## Plan Text

#### Text: The United States federal government should substantially increase its United States – Mexico North American Development Bank border transportation infrastructure investment

## Manufacturing Advantage

#### U.S.-Mexican trade is set to increase, but border infrastructure isn’t keeping up — the plan reduces congestion and saves the manufacturing sector

Wilson and Lee 12 — Christopher E. Wilson, Associate at the Mexico Institute of the Woodrow Wilson International Center for Scholars, where he develops the Institute’s research and programming on regional economic integration and U.S.-Mexico border affairs. He is the author of Working Together: Economic Ties between the United States and Mexico (Wilson Center, 2011), and an editor and author of the Institute’s forthcoming State of the Border Report, and Erik Lee, serves as Associate Director at the North American Center for Transborder Studies (NACTS) at Arizona State University (Christopher E. Wilson, Erik Lee, *Site Selection*, July 2012, “Whole Nations Waiting”, <http://www.siteselection.com/issues/2012/jul/us-mex-border.cfm>, Accessed 07-15-2013 | AK)

Commerce between the United States and Mexico is one of the great — yet underappreciated — success stories of the global economy. In 2011 U.S.-Mexico goods and services trade reached the major milestone of one-half trillion dollars with virtually no recognition. The United States is Mexico's top trading partner, and Mexico — which has gained macroeconomic stability and expanded its middle class over the last two decades — is the United States' second largest export market and third largest trading partner. Seventy percent of bilateral commerce crosses the border via trucks, meaning the border region is literally where "the rubber hits the road" for bilateral relations. This also means that not only California and Baja California, but also Michigan and Michoacán, all have a major stake in efficient and secure border management. The quantity of U.S.-Mexico trade is impressive, but its quality makes it unique. The United States and Mexico do not just sell goods to one another, they actually work together to manufacture them. Through production sharing, materials and parts often cross back and forth between factories on each side of the border as a final product is made and assembled. As a result, U.S. imports from Mexico contain, on average, 40 percent U.S. content, and Mexico's imports from the U.S. also have a high level of Mexican content. This system of joint production has two important consequences. First, it means that our economies are profoundly linked. We tend to experience growth and recession together, and productivity gains or losses on one side of the border generally cause a corresponding gain or loss in competitiveness on the other side as well. Second, the fact that goods often cross the border several times as they are being produced creates a multiplier effect for gains and losses in border efficiency. Whereas goods from China only go through customs and inspection once as they enter the U.S. or Mexico, products built by regional manufacturers bear the costs of long and unpredictable border wait times and significant customs requirements each time they cross the U.S.-Mexico border. Corridors in Crisis This trade relationship requires major infrastructure to function effectively. The largest trade corridor, often referred to as the NASCO corridor, links central and eastern Mexico to Texas, the American Midwest, Northeast, and Ontario, utilizing the key Laredo-Nuevo Laredo ports of entry (POEs). Other important trade arteries include the CANAMEX Corridor, which connects western Mexico to the intermountain United States and Canadian province of Alberta, as well as the shorter but high-volume I-5 corridor connecting California to Baja California. As the economies of both the U.S. and Mexico grow, it is likely that this network of freight transportation infrastructure — and the land POEs that serve as nodes in this network — will experience added stress. Unfortunately, the infrastructure and capacity of the ports of entry to process goods and individuals entering the United States has not kept pace with the expansion of bilateral trade or the population growth of the border region. Instead, the need for greater border security following the terrorist attacks of 9/11 led to a thickening of the border, dividing the twin cities that characterize the region and adding costly, long and unpredictable wait times for commercial and personal crossers alike. Congestion acts as a drag on the competitiveness of the region and of the United States and Mexico in their entirety. Solutions are needed that strengthen both border security and efficiency at the same time. The integrated nature of the North American manufacturing sector makes eliminating border congestion an important way to enhance regional competitiveness. The global economic crisis forced manufacturers to look for ways to cut costs. After taking into consideration factors such as rising fuel costs, increasing wages in China and the ability to automate an ever greater portion of the production process, many American companies decided to nearshore factories to Mexico or reshore them to the United States, taking advantage of strong human capital and shorter supply chains. Bilateral trade dropped significantly during the recession but has since rebounded strongly, growing significantly faster than trade with China. But the growth of trade continues to add pressure on the already strained POEs and transportation corridors. Several studies have attempted to quantify the costs of border area congestion to the economies of the United States and Mexico. In what is perhaps a testimony to the fragmented and geographically disperse nature of the border region, most of these studies have focused on particular North-South corridors of traffic and trade rather than taking a comprehensive, border-wide approach. The specific results of the studies (see table on p. 108) are quite varied. Nonetheless, one message comes through quite clearly — long and unpredictable wait times at the POEs are costing the United States and Mexican economies many billions of dollars each year. Moderate investments to update infrastructure and to fully staff the ports of entry are certainly needed, as long lines and overworked staff promote neither efficiency nor security. But in a time of tight federal budgets, asking for more resources cannot be the only answer. Strategic efforts that do more with less, improving efficiency and reducing congestion, are also needed. Trusted traveler and shipper programs (i.e. the Global Entry programs, which includes programs such as SENTRI, FAST, C-TPAT) allow vetted, low-risk individuals and shipments expedited passage across the border. Common Voice Improving these programs and significantly expanding enrollment could increase throughput with minimal investments in infrastructure and staffing — all while strengthening security by giving border officials more time to focus on unknown and potentially dangerous individuals and shipments. The development of the 21st Century Border initiative by the Obama and Calderón administrations has yielded some advances in this direction, but the efforts need to be redoubled. The 1990s were the decade of NAFTA and skyrocketing trade. The 2000s saw security concerns grow and recession struck. The new decade has only just begun, but the potential is there for a resurgence of competitiveness and regional integration. There are strong ideas — including trusted traveler and shipper programs, preclearance, customs harmonization, and public-private partnerships — that have enormous potential. The challenge is now for heterogeneous and geographically dispersed border communities to find a way to speak with a common voice, for policymakers in Washington and Mexico City to guide strategic planning for regional competitiveness, and for all stakeholders to engage vigorously in binational dialogue and cooperation.

#### **Border delays threaten production shut-downs — the plan solves by reducing transportation costs and shipping times**

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At a time when Mexico is poised to experience robust economic growth, a manufacturing renaissance is underway in North America and bilateral trade is booming, the United States and Mexico have an important choice to make: sit back and reap the moderate and perhaps temporal benefits coming naturally from the evolving global context, or implement a robust agenda to improve the competitiveness of North America for the long term. Given that job creation and economic growth in both the United States and Mexico are at stake, the choice should be simple, but a limited understanding about the magnitude, nature and depth of the U.S.-Mexico economic relationship among the public and many policymakers has made serious action to support regional exporters more politically divisive than it ought to be. The United States and Mexico have become profoundly integrated, and the two countries are now partners, rather than competitors, in the global economy. The North American Free Trade Agreement, geographic proximity, and the complementary nature of the two economies have fostered an integrated manufacturing platform. The United States and Mexico do not only trade finished products; they build them together. Indeed, roughly 40 percent of all content in Mexican exports to the United States originates in the United States, much more than the comparable figures with China, Brazil, and India, at four, three, and two percent respectively. Only Canada, at 25 percent, is similar. As a result, improvements in productivity in either country, as well as advances that lower the costs of moving goods across the border (i.e.: long wait times, inefficient customs procedures), strengthen the competitiveness of manufacturers throughout the whole region. While manufacturing wages in China were four times less than Mexico in 2000, they are now nearly equal and are expected to be 25 percent higher than Mexican labor costs by 2015.1 The simple math of wage differentials drove the past decade’s movement of factories from the U.S. and Mexico to China, but companies are taking an increasingly holistic approach in deciding where to locate factories, considering transportation costs and shipping times; exchange rate and political risks; language, culture, and time zone differences; contract and intellectual property law enforcement; security; production flexibility; the supply and cost of materials and energy; and the availability of skilled and educated workers. In most of these categories, Mexico is gaining ground or maintains a distinct advantage over other regions of the world, particularly in terms of serving markets throughout the Americas. For example, between 2007 and December 2012, the value of the Mexican Peso fell by 17 percent compared to the U.S. Dollar and by a full 33 percent compared to the Chinese Yuan, improving the competitiveness of regional exports vis-à-vis Chinese goods.2 Crude oil prices rose 231 percent between 2002 and 2012, thus raising shipping costs and incentivizing the use of shorter, regional rather than longer, transcontinental supply chains.3 New drilling techniques, however, are changing the outlook for oil and especially natural gas, opening access to new reserves, increasing production, and therefore lowering some energy costs. While this may eventually lower long range shipping costs, the more immediate effect is proving to be a major decline in natural gas prices, which has already lowered electricity costs in some parts of the United States and has the potential to do so throughout both the region. Such a decline in prices provides a major boost to energy intensive industries, such as steel, and petrochemical producers. The United States is on the forefront of the technological advances in the energy industry and stands to gain the most from them, but Mexico could reap the benefits as well should it either reform its energy industry to take advantage of its significant shale gas reserves or develop the pipeline infrastructure to support increased gas imports from the United States. Technological advances and improvements in the manufacturing process and logistics are revolutionizing industrial production in ways that significantly change cost structures, further incentivizing those that had offshored to China to consider near-shoring in Mexico or re-shoring their production back to the United States. Robots and the high-tech sensors that allow them to function with precision are allowing many of the simple, repetitive jobs that traditionally made up factory work obsolete. The need for large numbers of relatively unskilled laborers is on the decline, and the need for high skilled technicians who can program and maintain the complex machines and robots of today’s factories is on the rise. As a result, labor costs are a shrinking portion of total production costs, as evidenced by a recent study that found only 5.3% of the price of an iPhone goes to offshore manufacturing wages.4 This shift opens an opportunity for advanced economies like the U.S. to recoup some of their share of global manufacturing, especially if the complementary nature of high-tech design and production in the U.S. is complemented with lower cost manufacturing in Mexico for the portions of production that still require a higher degree of manual labor. The widespread implementation of lean manufacturing principles has improved the efficiency and agility of factories around the world. One important area in which fat has been cut from the manufacturing process is in warehousing. Just-in-time supply chain management has minimized the costly storage of parts and products, thus fueling the trend of regionalization in manufacturing by increasing the importance of a robust network of nearby suppliers. It is also greatly increasing the need for short and predictable wait times at the U.S. land borders since an unexpected delay has the potential to shut down production until the needed parts arrive at their destination.

