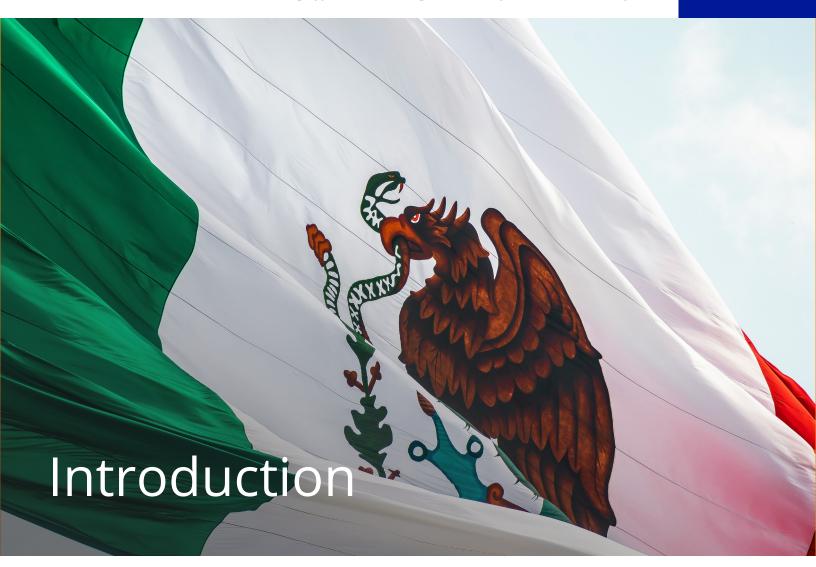




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Canadian-U.S.-Mexican Shipping Logistics

For many U.S. businesses the road to Canada begins in Mexico. And now, thanks to enhanced logistics capabilities the road has never been less bumpy or more efficient. U.S. businesses can take advantage of logistics solutions to achieve seamless, ground service from the Mexican border directly to Canada. Such innovative solutions allow Mexican-based shipments—parts and components along with finished goods—to arrive in Canada faster, and more reliably than was previously possible.

This logistics prowess comes at an ideal time. A growing number of businesses are opting to move their supply chains out of China and other Asian countries, and closer to home. Mexico has been among the preferred destinations, with companies including Bombardier, Samsung, Daewoo, Amazon, Heineken, Bosch, Alsea, Pirelli, Walmart, Home Depot, Hasbro, and Mercado Libre either expanding operations—or making an initial foray into the Mexican market.

These companies would seem to align with findings of a survey by Gartner-owned consultancy <u>Capterra</u> which found nearly 90% of U.S.-based small-and-medium-sized businesses (SMBs) will "reshuffle their supply chains to utilize suppliers in the U.S. or Mexico in 2023."

Businesses moving operations to Mexico join those with footholds already established in that country. Auto manufacturing, for example, is deeply integrated throughout North America, with the <u>Canadian Vehicle Manufacturer's Association</u> noting that "parts and components may cross Canadian-U.S.-Mexican borders as many as eight times before being installed in a final assembly."

Other established industries include consumer goods, aerospace equipment, medical devices, home appliances, technology equipment and services, plastics, and energy. There are many reasons why Mexico has emerged as a preferred manufacturing location. Quebecbased Bombardier Aerospace, which has maintained manufacturing operations in the Mexican state of Querétaro since 2005, cited the country's low-cost manufacturing environment and skilled workforce as reasons behind its sourcing decision. In 2022, when Bombardier announced a significant expansion in its Mexican operations, CEO Eric Martel said that Querétaro offered "an unbeatable ecosystem," that enabled its sustained growth, with critical features including "logistics connectivity, security, quality of life and constant support from state authorities."

Strong government support—both federal and state—has been integral to Mexico's success in attracting foreign investment. Most notably, the country's "maquiladora" program allows for foreign ownership of manufacturing plants, and favorable tax treatment. In addition, the United States-Mexico-Canada (USMCA) agreement ensures duty-free status for qualified products moving between the three partner countries.

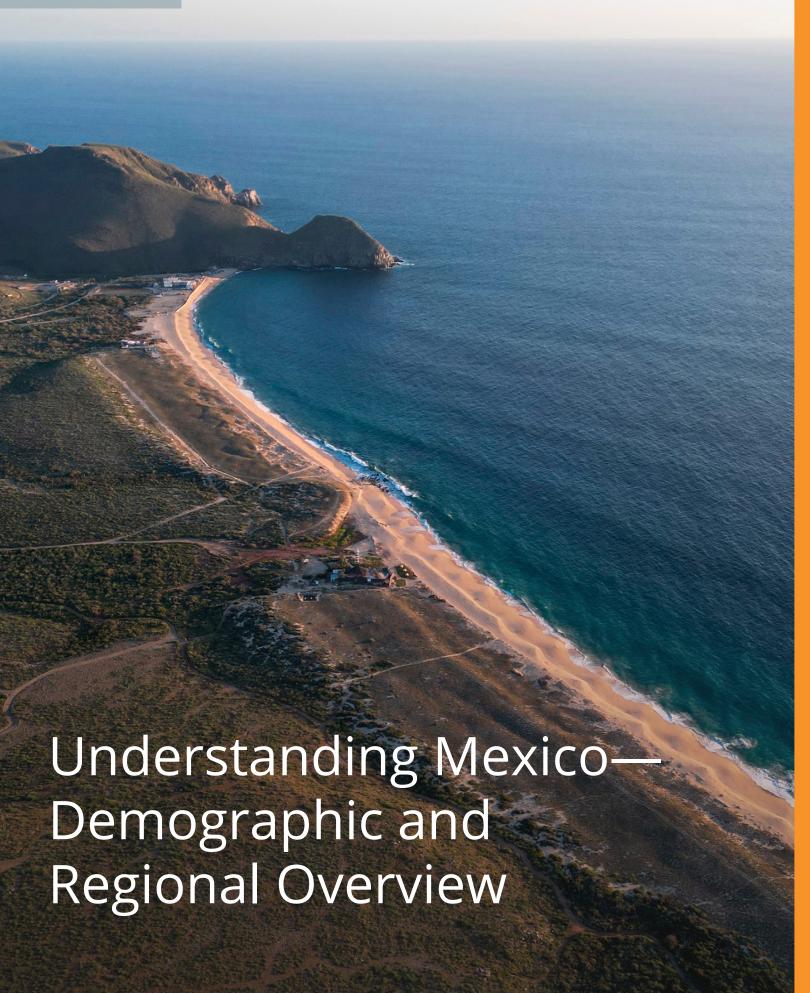
Integral to any North American-based supply chain, is a comprehensive logistics strategy that includes a Mexico-to-Canada component. In many ways though, this leg of the North American transit cycle has been underserviced. Moving goods between Mexico and the U.S. is a fairly

straightforward proposition, and shippers will find many options. Shipments traveling from the U.S. to Canada can also benefit from efficient logistics services, including mission critical "same day" services, and less urgent ground solutions that guarantee deliveries within 2-3 days. But direct, efficient service from Mexico to Canada, is truly a niche that many providers simply cannot accommodate. Among those that do, most require multiple hand-offs between carriers, which adds transit time, and increases the risk of damage and theft.

An ideal solution, naturally, is to rely on a single-source provider that offers comprehensive service for all North American shipments. A provider with the ability to move a shipment directly from the Mexican border, through the United States and into Canada. Such a solution would ensure reliability for parts deliveries moving between U.S., Mexican, and Canadian manufacturing facilities, guarantee on-time arrivals for apparel and other consumer goods promised to Canadian businesses including retailers, and allow eCommerce shipments to meet Canadian consumer expectations.

This paper will discuss Mexico's increased stature among U.S. and Canadian businesses. As the discussion will make clear, businesses can expect significant benefits from shifting their supply chains to Mexico, including cost savings, duty-free trade, and related efficiencies. A comprehensive logistics strategy though, including capabilities offered by Purolator International, is vital to success, especially for end-deliveries throughout Canada.





Understanding Mexico— Demographic and Regional Overview

Any business considering a shift to a Mexican-based supply chain should be familiar with that country's unique attributes. Did you know, for example, that very few Mexicans are fluent in English? Or that the country is comprised of 32 different states, six of which border the United States? Or that Mexico is home to distinct "manufacturing clusters" that cater to industries including aerospace, automotive, electronics, technology, and medical devices? Following is an overview of key demographic and market factors that help explain Mexico's appeal as a preferred supply chain destination.



Diplomatic Ties that Span 200+ Years

The two countries have maintained diplomatic ties for more than 200 years, a relationship described by the U.S. State Department as "intimate and often contentious." The countries have endured at least three periods during which diplomatic relations were severed, including the Mexican-American War which lasted from 1846-1848. Diplomatic relations have remained intact for more than a century though, with the last interruption occurring over the 1914-1917 period.



Population and Language

The country of Mexico, officially called the <u>United Mexican States</u>, includes a population of 129 million people, making Mexico the 10th largest country in the world, according to 2023 estimates by the <u>CIA World Factbook</u>.

By comparison, the United States is the world's third most populous country with 339 million residents, and Canada ranks 38th, with a population of 38.5 million. China is the world's largest country in terms of population, with 1.4 billion people.

