications infrastructure used by first responders and law enforcement, especially the radio communication used in the field, does not permit communication with other first responders and law enforcement agencies because they all use different frequencies. Chief Caid cited this as a major concern because it poses serious problems for Rural/Metro and other first responders and law enforcement when they need to be able to communicate efficiently as they conduct operations together, especially

during catastrophic emergency situations. Chief Caid believes that complete cell phone coverage would be an excellent tool to allow better communication among first responders and law enforcement in the field, as well as to make it easier for the public to contact emergency services. He suggested including as stakeholders Southern Arizona Search and Rescue, county emergency managers, the Arizona League of Cities and Towns, and Voluntary Organizations Active in Disasters (VOADS) like the Salvation Army and the Red Cross.

The Border Patrol is unique in the First Responders/Law Enforcement category. It is part of the DHS, a federal agency, and operates on all of the land that this report focuses on. While most of the other stakeholders in this report are affected by the intense migration in southern Arizona and have a stake in reducing migrant deaths, their institutional missions do not explicitly focus on undocumented immigration. The Border Patrol's mission, however, is to prevent undocumented immigration and apprehend undocumented immigrants once inside the U.S. Furthermore, it sometimes acts as a first responder when rescuing migrants from dangerous situations and as law enforcement when performing routine arrests and detentions. As stated earlier in this report the Border Patrol's budget has been increasing steadily in recent years. It has superior technology and infrastructure, including communications infrastructure, as compared to the other first responders/law enforcement stakeholders interviewed. All other first responder/law enforcement stakeholders stated that their current communication systems were not 100 percent effective and that increased cell phone coverage would be a great benefit. On the other hand, Border Patrol spokesman Jim Hawkins stated that the Border Patrol did not have an opinion on increasing cell phone coverage because it did not use cell phones and that its communications infrastructure was adequate. However, as the interview progressed, Mr. Hawkins stated that increased cell phone service would be advantageous because they too could

not communicate with other law enforcement agencies and first responders because their radios operated on different frequencies. He noted the Federal Emergency Management Agency (FEMA) as an example of an agency that they could not communicate with in the field using current communications infrastructure. Furthermore, he said that cell phones could provide a good back-up to their normal methods of communication. Finally, he stated that greater cell phone coverage would be advantageous to the public affairs officers because they could file incident reports in the field over the phone. So, while the Border Patrol was more guarded about recognizing the benefits of increased cell phone coverage, it has some of the same issues that other first responders and law enforcement have with their communications infrastructure. Finally, Agent Hawkins identified possible stakeholders that might be included moving forward with a project including the U.S. Air Force and Marine Air Wings that use the Barry M. Goldwater Bombing Range and the Federal Aviation Administration (FAA).

None of the first responders/law enforcement stakeholders identified any barriers that they would pose to increasing cell phone service since they would not be paying for the installation or maintenance of the infrastructure, and would benefit from increased cell phone service. One significant aspect revealed during the interviews was that law enforcement was not overly concerned with expanded cell phone coverage being used to facilitate illegal activities. Although Agent Hawkins and others did express mild concern that expanded cell phone coverage could facilitate criminal activity, the attitude was that criminals exploit whatever systems and infrastructure are in place to break the law.

Overall the law enforcement/first responders stakeholders that were interviewed supported expanding cell phone service, although as mentioned before, the Border Patrol was not as enthusiastic as the others. Current communications infrastructure for those interviewed could

be enhanced to improve the ability to communicate in the field. The interviewees viewed the inability to communicate between different agencies when in the field, especially in a catastrophic emergency or disaster situation, as a critical issue that needs to be fixed. Also, better cell phone service would improve the public's ability to contact emergency services in case of emergency. Interestingly, even though the Border Patrol has programs to mitigate migrant deaths and asserts publicly that it is committed to saving lives, Agent Hawkins did not express any interest in the possibility that expanding cell phone service could greatly reduce migrant deaths in the desert.

### **Public Land Manager Interviews**

All but one of the public land managers interviewed supports greater cell phone coverage, but there are serious barriers to installing towers on public lands, especially wildlife refuges. The public lands covered in this report are managed by several different federal government agencies. For this report the following people were interviewed: Sally Gall, Assistant Manager of the Buenos Aires National Wildlife Refuge (Buenos Aires) for the United States Fish and Wildlife Service; Roger DiRosa, Refuge Manager at Cabeza Prieta National Wildlife Refuge (Cabeza Prieta) for the United States Fish and Wildlife Service; Patrick Madagan, Field Office Manager for the Tucson Area Bureau of Land Management (BLM); Julie Kovacs, Border District Ranger at Organ Pipe Cactus National Monument (Organ Pipe) for the National Park Service; and Keith Graves, District Ranger at Coronado National Forest (Coronado) for the United States Forest Service. There is no common federal policy that dictates how these agencies should respond to a proposed cell tower project. Each agency has a different mission and operates under different policies, guidelines, and management plans. Even within the same

agency, land managers that oversee different areas have considerable autonomy to make decisions affecting the land that they manage. The political views of the various land managers can play a role in the decisions they make pertaining to the management of the land, as well. For example, Humane Borders has experienced difficulty renewing some of its long standing water station permits after a sympathetic director for a particular public land was replaced by one that was less supportive of water stations. Furthermore, Humane Borders has met greater resistance seeking permits for water stations from offices in different cities that are part of the same federal land management agency. The fact that these agencies, and even offices in different cities within the same agency, have autonomy to make decisions is important to remember for moving forward with a project to expand cell phone service.

Sally Gall of the Buenos Aires National Wildlife Refuge, Keith Graves of the Coronado National Forest, Patrick Madagan of the Tucson BLM, and Julie Kovacs of the Organ Pipe Cactus National Monument all supported increasing cell phone service for the land that they manage. They believe that cell phones would benefit the public by providing more communications leading to better safety and security. Patrick Madagan noted that most people that use public lands carry cell phones for safety reasons, but find cell phone service to be inadequate. He also stated that BLM colleagues that visit from Washington, D.C. are often amazed that much of the BLM land in southern Arizona does not have cell phone coverage. A common mission of all agencies is to make sure that visitors are as safe as possible. Cases of serious injury, motor vehicle accidents, and criminal activity could be more effectively controlled and responded to with greater cell phone coverage.