#### Modernizing border infrastructure solves — safeguards competitiveness, bolsters manufacturing, and supports 6 million U.S. jobs

NAFTA Works 13 — a monthly newsletter on NAFTA and related issues (NAFTA Works, Volume 18, Issue 4, April 2013, “Border Infrastructure's Key Role in Expanding U.S.-Mexico Trade”, <http://www.naftamexico.net/wp-content/uploads/2013/05/apr13.pdf>, Accessed 07-21-2013 | AK)

Very few countries in the world have the potential to shape the United States’ manufacturing competitiveness as much as Mexico. It is difficult to overstate the critical importance of this strategic partnership, as trade between both countries reached roughly half a trillion dollars in 2012, maintaining Mexico’s status as the U.S.’ third largest trading partner and its second largest export market as it purchased nearly 1/8 of all U.S. exports. The increased usage of cross-border production lines has resulted in a very unique trading partnership, where working to establish a trade facilitating border infrastructure is now crucial to successfully competing in the global market. In order to understand the true strength of this partnership, a new approach that incorporates the relevance of foreign value-added in exports is required. Consequently, one of the most distinctive factors of U.S.-Mexico trade lies in its qualitative nature. Working together to co-manufacture products entails an intensive intra-industry trade of inputs rather than exclusively trading in finished products, helping to support the 6 million U.S. jobs that depend on trade with Mexico. As a result of this highly integrated production process, on average, 40% of all content in Mexican exports to the U.S. actually originates in the United States. As 82%, or $404 billion, of bilateral trade was carried across the border via surface transportation in 2012, improving the efficiency of trade flows at the U.S. southern Ports of Entry (POE) is imperative to safeguarding a regional competitive edge. Last year, over 44 million tons of food, inputs, components, and finished products crossed by land from Mexico into the U.S. to supply manufacturing plants and supermarkets alike. Far from exclusively benefiting the four Southern U.S. states bordering Mexico, a total of twenty-nine U.S. states had exports to Mexico in excess of $1 billion in 2012, making this one of the most economically significant borders in the world. Additionally, some twenty-three U.S. states depended on Mexico as their No. 1 and No. 2 largest export market in 2012, with states as far north as Michigan exporting over $10 billion. This illustrates that even states’ local economies that are far from the southern border are also major stakeholders when it comes to building a seamless, long haul border infrastructure that is capable of minimizing cross-border business costs. Of the 26 POEs along the southern border that collectively handled more than $1.3 billion in bilateral trade each day in 2012 - virtually all of it tariff free - the largest by far is the Port of Laredo in Texas. This critical POE facilitated more than 3.5 million cross-border commercial truck shipments, and over 500 thousand rail-boxes via railway in both directions, carrying more than $163 billion in goods in 2012 or 35% of all bilateral trade. Considering that forty U.S. states spread across the country use Laredo as their primary POE, this port could truly be considered the U.S.’ main artery for bilateral trade with Mexico. Last year alone, more than $76 billion in U.S. exports to Mexico and $86 billion in imported Mexican goods went through the Laredo POE. Another strategic POE is El Paso, which had 13% of all U.S.- Mexico trade pass through in 2012. With over $66 billion in goods being traded here, it is the second busiest port for bilateral trade. As an example of its relevance, El Paso is the second largest POE for U.S. electrical machinery exports to Mexico, as it was responsible for the timely crossing of 26% of this vital industry’s exports. Along the western side of the border, Otay Mesa is the U.S.’ third largest POE for bilateral trade with Mexico, which had more than $35 billion of goods move through this facility in 2012. An astonishing 99% of trade between California and Mexico is conducted by trucks, therefore ensuring that the state’s busiest commercial truck crossing operates at maximum efficiency is critically important. In order to enhance and also secure regional competitiveness, the strength of both countries’ industrial capabilities lies in the joint effort to minimize the logistical costs placed on regional manufactures. By expanding and modernizing the current border infrastructure, both countries promote a world-class logistical capability that improves border wait times, customs procedures, and trusted traveler or shipper programs. As a result, both countries are working together through the 21st Century Border Initiative to address shared challenges. Progress has been achieved over the past three years that has helped to facilitate the secure and efficient flow of goods and people along the border. Three new international bridges, one in Arizona and the other two in Texas, were constructed to support this growing demand. Becoming operational in 2009, the Anzalduas International Bridge in Texas was the first new bridge to be built in over a decade, during which bilateral trade grew by 76%.

### Scenario One: Auto Industry

#### Our manufacturing sectors are deeply integrated — strong U.S.-Mexican supply chain is the foundation of the auto industry

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Regional integration between the United States and Mexico is already vast and deep. As the United States’ second largest export market and third largest trading partner, Mexico is clearly important to the U.S. economy. Merchandise made has more than quintupled since NAFTA went into effect in 1994, and in 2011, bilateral goods and services trade reached approximately a half-trillion dollars for the first time. The U.S. Chamber of Commerce has calculated that the jobs of six million American workers depend on U.S.-Mexico trade. Many of those jobs are in border states, which have especially close ties to Mexico, but Mexico is also the top buyer of exports from states as far away as New Hampshire (mostly computers and electronics). In fact, 20 states, from Michigan to Florida, sell more than a billion dollars’ worth of goods to Mexico each year, and Mexico is the first or second most important export market for 21 states. The United States and Mexico are also major investors in one another. In fact, combined foreign direct investment holdings now total more than $100 billion. According to the most recent count by the Department of Commerce, U.S.-owned companies operating in Mexico created $25 billion in value added and employed nearly a million workers. Mexican investment in the United States is less than U.S. investment in Mexico, but it is has been growing rapidly in recent years. Several of Mexico’s top companies, which are increasingly global operations, have made significant investments in the United States. Mexico’s Cemex, for example, is North America’s largest maker of cement and concrete products. Grupo Bimbo, which owns well-known brands such as Entenmanns’s, Thomas’s English Muffins, and Sara Lee, is the largest baked goods company in the Americas. Even Saks Fifth Avenue and the New York Times Company are supported by significant Mexican investment. The massive volume of commerce and investment is important, but the depth of regional integration is the primary reason why Mexico contributes to U.S. competitiveness. Mexico and the United States do not just trade products, they build them together. In fact, to understand regional trade, it is necessary to view imports and exports in a different light. Whereas imports from most of the world are what they appear to be—foreign products—the same cannot be said of imports from Mexico. During production, materials and parts often cross the southwest border numerous times while U.S. and Mexican factories each perform the parts of the manufacturing process they can do most competitively. Because of the complementary nature of the two economies, close geographic proximity, and NAFTA, which eliminated most tariff barriers to regional trade, the U.S. and Mexican manufacturing sectors are deeply integrated. Demonstrating this integration is the fact that 40% of the value of U.S. imports from Mexico comes from materials and parts produced in the United States. This means that 40 cents of every dollar the United States spends on Mexican goods actually supports U.S. firms. The only other major trading partner that comes close to this amount is Canada, the United States’ other NAFTA partner, with 25% U.S. content. Chinese imports, on the other hand, have an average of only 4% U.S. content, meaning that the purchase of imports from China does not have the same positive impact on U.S. manufacturers. The regional auto industry is a good example of this production-sharing phenomenon. The United States, Mexico, and Canada each produce and assemble auto parts, sending them back and forth as they work together to build cars and trucks. Cars built in North America are said to have their parts cross the United States borders eight times as they are being produced, and between 80 and 90% of the U.S. auto industry trade with its North American partners is intra-industry, both of which signal an extremely high level of vertical specialization. As a result, Detroit exports more goods to Mexico than any other U.S. city, and the North American auto industry has proven much more resilient than many expected. Although several of North America’s largest automakers nearly collapsed during the financial crisis in 2008 and 2009, a robust recovery is now under way. Mexico and the United States have each experienced the sharpest rise in vehicle production of the world’s top 10 auto producers during the past two years, growing 51 and 72%, respectively, between 2009 and 2011.

#### The auto industry is key to military readiness – checks every impact

Thoma 9 (Mark Thoma, economics professor at the University of Oregon, “Does the U.S. Need an Auto Industry?,” New York Times, 4-30-09, <http://roomfordebate.blogs.nytimes.com/2009/04/30/does-the-us-need-an-auto-industry/?_r=0)//RDa>

Does America need an auto industry? I believe that specialization and trade generally makes us all better off, so there is no reason to oppose industry moving outside our borders. But the costs and benefits of specialization sometimes hit different groups of people, so there can be winners and losers. People losing jobs in the auto industry generally do worse when they find new jobs, and that has been a big reason for the opposition to letting manufacturing of autos and other goods go into decline. But there is another rationale for policies preserving certain kinds of production: protecting industries vital to national defense. If you are an island nation vulnerable to blockades or trade embargoes intended to prevent food and other goods from being imported, it may be in your interest to protect domestic agriculture, for example. The question is the degree to which a country can outsource the manufacturing of goods needed for national defense. If we do not have the capacity to produce engines, cars, tractors, and other goods that can be quickly converted to building military vehicles and aircraft, and war breaks out and those supplies are cut off, where does that leave us? Some goods can be safely outsourced since they aren’t vital to national defense, or because the barriers to restarting production are small. But assembly lines used to produce automobiles cannot be constructed in an instant, so losing this industry would make us more vulnerable. (Foreign ownership of factories located here is not a problem, since we could easily take those over if necessary, so we should be happy with the announcement of the alliance of Chrysler with Fiat.) Of course, a counterargument is that “vital for national defense” can be used as a cover for broad protectionist policies. Every supplier to the auto industry, for example, could claim that they are just as essential as the factory itself. Still, I think it’s important to ask if eliminating domestic auto production crosses the safety line, and I worry that it would.

#### Collapse risks deterrence failure — escalates to great-power war

Spencer 2K (Jack Spencer, Research Fellow at Thomas A. Roe Institute for Economic Policy Studies, “The Facts About Military Readiness”, Heritage Foundation, 9-15-2000, <http://www.heritage.org/Research/Reports/2000/09/BG1394-The-Facts-About-Military-Readiness)//RDa>

America's national security requirements dictate that the armed forces must be prepared to defeat groups of adversaries in a given war. America, as the sole remaining superpower, has many enemies. Because attacking America or its interests alone would surely end in defeat for a single nation, these enemies are likely to form alliances. Therefore, basing readiness on American military superiority over any single nation has little saliency. The evidence indicates that the U.S. armed forces are not ready to support America's national security requirements. Moreover, regarding the broader capability to defeat groups of enemies, military readiness has been declining. The National Security Strategy, the U.S. official statement of national security objectives,3 concludes that the United States "must have the capability to deter and, if deterrence fails, defeat large-scale, cross-border aggression in two distant theaters in overlapping time frames."4According to some of the military's highest-ranking officials, however, the United States cannot achieve this goal. Commandant of the Marine Corps General James Jones, former Chief of Naval Operations Admiral Jay Johnson, and Air Force Chief of Staff General Michael Ryan have all expressed serious concerns about their respective services' ability to carry out a two major theater war strategy.5 Recently retired Generals Anthony Zinni of the U.S. Marine Corps and George Joulwan of the U.S. Army have even questioned America's ability to conduct one major theater war the size of the 1991 Gulf War.6 Military readiness is vital because declines in America's military readiness signal to the rest of the world that the United States is not prepared to defend its interests. Therefore, potentially hostile nations will be more likely to lash out against American allies and interests, inevitably leading to U.S. involvement in combat. A high state of military readiness is more likely to deter potentially hostile nations from acting aggressively in regions of vital national interest, thereby preserving peace.

