

FROM  
**BORDER**  
TO BI-NATIONAL  
**BARRIERS**  
**PROMISE**



What the Future Could Be With  
a Frictionless Border

REPORT 2014

## Preface: Seeing Beyond National Boundaries

**Back in 2007, not long after I moved to Toronto, I wrote an op-ed piece for *The Globe and Mail* in which I urged Torontonians to look at their city in a new way—“as the nerve center of one of the world’s greatest mega-regions, a trans-border powerhouse that stretches from Buffalo to Quebec City.” Now seven years later, the Cali-Baja Region is making a similar case for their future.**

“Place, not statehood, is the central axis of our time and of our global economy,” I explained. But when a place is an interdependent constellation of cities, it needs to learn to “think and act like a mega-region” before it can truly thrive, “not like a bunch of separate cities with empty space between them.”

Each jurisdiction and both host nations in the case of my Tor-Buff-Chester (Toronto, Buffalo, and Rochester—the inelegant coinage is my own) must work together to knit the connective fiber that will allow the region to function better together than apart. And they must be prepared to make big investments to do so. “Mega-regions benefit from global hub airports,” I noted, “But the best way to get around one is not by plane or car but by fast rail. Europe has this one figured out.” America’s criminally short-sighted failure to invest in high-speed rail has cost it many more dollars than it’s saved—a deficit that is compounding with every passing year.

Looking south, I pointed out that Tor-Buff-Chester was not the U.S.’s only bi-national mega. “Regions on the U.S. border take advantage of low-cost Mexican manufacturing while stationing high-end design and management on the U.S. side,” I wrote. My own Creative Class

Group, I was proud to relate, “Initiated the world’s first bi-national downtown, Wi-Fi, and arts and cultural center between El Paso and Juarez.”

But all was not well. Sad to say, neither Tor-Buff-Chester nor any of the other city pairs and constellations that straddle the U.S., Canada, and Mexico’s national boundaries have gone on to achieve a fraction of their great potential. What has held them back? More than anything else, it is the border. “Fixing the border problem will be key,” I wrote back then. “As an American and frequent traveler to the States, I know that much of the problem is generated by the Homeland Security paranoia of the American authorities.” That hasn’t changed.

As much as I love my adopted city, the thing that I like the least about living in Toronto is having to cross the border. Even with Nexus and Global Entry, my wife and I are treated like criminals. It is not easy for us to ship anything between Buffalo and Toronto and duties make everything more expensive.

I always think how diverse, wonderful, and amazingly stronger than the sum of its parts a fully-integrated North America could be. Imagine a whole continent that seamlessly combined the U.S.’s financial strengths with Canada’s energy resources and Mexico’s diversity and cost advantages—and the incredible creativity and entrepreneurial dynamism of all three. Now that is a place I would want to live in. It would be more than competitive with China and Europe, providing both an intensified and enlarged energy and knowledge nexus and

the best place to manufacture in the world—not to mention a boon in tourism dollars. Miami might attract a lot of deep-pocketed vacationers from around the world, but it pales as a vacation destination when you compare it to Mexico.

And it's not that we haven't made significant progress. If the glass is half empty, it is also half full. As controversial and imperfect as it might have been, NAFTA provided a framework to realize some, if not all of these advantages. But as this white paper clearly shows, half full is not nearly full enough. The U.S.'s dysfunctional border management is costing all three countries huge sums of money, while stifling their potential and impoverishing their cultures. This is simply unacceptable. In this age of epochal economic challenges, we need to open doors, not close them.

It is infuriating and frustrating to consider that politicians win more votes when they promise to double down on destructive policies than when they propose to reform them. Neo-Nativist paranoia about immigrants demeans us as a country and costs us the benefits of international talent; protectionist trade and industrial policies only hurt us in the long run by propping up uncompetitive industries.

Our national security concerns are real and urgent, but we are not meeting them by tying up trucks in traffic, interrupting supply chains, and torturing blameless business travelers and tourists with long lines and cumbersome bureaucracies—and by sending the smartest, most inventive, productive, and hard-working people in the world a clear message that we would rather they took their innovations

and business start-ups to other nations. The U.S. is already losing scientists and intellectuals to countries that have proven themselves to be more welcoming. It is a disastrous trend.

The impetus and logic of our new economic age is global. We need to make it work for us, rather than hold ourselves back by working against it. The places that compete the most effectively are the most diverse and the least inward-looking and defensive. Of course we will never live in a fully post-Sovereign world, as the European Union's current troubles attest—nor would we want to, because the border is what creates the complementarities that add texture and value to bi-national regions. Take the border away and the food would lose much of its piquancy; the music would have a blander sound. But link entrepreneurs, technologists and manufacturers across it, allowing them to mobilize their different resources, harness their unique abilities, and combine and recombine their ideas, and the possibilities are limitless.

The world is spiky: money, resources, and economic power are not spread out evenly but concentrate in just a handful of places. Our emergent knowledge-based economy favors big, densely-populated conurbations, where the clusters of industries and talent are thickest. Rich in people, in skills, and resources, binational regions like Cali-Baja are just that sort of a place. Knit together by a shared infrastructure and goods and talent that flow in both directions, it could become even bigger and more powerful—an engine that could power growth on both sides of the border, and indeed in both nations at large.

Good fences, as the poet said, make good neighbors. Tearing the border down is neither a politically viable nor an economically sound approach to a very real problem. But the agencies that have been tasked with the border's protection need to learn to think of it as more of a semi-permeable membrane than an unbreachable barrier—some people and goods must pass across it frictionlessly, while others are halted.

**It's time that the Department of Homeland Security, the police agency that has jurisdictional and policy control of the border, invite input from the Departments of State and Commerce, who understand that it is also functions as a critical piece of diplomatic and commercial infrastructure. Better processes, smarter systems, and more advanced technologies are desperately needed.**

I sincerely hope this report will help to bring that about. Our future depends upon it.

– RICHARD FLORIDA, FOUNDER  
CREATIVE CLASS GROUP

## Executive Summary

In “today’s borderless economy,” the management expert Kenichi Ohmae declared in 1993, the “wealth-generating region states that lie within or across” nation states are the “globe’s natural economic zones.” A year later, the U.S., Canada, and Mexico formalized the North American Free Trade Agreement (NAFTA), which created the largest free trade area in the world.

Twenty years on, the political mood in the U.S. is more protectionist and anti-immigrant than it’s been since the 1920s and its borders, though officially open to Canadian and Mexican trade, are administered by the U.S. Customs and Border Patrol, a police agency which is under the auspices of the Department of Homeland Security.

NAFTA is clearly working up to a point—the volume of truck traffic is high in both directions—but the militarization of the border has created impediments that slows down the passage of people and goods, significantly limiting both the quantity of bi-lateral trade and the informal interactions between citizens that are so productive of entrepreneurial company formation.