Another common benefit revealed in the interviews of the land managers that support increased cell coverage was that it could help staff communicate more effectively in the field.

They stated that current communications infrastructure can be improved on nearly all of the land that they manage. Each agency has its own particular communications infrastructure that operates on its own unique frequency that does not communicate with other agencies' frequencies. Agencies commonly use two-way radios to communicate in the field, but there are areas where they are inadequate. The land managers view expanding cell phone coverage as an effective way to help bridge gaps in the current communications infrastructure and improve overall communication. They also view cell phones as advantageous because they allow communication with other agencies, including first responders, which the current two-way radios do not. In an emergency scenario where multiple agencies and first responders need to communicate, current communications infrastructure is inadequate. Their view of this issue is similar to views expressed by the law enforcement/first responders that were interviewed: interagency field communications in a practical sense do not exist. Julie Kovacs noted that there are places that even the satellite phones that are used to communicate in the most remote locations have been experiencing poor service because of malfunctioning satellites. The BLM office in Tucson issues cell phones to some staff, so better cell coverage would enhance their ability to communicate in the field. In fact, a recent shooting in which several undocumented migrants were murdered in the BLM-managed Ironwood Forest National Monument was reported via cell phone, helping to get emergency help to the scene more quickly.

The four land managers that support expanding cell phone coverage also noted disadvantages. Keith Graves believes that expanding cell phone service may encourage migrants to put themselves in more dangerous situations by crossing in more remote areas because they feel more secure with enhanced cell phone coverage. He believes that water stations have the same effect. In his opinion, Border Patrol rescue beacons are a better solution to the current

problem of migrant deaths. Julie Kovacs is concerned that if Organ Pipe Cactus National Monument has greater cell phone coverage, park visitors may call park staff for minor problems and non-emergencies that in the absence of cell phones they would remedy on their own. She sees this as a disadvantage because it would take staff away from other more important duties. She also felt that improving coverage may benefit smugglers, but acknowledged that smugglers already have good communications and will use any tools at their disposal to aid their criminal enterprises. The interviewees mostly dismissed concerns about the possibility that increasing cell phone coverage would increase illegal activities including drug smuggling and human trafficking. They agreed with the law enforcement perspective that criminal operations adapt to any conditions and use whatever resources are available to them and will not expand just because of better cell phone service.

Policy barriers to increasing cell phone coverage on public lands are prohibitive with the possible exception of land managed by the Bureau of Land Management. Even though the land managers have significant autonomy to make decisions about how to manage their land, the autonomy is constrained by policy created at the national level. Each agency has its own set of policies and guidelines that must be followed. Land managers cannot allow the construction of cell phone infrastructure with the wave of a magic wand. Each agency has its own set of procedures for allowing projects to be carried out on the land that it is charged to oversee. Undertaking a cell tower project will require different strategies based on the policies and guidelines of each agency where improved cell phone service is desired. Furthermore, all of the land managers pointed out that even if there were no bureaucratic or legal obstacles and cell towers could be placed anywhere on the lands they manage, the mountainous topography and remoteness of much of southern Arizona would pose significant constraints on the effectiveness

of cell phone service. Installing cell phone infrastructure in remote areas would be logistically difficult. If towers were installed, maintaining them would pose a challenge as well. Even if cell towers are installed in remote areas, nearby mountains could interrupt cell phone signals and make them much less effective.

Installing cell phone infrastructure will be most difficult on the wildlife refuges, and according to Roger DiRosa, would be impossible. Sally Gall stated that a request for cell phone towers on the Buenos Aires National Wildlife Refuge would likely be denied because it is not a “compatible use” on the refuge. She also stated that the impact of such a project on wildlife would need to be studied to determine its compatibility with refuge goals. Roger DiRosa went into greater detail during his interview about why placing cell phone towers on refuge land would be prohibited. He stated that no infrastructure of any kind is allowed in designated wilderness areas. Furthermore, any project undertaken on a wildlife refuge would have to be compatible with the National Wildlife Refuge Administration Act and the Organic Act enacted by the Clinton Administration.

Julie Kovacs stated that Organ Pipe Cactus National Monument is nearly ninety percent designated wilderness area. That fact alone would make approval unlikely for any project that seeks to install infrastructure in designated wilderness areas. There are, however, pockets within the monument that are not wilderness areas including roads and areas where radio repeater towers are located. These pockets would be the most likely place where cell towers could be erected. Installing cell phone infrastructure on existing towers should be investigated, as well.

Keith Graves revealed during his interview that Coronado National Forest has a management plan that guides the management of the forest, including where communications infrastructure can be placed. Much of the area currently designated is at capacity. The

management plan was in the process of being revised at the time of the interview.

Communications infrastructure could not be placed in wilderness areas unless they meet other goals and objectives designated in the management plan, which Mr. Graves believed it would not. Furthermore he stated that the Coronado National Forest has provided cell phone coverage where possible on existing sites designated for communications infrastructure. Proposals to install communications infrastructure on other sites have been denied in the past. Understanding past denials can provide insight into how to craft a project that avoids the pitfalls of other projects.

The fewest barriers to installing communications infrastructure based on the interviews appear to be on BLM land. Patrick Madagan stated that the Bureau of Land Management would not hinder increasing cell phone service on BLM lands.

Another common theme that arose during the interviews with the land managers was the issue of funding. All agreed that their agencies would not be investing resources to enhance cell phone service if a project were proposed. All expect that the resources would be coming from the cell phone companies themselves or from some other funding source.

Roger DiRosa, Refuge Manager at Cabeza Prieta National Wildlife Refuge is the only stakeholder interviewed who is adamantly opposed to increasing cell phone coverage. He thinks that greater coverage will attract more migrants to cross the border into Cabeza Prieta. Mr. DiRosa believes that securing the border to keep migrants out of Cabeza Prieta is possible through a synergy of different systems and tactics and supports this approach as the best way to reduce migrant deaths.

