



## Not your father's Mexico

*With progressive industrial policies, the country offers numerous opportunities for American shippers, their suppliers, 3PLs and carriers.*

BY JOHN ISBELL

I have made two trips to Mexico this year, visiting Tijuana, Guadalajara, San Luis Potosi, Irapuato, Leon, Mexico City, and Monterrey. I traveled by road from Guadalajara to San Luis Potosi to the outskirts of Queretaro to Irapuato to Leon and was amazed by the good condition of the highways and travel speed. I visited a very modern industrial park outside Guadalajara and one near San Luis Potosi. The Mexico I saw is “not your father’s Mexico,” a country with substandard infrastructure, a poor and illiterate population, and low quality products.

Today, Mexico is alive with progress and its industrial sector is humming. The country is the world’s fourth largest exporter of light vehicles (2.4 million cars in 2012); supports a growing aerospace industry; is a major supplier of white goods (refrigera-

tors, washers and dryers, air conditioners), electronics including cell phones, pharmaceuticals, medical devices, power systems, and a variety of consumer products.

What *CNN* and other media fail to report is a Mexico that has been aggressively marketing itself to attract Fortune 100 global companies and others to set up manufacturing closer to their consumer base. This concept is commonly referred to as “near-shoring,” but I prefer to call it “right-sourcing.” Right-sourcing brings production to the most appropriate point in a global supply chain to enable products to be shipped to consumers at more competitive landed, duty-paid delivered costs and in less time. Mexico has signed more free trade agreements (12 to be exact) than any other country, which cover 44 countries across North America, Europe and Asia, in addi-

tion to 23 bilateral investment agreements that provide preferential access to a market of nearly 1 billion potential consumers, according to an article in *ProMexico’s Negocios Magazine’s* December 2012-January 2013 issue. This means exports from Mexico can be imported to these countries at little to no duty.

Instead of this positive economic news, what the media focuses on is the Mexican drug cartel violence. Like all sensational reporting, the bark is louder than the bite, and its impact on cargo theft is less than you might imagine, as explained later in this article.

Mexico’s GDP growth for 2013 is expected to range between 3.3 and 3.5 percent. Barclay’s research further reports “domestic factors, such as stable labor costs, proximity to the U.S., and a favorable trade

basket, are finally adding percentage points to Mexico's GDP (0.6 percent per year). The Mexican economy is likely to support growth close to 4 percent year-over-year in the near future." *ProMexico* noted the lead locomotive driving this growth is Mexico's fast-growing automobile industry. Car manufacturers from the United States, Japan, and Europe have made significant investments in light vehicle manufacturing in Mexico. This has led to a large number of automobile component suppliers setting up their own manufacturing operations in Mexico.

As someone who has experienced Asian production for the past 35 years, I'm truly impressed by what I see and read about Mexico. Is Mexico going to be the new China? Anyone who has been to or is sourcing from China knows the answer to that question is no. While labor rates are experiencing double digit growth along China's eastern coastal manufacturing belt, the Chinese model cannot be completely replicated anywhere else in the world for the following key reasons: the productivity of its work force, especially in fine-stitching and handwork; its vertically integrated sourcing structure that minimizes the amount of direct imports needed to produce exports; a 1.1 billion population that provides both workers and consumers; its vast land base that enables labor-intensive manufacturing to relocate to regions with lower labor costs; an ability to rapidly add transportation infrastructure (seemingly almost overnight) to move products cost effectively and timely; and a government that's committed to doing what's necessary either to manage its currency or support cost competitive export growth.