### Scenario Two: Innovation

#### Strengthening the domestic manufacturing maintains U.S. technological innovation and superiority

Ettlinger and Gordon 11 (Michael Ettlinger, Vice President for Economic Policy at American Progress, Kate Gordon, Senior Fellow at American Progress, “The Importance and Promise of American Manufacturing,” April, http://www.americanprogress.org/wp-content/uploads/issues/2011/04/pdf/manufacturing.pdf)//RDa

Beyond innovation and competitiveness, basing manufacturing in the United States also is important to our overall national and economic security. The most clear-cut example of this, of course, is the importance of being able to produce for the needs of our armed forces. The importance of domestic capabilities in defense manufacturing is obvious—one doesn’t want to be dependent on foreign suppliers in a time of conflict. Equally obvious is the importance of keeping innovations in military technology close to home.

#### That undergirds U.S. military and economic primacy

Segal 4 (Adam Segal, Maurice R. Greenberg Senior Fellow in China Studies at the Council on Foreign Relations, “Is America Losing Its Edge,” Foreign Affairs, November 2004 - December 2004, Pg. 2 Vol. 83 No. 6, Technology Enterprises in China)//RDa

The United States' global primacy depends in large part on its ability to develop new technologies and industries faster than anyone else. For the last five decades, U.S. scientific innovation and technological entrepreneurship have ensured the country's economic prosperity and military power. It was Americans who invented and commercialized the semiconductor, the personal computer, and the Internet; other countries merely followed the U.S. lead.¶ Today, however, this technological edge-so long taken for granted-may be slipping, and the most serious challenge is coming from Asia. Through competitive tax policies, increased investment in research and development (R&D), and preferential policies for science and technology (S&T) personnel, Asian governments are improving the quality of their science and ensuring the exploitation of future innovations. The percentage of patents issued to and science journal articles published by scientists in China, Singapore, South Korea, and Taiwan is rising. Indian companies are quickly becoming the second-largest producers of application services in the world, developing, supplying, and managing database and other types of software for clients around the world. South Korea has rapidly eaten away at the U.S. advantage in the manufacture of computer chips and telecommunications software. And even China has made impressive gains in advanced technologies such as lasers, biotechnology, and advanced materials used in semiconductors, aerospace, and many other types of manufacturing.¶ Although the United States' technical dominance remains solid, the globalization of research and development is exerting considerable pressures on the American system. Indeed, as the United States is learning, globalization cuts both ways: it is both a potent catalyst of U.S. technological innovation and a significant threat to it. The United States will never be able to prevent rivals from developing new technologies; it can remain dominant only by continuing to innovate faster than everyone else. But this won't be easy; to keep its privileged position in the world, the United States must get better at fostering technological entrepreneurship at home.