Mexico is the largest <u>Spanish-speaking country</u> in the world, spoken by roughly 95 percent of residents. While Spanish is the country's official language, nearly 70 indigenous languages can be found throughout the country. English proficiency is quite low throughout Mexico. The <u>2022 English Proficiency Index (EPI)</u>, which measures levels of English proficiency among non-English-speaking countries, ranks Mexico 88th out of 111 countries surveyed, with a designation of "Very Low Proficiency." When measured against other Latin American countries. Mexico ranks 19th out of 20.

Further, <u>Lingoda</u> language learning provider estimates just 10 percent of Mexico's population speaks English with any level of proficiency. "The percentage is higher in the northern areas due to the proximity to the United States," the analysis found, noting that "English is often a prerequisite for employment" in Mexico City and other big cities, especially in industries related to tourism.

The <u>U.S. International Trade Administration</u> advises that "while many people in the large cities speak some English, it may be difficult for them to conduct detailed business discussions." As a precaution, the agency suggests non-Spanish speaking visitors to Mexico "consider hiring an interpreter for formal business meetings.



Geographic Size and Location

In terms of area, Mexico is the <u>14th largest country in the world</u>. Mexico is comprised of roughly 2 million square kilometers and accounts for 1.32 percent of the Earth's total area. By comparison, its North American neighbors are considerably larger. Canada is the world's second largest country (behind Russia), occupying 10 million square kilometers, while the United States is fourth largest, occupying 9.4 million square kilometers.

Mexico is the third largest country in Latin America, behind Brazil and Argentina. With regard to its borders, in the north, Mexico shares a 1,950-mile-long border with the United States (Texas, Arizona, New Mexico, and California). Mexico's west coast borders the Pacific Ocean, with the east coast adjacent to the Gulf of Mexico and the Caribbean Sea. Mexico shares its southeastern border with Guatemala and Belize.



Currency

The Mexican Nuevo Peso is the official currency of Mexico, commonly referred to as the "peso."



System of Measurements

Mexico has adopted the <u>metric system</u> as its official standard of measurement. This is different from the United States, which uses the imperial system of units (inches, feet, gallons, etc.).



The United Mexican States

The country of Mexico is divided into 32 distinct states, including six that align with the almost-2,000-mile-long U.S. border. Those border states, along with a few details about each, include:

Texas Border States

According to the Texas Department of Transportation, Texas serves as a gateway for shipments moving between the U.S. and Mexico, with 76 percent of all truck and rail trade crossing the Texas-Mexico border. During 2020, shipments were valued at \$345 billion.

The Texas/Mexico border spans more than <u>1,254 miles</u>, <u>and is served by 28 international bridges</u> and border crossings. The border region in Texas is divided into distinct regions including El Paso, Laredo, and Pharr (the Rio Grande Valley). Mexican border states include:

Chihuahua

- · Major cities: Juárez, Chihuahua, Cuauhtémoc.
- Population: 3,741,869.
- Truck Border Crossings:
 - Texas—Bridge of the Americas, Ysleta Bridge, Presidio-Ojinaga Bridge.
 - New Mexico—Columbus-Puerto Palomas, Santa Teresa-San Járonimo.
- Nearby U.S. Cities: El Paso, TX; Santa Teresa, New Mexico.
- Attributes/Industry Clusters: Medical Devices, Aerospace, Automotive, Electronics, Agribusiness.
 - International companies: Honeywell, Bell, Fokker-GKN, Safran Group, Embraer.
- Industrial Parks: 7 industrial parks in Chihuahua.
- Top Export Markets:
 - United States—\$73.1 billion.
 - Singapore—\$575 million.
 - Canada—\$471 million.



Coahuila

- · Major cities: Saltillo (capital), Torreón, Monclova.
- Population: 3,146,771.
- Truck Border Crossings: <u>Del Rio-Acuña Bridge</u>, <u>Camino Real International Bridge</u>.
- Nearby U.S. Cities: Del Rio and Eagle Pass, TX.
- Attributes/Industry Clusters: Auto parts and accessories, Engines and related components, Plastics, Textiles, Beverages, Coal.
 - International companies: <u>Phillips</u>, Fiat Chrysler, General Motors, Daimler, Freightliner.
- Industrial Parks: 31 industrial parks in Coahuila.
- Top Export Markets:
 - United States—\$8.65 billion.
 - · China—\$2.94 billion.
 - · Canada—\$815 million.

Nuevo León

- · Major cities: Monterrey, Apodaca, Guadalupe.
- Population: 5,784,442.
- Truck Border Crossings: Laredo-Columbia Solidarity Bridge (also World Trade Bridge in nearby Nuevo Laredo).
- · Nearby U.S. Cities: Laredo and San Antonio, TX.
- Attributes/Industry Clusters: Aerospace, Defense, Automotive, HVAC, Medical Devices, Home Appliances.
 - International companies: Over <u>40 percent</u> of the world's largest manufacturers are located in Nuevo León including: KIA, IKEA, Whirlpool, John Deere, Johnson Controls, General Motors, PepsiCo, Fiat Chrysler.
- · Industrial Parks: <u>97 industrial parks</u> in Nuevo León.
- Top Export Markets:
 - United States—\$\$25.4 billion.
 - China—\$11.6 billion.
 - Brazil—\$2.05 billion.

Tamaulipas

- · Major cities: Reynosa, Matamoros, Nuevo Laredo.
- Population: 3,527,735.
- Truck Border Crossings: World Trade Bridge—
 considered the "most important truck crossing on
 the U.S./Mexican border." The World Trade Bridge
 represents 60 percent of all truck traffic crossing
 between Texas and Mexico.
- Nearby U.S. Cities: Laredo, McAllen, and Brownsville TX.
- Attributes/Industry Clusters: Electronics, Automotive, Chemicals, Aerospace, Medical Equipment.
 - International companies: LG, Motorola, Panasonic, Eaton, Magna, Hilti, Black & Decker, Tyco, BASF, Corning, iiMED, Medline.
- Industrial Parks: 24 industrial parks in Tamaulipas.
- Top Export Markets:
 - · United States—\$29.2 billion.
 - Canada—\$184 million
 - Belgium—\$163 million.





California Border

California shares a border with the Mexican state of Baja California that spans 140 miles. Baja California also extends into Arizona, but all border crossings are in the region that aligns with California.

Baja California

- Major Cities: Tijuana, Mexicali (capital), Ensenada, Tecate, Playas de Rosarito.
- Population: 3,769,020.
- Truck Border Crossings: Otay Mesa, and Tecate.
- Nearby U.S. Cities: San Diego.
- Attributes/Industry Clusters:
 - Medical Devices: More than 80 companies and 74,000 employees. Multinationals with operations in Baja California include Medtronic, DJO Global, and Thermo Fisher Scientific.
 - **Electronics:** More than 180 manufacturing facilities that employ 120,000 workers. Products include televisions, consumer electronics, automotive and aeronautical components, and sensors. Major companies include Philips, Samsung, and Panasonic.
 - Aerospace: Home to more than 50 aerospace companies that have deeply-rooted supply chains. Manufacturing includes products for commercial, defense, and space operators, along with drone production, repair (MRO) facilities, and cargo operations. Key operators include Rockwell, Honeywell, Lockheed Martin, Zodiac, and Menzies Aviation.
- · Industrial Parks: 60 industrial parks in Baja California.
- Top Export Markets:
 - United States—\$52.2 billion.
 - · Canada—\$733 million.
 - Columbia—\$397 million.

Arizona Border States

The state of Arizona shares a border with Mexico that spans roughly 370 miles. Mexican border states include Sonora and Baja California. However, there are no border crossings between Arizona and Baja California, only between the state of California and Baja California, as discussed above.

Sonora

- Major Cities: Hermosillo (capital), Cajeme, Nogales, Guaymas.
- Population: 2,944,840.
- Truck Border Crossings: Major crossings include Nogales, which accounts for 80 percent of all northbound Arizona truck crossings, and San Luis II, which accounted for 10.8 percent of truck crossings during 2022.
- Nearby U.S. Cities: Tucson, AZ.
- Attributes/Industry Clusters: Advanced Component Manufacturing, Aerospace, Electronics, Copper Ores and Concentrates, Agriculture.
 - Guaymas is home to Mexico's <u>turbine component</u> machining cluster.
- International companies: Airbus, Bombardier, Hamilton Sundstrand.
- Industrial Parks: <u>9 industrial parks</u> in Sonora.
 20 Maguiladoras.
- Top Export Markets: United States—\$12.4 billion.
 - · China—\$2.07 billion.
 - · Japan—\$907 million.

New Mexico Border

The New Mexico/Mexico border spans 180 miles, most of which is aligned with the Mexican state of Chihuahua (discussed above). According to the New Mexico Department of Health, the state accounts for nine percent of the total U.S./Mexico border.

Commercial border crossings located in New Mexico include:

Santa Teresa Port of Entry: Located 40 miles south of New Mexico's second largest city, Las Cruces, and 20 minutes from El Paso, TX. The entry is used for trucks moving goods to Ciudad Juárez and further into the interior of Mexico. The Santa Teresa crossing is the largest livestock import/export facility on the Mexican border, processing hundreds of thousands of cattle each year.

<u>Columbus Port of Entry:</u> Connects Palomas, Chihuahua with Columbus, New Mexico. This crossing is located 65 miles west of the Santa Teresa crossing.

