The Case for BRAC: Military Base Closures and the Effects on Local Communities

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Abstract
Community leaders and politicians often worry that the closure of military facilities will do irreparable harm to local economies. Empirical data shows that most areas recover lost jobs within a matter of time, but case studies paint a richer picture than statistics. This paper explores three distinct cases from the United States -- Loring Air Force Base in Limestone, Maine; The Presidio in San Francisco, California; and Dow Air Force Base in Bangor, Maine -- to show how different communities have adapted to military base closures. The timing for redevelopment and reuse varies widely, and not every property has succeeded. The paper includes some observations about how and why each place adapted or failed to do so, and offers policy recommendations for those confronting additional defense industry consolidations driven by competing fiscal pressures and the rapidly changing security environment.

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Introduction

In March 2016, the Department of Defense completed a thoroughgoing review of its existing infrastructure, and its needs going forward. The Pentagon concluded that the military will have 22 percent excess capacity as of 2019. These projections are not based primarily on expectations of a much smaller force. Even if Congress or the Trump administration succeeds in slowing or reversing proposed personnel cuts, the Pentagon will still be saddled with considerably more property than it needs well into the 2020s.

“Absent another [Base Realignment and Closure] round,” the report explained, “the Department will continue to operate some of its installations suboptimally as other efficiency measures, changing force structure, and technology reduce the number of missions and personnel.” Calling the BRAC process “the fairest approach for working with Congress and local elected officials to close installations,” the DoD noted that the alternative of “incremental reductions” “will have an economic impact on local communities without giving them the ability to plan effectively for the change.”

So far, such appeals have failed. Congress refuses to authorize another BRAC round. Members are convinced that such closures will be devastating for their states and districts. This remains the case despite the fact that the most dire predictions of economic calamity resulting from base closures usually fail to materialize. Indeed, in most cases, communities have recovered following the closure of a nearby military facility. Studies purporting to show grave and irreparable economic harm generally ignore the beneficial effects of moving resources from the military to more productive sectors of the economy.

We take such resource reallocation for granted when it pertains to changing consumer tastes, even if we are sometimes sad or inconvenienced when our favorite businesses succumb to competitive pressure. Changing consumer preferences and needs affect the supply of particular products and services. In much the same way, technological and geopolitical change affects both the demand for military hardware, and ultimately its character. We are buying fewer ships today than we did a generation ago, and we’re buying different kinds of ships. Jet-powered aircraft have replaced propeller-driven ones, just as monoplanes replaced biplanes in an earlier era. The manufacturers of ships and planes, therefore, have had to adapt. And those that haven’t have simply disappeared. The size and composition of the active-duty military has changed just as dramatically, hence the need for fewer military bases, and more flexible land-use policies.

When a military base closes, it has a profound impact on the surrounding communities. Their populations shift as people leave in search of opportunities elsewhere. Those who remain must find new jobs to replace those lost. Civic and business leaders must find new sources of revenue. Some communities do relatively well, relatively quickly. Others take longer to adapt. And a few never do.

This paper tells three such stories: Loring Air Force Base in Limestone, Maine; The Presidio in San Francisco, California; and Dow Air Force Base in Bangor, Maine. These cases show that the timing for redevelopment and reuse varies widely. The paper includes observations about how and why each place adapted or failed to do so, and offers policy recommendations for those confronting additional base consolidations driven by competing fiscal pressures and the rapidly changing security environment.

Loring Air Force Base, Limestone, Maine

Drive north on Interstate 95, from any major east coast city, be it Washington, DC, or Philadelphia, or New York. Keep going. Past Boston, and past Portland, Maine. Keep going. Take I-95 until it ends in Houlton. Then keep driving north, along U.S. Route 1, past Presque Isle, and into Caribou. You’re about ten miles west of Canada, so you shouldn’t be surprised to see a Tim Horton’s.

Then hang a right, and head east, onto Maine Route 89, otherwise known as Access Highway. After a few miles, a blue sign with black and white letters welcomes you to Limestone, inviting visitors to “Enjoy our quality of life.” A second sign, just like it, welcomes you in French: “Partagez notre qualité de vie.” The tiny town that you encounter before crossing the Canadian border into New Brunswick boasts a handful of shops along U.S. Route 1A, including Mike’s Family Market, a small grocery store. A handwritten note taped to the register reads “No more charging. Don’t ask. Per Mike.”

Barely a generation ago, this sleepy border outpost was booming. Starting after World War II, and into the late 1950s and early 1960s, Limestone struggled to accommodate the massive influx of new arrivals to Loring Air Force Base. In just ten years, its population grew over five fold, from 2,400 at the time of the 1950 census, to more than 13,000 in 1960. But Limestone’s growth proved ephemeral. Ever dependent upon activities at the base, it rose and fell on the nation’s Cold War fortunes. And less than five years after the Berlin Wall came down, Loring closed for good.

For many Americans living in defense communities, the cities and towns in close proximity to our nation’s military bases, the story of Loring is the ultimate cautionary tale. Whenever a closure looms, civic leaders fight like hell to stop it. If they lose their base, they believe, they will suffer Limestone’s fate.

Maine’s congressional delegation fought, too – so hard, in fact, that they almost singlehandedly prevented the U.S. government from closing any military bases for over ten years, from the late 1970s to the late 80s. But, in the end, they couldn’t save Loring. Or Limestone.

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The people of northern Maine are accustomed to remoteness. Occupying the wedge of New England that protrudes into Canada, they cherish their independence. They hunt in the state’s vast forests, and fish the abundant lakes and streams. They can drive for hours on unpaved roads, the solitude broken only by the rumble of massive logging trucks tearing at impossible speeds over the dirt and gravel. In the winter, Mainers drive their snowmobiles over miles and miles of trails, or simply across the wide open spaces covered by feet of snow.

Below many of those open spaces, buried just below the soil, lie potatoes. For generations, the people of Aroostook County have harvested the ubiquitous stem vegetable. The short growing season was long enough, and the rocky soil fertile enough, to produce more than they needed. Their markets grew with America’s – and the world’s -- appetite for the simple starch. For most of the rest of Maine, Aroostook County – or simply “The County” – was always synonymous with potatoes.
But with the arrival of the airplane, the people of Aroostook County saw the potential to shorten the distances between themselves and the rest of the world. The small town of Presque Isle (French for “almost an island”) constructed the county’s first airport in 1930, and the Presque Isle Merchant’s Association promoted commercial air service. In 1940, with war clouds looming, the U.S. Army Air Corps acquired the airport and converted it to a military air field. What began as a convenient staging point for aircraft bound for Europe became, by war’s end, one of the largest airstrips in America.

After World War II, the Strategic Air Command (SAC) stayed busy, developing plans to become the backbone of a new Air Force responsible for carrying the nation’s nuclear weapons. These would, it was hoped, deter the next war (“Peace is our profession,” became their motto). SAC located open space near Limestone, about 25 miles north of Presque Isle, and in 1947 began construction of the first base built from the ground up specifically as a SAC base. It would also be one of the largest. The first planes arrived in 1950, and the base became fully operational in February 1953. Originally known simply as Limestone AFB, the base was renamed in 1954 after Portland, Maine-native Major Charles Loring, an experienced combat pilot killed in action in Korea in 1952.

