ON THE OUTSKIRTS OF TUCSON LIES THE UNIVERSITY of Arizona’s industrial park, known as the Science and Technology Park, or Tech Park. Seven thousand people work at the sprawling, 1,345-acre campus, which has the appearance of a mall-size gated community, with security booths at all entrances. Established in 1994, after the university bought it from IBM, the park is home to about 40 companies, several working in some way on “border security.” With a six-acre parcel of desert designated for mock border-crossing scenarios, as well as in-door labs, Tech Park is tailoring itself to accommodate the up-and-coming border-security industry to develop, test, and eventually commercialize its products—including perimeter surveillance, fencing, potentially drones, and other components of the militarized border apparatus.

With the Iraq war winding down, military contractors looking to boost their profits have turned to the U.S.-Mexico border as a fresh market for their products. Case in point: Aria International, a military contracting company founded in early 2002 that moved its headquarters from Virginia to Tech Park in 2010. During the Iraq war it outfitted airships, helicopters, and drones for surveillance operations. At the U.S. Al Dhafra Air Base in the United Arab Emirates, the company built double fencing, thermal cameras, radar, and remotely operated M-16 rifles. Now in Arizona, Aria will use its expertise on the U.S.-Mexico border. According to the company’s CEO, Mike Crosby, Aria moved to Arizona because Department of Homeland Security (DHS) contracts for border enforcement are now the most lucrative. “We want to be right here in the heart of it,” Crosby said in the December 2010 issue of National Defense. “As they say, Follow the money.”

Indeed, the market for border-security goods and services is growing 5% each year, according to a report by the U.K. company Visiongain, and border security will become a $25 billion industry by 2020. Add in contracts for customs infrastructure and the Coast Guard, and boundary security becomes the strongest branch of the homeland security industry, with a projected $113 billion domestic market between 2011 and 2014, according to a report by Homeland Security Market Research, a Washington, DC-based consulting firm “serving the homeland security community.” Driven by the growing demand for their products, Aria International and companies like it are forming the first border-enforcement technology cluster of its kind in the United States, and this grouping of companies includes large, well-established arms manufacturers and small start-ups, all located in the border zone.

For those championing increased enforcement, Arizona is the contemporary frontline of the battle to secure the borderlands. The calls for ever more resources come not only from the vociferous anti-immigration warriors, but also from the federal government.

“We first increased the pressure in Texas and in California, and as we succeeded in driving down illegal activity there, it steadily moved toward the middle—toward Arizona,” said former U.S. customs and border protection (CBP) commissioner Alan D. Bersin, in the spring 2011 edition of Frontlines, a CBP publication. “As we adopt our operations there, we do so knowing that it’s time to clamp down on this corridor. It’s time to finish the job.”

There is a lot of political pressure to make this happen: The powerful Arizona duo of Republican senators John McCain and Jon Kyl proposed the Border Security Enforcement Act of 2011 that called for an additional $4 billion be invested over the next five years to deploy 6,000 National Guard troops to the border, bring in an additional 5,000 Border Patrol agents, erect double-layer fences, and fly more drones in the state. If companies are to reap profits from the “border crisis,” Arizona is clearly one of the hot zones.

Together, the companies at Tech Park are one of Tucson’s top-five employers. In 2008, when Arizona was reeling...
from the recession, the park boasted a 98% occupancy rate and contributed $3 billion to the economy of Pima County, which includes Tucson and 132 miles of the U.S.-Mexico border. In the context of the anti-immigrant “secure our borders” hysteria, the U.S.-Mexico border has become something of an oil well for the contractors that stand to profit from the federal government’s increasingly lavish spending in the borderlands and beyond. In the last 10 years alone, $90 billion has been invested in border enforcement throughout the United States, according to the Associated Press. This is more than double what Mexico spent during that same period on its entire military, which is fighting a war with the stated mission of taking down drug cartels and organized crime. Almost a third of the $57 billion DHS budget for 2012 is dedicated to border and immigration enforcement.