Non-Border Mexican States with Significant Manufacturing Facilities

Beyond the six border states described above, other states with significant manufacturing operations include:

Estado de México

- Population: 16,992,418.
- · Location: Central Mexico.
- Major Cities: Ecatepec de Morelos, Nezahualcóyotl, Toluca (capital).
- Attributes/Industry Clusters: Automotive, Agriculture, Chemicals, Textiles, Paper Products.
 - International companies: Stellantis, Henkel, ZF Group.
- Industrial Parks: <u>41 industrial parks</u> in Estado de México.

- Top Export Markets:
 - United States—\$12.3 billion.
 - · China—\$8.56 billion.
 - Germany—\$1.56 billion.

Mexico City (National Capital/Federal District)

- Population: The population of Mexico City, according to <u>INEGI</u>, the country's statistics agency, was 9.2 million people in 2020. However, more than 20 million people live in the greater Mexico City metropolitan area.
 - Greater Mexico City ranks <u>fifth in the world</u> in terms of population, according to the United Nations.
 Only Tokyo, Delhi, Shanghai and Sao Paulo are larger.
- Location: Central Mexico.
- Attributes/Industry Clusters: Accounts for one-fourth of Mexico's gross domestic product.
 - Home to the Mexican stock exchange, many corporate headquarters, and international financial institutions.

Guanajuato

- Population: 6,166,934.
- Location: Central Mexico (northwest of Mexico City).
- Major Cities: León, Irapuato, Celaya, Guanajuato (city, capital).
- Attributes/Industry Clusters: Automotive, Aerospace.
 - <u>International companies:</u> Honda, Mazda, Volkswagen, Nissan.
- Industrial Parks: 38 industrial parks in Guanajuato.
- Top Export Markets:
 - United States—\$7.15 billion.
 - · China—\$2.61 billion.
 - · Japan—\$2.58 billion.

Jalisco

- Population: 8,348,151.
- Major Cities: Zapopan, Guadalajara (capital), Tlajomulcom de Zúñiga.
- · Location: Western Mexico.
- Attributes/Industry Clusters: Telecommunications Equipment, Software, Electronics, Digital Components.
 - <u>International companies:</u> General Electric, IBM, Intel, Hewlett-Packard, Siemens, Flextronics, Oracle
- Industrial Parks: 20 industrial parks in Jalisco.
- Top Export Markets:
 - · China—\$14.3 billion.
 - United States—\$10.3 billion.
 - Taiwan—\$3 03 billion

Puebla

- Population: 6,583,278.
- · Location: Central Mexico.
- Major Cities: Puebla (capital), Tehuacán, San Martín Texmelucan.
- Attributes/Industry Clusters: Automotive, Metal Mechanics, Electronics, Food Processing, Chemicals.
 - International companies: Volkswagen (largest assembly plant outside of Germany), Audi, Honda, Mazda, Nissan, PepsiCo, Nestlé, BASF, Coca-Cola, Heineken, Magna International.
- Industrial Parks: 8 industrial parks in Puebla.
- Top Export Markets:
 - United States—\$12.7 billion.
 - China—\$3.56 billion
 - · Germany—\$3.48 billion.

Querétaro

- Population: 2,368,467.
- Location: Central Mexico (120 miles north of Mexico City).
- · Major Cities: Querétaro, San Juan del Río, El Marqués.
- Attributes/Industry Clusters: Close proximity to U.S. border with Laredo, TX located 580 miles away.
- <u>Industries</u> include Aerospace, Automotive, Consumer Appliances, Plastics, Food Production.
 - International companies: Airbus, Bombardier, Safran, Samsung, General Electric, Michelin, Magna International, BOSCH, Siemens, Coca-Cola, Campbell's, Mars, Nestlé, Gerber.
- Industrial Parks: <u>20 industrial parks</u> located in Querétaro.
 - Top Export Markets: United States—\$12.3 billion.
 - · Canada—\$762 million.
 - United Kingdom—\$195 million.

Veracruz de Ignacio de la Llave

- Population: 8,062,579.
- · Location: Eastern Mexico.
- Major Cities: Veracruz, Xalapa, Coatzacoalcos.
- Attributes/Industry Clusters: Port of Veracruz, located on the Gulf of Mexico. Serves as a hub for automotive trade, including Volkswagen, Ford, General Motors, BMW, Chrysler, Volvo, Mercedes Benz, Jaguar, Audi, Honda, Porsche, Nissan.
- <u>Industries:</u> Automotive, Iron/Steel, Coffee, Food Production.
- Industrial Parks: <u>8 industrial parks</u> located in Veracruz de Ignacio de la Llave.
- Top Export Markets:
 - United States—\$2.66 billion.
 - Canada—\$249 million.
 - · Columbia—\$209 million.





Why is Mexico a Preferred Manufacturing and Sourcing Partner



Why is Mexico a Preferred Manufacturing and Sourcing Partner

400 businesses. That's the number of North American companies that, according to Mexican government authorities, in late-2022 were actively considering shifting production from Asia to Mexico. According to The New York Times, this latest boost to Mexican-based manufacturing comes as U.S. and Canadian companies look to bring supply chains and manufacturing closer to home. The practice is referred to as "nearshoring" or "friendshoring," which more accurately reflects the strong relationships that exist between the U.S., Canada and Mexico. The increased shift to Mexico is being driven by a multitude of factors including changing economic realities, geopolitical tensions with China, and lingering fallout from pandemic-related supply chain disruptions.

In looking to Mexico, businesses can find relief from the more onerous challenges to their Asian-based <u>supply chains</u>. And while Mexico presents its own set of obstacles, businesses are increasingly finding the country to be a favorable location for both identifying critical suppliers, and sourcing production.

Advantages and Opportunities of a Mexican-Based Supply Chain

Factors driving U.S. businesses' decisions to shift production to Mexico include:



Improved Transit Time. U.S. businesses can shave days—sometimes weeks—from their Asian-based delivery schedules. With most manufacturing facilities located in northern Mexico, shipments are just a short drive from the U.S. border. Once in the U.S., Canadabound shipments can be seamlessly processed for northbound service. Depending on the choice of logistics carrier, shipments can now arrive in Canada via direct ground service from the Mexican border.



Labor Costs. Supply Chain Quarterly reports that during 2022, manufacturing wages in Mexico averaged \$4.22 per hour. This compares favorably with the U.S. hourly rate of \$30, and \$5.58 per hour earned by workers in China.



Free Trade Benefits. The United States-Mexico-Canada Agreement (USMCA) took effect in 2020 and builds upon the trade relationship initially outlined in the 1994 North America Free Trade Agreement (NAFTA). Together, these trade agreements represent a decades-long commitment to enhanced trade between the United States, Canada and Mexico. Key provisions of the USMCA include duty free status for all qualified goods moving between the three partner countries. This has resulted in deeply integrated supply chains, especially in the automotive, aerospace, medical devices, and electronics industries. An example reported by the Financial Post highlighted the production process for a General Motors V-6 engine. Parts and components cross the border four different times, the paper noted, "all without a single tariff levied."



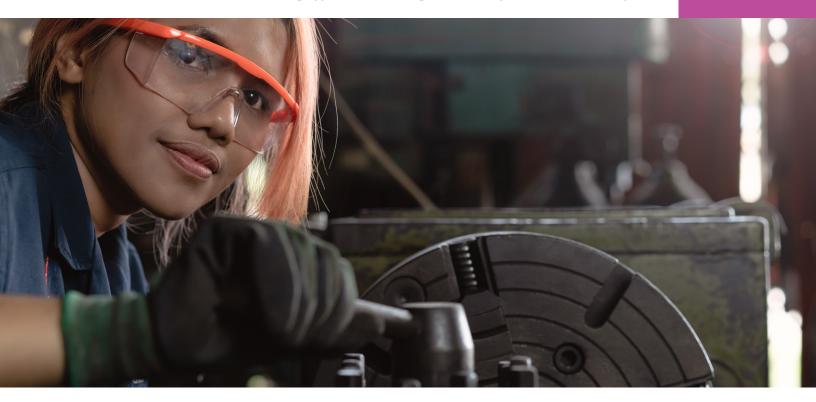
Program and Maquiladoras. U.S. and Canadian businesses can take advantage of Mexico's IMMEX Program, which allows foreign-owned facilities to temporarily import raw materials into Mexico, provided the goods are subsequently exported. This allows international companies to avoid duty and tax obligations. According to Braumiller Law Group, PLLC, an IMMEX, which stands for (English translation) Manufacturing Maquiladora and Export Services Industry, is a business that meets specific requirements and has been authorized by the federal government. In addition

to potential duty and tax savings, "IMMEX may save money via the low salaries and wages in Mexico," the Braumiller analysis noted, adding that "an IMMEX can represent big savings for large companies who are attracted by these and other incentives to invest in Mexico."

The IMMEX program replaced the government's existing "Maquiladora" program, which was started during the 1960's to encourage foreign investment. As originally conceived, a maquiladora referred to a foreign-owned assembly facility that produced goods for export. The IMMEX program updates the maquiladora concept, namely by aligning program benefits with NAFTA/USMCA provisions.

According to <u>MexicoNOW</u>, approximately 5,150 maquiladoras were operating throughout Mexico during 2020. <u>More than half</u> of these facilities are located in the six Mexican states that border the United States: Baja California, Chihuahua, Coahuila, Nuevo León, Sonora, and Tamaulipas.

A potential drawback to the program, according to the Braumiller legal analysis, is the IMMEX/Maquiladora program's complexity. "Although the savings and benefits of an IMMEX can be attractive for foreign investors," the analysis notes, "it is important to point out that the requirements to incorporate an IMMEX and then operate one, can be an overwhelming and complicated task for anyone." Plus, Braumiller points out, IMMEX facilities are regularly monitored by the Mexican government, and the slightest error could be grounds for suspension and, possibly, criminal sanctions imposed against company personnel.