#### The pursuit of hegemony is inevitable, sustainable, and prevents great power war

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Since the end of World War II, the United States has pursued a single grand strategy: deep engagement. In an effort to protect its security and prosperity, the country has promoted a liberal economic order and established close defense ties with partners in Europe, East Asia, and the Middle East. Its military bases cover the map, its ships patrol transit routes across the globe, and tens of thousands of its troops stand guard in allied countries such as Germany, Japan, and South Korea.¶ The details of U.S. foreign policy have differed from administration to administration, including the emphasis placed on democracy promotion and humanitarian goals, but for over 60 years, every president has agreed on the fundamental decision to remain deeply engaged in the world, even as the rationale for that strategy has shifted. During the Cold War, the United States' security commitments to Europe, East Asia, and the Middle East served primarily to prevent Soviet encroachment into the world's wealthiest and most resource-rich regions. Since the fall of the Soviet Union, the aim has become to make these same regions more secure, and thus less threatening to the United States, and to use these security partnerships to foster the cooperation necessary for a stable and open international order.¶ Now, more than ever, Washington might be tempted to abandon this grand strategy and pull back from the world. The rise of China is chipping away at the United States' preponderance of power, a budget crisis has put defense spending on the chopping block, and two long wars have left the U.S. military and public exhausted. Indeed, even as most politicians continue to assert their commitment to global leadership, a very different view has taken hold among scholars of international relations over the past decade: that the United States should minimize its overseas military presence, shed its security ties, and give up its efforts to lead the liberal international order.¶ Proponents of retrenchment argue that a globally engaged grand strategy wastes money by subsidizing the defense of well-off allies and generates resentment among foreign populations and governments. A more modest posture, they contend, would put an end to allies' free-riding and defuse anti-American sentiment. Even if allies did not take over every mission the United States now performs, most of these roles have nothing to do with U.S. security and only risk entrapping the United States in unnecessary wars. In short, those in this camp maintain that pulling back would not only save blood and treasure but also make the United States more secure.¶ They are wrong. In making their case, advocates of retrenchment overstate the costs of the current grand strategy and understate its benefits. In fact, the budgetary savings of lowering the United States' international profile are debatable, and there is little evidence to suggest that an internationally engaged America provokes other countries to balance against it, becomes overextended, or gets dragged into unnecessary wars.¶ The benefits of deep engagement, on the other hand, are legion. U.S. security commitments reduce competition in key regions and act as a check against potential rivals. They help maintain an open world economy and give Washington leverage in economic negotiations. And they make it easier for the United States to secure cooperation for combating a wide range of global threats. Were the United States to cede its global leadership role, it would forgo these proven upsides while exposing itself to the unprecedented downsides of a world in which the country was less secure, prosperous, and influential.¶ AN AFFORDABLE STRATEGY¶ Many advocates of retrenchment consider the United States' assertive global posture simply too expensive. The international relations scholar Christopher Layne, for example, has warned of the country's "ballooning budget deficits" and argued that "its strategic commitments exceed the resources available to support them." Calculating the savings of switching grand strategies, however, is not so simple, because it depends on the expenditures the current strategy demands and the amount required for its replacement – numbers that are hard to pin down.¶ If the United States revoked all its security guarantees, brought home all its troops, shrank every branch of the military, and slashed its nuclear arsenal, it would save around $900 billion over ten years, according to Benjamin Friedman and Justin Logan of the Cato Institute. But few advocates of retrenchment endorse such a radical reduction; instead, most call for "restraint," an "offshore balancing" strategy, or an "over the horizon" military posture. The savings these approaches would yield are less clear, since they depend on which security commitments Washington would abandon outright and how much it would cost to keep the remaining ones. If retrenchment simply meant shipping foreign-based U.S. forces back to the United States, then the savings would be modest at best, since the countries hosting U.S. forces usually cover a large portion of the basing costs. And if it meant maintaining a major expeditionary capacity, then any savings would again be small, since the Pentagon would still have to pay for the expensive weaponry and equipment required for projecting power abroad.¶ The other side of the cost equation, the price of continued engagement, is also in flux. Although the fat defense budgets of the past decade make an easy target for advocates of retrenchment, such high levels of spending aren't needed to maintain an engaged global posture. Spending skyrocketed after 9/11, but it has already begun to fall back to earth as the United States winds down its two costly wars and trims its base level of nonwar spending. As of the fall of 2012, the Defense Department was planning for cuts of just under $500 billion over the next five years, which it maintains will not compromise national security. These reductions would lower military spending to a little less than three percent of GDP by 2017, from its current level of 4.5 percent. The Pentagon could save even more with no ill effects by reforming its procurement practices and compensation policies.¶ Even without major budget cuts, however, the country can afford the costs of its ambitious grand strategy. The significant increases in military spending proposed by Mitt Romney, the Republican candidate, during the 2012 presidential campaign would still have kept military spending below its current share of GDP, since spending on the wars in Afghanistan and Iraq would still have gone down and Romney's proposed nonwar spending levels would not have kept pace with economic growth. Small wonder, then, that the case for pulling back rests more on the nonmonetary costs that the current strategy supposedly incurs.¶ UNBALANCED¶ One such alleged cost of the current grand strategy is that, in the words of the political scientist Barry Posen, it "prompts states to balance against U.S. power however they can." Yet there is no evidence that countries have banded together in anti-American alliances or tried to match the United States' military capacity on their own – or that they will do so in the future.¶ Indeed, it's hard to see how the current grand strategy could generate true counterbalancing. Unlike past hegemons, the United States is geographically isolated, which means that it is far less threatening to other major states and that it faces no contiguous great-power rivals that could step up to the task of balancing against it. Moreover, any competitor would have a hard time matching the U.S. military. Not only is the United States so far ahead militarily in both quantitative and qualitative terms, but its security guarantees also give it the leverage to prevent allies from giving military technology to potential U.S. rivals. Because the United States dominates the high-end defense industry, it can trade access to its defense market for allies' agreement not to transfer key military technologies to its competitors. The embargo that the United States has convinced the EU to maintain on military sales to China since 1989 is a case in point.¶ If U.S. global leadership were prompting balancing, then one would expect actual examples of pushback – especially during the administration of George W. Bush, who pursued a foreign policy that seemed particularly unilateral. Yet since the Soviet Union collapsed, no major powers have tried to balance against the United States by seeking to match its military might or by assembling a formidable alliance; the prospect is simply too daunting. Instead, they have resorted to what scholars call "soft balancing," using international institutions and norms to constrain Washington. Setting aside the fact that soft balancing is a slippery concept and difficult to distinguish from everyday diplomatic competition, it is wrong to say that the practice only harms the United States. Arguably, as the global leader, the United States benefits from employing soft-balancing-style leverage more than any other country. After all, today's rules and institutions came about under its auspices and largely reflect its interests, and so they are in fact tailor-made for soft balancing by the United States itself. In 2011, for example, Washington coordinated action with several Southeast Asian states to oppose Beijing's claims in the South China Sea by pointing to established international law and norms.¶ Another argument for retrenchment holds that the United States will fall prey to the same fate as past hegemons and accelerate its own decline. In order to keep its ambitious strategy in place, the logic goes, the country will have to divert resources away from more productive purposes – infrastructure, education, scientific research, and so on – that are necessary to keep its economy competitive. Allies, meanwhile, can get away with lower military expenditures and grow faster than they otherwise would.¶ The historical evidence for this phenomenon is thin; for the most part, past superpowers lost their leadership not because they pursued hegemony but because other major powers balanced against them – a prospect that is not in the cards today. (If anything, leading states can use their position to stave off their decline.) A bigger problem with the warnings against "imperial overstretch" is that there is no reason to believe that the pursuit of global leadership saps economic growth. Instead, most studies by economists find no clear relationship between military expenditures and economic decline.¶ To be sure, if the United States were a dramatic outlier and spent around a quarter of its GDP on defense, as the Soviet Union did in its last decades, its growth and competitiveness would suffer. But in 2012, even as it fought a war in Afghanistan and conducted counterterrorism operations around the globe, Washington spent just 4.5 percent of GDP on defense – a relatively small fraction, historically speaking. (From 1950 to 1990, that figure averaged 7.6 percent.) Recent economic difficulties might prompt Washington to reevaluate its defense budgets and international commitments, but that does not mean that those policies caused the downturn. And any money freed up from dropping global commitments would not necessarily be spent in ways that would help the U.S. economy.¶ Likewise, U.S. allies' economic growth rates have nothing to do with any security subsidies they receive from Washington. The contention that lower military expenditures facilitated the rise of Japan, West Germany, and other countries dependent on U.S. defense guarantees may have seemed plausible during the last bout of declinist anxiety, in the 1980s. But these states eventually stopped climbing up the global economic ranks as their per capita wealth approached U.S. levels -- just as standard models of economic growth would predict. Over the past 20 years, the United States has maintained its lead in per capita GDP over its European allies and Japan, even as those countries' defense efforts have fallen further behind. Their failure to modernize their militaries has only served to entrench the United States' dominance.¶ LED NOT INTO TEMPTATION¶ The costs of U.S. foreign policy that matter most, of course, are human lives, and critics of an expansive grand strategy worry that the United States might get dragged into unnecessary wars. Securing smaller allies, they argue, emboldens those states to take risks they would not otherwise accept, pulling the superpower sponsor into costly conflicts -- a classic moral hazard problem. Concerned about the reputational costs of failing to honor the country's alliance commitments, U.S. leaders might go to war even when no national interests are at stake.¶ History shows, however, that great powers anticipate the danger of entrapment and structure their agreements to protect themselves from it. It is nearly impossible to find a clear case of a smaller power luring a reluctant great power into war. For decades, World War I served as the canonical example of entangling alliances supposedly drawing great powers into a fight, but an outpouring of new historical research has overturned the conventional wisdom, revealing that the war was more the result of a conscious decision on Germany's part to try to dominate Europe than a case of alliance entrapment.¶ If anything, alliances reduce the risk of getting pulled into a conflict. In East Asia, the regional security agreements that Washington struck after World War II were designed, in the words of the political scientist Victor Cha, to "constrain anticommunist allies in the region that might engage in aggressive behavior against adversaries that could entrap the United States in an unwanted larger war." The same logic is now at play in the U.S.-Taiwanese relationship. After cross-strait tensions flared in the 1990s and the first decade of this century, U.S. officials grew concerned that their ambiguous support for Taiwan might expose them to the risk of entrapment. So the Bush administration adjusted its policy, clarifying that its goal was to not only deter China from an unprovoked attack but also deter Taiwan from unilateral moves toward independence.¶ For many advocates of retrenchment, the problem is that the mere possession of globe-girdling military capabilities supposedly inflates policymakers' conception of the national interest, so much so that every foreign problem begins to look like America's to solve. Critics also argue that the country's military superiority causes it to seek total solutions to security problems, as in Afghanistan and Iraq, that could be dealt with in less costly ways. Only a country that possessed such awesome military power and faced no serious geopolitical rival would fail to be satisfied with partial fixes, such as containment, and instead embark on wild schemes of democracy building, the argument goes.¶ Furthermore, they contend, the United States' outsized military creates a sense of obligation to do something with it even when no U.S. interests are at stake. As Madeleine Albright, then the U.S. ambassador to the un, famously asked Colin Powell, then chairman of the Joint Chiefs of Staff, when debating intervention in Bosnia in 1993, "What's the point of having this superb military you're always talking about if we can't use it?"¶ If the U.S. military scrapped its forces and shuttered its bases, then the country would no doubt eliminate the risk of entering needless wars, having tied itself to the mast like Ulysses. But if it instead merely moved its forces over the horizon, as is more commonly proposed by advocates of retrenchment, whatever temptations there were to intervene would not disappear. The bigger problem with the idea that a forward posture distorts conceptions of the national interest, however, is that it rests on just one case: Iraq. That war is an outlier in terms of both its high costs (it accounts for some two-thirds of the casualties and budget costs of all U.S. wars since 1990) and the degree to which the United States shouldered them alone. In the Persian Gulf War and the interventions in Bosnia, Kosovo, Afghanistan, and Libya, U.S. allies bore more of the burden, controlling for the size of their economies and populations.¶ Besides, the Iraq war was not an inevitable consequence of pursuing the United States' existing grand strategy; many scholars and policymakers who prefer an engaged America strongly opposed the war. Likewise, continuing the current grand strategy in no way condemns the United States to more wars like it. Consider how the country, after it lost in Vietnam, waged the rest of the Cold War with proxies and highly limited interventions. Iraq has generated a similar reluctance to undertake large expeditionary operations -- what the political scientist John Mueller has dubbed "the Iraq syndrome." Those contending that the United States' grand strategy ineluctably leads the country into temptation need to present much more evidence before their case can be convincing.¶ KEEPING THE PEACE¶ Of course, even if it is true that the costs of deep engagement fall far below what advocates of retrenchment claim, they would not be worth bearing unless they yielded greater benefits. In fact, they do. The most obvious benefit of the current strategy is that it reduces the risk of a dangerous conflict. The United States' security commitments deter states with aspirations to regional hegemony from contemplating expansion and dissuade U.S. partners from trying to solve security problems on their own in ways that would end up threatening other states.¶ Skeptics discount this benefit by arguing that U.S. security guarantees aren't necessary to prevent dangerous rivalries from erupting. They maintain that the high costs of territorial conquest and the many tools countries can use to signal their benign intentions are enough to prevent conflict. In other words, major powers could peacefully manage regional multipolarity without the American pacifier.¶ But that outlook is too sanguine. If Washington got out of East Asia, Japan and South Korea would likely expand their military capabilities and go nuclear, which could provoke a destabilizing reaction from China. It's worth noting that during the Cold War, both South Korea and Taiwan tried to obtain nuclear weapons; the only thing that stopped them was the United States, which used its security commitments to restrain their nuclear temptations. Similarly, were the United States to leave the Middle East, the countries currently backed by Washington – notably, Israel, Egypt, and Saudi Arabia – might act in ways that would intensify the region's security dilemmas.¶ There would even be reason to worry about Europe. Although it's hard to imagine the return of great-power military competition in a post-American Europe, it's not difficult to foresee governments there refusing to pay the budgetary costs of higher military outlays and the political costs of increasing EU defense cooperation. The result might be a continent incapable of securing itself from threats on its periphery, unable to join foreign interventions on which U.S. leaders might want European help, and vulnerable to the influence of outside rising powers.¶ Given how easily a U.S. withdrawal from key regions could lead to dangerous competition, advocates of retrenchment tend to put forth another argument: that such rivalries wouldn't actually hurt the United States. To be sure, few doubt that the United States could survive the return of conflict among powers in Asia or the Middle East – but at what cost? Were states in one or both of these regions to start competing against one another, they would likely boost their military budgets, arm client states, and perhaps even start regional proxy wars, all of which should concern the United States, in part because its lead in military capabilities would narrow.¶ Greater regional insecurity could also produce cascades of nuclear proliferation as powers such as Egypt, Saudi Arabia, Japan, South Korea, and Taiwan built nuclear forces of their own. Those countries' regional competitors might then also seek nuclear arsenals. Although nuclear deterrence can promote stability between two states with the kinds of nuclear forces that the Soviet Union and the United States possessed, things get shakier when there are multiple nuclear rivals with less robust arsenals. As the number of nuclear powers increases, the probability of illicit transfers, irrational decisions, accidents, and unforeseen crises goes up.¶ The case for abandoning the United States' global role misses the underlying security logic of the current approach. By reassuring allies and actively managing regional relations, Washington dampens competition in the world's key areas, thereby preventing the emergence of a hothouse in which countries would grow new military capabilities. For proof that this strategy is working, one need look no further than the defense budgets of the current great powers: on average, since 1991 they have kept their military expenditures as a percentage of GDP to historic lows, and they have not attempted to match the United States' top-end military capabilities. Moreover, all of the world's most modern militaries are U.S. allies, and the United States' military lead over its potential rivals is by many measures growing.¶ On top of all this, the current grand strategy acts as a hedge against the emergence regional hegemons. Some supporters of retrenchment argue that the U.S. military should keep its forces over the horizon and pass the buck to local powers to do the dangerous work of counterbalancing rising regional powers. Washington, they contend, should deploy forces abroad only when a truly credible contender for regional hegemony arises, as in the cases of Germany and Japan during World War II and the Soviet Union during the Cold War. Yet there is already a potential contender for regional hegemony -- China -- and to balance it, the United States will need to maintain its key alliances in Asia and the military capacity to intervene there. The implication is that the United States should get out of Afghanistan and Iraq, reduce its military presence in Europe, and pivot to Asia. Yet that is exactly what the Obama administration is doing.¶ MILITARY DOMINANCE, ECONOMIC PREEMINENCE¶ Preoccupied with security issues, critics of the current grand strategy miss one of its most important benefits: sustaining an open global economy and a favorable place for the United States within it. To be sure, the sheer size of its output would guarantee the United States a major role in the global economy whatever grand strategy it adopted. Yet the country's military dominance undergirds its economic leadership. In addition to protecting the world economy from instability, its military commitments and naval superiority help secure the sea-lanes and other shipping corridors that allow trade to flow freely and cheaply. Were the United States to pull back from the world, the task of securing the global commons would get much harder. Washington would have less leverage with which it could convince countries to cooperate on economic matters and less access to the military bases throughout the world needed to keep the seas open.¶ A global role also lets the United States structure the world economy in ways that serve its particular economic interests. During the Cold War, Washington used its overseas security commitments to get allies to embrace the economic policies it preferred -- convincing West Germany in the 1960s, for example, to take costly steps to support the U.S. dollar as a reserve currency. U.S. defense agreements work the same way today. For example, when negotiating the 2011 free-trade agreement with South Korea, U.S. officials took advantage of Seoul's desire to use the agreement as a means of tightening its security relations with Washington. As one diplomat explained to us privately, "We asked for changes in labor and environment clauses, in auto clauses, and the Koreans took it all." Why? Because they feared a failed agreement would be "a setback to the political and security relationship."¶ More broadly, the United States wields its security leverage to shape the overall structure of the global economy. Much of what the United States wants from the economic order is more of the same: for instance, it likes the current structure of the World Trade Organization and the International Monetary Fund and prefers that free trade continue. Washington wins when U.S. allies favor this status quo, and one reason they are inclined to support the existing system is because they value their military alliances. Japan, to name one example, has shown interest in the Trans-Pacific Partnership, the Obama administration's most important free-trade initiative in the region, less because its economic interests compel it to do so than because Prime Minister Yoshihiko Noda believes that his support will strengthen Japan's security ties with the United States.¶ The United States' geopolitical dominance also helps keep the U.S. dollar in place as the world's reserve currency, which confers enormous benefits on the country, such as a greater ability to borrow money. This is perhaps clearest with Europe: the EU's dependence on the United States for its security precludes the EU from having the kind of political leverage to support the euro that the United States has with the dollar. As with other aspects of the global economy, the United States does not provide its leadership for free: it extracts disproportionate gains. Shirking that responsibility would place those benefits at risk.¶ CREATING COOPERATION¶ What goes for the global economy goes for other forms of international cooperation. Here, too, American leadership benefits many countries but disproportionately helps the United States. In order to counter transnational threats, such as terrorism, piracy, organized crime, climate change, and pandemics, states have to work together and take collective action. But cooperation does not come about effortlessly, especially when national interests diverge. The United States' military efforts to promote stability and its broader leadership make it easier for Washington to launch joint initiatives and shape them in ways that reflect U.S. interests. After all, cooperation is hard to come by in regions where chaos reigns, and it flourishes where leaders can anticipate lasting stability.¶ U.S. alliances are about security first, but they also provide the political framework and channels of communication for cooperation on nonmilitary issues. NATO, for example, has spawned new institutions, such as the Atlantic Council, a think tank, that make it easier for Americans and Europeans to talk to one another and do business. Likewise, consultations with allies in East Asia spill over into other policy issues; for example, when American diplomats travel to Seoul to manage the military alliance, they also end up discussing the Trans-Pacific Partnership. Thanks to conduits such as this, the United States can use bargaining chips in one issue area to make progress in others.¶ The benefits of these communication channels are especially pronounced when it comes to fighting the kinds of threats that require new forms of cooperation, such as terrorism and pandemics. With its alliance system in place, the United States is in a stronger position than it would otherwise be to advance cooperation and share burdens. For example, the intelligence-sharing network within NATO, which was originally designed to gather information on the Soviet Union, has been adapted to deal with terrorism. Similarly, after a tsunami in the Indian Ocean devastated surrounding countries in 2004, Washington had a much easier time orchestrating a fast humanitarian response with Australia, India, and Japan, since their militaries were already comfortable working with one another. The operation did wonders for the United States' image in the region.¶ The United States' global role also has the more direct effect of facilitating the bargains among governments that get cooperation going in the first place. As the scholar Joseph Nye has written, "The American military role in deterring threats to allies, or of assuring access to a crucial resource such as oil in the Persian Gulf, means that the provision of protective force can be used in bargaining situations. Sometimes the linkage may be direct; more often it is a factor not mentioned openly but present in the back of statesmen's minds."¶ THE DEVIL WE KNOW¶ Should America come home? For many prominent scholars of international relations, the answer is yes -- a view that seems even wiser in the wake of the disaster in Iraq and the Great Recession. Yet their arguments simply don't hold up. There is little evidence that the United States would save much money switching to a smaller global posture. Nor is the current strategy self-defeating: it has not provoked the formation of counterbalancing coalitions or caused the country to spend itself into economic decline. Nor will it condemn the United States to foolhardy wars in the future. What the strategy does do is help prevent the outbreak of conflict in the world's most important regions, keep the global economy humming, and make international cooperation easier. Charting a different course would threaten all these benefits.¶ This is not to say that the United States' current foreign policy can't be adapted to new circumstances and challenges. Washington does not need to retain every commitment at all costs, and there is nothing wrong with rejiggering its strategy in response to new opportunities or setbacks. That is what the Nixon administration did by winding down the Vietnam War and increasing the United States' reliance on regional partners to contain Soviet power, and it is what the Obama administration has been doing after the Iraq war by pivoting to Asia. These episodes of rebalancing belie the argument that a powerful and internationally engaged America cannot tailor its policies to a changing world.¶ A grand strategy of actively managing global security and promoting the liberal economic order has served the United States exceptionally well for the past six decades, and there is no reason to give it up now. The country's globe-spanning posture is the devil we know, and a world with a disengaged America is the devil we don't know. Were American leaders to choose retrenchment, they would in essence be running a massive experiment to test how the world would work without an engaged and liberal leading power. The results could well be disastrous.