The base had some logistical challenges, given its great distance from traditional supply routes. But its location also proved a selling point. It was simultaneously closer to Europe, the Middle East, and, most importantly, Russia, than any other base in the contiguous United States. Bombers launched from Loring could therefore reach more targets faster than those from any other U.S. base. Its distance from a major population center in the United States also presented a macabre advantage: should the Soviets attempt a decapitating first strike against U.S. nuclear forces, such an attack would threaten, at most, only a few tens of thousands of people living in and around Limestone and Caribou.

Located on 14,300 acres, Loring boasted a 12,000-foot-long runway, one of the world’s longest, and more weapon and fuel storage capacity than any other SAC facility. Loring’s Arch Hangar, and its identical twin at Ellsworth Air Force Base in North Dakota, were the largest ever built. It also housed a maximum security nuclear weapons storage facility, a base-within-a-base complete with its own barracks, recreational facilities, and

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3 Ibid.
4 Ibid., p 11.
7 Ibid.
offices.\(^9\) Initially designed to house over 100 gigantic B-36s bombers, Loring quickly transitioned to supporting B-52s as well as aerial refueling tankers.\(^10\)

Beginning in 1957, Loring established a 24/7 alert force, with planes on the tarmac ready to take off within three minutes of receiving orders to launch. The base remained on 24-hour alert until 1988.\(^11\)

But by the time the Loring alert force was up and operational, the need for a reliable and prompt response to deter a nuclear attack had already provoked wide-ranging changes to the nation’s defense posture. Whereas the United States during the earliest days of the nuclear era was wholly dependent upon manned aircraft to deliver such weapons, improvements in rocket technology and warhead design enabled long-range missiles to eventually assume a larger share of the nation’s nuclear deterrent mission. By 1960, the United States had also deployed nuclear weapons at sea.

In 1963, Secretary of Defense Robert McNamara ordered the military to stop production of B-52 bombers, and scrapped its B-47 and B-58s. He canceled the Air Force’s B-70 supersonic bomber.\(^12\) And in 1966, the federal government stopped investing in Loring’s infrastructure.\(^13\)

McNamara was making other changes to the nation’s defenses. During his tenure as Secretary of Defense, the department closed over 950 military facilities in and around the United States. Approximately 60 of these were major bases.\(^14\) These closures had a significant impact on surrounding communities, prompting an impassioned outcry from members of Congress. McNamara was outwardly unmoved, at one point boasting that his office had “not reversed a single base closure decision due to pressure; nor has it been necessary to reopen a single installation.”\(^15\)

Such utter disregard for the interests of local communities in base closure decisions emboldened Congress to try to block further moves by legislation. But President Lyndon Johnson vetoed the Military Construction Authorization Act (H.R. 8439) passed in 1965.\(^16\) It would be another 11 years before the balance of power between the Pentagon and the Congress shifted to the legislators. And Loring AFB proved instrumental in that push.

On March 11, 1976, the Department of Defense announced that Loring’s B-52 bombers would be removed, and its 42nd Bombardment Wing deactivated. The Pentagon

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\(^10\) “Loring Air Force Base, 42nd Bomb Wing – B-36, B-52.”


argued that the base required some $300 million in capital improvements, and that its bombers were increasingly vulnerable to cruise missiles launched from Soviet submarines.\textsuperscript{17}

Armed with research showing that the planned reductions at Loring would devastate the area economy – one estimate predicted a loss of 2,000 jobs and $45 million a year in economic activity – locals formed the Save Loring Committee. They organized hearings in which residents testified to the harm that they would suffer should Loring ever close, and raised funds to lobby against it.\textsuperscript{18}

Meanwhile, Maine’s congressional delegation leapt into action. The state’s senior U.S. senator, Edmund Muskie, attached a section to the military construction bill mandating that Congress be notified whenever a base was a “candidate” for closure or major realignment. It then called for a mandatory nine-month waiting period, during which time the DOD was expected to comply with the National Environmental Policy Act (NEPA), and to reply to congressional requests for information. Then, after that nine-month period, the Pentagon was expected to formally notify the armed services committees, to include a detailed justification for each closure or realignment. Thereupon commenced a 90-day period in which Congress could pass legislation to block any given DOD decision.\textsuperscript{19}

President Gerald Ford, like Johnson before him, objected to congressional interference in the military’s base decisions, and vetoed the bill. The House mustered the necessary two-thirds to override, but garnered just 51 votes in the Senate. Emboldened, proponents tried again. With Missouri’s Stuart Symington, a noted defense hawk who had served as the first Secretary of the Air Force, as the lead sponsor, the bill garnered overwhelming support in both houses. With a veto override all-but-certain, Ford tried to put a positive spin on his decision to sign the legislation into law.

“The bill which I am signing,” the president explained, “represents a substantial compromise on behalf of the Congress and refreshes my faith in the system of check and balances established by our Constitution.”

It was nothing of the sort. Notes Charlotte Twight, the legislation “did not represent a mere gradual swing in the pendulum: It was a thunderous crash, shifting significant political power from the executive to the legislative branch of government.”\textsuperscript{20} The following year, Congress enacted similar legislation sponsored by Rep. William Cohen of Maine and House Speaker Thomas P. “Tip” O’Neill. Signed into law by President Jimmy Carter in 1977, O’Neill-Cohen, notes David S. Sorenson, “effectively prevented base closings for the next ten years.”\textsuperscript{21}

By 1979, the Air Force had given up trying to shutter Loring. In the ensuing decade, in the midst of President Ronald Reagan’s military build-up, an estimated $300 million of improvements and upgrades occurred at the base, including the construction of

\textsuperscript{18} Twight, “Institutional Underpinning of Parochialism,” pp. 84-85.
\textsuperscript{19} Twight, “Department of Defense Attempts to Close Military Bases,” p. 244.
\textsuperscript{20} Twight, “Institutional Underpinning of Parochialism,” p. 76.
\textsuperscript{21} Sorenson, Military Base Closure, p. 16.
a new runway and hospital.\textsuperscript{22} By decade’s end, the base counted 75 miles of roads, 324 buildings, and its own sewage treatment plant. Amenities included a movie theater, a veterinary clinic, and a golf course.\textsuperscript{23} The base even had its own ski hill.\textsuperscript{24}

Lawrence Korb, Assistant Secretary of Defense for Manpower, Reserve Affairs, Installations, and Logistics in the Reagan administration, complained that “because of the expenditure of new construction money that was basically \textit{jammed down our throats} by the Congress, it no longer makes any sense to close that installation.”\textsuperscript{25}

The same could have been said of a number of other facilities around the country. By 1988, the military counted 3,816 properties in the United States, 471 of which the Pentagon considered to be major bases.\textsuperscript{26} The Pentagon estimated that 40 percent of these facilities were in excess of its needs.\textsuperscript{27} But, throughout the 1980s, O’Neill-Cohen blocked the military’s attempts to reduce its overhead.

New legislation was required to break the logjam. Rep. Dick Armey of Texas championed an effort that ultimately led to the creation of an independent Base Realignment and Closure (BRAC) commission. In 1987, and again in 1988, he teamed up with Senator William Roth of Delaware to grant the Secretary of Defense wide authority for closing excess bases. In October 1988, Congress passed the legislation, and President Ronald Reagan signed it into law.\textsuperscript{28} It stipulated that, by the end of that year, December 31, 1988, the commission would submit a list of facilities that it believed should be closed or realigned. The list would be treated as a package; it could only be accepted or rejected, in its entirety.\textsuperscript{29}

Maine’s congressional delegation, led by its newest senator, George Mitchell, had opposed BRAC from the beginning. They anticipated that many of the same arguments against the base at Limestone that were heard in the 1960s and 1970s – including its high operating costs and inconvenient location – would be resurrected in the waning days of the Cold War.