DiRosa does not share any of the opinions about the benefits of increased cell phone coverage held by the other land managers that were interviewed. The Border Patrol is very

active on the wildlife refuge and has set up a camp there. The staff at Cabeza Prieta cooperates extensively with the Border Patrol and communicates with them using two-way radios. Repeater towers relay the radio signals over long distances. In areas where the two-way radios are inadequate, DiRosa's staff uses satellite phones. DiRosa believes that communication infrastructure at Cabeza Prieta is adequate, and cell phones would not provide any benefit to the public or to his staff.

In summary, Roger DiRosa opposes expanding cell phone coverage in Cabeza Prieta, while the other four land managers interviewed would support expansion. The four land managers that support increased coverage believe that it will help to improve staff communication in the field, enhance public safety on the lands, and reduce migrant deaths. They also echoed the frequently expressed concerns that the two-way radios used in the field cannot communicate with other agencies and law enforcement and first responders. They believe that better cell phone coverage is an effective tool that would allow communication across agency lines.

During these interviews an important finding came to light. Attempting to expand cell phone coverage on the public lands covered in this report will encounter major bureaucratic and legal barriers. Much of the land is designated wilderness area which makes installing infrastructure very difficult, if not impossible. Areas that are not wilderness areas will still pose challenges to expanding cell phone coverage because of compatibility issues with management plans. Some areas suitable for infrastructure placement, like in Coronado are reportedly at capacity. Finally federal policy like the National Wildlife Administration Act and the Organic Act may pose further obstacles to a project to expand cell phone service.

## **Policy Maker Interviews**

Enrique Serna, Deputy County Administrator for Pima County, who spoke on behalf of Pima County, strongly supports any effort including expanding cell phone coverage that reduces the number of migrant deaths that occur in Pima County. The Pima County Board of Supervisors starting in 2001 has voted annually to fund Humane Border's with \$25,000 to maintain water stations on designated sites on county property (Meltzer 2006) (Stellar 2001). Mr. Serna believes that the Pima County Board of Supervisors would support a project that expands cell phone service in the county based on its past and current support of the water stations. He noted that the courts have upheld Pima County's ability to fund water stations on county property and believes that the county would not encounter legal obstacles by supporting a cell phone service expansion project on county land.

Mr. Serna believes that the biggest advantage of expanded cell phone service in Pima County is saving the lives of undocumented migrants on county land. The county is obligated to protect the lives of everyone in the county regardless of legal status. Furthermore, from an economic standpoint, migrant deaths cost the county precious resources. The body of every migrant that dies in Pima County is processed by the Pima County Medical Examiner's Office. So many migrants die every year in Pima County that the Medical Examiner's Office had to expand its facilities to cope with the bodies (Rotstein 2006). Furthermore, Mr. Serna believes that better cell phone service is an excellent public infrastructure project for the county because it is a tool to improve economic development and public health. Finally, from a homeland security perspective, communication will be enhanced. Again, communications among agencies, first responders, and emergency personnel in the event of a disaster or emergency was viewed as inadequate and cell phone service will help to improve the situation. The only negative aspects

mentioned by Mr. Serna was the possible backlash from some constituents that do not support any action that might benefit migrants and the possible negative environmental impacts of installing and maintaining cell towers. Also, county funding for such a project would likely be a challenge.

An interview with Lynette Evans, Arizona Governor Janet Napolitano's Policy Advisor for Regulatory Affairs, revealed a more cautious attitude than that of Enrique Serna's. Mrs. Evans stated that the Governor's Office did not have an opinion on increasing cell phone coverage in response to migrant deaths. The Governor is more likely to have a position on a concrete project proposal. Also, state governments have little regulatory oversight over cell phone companies, so the Governor would be less likely to be involved in that aspect. While the Governor's Office was not willing to commit its support to a cell tower project, Mrs. Evans believes, as does Mr. Serna, that increasing cell phone service is beneficial to Arizona because it promotes commerce. She noted that many people work while traveling, especially from their cars, and increasing cell service would enhance their productivity.

Mrs. Evans identified several possible barriers to increasing cell phone service that other interviewees did not including: Federal Communications Committee (FCC) issues; local oversight and zoning experts exerting control over placement of cell towers; and negative reactions from cell phone companies if the government mandates increased coverage.

Federal border policy has forced Pima County, the state of Arizona, and the Tohono O'odham Nation to bear the high cost of migrant deaths and other issues related to undocumented immigration. Pima County has been proactive in trying to reduce the number of migrant deaths by funding Humane Borders since 2001. Enrique Serna believes that expanding cell phone service in Pima County provides a broad range of benefits and therefore believes that

Pima County would support a project to improve cell phone coverage. In his opinion a project would encounter few if any barriers from Pima County. Governor Napolitano's office was non-committal about supporting a project. Even so, Lynette Evans believed that expanding cell phone service would have a number of benefits for Arizona, especially from an economic development standpoint. It does not appear that the Governor would be a barrier to a project and may consider supporting a formal proposal if one was presented.

### **Summary of Findings, Analysis, and Project Feasibility**

The institutional stakeholders interviewed for this report, with the exception of Roger DiRosa, Refuge Manager of the Cabeza Prieta National Wildlife Refuge, support, or do not pose serious barriers to, a project to expand cell phone coverage in the southern Arizona desert along the U.S.-Mexico border in an effort to reduce migrant deaths. Some of the main reasons that the stakeholders support this effort include providing humanitarian assistance to migrants crossing the southern Arizona desert, bolstering economic development, reducing the costs of immigration borne by Pima County, benefiting public health, improving communications between first responders, law enforcement, and federal, state, and local government agencies in emergency and catastrophic situations, and enhancing staff communication on public lands. The disadvantages of expanding cell phone service that were mentioned included the negative impacts on wildlife, aesthetics of towers, the belief that cell phone service attracts migration, benefiting illegal activity, and negative reactions by political constituents. Even with numerous potential benefits to and broad-based support by the stakeholders, substantial barriers exist to expanding cell phone coverage on the public lands along the border that experience the negative impacts of undocumented immigration and the humanitarian crisis of migrant deaths. The major

barriers appear to be in the laws, policies, guidelines, and management plans that land managers must abide by when administering public lands. Other barriers include rugged topography and remote locations that would make installation and maintenance of infrastructure difficult, locating funding sources, and environmental and anti-immigrant groups that would oppose installing infrastructure. The stakeholders in the categories of Law enforcement/First responders and Policy Makers would not oppose a project and would not pose substantial barriers to project.