Recognizing the urgency of this issue, we set out to understand the economic and social/cultural challenges posed by excessive border friction, to reframe the narrative about the border, demonstrating

how it can be utilized to promote economic and cultural development, and to offer a set of concrete recommendations for improvements, among them:

- A formal severance between security and policy considerations in the governance of U.S. border operations, and the inclusion of the Department of State and/or the Department of Commerce in its management.
- Significant investment in better border technologies and government management systems.
- Investment in more efficient transportation infrastructure, from bi-national airports to high-speed trains.
- Improved data collection and the development of shared data-bases of regional demographics and economic trends.
- An expanded commitment to cross border civic and networking initiatives.
- The private sector needs to be brought in to assist in all of the above.

## Introduction

### Imagine a location that provides all of this:

- Soup-to-nuts product development, from initial concept, laboratory research, and prototype design to manufacturing and distribution—and all of it within the distance of a short car trip instead of spread out across the world.
- A customer base that has literally doubled in size within the past two decades—and that has increased both its diversity and its disposable income.
- Access to a youthful talent base that is multi-cultural, bi-lingual, and driven to become real players in the notoriously spiky tech world.
- An emergent Aerotropolis that is globally connected like no other place in the U.S., not just by air, but by sea, rail, and highway.
- A rapidly evolving ecosystem for high-tech and bio-tech startups, with conduits to Silicon Valley in the north and to Mexico's growing investor class in the south.
- A playground for the creative class, with beaches, boating trails, mountain biking, and scenery—and a menu of cultural and culinary choices that is surprisingly generous and broad.

The San Diego/Tijuana region is being reshaped by a vision of the economic benefits that can be achieved by trans-sovereignty and the practical impetus provided by the North American Free Trade Agreement (NAFTA). San Diego is emerging from the shadow of LA and becoming a culture and foodie destination in its own right; Tijuana has long-since outgrown its tawdry reputation as a playground for cash-strapped sailors on shore leave. Chef Rick Bayless called it “one of the great food cities of North America” and remarked on its neighborhoods that are “so sophisticated you can’t imagine.”

But it is still a significant work in progress, because the border that creates its complementarities is nowhere near as frictionless as it should be. Goods and people are not allowed to move across it as quickly and as easily as they need to, discouraging many from even trying, whether it is weekend pleasure-travelers foregoing an excursion to a gallery, a shopping mall, or a visit to a doctor because it’s not worth the wait in border traffic, or a major business passing up an opportunity to relocate a manufacturing facility from China to Baja.

We are paying for this at both ends. According to a recent *Associated Press study*, “annual border spending...tripled over the last decade as lawmakers have allocated funds to build a sophisticated network of sensors, fences, law enforcement patrols, and unmanned aerial vehicles.” But for the “taxpayers footing these bills,” the study found, “the returns have been mixed: fewer illegal immigrants but little impact on the terrorism issue, and no stoppage of the drug supply.”

As George Will put it in a blistering *Washington Post* column:

*Many Republicans rightly say that control of borders is an essential ingredient of national sovereignty. But net immigration from Mexico has recently been approximately zero. Border Patrol spending, which quadrupled in the 1990s, tripled in the 2000s. With illegal entries near a 40-year low, and a 2012 Government Accountability Office assessment that border security was then 84 percent effective, will a "border surge" of \$30 billion more for the further militarization (actually, the East Germanization) of the 1,969 miles assuage remaining worries?*

Anti-immigration sentiments and fears of terrorism are potent political pressure points, especially since 9/11 and the economic crisis of 2008. But if border militarization plays well with critical blocs of voters in the interior, the people who are most directly affected by it tell a different story. As attested to by a cross section of Tijuana and San Diego business and civic leaders whose voices will be heard in this paper, the San Diego/Tijuana region is paying a steep price in lost productivity and foregone economic and cultural opportunities.

Bi-national trade is clearly working; the fact that so many people and vehicles and freight are crossing the border proves that. But it could be working so much better than it is. Border traffic and border management are a nightmare, and their effects are not just being felt in San Diego and Tijuana but across every one of its 2,000 miles, impacting such far-flung city pairs as El Paso and Ciudad Juarez, Brownsville and Matamoros, Laredo and Nuevo Laredo, and metro trading partners like Mexico City and Los Angeles and Chicago that are separated by thousands of miles. The full economic costs are

## *More than 60,000,000 border crossings between San Diego and Baja California annually.*

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incalculable in both countries, and we use the word "incalculable" in its literal sense. A damning GAO [report](#) released in July, 2013 revealed that the CBP's reporting on wait times to cross the border is so unreliable that it's impossible to quantify their effects on national trade.

But the [San Diego Association of Governments \(SANDAG\)](#) did provide some telling numbers in a detailed [report](#) that was released in 2006. There are more than 60,000,000 crossings between San Diego and Baja California each year, it reported. More than half the trips are for shopping and recreation; some ten million are for work. Fully 90 percent are local, originating or ending in San Diego County or Tijuana. 730,000 trucks cross into California and a similar number cross into Mexico. "Congested truck traffic at border crossings," the report noted, "has an especially dampening impact on economic expansion."

*Delay hinders the ability of manufacturers in the border regions, including the maquiladoras, to support the kind of businesses that depend on reliable logistics for the distribution of freight. In an increasingly just-in-time manufacturing economy, unpredictable wait times for trucks at the border act as a barrier to trade that slows and inhibits cross-border economic investment opportunities. Cross-border traffic generates significant income for retailers, hotels and recreation businesses on both sides of the border. However, by discouraging some from making trips across the border, congestion inhibits potential growth in business income and therefore hinders trade in the long term.*

The direct losses from inadequate border infrastructure between San Diego County and Baja California amounted to \$2.9 billion in foregone gross output and 40,000 jobs in the San Diego and Baja California regions, according to a [2007 update](#) to the SANDAG report, and \$7.2 billion and 62,000 jobs in the U.S. and Mexican economies as a whole.

“It takes a whole day just to go to Tijuana,” Marney Cox, the Chief Economist of SANDAG remarked in an interview, “same as if I went to Silicon Valley.” Not coincidentally, Tijuana does a greater volume of business with Silicon Valley than it does with San Diego, according to a Brookings Institution/J.P. Morgan Chase Bank [study](#). Proximity should be a bigger plus than it is.

Recognizing the urgency of this issue, we were tasked with understanding the economic and social/cultural challenges and hurdles associated with a border that is more cumbersome than it should be. We pored over many preexisting research studies and news articles to understand its impact on work and life. We met with dozens of business, community and government officials on both sides of the Tijuana–San Diego border to hear their personal stories and vision for a frictionless U.S. and Mexico border. We wanted to tell the personal stories of residents who are impacted by the border’s challenges each and every day. In doing so our purpose is clear: we hope to reframe the narrative about the border, offer concrete ideas to address the challenges it poses, and demonstrate how it can be utilized to promote competitiveness and economic as well as cultural development. San Diego and Tijuana may be the biggest city pair on the southern border, but the lessons they teach are applicable to every other U.S. crossing.

