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Infrastructure: engine for development

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Investment in infrastructure for long and short run economic growth in Mexico

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SCT scope: many industries, one job



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Communications and Transportation Secretariat



- ❖ SCT regulates and promotes wide variety of industries. Yet its focus is *to create, to develop and to regulate networks*:
 - ✓ Such networks connect users through a compatible or inter-operable physical infrastructure.
 - ✓ Systems consist of nodes and links of variable size and complexity.
- ❖ In the past, these networks were independently conceived and developed.
- ❖ Today, the trend is to move in the opposite direction:
 - In transport, towards multimodal systems.
 - In telecomm, towards total convergence: *total play*.



The State as a key factor to achieve coordination



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- ❖ SCT must solve conflicting interest and coordination problems, which are inherent to network industries.
 - Suppliers: access, interconnection or inter-operability.
 - Suppliers and consumers: prices.
 - Consumers: crossed-subsidies.
 - Levels of government: federalism.

THE MARKET ITSELF CANNOT SOLVE THESE PROBLEMS



- ❖ The development of these networks depends on technology, but also on regulation, which can become an obstacle or an opportunity.

Source of wealth:
Article 27 of the Mexican Constitution

- ❖ Normative framework:

Article 28: Prohibition against monopolies.

Article 134: Provision of public goods under the best conditions for the State.

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Mexico at a glance

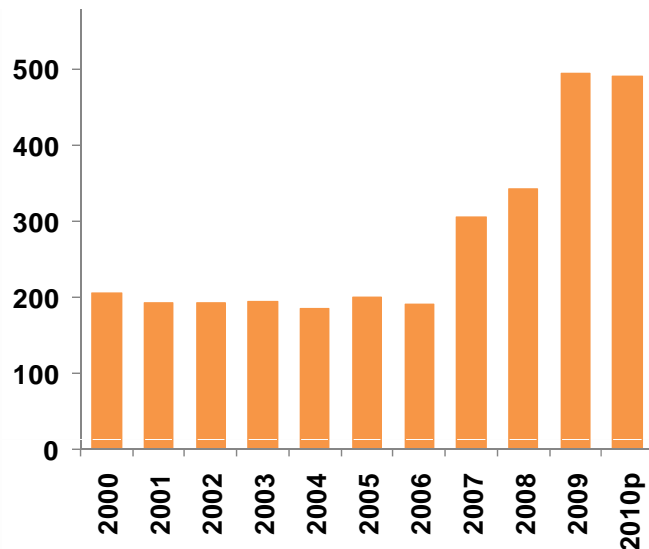


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- ❖ Population: 106.8 million inhabitants (11th largest in the world).
- ❖ Annual GDP: US\$1.08 trillion (13th largest in the world) .
- ❖ Size: about two million km² (15th largest in the world).
- ❖ The current government has made significant efforts to expand Mexican infrastructure in order to improve its international competitiveness.

Public Investment in infrastructure
(Constant Billion Pesos 2010)



Source: SHCP.

•** (Constant pesos 2010)

Yet, a lot to do (Mexico Competitiveness Report 2009)

Pillars of competitiveness	Mexico's rank (out of 134 economies)
Labor market efficiency	110
Institutions	97
Innovation	90
Higher education and training	74
Goods market efficiency	73
Technological readiness	71
Infrastructure	68
Financial market sophistication	66
Health and primary education	65
Business sophistication	58
Macroeconomic stability	48
Market size	11