\textsuperscript{25} Quoted in Twight, “Institutional Underpinnings of Parochialism,” p. 85. Emphasis in original.
\textsuperscript{27} Larry Korb, Forward to Sorenson, \textit{Military Base Closures}, p. viii.
They were right. Although Loring was not included in the first BRAC commission’s recommended cuts in 1988, it did wind up on the list that Secretary of Defense Dick Cheney delivered to the commission in April 1991. The Save Loring Committee, resurrected to fight a possible closure in 1988, immediately swung into action. Over 3,000 Air Force personnel were serving on the base at the time of Cheney’s announcement, plus nearly 1,200 civilians. Dependents living on or off base totaled another 4,100. A report prepared by the governor’s Task Force on Defense Realignment and the Maine Economy estimated that Aroostook County would lose a total of 6,200 jobs as a result of the closure. The area’s schools would also be hit hard; between 70 and 80 percent of students were military dependents. Loring accounted for $152 million in salary income alone, and was believed to generate $200 million in economic activity for the community. The Air Force, for its part, estimated that it would save $62 million per year by closing the base.

Olympia Snowe, representing Maine’s 2nd congressional district, which included all of Aroostook County, pointed to the base’s “geostrategic importance” but mostly stressed its importance to the area economy. Loring’s closure, Snowe explained in May 1991, “will be devastating to Aroostook County and Maine.”

One week later, Snowe, joined by her congressional colleagues, including Senators Mitchell and Cohen, and 1st District Congressman Tom Andrews, alleged that the Air Force was using outdated information to assess Loring’s costs and economic impact. They pointed to the $300 million in improvements made over the previous decade, and contended that the Air Force had understated the base’s continued military utility. But Air Force Secretary Donald Rice didn’t budge. In a letter to BRAC Commission Chair Jim Courter, Rice reiterated that Loring should close. The commission agreed. Loring was included in the final list of closures on June 30th, 1991. President George H.W. Bush signed off ten days later.

Snowe condemned the entire process, drafting a “Dear colleague” letter to be signed by all four members of Maine’s congressional delegation. But Andrews wouldn’t put his name to it. As a member of the House Armed Services Committee, Andrews had worked to keep Maine’s bases open. But he respected the process, and, once the final BRAC list was issued, refused to challenge it.

As he explained to a *Boston Globe* reporter at the time, “There was...no sleight-of-hand, no back-room deals. We got a fair hearing.”

Andrews continued:

We had a process that we had to have to break the stranglehold of pork-barrel politics. The commission process was open and honest. …You’ve got to do what you think is right. If you’re constantly looking for the thing that's politically helpful, that’s the biggest trap of all. I made a pledge to myself when I went down [to Washington] - not to do that.  

The *Maine Sunday Telegram* had a different take, running an editorial cartoon showing Andrews bailing out of a wounded aircraft, while the other three members of the Maine delegation fought on. Not long after, he was speaking at a dinner when some in the audience turned their backs on him in protest of his stance on Loring.

He asked them, “Is this about Russian bombers attacking the U.S.? If that is what you're afraid of, let’s talk about that.”

“But if this is about jobs, about industrial policy, military spending is the worst possible instrument. The Pentagon should not be a jobs program.”

He was pretty unpopular.

But he was encouraged when one day he was driving on the Maine Turnpike, and he came to the toll booth to get his ticket. They had tickets back then.

The ticket taker paused and looked at him long and hard.

“Are you Andrews?” he asked.

The congressman said that he was.

“I’m a Republican,” the toll-taker said, “and I never thought I’d say this. But I like you. You’ve got a lot of guts, boy. You’re doing the right thing.”

The man reminded Andrews of his father, the former congressman told me over lunch in 2013. He was a fiscal conservative who understood that you can’t keep spending mindlessly on things that are no longer needed. Tom Andrews was proud to have won that toll-taker’s respect.

But he realized the political risks. He survived a well-funded challenge in 1992 from Linda Bean, heiress to the L.L. Bean fortune. But when two years later Andrews mounted a bid to fill the Senate seat vacated by George Mitchell in 1994, Olympia Snowe soundly defeated him.

Did he have any regrets about his decision not to speak out against Loring’s closure?

“The story managed me,” he said.

He explained:

When I took my stand, and refused to sign the letter criticizing the BRAC commission's recommendations, I should have gone to Limestone and talked about ways to revitalize the area after the base shut down. Then I should have

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40 Interview with author, August 27, 2013, Washington, DC.
gone to all of the major papers in the state, and met with the editorial boards, and explained why I did what I did. I didn’t do that. And it hurt me. But I don’t regret what I did.42

Tom Andrews was always a rare sort of politician, which might explain why he isn’t one any longer.

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With the benefit of hindsight, we can now see that Loring AFB masked the major economic dislocations occurring throughout the state of Maine, but especially in Aroostook County.43

During the latter half of the 20th century, Limestone, and to a lesser extent nearby Caribou and Presque Isle, were partially insulated from the market forces ravaging The County. When “meat and potatoes” were shorthand for a satisfying meal, Aroostook County’s farmers were sitting pretty. As consumers’ tastes changed, however, potatoes were replaced by other starches, such as rice and pasta. Maine producers lost ground to those in other states, and abroad. In 1940, Maine was the largest potato producer in the United States; by 1994, it had slipped to eighth in the nation.44 The industry that had lifted the region for generations became an anchor. By one estimate, the total land state-wide dedicated to potato cultivation declined from 200,000 acres in the 1950s, to 75,000 acres in 1996.45

Property values sank, and the region hemorrhaged people and talent. The 1960 census counted 106,000 residents in Aroostook County; by 1990, before Loring’s closure, population county-wide stood at just under 87,000.46 With the exception of the towns in close proximity to Loring, which experienced impressive gains during that period, the rest of Aroostook County’s residents seemed desperate to leave. Since Loring’s closure, thousands more have joined them. A mere 68,000 live there today.47

In 1998, the Air Force transferred 4,700 acres of the former base to the U.S. Fish and Wildlife Service. Since then, the Aroostook National Wildlife Refuge has grown to 5,252 acres.48 The rest of the base was turned over to the Loring Development Authority, which today operates the Loring Commerce Center.

42 Interview with author, August 27, 2013, Washington, DC.
43 Maine Department of Labor, et. al., p. 5.
46 Maine Department of Labor, et. al., p. 5.
When I was there in the late spring in 2015, I saw only a handful of people, mostly young men clustered around a Job Corps training center. Otherwise, there were mostly empty buildings, in varying degrees of disrepair. The massive arch hangar is still there, and the air control tower. The runway stretches as far as the eye can see.

It hadn’t always been that deserted. I learned that a Sitel Insurance call center that employed 150 people in the former commissary had recently relocated to nearby Caribou. A Maine Army National Guard facility that had been repairing vehicles damaged in the Iraq war had seen most of its business evaporate after U.S. forces withdrew. The jam band Phish performed at some festivals at the base. The Great Went, in August 1997, drew 75,000 fans, making it the top-grossing rock concert that summer.49

But Phish broke up, and a major economic revival at Loring and Limestone doesn’t seem in the offing.