*“America now spends more money on immigration enforcement than on all the other main federal law-enforcement agencies combined.”*

*U.S. PRESIDENT BARACK OBAMA, THE ECONOMIST*

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We will *not* make a case for open borders of the kind that are found in the Schengen Region of Europe, for two reasons. First, while economic logic dictates an increasingly trans-national outlook, practically speaking, a borderless south is a non-starter. While Libertarians traditionally advocated open borders (the 2004 platform of the U.S. Libertarian Party [called for](#) “the elimination of all restrictions on immigration, the abolition of the Immigration and Naturalization Service and the Border Patrol, and a declaration of full amnesty for all people who have entered the country illegally”), Ron Paul, perhaps the best-known Libertarian in the U.S.—a politician who is much less demagogic on the subject of immigration than most of his fellow House Republicans, or his son Rand in the Senate—voted for a border fence in 2006 and has advocated hiring more border guards as recently as December, 2013. Barack Obama [brags](#) that his administration “has put more boots on the ground on the southern border than at any time in our history” and as *The Economist* recently [noted](#), “America now spends more money on immigration enforcement than on all the other main federal law-enforcement agencies combined.”

Immigration and free trade have always been political third rails, but they have become especially charged since the economic meltdown of 2008—and not just in the U.S. but increasingly in Europe. A 2012 [white paper](#) by Freerk Boedeltje of the Institute for Regional



Studies of the Californias at San Diego State University, specifically compared the EU and the San Diego-Tijuana border regions. Surprisingly, it found not just contrasts but likenesses. “Through the strong focus on securitization and border management,” it noted, “The EU external borders, like the U.S.-Mexican border, have become increasingly secured zones with limited access, fenced structures, increased control and tightened security measures.”

Second, and more to the point, even if a fully open border with Mexico were politically feasible, it would have the effect of blurring the differences between the two regions, and hence erasing the complementarities that are generative of so much economic value. One side of the border excels in research and design, the other in manufacturing. One side is rich in capital, the other in skilled, cost competitive labor. Each has its own strengths and specializations.

Voters and law-makers alike must learn to see the border in a different way than they are accustomed to, as an economic growth platform rather than a security vulnerability. This report is a first step in that effort. Starting with a big-picture consideration of the global implications of the rise of trans-national mega-regions, it will drill down into the Cali-Baja region in particular, showing how San Diego and Tijuana, and Mexico and the U.S. at large, are stronger together than apart—and how they could and should be stronger still.

## The Rise of the Mega Region

More than two decades ago, in the Spring, 1993 issue of *Foreign Affairs*, MIT’s Kenichi Ohmae, at the time a senior partner of the McKinsey Group and its director of operations in Japan, threw down a gauntlet. “The nation state,” he wrote, “has become a dysfunctional unit for understanding and managing the flows of economic activity that dominate today’s borderless world. Policymakers, politicians and corporate managers would benefit from looking at ‘region states’—the globe’s natural economic zones—whether they happen to fall within or across traditional political boundaries.” In his book *The End of the Nation State: The Rise of Regional Economies* (1995), he took his argument a step further:

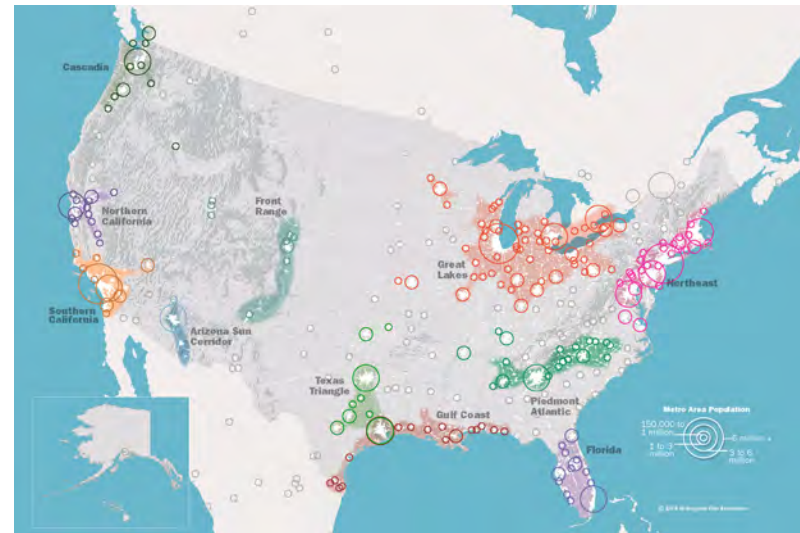
*“In today’s borderless economy, there is really....only one legitimate instrument of policy to restore sustainable and self-reinforcing vitality.....And that is to cede meaningful operational autonomy to the wealth-generating region states that lie within or across their borders, to catalyze the efforts of those region states to seek out global solutions, and to harness their distinctive ability to put global logic first and to function as ports of entry to the global economy.”*

*The 40 largest make up 18 percent of the world's population, but account for 66 percent of its economic activity, and 86 percent of its patented innovations.*

Though Ohmae's full-bore globalism has an anachronistic ring in a world in which the passions of nationalism have seen such a dramatic resurgence, the idea that cities and their surrounding areas are replacing nation-states as the primary social and economic organizing units of our time has nonetheless achieved a significant consensus.

Our world is spiky, and it is getting more so all the time, as populations, economic output, and innovation increasingly concentrate in a relative handful of locations. The world's tallest spikes, the real engines of the global economy, are its mega-regions—the sprawling but loosely integrated economic units that come into being as neighboring cities grow outward and into one another. In their 2007 paper [“The Rise of the Mega-Region,”](#) Richard Florida, Charlotta Mellander, and Tim Gulden used a dataset of nighttime light emissions to calculate a consistent measure of their economic output. The ten largest megas, they found, house just 6.5 percent of the world's people but account for 43 percent of its economic activity and 57 percent of its patented innovations. The 20 largest account for 57 percent of economic activity and 76 percent of innovations. The 40 largest make up 18 percent of the world's population, but account for 66 percent of its economic activity, and an astounding 86 percent of its patented innovations.

Many of these “wealth-generating region states” fall “across traditional boundaries,” for example Amsterdam-Brussels-Antwerp, Tel Aviv-Amman-Beirut, and Barcelona-Lyons.



Source: America 2050

The map above, reproduced from the Regional Plan Association's [America 2050](#) project, identifies the 11 largest mega-regions in the U.S., which it compares to Europe and Asia's Global Integration Zones. Three of them are bi-national: Tor-Buff-Chester (Toronto, Buffalo, and Rochester); Cascadia (Seattle, Portland, and Vancouver), and So-Cal (LA, San Diego, and Tijuana). “In the United States,” the report continues, “the coupling and chaining of industrial activity to take advantage of ‘just in time’ production and delivery is increasingly critical to the success of our economy. [But] the limited capacity to move goods quickly and ‘on demand’ is a serious obstacle that firms face in congested regions”—an observation that is of special salience to San Diego and Tijuana.

## Two Cities, One Bi-National Region

The So-Cal mega is home to 21 million people and \$710 billion in output. LA is preeminent, of course, in films, recording, and entertainment; its media, design and arts skill base is more than two and a half times larger than the national average. It is also a major port (\$223 billion in U.S. trade value) and a center for finance, banking, and technology. San Diego boasts world-class information technology, telecommunications, and biotechnology. It has 42,000 life sciences employees who work at companies such as Genentech, Arena Pharmaceuticals, and Quidel on biopharmaceuticals, medical devices and biofuels. Tijuana houses one of the world's largest high-tech electronics manufacturing centers, with approximately 59,000 workers developing products ranging from LCD television projectors and circuit boards to solar panels and satellite tracking devices. In 2013, Tijuana's medical device manufacturing employment topped 34,000 – with nearly 40 companies, it has the highest concentration in North America. Tijuana also has some 54 automotive plants employing more than 18,000 workers.