## Economy Advantage

#### Status quo shortfalls in border infrastructure hamper trade — inefficiency and congestion

U.S. Chamber of Commerce 11 — United States Chamber of Commerce, 2011 (“Steps to a 21st Century

U.S.-Mexico Border: A U.S. Chamber of Commerce Border Report,” Available Online at <http://www.uschamber.com/sites/default/files/reports/2011_us_mexico_report.pdf>, Accessed 05-21-2013, p. 18)

Rapid population growth along the border puts increased pressure on infrastructure at a time when government, at all levels, is dealing with inadequate revenues to deal with not only the signiﬁcant backlog of maintenance but also the signiﬁcant investments necessary to create a 21st century infrastructure. Moreover, growth of commercial trafﬁc continues to overwhelm ports of entry to and from the United States and Mexico. From 1990 to 2010, U.S. exports to Mexico grew from $28 billion to $163 billion. Total trade between the United States and Mexico has expanded by more than 600% since 1990. Trucking and rail are the primary modes of transportation for products moving across the border, and both modes are hindered by inefﬁcient infrastructure. By investing in border infrastructure, goods, services, and people will be able to move more efﬁciently, therefore decreasing the costs of doing business. Congestion and inefﬁcient infrastructure produce uncertainty, unreliability, and high costs for international shippers.

#### Improving border infrastructure facilitates expanded trade — boosting jobs and economic growth

Figueroa et al. 11 — Alejandro Figueroa, Policy and Research Analyst at the North American Center for Transborder Studies at Arizona State University, holds an M.B.A. from the W.P. Carey School of Business at Arizona State University and a B.A. in Political Science and International Studies from Arizona State University, et al., with Erik Lee, Associate Director at the North American Center for Transborder Studies at Arizona State University, former assistant director at the Center for U.S.-Mexican Studies at the University of California-San Diego, holds an M.A. in Latin American Studies from the University of California-San Diego, Rick Van Schoik, Director of the North American Center for Transborder Studies at Arizona State University, former Navy Seal, former managing director of the Southwest Consortium for Environmental Research and Policy, conducted post-graduate studies in philanthropy at Harvard Graduate School of Education and in sustainable development at Tufts University, holds a B.A. in oceanography and engineering from the U.S. Naval Academy, 2011 (“Realizing the Full Value of Crossborder Trade with Mexico,” Report of The North American Center for Transborder Studies at Arizona State University, Available Online at http://21stcenturyborder.files.wordpress.com/2011/12/realizing-the-value-of-crossborder-trade-with-mexico2.pdf, Accessed 05-21-2013, p. 3)

U.S.-Mexico Border Management: Building the Infrastructure for Future Competitiveness

Sharing a 2,000-mile long border with Mexico needs to be recognized as both a challenge and an opportunity. Though improving, our border’s current infrastructure and capacity today reflect the needs of a bygone era. While land ports of entry between the two nations were first envisioned to process the legitimate crossing of people, goods and services across the border, security has taking an overwhelmingly dominant role in recent years, hampering the ability of agencies to efficiently manage border traffic. With this in mind, in May of 2010 the U.S. and Mexico signed the 21st Century Border Management Joint Declaration. Recognizing the importance of fostering the commercial relationship, both countries have agreed to coordinate efforts to enhance economic competitiveness by expediting lawful trade. The basic idea is that developing a modern and secure border infrastructure will give an added boost to our region’s safety and competitiveness in the world. Much Opportunity, but the Real Work Has Only Just Begun The poor infrastructure, the inadequate staffing levels and the heavy focus on security that prevails at the U.S.–Mexico border have cost both economies billions of dollars in gross output annually. It is past time for our shared border to begin to meet today’s demands, acting as a facilitator and conductor of lawful flows of goods, services and people across our nations so that we may capitalize on the full potential of our partnership. If a billion dollars’ worth of trade crosses the U.S.-Mexico border on a daily basis now while sustaining six million jobs, imagine what could be accomplished with a truly 21st century border.

#### **This is critical to a robust supply chain — infrastructure constraints and border delays hamstring growth**

Figueroa et al. 12 — Alejandro Figueroa, Research and Policy Analyst at the North American Center for Transborder Studies at Arizona State University, and Erik Lee, Associate Director at the North American Center for Transborder Studies at Arizona State University, and Rick Van Schoik, Director of the North American Center for Transborder Studies at Arizona State University (Alejandro Figueroa, Erik Lee, Rick Van Schoik, North American Center for Transborder Studies — Arizona State University, 01-04-12, “Realizing the Full Value of Crossborder Trade with Mexico”, <http://21stcenturyborder.files.wordpress.com/2011/12/realizing-the-value-of-crossborder-trade-with-mexico2.pdf>, Accessed 07-16-2013 | AK)

The close economic ties between the U.S. and Mexico illustrate the dynamics of a 21st century supply chain as inputs cross the border multiple times, accumulating value added to the goods being exported and imported through our shared border. The automotive, electronics and aeronautic industries, among others, are examples of the highly integrated supply chains between U.S. and Mexican industries that have successfully faced global competition. The North American auto industry has become highly integrated since the original Auto Pact between Detroit and Ontario that began cross-border manufacturing in North America. Today, vehicles made in Mexico have a high U.S. content, while at the same time vehicles manufactured in the U.S. use a large number of Mexican-made auto parts. Supply chains are critical to businesses’ underlying value, growth potential, and economic competitiveness. Unfortunately, supply chains often come to a stop due to border delays, security concerns, and infrastructure constraints. These issues create an environment of uncertainty in the business community, which deters investment, job creation and economic prosperity. Exports clearly create jobs, but what is less apparent is that exports rely on imports. When U.S. firms build and produce things together with firms in Mexico, it is imperative for them to get key components across the border as fast as possible back into their facilities. The sooner they are in, the sooner they may continue to move along the supply chain until they reach the consumer and create a profit for the U.S. firm and the economy. In a just-in-time business environment, the company relies on an efficient process at the border in order to get numerous key components shipped rapidly from Mexico. Mexico has increasingly become a strategic supplier to U.S. industry; Mexico’s intermediate exports contribute to both intermediate and finished goods in the U.S. Capital goods traded between the U.S. and Mexico also play an important role in increasing regional competitiveness. Last year, $70 billion worth of machinery, tools and equipment were traded bilaterally to produce other goods that were in turn consumed locally or sold to foreign markets as North American-made products. The highly complementary nature of this trade illustrates the growing importance of incorporating value-added every time a product crosses the border for further processing. The interconnectivity between the supply chains of both countries help U.S. companies remain competitive in the world marketplace by producing goods for worldwide consumption at competitive prices. Mexico’s proximity to the U.S. allows production to have a high degree of U.S. content in the final product which in turn helps create and sustain jobs in both countries.