Some 2,300 people now call Limestone home, about the same number that lived there in the late 1940s. Every year, Limestone’s permanent residents are joined by about 150 high school students who make the trip to the Maine School of Science and Mathematics, a residential school that shares space with Limestone’s public school. The Limestone Community School has plenty of space to share. Built in the 1970s, it lost 1,100 students and 130 employees after the Air Force departed Loring.50

In a way, the magnet school has displaced Loring as Limestone’s claim to fame. A sign welcoming visitors once boasted that the town was “Home of the World’s Best Potatoes, Largest Bombers, Fastest Fighters, and Mightiest Tankers.”

It now reads, “Welcome to Limestone, Home of the World’s Best Potatoes, Maine School of Science and Mathematics, Loring Commerce Centre and Aroostook National Wildlife Refuge.”51

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**The Presidio, San Francisco, California**

Though visitors to San Francisco have a plethora of sites and famous venues to take in, including the Transamerica Building, Coit Tower, Lombard Street, and Alcatraz, none is more iconic than the Golden Gate Bridge. The massive suspension bridge with the distinctive orange brown color connects the peninsula of San Francisco at its south end, to Sausalito, Marin, and the Golden Gate National Recreation Area at its north end. It spans the entrance to one of North America’s finest inland waterways, a 60-mile long bay extending from the wine growing regions of Sonoma and Napa Counties in the north to the Silicon Valley technology incubators in Palo Alto, Sunnyvale, and San Jose at its south end.

Those wishing to snap a few photos of the landmark bridge typically drive north, through the impossibly steep city streets of San Francisco. Then US Route 101 turns left,

from Van Ness Avenue to Lombard Street heading west. As you pass the Palace of Fine Arts on the right, the city street turns to a multilane highway, and the bridge rises before you as you emerge from a series of tunnels. Most will cross the six-lane bridge, and then pull off at the visitor’s center on the bridge’s north end.

But there is another vantage point, one prized by professional photographers and San Franciscans in the know. At the south end of the bridge, on a ridge above the bay, the Golden Gate Bridge Welcome Center provides an entirely different perspective. From here, looking north, you can see Fort Point below the bridge. The red brick structure that dates to the Civil War era is practically pressed against one of the bridge’s massive support stanchions.

In the days of sailing ships, this spit of land jutting into the sea provided the ideal location for a military fortification. To the left is the Pacific Ocean, to the right is the massive bay. From here, the Spanish explorer Juan Bautista de Anza established the northern-most outpost of the Spanish Empire in 1776. It became known as the Presidio.\(^52\)

For nearly 220 years, the Presidio was a military installation, though it changed hands from Spain to independent Mexico, and then to the Americans in 1846.\(^53\) It underwent a major expansion during the American Civil War, and was expanded again in the 1870s and 1880s, as Americans consolidated control over the continental interior, and began turning their eyes westward across the Pacific. By the time of the Spanish-American War of 1898, the Presidio was a critical staging base for troops headed to the Philippines.\(^54\) It served a similar function in the middle and late 20th century, during World War II and the wars in Korea and Vietnam.\(^55\) The U.S. Sixth Army was headquartered at the Presidio, until the unit was deactivated in 1995.\(^56\)

But the Presidio was always much more than just a military base. One of the most picturesque places in a famously picturesque city, the Presidio was a public treasure for the people of San Francisco; an oasis of open space, dense forests, and beaches.

It still is. But it is no longer a military base.

The story of how the Presidio became a national historic site that preserves public access while also providing housing for residents and a home for businesses is worth exploring in detail. It didn’t happen by accident.

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In 1972, Congress passed legislation stipulating that the Presidio would be turned over to the National Park Service in the event that the Army ever deemed the base

unnecessary for the nation’s defenses. The plan was for the property to become part of the newly created Golden Gate National Recreation Area, 28 non-contiguous acres of coastland along the north and south ends of the Golden Gate.

At the time, this probably seemed unlikely. U.S. military involvement in Vietnam was beginning to wind down, but the country remain locked in the Cold War with the Soviet Union. Meanwhile, the U.S. military maintained hundreds of outposts throughout the Pacific, from Hawaii and Guam to the Philippines, Korea and Japan.

But, in some respects, the Army was growing frustrated by the Presidio. To be sure, senior officers loved to be posted there. After all, it had easy access to the city, an 18-hole golf course, and other amenities typical of major military bases. On the other hand, the costs to station a single person at the Presidio were among the highest in the country. By 1979, the Army was seriously exploring ways to divest itself of the property prized by everyone else, and in 1989 they got their wish: the Presidio was included in a list of properties to be closed under the Base Realignment and Closure process that had been passed into law the year before.

The National Park Service (NPS) would now inherit what “An Act to Establish the Golden Gate Recreation Area” had bequeathed to them: approximately 1,480 acres in the heart of a major urban area. It posed a challenge. Although the size of the property was tiny by NPS standards – Yellowstone is over 2.2 million acres, and 11 other national parks comprise at least 1 million acres – the maintenance costs were expected to be enormous. The property contained nearly 800 buildings and facilities, from residences to hospitals. Many of these were subject to the National Historic Preservation Act, and could not be merely demolished, or even easily renovated. Initial estimates suggested that it would cost $86 million merely to bring the Presidio up to public standards, and then at least $45 million every year to keep it that way. By way of comparison, Yellowstone’s annual operating costs were about $18 million.

On the advice of the Golden Gate National Parks Conservancy, a local non-profit, the Park Service formed a Presidio Council, which then hired McKinsey and Company to develop a viable funding model. Meanwhile, suggestions from the public poured in. There were calls for all of the buildings to be torn down, and the park returned to nature. Others favored using the property to house the city’s homeless population. One even wanted to turn it into a landing zone for visitors from outer space!

64 Kenworthy, “Good News and Bad for Park Service.”
DC, members of Congress had different ideas. Rep. John Duncan of Tennessee worried that the Presidio would “drain money from every other park in the Nation.” He wanted it sold. Sen. Pete Domenici of New Mexico agreed; he thought the property could fetch $550 million for a federal treasury drowning in $4 trillion of red ink.  

But the wide array of suggestions, of varying degrees of feasibility, highlighted the tension at the heart of the Presidio’s conversion: How to preserve the heritage and beauty of the place, while also achieving financial viability? McKinsey concluded that the physical structures, though costly to repair and maintain, could prove to be a critical source of rental income; they could even generate enough money to cover the park’s ongoing maintenance costs, plus additional funds that could be dedicated to historic preservation and ecological protection and restoration.

But the National Park Service was not set up to be a landlord; it didn’t even have control over the fees paid by visitors to its parks. It was a government agency within the Department of the Interior, merely one of hundreds of similar agencies who derived their funding mostly from annual appropriations from Congress. And, back then, any monies collected went straight to the U.S. Treasury. An independent entity would need to be created to address the unique challenges, and capitalize on the unique opportunities, presented by the Presidio.

A document that outlined the Park Services’ plans, “Creating a Park for the 21st Century,” envisioned a collaboration between the NPS and a “federally chartered partnership institution” with “new legislative authorities.” Presidio Park would be divided into two areas, with the Park Service administering the largely undeveloped Area A, and the new institution responsible for Area B, 1,168 acres that included buildings and other properties that could be leased, as well as park land to be maintained and developed. The plan called for annual appropriations of $25 million to renovate existing structures, plus legislation to stand up the as-yet unnamed new entity.