This report focuses more narrowly on the Cali-Baja mega, which includes the 28,656 square miles of San Diego County and Imperial County in the U.S. and Baja California in Mexico. Home to 6.6 million people with \$205 billion in economic output, the region's knowledge assets include 90 colleges and universities and more than 80 research institutes, including UC San Diego, The Scripps Research Institute, Sanford-Burnham Institute, and the Salk Institute for Biological Studies. A who's who list of companies call the San



Source: Calibaja.net

*The Cali-Baja mega-region is home to 6.6 million people with \$205 billion in economic output*

Diego-Tijuana region home: Qualcomm, Kyocera International, Nokia, Genentech, Northrop Grumman, SAIC, Lockheed Martin, Medtronic, Honeywell, and many more. According to a Martin Prosperity Institute analysis of 2012 venture capital data provided by the National Venture Capital Association, the San Diego metro ranks sixth in the U.S. for venture capital, with \$1.1 billion in 103 investments in 2012.

“San Diego is home to the largest concentration of military in the world,” according to the San Diego Economic Development Corporation. “It is homeport to more than 60% of the ships in the U.S. Pacific Fleet and more than one-third of the combat power of the U.S.

Marine Corps. The defense industry represents one out of every four jobs in the San Diego region with companies developing unmanned vehicles, robotics, cyber security and shipbuilding.” Military spending in San Diego amounts to some \$20.6 billion and accounts for more than 312,000 jobs.

The region is well-supplied with logistics infrastructure, including five interstate freeways, five international airports, two specialized maritime port facilities and numerous rail links. To the east of San Diego, Imperial Valley is rich in land that can be developed for business or residential uses and that already supports \$4 billion in agribusiness. A number of companies, such as Synthetic Genomics, Tenaska, Pattern Energy and Cal Energy, are developing solar, wind, biofuel, and geothermal technologies within the region.

Tijuana is not just a source of lower cost labor and maquiladoras where finished products are assembled from imported components; it has an abundance of engineers, doctors, and other highly skilled people. More than 83,000 students are enrolled in its more than 35 public and private universities, 14 technical schools, and 57 high schools. Tijuana is also home to 13 nationally accredited university programs in engineering, information sciences, and business administration. The depth and breadth of Tijuana’s talent pool—and the extent to which it interpenetrates San Diego’s—is clearly evidenced by some of the interview subjects you will hear from in the course of this report.

*Tijuana is also home to 13 nationally accredited university programs in engineering, information sciences, and business administration.*

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Geraldo Toledo is a microbiologist and a Senior Director at Synthetic Genomics, a leader in algae-to-biofuel conversion. A Mexican national who has spent more than 18 years in San Diego, he is a founding member of Talento sin Fronteras, an organization that brings Mexican scientists together on both sides of the border to network and connect. Miguel Marshall is a venture capitalist who works for Angel Ventures Mexico, an investment firm that is avid for cross border opportunities. Ping Wang’s parents ran a maquiladora in Tijuana. He earned his PhD in the U.S. and now runs the Ansir Innovation Center, a San Diego-based technology incubator. Like Miguel Marshall, he has been working on a number of initiatives with partners on both sides of the border, where he sees huge opportunities for working with skilled programmers, engineers, and entrepreneurs.

But not all ambitious *Tijuanense* are looking north. “There is the feeling that the city has retaken itself,” Teddy Cruz, an architect and professor at the University of California, San Diego, whose work has examined Tijuana, recently told *The New York Times*. “There’s a kind of a vibrancy that is really unique in recent times. There’s something about the city taking back its spaces.”

Both cities are becoming widely known for their quality of life and amenities. San Diego County has a thriving craft beer scene, with over 80 breweries. “Beer,” *The New York Times* recently reported, “has

become as much a part of the San Diego identity as surf and sun.” *Food & Wine* wrote of Tijuana’s “access to raw ingredients that are as good as those anywhere on America’s West Coast,” adding that “what it lacks in culinary tradition (Tijuana will never be Oaxaca), it makes up for with the mingling of flavors from Chinese, Japanese, Spanish, and Italian immigrants.”

Though Tijuana and San Diego each have significant arts, music, and theater scenes, Tijuana’s, bridging as it does the Third and the First Worlds, has a distinctive character, according to Ann Berchtold, the founder and Executive Director of the Art San Diego Contemporary Art Fair. The presence of its artists’ works in San Diego galleries and the contributions they make as teachers in San Diego arts institutions “helps create an edge for the San Diego arts community that is often in the shadow of LA or Mexico City,” she says. “The rawness of Tijuana’s art and cultural scene is what gives the community its competitive advantage.”

“Homogenize the region,” she cautions, and “you’d lose the identity.”

There has been no shortage of vision—a legal framework for economic co-development exists and business people, scientists, and culture workers on both sides of the border have made significant investments and reaped significant gains. As Mexico’s Ambassador to the United States Eduardo Medina-Mora told the 82nd Winter Meeting of the United States Conference of Mayors, “since the NAFTA years, a deeper integration in the region has taken place...North America has become a region of shared production, and we are now building things together and competing as a unit in the global economy.”

Exports to Mexico reached \$217 billion in 2012, more than exports to Japan and China combined. “While a tag may read ‘Made in Mexico,’” the Ambassador noted, “More and more of these products are actually made in North America. To put it simply, the interest of the U.S. and Mexico are aligned because we build and export things together.” In 2011, according to a white paper from the Healthy Borders 2012 conference, more than 4.8 million commercial trucks, 61.2 passenger vehicles, and 40.2 million pedestrians entered the U.S. through the 43 points of entry along the southern border.

## Barriers to Opportunity

But all is not well. “Since 9/11,” observes Mario Lopez, a past Executive Director of the Tijuana Economic Development Corporation and San Diego’s former Director of Bi-National Affairs, “the border has been seen as a national security issue rather than a commerce or economic development issue.” The lost opportunity costs that are levied by its aggressive militarization are significant; in fact they are preventing the entire region from realizing its full potential.

David Malmuth, a real estate developer and a Partner at I.D.E.A. District, an initiative that seeks to create 13,000 design and tech jobs in Downtown San Diego’s East Village, compares the DHS’s mismanagement of the border to the war on drugs. The border has been militarized, he says, but what have we gotten for it? His wife is in the art business, he adds, and she has to “jump through major hoops just to move art across the border.”

Kyocera’s David Hester notes that his “biggest frustration is the wait times at the border for our trucks, typically two to four hours,

and on some days we have about 70 trucks crossing per day. I think pre-checks and reduced inspection time is the way to go to improve things, not simply building more booths. Building more booths stimulates more people to cross and the inevitable result is wait times that are unacceptable.”

“What’s holding us back?” Marney Cox, SANDAG’s Chief Economist, asks rhetorically. “Delays at the border. If we can un-kink the supply chain, it will help unlock a lot of the potential for additional suppliers. Improving rail connectivity would be a huge boost as well.”