#### This is vital to the U.S. economy and global competitiveness — trade with Mexico is key

Wilson 12 — Christopher E. Wilson, Associate at the Mexico Institute of the Woodrow Wilson International Center for Scholars, previously served as a Mexico Analyst for the U.S. Military and as a researcher at American University’s Center for North American Studies, holds an M.A. in International Affairs from American University, 2012 (“U.S. Competitiveness: The Mexican Connection,” *Issues in Science & Technology*, Volume 28, Issue 4, Summer, Available Online at <http://www.issues.org/28.4/p_wilson.html>, Accessed 05-14-2013)

A “giant sucking sound” was the memorable description made by presidential candidate Ross Perot during the 1992 campaign of the impact that the North American Free Trade Agreement (NAFTA) would have, as businesses and jobs moved from the United States to Mexico. The reality is that economic cooperation with Mexico has been a boon for U.S. industry and has strengthened the country’s competitive position in ways that have produced broad economic benefits. Today, as China and other Asian countries have emerged as major economic challengers, expanding economic cooperation with Mexico is one of the best ways for the United States to improve its global competitiveness. Regional integration between the United States and Mexico is already vast and deep. As the United States’ second largest export market and third largest trading partner, Mexico is clearly important to the U.S. economy. Merchandise made has more than quintupled since NAFTA went into effect in 1994, and in 2011, bilateral goods and services trade reached approximately a half-trillion dollars for the first time. The U.S. Chamber of Commerce has calculated that the jobs of six million American workers depend on U.S.-Mexico trade. Many of those jobs are in border states, which have especially close ties to Mexico, but Mexico is also the top buyer of exports from states as far away as New Hampshire (mostly computers and electronics). In fact, 20 states, from Michigan to Florida, sell more than a billion dollars’ worth of goods to Mexico each year, and Mexico is the first or second most important export market for 21 states. The United States and Mexico are also major investors in one another. In fact, combined foreign direct investment holdings now total more than $100 billion. According to the most recent count by the Department of Commerce, U.S.-owned companies operating in Mexico created $25 billion in value added and employed nearly a million workers. Mexican investment in the United States is less than U.S. investment in Mexico, but it is has been growing rapidly in recent years. Several of Mexico’s top companies, which are increasingly global operations, have made significant investments in the United States. Mexico’s Cemex, for example, is North America’s largest maker of cement and concrete products. Grupo Bimbo, which owns well-known brands such as Entenmanns’s, Thomas’s English Muffins, and Sara Lee, is the largest baked goods company in the Americas. Even Saks Fifth Avenue and the New York Times Company are supported by significant Mexican investment. The massive volume of commerce and investment is important, but the depth of regional integration is the primary reason why Mexico contributes to U.S. competitiveness. Mexico and the United States do not just trade products, they build them together. In fact, to understand regional trade, it is necessary to view imports and exports in a different light. Whereas imports from most of the world are what they appear to be—foreign products—the same cannot be said of imports from Mexico. During production, materials and parts often cross the southwest border numerous times while U.S. and Mexican factories each perform the parts of the manufacturing process they can do most competitively. Because of the complementary nature of the two economies, close geographic proximity, and NAFTA, which eliminated most tariff barriers to regional trade, the U.S. and Mexican manufacturing sectors are deeply integrated. Demonstrating this integration is the fact that 40% of the value of U.S. imports from Mexico comes from materials and parts produced in the United States. This means that 40 cents of every dollar the United States spends on Mexican goods actually supports U.S. firms. The only other major trading partner that comes close to this amount is Canada, the United States’ other NAFTA partner, with 25% U.S. content. Chinese imports, on the other hand, have an average of only 4% U.S. content, meaning that the purchase of imports from China does not have the same positive impact on U.S. manufacturers. The regional auto industry is a good example of this production-sharing phenomenon. The United States, Mexico, and Canada each produce and assemble auto parts, sending them back and forth as they work together to build cars and trucks. Cars built in North America are said to have their parts cross the United States borders eight times as they are being produced, and between 80 and 90% of the U.S. auto industry trade with its North American partners is intra-industry, both of which signal an extremely high level of vertical specialization. As a result, Detroit exports more goods to Mexico than any other U.S. city, and the North American auto industry has proven much more resilient than many expected. Although several of North America’s largest automakers nearly collapsed during the financial crisis in 2008 and 2009, a robust recovery is now under way. Mexico and the United States have each experienced the sharpest rise in vehicle production of the world’s top 10 auto producers during the past two years, growing 51 and 72%, respectively, between 2009 and 2011. From competitors to partners The United States and Mexico once worked relatively independently to manufacture goods and export them, but now they work together to produce goods that are sold on the global market. With their economies so intimately linked, the United States and Mexico now experience the cycle of growth and recession together. If they ever were economic competitors, it is clear that they have now become partners that will largely sink or swim together. Because they are in the same boat, the United States and Mexico should develop a joint strategy to increase regional competitiveness vis-à-vis the rest of the world.

#### U.S.-Mexico trade is vital to the economy — it sustains millions of high-quality jobs

Figueroa et al. 11 — Alejandro Figueroa, Policy and Research Analyst at the North American Center for Transborder Studies at Arizona State University, holds an M.B.A. from the W.P. Carey School of Business at Arizona State University and a B.A. in Political Science and International Studies from Arizona State University, et al., with Erik Lee, Associate Director at the North American Center for Transborder Studies at Arizona State University, former assistant director at the Center for U.S.-Mexican Studies at the University of California-San Diego, holds an M.A. in Latin American Studies from the University of California-San Diego, Rick Van Schoik, Director of the North American Center for Transborder Studies at Arizona State University, former Navy Seal, former managing director of the Southwest Consortium for Environmental Research and Policy, conducted post-graduate studies in philanthropy at Harvard Graduate School of Education and in sustainable development at Tufts University, holds a B.A. in oceanography and engineering from the U.S. Naval Academy, 2011 (“Realizing the Full Value of Crossborder Trade with Mexico,” Report of The North American Center for Transborder Studies at Arizona State University, Available Online at http://21stcenturyborder.files.wordpress.com/2011/12/realizing-the-value-of-crossborder-trade-with-mexico2.pdf, Accessed 05-21-2013, p. 3)

The United States urgently needs a sustained national conversation regarding how to realize greater value in our cross-border trade with Mexico, and the benefits of increasing efficiencies at our shared border. As the export sector assumes more importance and the U.S. economy struggles to create high-quality jobs, our nation needs to discover every dollar of value in our relationship with our nation’s number two export market: Mexico. Trade with Mexico: An Abundance of Value That Is “Hidden In Plain Sight” Trade is an important tool in policymakers’ economic development toolbox. Ever since the enactment of the North American Free Trade Agreement (NAFTA), and given the complementarity of the U.S. and Mexican economies, bilateral trade has grown exponentially, reaching a record high of nearly $400 billion in 2010. Mexico is now the third-ranked commercial partner of the U.S. and the second largest market for U.S. exports. Mexico spent $163 billion on U.S. goods in 2010, and trade with Mexico sustains six million jobs in the U.S. This is economic value that for many in the U.S. remains “hidden in plain sight.” To provide a better idea of what this commercial partnership means to our country, U.S. sales to Mexico are larger than all U.S. exports to the BRIC countries (Brazil, Russia, India and China) combined, as well as all combined sales to Great Britain, France, Belgium and the Netherlands. Twenty-two states count Mexico as their No. 1 or No. 2 export market, and it is a top-five market for 14 other states. American consumers and businesses import large quantities of jointly produced products and services from Mexico such as automobiles, produce, and petroleum, just to name a few. Still, for every dollar Mexico makes from exporting to the U.S., it will in turn spend 50 cents on U.S. products or services, which are a considerable benefit to our economy and demonstrates the truly unique quality of this trade or “joint production” relationship.

**Economic collapse leads to war – studies prove**

**Royal 2010**

(Jedediah, director of Cooperative Threat Reduction at the U.S. Department of Defense,Economics of War and Peace: Economic, Legal, and Political Perspectives, pg 213-215, ldg)

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defense behavior of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances Modelski and Thompson’s (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (see also Gilpin, 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Fearon 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflicts as a rising power may seek to challenge a declining power (Werner, 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remains unknown. Second, on a dyadic level, Copeland’s (1996, 2000) theory of trade expectations suggest that “future expectation of trade” is a significant variable in understanding economic conditions and security behavior of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult to replace item such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states. Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write, The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg and Hess, 2002, p. 89) Economic decline has also been linked with an increase in the likelihood of terrorism (Blomberg, Hess and Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. “Diversionary theory” suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a “rally around the flag” effect. Wang (1996), DeRouen (1995) and Blomberg, Hess and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states due to the fact the democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. De DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States and thus weak Presidential popularity are statically linked to an increase in the use of force. In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels. This implied connection between integration, crises and armed conflict has not featured prominently in economic-security debate and deserves more attention. This observation is not contradictory to other perspectives that link economic interdependence with a decrease in the likelihood of external conflict, such as those mentioned in the first paragraph of this chapter. Those studies tend to focus on dyadic interdependence instead of global interdependence and do not specifically consider the occurrence of and conditions

#### The impact is large: economic growth is crucial to address all global challenges

Silk 93 — Leonard Silk, Distinguished Professor of Economics at Pace University, Senior Research Fellow at the Ralph Bunche Institute on the United Nations at the Graduate Center of the City University of New York, and former Economics Columnist with the *New York Times*, 1993 (“Dangers of Slow Growth,” *Foreign Affairs*, Available Online to Subscribing Institutions via Lexis-Nexis)

Like the Great Depression, the current economic slump has fanned the firs of nationalist, ethnic and religious hatred around the world. Economic hardship is not the only cause of these social and political pathologies, but it aggravates all of them, and in turn they feed back on economic development. They also undermine efforts to deal with such global problems as environmental pollution, the production and trafficking of drugs, crime, sickness, famine, AIDS and other plagues. Growth will not solve all those problems by itself. But economic growth – and growth alone – creates the additional resources that make it possible to achieve such fundamental goals as higher living standards, national and collective security, a healthier environment, and more liberal and open economies and societies.

## Environment Advantage

#### NADBank key to environmental cooperation

**Taj, 06** (Mitra, “Possible shutdown of NADBank worries some U.S. lawmakers,” Tucson Citizen, 3/16/06, http://tucsoncitizen.com/morgue2/2006/03/16/152961-possible-shutdown-of-nadbank-worries-some-u-s-lawmakers/)

“I don’t want to see the NADBank go away,” she said. “It needs to reform itself to be relevant to the communities it serves.” Those communities, Bronson said, are some of the poorest in the country, and need more affordable lending, not less. Holub said the only other institution to which the city could have turned would have been Congress, a historically **unreliable funding source for projects along the border.** “**That’s why the NADBank was created in the first place.** Environmental problems had become so enormous along the border,” Holub said, “and Congress was simply not meeting our needs.” Bronson said because environmental problems span both sides of the border, border solutions should also. “**There has to be an international agency that works on making improvements on both sides** of the border,” Bronson said. Flores said that although **the NADBank** is doing more to help border communities tackle environmental problems, the **binational approach** to solving binational problems **has been a success so far.** “We’ve brought to the board’s attention what we see to be current limitations and obstacles to further enhancing the quality of life in the border regions,” Flores said. “We’ve done that.” For officials in border regions, improving the bank to make it more responsive to the environmental needs of border citizens **would be a welcome move.**

#### That is key to prevent mass biodiversity loss – the border is key

**Van Schoik, 04** – Rick, teaches international environmental security, science, and policy at San Diego State University, California (“Biodiversity on the U.S.-Mexican Border,” World Watch Institute, http://www.worldwatch.org/node/567)

