

MAJOR INFRASTRUCTURE PROJECTS IN MEXICO

A Resource Guide for U.S. Industry



Sponsored by the U.S. Trade and Development Agency



About This Report

This report has been developed to provide potential U.S. exporters with an overview of México's infrastructure sectors, the sector development plans in place through 2018, and to provide profiles of a sample of specific upcoming projects of potential interest.

This document represents just one section of a larger report developed and published by the U.S. Trade Development Agency. The full text is housed online in the U.S. Commercial Services' Market Research Library and can be accessed by visiting http://buyusainfo.net/docs/x_8012471.pdf. Please note that this document is an interim product. Further elaboration of transportation and telecommunications projects will be provided in the final version to be published later in 2014. This will include additional sections describing project opportunities in the energy and water sectors.

For More Information on These Opportunities

To learn more about the opportunities described in this report, locate the U.S. Export Assistance Center nearest you by visiting <http://www.export.gov/eac> and contact your local U.S. Commercial Service Trade Specialist for more information.

The U.S. Trade and Development Agency

The U.S. Trade and Development Agency (USTDA) helps companies create U.S. jobs through the export of U.S. goods and services for priority development projects in emerging economies. USTDA links U.S. businesses to export opportunities by funding project planning activities, pilot projects and reverse trade missions while creating sustainable infrastructure and economic growth in partner countries.

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Transportation – Aviation

The Secretaría de Comunicaciones y Transportes (SCT) is México's federal agency responsible for the country's transportation and communication systems. The SCT's mission is to develop and advance policies and programs in the transportation and communication sectors that contribute to the sustainable economic growth and social development needs of México. The SCT achieves this mission through area-specific administrative bodies. These administrative bodies are responsible for a given mode or group of modes of transportation, generally, and transportation statistics, information, and planning, specifically. These SCT units are covered in more detail in the background sections for each specific transportation mode.

Under the new administration the SCT has made it their priority to provide transport infrastructure that makes the movement of products, services, and people easier, in a fast, efficient, and low cost manner. Gerardo Ruiz Esparza was appointed by President Enrique Peña Nieto to serve as the Secretary of Transportation in 2012. The SCT was allocated \$107 billion (MXN) of México's 2014 budget, 50% higher than the previous year's allocation to the agency. SCT funding accounts for 12.3% of the total projects to be carried out in 2015.

The administration's \$590 billion (USD) 2014 – 2018 National Infrastructure Program (PNI in Spanish) encompasses a wide variety of projects aimed at the development of an enhanced national network of roads, ports, airports, railways and telecommunications services and infrastructure. Many of the investments identified in the PNI will be funded from an array of sources including federal resources from the Fondo Nacional de Infraestructura (FONADIN, México's National Infrastructure Fund), the Banco Nacional de Obras y Servicios Públicos (BANOBRAS, the National Works and Public Services Bank), state and municipal sources, user fees, and Public Private Partnerships (PPPs). Multilateral institutions including the World Bank Group, the North American Development Bank (NADB), and the Inter- American Development Bank (IADB) continue to be active partners supporting development of transportation infrastructure in México through a range of financing instruments and technical assistance.

Sector Background

By a count of sheer number of aviation facilities México ranks third in the world with 1,872 facilities of one type or another. Many of these are small, general aviation facilities (aerodromes) with limited capacity. 243 facilities are more substantial airports with paved primary runways of different lengths, described below. For context, the largest passenger jets in regular commercial service, such as an Airbus A380 or a Boeing 747-400, would (very roughly) require a runway length in excess of 9,000 feet for takeoff when fully loaded.

The Mexican government includes within the national aeronautical system 76 major airports. Another 1,388 facilities are classified as aerodromes and there are 408 registered heliports. Of the 76 airports in the system, 34 are concessioned to private airport operators.