It is an oft-heard refrain. MIND Hub’s Jorge Arroyo and Ulises Elias are focused on supporting Mexican entrepreneurs; their business model depends on their having direct access to clients and capital in the U.S. There would be more opportunities for collaboration, they say, “If the border crossing wasn’t so cumbersome.” Claudio Arriola, Director of the BiT Center, agrees. “Many of our entrepreneurs would collaborate more across the region, if the border crossing was more efficient. Time is critical for entrepreneurs.”

Ansir’s Ping Wang allows that he spends a lot of time crossing back and forth across the border but understands why others prefer not to. “It can be time consuming,” he says, which is why he recommends the creation of guest Visa passes, similar to the [SENTRI pass](#) (Secure Electronic Network for Travelers’ Rapid Inspection) that the CBP makes available to preferred travelers to expedite their crossings. “We have to broaden the definition of the trusted traveler program to make the border crossing process more inclusive and easier,” Tijuana Innovadora’s Jose Galicot says. “We’ve got to make it simpler.”

But before the SENTRI pass is expanded, its application process needs to be streamlined and improved. Caitlin Trimble, a U.S. citizen who has resided in Tijuana since she was 10 but who attended college in San Diego and works there as a paralegal, shared a Kafka-esque horror story about her unsuccessful efforts to receive one. After her application was peremptorily denied, she went through a years-long appeals process, in which she documented her unblemished criminal record, only to be refused again and again. The system has denied her application because of unspecified reasons in a catch-all category of “other”, with no further explanation. Local CBP representatives say all decisions are made at headquarters, which they have no direct communications with. The overzealous emphasis on security in this case defies common sense and logic.

“The system is clearly broken,” she said. “There’s guilt by association, and no due process. It seems to go against everything people on both sides of the San Diego and Tijuana border have been trying to do to make things easier.”

*You could ask me, “Why don’t you just move to San Diego and not have deal with the border crossing?” Tijuana is my home; it is where I’ve spent most of my life. The wait to cross the border each day has become a major impediment to my personal and professional life.*

We have quoted her at length because her story is far from unique—and it is illustrative of the frustrations that not just privileged venture capitalists and industrialists, but working people must endure on a daily basis.

The dysfunctions affect crossings in both directions. Frank Carrillo, the President of Simnsa Health Plan, the first cross-border HMO, says that the “biggest challenge to really expanding the cross-border healthcare industry is the border. The border infrastructure is constantly improving, but we still have much to do to have an efficient border crossing. Right now, a significant percentage of Americans who cross the border come for healthcare services.”

“There is a structural flaw to how the border is managed,” Cushman & Wakefield’s Malin Burnham observes. “The Department of State and the Department of Commerce should be a part of the policy conversation. We need to get more private industry involved.”

“We need to look to the EU,” Pete Garcia, a partner at I.D.E.A. District adds. “We should have a discourse about the cultural and economic advantages of not having a border. Are there alternatives for managing the region, while still maintaining the integrity of each country?” While we believe that the EU’s approach is unlikely to travel to the U.S., a more constructive, less reactive discourse about the border would indeed be welcome.

“There is two-way traffic here,” North American Research Partnership’s (NARP) Rick Van Schoik emphasizes. “The trucks heading south in other places are often empty. That’s usually not the case here.” Van Schoik’s point is underlined by “[U.S. Manufacturing and the Importance of International Trade: It’s Not What You Think](#),” a study by Kevin L. Kliesen and John A. Tatom that was published by the St. Louis Federal Reserve last year.

“The popular consensus is that manufacturing employment trends reflect an absolute decline in manufacturing output....in this view,

*For every \$100 in goods that the U.S. imports from Mexico, it includes \$40 of U.S.-made content.*

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imports are bad because they represent the offshoring of domestic jobs and the death of U.S. manufacturing.” But intermediate products—parts, in other words—cross the border in both directions, and “intermediate goods imports and capital goods imports are the lifeblood of U.S. output.”

Since NAFTA was signed in 1994, the Brookings Institute/J.P.Morgan Chase [study](#) shows, Mexico has become the U.S.’s third largest trading partner after Canada and China, with an estimated \$379 billion in goods and services passing between the two countries. Moreover, the study found that every \$100 in goods that the U.S. imports from Mexico includes \$40 of U.S.-made content. The share of U.S.-made content in Canadian imports is just \$25; for Chinese imports it is \$4.00; for imports from the EU it is only \$2.00.

The higher level of U.S. content in imports from Mexico means more jobs and revenues for cities like San Diego and for the United States as a whole. But while the bi-national production system depends upon the border to realize its cost benefits, the expenses in time and dollars that it levies threatens to erase them.

Metro-to-metro trade is more likely to occur between U.S. and Mexican metros than U.S. and Canadian metro pairs. Fifteen pairs of U.S. and Mexican metros have more than \$1 billion in trade, led by Los Angeles and Mexico City (\$2.2 billion). Ironically, San Diego and Tijuana were not even in the top 10—a fact that border issues may well play a role in.

“Border management has implications that extend far beyond the border region itself,” The North American Research Partnership’s comprehensive [State of the Border](#) report, issued in Spring, 2013, notes. “Even modest investments in border infrastructure and creative efforts to manage points of entry more efficiently can produce substantial economic gains to both the border region and to the national economies in both countries.”

Better border management would not just improve the business climate in the San Diego-Tijuana region, it would enable better natural resource management. “There are a lot of connections that are foregone,” NARP’s Rick Van Schoik points out, “because of the transaction costs of the border. For example, think of the environmental NGO community. The commons, meaning the environmental assets that span the border, have not been as efficiently managed as they could be. It’s hard to bring these people together to collaborate, and the environment has suffered because of it.”

Traffic tie-ups at the San Ysidro crossings produce pollution that affects near-by communities, not to mention the people waiting in line. The emissions have been linked to respiratory problems, cardiovascular disease, and cancer in vulnerable populations like children, pregnant women, and the elderly. Test subjects who cross regularly as pedestrians had urinary 1 NP metabolite levels that were 10 times as high as local residents who didn’t cross the border.

One thing that does cross the border with little friction is the [TB bacillus](#). TB rates in both California and Baja California are significantly higher than the rates in Mexico and the U.S. at large and Tijuana has four times as many cases as San Diego. Bi-national

efforts to control the disease are urgently needed—at least as much as the CBP’s lavishly funded anti-terrorism initiatives.

What’s clear is that the U.S. agencies that are directly responsible for border security have failed to appreciate the economic and cultural/social opportunities that a bi-national region like San Diego/Tijuana presents. Much more than a soft spot for illegal immigration, drugs, and other criminal activities, the border is a potential platform for economic growth and innovation and cultural enrichment. But too little of its potential is being realized.

## Stronger Together

In 2013, the political theorist Benjamin Barber published a book whose title echoed Ohmae’s famous paper. *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities* argues that cities, city regions, and networks of cities are increasingly supplanting nation states as the world’s most important actors. If the European Union’s post-sovereignty experiment is faltering, transnational networks of cities offer a promising new democratic model for bottom-up global governance.