Industrial Parks/Manufacturing Clusters.

Strategic planning has helped in the development of "manufacturing clusters" that can be found across Mexico. As the maquiladora manufacturing program helped spur a dramatic increase in manufacturing facilities, companies came to understand the value in locating in close proximity to their suppliers, with plenty of qualified workers, direct access to highways, airports and waterways, and ample supplies of electricity and water. This thinking gave rise to networks of world-class industrial parks located across the country. According to the Mexican Association of Industrial Parks, more than 430 parks are now in place throughout the country, representing more than 3,800 companies and accounting for more than three million jobs.

In Ciudad Juárez, for example, located in the Mexican border state of Chihuahua, at least 10 industrial clusters have taken root. This includes the <u>BIO El Paso—Juárez</u> medical device cluster, the <u>Chihuahua Aerospace Cluster</u>, and the <u>Chihuahua Automotive Cluster</u>. These clusters are housed within <u>industrial parks</u> located throughout the region.

The nation's network of automotive clusters, which includes OEMs and Tier I, 2, and 3 suppliers, for example, helped establish Mexico as a global leader in vehicle and parts production. According to TECMA, more than 30 auto-industry clusters can be found along the border and throughout central Mexico. "The resulting economies of scale, shared resources, and common R&D generate incredible synergies and cost savings," TECMA notes.



Skilled Labor. International businesses will find ample supplies of Mexican workers with the skills necessary for today's advanced manufacturing processes. This is largely due to relationships forged within industrial clusters, as universities and technical schools have worked closely with manufacturers to offer required training to potential employees. According to North American Production Sharing (NAPS), which assists international companies in entering the Mexican market, this includes a growing demand for skilled labor, especially in the aerospace, medical device, and metal mechanic industries. As NAPS points out, Mexico graduated more engineers in 2021 than did the United States.

What Are Potential Downsides to Manufacturing in Mexico

While Mexico clearly has much to offer an international company looking to shift production from Asia, there are considerations that could potentially interfere with a company's ability to achieve its desired goals. Considerations include:

Energy Uncertainty. According to the *Wall Street Journal*, the current Mexican government is attempting to bolster state-owned energy companies by closing off privately-owned entities. This has resulted in serious challenges for businesses including higher costs, uncertainty about sufficient energy supplies, and a lack of access to clean energy. As the *Journal* notes: "The moves will cost Mexico billions of dollars in foregone investment; raise domestic energy prices; limit the growth of oil and electricity output; and damage the competitiveness of Mexican companies and hundreds of multinationals that operate here, according to the U.S. government, private companies and economists."

These sentiments were echoed by Sergio Argüelles of the Mexican Association of Private Industrial Parks who, according to *Mexico Business News* stated that "the main challenge to taking advantage of the arrival of new investments will be to guarantee the availability of energy and provide certainty in the country for the installation of industrial parks and warehouses."

Supplier Access. Reporting by *The Wall Street Journal* noted that many companies shifted manufacturing to Mexico only to find that certain parts were unavailable. This resulted in companies having to rely on Asia for the required materials, thus diminishing much of the benefit of pursuing a "closer to home" manufacturing strategy. "Mexico lacks many of the supply chain networks that support products ranging from iPhones to washing machines and sofas," the *Journal* reported. "Building up similar ecosystems in Mexico will take years."

Theft. Security-related risks including cargo theft and extortion present ongoing challenges for companies with Mexican operations. Reporting by <u>Supply Chain Quarterly</u> noted: "Reported cases of extortion rose by 28 percent year-on-year nationwide during the first half of 2022, with manufacturing hubs Guanajuato in and Nuevo León reporting the greatest increase in incidence."

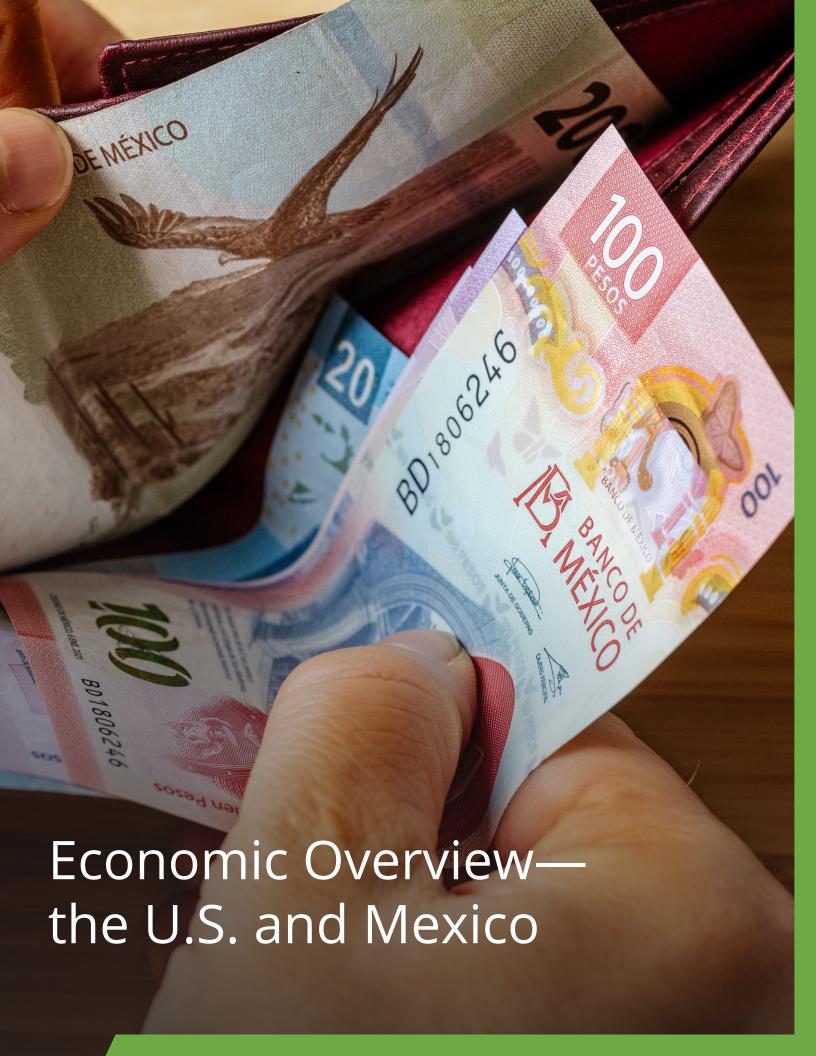
Further, the analysis noted, "the states of Mexico and Puebla, both part of the Central/Bajío region, account for roughly 70 percent of all incidents of cargo theft, whereas automotive components account for more than one-third of all stolen rail cargo."

Violence. The International Trade Administration (ITA) alerts U.S. companies about the risk of "continued violence involving criminal groups," which has created "heightened insecurity in some parts of Mexico," including in some border areas, port zones and along truck and rail corridors. The U.S. Department of State also warns Americans: "Violent crime—such as homicide, kidnapping, carjacking and robbery—is widespread and common in Mexico." Americans are advised to carefully review State Department travel warnings for Mexican regions.

Customs Obstacles. The ITA also notes concerns about the Mexican customs process, specifically with regard to insufficient notification about process changes, inconsistent interpretation of regulatory requirements at different border locations, and uneven enforcement of Mexican standards and labeling laws. In addition, the ITA advises, agricultural exporters complain that "Mexican inspection and clearance procedures for some agricultural products can be long, burdensome, nontransparent, and unreliable."

Labor Laws, Product Standards and Customs Regulations. The International Trade Administration further <u>advises</u> that in addition to customs regulations, "product standards and labor law may present challenges for U.S. companies."

The agency is careful to remind businesses that extensive U.S. resources are available to help navigate requirements for their particular business.





Economic Overview the U.S. and Mexico

The <u>U.S. International Trade Administration (ITA)</u> refers to Mexico as "one of the largest and most vibrant markets for U.S. products in the world." Mexico is the 16th largest economy in the world, and in 2022, was the United States' <u>second largest-overall trading partner</u>, <u>behind Canada</u>. The United States is Mexico's top trade partner.

According to the Congressional Research Service, the U.S./Mexican trade relationship is driven by factors including Mexico's geographic proximity, the extensive cultural and economic ties between the two countries, and the strong economic relationship that has developed over the 30+ years in which free trade agreements have been in place, namely the North American Free Trade Agreement (NAFTA) from 1994-2020, and its replacement, the United States-Mexico-Canada Agreement (USMCA) which took effect in 2020.

As the CRS points out, an important result of NAFTA—and now the USMCA—has been the development of deeply-integrated supply chains, especially in key industries including automotive, electronics, appliances, and machinery. "Much of the bilateral trade between the United States and Mexico occurs in the context of supply chains as manufacturers in each country work together to create goods.... The flow of intermediate inputs produced in the United States and exported to Mexico, and the return flow of finished products greatly increases the importance of the U.S.-Mexico border region as a production site."

"Leading Prospect" Industries

The ITA, as part of its core mission, offers insight about export and investment opportunities for more than 125 countries. Typically, the agency highlights a handful of industries it considers to be "leading prospects" within each country. For Mexico though, the ITA refers to "an extraordinary range of sectors," featuring 20 different industries, a few of which include:

Automotive

The <u>automotive industry</u> is critical to the Mexican economy, accounting for 3.5 percent of the nation's gross domestic product, 20 percent of manufacturing GDP, and employing more than one million people nationwide.