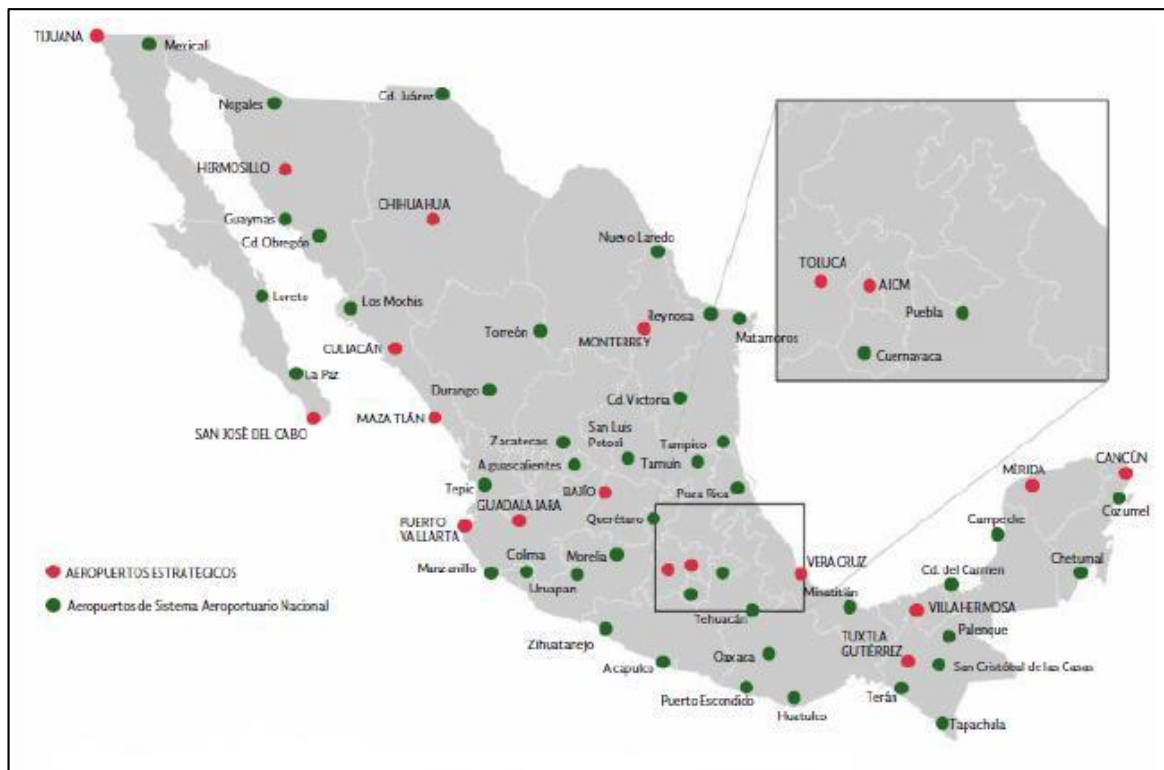
Number	Airport Primary Paved Runway Length		As %
	Fro	To	
12	9,997	+	5%
32	7,999	9,997	13%
80	5,000	7,995	33%
86	2,999	4,999	35%
33	0	2,999	14%
243			100%

México's Airports with Paved Runways by Length

These private concessionaires are:

- ASUR: Aeropuertos del Sureste operates 9 airports.
- GAP: Grupo Aeroportuario del Pacífico operates 12 airports.
- OMA: Grupo Aeroportuario Centro Norte operates 13 airports.

19 airports in the system are operated exclusively by Aeropuertos y Servicios Auxiliares (ASA), a state entity. Another 4 are operated in partnership with ASA. México City's "Benito Juárez" International Airport (AICM) is operated by an independent state-owned company, Grupo Aeroportuario de la Ciudad de México or GACM. 18 other airports are managed by state or municipal governments. México's system is served by 21 major international airline carriers, including Mexican companies Aeroméxico and Volaris. There are a total of 10 domestic carriers operating a fleet of 258 aircraft.



Map of the Mexican National Airport System

Airline traffic is heavily concentrated within the system. In 2012 88% of the 86.4 million passengers transported were handled by only 17 airports, and of those AICM accounted for 34% of passengers transported. 98% of 747,000 tons of cargo transported passed through these same 17 airports.