Cabeza Prieta is unique among the public lands examined in this report, and is the most problematic for expanding cell phone infrastructure because it presents its own set of distinct challenges and issues. However, it also helps to illustrate some common characteristics held by much of the public land. In 2002, a group of fourteen undocumented immigrants died there in one day. It was one of the first major events that drew attention to the rising migrant death toll and signaled the coming humanitarian crisis in southern Arizona (Ibarra 2001). Cabeza Prieta is bordered on the west and north by the Barry M. Goldwater Bombing Range. The bombing range is bordered to the north by Interstate 8. The few roads that can be used by the public are rugged and require four-wheel-drive vehicles (the Cabeza Prieta website states that one road is passable with high clearance two-wheel-drive vehicles), and there are no facilities for gasoline or potable water. The bombing range is off limits to the public and poses obvious threats to human safety. There are, according to Mr. DiRosa, hundreds of miles of illegal vehicle trails used mostly by drug smugglers that crisscross the refuge and have seriously degraded the once pristine natural environment. This may be the most dangerous area for migrants to cross into the U.S because of its remoteness and lack of infrastructure. The map of migrant deaths does not indicate many reported deaths in Cabeza Prieta as compared to points east, and most that have been reported occurred along the eastern edge closer to the town of Ajo, Arizona and Organ Pipe, which has

some infrastructure including public roads that allow visitors to tour the park, two-way radio towers, Humane Borders water stations, and Highway 85 that runs north from the port of entry at Lukeville, Arizona. The reported deaths according to the Humane Borders map occurred in the northeast of the refuge near Ajo. One hypothesis is that those migrants strayed off course while heading towards Ajo. Furthermore human smugglers have likely learned to avoid crossing in Cabeza Prieta because of the area's infamous reputation documented in the book *The Devil's Highway: A True Story* by Luis Alberto Urrea. The book chronicles the deadly journey of the fourteen migrants killed in 2002 and describes the long history of the "Devil's Highway" that runs through Cabeza Prieta as a route that has claimed the lives of travelers for centuries.

Areas east of Cabeza Prieta are still perilous to cross, but migrants are much closer to infrastructure that could lead to their rescue in an emergency situation than they would be in Cabeza Prieta. Furthermore, as noted by stakeholders, expanding cell phone coverage in Organ Pipe Cactus National Monument and eastward across the Tohono O'odham Nation, Buenos Aires and Coronado would have many more benefits, including preventing migrant deaths, than in Cabeza Prieta.

One major reason for Mr. DiRosa's opposition to expanding cell phone service is his belief that cell phone coverage in the wildlife refuge would attract more migration that otherwise would occur at other points along the border. Humanitarian aid groups like Humane Borders reject the notion that water stations cause migration, arguing instead that macroeconomic conditions are largely at fault. They believe that water stations are a reaction to migration, and do not cause or encourage it. The same argument that is used to justify water stations is the same rationale behind advocating for increased cell phone coverage. As noted in this report, hundreds of thousands of migrants yearly are already crossing into Arizona from Organ Pipe to the New

Mexico state line regardless of cell phone coverage, water stations, or increased enforcement measures. However, it does appear that once migrants have made the decision to cross the border, the route they or their smugglers choose tends to be a balance between traveling in areas remote enough to avoid detection and being close enough to some infrastructure to be able to arrange for transportation farther into the interior. Furthermore, migrant traffic shifts frequently to different areas based on factors including where the Border Patrol is focusing enforcement efforts. It is conceivable that expanding cell phone coverage into Cabeza Prieta may attract migrants already determined to enter the U.S. to cross there instead of somewhere else with no coverage. The death data on the map indicates that migrants have been crossing in other remote areas east of Cabeza Prieta where there is some infrastructure, albeit minimal, as well as some cell phone coverage and where expanding cell phone service is more feasible.

Cabeza Prieta and much of the public land covered in this report share similar characteristics as well. Much of the land is designated wilderness area. Placing towers in those areas appears to be nearly impossible regardless of land manager support. The various management plans for different public lands are another possible barrier. Most of the public land is remote and rugged and would pose obstacles to installation and maintenance of infrastructure. The mountainous topography in many areas may also limit the effectiveness of cell service. Gaining the support of public land managers will be crucial to figure out ways that cell phone infrastructure can be installed to effectively serve the areas they manage that are experiencing heavy migrant traffic and still be compatible with their policies and missions. Finally, many stakeholders suggested that plans to install infrastructure on public lands would likely generate opposition from environmental groups that would oppose disturbing natural areas.

The land managers experience and understand the realities of undocumented immigration

and the destruction of the public lands they manage. They may have different ideas about how to solve the problems associated with undocumented immigration on public lands, but none of them want migrants dying on public lands. They view the problem as a human rights issue, an economic issue, an environmental issue, and a safety issue among others. Ironically federal law prohibits undocumented immigration, yet federal border enforcement strategy makes undocumented immigrants more likely to cross the lands they manage causing a tremendous burden that they must cope with and mitigate as best they can.

The Tohono O’odham Nation is unique in the study area for several reasons. It is the largest political entity in the study area that borders Mexico, has an autonomous government, and is not public land. There is more infrastructure there than in other places in the study area because of the small villages and settlements that dot the landscape and the roads that connect them. Tohono O’odham live on both sides of the border and until recently the U.S. government has allowed relatively free and unchecked movement across the border at a number of crossing points on the Nation. Many of these factors have led migrants to cross the border there and have resulted in a large number of the total migrant deaths in the Tucson Sector.