Mexico has its niche for global supply chains, primarily due to its proximity to the world's largest consumer base — the U.S. market. Because of the North America Free Trade Agreement (NAFTA), the majority of Mexico's exports can enter the United States duty free. In addition to this tremendous competitive asset, Mexico offers numerous advantages over other Asian suppliers. The more important advantages include:

**1. Ease and flexibility of setting up a business** — According to the World Bank and International Finance Corp.'s *2013 Doing Business Report*, Mexico is ranked 48 out of 135 economies for ease of doing business. The United States is ranked 4th; China, 91st; Vietnam, 99th; Indonesia, 128th; and India, 132nd. Shelter companies, which handle administrative, human resource, and import and exports issues from start-up forward, delivering

legality and compliance for their clients, offer companies wanting to test Mexico as a production source relative easy and expedited (six to eight weeks in some cases) turnkey solutions to establish manufacturing operations in Mexico, primarily within 200 miles of the U.S. border.

## 2. Educated and motivated workforce

According to the Index Mundi, the literacy rate adult total (percent of people ages 15 and above) in Mexico was 93.07 as of 2010. Being able to communicate in English down to the middle management-level in most Mexican companies with foreign owners or buyers, international logistics service providers, and most senior government officials gives Mexico a major advantage over many Asian countries.

With a population of 115 million, Mexico has more than 790,000 students enrolled in engineering and technology programs of which 115,000 graduate annually, roughly three-times as many as the United States on a per capita basis, said a *New York Times* article published earlier this year. Major industries provide financial support for engineering and technical training by sponsoring university programs and/or setting

up technical training schools close to the factories. For example, the Safran Group is heavily involved in sustainable development projects and training programs. It's leading the creation of a French-Mexican "Aeronautical Campus" in Querétaro to develop a highly skilled and trained workforce in aviation and maintenance, repair and overhaul operations (MRO) jobs, according to *ProMexico*. It's precisely this form of learning that prompted Pinnacle Aerospace to set up its primary design center in Ciudad Obregón, Sonora in 2009 to develop embedded software product solutions for the aerospace industry. Mike Morgan, president and chief executive officer, told *ProMexico*, "We are in Mexico for the long run, thanks to national and local government assistance, a 'fabulous' workforce, the country's close proximity to the U.S. and its special relationship with universities and colleges in Sonora." According to Richard Anderson Aguayo, Carhartt's plant manager, "the Mexican workforce is extremely proud, so if you make the productivity metrics available to them, they are self-correcting. There is a sense of pride among the Mexican worker, so play towards that quality. Mexicans are

Table 1

## Labor rates per hour in U.S. dollars

Country	Dollars/hour in 2010	Dollars/hour in 2020	Percent increase
Mexico	\$2.90	\$5.20	77%
China	\$2.00	\$7.60	273%
Taiwan	\$7.10	\$9.50	34%
Korea	\$14.40	\$20.70	44%
U.S.	\$25.00	\$30.00	18%
Germany	\$34.00	\$42.00	25%

Table 2

## Real exchange rate and inflation

Country	Currency exchange to USD in 2010 (a)	Currency exchange to USD in 2020 (a)	Real exchange rate change from 2010 to 2020	Cumulated inflation from 2010 to 2020
Mexico	93	112	20%	48%
China	117	191	64%	41%
Taiwan	98	142	44%	35%
Malaysia	117	163	40%	55%
Brazil	150	209	39%	59%
Japan	110	117	6%	8%

Note: (a) Based on currency exchange rate to U.S. dollars in 2005 being 100.

Source: *ProMexico* with Global Insight forecast (November 2011).

adaptable and have good problem solving skills.”

**3. Low labor costs**—Current hourly labor rate studies show Mexico being slightly above China, but that favorability will become Mexico’s advantage by 2020, as shown in Table 1.

In 2010, Mexico’s total compensation per worker was \$3.94 an hour, said Kristin Dziczek, director of labor and industry at the Center for Automotive Research, citing Bureau of Labor Statistics data. That compared with \$3.45 in China, \$34.59 in the United States and \$52.60 in Germany.

**4. Good transportation infrastructure**—I was impressed with the quality and condition of the highways during my travels. While some areas of Mexico City are heavily congested, highway travel elsewhere is largely comparable to U.S. freeways and divided highways in high traffic corridors.