The University of Arizona (UA) has become a key node in this expanding, 21st-century version of President Eisenhower’s “military-industrial complex.” The emerging conjunction between the armed forces, the arms industry, legislators, and the academy can be glimpsed at the UA, and one can almost feel its “total influence,” as Eisenhower said, “politically, economically, and even spiritual [sic].” Like the military-industrial-complex in 1961, when Eisenhower gave his famous farewell speech, this is “new to the American experience.” The UA’s role in the buildup has been to lure companies like Aria to Tech Park with the offer of increased leverage to win DHS contracts. The UA develops the facilities, programming, staff, and infrastructure to both help start-up companies come to life and to facilitate the conversation between industry and the border-enforcement agencies, especially those within the DHS, such as the CBP, Immigration and Customs Enforcement (ICE), and the U.S. Coast Guard.

The UA’s central role in making a home for the border-security industry’s R&D component was solidified in 2008, when DHS awarded the university a $17 million, six-year grant to create the Center for Excellence on Border Security and Immigration, known as BORDERS—a consortium of 14 “premier institutions,” mostly universities but also the RAND Corporation and the Migration Policy Institute, a think tank. BORDERS, according to its mission statement, is meant to develop “innovative technologies, proficient processes, and effective policies that will help protect our nation’s borders from terrorists and criminal activity, facilitate international trade and travel, and provide deeper understanding of immigration dynamics and determinants.” The DHS designated the UA to head up the R&D arm of the consortium, while the University of Texas–El Paso was funded to lead the education front, creating curricula, classes, and majors in the burgeoning homeland-security field.

The BORDERS Advisory Board reads like a who’s who of the border-enforcement complex, spanning the public and private sectors. Two of the five board members are retired military—Major General Donald Lynch, who after retiring from the Marine Corps helped develop oil fields in Kazakhstan and was president of the Bechtel Corporation in Brazil, and Major General Donald W. Shepperd, who spent part of his retirement from the U.S Air Force as a military analyst for CNN and is the president of the Shepperd Group, a private military consulting firm. Another board member, Gary Shiffman, is the managing director of the Chertoff Group, a multibillion-dollar security consulting firm founded by Michael Chertoff, President George W. Bush’s DHS secretary. Shiffman is also a professor at Georgetown University, where he focuses on homeland security, counterrorinsurgency, and intelligence.

There are also former functionaries of the now defunct INS. Neville Cramer of IE Solutions, an immigration enforcement consulting company, is a former INS special agent and author of Immigration Chaos: Solutions to an American Crisis (2008), in which he writes: “If we are to maintain ourselves as a world leader, we must curtail illegal immigration to a manageable level, secure our physical borders and allow America to once again become a nation that welcomes immigrants—not a nation flooded with illegal aliens.” The only one of the five representing a nonprofit is Doris Meissner of the Migration Policy Institute, former director of the INS from 1993 to 2000 under the Clinton administration. Meissner was head of the INS during an unprecedented upsurge of both human and technological resources dedicated to the border region, the same operations that created this multibillion-dollar border apparatus that is luring more and more companies into the region today.

The BORDERS research at UA covers a wide range of technologies, including surveillance and “deception detection,” according to Elyse Golob, the program’s executive director. For example, UA Aerospace Mechanical Engineering students are studying locust wings to develop miniature surveillance drones that they call Micro Air Vehicles. A reporter for KVOA, Tucson’s NBC affiliate, explained that these “toys,” which can make pinpoint stops and move through thin crevices, could someday “help secure the U.S.-Mexico border” by going after “terrorists, drug smugglers, and other intruders.” BORDERS is also producing advanced lie detectors
that will be used to “automate and augment border enforcement,” according to Golob. Along similar lines, BORDERS is working on a study that will give guidance on “border screening methods and techniques” to identify “individuals who might pose a terrorist threat, based on empirical analysis of the behaviors of actors who have been involved in previous terrorist attacks.”

The BORDERS work-plan literature contends that its students will become adept in the field of “Homeland Security–Science, Technology, Engineering, and Mathematics” (HS-STEM), and “through their educational, research oriented, and career-focused experiences in BORDERS tech, these students gain a deep knowledge in border, cyber or network security that will position them well for future careers in DHS.” It goes on to mention that the program is “forging advantageous connections with various stakeholders including DHS agencies; federal, state and local agencies; industry, university and international constituents.”

The UA’s involvement in the border industry is not confined to Tech Park. Golob’s office, for example, is located on the UA’s main campus, at McClelland Hall, home to the Eller College of Management, the university’s business school. Golob says that a couple years ago people from the DHS, CBP, and the Fort Huachuca military base were testing border-security technology produced by Boeing right in the basement of McClelland Hall. Even Golob didn’t have security clearance to enter the area, she says.