The U.S.-Mexican border region has the highest rate of species endangerment in the United States. Some 31 percent of the species listed as endangered by the U.S. Department of Interior are found in the region. On the Mexican side of the border, 85 species of plants and animals are endangered. Not surprisingly, the threats to these species are exacerbated by the fact that the ecosystems in this region are split by a political boundary that greatly complicates conservation efforts. The area along the U.S.-Mexican border has seen extraordinary population growth, and the resulting residential and industrial sprawl along the border can evoke a doomsday vision for the entire strip from the Pacific to the Gulf of Mexico. Already, habitat loss is estimated at 2.5 hectares (more than 6 acres) per day within Tijuana alone. Last summer a coalition of U.S. and Mexican conservation biologists and other experts (the Southwest Consortium for Environmental Research and Policy) met to discuss possible ways of responding to this mounting border crisis. Well aware that the most important principle of biodiversity conservation is the need to protect the largest possible intact landscapes, we focused on identifying ways in which protections could be established that, in effect, crossed the border-regardless where the fences or guards might stand-to encompass whole ecosystems. Establishing effective cross-border policies is not easy. While nations can readily agree to conserve migrating species in their territories, as when Mexico signed on to the United States' Migratory Bird Treaty Act to protect migrating birds half a century ago, protecting adjacent prime natural areas proves much more difficult. Designed to stop humans from freely crossing, borders also stop other species. Since 9/11, the U.S.-Mexican border has been further bolstered by both the Department of Homeland Security (DHS, which was formerly divided into the customs, border patrol, and immigration agencies) and the still somewhat-secret Joint Task Force Six (JTF-6, a multi-service command charged with providing counter-drug-trafficking support). These agencies' efforts and physical infrastructure have done significant damage to wildlife habitats. Their use of sensor fields, roads, and triple fences up to 50 meters deep create erosion and dust. The physical presence of vehicular patrols, all-night artificial lighting, noise, dragging of screens to clear a slate that makes footprints visible, and the clearing of brush also degrade sensitive habitat as homeland security forces seek view and access points. Along the San Diego segment, a proposal to install triple fencing now pits the federal government's ambitions to secure borders against the state and local jurisdiction over environmental issues. "The project would cut a 150-foot swath across a habitat that is home to some of the state's rarest plants and at least three endangered wildlife species," writes California environmental journalist Terry Rodgers. While borders make environmental protection more difficult in many respects, they can also provide unique opportunities for conservation-provided that the neighboring nations are amenable to cooperation. One such form of cooperation is through the designation of parks along borders as "peace parks." During the past year, Israel and Jordan's agreement to build an environmental studies center over their common border illustrated the ability of environmental concerns to serve as a sign that the link between biodiversity and security can be turned around so that it is not seen as an impediment or cost of security but as augmenting security. Conservation attitudes are hugely complicated by poverty and asymmetry at this border. "The [Mexican] green world is ravaged by people whose only path from starvation lies in slashing and burning the jungle to plant a patch of corn," observed New York Times reporter Tim Weiner in 2002. Even in the relatively affluent border region of Mexico, the economic asymmetry between the two countries is so sharp-and land-use so different-that the border is starkly visible to people flying over in airliners.

#### Border biodiversity is key to survival

**Nabhan, 00** – Gary Paul, writer, lecturer and world-renown conservation scientist (“Biodiversity: The Variety of Life that Sustains Our Own,” Arizona-Sonora Desert Museum, January 2000, http://www.desertmuseum.org/books/nhsd\_biodiversity.php)