Mexico has two major container ports on its west coast at Manzanillo and Lazaro Cardenas. APM Terminals will build and operate a new container terminal in Lazaro Cardenas. International Container Terminal Services will develop and operate a second specialized container terminal

at Manzanillo. Hutchinson Port Holdings Group is investing in new gantry cranes at both of these ports. Veracruz and Altamira/Tampico are the main container terminals on the Gulf coast and both are planning expansions.

Railroad deregulation in the mid-1990s allowed foreign railroads to operate in Mexico. The Union Pacific Railroad does not operate within Mexico’s borders, but as a minority owner of Ferromex, the country’s state-owned railroad, it interchanges equipment with Ferromex at Mexicali, Nogales, El Paso, and Eagle Pass; and with the Kansas City Southern Railroad (KCS) at Laredo and Brownsville. KCS is the only Class I railroad that has full control since 2005 of its operations from U.S. interior points across Nuevo Laredo and Matamoros through central Mexico to Lazaro Cardenas, Veracruz, and Tampico. UP and KCS offer competitively priced intermodal services, which enable a faster and less expensive border-crossing than by truck.

While air freight capacity outside of Mexico City needs to be improved, the proximity of Mexico to its largest trading partner – the United States – lessens the demand for air freight. However, general freight growth is driving the planning of

a second airport in Mexico City.

From my experience, moving freight in Mexico is faster and more efficient than in Southeast Asian countries, including India. Also, travel between Mexico and U.S. cities can be completed in hours compared to days and without the burden of significant time-zone differences for Asia and India. This expedites and reduces the cost of product development and factory visits for U.S. staff. It also reduces the transit time and cost from Mexico to most U.S. markets compared to ocean transit from Asia. For example, it takes about 18 hours to truck products from Guadalajara to Laredo, Texas, and another four hours to Dallas. It takes about 19 days for containers from South China to arrive in Dallas, 25 days from Vietnam, and about 23 days from Indonesia.

**5. Strong Economic Outlook**—Mexico is projected to maintain a stronger and relatively stable peso exchange rate with the U.S. dollar through 2020 in comparison to the currencies of China, Malaysia, Taiwan, and Brazil. Mexico’s rate of inflation is forecast to be at the median point of inflation for the countries in Table 2, excluding Japan. The information in Table 2 suggests the Chinese, Malaysian, Taiwanese, and



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Brazilian currencies will show stronger appreciation to the U.S. dollar between 2010 and 2020. Despite the fact that Mexico is projected to have higher or comparable inflation, the more stable exchange rate suggests the country's product costs are likely to escalate at a much lower rate over this period compared to these other countries.

**Security.** The subject of cargo security and employee safety is the elephant in the room when it comes to perceptions and concerns about manufacturing in Mexico. According to FreightWatch's Ron Greene, "modal theft trends differ around the world, but Mexico tops the list for truck thefts, with 83 percent of thefts being derived from truck hijackings in 2012. Understanding global and local risks can help shippers take proactive measures to keep in-transit cargo secure."

Taking measures to keep in-transit cargo secure is the operative word for Mexico. According to John Baird, security director for Flextronics International, zone highway security is one measure companies are taking to safeguard in-transit truck shipments. Trucks are monitored by GPS and non-uniformed surveillance teams are located along key highway sectors to discretely monitor truck traffic. Avoiding certain highway sections where known cartel activity occurs is another measure to safeguard cargo. According to Troy Ryley, director of Transplace's Mexico service, in an interview with *American Shipper*, "Transplace moves a lot of high-value goods and the amount of issues (security) is minimal. During my 20-year career, I could count major issues (security) on my hands and toes." Active involvement by the Mexican government against drug cartels and companies being proactive in safeguarding their shipments have reduced cargo thefts in Mexico for the quarter ending June 2013 by 27 percent compared to the same period in 2012, with a reported 295 cargo theft incidents, FreightWatch noted in its second quarter 2013 report.