Mexico is the seventh-largest global passenger vehicle manufacturer, with annual production of roughly three million vehicles. Ninety percent of vehicles produced in Mexico are exported, with more than 75 percent sent to the United States. Automakers with a presence in Mexico include Audi, Baic Group, BMW, Stellantis, Ford, General Motors, Honda, Hyundai, Kia, Mazda, Mercedes Benz, Nissan, Toyota, and Volkswagen. Tesla is expected to begin manufacturing operations in Mexico during 2024.

Mexico is the world's sixth largest manufacturer of heavy-duty vehicles, with more than 14 manufacturers and assemblers of buses, trucks, tractor trucks, and engines operating in 11 manufacturing plants. Mexico is the world's leader in tractor truck exports, with more than 95 percent of vehicles sold to the United States. Leading manufacturers established in Mexico include Cummins, Detroit Diesel Allison, Freightliner-Daimler, Mack Trucks, Volvo Group, Mercedes-Benz, and Isuzu Motors.

Manufacturers are primarily located in automotive clusters found primarily within border states and manufacturing-rich interior states. Auto parts producers—Tier I, II, and III—are located close to these manufacturing facilities. According to Export Development Canada, automotive OEMs and suppliers are concentrated in a region called Bajío, which is comprised of four states: Guanajuato, Aguascalientes, Querétaro, and Jalisco. The region includes more than 600 OEMs and key Tier 1 and Tier 2 suppliers.

The USMCA trade agreement includes specific requirements for the automotive industry. Under the terms of the agreement, 75 percent of a vehicle's content (70 percent for heavy trucks) must be produced in North America, with all "core parts" originating in either the United States, Canada or Mexico. Only goods meeting these content requirements will receive duty-free access, although provisions for trucks will not take effect until 2027.

Aerospace

The Mexican Aerospace Industry Federation (FEIMA) notes that Mexico's <u>aerospace sector</u> increased from 100 manufacturing firms and organizations in 2004, to almost 370 by mid-2022. Firms operating in Mexico include manufacturers, maintenance-repair-overhaul facilities (MROs), technical schools, research centers, universities, and related service providers.

The aerospace sector is divided as follows:

- Original equipment manufacturers (OEMs) producing aircrafts supported by Tier I manufacturers making principal aircraft systems.
- Tier 2 companies making sub-assemblies.
- Tier 3 and 4 suppliers providing parts and raw materials.

Mexico's aerospace industry has five main hubs, located in the states of Baja California (Tijuana-Mexicali), Chihuahua, Sonora, Querétaro and Nuevo Léon. Although, the industry has a presence in 20 of the country's 32 states.

Aerospace multinationals operating in the Mexican market include Bombardier, Boeing, Airbus, Embraer, Raytheon, Safran, Fokker, GE and Rolls Royce.



Advanced Manufacturing

Mexico is among the world's five largest importers of advanced manufacturing technology, a trend that has accelerated as companies continue to nearshore to Mexico. This has resulted in even higher levels of efficiency and productivity within Mexico's manufacturing facilities, allowing U.S. companies to add resiliency to their supply chains.

Sub-sectors in which Mexico is investing in technology-based manufacturing solutions include:

Advanced Materials: Advanced materials, as defined in Risk Analysis journal, refer to "materials that are specifically engineered to exhibit novel or enhanced properties that confer superior performance relative to conventional materials." Examples of advanced materials, according to ICL specialty minerals company, "are beginning to transform every aspect of life," as scientists unlock new capabilities within materials previously thought to have reached their potential. "An aircraft or a car can be made from stronger, lighter materials. It may last longer, run more economically, and be more friendly to the environment. Commonly used devices can become smaller and more efficient. A smartphone now performs many of the functions of the laptop, which in turn performs many of the functions of a computer that was once the size of a house," the ICL overview explains.

In Mexico, advanced material development was initially limited to just a few R&D centers. However, ITA reports that today more than 200 companies throughout the

country produce advanced materials at a relatively high volume. Producers are generally located in clusters located in the State of Mexico, and the Bajío and central Mexico regions.

Mexican facilities have been especially successful in the field of nanotechnology. According to Moeller IP Advisors, Mexican companies have developed more than 150 products using nanotechnology. This includes Gresmex, which designed and patented a sanitizer capable of destroying the H1N1 virus; Sanka which developed a food supplement; and the Monterrey-based Alimientos which produces a nanopackaging food storage solution.

- Automation and Mobile Robots: Mexico was the fourth largest importer of industrial robots in the world during 2021, spending more than \$135 million on devices to automate key manufacturing processes. According to Mexico Business News, 62 percent of all robots installed in Mexico are affiliated with the automotive industry, followed by plastics and chemical manufacturing. "Mexico is considered an emerging market for the production and installation of industrial robots," although its ratio of 44 robots per 44,000 employees, lags the United States ratio of 228 robots per 10,000 employees.
- Visual Factories. According to the ITA, the visual factory concept involves the use of interconnected digital platforms as a way to allow companies to "see" every step in their manufacturing processes.
 Visual factory technology is in strong demand among Mexican manufacturers, and is regarded as an essential part of an "Industry 4.0 smart factory."



Electronics

According to <u>IVEMSA</u> relocation company, over 730 plants manufacture audio and video, telecommunications, computer equipment, and related parts across Mexico. Companies are drawn to Mexico due to its skilled workforce and enhanced intellectual protection agreements. "Mexico is the largest exporter of flat-screen TVs in the world," IVEMSA notes, "the third-largest exporter of computers, and the eighth-largest producer of electronics in the world."

International brands with operations in Mexico include LG, Sony, Samsung, Dell, Toshiba, RCA, Phillips, Panasonic, Siemens, and Vizio. Baja California is referred to as "the Silicon Valley of Mexico," with more than 200 electronics companies operating in the region. The principal city of Tijuana alone includes facilities that manufacture more than 20 million televisions each year.

ICT and Digital

The <u>ITA</u> notes that "Mexico is positioning itself as a high-quality software developer to the manufacturing, aerospace, and finance industries." Currently 2,000 companies operate within 38 IT clusters located throughout the country offering software development, call center operations, high-tech manufacture, and engineering services.

According to research by <u>Tetakwai</u>, Mexico's roughly 300 academic institutions graduate about 65,000 students annually who fill the growing number of professional positions within the IT sector. International tech companies <u>with manufacturing operations in Mexico</u> include: Dell, Hewlett-Packard, IBM, Sony, LG, Nokia, and Motorola, with many others actively considering shifting production out of China.

In addition to Tijuana, electronics manufacturing <u>can be</u> <u>found</u> in Coahuila (Saltillo), Chihuahua (Juárez), Nuevo León (Monterrey), and the State of Mexico.





Home Appliances

Mexico is currently home to six manufacturing clusters dedicated to household appliance manufacturing, according to <u>Tecma</u> group of companies. The largest cluster, located in Nuevo León, accounts for 40 percent of production, and is the leading source of Mexicanproduced refrigerators, freezers, and air conditioners. Other appliances produced in Mexico include washing machines, cooktops, vacuum cleaners, and electric water heaters. Overall, Tecma reports, approximately 500 appliance companies operate in the Mexican market including Whirlpool, Bosch, Hisense, Electrolux, LG, Mabe (GE), and Samsung. Whirlpool, in fact, began shifting production to Mexico long before the pandemic, and operates five facilities across the country: three in Nuevo León for the production of refrigerators, washing machines, and components; a facility in Guanajuato that produces dishwashers, and a refrigerator facility in Coahuila.

According to *Mexico News Daily*, the country's home appliance manufacturing industry is valued at US\$14.8 billion, and accounts for 35 percent of U.S. imports.

Nearshoring has resulted in a spike in not just major appliances, but smaller devices as well. According to *FabTech Mexico*, the country has seen an influx of "minor household appliance" manufacturers, including coffee makers, blenders, mixers, irons, hair dryers, air fryers,