Including the Nation in a potential project is crucial because of the high number of deaths there, and because of the other benefits that cell phone service would bring. The map shows that the Nation has very poor service. The Nation would not have the same barriers as the public lands, but would likely have others that should be researched. One barrier mentioned by other stakeholders, as well as Sgt. Miguel of the police department was that holy sites could not be disturbed. Another obstacle is Humane Borders’ poor relationship with the Nation.

Unfortunately, one of the main weaknesses of this report is that only one representative from the Tohono O’odham Nation was interviewed. As described in this report, Sgt. Miguel of

the Tohono O’odham police force provided useful insight into the benefits that better cell phone service would have for the police and other first responders as well as the citizens of the Nation. Contacting and interviewing other representatives from the Nation, including the Fire Department and the Tribal Council proved difficult.

### **Policy Recommendations for Advancing Cell Phone Coverage Expansion**

The analysis of interviews shows nearly full institutional support for expanded cell phone coverage. Of the ten stakeholders interviewed, seven indicated support, two were non-committal and one was opposed. Those that support expanding cell phone service believe that it would be an effective tool to initiate the rescue of migrants that are in danger in their management areas. Aside from saving the lives of migrants, interviewees identified numerous other benefits that would make moving forward worthwhile. Therefore, Humane Borders should start to organize a coalition of stakeholders that support expanding cell phone service. Barriers exist, but with the support of a broad coalition and creative ideas and solutions, improving cell phone coverage in many areas may be feasible. This report is most concerned with policy to reduce migrant death. The following recommendations for Humane Borders, or any group or organization that takes on a project to increase cell phone coverage, begin with recommendations that will likely be the easiest to accomplish and move to recommendations that appear to be the hardest to implement.

- Work around protected lands and determine where installing cell phone infrastructure would be feasible and still be effective in reducing migrant deaths.
- Form a formal coalition of stakeholders that supports expanding cell phone coverage including but not limited to:
  - Public land managers
  - Tohono O’odham Nation representatives
    - Tribal Council
    - Law enforcement, fire departments, first responders
    - Utility companies

- Law enforcement agencies
  - First responders
  - Border Patrol
  - Business groups
  - Economic development organizations
  - Cell phone companies
  - Humanitarian aid organizations
  - Faith-based groups
  - Mexican, Guatemalan, and other consulates in Arizona
  - Political leaders and policy makers
  - U.S. Coast Guard
  - U.S. military representing the Barry M. Goldwater Bombing Range
- Recruit other stakeholders through the coalition, and reach out to environmental groups, anti-immigrant groups, and others that may oppose the project to limit and mitigate future conflicts.
  - Create a concrete plan to expand cell phone service that the coalition can support and publicize.
    - Determine costs and possible funding sources for the project.
    - Emphasize all benefits mentioned by stakeholders, not just reducing migrant death.
    - Emphasize the benefits to homeland security.
    - Research technical and legal barriers to determine the most feasible locations for infrastructure.
    - Understand how cell phone infrastructure works.
  - Reach out to cell phone companies.
    - Since they will provide service, they should be consulted and included in project proposals.
    - Their technical expertise will be crucial in determining infrastructure requirements.
  - Begin building greater capacity and increase human capital within Humane Borders to accomplish the more advanced and difficult steps for the project.
  - Initially, avoid potential legal and bureaucratic barriers to installing cell phone infrastructure in Cabeza Prieta, Organ Pipe, Buenos Aires, and Coronado.
  - On and near public lands investigate the feasibility of locating cell phone infrastructure on or near existing infrastructure including roadways, communication towers, and buildings as supported by Sally Gall at Buenos Aires.
  - Along the Highway 286 corridor and around Buenos Aires and the Coronado determine ownership of private land as well as public rights-of-way and easements to determine feasibility of installing cell phone infrastructure there.

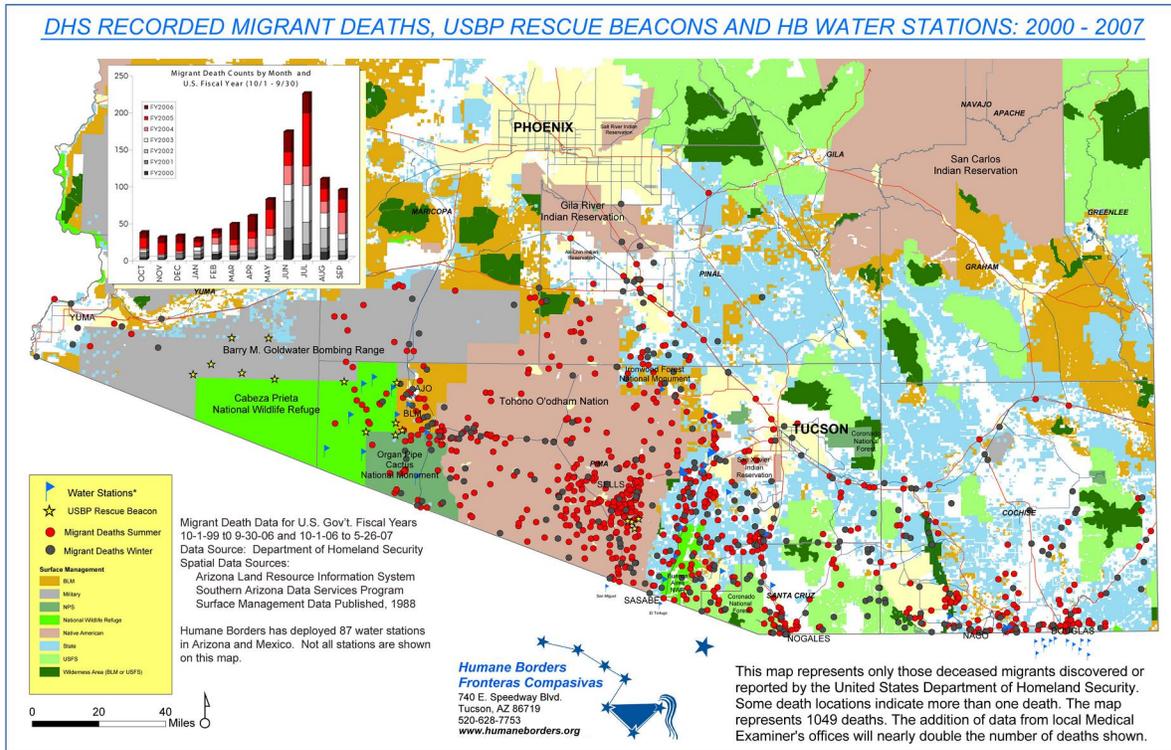
- Investigate installing cell phone infrastructure on state trust land.
  - Significant migrant traffic occurs on state trust land.
  - State trust land borders Buenos Aires, Coronado, the Tohono O’odham Nation, and the BLM’s Ironwood Forest.
  