The plan encountered some opposition. The loudest critics were those lawmakers who believed that the property, arguably some of the most valuable real estate in the federal government’s entire portfolio, should be sold for a hefty price. Why create an entirely new entity that would require ongoing federal support, they asked? But Rep. Nancy Pelosi, who represented a San Francisco district in Congress, joined with other lawmakers and successfully pushed through special legislation that delivered on the NPS plan. President Bill Clinton signed the Presidio Trust Act into law on November 12, 1996. The Presidio Trust was born.

The new entity was granted authority to borrow up to $50 million from the U.S. Treasury, and was expected to receive approximately $25 million in annual appropriations. But there was a catch. The Trust was required to set up a board of directors and within one year of their first meeting present a plan that would progressively reduce federal government subsidies to the Presidio, with a goal to achieve self-sufficiency within 15 years. The Trust was granted authority to rent out properties

66 Ibid.
at the Presidio, and to apply those proceeds to continued preservation and restoration, as well as day-to-day operations.\textsuperscript{70}

The Trust’s independence proved to be its single most powerful asset. With independence comes flexibility. It is able to partner with private entities, but, as a federal agency, is not in danger of becoming dominated by them. It works with the National Park Service to develop an appealing visitor experience, but has sole jurisdiction over budgets and operations.

And, contrary to the worst fears of those who thought it would be a permanent drag on taxpayers, the Presidio received federal funds for the last time in 2012, precisely 15 years after the first meeting of the Presidio Trust Board of Directors. The Trust today generates about $30 million more each year than it spends in maintenance and operations.\textsuperscript{71}

Private residences generate over 40 percent of the Trust’s annual income ($51.02 million in 2016).\textsuperscript{72} Toby Rosenblatt, the first chairman of the Presidio Trust’s Board of Directors, credited executive director Jim Meadows with the decision to invest resources there first.\textsuperscript{73} It used the federal government loans and annual appropriations totaling $348 million during the 15-year transition to rehabilitate homes and apartments that are now attractive rental properties.\textsuperscript{74}

Soaring real estate costs in San Francisco and the rest of the Bay Area have been a chronic problem for years. The Presidio has offered a partial solution, though rents remain sky-high, and there is still room to expand residences on the former base.

Commercial leasing also comprises a major revenue stream. The Trust attracted over $1.6 billion in public and private investment during its first 15 years of operation, and 80 percent of the Presidio’s office spaces were occupied as of 2013.\textsuperscript{75}

The most famous of these tenants is Industrial Light and Magic, a division of George Lucas’s film production company Lucasfilm. The Star Wars creator chose to build a sprawling campus on the grounds of the former Letterman Hospital, a 1960s-era eyesore not covered by the park’s historic preservation regulations. Lucas constructed the new facility, the Letterman Digital Arts Center, at a cost of $350 million, using building materials recycled from the demolished hospital. The collection of multistory buildings comprising 900,000 square of office space is arranged in an open L, connected by walking paths and ample green space in a public park designed by landscape architect Larry Halprin.\textsuperscript{76} San Francisco’s Palace of Fine Arts rises behind, just beyond the wall of
the former base. A statue of Yoda, one of Lucas’s most famous creations, greets visitors to Building B, which also houses a museum featuring artwork from Lucas’s films.77

Craig Middleton, who served as the Trust’s executive director from 2001 to 2015, credits Lucas with bringing in more than just revenue to the Trust, approximately $5.8 million annually in rent. In those early days, he explained in an interview with Greg Beato, “we were practically having to beg [non-residential tenants] to come out here.” The properties were not yet up to speed, and services such as electricity were inconsistent. “Lucas,” Middleton continued, “gave others the confidence that somebody had really placed a big bet on the Presidio – so they should, too.”78

The Trust has also invested heavily in environmental preservation, and even remediation, restoring the land and water in the Presidio to conditions more pristine than when it operated as an Army base. These include dredging and purifying, and removing invasive species from, Mountain Lake. The Trust has planted nearly 4,000 trees in the Presidio’s 300-acre forest, and it has removed or detoxified hundreds of thousands of tons of contaminated soil. Many of these projects have been partially funded by over $150 million in private philanthropy.79

The Trust has managed to navigate between the many competing visions for the Presidio. But there have been controversies. Preservationists objected to the building of the Lucasfilm campus at the former Letterman Hospital site. The original NPS plan had called for a research and educational center there, not a major film-maker.80

Environmentalists and ecologists complain that the Trust hasn’t done enough to celebrate the biodiversity of the place. Some historians believe that it hasn’t done enough to educate visitors about the Presidio’s heritage. A plan to build a 90,000-square foot hotel in the Main Post has been stalled since 2012 by a lawsuit filed by the Presidio Historical Association and the Sierra Club.81

Another lawsuit in 2010, spearheaded by the Professional Engineers in California Government, sought to hold up construction of the Presidio Parkway.82 Designed to replace the aged and seismically deficient Doyle Drive (constructed in 1937), the Presidio Parkway would divert traffic going to the Golden Gate Bridge through a series of tunnels. The removal of Doyle Drive would create more open space in the park, and increase the aesthetic quality of the area. Importantly, it removed an artificial barrier separating the Main Post from Crissy Field on the bay.83

 Critics fixed on the financing plan for the project, in which private companies would front part of the cost of building and maintaining the parkway, with the state progressively paying them back, plus an extra 14.2 percent. Opponents claimed this

79 Ibid., 6.
method of funding would cost the taxpayers more than traditional methods, wherein “Caltrans designs and finances a project and then requests bids for the work from construction companies,” while supporters claimed it would help reduce the risk of the project running over budget.\(^8^4\) In the end, the Engineer Union’s lawsuit was dismissed in early 2011 and the project went forward. The finished parkway opened in July of 2015.\(^8^5\)

Other controversies revolve around the severe restrictions on land use in the Presidio. Critics accuse the Trust board of being too conservative, and of failing to capitalize on the property’s full potential. Two instances in which the board turned away potentially lucrative projects because they did not match with the Presidio’s unique character are particularly noteworthy. In 2007, Gap co-founder Donald Fisher came forward with a plan to build a new museum dedicated to showing off his celebrated art collection. A prominent San Francisco philanthropist and one-time member of the Trust’s board, Fisher wanted to build the 100,000 square foot structure in the heart of the Presidio’s Main Post.\(^8^6\) Even though the area was underutilized, Fisher’s building “didn’t fit with the rest of the site,” Middleton explained.\(^8^7\) Fisher withdrew his proposal in 2009, and his collection landed at the San Francisco Museum of Modern Art.\(^8^8\)

George Lucas had an idea for a different sort of art museum three years later, at the site of the Presidio’s former commissary. His collection, valued at $1 billion, included works by Norman Rockwell, as well as animation and classic cinema. He pledged $300 million to cover all construction costs, plus a $400 million endowment for operating expenses. But some faulted Lucas’s design, and it threatened to block the view of the Golden Gate and the bay from the Main Post.\(^8^9\) In February 2014, a unanimous board voted no. In January 2017, Lucas reached a deal with the city of Los Angeles to build his Museum of Narrative Art there.\(^9^0\)

Meanwhile, the NPS and the Trust have had their share of tussles. The Trust’s special status as an independent entity with its own operations and budget is a particular source of friction, notes Rosenblatt.\(^9^1\) John Ferrell, a former budget analyst for the city of San Francisco, calls the Presidio Act unconstitutional because it granted a local tax

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\(^{84}\) Elinson, “Controversy Tests Bold Freeway Project.”


\(^{87}\) Beato, “The Park That Paid Off,” p. 5.