Within the Mexican government the General Directorate of Civil Aeronautics of the Secretariat of Transportation has responsibility for the development and oversight of the Mexican aviation system. The Directorate has multiple divisions including airports, security, technical (standards setting), air traffic control, international, civil aviation affairs and accident investigation. Within this substantial agency the Division of Airports has the responsibility for development of airport infrastructure, services and aviation-sector concessions.

Airport	Operator						Total	As %	Cum. %
	AICM	GAP	ASUR	OMA	SOC.	ASA			
MEXICO CITY	31,532,331						31,532,331	33.9%	34%
CANCUN			15,962,162				15,962,162	17.1%	51%
GUADALAJARA		8,104,762					8,104,762	8.7%	60%
MONTERREY				6,417,755			6,417,755	6.9%	67%
TIJUANA		4,255,235					4,255,235	4.6%	71%
SAN JOSE DEL CABO		3,234,287					3,234,287	3.5%	75%
PUERTO VALLARTA		2,591,035					2,591,035	2.8%	77%
MERIDA			1,316,242				1,316,242	1.4%	79%
HERMOSILLO		1,276,201					1,276,201	1.4%	80%
CULIACAN				1,252,235			1,252,235	1.3%	82%
TOLUCA					1,161,064		1,161,064	1.2%	83%
VILLAHERMOSA			1,014,445				1,014,445	1.1%	84%
VERACRUZ			1,010,814				1,010,814	1.1%	85%
BAJIO		975,873					975,873	1.0%	86%
CHIHUAHUA				885,659			885,659	1.0%	87%
TUXTLA GUTIERREZ (AAC)					855,073		855,073	0.9%	88%
MAZATLAN				731,297			731,297	0.8%	89%
CD. JUAREZ				702,904			702,904	0.8%	89%
ACAPULCO				617,079			617,079	0.7%	90%
Remaining 41 Airports	-	2,203,110	1,775,993	2,685,544	347,189	2,232,328	9,244,164	9.9%	100%
Subtotal	31,532,331	22,640,503	21,079,656	13,292,473	2,363,326	2,232,328	93,140,617	100%	
As %	34%	24%	23%	14%	3%	2%	100%		
Cumulative %	34%	58%	81%	95%	98%	100%			

Matrix of México's Top 60 Airports by 2013 Passenger Traffic and Airport Operator

The 17 largest airports, considered the strategic airports, are well connected to the trunk road network. The government's strategic development objectives for this sector include:

- Capacity Expansion in the Valley of México:** The country will develop long-term solutions to the steadily increasing demand for airport services in the Valley of México, in particular by expanding capacity at México City International Airport. AICM was declared at full capacity in 2012. This inability to handle more traffic at the country's largest airport impacts national competitiveness. The present congestion creates significant safety concerns.

- **Reducing Air Logistics Costs:** The supervision of the development of the national carriers will improve, and more bilateral international air transport agreements will be established. Generally costs should be lowered, frequency of service increased, and quality of service improved.
- **Improving Safety:** This will be accomplished by aligning the certification of airports with strict international standards, improved training of pilots and air traffic controllers, investments in traffic control systems, and stricter implementation of safety procedures.
- **Support Regional Development:** This will be accomplished by investments in the network of regional airports managed by ASA and increasing interconnections.

The government has set two primary quantitative goals to be achieved by 2018. Air passenger-kilometers travelled should increase from 4.9 million per month in 2012 to 162 million. Available air seat-kilometers should increase from 1,849 million per month to 2,145 million per month.

PNI Projects

In support of achievement of these goals, the government of México has included 20 significant aviation projects in the National Infrastructure Plan (PNI) with an estimated total investment of \$276 million. This amount does not include investments associated with capacity increases at AICM.