- Investigate the feasibility of installing cell phone infrastructure on BLM land.
  - This public land appears to have the fewest barriers to installing cell phone coverage.
  - BLM lands experience significant migrant traffic.
  - BLM lands border Cabeza Prieta, Organ Pipe Cactus, and the Tohono O’odham Nation and could help get some coverage to those public lands.
  
- For the public lands covered in this report, examine the National Wildlife Refuge Administration Act, the Organic Act, and management plans to determine how infrastructure is approved and installed and if it is feasible to pursue expanding cell phone coverage there.

It is important to remember that Humane Borders’ water stations and a project to improve cell phone coverage to save migrant lives would not be necessary if it were not for U.S. policies that have contributed to the macroeconomic conditions that have driven people to migrate to the U.S. to survive. Migrants cross into the U.S. illegally not because they want to break the law, but because the legal avenues to immigrate are insufficient to meet demand. Border enforcement has deliberately pushed migrants to cross the border in ever more remote and dangerous landscapes forcing them to hire expensive and often dangerous smuggling organizations and ultimately leading to increasing migrant deaths. The U.S. Government must first recognize, understand, and address the root causes that force people to risk their lives crossing the Arizona desert to immigrate to the U.S. The best way to prevent migrant deaths is to get people out of the desert by reforming immigration and enforcement policy so that migrants no longer must risk their lives crossing into the U.S. illegally outside ports of entry in the southern Arizona desert. Until public policy adequately addresses the ongoing humanitarian crisis in the southern Arizona desert, humanitarian aid groups like Humane Borders must continue to do whatever is legally possible to prevent migrant deaths, including undertaking a project to increase cell phone

coverage along migrant corridors.



## Appendix 2: Department of Homeland Security Recorded Migrant Deaths 2000 - 2007



### **Appendix 3: Interview Questions**

1. Does your organization support the expansion of cell phone service in southern Arizona and along the border by increasing the number of cell phone towers? Why or why not?
2. What are the advantages/disadvantages of greater cell phone coverage for you or your organization?
3. What barriers would inhibit the installation of cell towers and increased cell phone service? Physical? Cost? Political?
4. What other groups or organizations, aside from yours, would oppose/support increased cell phone coverage? Why?
5. Would you or your organization publicly promote increased cell phone coverage? What could you or your organization do to promote increased cell phone coverage?
6. Are there other stakeholders or decision-makers that should be included in this survey?
7. Do you have any additional information that you would like to share?
8. Do you have any questions?
9. Do you have any final comments?

## Appendix 4: Letter of Interest

College of Social and Behavioral Sciences  
Department of Geography & Regional Development  
Planning Degree Program



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Dear Interviewee:

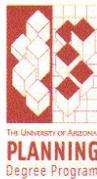
Jay Young is a graduate student in the Planning Degree Program at the University of Arizona. As part of his degree requirements, he is completing a Master's Report entitled "*Reducing Migrant Deaths in Southern Arizona: Surveying the Political Landscape to Determine Cellular Tower Project Feasibility.*"

I would like to thank you for your interest and cooperation with Jay's research on this politically sensitive and very important public policy topic.

This report will be made public and will be available electronically through the University of Arizona library upon completion in August of 2007.

Sincerely,

Dr. Laura Huntoon  
Associate Professor of Planning  
The University of Arizona



## Appendix 5: Table of Interview Results

### Gall, Graves, Kovacs

	Sally Gall - Assistant Manager at Buenos Aires National Wildlife Refuge	Keith Graves - District Ranger at Coronado National Forest	Julie Kovacs - Border District Ranger at Organ Pipe Cactus National Monument
Do you/your organization support expanding cell phone service?	Yes.	Yes.	Yes.
Advantages?	Better communication in Altar Valley. Promote safety in remote areas. Radios inadequate.	SE Corner has poor coverage - must use SAT phones. Expanded coverage enhances operational capability. Poor radio coverage. Total benefit for people that land is for.	Timeliness of receiving reports for emergency help. Safety and security.
Disadvantages?	Coverage isn't always good. Aesthetics of towers. Impact on wildlife.	Same problems with water stations: more coverage may encourage folks to put themselves in more dangerous situations. Rescue beacons are better.	People (non-migrant park users) in non-emergency situations may start calling more: hikers needing directions, lacking water, etc. - difficult b/c of reducing staff levels. Illegal activity. Smugglers are using cell phones and radios already.
Barriers?	Would likely deny request based on mission b/c it is not a compatible use on refuge. Surrounding landowners. Interference with camera towers? Would need to review wildlife impact. Land around refuge would be more appropriate.	Forest land Mgmt Plan designates where communications can be placed. Would have to revise plan. Could not be put in proposed wilderness unless they were identified as needed to meet other goals or objectives of the plan. Legislation would be required - congressional process needed. Communications sites are full. New cell tech overpowers other communications infrastructure.	Cost. Wilderness Act basically prohibits installation of infrastructure in wilderness area - Organ Pipe is 90%+ designated wilderness area. There are pockets of non-wilderness areas in the park like on hilltops that have repeaters and along roadways. Not aware of any management plans where they could advocate for increased cell towers.