One example of city-driven cross-border cooperation Barber pointed to is the San Diego/Tijuana region. Quoting the slogan “*Dos ciudades, pero una region*—we are two cities, but one region,” he applauded San Diego’s on-going efforts to create “a common economic infrastructure of value to both cities.” San Diego opened a satellite office in Tijuana in 2013; Mario Lopez, the former executive director of Tijuana’s Economic Development Corporation, was appointed San Diego’s Director of Binational Affairs. As Jose Galicot, the president of Tijuana Innovadora, an organization of Tijuana business leaders,



put it, “Tijuana probably has more in common with San Diego than it does with the rest of Mexico; today’s binational region is about equals—two nodes of the region that are equally competitive.”

By working together on airport and rail connections, the binational region may finally help solve some of its more vexing transportation and logistics challenges. San Diego has struggled for decades to find an alternative location to Lindbergh Field for an international airport with multiple runways long enough to accommodate the larger planes that are typically used for international routes. Lindbergh is currently the busiest single-runway airport in the United States, with nearly 18 million passengers coming through in 2013, and will meet capacity (currently estimated to be 21 million passengers) in the coming years. Numerous attempts to find alternative locations have failed, the most recent in 2006. However, Tijuana’s A.L. Rodriguez International Airport, located right next to the border in Otay Mesa, has a runway long enough to accommodate large jets, and offers an attractive option to expanding the region’s capacity. Beginning in 2007, a group of U.S. and Mexican investors, working with the operator of Rodriguez Airport, developed a concept of a crossborder terminal. Passengers will check in on the U.S. side, walk across a pedestrian bridge over the border, and board their plane on the Mexican side. Construction on the Mexican side began in 2013. When completed, passengers will no longer have to endure long border waits to get to and from the airport. Better access to Rodriguez may also help relieve pressure on Lindbergh’s future capacity.

Improving east-west rail connections is another area where cross border cooperation should benefit the binational region’s economy. The San Diego and Eastern Arizona railway, the original east-west

line between San Diego and El Centro, was built between 1906 and 1919. It passes through rugged mountains, crossing the U.S.-Mexico border twice, and its numerous tunnels and bridges have fallen into disrepair. With expanding trade and particularly the growth of the maquiladora manufacturing sector in Baja California, there have been attempts to bring the full line back into service to make it easier to ship commercial freight east and reduce the need to transport goods across the border by truck. As with the cross border airport terminal project, in 2013 groups of investors on both sides of the border, working separately but in concert with one another, have begun the process of repairing the line and getting the necessary agreements in place to begin operations.

San Diego and Tijuana had hoped to submit a joint proposal to co-host the 2024 Summer Olympics, until it became clear that the IOC was not prepared to amend its guidelines, which exclude bi-national bids. San Diego’s 2024 Olympics Exploratory Committee is currently preparing a solo bid, but for its whole region, including “3 cities in 3 counties as well as 8 tribal nations and the City of Tijuana in Baja California.” The committee sees the Olympic process as a mechanism for “creating an international vision for the mega-region.” Its new model is more appealing than the stridently nationalist chauvinism that characterizes so much Olympic competition, and it is more reflective of the social and economic connectivities of regions.

But if both localities are moving towards a cooperative, more collaborative spirit, the management of the border is in the hands of national governments, which are more than living up to their reputations for dysfunctionality.

## What Cali-Baja Could Be With a Frictionless Border

Together, Tijuana and San Diego possess all the drivers of 21st century competitiveness, which Richard Florida has identified as the 4T's of Technology, Talent, Tolerance, and Territorial Assets. Key to the region's strengths are its R&D-to-manufacturing capabilities. In theory, everything can be done in one region and quickly.

Chris Anderson, the former editor of *Wired* and now the president of 3D Robotics, could have manufactured the miniature drones his company designs in China but he chose Tijuana, he says, because of its advantages of cost, speed, and proximity. In an op ed piece in *The New York Times*, he compared San Diego's relationship to Tijuana to Hong Kong's with Shenzhen's—"together, the two created a world-beating manufacturing hub: business, design and finance in Hong Kong, manufacturing in Shenzhen. The clear division of labor between the two became a model for modern China." The Tijuana template, he adds, "Isn't so much about outsourcing as quicksourcing."

"Mexico is a very favorable location when you compare it to China," Gerardo de la Concha, Vice President of Manufacturing Operations for Medtronic, agrees. Besides the obvious advantages of proximity, it has an educated workforce (Mexico graduated 115,000 engineering students in 2012, three times as many on a per capita basis as the U.S.), stronger intellectual property protections, stable wages and inflation, a bilingual workforce, and of course lower costs.

*"Isn't so much about outsourcing as quicksourcing."*

CHRIS ANDERSON, PRESIDENT, 3D ROBOTICS

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But for all the advantages of propinquity and value, the kink that the border introduces exacts steep costs in dollars and time—literally billions of dollars, as we have seen. Anderson's and de la Concha's examples are perhaps more aspirational than strictly descriptive.

As Freerk Boedeltje put it in his white paper comparing Cali Baja to the EU:

*The transactions costs of anything beyond small scale import export activities are rather high even without customs and visa restrictions which further complicate the import export activities. For example, one of the biggest limitations for fast mobility of trade is often not the trade itself, but the driver of the truck and all the screenings and paperwork involved. This has limited the degree to which direct investments or other entrepreneurial activities have taken place. In addition, labor restrictions and visa restrictions on the U.S. side of the border do not allow for the development of more dynamic cross border job markets.*

Increasingly, Mexico is looking beyond the United States. David Maya-goitia, Chairman of the Board and President of the Tijuana Economic Development Corporation (DEITAC), an architect by training who lives in San Diego but works in Tijuana, told us about the Honeywell

maquiladora in Mexicali, which employs more than 16,000 people, including large numbers of Mexican-born PhDs:

I've been working on developing a technology company incubator concept that would be near the El Florido development. One of the conditions for government support is that we secure operating capital for 10 years. I visited 35 companies to line up commitments and in the process learned a lot about what is going on. One of the companies I visited was Honeywell, whose head of government relations told me about their R&D facility in Mexicali. It employs 450 engineers, many with PhDs and Masters Degrees. They have only one major contract, and that's with Airbus. What are they doing? They're looking into ways to convert turbine jet engines into electronic impulse engines. That's really advanced stuff, and if they figure it out, it would have huge implications for the industry.

Honeywell is far from an outlier. "Foxconn is developing new display technologies; Plantronics has a design and engineering center in its manufacturing facility," he continued. "The cost to develop products in Baja California is 60 percent less than it is in the U.S."

DEITAC is looking to generate new possibilities for foreign manufacturers. "We want Baja California to become a one-stop shop," Mayagoitia said. "You can set up a small office in an incubator, transition to small-scale manufacturing, and then move up to large-scale manufacturing. All within the same place."

Kyocera has about 1000 workers in its Tijuana facility, which has moved beyond the simple assembly of solar panels and electronic components to the design and production of prototypes and the

development of processes and plans. One of the strongest draws of the Kyocera Mexicana plant, notes David Hester, its president, "is its ability to get to market quickly. We have been able to install new production lines and produce the first completed prototypes in less than four weeks. Processes that used to take fifteen days now take just fifteen hours because the components used to cross the border up to four times. Now they cross only once, and when they are complete, they are shipped directly to the customer."