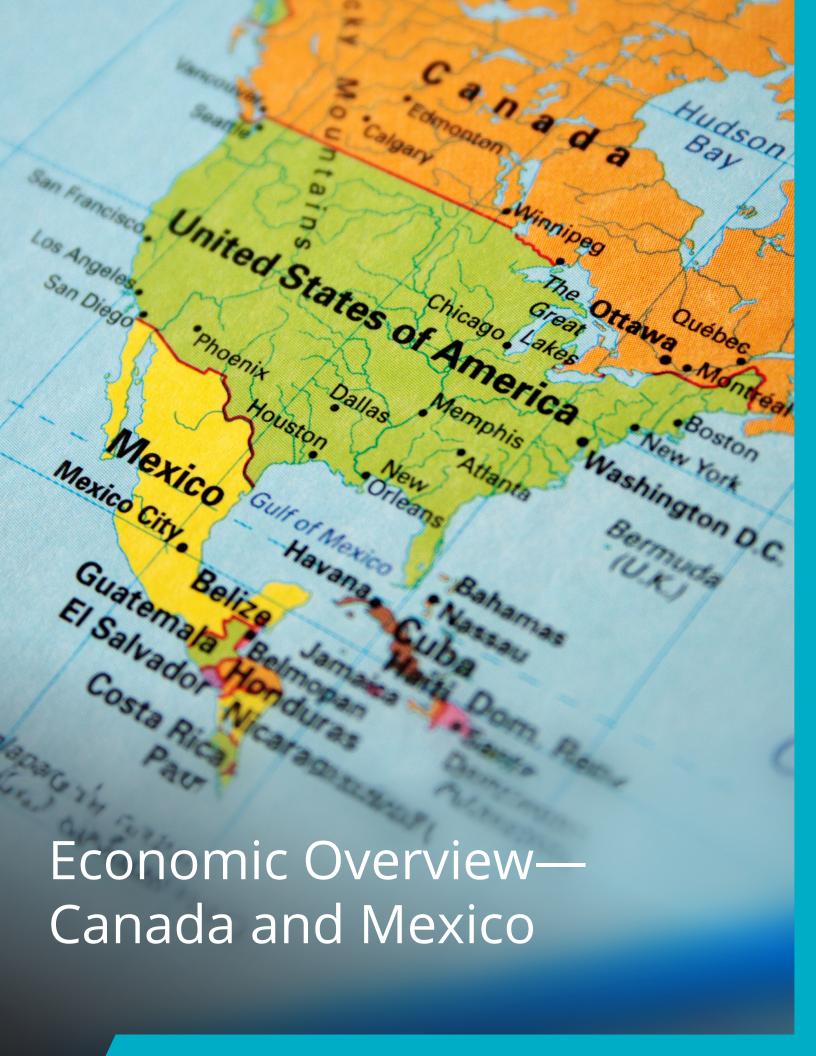
and juicers. "We have received calls from Canadian and South American companies looking for minor household appliances that used to be imported from Asia," noted Yoelli Rojas, director of the Nuevo León manufacturing cluster.

In addition to Nuevo León, <u>appliance clusters</u> can be found in Mexico City, Coahuila, Guanajuato, Querétaro, and San Luis Potosi

Medical Devices

Mexico is the second largest medical device market in Latin America, following Brazil, and the <u>eighth-largest</u> manufacturer in the world. The country is also the top exporter of medical devices to the United States. Global manufacturers with facilities in Mexico include Medtronic, Johnson & Johnson, Welch Allyn, and GE Medical Systems.

More than 80 medical device companies can be found in the border state of Baja California, accounting for more than half of the industry's overall presence in the Mexican market. Baja California shares a border with San Diego, California. Together the region comprises the Cali-Baja Biotech cluster, which represents more than 800 companies involved in the manufacture of devices including everything from wheelchairs to surgical kits, to lenses and dentures.





Economic Overview— Canada and Mexico

Global Affairs Canada describes its relationship with Mexico as "dynamic and prosperous," with connections formed "as friends, as North American neighbors, and as strategic partners in the Americas and the world." Both countries—along with the United States—are signatories to the USMCA free trade agreement.

Mexico and Canada have established relations apart from the USMCA agreement, namely through the Canada-Mexico Partnership (CMP) which has existed since 2004. The purpose of the CMP is to seek bilateral cooperation across a number of common interests including trade and investment, environmental issues, government, and energy.

The two countries are also signatories to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) trade agreement. The agreement seeks to promote trade opportunities in the Asia Pacific, with signatories that include Mexico, Canada, Australia, Brunei, Chile, Japan, Malaysia, New Zealand, Peru, Singapore, and Vietnam.

With regard to merchandise trade, Mexico was Canada's third largest partner during 2021, after the United States and China. Canada was Mexico's sixth-largest trade partner. As a result of this strong and sustained relationship, Export Development Canada (EDC) lists Mexico as a "priority market," and provides extensive financial services to assist Canadian companies seeking to find export opportunities, or invest in that country.

The government has identified several sectors that offer "the greatest opportunities" for Canadian businesses. Those sectors, many of which overlap with U.S.-designated priorities, include:

- Aerospace
- Agriculture, Food, and Beverages
- Automotive
- Cleantech
- Information and Communication Technologies
- Mining
- · Oil and Gas.

Export Development Canada has been a leader in promoting Mexico as a viable alternative to Asianbased supply chains. "Mexico is not only the secondlargest economy in the Latin American region," Monterrey-based EDC Senior Regional Manager Felipe Sanmiguel wrote in a Mexico Business article, "but its geographical proximity to the United States, coupled with the fact that many multinational companies are moving to Mexico to be closer to the American economy, are among the reasons why Canadian manufacturers and service providers are now looking to integrate into Mexico's supply chains and set up shop south of the Rio Grande."

Canada's Export Development agency, Sanmiguel







North American Logistics Efficiency and Mexico-Canada Success

Supply chain efficiency is frequently cited by manufacturers as a key reason for sourcing materials or relocating production to Mexico. A core component of achieving a high level of efficiency, of course, is a reliable logistics strategy that ensures timely movement of goods.

By moving production to Mexico, U.S. and Canadian businesses eliminate a weeks-long ocean crossing inherent to an Asian-based supply chain, and can expect faster transit times and improved reliability. While these are significant benefits, a business will need to carefully plan its North American-based logistics strategy and consider that carriers and logistics providers have vastly different capabilities and competencies. As the following discussion will make clear, this is especially true for shipments moving from Mexico to Canada.

Most shipments crossing the Mexico-U.S. border and the U.S.-Canada border travel by truck. According to the American Trucking Associations, trucks transported 66.1 percent of the value of surface trade between the U.S. and Canada during 2021. For shipments between Mexico and the United States, trucks carried 82.7 percent.

But what about shipments traveling from Mexico to Canada? While ground freight remains the most efficient option, the process is a bit more complicated. However, innovative logistics providers have "upped their game" in recent years, and now offer solutions that allow comprehensive, seamless service.

First though, it's important to understand a few nuances inherent to shipments that originate in the Mexican market.



Driver Restrictions for Mexico-U.S. Cross Border Movement

Mexican trucks and drivers, for the most part, are not permitted to travel beyond a 25-mile radius of the U.S.-Mexico border. This means more drivers, and often more trucks, are required to complete a Mexico-U.S. cross border movement.

Canadian drivers, on the other hand, are permitted to travel within the United States to transport shipments to their end destinations

The reasons for this apparent double-standard are rooted in long-standing U.S. policy. According to analysis by National Review, in 1982 the U.S. Congress banned Mexican truckers from entering the United States. A reversal of that ban was included in NAFTA, which took effect in 1994, and mandated that Mexican trucks be allowed to enter the U.S. by no later than 2000. "The U.S. left the restriction in place anyway," the analysis notes, and what followed was a period marked by lawsuits, regulatory challenges, and retaliatory tariffs as U.S. entities sought to prevent lower-paid Mexican drivers from operating on American highways.

The USMCA, which replaced NAFTA in 2020, also includes provisions allowing certain Mexican drivers to operate within the U.S. "As things currently stand," the National Review reported, "a capped number of Mexican carriers may operate long-haul routes across the border, but no Mexican carrier may haul freight between two points within the U.S., which is called 'cabotage."

Transloading and Through-Trailer Services

As a result, the U.S.-Mexico cross border experience is quite different from the U.S.-Canada experience. The unique challenges associated with the U.S.-Mexico clearance process—a process described by the U.S. Federal Highway Administration (FHWA) as complicated—have resulted in a modus operandi that requires multiple stakeholders.

"Currently, Mexican tractors are restricted to circulation in a narrow commercial zone extending out to 25 miles from the border (or up to 75 miles in Arizona)," the FHWA notes. "Therefore, Mexican truck shipments into the United States are required to use a drayage or transfer tractor that picks up a trailer on the Mexican side of the border and then hauls it into the United States, where it is dropped off so a U.S. long-haul tractor can carry the trailer further into U.S. territory."

Shipments generally have two options for crossing the Mexican border:

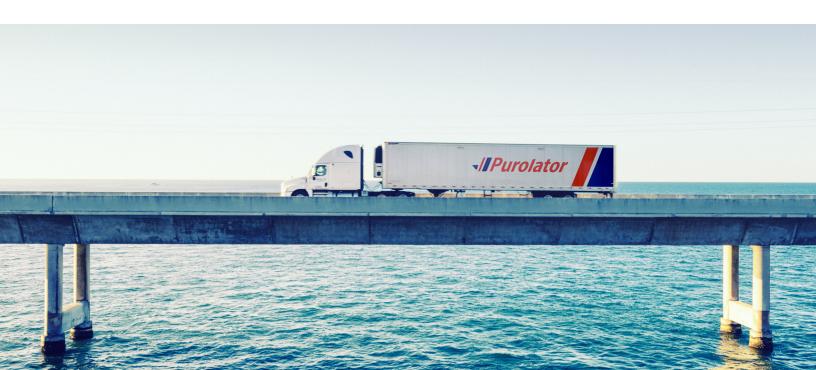
Transloading (also called Cross-Docking).

Transloading is a service in which freight is physically transferred to a different trailer after crossing the border. Transloading generally involves at least two trucks, three drivers, and multiple steps, as follows:

- Stage One: Pickup—A shipment is picked up by a Mexican carrier and transported via a Mexican driver to a facility located close to the border.
- Stage Two: Border Crossing—The trailer is picked up by a "crossing driver" that shuttles the trailer the short distance over the border. The crossing driver clears Mexican export customs as well as the U.S. import process and delivers the shipment to a transloading facility located no farther than 25 miles from the border.
- Stage Three: Transloading/Cross Docking—A U.S. driver takes over and transfers the shipment from the Mexican carrier to the U.S. carrier. The Mexican driver returns to Mexico, often to take on a subsequent load and repeat the short trip back into the U.S.
- Stage Four: Final Delivery—The U.S. company oversees final delivery of the shipment within the U.S. market.
 Depending on a shipment's ultimate destination, this can require additional transfers.