	Sally Gall - Assistant Manager at Buenos Aires National Wildlife Refuge	Keith Graves - District Ranger at Coronado National Forest	Julie Kovacs - Border District Ranger at Organ Pipe Cactus National Monument
Promote project publicly?	No. If it happened, great, but they wouldn't be involved	No. Could evaluate proposal based on their policy. Have provided coverage where possible on existing sites. Have had proposals on non-existent sites and have denied them.	Don't know. Never been mentioned.
Other organizations that might benefit/support project?	Anyone living in the Altar Valley, U.S. Game and Fish, law enforcement, ADOT, visitors, all refuge users	Department of Homeland Security, local emergency management systems, all legitimate users Any groups that use nat'l forest would support.	No answer.
Organizations that would be negatively affected/oppose cell service?	Someone with tower near their property.	None. Would depend on cell service provided - newer cell tech that impacts other communications sites. Received a notice from Washington about the new tech. Wilderness groups opposed.	Environmental groups like National Parks Conservation Association, WWF, Defenders of Wildlife.
Additional Information?	Alltel works in the Altar Valley. Verizon works near Arivaca. Most of the park has service. Much of Arivaca Rd. doesn't work. Less service closer to border. 3 new camera towers on refuge	Have found throwaway cell phones probably used by smugglers. Cell phones are seldom used for rescues – migrants usually start fires. Cabeza is a wilderness area and they may not have that authority to authorize cell phone expansion, but Homeland Security might. Homeland Security has chosen to do its SBINET b/c it's flat in Pima Co. Terrain is a problem - line of site.	Currently good service north of the 66 mountains and in Lukeville.

	Sally Gall - Assistant Manager at Buenos Aires National Wildlife Refuge	Keith Graves - District Ranger at Coronado National Forest	Julie Kovacs - Border District Ranger at Organ Pipe Cactus National Monument
Final Comments?	<p>Questions don't address immigration. Don't want people dying but don't want to support or promote illegal activity. Service to migrants would be incidental. Wouldn't specifically support for migrants. They find lots of cell phones. Cell phones used for drug activity.</p> <p>Have been approached by Nextel, but nothing happened.</p>	None.	None.

**Madagan, DiRosa, Hawkins**

	Patrick Madagan - Field Office Manager for Tucson Area BLM	Roger DiRosa - Refuge Manager for Cabeza Prieta National Wildlife Refuge	James Hawkins - US Border Patrol, Tucson Sector, Public Affairs Office
Do you/your organization support expanding cell phone service?	Yes.	Question has not been posed to his agency so he doesn't know. As the manager of Cabeza Prieta he is strongly opposed.	Neither here nor there. BP doesn't use cell phones. No organizational interest. They communicate through radio and sat phones. More communications ability would be a good thing in these areas, but it is not something they get involved with. Communications could be better.
Advantages?	Better coverage for their employees, park rangers. They would support greater coverage. Even cell coverage on map could be improved. Not willing to put up money b/c of limited funds. Would look to other companies to improve coverage. BLM has some cell phones that they check out to their employees. Use radios, cells and sat phones. Most people don't go hiking without their cell phones these days.	None. Coverage is not necessary on refuge b/c they and BP use repeaters - strong interagency communication. His officers carry satellite phones for emergency.	Would be another method of communication would be a good back-up. Would be an advantage for the public affairs office. Could file a report over the phone about an incident. Would be able to talk more easily to other law enforcement agencies. Can't communicate with FEMA for instance, with their radios. Back-up in emergencies.
Disadvantages?	No disadvantages. People from DC are amazed that they don't have service out there. Are you advocating migrants coming through? Drug dealers work whatever system is in place.	Installation of cells in wilderness would have to go through "minimum tool analysis." Use for nefarious purposes by smugglers, attractant to smugglers and migrants. Installation would be difficult. Environmental assessment/analysis for impact of install and maintenance.	No obvious disadvantages. Possible downside of smuggling orgs having better communication.

	Patrick Madagan - Field Office Manager for Tucson Area BLM	Roger DiRosa - Refuge Manager for Cabeza Prieta National Wildlife Refuge	James Hawkins - US Border Patrol, Tucson Sector, Public Affairs Office
Barriers?	No political barriers on BLM lands. Company would come in and BLM would grant them a right of way. BLM wouldn't be a hindrance. Possible protests from anti-migrant groups.	No infrastructure allowed in designated wilderness areas. Cost not a factor b/c Cabeza Prieta wouldn't pay to put them in. Law – wilderness areas; National Wildlife Refuge Administration Act and Organic Act. Infrastructure would have to be compatible. Might not be compatible with the refuge. Managerial discretion. Topography. Remote.	Rough terrain makes installing towers difficult. Political issues - lots of red tape to get towers on govt land. TO Nation can decide what goes in and what doesn't. Cost wouldn't be an issue since they wouldn't be installing them. Maybe monsoons would be a problem. Can't put towers on holy sites on the TO Nation.
Promote project publicly?	He wouldn't call up Verizon and ask for service. If asked by someone he would say that increasing cell service was necessary for their safety. They warn people that cell coverage is bad. Resource Mgmt Plans could state that improved cell phone coverage is desired. Plans are ambiguous. Might not mean that they could come up with money. Could possibly use a grant specifically for cell towers. Having language supporting towers in the management plan could help.	Can't speak for his agency. Suspects his agency wouldn't support coverage.	Would not promote publicly. Don't see promotion of cell phone as their role in the community. Border Safety Initiative - might come out and say that BP supports increasing service if it might save lives. Cell phones aren't a good way to save yourself b/c of short battery life. Coyotes are the ones that typically have the cell phones. Migrants sometimes overpower coyote for phone. Wouldn't come out for or against.
Other organizations that might benefit/support project?	Border Patrol, NFS, Coast Guard, BLM partners - Friends of the Ironwood.	None.	None.
Organizations that would be negatively affected/oppose?		Border Patrol; B.M. Goldwater Gunnery Range; Wilderness NGOs and supporters of wilderness;	Environmental groups might be opposed to towers in the desert.