All of these examples are positives for Mexico, but the U.S. is losing out on opportunities. If the border didn't constrict the flow of knowledge, goods, and people, the U.S. could reap more of the advantages Mexico offers—of cost and of collaboration.

San Diego has a well-established startup culture, with numerous incubators and entrepreneur support organizations like CONNECT, EvoNexus, BIOCOM, Startup Circle, and Ansir, an incubator and accelerator that takes a stake in companies in return for providing them with start-up services. On the Mexican side of the border, the Tijuana Innovadora is held every other year as a means to highlight the city's entrepreneurial and innovative culture. Tijuana's BiT Center (Baja Innovative Technology) is one of North America's largest coworking spaces; the Mexican Innovation Development (MIND) Hub has a similar model to Ansir's. Its Ulises Elias says that MIND Hub is "betting on a borderless partnership." It's a smart bet, but as things currently stand, it is also a risky one.

Another opportunity for cross-border entrepreneurship and new technology development is in healthcare and the life sciences. As

noted earlier, a number of San Diegans cross the border to take advantage of inexpensive Mexican health care, especially dentistry. Richard Kiy is the president and CEO of the [International Community Foundation](#), a San Diego-based philanthropy that has been exploring the further benefits that could be realized from so-called medical tourism. He is currently pressing for a pilot program that would allow U.S. citizens to use Medicare to pay for procedures that are carried out in Mexico. But its chances are uncertain, especially with the new wrinkles that Obamacare is introducing.

Medical testing is still another potential growth area. Tijuana manufactures a vast array of medical devices; it is also an ideal location for clinical trials. “Qualcomm is doing a clinical study in Baja California to look at wireless monitoring of people suffering from diabetes,” he mentioned. “There are a lot of advantages to trials like these in the cross border region. You’ve got innovative technology, you’ve got access to a large patient pool, and you’ve got lower costs associated with monitoring the study versus doing it somewhere much farther away.”

Richard Florida has established the importance of the arts and Bohemian occupations in economic development—both as direct contributors and for the quality of place that they add to a region, making it a more attractive locational choice for the entrepreneurial creative class. San Diego spent half a billion dollars on the arts in 2010, more than twice the median for cities of similar size. As a 2004 [report](#) from the International Community Foundation noted, Tijuana was named one of the eight most creative cities in the world by Newsweek; as such, it makes a significant contribution to San Diego’s creative

quotient, but nowhere near as much as it could. Programs like the Tijuana Art Walk, Art Walk San Diego, and the InSITE exhibitions that have been held in San Diego and Tijuana at intervals since the 1990s encourage this cross-fertilization, but they hardly exhaust its potential. Because the border is more restrictive of movement from the south to the north, most of the institutionally-driven collaboration has originated in San Diego. A more open border would allow more in the way of cross-fertilization.

Teddy Cruz observed that Tijuana has derived some unexpected benefits from border restrictions. Going all the way back to the Prohibition era, Tijuana looked to San Diego for tourist dollars, and then with the rise of the maquiladoras, for business opportunities. The hardening of the border has pushed Tijuana to look inward and develop not just its businesses but its powerful grass roots arts, music, and culinary scenes, which have enriched the entire region.

Cruz made the point that Americans tend to think of cross-border collaboration as uni-directional—as a matter of well-endowed U.S.-based NGOs and cultural organizations delivering assistance to their less-advantaged neighbors. They forget that they share the same geography, the same transportation infrastructure, and the same power grid. The presence of Mexican shanty towns pressed up against the border fences should not only offend one’s sense of justice—they pose a risk to water sources that both countries rely on. As people on both sides of the border develop a sense of shared identity and learn to cooperate with each other on problem solving, they will begin to model a new kind of global citizenship.

San Diego and Tijuana combined are a veritable powerhouse of export clusters, talent, universities, logistics, and infrastructure. The culture is diverse and multi-cultural; though their economic disparities are obvious, both cities are rich in amenities and quality of life. Their complementarities are obvious; together they add up to far more than the sum of their parts.

Whether the topic is trade and manufacturing, medicine, the arts, the environment, epidemiology or even national security, a less paranoid, more collaborative, and more technologically sophisticated system of border management would pay enormous dividends, advancing new models of cross-border socio-economic equity.

## A Vision for the Future

Tijuana and San Diego sorely need a better-functioning, more frictionless border. Here are some initial steps the U.S. and Mexico could make towards that end:

- **Immediately separate security from policy considerations in the governance of U.S. border operations.** DHS is the only federal agency that has jurisdiction over both operations and policy in the security arena. This has led to security concerns overriding all other considerations in how U.S. borders are managed. As *The Economist* put it, “a mass murder committed by mostly Saudi terrorists resulted in an almost limitless amount of money being made available for the deportation of Mexican house-painters.”
- **Include the Department of State and/or Department of Commerce in the management of the borders.** As noted above and throughout this report, security concerns have been prioritized above all

others since 9/11, levying significant economic and social costs. It is time for economic and social development to be given equal weight.

- **Improve border technologies and government management systems.** Crossings of people and goods take too long and entail too much bureaucracy. They can be streamlined. In the Tijuana-San Diego region, for example, SANDAG is preparing a master plan on border modernization that it will release this spring; its recommendations should be carefully considered. In an NPR [interview](#), the former Mexican ambassador to the U.S. Arturo Sarukhan noted that if “instead of having to fill in three different customs pediment forms, you have one single North American pediment....we could really enhance cross-border trade.” This isn’t even “low-hanging fruit,” he emphasized. “It’s fruit on the ground.”
- **Transportation infrastructure has to be more efficient.** Connectivity matters more for cross border city regions. Airports, ports, and border crossings can be complementary rather than competitive. Tijuana’s A.L. Rodriguez International Airport will soon feature a pedestrian bridge that connects to a parking lot on the California side, allowing passengers to avoid the long lines at San Ysidro. Other similar efforts can be made.
- **Improve data collection and develop a shared database of assets.** As witnessed by the GAO report mentioned in the first part of this report, private and public efforts to better leverage the border region have been stymied by a lack of reliable data. Both the U.S. and Mexico need to create shared data sets of regional demographics and economic trends.

- **Make a greater commitment to incubate cross border civic and networking initiatives.** The region is already seeing increased informal collaborations like that of the BiT Center and the Ansir Innovation Center, Tijuana Innovadora, and the San Diego Regional Chamber of Commerce. Many of the people we interviewed underlined the need for better cross-border civic initiatives and networking opportunities.

San Diego and Tijuana's complementary capacities for high tech invention and production are tremendous competitiveness assets; most regions would be happy to have just one of them. And San Diego-Tijuana is only one of a number of regions that cross the U.S. and Mexican border whose synergies have yet to be fully leveraged.

El Paso and Juarez are literally a stone's throw apart, though El Paso is vastly richer and safer. There are a wealth of similar opportunities to those in Cali-Baja, and the El Paso Regional Economic Development Corporation and Paso del Norte Group are eager to take advantage of them. Recently they established the [Borderplex Binational Economic Alliance](#), which they describe as a "bi-national metro area of more than 2.7 million people, encompassing three states and two nations—offering a globally competitive business environment."