\(^{89}\) Deborah Solomon, “3 Vie to Build San Francisco Culture Hub; The Filmmaker George Lucas is Finalist for Presidio Project” *International Herald Tribune*, September 17, 2013.


\(^{91}\) Rosenblatt interview.
exemption to businesses located there, something that Congress had no power to confer. Others object to provisions of the act that allow the Trust to avoid onerous federal regulations. Explained Craig Middleton, the Trust has “lots of flexibility relative to hiring and firing, contracting, all the things that [other] government [agencies] complain about.”

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Not every base closure will be as successful as the Presidio. Indeed, perhaps none ever will. The circumstances surrounding its closure, the state of the local economy, and the nature of the property itself, made for a smooth transition. If anything, the wonder isn’t that the Presidio has been successful. One may reasonably ask, why didn’t it happen sooner? And why hasn’t it gone farther?

The simple answer is that the Presidio’s caretakers don’t have to. With sufficient revenues to cover their operations, the Trust can afford to take its time. For example, Fort Winfield Scott, an array of well-maintained buildings perched atop a hill overlooking the Golden Gate, was unoccupied when I visited in August 2015. It seemed like a missed opportunity. But it is now home to the Presidio Institute, a place where people come together to address common challenges for their communities. Meanwhile, the Baker Beach Apartments might be a perfect example of what happens in an overheated real estate market. Renters love the views, but not the prices. And the properties themselves are nothing special. But the Trust can postpone major renovations so long as people are willing to pay, and they are: $2,795 a month for a 660-square foot 1-bedroom apartment, and up to $4,195 for a 4-bedroom.

Sniping aside, the results overall speak for themselves. The Trust has successfully transitioned the Presidio from a federal government liability to a national asset. It provides housing in a city that desperately needs more, and ample office and business space as well. And it has done all that while preserving much of the character of the former base. Visitors can still enjoy wide open spaces, and visit the well-maintained historic properties of the Main Post, including the Walt Disney Family Museum. The Old Officers Club features a museum and a fine restaurant. A few doors down is the Inn at the Presidio, a 22-room boutique hotel constructed in a former barracks building. Crissy Field, the site of the base’s former airstrip, is popular with kite-fliers, and provides stunning views of the Golden Gate and San Francisco Bay. Baker Beach on the Pacific can be cold and windy, but features a “clothing optional” portion for the truly adventurous. Others can hike along the trails in the overlooking cliffs.

Visitors to San Francisco need to add the Presidio to their list of sites to see.

Dow Air Force Base, Bangor, Maine

Bangor, the third largest city in the state of Maine, is situated on the west bank of the Penobscot River, a relatively short distance to the sea due south, where Verona Island clogs the entrance to Penobscot Bay and the Atlantic.

That location on a navigable waterway enabled Bangor to grow rich in the middle 19th century, first as a major shipbuilder, and later as a transit point for lumber from Maine’s abundant forests. She was “like a star on the edge of night,” gushed Henry David Thoreau, “overflowing with the luxuries and refinements of Europe, and sending its vessels to Spain, to England, and to the West Indies.”

But steam and steel devastated the market for wooden sailing ships, and then a massive fire in 1911 consumed the city’s lumber stocks. Within a year of the Great Fire most of the city’s sawmills, which had once numbered over 300, and the oldest of which was constructed before the Revolutionary War, were gone. The city struggled to find new industries to replace the old, but remained an important logistics center in the first few decades of the 20th century.

A visit by famed air power evangelist Brigadier General Billy Mitchell made a lasting impression on Bangoreans. A total of 23 aircraft, including Martin bombers and De Havilland scout planes, landed on Charles W. Morse’s hayfield over the course of three days in August 1923. The flamboyant Mitchell told a meeting of the Rotary Club that Bangor’s northeast location made it a “natural air center” for the country’s defenses. He wasn’t alone. A year later, the War Department sent a young officer, Lieutenant James H. Doolittle, to photograph the area’s topography in a search for future airfields.

But it was a private citizen, Edward R. Godfrey, who first established Bangor as an aviation hub. Godfrey purchased Morse’s nearly ninety-acre farm in October 1925, and added 300 acres of nearby property in 1929. Boston-Maine Airways began regular flights from Godfrey Field to Portland and Boston in 1931, including a visit by Amelia Earhart in 1933. A year later, Godfrey leased his airport to the city of Bangor, which renamed it the Bangor Municipal Airport in 1936.

Within a few years, the city had taken ownership of the property outright through eminent domain, and then handed it over to the Army Air Corps, which cast the facility as “the primary site in Maine for aerial defensive purposes.”

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98 Gagnon, “Hometown: Bangor-Brewer.”
An estimated 4,000 locals were employed in 1940 and 1941 to build cantonments and railroad spurs for the base.\(^{105}\) A story in the *Bangor Daily News* explained that the new base “Placed Bangor in the center of the vast defense program as a key point of modern warfare’s most potent thrust: War in the air.” The paper predicted that it would open “new avenues of employment for many of Bangor’s idle. It meant, or will eventually mean, an increased spending surplus for the city, as airmen and their wives and families settle here permanently.”\(^{106}\)

The paper wasn’t wrong. Historian David Bergquist tells the story of how Bangor Army Air Field, which boasted just two tiny runways in 1937, eventually became a major military airfield during World War II, and, by the mid-1950s, a key component in the nation’s Cold War defenses.\(^{107}\)

The Army renamed the base Dow Army Air Field in 1942, to honor Lt. James Frederick Dow, a native of the northern Maine town of Houlton. Dow had been a standout athlete in Houlton, and later at the University of Maine.\(^{108}\) He joined the Army after graduating from college, and had earned his wings in the Army Air Corps, but was killed in a training accident over Queens, New York, in June 1940.\(^{109}\)

At the time of the Pearl Harbor attack and American entry into World War II, the base housed some 2,500 men.\(^{110}\) During the war, the permanent military population more than tripled. Another 100,000 soldiers transited through Dow, as well as thousands of aircraft bound for Europe. After the war ended, the base helped to redeploy parts of the 8th, 9th, and 15th Air Forces from Europe to other locations in the United States.\(^{111}\)

The Army had invested heavily in the base over the course of the war. Unsurprisingly, given its economic importance, local elected officials arranged to keep the base open after war’s end, if not as a base, then as a municipal airport.

The Army Air Corps, and later the Air Force, wanted it closed. The tug of war continued through the late 1940s and into the early 1950s. The Air Force certified the base as surplus in 1950, and the city took ownership back from the federal government. It appointed a civilian airport manager, and invited Northeast Airlines – the successor to Boston-Maine Airways – to resume commercial operations there.\(^{112}\)

But less than a year later, the Air Force announced that it would be returning to Bangor.\(^{113}\) In the ensuing years, the Air Force vastly expanded the base, to include a 2.5 mile runway (the longest runway east of the Mississippi), and a 530-unit housing complex.\(^{114}\) The 2,000-acre base hosted nearly 5,000 Air Force personnel, plus their

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\(^{105}\) Ibid., p. 8.

\(^{106}\) “Airport-Politics Local Top Stories of the Past Year,” Bangor Daily News, January 1, 1941.

\(^{107}\) Bergquist, *Bangor in World War II*, passim.


\(^{111}\) Ibid., p. 11.

\(^{112}\) Ibid., p. 13.

\(^{113}\) Ibid.