	Patrick Madagan - Field Office Manager for Tucson Area BLM	Roger DiRosa - Refuge Manager for Cabeza Prieta National Wildlife Refuge	James Hawkins - US Border Patrol, Tucson Sector, Public Affairs Office
Additional Information?	Tohono O'odham Nation has most deaths. Coast Guard is looking to expand service. Usually one person in a group of migrants has a cell phone. Improving communication is not advocating migration. Migration is coming. Armed drug runners create a safety issue. Communication via cell phone helped get emergency help out to the murder victims in IFNM. The key is finding out who opposes such a project.	Many illegals carry cell phones. Can get coverage near I-8. Little interaction with Pima County b/c search and rescue is done by BP and C.P. b/c of remoteness of the area. If remains are found, Pima Co. takes charge and treats area as a crime scene. Pima Co. is never on the refuge unless Cabeza calls them. Close contact with T.O. on a regular basis. Borderlands Mgmt. Taskforce - govt entities get together and speak frankly and point fingers. Has been very productive and has congressional support - BP, Refuges; USFS; BLM; law enforcement agencies, state agencies, military. Thinks securing the border is the answer through a synergy of systems. Going to put up surveillance towers through SBINet	Cell phones are not the best way to get rescued. People don't know what they are getting into. Coyotes lie to the people and tell them that they are going to be fine. Don't want people to get a false sense of security thinking that there is good cell phone coverage and they will be okay. People often don't know where they are. Signal has to be triangulated. BP is very leery. Better communication and more communication is better for everybody.
Final Comments?		Would recommend other options like rescue beacons. Very concerned about attracting migrants. Considers water an attractant and that it might not save lives when people are overheating. Migrants are criminals and cell towers might be aiding and abetting.	

**Miguel, Caid, Evans, Serna**

	Anne Miguel – Tohono O’odham Police Sergeant	Les Caid – Rural/Metro Fire Chief	Lynette Evans – Arizona Governor's Policy Advisor for Regulatory Affairs	Enrique Serna - Deputy County Administrator for Pima County
Do you/your organization support expanding cell phone service?	Yes, the Police Department would support.	Yes.	The governor's office does not have a position. There is little state oversight of cell phone companies.	Yes. Any strategy that helps reduce migrant deaths in Pima County would be supported. Board of Supervisors has supported efforts in the past and would likely support a project. Courts have supported Pima Co.'s ability to fund water stations.
Advantages?	Help respond to migrant deaths. Department radios have dead spots. Better communication. Youth frequently uses text messaging. Tribal rangers could use better communications.	Better patient care. Some areas are challenging b/c their radios don't hit repeaters. Communications is their greatest challenge. Better communication between dispatch and responding units and responding units getting info about the nature of the call. First info is not always best info. Newer cell phones w/ GPS to track calls. Only way to communicate with others on a joint mission is with cell phones.	Greater coverage for all people is an advantage. Promotion of commerce - many people travel and work and rely on their cell phones.	Save lives first and foremost. Minimize economic costs of migration. Not a high political cost. Improve communications among First responders - better for Homeland Security. Investing in public infrastructure from a public health perspective. Economic development tool.
Disadvantages?	None.	Potential for overloading the cell phone system in an emergency when everyone is using their phones.	No disadvantages.	May have negative reaction from some constituents, but not enough to derail support for a project.

	Anne Miguel – Tohono O’odham Police Sergeant	Les Caid – Rural/Metro Fire Chief	Lynette Evans – Arizona Governor's Policy Advisor for Regulatory Affairs	Enrique Serna - Deputy County Administrator for Pima County
Barriers	Nation is divided into 11 districts. Each district would need to be contacted. Also would need to contact Nation govt. Would need to request permission. Sacred sites, sacred mountains. Cost of installation in remote areas. Size of the reservation.	Cost of towers - right of way; finding locations. If towers are put up can any service provider use them? Conservative groups claiming that towers aid and abet.	Regulatory matters that cell phone companies themselves would have to deal with. Local oversight and zoning exerts largest amount of control on cell towers. There may be some FCC barriers. Cell phone companies might react negatively if they are mandated to increase coverage.	Environmental impact to habitats on county land. Determining funding source.
Promote project publicly?	The Nation has a media person that should be contacted.	Challenge of corporate policy vs. real life issues. Fire and Ambulance would definitely support and would come out publicly and say so. Also b/c something has to be done to save the lives of migrants.	It's hard to say if there is no concrete proposal on the table. The Governor doesn't comment on pending legislation.	Would support publicly.

	Anne Miguel – Tohono O’odham Police Sergeant	Les Caid – Rural/Metro Fire Chief	Lynette Evans – Arizona Governor's Policy Advisor for Regulatory Affairs	Enrique Serna - Deputy County Administrator for Pima County
Other organizations that might benefit/support project?	People commuting across the nation; People, especially teachers, coming in to work on the Nation who get caught in traffic jams when the highway closes due to wrecks. Tribal utilities that provide service on the Nation. Tribal govt.	Any first responders, public health services that run clinics in rural areas, southern Arizona Search and Rescue; Tohono O’odham would support; Southern Arizona Search and Rescue; Emergency managers for every county. VOADs - Voluntary Organizations Active in Disasters - i.e. Red Cross, Salvation Army, Lutheran Social Ministries; schools. League of Cities and Towns	No.	Office of Emergency Management, Pima County Health Department, Mexican Consulate, Pima County Medical Examiners Office
Organizations that would be negatively affected/oppose?	No new info.	No new info.	No.	Anti-immigrant groups.
Additional Information?	Alltel works on the Nation; Verizon does too.	None.	Reach out to the cell phone industry itself.	None.
Final Comments?	None.	None.	None.	None.

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