By actively policing and managing rail cargo shipments, KCS reports 99.98 percent of all rail shipments move without a claim due to the carrier's embedded security force, said Brian H. Bowers, the railroad's senior vice president of intermodal and automotive, at the Nearshoring Mexico 2013 Conference in Dallas. With over 80,000 border crossings between Mexico and the United States per month, as recorded by the U.S. Department of Transportation, the number of cargo thefts is insignificant.

Being informed and establishing and following well-defined security protocols especially in high-risk areas of Mexico,

companies can safeguard their cargo and, more importantly, their employees. Mexican government officials are also implementing proactive policies to reduce the risk to its civilian population. In one of the highest-risk cities, Juarez, a new mayor, governor, new chief prosecutor and police chief implemented proactive plans which have reduced homicides per 100,000 by 93 percent since October 2010 and car hijacking by 92 percent since January 2011, said K. Alan Russell, president and CEO of The Tecma Group, at the Nearshoring Mexico conference.

**Open for business.** Mexico has established itself as a cost efficient, stable supply source for manufacturing automobiles, aerospace products, white goods, electronics, pharmaceuticals, medical devices, power systems, and a variety of consumer products including toys. The Danish Lego Co. recently announced it will invest \$125 million in its plant in Ciénaga de Flores, Nuevo León, where it molds, packages and prepackages toys for the U.S. market, generating 1,000 direct jobs and 300 indirect jobs, said a July issue *ProMexico* article.

Due to competition among Mexico's 31 states to attract foreign direct investments, industrial development is widespread across the country, taking advantage of state-offered incentives and workforce availability. The northern cities along the U.S. border have the highest concentration of shelter companies, due in part to the Maquiladora program that started in the 1970s. (The Maquiladora program allows raw materials to enter Mexico duty-free as long as they are used to manufacture products for exports. It's available to any company manufacturing in Mexico, not just within 200 miles of the U.S. border. Its new official name is IMMEX.) Land and labor costs are higher in this area compared to areas in central Mexico, with the tradeoff being lower transportation costs and a higher level of in-transit cargo security due to the shorter transit distance to U.S. border crossings.

Going south toward Mexico City, major manufacturing areas within 200 miles of the border are located in Chihuahua, Monterrey, and Saltillo. Further south, large scale manufacturing is now taking place in San Luis Potosi, Zacatecas, and Aguascalientes and to the west in Guadalajara.

About two hours north of Mexico City is an area called Bajío which includes Querétaro, the largest city in the Bajío region, a major distribution center for Mexico and the center for automotive and aerospace industries. Just west of Mexico City is Toluca, known for its growing pharmaceutical

manufacturing. Southeast of Mexico City is Puebla which is about two hours from the Port of Veracruz.

Mexico is currently a viable source location for high quality and cost-efficient manufacturing for many products. The automobile industry has been the single largest investor in new plants, but other industries have found gold in Mexico. It's not the illusive gold that Coronado was seeking, but rather the gold in Mexico's productive and low-cost labor force; the ease of doing business; its free trade status with many countries, especially with the United States under NAFTA; its multimodal transportation network; and a government that's "open for business" and promoting programs on labor reform and energy development.

**Evaluating Mexico.** Understanding how Mexico compares to a company's existing location(s) on a landed, duty-paid cost basis is a critical evaluation that varies by industry and company. Mexico is a very diverse country so gaining the right quantitative and qualitative perspective to develop a reasonably accurate value proposition takes a fair amount of in-country research. Each geographic region in Mexico has its strengths and limitations, so when evaluating where to locate a new manufacturing facility, a company needs to consider the availability of water, power, cost of building or leasing facilities, location of industrial parks, labor costs, transport options, and incentives, as well as other necessities to ensure a successful and profitable operation. Unless they have in-house resources for this work, companies should consider consulting firms that can provide quantitative metrics for a multiple number of regions in Mexico using a company's manufacturing parameters along with a qualitative analysis of the challenges and opportunities that exist in Mexico. Industrial real estate developers and shelter companies can also provide guidance based on their respective business portfolios.

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