According to Bruce Wright, associate vice president of Tech Park, the idea for the park grew out of his work with the UA Economic Development Center, a forerunner of the park. In 1992 the state of Arizona mandated that the center “lead a state-wide effort to position Arizona in NAFTA and show we can exploit the commercial opportunities with Mexico, the border, and Latin America,” Wright says. The cross-border trade and development program led the center to focus on infrastructure development, border ports of entry, trade corridors, and ultimately “border technology and security, particularly in the aftermath of 9/11.” The center put together a consortium of universities along the southwest border and proposed to form a border-security center. In 2006 DHS issued a request for proposals, and the UA center submitted one. BORDERS was born. The program and Tech Park now collaborate, and they are doing many similar things, though they are separate entities.

Today, many of the companies at Tech Park are lining up to work on the
newest generation of DHS's “virtual” border wall project, which aims to build a barrier comprised of advanced surveillance towers, cameras, and motion sensors. Boeing originally received an $800 million DHS contract for the project, then known as SBInet, but the Arizona desert’s canyons and elevation shifts wreaked havoc on the company’s towers, and the motion sensors had trouble distinguishing between large animals and humans. DHS has now tentatively renamed the project the Alternative (Southwest) Border Program, and is seeking to establish an upgraded, functional technology to finally pull off the virtual wall. Wright says Tech Park already has the companies to make this happen.

“We’re working with companies that have 40- to 80-foot towers,” Wright says. “Companies that are working with motion detectors. Companies that have look-down cameras. Companies that can integrate communications. A company that we’re working with has a Web-based technology platform that could display all this information and piece it together, so that the general public as well as the agents in the field could use it.”

According to Wright, Tech Park has been in conversation with several small Tucson companies, like Zonge International, which is helping to develop an underground fiber-optic line that will supposedly distinguish between cattle and humans. There are also much larger companies like Boeing, IBM, Honeywell, Motorola, and Raytheon, which could possibly acquire some of the small companies, Wright says, or at least use their technology to supplement and complement their work.

This industry is so promising, Wright says, because it is not limited to U.S. borders. “There is a worldwide market for border technology. I mean, there’s the border between Ukraine and Russia, between Poland and Russia, between the Palestinians and the Israelis . . . all around the world, there are border issues,” he says enthusiastically. In effect, the growing cluster of companies at Tech Park can use the southern-Arizona borderlands as a testing laboratory.

It occurred to me as I talked with Wright and his Tech Park colleagues that I had never met people who were so enthusiastic about the U.S.-Mexico border situation. I have talked to Border Patrol agents who lay out the situation using militaristic terminology—rigid, cold language to make sense of and strategize around their mission. I have talked to activists and rights organizations who describe the border situation as a humanitarian crisis, with hundreds of migrants’ bodies recovered from the desert each year. And I have talked to the migrants themselves, right before they cross from Mexico into the United States, many with apprehensive faces, who say they never wanted to leave their homes. But I have never talked to anyone who speaks with such enthusiasm about the boundary, its enforcement, and its potential. We have a goldmine waiting to be tapped, Wright seems to be saying, and Tucson is the perfect place for this to happen.

According to a headline of the Homeland Security Newswire, that goldmine is already paying off, at least locally: “The Border Security Crisis Boosts Tucson’s Economy.”

“When the University of Arizona, and some fifty companies already involved with border security in some way, Tucson’s future could hold more high-tech, high-paying jobs,” the article leads in the first paragraph. These are sweet words for an economically depressed area with a poverty rate of nearly 23%. As Wright explains, why shouldn’t Arizonans be happy about the economic possibilities of the “border crisis”?

“If we’re going to be in bed with the border on a day-to-day basis,” he says, “with all of its problems and issues, and there’s a solution to it, why shouldn’t we be the place where the issue is solved and we get the commercial benefit from it?”

Education scholar Henry Giroux could have been talking about the UA and its Tech Park when he commented that militarized learning plays a central role in the process of generating profits for military contractors. “As research funds dry up for programs aimed at addressing crucial social problems,” he wrote in June, “new opportunities open up with the glut of military funding aimed at creating more sophisticated weapons, surveillance technologies, and modes of knowledge that connect anthropological concerns with winning wars”—or, in this case, winning the war against poor people crossing an international boundary.10