*The New York Times* recently published a [story](#) about how a tax hike on consumer goods in Mexico might have spelled an opportunity for Texas merchants. But "until United States Customs and Border Protection puts additional resources in place to improve cross-border traffic, leaders and business owners say, what should be a boon could be little more than a bump." Many Mexicans would rather pay the tax than wait for hours to cross the U.S. border.

*"I think it all depends on what goes on at the bridges and how long it takes to process people," said Les Norton, a store owner and president of the Laredo Downtown Merchants Association. "It's so frustrating when you're dealing with these bureaucrats who look at Laredo and think every person coming from Mexico is either a terrorist or smuggling drugs."*

It is the same story again and again, across all 2,000 miles of the southern border. And while the wealth disparities aren't as jarring and there is less of a language and cultural barrier, many of the same conditions exist in the north. Overly-aggressive border security and backward-looking economic ideas have cast a shadow over the U.S./Canadian border too.

**Imagine how much more we could achieve if we invested even half of what we've spent to protect the border on new systems that facilitate trade, tourism, and cultural exchange across it. Imagine how much stronger, safer, and mutually enriched we could be.**

## Partners

### Creative Class Group

The Creative Class Group (CCG) is a boutique advisory services firm composed of leading next-generation researchers, academics, and strategists. CCG believes that every single human being is creative—and that it is only when we tap that great reservoir of overlooked and underutilized human potential that we can truly achieve economic progress and a more meaningful, more fulfilling way of life. CCG's approach centers on the research of the urban theorist and CCG founder Richard Florida, a world-renowned thought leader on issues such as economic competitiveness, demographic trends, and cultural and technological innovation.

### Global CONNECT

Global CONNECT is a university-based consultancy that works with regions around the world on issues related to technology commercialization, entrepreneurship, and innovation by providing highly relevant and application-oriented research and educational services. By drawing upon its knowledge of best practice, Global CONNECT assists its clients build the capacity necessary to compete in a global, knowledge-based economy. Global CONNECT is housed within UC San Diego Extension, the professional education and public service division of UC San Diego, one of the top 15 research universities worldwide. UC San Diego has also been ranked by *Washington Monthly* for the past three years as the number one university in the nation in rankings measuring “what colleges are doing for the country.”

## Team

### Richard Florida

The Director of the [Martin Prosperity Institute](#) at the University of Toronto's Rotman School of Management, Global Research Professor at New York University, and the founder of the Creative Class Group, which works closely with governments and companies worldwide, Richard Florida is perhaps the world's leading urbanist, “as close to a household name as it is possible for an urban theorist to be in America,” according to *The Economist*. *Esquire* has included him on its annual list of “The Best and the Brightest,” and *Fast Company* dubbed him an “intellectual rock star.” MIT Technology Review recently named him one of the world's most influential thinkers.

Florida is the author of several global best sellers, including the award-winning *The Rise of the Creative Class* (“one of the best business books of all time”—800-CEO-READ), and is a senior editor for *The Atlantic*, where he co-founded and serves as Editor-at-Large for [Atlantic Cities](#), the world's leading media site devoted to cities and urban affairs.

Florida appears regularly on CNN and other news broadcasts and is a regular contributor to the op ed pages of major newspapers and magazines. *TIME* magazine recognized his Twitter feed as one of the 140 most influential in the world.

Florida previously taught at Carnegie Mellon and George Mason University, and has been a visiting professor at Harvard and MIT. He earned his Bachelor's degree from Rutgers College and his Ph.D. from Columbia University.

## Mary Lindenstein Walshok

Mary Lindenstein Walshok is an author, educator, researcher, and Associate Vice Chancellor for Public Programs and Dean of Extension at the University of California San Diego. She is a thought leader and expert on aligning workforce development with regional economic growth.

The author of more than 100 articles and reports on regional innovation, the role of research institutions in regional economies, and workforce development, she has authored and co-authored numerous book chapters and articles on the world of work, including: *Blue Collar Women* (1981), *Knowledge Without Boundaries: What America's Research Universities Can Do for the Economy, the Workplace, and the Community* (1995), *Closing America's Job Gap* (2011) and the forthcoming book for the Stanford University Press, *Invention and Reinvention: The Evolution of San Diego's Entrepreneurial Economy*.

As head of the continuing education and public programs arm of UC San Diego since 1981, Walshok oversees programs that educate more than 55,500 enrollees annually, which translates to more than 26,000 students in over 4,900 courses. She oversees a staff of 230 employees and an annual budget of more than \$35 million. She has developed outreach efforts to help accelerate the San Diego region's economic vitality, assure a globally competitive talent pool and help college graduates transition to employment areas that are in higher demand.

## Nathan Owens

Nathan Owens is the Director of Global CONNECT, a public program of UC San Diego Extension that works with clients from around the world on projects related to technology and innovation. As Director, Nathan develops customized education and training programs, as well as conducts research on regional innovation systems. Nathan's work frequently involves Mexico, including a four-year initiative supported by Merck & Co. to build research and entrepreneurial capacity in the life sciences. He also represents UC San Diego Extension on a SANDAG committee focused on border infrastructure and economic development opportunities in the San Diego-Baja California binational region.

Prior to joining Global CONNECT, Nathan worked as a research analyst at a Washington, DC consulting firm where he focused on U.S. science and technology policy as well as IT and telecom market trends. While in Washington, Nathan received his MA from the Elliott School of International Affairs at The George Washington University. Nathan also holds a BA in political science from UC San Diego.

## Steven Pedigo

Steven Pedigo is the Director of Research for the Creative Class Group, a global think tank comprised of leading researchers, academics and strategists. In this role, he provides cutting-edge analysis of economic and demographic trends for communities, Fortune 500 companies, and major media outlets across the globe. Steven has managed a team of expert researchers to provide business intelligence for an array of clients such as Pinewood Studios, Zappos.com, Le Meridien Hotels, Emaar Canada and *Kiplinger's Magazine*.



In addition to his work with the Creative Class Group, Steven is the Director of Civic Engagement and an Assistant Clinical Professor for Economic Development at New York University (NYU). In his role at NYU, Steven is leading the effort to develop, fund and deliver the University's civic engagement and economic development curriculum and research program.

Prior to joining NYU, Steven was a Vice President and Member of the Senior Management Team for the Initiative for a Competitive Inner City (ICIC), a national research organization founded by Harvard Business School professor Michael Porter to encourage private-sector investment into U.S. urban centers.

Steven holds a bachelor's degree from the University of Texas at Austin and graduate degrees from the H. John Heinz III School for Public Policy and Management at Carnegie Mellon University and the University of Illinois at Urbana-Champaign.

### **Arthur Goldwag**

Arthur Goldwag is the author of *Isms & Ologies* (2007) and *The New Hate: A History of Fear and Loathing on the Populist Right* (2012), among other books. His political essays have appeared at Salon, *The Daily Beast*, *The Washington Spectator*, *The Atlantic* and other venues.



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*Today's binational region is about equals—two nodes of the region that are equally competitive.*

*JOSE GALICOT, PRESIDENT & FOUNDER, TIJUANA INNOVADORA*