- **Expansion of the México City Airport:** This effort is still in feasibility stages and planning activities and information are being closely held by the operator and the Mexican government. The PNI notes that the investments involved in this expansion could be potentially as large as \$9 billion dollars, other published estimates have been in excess of \$5 billion. Reports indicate that seven international engineering firms were shortlisted in April of 2014 to compete for the design of a 5,000 hectare expansion of AICM, incorporating 70 gates, and capable of handling 40 million additional passengers per year. This expansion megaproject would be phased, with the project potentially beginning as soon as 2014 and the first operations initiating in 2018. The shortlisted designers are: Zaha Hadid; Norman Foster; Richard Rogers; SOM; Gensler; Pascall+Watson; Teodoro González de León with Taller de Arquitectura X.
- **Expansion of general aviation facilities at the Hidalgo Airport (CG-079):** \$90 million in projected investment.
- **Runway extension at Lazaro Cardenas:** \$76 million in projected investment.
- **Completion of the Palenque Airport including terminal modernization:** \$18 million in projected investment. This project began in 2010 and is scheduled for completion in 2014.
- **Modernization of the Chetumal Airport (CG-164):** \$15.5 million in projected investment.
- **Expansion of the Monterrey Airport:** \$15 million in projected investment.
- **Construction of a new airport in the Isthmus region (CG-210):** \$14 million in projected investment.
- **Completion of the Nuevo Laredo cargo airport (CG-183):** \$14 million in projected investment.
- **Rehabilitation and modernization of the Atlangatepec Airport (CG-251):** \$9.3 million in projected investment.

- **Modernization of the El Lencero Airport in Jalapa (CG-220):** \$7.6 million in projected investment.
- **Expansion of the Tijuana Airport:** This investment of \$5.7 million will expand the terminal and perimeter road.
- **Expansion of the Puerto Vallarta Airport:** This \$5.2 million investment will expand the terminal, satellite buildings and commercial spaces.
- **Modernization of the Bajio-Guanajuato Airport:** This \$4.3 million investment will expand the baggage and waiting areas.
- **Expansion of the Chihuahua Airport:** This \$3.8 million investment will improve the security areas and perimeter road.
- **Expansion of the Hermosillo Airport:** This \$1.5 million investment will expand the terminal building.
- **Expansion of the Culiacan Airport:** This \$1 million investment will improve illumination, security and access control systems.
- An additional \$1.1 million in total investment will occur through small projects at the airports of **Mazatlan, Toluca, San Jose del Cabo, San Luis Potosi, and Merida.**

USTDA Projects

ASA Airport Development and Management Feasibility Study

In October of 2009 USTDA completed this advisory project for Aeropuertos y Servicios Auxiliares (ASA). The study covers four airports in México: Toluca (TLC), Puebla (PBC), Cuernavaca (CVJ), and Querétaro (QRO). The study had two components. First, it identified U.S. route and carrier combinations that could be likely new service opportunities for the airports. This component included exploratory meetings with selected carriers that would potentially support and market new service. The second half of the project focused on necessary changes to equipment and procedures that would be required to support expanded service to the U.S. The study included analyses and recommendations for security and included assessments of developmental and environmental impact.

San Luis Potosi International Airport Runway Expansion and Modernization Feasibility Study

In September of 2009 USTDA completed this feasibility study, prepared for concessionaire OMA as the project sponsor, and performed by a consortium of PBS&J, Infrastructure Management Group, the Texas Transportation Institute and AVILA Consultoria Ambiental. This study analyzed the feasibility to improve SLP's infrastructure in order to alleviate airport congestion, attract additional U.S. and Mexican airline and cargo service, and enhance regional growth. The study incorporated a facility assessment and analysis, a demand study, analysis of capacity expansion requirements; and environmental, financial and trade analyses. An airport development plan was produced complete with cost estimates and a proposed schedule. This study resulted in a proposal for \$11.9 million in investments in basic infrastructure improvements, exclusive of property acquisitions and systems.

Project Contacts and Information

For more information on project opportunities in the roads and highways sector please locate the U.S. Export Assistance Center nearest you by visiting <http://www.export.gov/eac> and contact your local U.S. Commercial Service Trade Specialist.

You may also reach out to:

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