Through-trailer. Another option called "through-trailer," allows shipments to remain on the same trailer. The process still requires multiple drivers, but since no freight transfers are required, shipments generally move faster. Required stages include:

- Stage One: Pickup—A Mexican driver picks up a shipment and travels to a facility located close to the border. This is similar to the initial stage in transloading.
- Stage Two: Border Crossing—A crossing driver transports the trailer across the border and through the U.S. and Mexican customs processes. The shipment is transported to a U.S. carrier's facility and remains on the same truck.
- Stage Three: Final Delivery—The shipment enters the U.S. carrier's distribution network for final delivery.



Through-trailer services are generally used for heavy, irregularly-sized, or highly-fragile shipments that would be difficult to transfer to a second trailer. Limited capacity is also an issue since most carriers do not have trailers available to accommodate longer trips. Capacity concerns though, may be addressed by selecting a logistics provider (such as Purolator International) that can accommodate through-trailer service requests.

In a 2023 Wall Street Journal video discussing the increased volume of trucks traveling between Laredo, TX and Nuevo Laredo, Daniel Covarrubias, director of the Texas Center for Economic and Enterprise Development at Texas A&M University noted: "If you take a 35-mile radius and place it here on the crossborder hub of Laredo/Nuevo Laredo, you're going to find upwards of 500 U.S. customs brokers and Mexican brokers. You're going to find more than 500 transportation companies. More than 350 logistics companies."

Left unsaid though, is that many of those transportation companies specialize in short "drayage" trips, shuttling shipments between Mexican and U.S. warehouses. In fact, 90 percent of truck traffic crossing the busy World Trade Bridge are short distance jobs. According to the U.S. Federal Highway Administration, "these short haul trucks will make up to three trips a day across the border."

Although the need for multiple drivers is an added step for Canada-bound shipments, any extra time required can be mitigated by choosing a logistics provider, such as Purolator International, that offers direct service from southern Texas to the Canadian market, followed by extensive service options throughout that vast country.



Customs Considerations

In-Bond Shipments

Canada-bound shipments originating in Mexico face the unpleasant reality of two border clearance procedures, an initial Mexico-U.S. clearance, followed by a U.S.-Canada clearance. The prospect of having to clear customs twice increases the risk of delays, double duty payments, and uncertainty, as products try to satisfy each country's compliance requirements.

U.S. Customs and Border Protection (CBP) allows shipments to avoid this scenario, by allowing shipments to pass through the United States without formally clearing U.S. customs. Instead, shipments move through the U.S. as "in-bond" shipments. The process is described by CBP as follows: "The in-bond process allows imported merchandise to be entered at one U.S. port of entry without payment of duties and transported by a bonded carrier to another U.S. port of entry or authorized destination provided all statutory and regulatory considerations are met. At the destination port, the merchandise is entered or exported."

In-bond status is very important for shipments moving from Mexico to Canada. Shipments are not assessed taxes, duties, or fees until they arrive in Canada, when they are formally "released" into that country. However, the United States sets specific requirements to qualify for this benefit:

- Cargo can only be transported by a bonded carrier.
 A bonded carrier is a transportation provider that is licensed by CBP to carry freight across U.S. border entry points and through the country. Licensed carriers will meet all CBP requirements, secure necessary bonding, and appear on CBP's list of approved in-bond carriers.
 - What is a customs bond? A customs bond, according to <u>TRG</u> insurance provider, is a financial guarantee that CBP will be paid any and all duties, taxes, and fees determined to be due during the importation process.
- If applicable, cargo can only be stored in a bonded warehouse in the United States.

- Specific documentation must be provided for all products traveling as an in-bond shipments.
- Trailers must be securely sealed, and the seal must remain intact until it is opened at the final port of entry.

Important to note though, is that each shipment will need to be assessed based on its unique attributes. Shipments that qualify under the USMCA, for example, can move across the U.S., Mexican and Canadian border without having to meet in-bond requirements.

USMCA Eligibility

Shipments that qualify for duty free status under the USMCA avoid duty liability, and in some instances, can avoid excessive paperwork requirements as well. For duty-free status, a product must meet specific USMCA requirements regarding the country of origin for the materials and components used in production. A manufacturer can learn about USMCA origin requirements by consulting the trade agreement's "rules of origin."

Passenger vehicles, for example, according to PriceWaterhouse Coopers, must meet a "regional value content" requirement of at least 75 percent, with at least 70 percent of steel and aluminum coming from North America. The vehicle's "core" components must be among the parts originating in North America and, at least 40 percent of the vehicle must have been produced by workers earning at least US\$16 per hour.

Shipments that qualify under the USMCA are able to move freely between the three partner countries. And many do. As mentioned previously, the <u>Canadian Vehicle Manufacturer's Association</u> notes that parts and components may cross Canadian-U.S.-Mexican borders as many as eight times before being installed in a final assembly.

The USMCA also allows for "simplified entry" for all shipments entering Canada valued at less than CAD\$3,300. This applies to all shipments, regardless of where components are sourced.

In addition, shipments arriving in Canada via an express carrier also benefit from USMCA provisions. Shipments valued at less than C\$40 can avoid Canadian taxes, while shipments valued below C\$150 are exempt from duties. These provisions are especially helpful for eCommerce shipments moving from Mexican production facilities to Canadian consumers. But again, these provisions only apply to shipments transported by an express carrier.

As these "extra steps" make clear, shipping products across North America requires an understanding of the many nuances involved. The process can be very technical, and exacting. But with an experienced logistics company waiting on the other side of the border to finish the job, products will arrive in Canada faster, and with the highest levels of efficiency, security, and visibility.

On to Canada! Ensure Direct Service, Canadian Expertise, and Maximum Efficiency

Once a Canada-bound shipment arrives in the U.S.— most often in Laredo, TX—the speed at which it arrives in Canada will depend entirely on the selected U.S. logistics provider. As the Laredo Economic Development Commission makes clear in its 2022 Economic Vision, shipments arriving in Laredo will find plenty of options for continuing their journeys into the U.S., Canada, or beyond. Specifically, the LEDC cites the "organic logistics clusters" that have been created in the Laredo region, which include "over 500 custom broker firms, more than 500 transportation companies, and at least 300 logistics warehouses and storage facilities, employing more than 30,000 employees on both sides of the border."

With so many options, identifying the ideal logistics partner can be confusing. This is especially critical though, for shipments destined for the Canadian market. As we've seen, Canada-bound shipments fall in a special category, since they do not undergo a formal U.S. customs entry process. This means then, that a qualified logistics partner must not only offer service to Canada, but should also understand the nuances of the customs process, and have the necessary capabilities.

In doing its due diligence, a company will soon realize that Purolator International is a leading provider of logistics services for shipments moving between the United States and Canada. Purolator offers extensive capabilities that enable single-source, comprehensive solutions that address even the most challenging supply chain needs. This includes direct service for Mexican-based shipments headed to Canada, with guaranteed, on-time delivery throughout the Canadian market.

Considerations in developing a North American logistics strategy, along with an overview of Purolator's capabilities, include:

- Transit time. Many U.S. companies are unpleasantly surprised to receive transit time estimates of 10-14 days for regular ground service from the U.S. to Canada. Estimates are even longer for shipments originating in Mexico. This can seriously hamper U.S. businesses that ship regularly to Canada, and must meet manufacturing schedules, or consumer expectations. Why does it take so long? A few reasons include:
 - Lack of providers that "specialize" in Mexico-US-Canada coverage. Ground service between Mexico, the United States and Canada is an underserved market. Businesses with shipments moving from Mexico to Canada often find they have no choice but to rely on major carriers that piece together solutions by combining routes. Such an approach usually results in multiple hand-offs, excessive down time, and time wasted on additional pickups and distribution center stops.
 - Lack of seamless service between Mexican carriers and U.S. carriers. Many times, a shipment will arrive at a transloading facility and have to wait until a scheduled U.S. carrier arrives to continue its northbound journey. Or, a shipment may be forced to utilize a transloading solution because its carrier does not have a trailer and driver available for "through service." Purolator allows shippers to avoid these time-wasting scenarios by ensuring a seamless transition at the transloading facility, and by tapping into its deep network to ensure adequate capacity. A Purolator-based

solution essentially eliminates the extra time and maneuvers required for shipments crossing the Mexican border.

- Most U.S. logistics companies have limited access in the Canadian market. For most U.S. providers, service capabilities end at the Canadian border.
 Once shipments pass through customs, they are often handed off to Canadian carriers. Such handoffs take time, and often require time-consuming diversions to a Canadian distribution center for unloading and sorting, before being reloaded for delivery within Canada. Such carrier transfers can add days to a shipment's transit time and be problematic for companies pressed to meet just-intime delivery requirements.
- Lack of comprehensive intra-Canada service. Once a shipment is transferred to a Canadian provider, it is possible that shipment will have to be handed off again, resulting in additional delivery delays. This is because most Canadian companies offer only regional service, and shipments in need of service beyond a certain geographic point will be transferred to a different provider. For U.S. companies with delivery needs across Canada, this often means enlisting a patchwork of regional providers, with each responsible for deliveries to a certain geographic area.