An excerpt from A Natural History of the Sonoran Desert There is a place in the Sonoran Desert borderlands which, more than any other I know, capsulizes what the term diversity has come to mean to both natural and social scientists alike. The place is a desert oasis known as Quitobaquito, centered on a spring-fed wetland at the base of some cactus-stippled hills that lie smack dab on the U.S.-Mexico border. Whenever I walk around there, I am astounded by the curious juxtapositions of water- loving and drought-tolerating plants, of micro-moths wedded to single senita cacti, and hummingbirds that have traveled hundreds of miles to visit ocotillos, of prehistoric potsherds of ancient Patayan and Hohokam cultures side by side with broken glass fragments left by O'odham, Anglo- and Hispanic-American cultures. Walk down from its ridges of granite, schist, and gneiss, and you will see organpipe cactus growing within a few yards of arrowweed, cattails, and bulrushes immersed in silty, saline sediments. The oasis has its own peculiar population of desert pupfish in artesian springs just a stone's throw from the spot where a native caper tree makes its only appearance in the United States. The tree itself is the only known food source for the pierid butterfly that is restricted in range to the Sonoran Desert proper. More than 270 plant species, over a hundred bird species, and innumerable insects find Quitobaquito to be a moist harbor on the edge of a sea of sand and cinder. Not far to the west of this oasis, there are volcanic ridges that have frequently suffered consecutive years without measurable rainfall, and their impoverished plant and animal communities reflect that. Quitobaquito is naturally diverse, but its diversity has also been enhanced rather than permanently harmed by centuries of human occupation. Prehistoric Hohokam and Patayan, historic Tohono O'odham, Hia c-ed O'odham, Apache, Cucupa, and Pai Pai visited Quitobaquito for food and drink long before European missionaries first arrived there in 1698. Since that time, a stream of residents from O'odham, exican, Jewish, and Mormon families have excavated ponds and irrigation ditches, transplanting shade and fruit trees alongside them. They intentionally introduced useful plants, and accidentally brought along weedy camp-followers, adding some fifty plant species to Quitobaquito over the centuries. Native birds and mammals have also been affected by human presence there, and some increased in number during the days of O'odham farming downstream from the springs. All in all, Quitobaquito's history demonstrates that the desert's cultural diversity has not necessarily been antithetical to its biological diversity; the two are historically intertwined. In fact, the Sonoran Desert is a showcase for understanding the curious interactions between cultural and biological diversity. There are at least seventeen extant indigenous cultures that each has its own brand of land management traditions, as well as the dominant Anglo- and Hispanic-American cultures which have brought other land ethics, technologies, and strategies for managing desert lands into the region. While some cultural communities such as the Seri were formerly considered passive recipients of whatever biodiversity occurred in their homeland, we now know that they actively dispersed and managed populations of chuckwallas, spiny-tailed iguanas, and columnar cacti. Floodwater farmers such as the Tohono O'odham and Opata dammed and diverted intermittent watercourses, planted Mesoamerican crops, and developed their own domesticated crops from devil's claw, tepary beans, and Sonoran panic grass. Anglo- and Hispanic-American farmers and ranchers initiated other plant and animal introductions, and dammed rivers on a much larger scale. Each of these cultures has interacted with native and exotic species at different levels of intensity, including them in their economies, stories, and songs. From an O'odham rainmaking song that echoes the sound of spadefoots, to the Western ballad "Tumblin' Tumbleweeds" written in Tucson over a half century ago, native and invasive species have populated our oral and written traditions as curses, cures, and resources. Technically speaking, this stuff we call diversity eludes one single definition. For starters, however, biodiversity (short for biological diversity) can be generally thought of as the "variety of life on earth." Scientists use this term when discussing the richness of life forms and the heterogeneity of habitats found within or among particular regions. Biodiversity in this sense is often indicated by the relative richness of species in one habitat versus another. Thus it is fair to say that riparian gallery forests of cottonwoods and willows along desert rivers typically support more avian biodiversity-a greater number of bird species-than do adjacent uplands covered with desertscrub vegetation. Similarly, there is greater biodiversity in flowering vines in the moist tropical forests of southern exico than there is in the Sonoran Desert of northern Mexico. It is worth noting, however, that ecologists such as E.O. Wilson first coined the term biodiversity to signify something far more complex than the mere number of species (termed species richness) found in any given area. Usually ecologists also consider the number of individuals within each species when they assess diversity or heterogeneity. An area where one desert wildflower such as the California poppy dominates eight other species is considered to be less diverse than an area with the same eight species where the numbers of each are more evenly distributed. As Kent Redford of The Nature Conservancy has recently explained, "A species-focused approach to biodiversity has proved limiting for a number of reasons....[The] use of just species as a measure of biodiversity has resulted in conservation efforts focusing on relatively few ecosystems while other threatened ones are highly ignored. Species do not exist in a vacuum, and any definition of biodiversity must include the ecological complexes in which organisms naturally occur and the ways they interact with each other and with their surroundings." The integrity of biodiversity can be teased apart into the following components. Although each of them may be separated out by scientists for study, they do not truly exist "apart" from one another. ECOSYSTEM DIVERSITY: the variety of landscapes found together within any region, and the ways in which their biotic communities interact with a shared physical environment, such as a watershed or coastal plain. A landscape interspersed with native desert vegetation, oasis-like cienegas, riparian woodlands, and croplands is more diverse than one covered entirely by one crop such as cotton. The Colorado River Delta was once a stellar example of ecosystem diversity, displaying a breath-taking mixture of riparian gallery forests, closed-canopy mesquite bosques, saltgrass flats, backwater sloughs, rivers, ponds, and Indian fields. Much of it is now dead, except for the hypersaline wetlands known as the Cienega de Santa Clara. BIOTIC COMMUNITY DIVERSITY: the richness of plants, animals, and microbes found together within any single landscape mosaic; such a mosaic can range in scope from the regional to the watershed level. This richness can be shaped by a variety of factors, ranging from the age of the vegetation to land use to soil salinity and fertility. For example, the number of species on well-drained, ungrazed desert mountain slopes covered by columnar cacti, ancient desert ironwoods, and spring wildflowers is greater than that on an alkali flat grazed by goats, where only saltbush, saltgrass, and seepweed may grow. The Rincon ountains east of Tucson demonstrate a gradient of communities, each with its own diversity, as they rise from desertscrub to xeric woodlands, and coniferous forests. INTERACTION DIVERSITY: the complexity of interactions within any particular habitat, such as the relationships between plant and pollinator, seeds and their dispersers, and symbiotic bacteria and their legumes. A pine-oak woodland in Arizona's "sky islands"harbors more interspecific interactions than does an even-aged pine plantation. Ramsey Canyon in the Huachuca ountains showcases such interaction diversity, with over a dozen hummingbirds, as well as bats, bees, and butterflies visiting its myriad summer flowers. SPECIES DIVERSITY: the richness of living species found at local, ecosystem, or regional scales. A well-managed desert grassland hosts more species than can be found in a buffelgrass pasture intentionally planted to provide livestock forage without consideration of wildlife needs. Quitobaquito, discussed above, is as fine an example of localized species diversity as we have anywhere in the binational Southwest. GENETIC DIVERSITY: the heritable variation within and between closely-related species. A canyon with six species of wild out-crossing beans contains more genetic variation than does a field of a single highly-bred hybrid bean. Indian fields in southern Sonora demonstrate this concept, for their squashes hybridize with weedy fieldside gourds, and their cultivated chile peppers are inflamed by genetic exchange with wild chiltepines. All of these components of biodiversity ensure some form of environmental stability to the inhabitants of a particular place. A landscape with high ecosystem diversity is not as vulnerable to property-damaging floods as a bladed landscape is, for a mix of desert grassland and wetlands serves to buffer downstream inhabitants from rapid inundations. A diverse biotic community is less likely to be ravaged by chestnut blight or spruce budworm than a tree plantation can be. A cactus forest with diverse species of native, wild bees is less vulnerable to fruit crop failure than are orchards or croplands that are exclusively dependent upon the non-native honeybees. A desert grassland with multiple species of grasses and legumes cannot be as easily depleted of its fertility and then eroded as can one with a single kind of pasture grass sucking all available nutrients out of the ground. And finally, a Pima Indian garden intercropped with many different kinds of vegetable varieties will not succumb to white flies or other pests as easily as will an expansive, irrigated lettuce field in the Imperial Valley. In short, more of "nature's services" - the economic contributions offered by intact ecosystems-are possible when we manage these ecosystems to safeguard or restore their biodiversity, and not allow it to be depleted. Recent estimates by environmental economists suggest that the dollar value of the services such as flood protection and air purification provided by the world's intact wild ecosystems averages thirty-three trillion dollars per year, compared to the eighteen trillion dollar Gross National Product of all nations' human-made products. The message is clear: when a mosaic of biotic communities is saved together and kept healthy within a larger landscape, few endangered species fall between the cracks and succumb to extinction processes. In contrast, a small wildlife sanctuary designed to save a single species often fails to achieve its goal, for the other organisms which that species ultimately needs in its presence have been ignored or eliminated. Not only do humans benefit from the conservation of large wildlands landscapes, but many other species do as well. How does this play out in our Sonoran Desert region? Ask most people to characterize life in the desert and few will think to mention the word "diversity"as part of their thumbnail sketch of this place. Most of us keep in our heads those pictures of bleak, barren, blowing sandscapes when we hear the word "desert." The Sonoran Desert does contain one major sea of sand, as well as a long corridor of coastal dunes along the Gulf of California, but even these are seasonally lush with unique and thriving life forms. As one spends more time in a range of Sonoran Desert habitats, one is constantly surprised by how many plants and animals are harbored here. Travel out of Sonoran Desert vegetation into the higher mountain ranges held within the region and even more astonishing levels of biodiversity can be found. In fact, the "sky islands"of southeastern Arizona and adjacent Sonora are now recognized by the Inter-national Union for the Conservation of Nature as one of the great centers of plant diversity north of the tropics. When we compare our desert with others, the contrast is striking. Overall, the Sonoran Desert has the greatest diversity of plant growth forms- architectural strategies for dealing with heat and drought-of any desert in the world. From giant cacti to sand-loving underground root parasites, some seventeen different growth forms coexist within the region. Often, as many as ten complementary architectural strategies will be found together, allowing many life forms to coexist in the same patch of desert. Biodiversity in the desert is often measured on a scale that would not be used in the tropical rainforest. Desert ecologists have found twenty kinds of wildflowers growing together in a single square yard (.84 m2), while a single tropical tree might take up the same amount of space. On an acre (.4 ha) of cactus forest in the Tucson Basin, seventy-five to 100 species of native plants share the space that three mangrove shrubs might cover in swamp along a tropical coast. These levels of diversity are a far cry from the "bleak and barren" stereotype, and it may well be that the Sonoran Desert region is more diverse than other arid zones of comparable size. Consider for example, the flora of the Tucson Mountains, which Arizona-Sonora Desert Museum research scientists recently inventoried with a number of their colleagues. In an area of less than forty square miles (100 km2), this botany team encountered over 630 plant species-as rich a local assortment of plants as any desert flora we know. This small area contains roughly one-sixth of the Sonoran Desert's entire plant diversity. It is disproportionately rich relative to its size, its paucity of surface water, and its elevational range. Such a diversity of wildflowers and blossoming trees attracts a diversity of wildlife as well. In the Sonoran Desert area within a thirty mile radius of Tucson, you can find between 1000 and 1200 twig- and ground-nesting native bees (all of them virtually "stingless"). As the Desert Museum's research associate Stephen Buchmann wryly notes, "this may mean that the Sonoran Desert region is the richest bee real estate anywhere in the world-the entire North American continent has only 5000 native bee species." Desert wildflowers attract more than bees. Southern Arizona receives visits from more hummingbird species-seventeen in all-than anywhere else in the U.S. Other pollinator groups, such as butterflies and moths, are well-represented in the region as well. Single canyons near the Arizona-Sonora border may harbor as many as 100 to 120 butterfly species, and moth species may number five to ten times higher than that in the same habitats. When all pollinating organisms breeding or passing through here are counted, it may be that the greater Sonoran Desert has as large a pollinator fauna as any bioregion in the world. This region is also rich in small mammals and reptiles. Some eighty-six species of mammals have ranges centered within the San Pedro National Riparian Area alone, a record unsurpassed by any natural landscape of comparable size in the U.S.; the area contains half of all mammal species in the binational Sonoran Desert. At least ninety-six species of reptiles are endemic to the Sonoran Desert-found here and nowhere else in the world. Why is such diversity present in a land of little rain? For starters, our bimodal rainfall pattern brings out completely different suites of wild-flowers and their attendant insects at different times of the year. In addition, we benefit from a more gradual transition between tropical nature and desert nature than does the Chihuahuan Desert on the other side of the Sierra Madre-many tropically-derived life forms reach their northernmost limits in the Sonoran Desert due to its relatively frost-free climes. Of course, tropic rainforests are much more diverse in the total number of species they have throughout their biome, in part because of their ages and their high energy budgets. However, there may be more turnover in species from place to place in the Sonoran Desert than in some tropical vegetation types. That is to say, many desert plants and insects are "micro-areal" - occurring only within a 100 by 100 mile spots on the map. Particularly in Baja California, there are extremely high levels of endemism, including some 552 plants unique to the peninsula. Nevertheless, it remains true that the highest levels of local diversity in this desert region occur where water accumulates. Some of the highest breeding bird densities recorded anywhere in the world come from riparian forests along the Verde and San Pedro river floodplains. More than 450 kinds of birds have historically nested or migrated along the Colorado, San Pedro, and Santa Cruz rivers. And yet, if riparian habitats were among our richest, what have we lost with the removal of cottonwoods from ninety percent of their former habitat in Arizona? Ornithologists cannot name a single Sonoran Desert bird that has gone extinct with riparian habitat loss, but many of the eighty species of birds dependent on these riparian forests have locally declined in abundance. A single desert riparian mammal-Merriam's mesquite mouse-is now extinct due to the loss of riparian habitat at the hand of groundwater pumping, arroyo cutting, and overgrazing. exican wolves and black bears that formerly frequented our river valleys are among those mammals no longer found in the Sonoran Desert proper. Conservation International has estimated that as much as sixty percent of the entire Sonoran Desert surface is no longer covered with native vegetation but is dominated by the 380-some alien species introduced to the region by humans and their livestock. Alien plants such as buffelgrass now cover more than 1,400,000 acres of the region, **at the expense of both native plants and animals.** Tamarisk trees choke out native willow and cottonwood seedlings. Invasive weeds such as Johnson grass and Sahara mustard have taken over much of certain wildlife sanctuaries and parks in the desert, outcompeting rare native species. Other invasive species such as Africanized bees and cowbirds also compete with the native fauna. Biological invasions are now rated among the top ten threats to the integrity of Sonoran Desert ecosystems, whereas a half century ago they hardly concerned ecologists working in the region. These invaders somehow reach even the most remote stretches of the desert, to the point of being ubiquitous. The wholesale replacement of natives by aliens is enough of a problem, but desert biodiversity has been even more profoundly affected by habitat fragmentation-the fracturing of large tracts of desert into pieces so small that they cannot sustain the interactions among plant, pollinator, and seed disperser. Such fragmentation does not necessarily lead to immediate extinctions, just declines-there is a time lag before a species' loss of interactions with others leads to **complete reproductive failure.** Fragmentation caused by urbanization is now considered the number-one threat to the biodiversity of the region and is not expected to diminish during our lifetimes. The population of Arizona's Maricopa County in the year 2025 is expected to be two and a half times what it was in 1995, and similar growth rates are anticipated along the entire desert coastline of the Sea of Cortez. In a sense, humans are making the Sonoran Desert much more like the old (and erroneous) stereotype of a barren wasteland. As more than forty dams were constructed along rivers in this century, old-timers witnessed hundreds of miles of riparian corridors dry up. Groundwater overdraft has also impoverished desert and riparian vegetation, as farms and cities pump millions more acre-feet out of the ground than rainfall in the region can naturally recharge. The roots of plants are left high and dry above the water table. Most of the Sonoran Desert was not at all naturally barren, but our misunderstandings have impoverished one of the richest arid landscapes on the planet. That is why the Desert Museum has endorsed a long-term Conservation Mission Statement which begins with these words from ecologist D.M. Bowman: "So what is biodiversity?...the variety of life on this planet is like an extra-ordinarily complex, unfinished, and incomplete manuscript with a hugely varied alphabet, an ever-expanding lexicon, and a poorly understood grammar....Ripping the manuscript to pieces because we want to use the paper makes little sense, especially if the manuscript says that **'to survive you shall not destroy what you do not understand'**. Our mission as ecologists must be to interpret the meaning of biodiversity. The urgent need for this mission, and our current ecological ignorance, must be forcefully communicated to the public." Instead of seeing future inhabitants rip out any more pages essential to the desert's story, the conservation organizations of the region have begun to work together to ensure that the most important corridors and secluded refugia for desert flora and fauna are identified and protected or restored. These critical areas - essential to the flow of diversity from source to sink, from headwaters to river mouth, and from tropical wintergrounds to summer nesting areas - must be kept from further fraying if the fabric of the Sonoran Desert is to remain intact. Scientists can prioritize such areas in terms of their value to biodiversity, but they will be safeguarded for future generations only if a broad spectrum of society is involved in endorsing their protection.

#### Necessary to prevent extinction

**Ghista ’05** (Garda, freelance journalist and public advocate [http://www.worldproutassembly.org/archives/2005/04/biodiversity\_un.html](http://www.worldproutassembly.org/archives/2005/04/biodiversity_un.html" \t "_blank) “Biodiversity - Underprotected or Overprotected?”)

**Biodiversity is crucial to human survival,** and far greater efforts must get underway to preserve biodiversity.[3] When we lose particular species, when they become extinct,it affects the entire ecosystem. In addition, potential drugs that could cure modern diseases are lost forever. For this very reason, if human beings do not take care of all other life forms on our planet, it is the people themselves who will incur the greatest suffering as a consequence. While extinction of species is a normal process in nature, and while 99.9 percent of all species that once lived are now extinct, that process of extinction is a gradual one and therefore does not cause harm to those left behind. If extinction occurs in a natural gradual manner, there will be new species to replace the old through allopatric or sympatric speciation.[4] Disease, new predators, climate change, habitat loss and other factors cause the normal extinction of plant and animal life. However, what is happening today is something entirely different. Today it is the calculated actions of a few human beings � greedy capitalists for whom money is the summum bonum of life � that are causing havoc to our environment.