Bangor’s population grew nearly 25 percent in the 1950s. The economy in the greater metropolitan area boomed, capped off by the completion of a $2 million shopping mall a short distance from Dow. The city and state of Maine also invested heavily in infrastructure, including a massive new water system, and an expansion of what would eventually be called Interstate 395 to connect Bangor’s Maine Street to the then-unfinished Interstate 95. Bangor also built the largest high school in the state of Maine to house the influx of new students, many of whom were Air Force dependents.\footnote{Tom McCord, “A Vote to be Modern; 1960s Kenduskeag Stream Project Aimed for a Renaissance in the City’s Downtown,” Bangor Daily News, December 27, 2008; and Tom McCord, “A Remedy for Renewal; Bangor Slowly RedisCOVERs the Value of Its Past, but It Takes Some Plucky People and a New Ordinance to Help,” Bangor Daily News, January 15, 2010.}

But the city wasn’t done. A referendum in 1958 created an Urban Renewal Authority to address some of the city’s chronic problems, including substandard housing, traffic congestion, and inadequate parking. In 1964, that agency presented a plan to tear down over 150 old and dilapidated homes in the heart of the city, including the old city hall. Bangor was poised to carry out a hugely ambitious and far-reaching urban renewal project, with the hope of forever transforming the city.\footnote{Wentworth, “Recovering from a Lost Community,” p. 12.}

Then, disaster struck. Or so it seemed.

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For years, Maine’s congressional delegation had tried to establish Dow as a permanent fixture of the nation’s defenses.

After World War II, when closure seemed imminent, Maine Senator Ralph Owen Brewster claimed that the Army had pledged to never leave when it had taken ownership of the airport from the city in the late 1930s. Brewster continued to push funding for the base as a senator in the late 1940s, in a bid to ensure that it would be impossible to close. He was only partly successful. In August 1949, Secretary of Defense Louis Johnson announced that Dow would be reduced to “caretaker status,” and the base’s long term prospects weren’t assured by the buildup that ensued after U.S. entry into the Korean War.\footnote{Thomas R. McCord, “A House That's Always Haunted: Urban Renewal in Bangor, Maine, 1945-1985,” (2013). Electronic Theses and Dissertations. 1927, http://digitalcommons.library.umaine.edu/etd/1927, p. 71.}

Several years later, however, the Air Force legislative liaison wrote to Maine’s Rep. Clifford McIntire (R-ME, 3), and assured the congressman that Dow was there to stay. “Dow Air Force Base has been designated a permanent installation,” he wrote in 1954, and that was intended as “an assurance to the local community that the Air Force has a long-term requirement to use the base.”\footnote{Thomas R. McCord, “A House That's Always Haunted: Urban Renewal in Bangor, Maine, 1945-1985,” (2013). Electronic Theses and Dissertations. 1927, http://digitalcommons.library.umaine.edu/etd/1927, p. 71.}
But the military can be a fickle partner. Promises that any given base was vital to national security, and would never be closed, were easily made, and, it turned out, easily broken.

On November 19, 1964, Secretary of Defense Robert McNamara announced a sweeping round of base closures, 95 facilities in all. Dow was on the list. McNamara cited a number of factors including high maintenance costs, cold winters, and poor construction. Fifty percent of servicemen and their families lived off base, but much of Bangor’s housing was considered substandard. The military was also rapidly shifting away from manned bombers to missiles, and Dow’s long runways and northern location were no longer a serious strategic advantage. Maine’s Congressional delegation, led by Sen. Edmund Muskie, failed to convince McNamara to reverse course. Dow would close by the end of June 1968.

City officials and civic leaders in Bangor reacted differently to the news. Peter D’Errico of the Urban Renewal Authority said “It came as a complete shock.” But others claimed to have seen the handwriting on the wall. Despite assurances that the base would always stay open, the Pentagon had deactivated one of the air refueling squadrons at Dow, retired the B-47 and B-58 bombers, and had stopped production of successor B-52s.

The Bangor Daily News editorialized that the closure was “inevitable.” Editor Richard K. Warren recalled “We knew it had to come one day.”

What that all meant for the city was an open question. On the one hand, Bangor gained control of 2,300 acres or land and a million square feet of building space, valued at between $100 and $150 million. The Department of Defense sold it for $1.

On the other hand, Dow Air Force base was arguably the most consequential single economic entity in Bangor and the surrounding area. The number of military personnel assigned to the base, plus dependents, totaled some 12,000. An estimated 1,500 of the 7,500 students enrolled in Bangor public schools were Air Force dependents. In addition, the base employed 500 local civilians. When the base closed for good on June 30, 1968, it wasn’t clear at the time where these workers would go.

That the facility would continue as an air operations hub was never in question. The Federal Aviation Administration agreed to maintain continuous control tower service because the Maine Air National Guard would be on 24-hour alert. The transition from military airfield to civilian airport proved nearly seamless. The Air Force had allowed

120 Twigt, “Institutional Underpinnings of Parochialism,” op. cit., p. 75.
124 Sorenson, Military Base Closure, op. cit., p. 31.
127 “30th Anniversary: From Dow Air Force Base to Bangor International Airport, A Successful Conversion.”
commercial flights to continue throughout its time at Dow. On July 1, 1968, one day after the Air Force’s departure, a Northeast Airlines 727 practiced landings, and an 18-passenger turbo-prop plane took off for Portland, and eventually New York City.  

The rest of the Dow property was covered by the city reuse plan. Fortunately, Bangor had already given considerable thought to the question of redeveloping old and obsolete property. Its planned urban renewal project went forward in 1966 despite Dow’s impending closure. People familiar with that process staffed the Dow Reuse Executive Committee. Don Bradford, the Director of Economic Adjustment at the Department of Defense, would help.

Recalled Peter D’Errico, who took over as director of the Reuse Committee in 1967, the plan was “so simple.” It amounted to a map with sections designated for the airport, an industrial space, and a university campus. The University College of Bangor, founded in 1968, has since undergone at least a half dozen name changes. But it survives today as the Bangor branch of the University of Maine at Augusta. And it continues to use some of the former Dow buildings handed over to the city in 1968.

Two major manufacturers established operations in Bangor around the time of Dow’s closure. In 1966, the city reserved land for Sylvania Electric Products, a maker of integrated electric circuits. The Bangor Daily News noted that Sylvania “would be the city’s first major basic manufacturing industry in decades.” Up until that point, industrial development in the city had mostly entailed expansion or relocation of existing firms. By 1968, Sylvania was employing 460 people, mostly women, but in later years it would downsize its workforce. Its initial plans to employ 1,300 never materialized.

A second major manufacturer would prove to have a more enduring impact on Bangor’s economy. In October 1968, General Electric announced that it would move into three buildings on nine acres of the former base to expand its steam turbine business. By 1969, some 130 people worked there, and GE grew over the years to become one of the city’s largest employers.

The city designated 118 of the remaining Dow buildings for the Bangor International Industry Center. Today, the BanAir Industrial Park comprises 31.5 total acres prized for its easy access to the airport, rail lines, and highways.