Purolator though, is different. For one thing, Purolator is able to offer comprehensive service from the Mexican border, through the United States, and into Canada. Here's how it works:

 Within the United States, Purolator International is an "asset light" company, meaning it does not own any trucks or facilities. Instead, the company relies on relationships with established service providers to select the ideal solution for each customer. This allows Purolator to schedule pickups based on a customer's preferred schedule, and guarantee service from any point in the United States, including southern Texas. In fact, Purolator's Dallas processing facility serves as "command central" in coordinating services for Mexican-based shipments. From this convenient location, Purolator seamlessly processes all shipments

- in advance of direct transit to the Canadian border.
- Purolator's flexibility within the U.S. also allows the company to offer extensive consolidation services.
 This is an important time-and-cost-saver. Through consolidation, smaller shipments are combined with other northbound shipments, and travel as a single unit. This allows direct service with no additional stops, freight savings, and customs efficiency. Another unique capability—Purolator is able to combine both freight and courier shipments. This avoids two separate pickups and two different trucks. Instead, the consolidated load moves as a single unit, with enhanced cost savings and customs clearance efficiency.
- Once in Canada, the shipment immediately enters
 Purolator's Canadian network. Smaller shipments
 enter Canada's leading courier network which offers
 capabilities that include:
 - Comprehensive coast-to-coast coverage throughout Canada. This includes service to all provinces and territories, and access to 99.9 percent of all postal codes. Purolator's courier network also extends to remote areas, including facilities located in regions not accessible via highways.
 - Extensive delivery options. A business can choose from Purolator's extensive service options to ensure on-time delivery. These options include:
 - Extensive same day/next day offerings for timesensitive shipments.
 - Extensive ground service options for less urgent deliveries.
 - · Saturday/Evening delivery capabilities.
 - Mission critical air and freight services that ensure the fastest service possible.

Very few logistics companies offer end-to-end service from the Mexican border throughout Canada. Purolator stands apart, with ready solutions to seamlessly manage all supply chain needs, and ensure shipments arrive in Canada on time, and with the highest levels of efficiency.

- In-Bond Carrier Status. Canada-bound shipments
 passing through the United States without clearing
 customs are called in-bond shipments. In-bond
 shipments can only be transported by a qualified
 carrier. Eligible carriers, including Purolator
 International, must secure required bonds, meet all
 CBP licensing requirements, and be registered with
 CBP.
- Customs Management. Beyond in-bond status, customs expertise is also required to help manage Mexican, U.S. and Canadian compliance requirements. Most shippers enlist a qualified customs broker to manage the customs process on their behalf, or rely on their logistics provider for the required expertise. Important to note though, the shipper/importer remains liable for all information provided to customs on its behalf, so it's important for a business to understand the process.

An experienced customs broker will ensure that all Mexican, U.S. and Canadian compliance requirements are met, and help verify the accuracy of all shipment information. This is a critical service since incorrect/missing information is a top reason for shipment delays. In addition, a customs broker can help determine if a shipment is eligible for USMCA benefits, and ensure a business does not pay any more in duties and taxes than is legally owed!

 Transloading/Through-Trailer Capabilities. As discussed, shipments arriving in the U.S. from Mexico must undergo a muti-step process that requires multiple drivers and, for transloaded shipments, multiple trailers. It's essential to enlist a logistics provider that can facilitate these processes. This includes the ability to quickly transfer freight for cross-dock shipments, with qualified U.S. drivers available to seamlessly take over from the Mexicanbased driver who transported the goods across the border. Purolator International carefully coordinates with Mexican-based carriers for a precision-like transloading process, so that shipments can continue on their journey to the Canadian border. Purolator also accommodates shipments that would benefit from through-trailer services, by tapping into its extensive distribution network and identifying the ideal solution.



- Trusted Trade Program Participant. Mexico, the United States, and Canada operate programs referred to as "trusted trade programs," that seek to improve border security by enlisting voluntary cooperation of trade community members. In the United States, the program is called <u>Customs Trade Partnership Against</u> <u>Terrorism (C-TPAT)</u>, and relies on businesses including manufacturers, suppliers, retailers, and transportation and logistics providers, among others, that voluntarily certify the security of their supply chains, as well as those of their business partners. In exchange, C-TPAT members receive benefits including:
 - Access to Free and Secure Trade (FAST) lanes at land borders.
 - · Shorter wait times at the border.
 - Reduced number of CBP examinations.
 - Front of the line inspections.

Similar programs, with comparable benefits are in place via Mexico's Authorized Economic Operator program, and Canada's Partners in Protection (PIP) program. Agreements are in place among the three countries to extend benefits to each other's program participants.

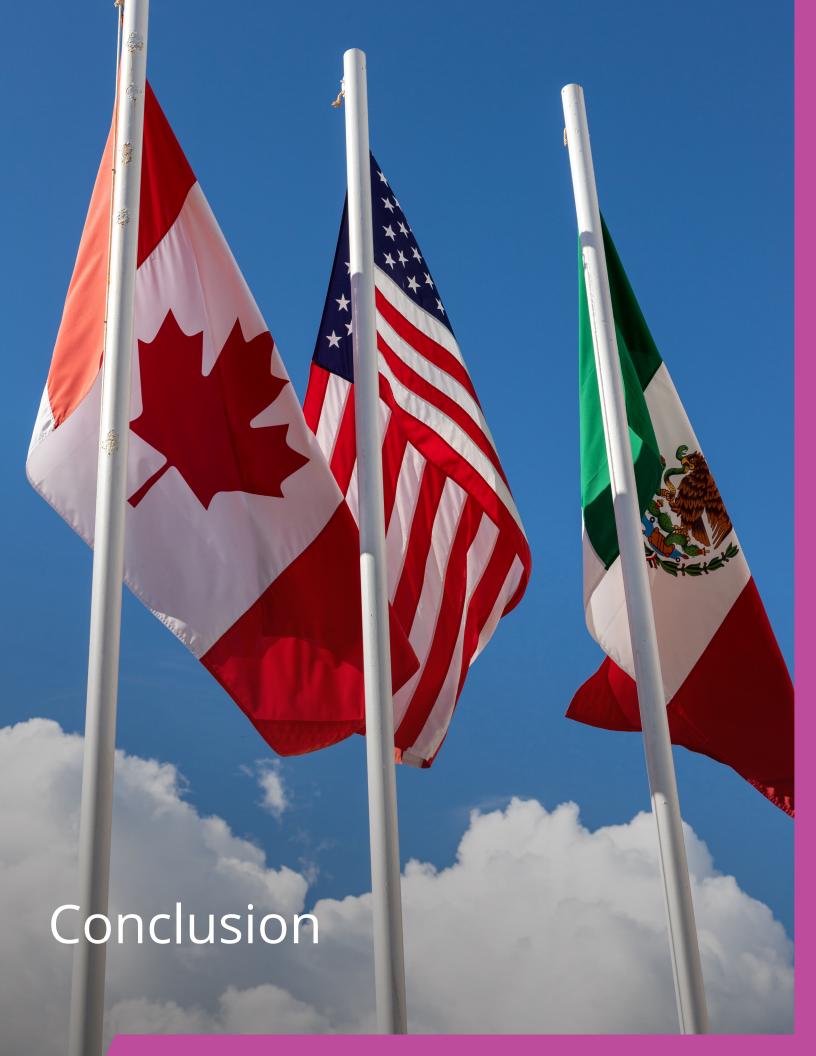
As a C-TPAT and PIP program participant, Purolator shipments benefit from customs efficiency and a reduced risk of delays. Not only does C-TPAT participation add efficiency, but it also indicates a seriousness about supply chain security.

Expedited Services. Expedited or "mission critical" services have become an increasingly attractive solution for ensuring guaranteed deliveries of timesensitive shipments, especially in meeting time-specific delivery requirements. An expedited solution can be customized to meet a shipper's specific needs, with delivery available on a global basis. Expedited services can be especially helpful in moving shipments from Mexico, into the Canadian market.

Although expedited services have traditionally been associated with "rush" or high value shipments, certain sectors—auto, health care, tech—have incorporated this solution into their regular supply chains, because of its guaranteed delivery times, and high levels of customer service.

North American businesses can take advantage of mission critical services to meet tight delivery deadlines, or for sensitive shipments. Purolator offers extensive mission critical services ranging from "next flight out" for most urgent shipments, to a hybrid-model, whereby a shipment might be transported via air for part of the journey, with ground service used for final delivery.





Conclusion

A 2023 <u>New York Times</u> article cited "basic geography" as a key factor behind many American companies' decisions to relocate manufacturing to Mexico. "Shipping a container full of goods to the United States from China generally requires a month," the article noted, whereas factories in Mexico and retailers in the United States "can be bridged within two weeks."

As the preceding discussion has made clear, Mexico has much to offer its North American neighbors, especially with regard to world-class manufacturing facilities, a top-notch workforce, and USMCA-based economic incentives. U.S. and Canadian companies are increasingly recognizing the role Mexico can have in their supply chains, at least for a portion of their manufacturing and sourcing needs.

But as is true with all supply chains, good logistics will be integral to success. Shipping from Mexico requires a few extra steps. But innovative logistics providers have risen to the challenge, with strong solutions that ensure fast, efficient service throughout the U.S. and Canada.





Find out how Purolator can help you efficiently ship from Mexico to Canada.

Contact us