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131 “30th Anniversary: From Dow Air Force Base to Bangor International Airport, A Successful Conversion.”
133 “30th Anniversary: From Dow Air Force Base to Bangor International Airport, A Successful Conversion.”
139 McCord, “A Remedy for Renewal.”
Looking back, it is clear that Bangor recovered from the loss of Dow, although the city’s fortunes mostly tracked with that of the rest of the state of Maine. There has been effectively no net population growth between 1970 and 2010, and between 2000 and 2010 per capita income grew in real terms by a modest seven percent.\(^{141}\)

Most of the new economic activity that occurred as a result of the closure of Dow AFB was associated with the expansion of the Bangor International Airport. A study conducted in 1993, 25 years after closure, found that the airport operated up to 50 domestic flights daily, and 3,100 international flights each year.\(^{142}\) The airport that year was estimated to have brought in $81.5 million in economic impact for the city (or about $133 million in 2015 dollars).\(^{143}\) Nearly 1,500 persons were employed full-time or part-time by the 25 aeronautical businesses associated with BIA, plus another 800 at the Maine Air National Guard, Army National Guard, and the Joint Forces Training Center.\(^{144}\)

Elsewhere on the former Dow property, 50 non-aeronautical companies – the largest of which was General Electric – employed nearly 1,600 people.\(^{145}\) In a survey conducted by the City of Bangor, respondents were responsible for more than 3,000 jobs, 66 percent of which were full-time positions. Payroll and other expenditures by these businesses totaled about $133.8 million in economic impact (about $217.7 million in 2015 dollars).\(^{146}\) That was $42.2 million more than Dow AFB generated in 1964.\(^{147}\) The city was objectively better off economically within a quarter century of Dow’s closure.

Today, the airport serves, on average, 41,000 passengers a month, with over 60,000 passengers in the peak months of July and August. Major carriers include American and Delta, operating year round. In April 2016, United Airlines announced that it would begin operating daily flights to and from Newark, New Jersey, during the peak travel months of July through October.\(^{148}\) The airport’s 1,800 full- and part-time employees, including those employed directly or by the airport’s 21 tenants, generate over $200 million in economic impact for the surrounding community.\(^{149}\)

On the 30th anniversary of Dow’s closure, the Bangor Daily News declared that BIA stood “as the model of a successful base closure.” The Department of Defense agreed. In 1989, as communities around the country were facing the prospect of a new round of base closures under the Base Realignment and Closure process, the DOD designated Bangor’s conversion of the former Dow AFB as one of five cases that others should emulate. City planner Peter D’Errico, who would go on to become the longest-

\(^{143}\) Ibid., pp. 20, 21.
\(^{144}\) Ibid., pp. 13-15.
\(^{145}\) Ibid., pp. 23.
\(^{146}\) Ibid., pp. 25-26.
serving director at BIA, noted with pride, “The Department of Defense calls us because they recognize [Bangor] as successful in the base closure business.”

In the nearly twenty years since then, Bangor has undergone a cultural transformation. Already home to the Bangor Symphony Orchestra, the oldest community symphony in the nation, as well as the Penobscot Theater Company and the Discovery Museum, in 2002 Bangor welcomed the University of Maine Museum of Art. That same year, the National Council for the Arts selected Bangor as the host city for an annual folk festival. Along the banks of the Penobscot River, former industrial property has been converted to open space that draws tens of thousands. A study published in 2013 found that the Waterfront Concerts Series, started in July 2010, had drawn over 200,000 attendees, generating over $30 million in economic activity.

Bangor’s adaptability is all the more remarkable given the economic currents swirling around it. Just as it was forced to deal with the loss of ships and sails in the mid-19th century, and the collapse of the lumber business in the early 20th, one of Maine’s last great industries – paper – was similarly buffeted by changing consumer tastes. In the 1960s, Maine’s Great Northern Paper, founded by Bangor businessmen, produced one sixth of all newsprint used in the United States, and the pulp and paper industry as a whole employed some 15,000 Mainers as recently as 1990. By 2013, that number had fallen to 5,000. Bangor’s population wasn’t spared. Eastern Fine Paper, located across the Penobscot River, closed in 2004. Verso Paper in nearby Bucksport closed ten years later.

152 “Business Development: Surprisingly Metropolitan Bangor, Refreshingly Different.”
But the diverse array of industries that located on the former Dow Air Force Base property insulated the city from some of the worst effects of this downturn in the paper industry. GE, for example, continued to employ as many as 500 in 2010.\(^{157}\)

In 1968, Business Week magazine published a report on how Bangor was adapting to the impending closure of the Dow Air Force Base. Senator Edmund S. Muskie proudly inserted the article in the Congressional Record, calling it “a source of encouragement for other communities across the country faced with the same dilemma.”

The article quoted Richard K. Warren, the editor of the Bangor Daily News, who opined that Dow’s closure “might be a good thing in the long run.”\(^{158}\)

On balance, it has been.

**Conclusion**

At a local Chamber of Congress breakfast many years ago, a businessman in attendance asked Maine Congressman Tom Andrews, “Why can’t government operate more like business?”

Because it isn’t a business, Andrews explained. You have to have a vision, just as you do in business, but that vision should allow you to make tough decisions about allocating scarce resources. The government doesn’t do that, and the Pentagon is no different. If you can’t close down obsolete bases, when the fact that they aren’t needed has been clearly and painstakingly established, you can’t possibly make the rest of the government operate more efficiently.\(^{159}\)

The BRAC process was created to circumvent the parochial impulses of congressmen and senators.\(^{160}\) The normal tendency is for members to put the interests of their district or state above that of the country. In many respects, they believe that they are doing their duty by blocking base closures, which, they fear, will have a devastating impact on local economies.

In a few cases, the effect has been devastating. Limestone, Maine, thrived when it was home to Loring Air Force Base. Now, it struggles to survive.

But, in most cases, communities adapt to the closure of military bases, just as they adapt to the closure of private businesses. And Congress’s stubborn refusal to allow the military to reduce its excess overhead by cutting unneeded bases is hurting the military and the communities that they claim to be protecting. By retaining bases that the military no longer wants or needs, opponents of another BRAC round are preventing defense communities from taking advantage of property that they could put to more productive uses. Without a BRAC, these underutilized properties are effectively trapped behind chain link fences and razor wire.


\(^{159}\) Interview with author, August 27, 2013, Washington, DC.

\(^{160}\) See, especially, Ryan, “Democracy, Military Bases and Marshmallows,” in Bagaen and Clark (eds), Sustainable Regeneration of Former Military Sites, op. cit.
In that sense, military bases aren’t really closed, they’re opened. The Presidio in San Francisco and Dow Air Force Base in Bangor, Maine, were unique in the sense that they were more open to outsiders than most other military bases. For much of its history, The Presidio was a de facto public park. Commercial airline flights departed regularly from Dow, even when it was a military base.

More typical are cases such as the Philadelphia Navy Yard, Fort Ord near Monterey, California, or the Brunswick Naval Air Station in Maine. These three facilities, all closed under the BRAC process, are today open to the public. They are home to businesses, such as Philadelphia’s iconic Tasty Baking Company, maker of Tastycakes, and the apparel maker Urban Outfitters. Cal State Monterey Bay is housed at the former Fort Ord. Meanwhile, thousands of acres have been set aside as part of the Fort Ord National Monument, which includes 86 miles of mountain bike and hiking trails. The Midcoast Regional Redevelopment Authority today operates Brunswick Landing, a business campus at the former Brunswick NAS. TechPlace, a technology accelerator that helps innovative, early-stage startups, is there.

Location is a major factor that explains why some places succeed faster than others, but it is hardly the only factor. Other keys to success include a workable plan, crafted with considerable input from community leaders and the general public. But it is also important for the land-use agencies to have sufficient authority to execute the plan.

The United States has converted thousands of former military facilities over its long history, from tiny frontier outposts, to urban manufacturing centers, to sprawling bases that covered tens of thousands of acres.

We can do so again.

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