Mexico needs more infrastructure

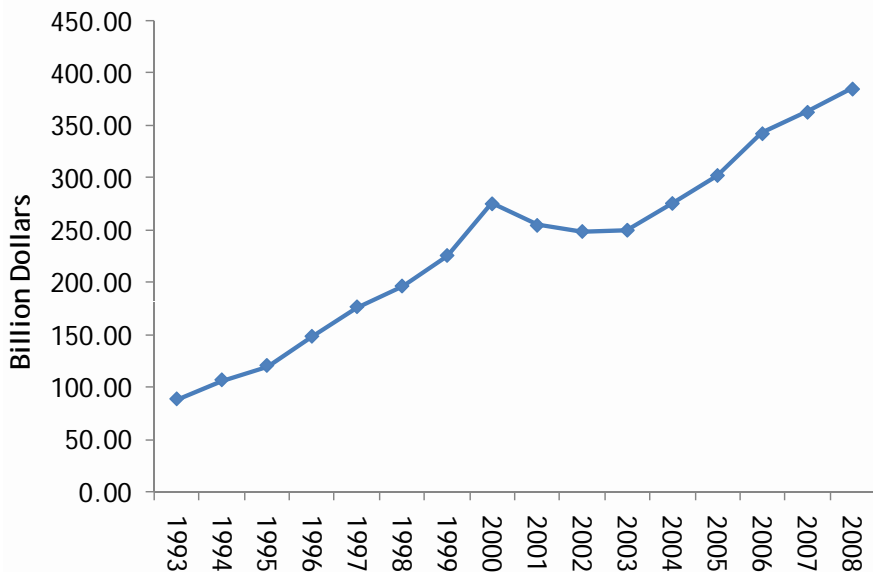


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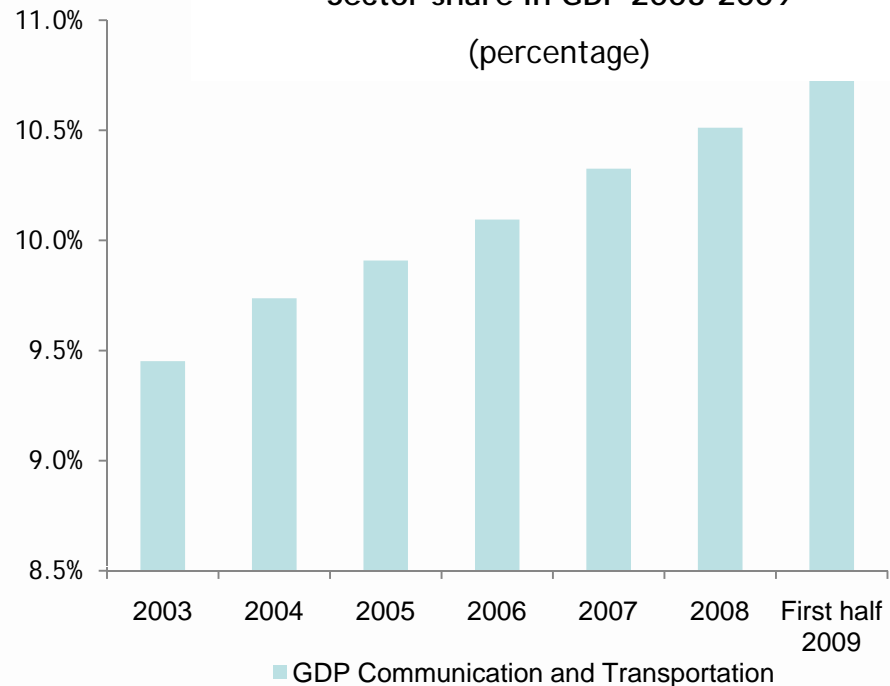
- ❖ Bilateral trade between Mexico and the US has increased 336% in the last 15 years.
- ❖ During this administration, communications and transportation sector has grown 9%, three times the growth rate of the Mexican economy.

Bilateral Commerce Mexico-USA



Source: Banco de México.

Sector share in GDP 2003-2009 (percentage)



Source: INEGI.



“Sexenio de la Infraestructura”

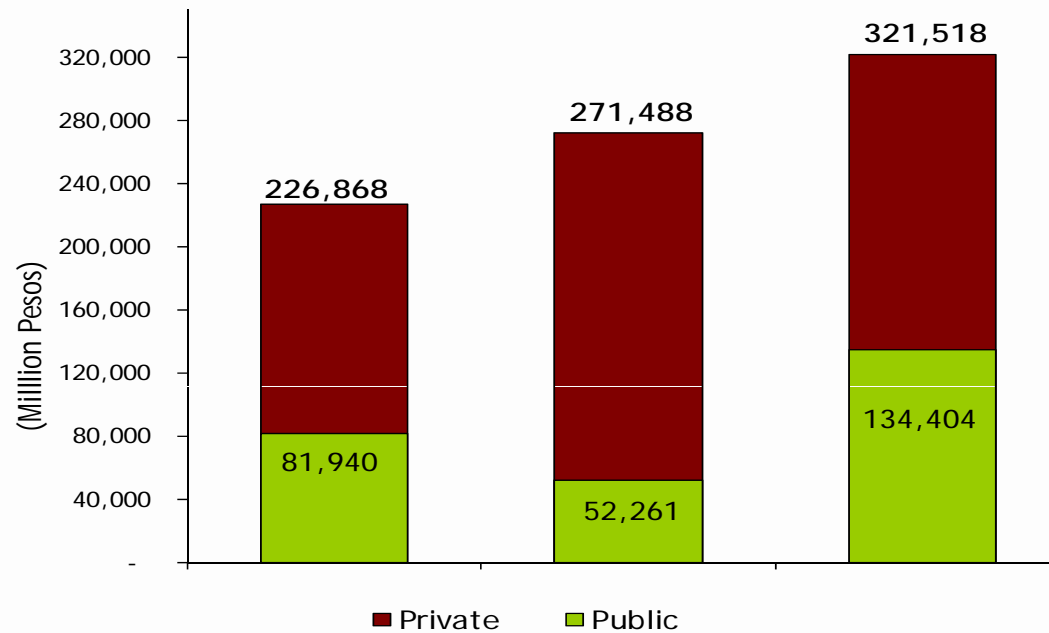


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- ❖ Investment in infrastructure during 2007-2009 is twice as much as 1995-97
- ❖ 18.1% higher than 2001-2003.

Infrastructure real investment in Communications and transportation during the first 3 years of the last three government terms, including budget cuts 2009**



Source: SCT.

•** (Constant pesos June 2009)



Real public investment 2007-2010



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❖ Committed with long-term development, the Mexican Government has taken a stake in infrastructure:

- ✓ Even with the current budget constraints, real investment for 2010 will be highest.
- ✓ Continue carrying out the National Infrastructure Program (PNI).

Mexican Million pesos
(Constant pesos 2009)

	2007	2008	2009	2010***	2010/2007	2010/2008	2010/2009
SCT Investment	30,071.7	36,304.7	51,120.9	61,405	204%	169%	120%
Road	29,095.3	34,916.7	41,916.4	49,057	169%	140%	117%
Rail and airports	496.8	659.7	4,661.3	5,210	1049%	790%	112%
Ports	379.5	599.7	1,156.0	1,280	337%	214%	111%
Communications	6.5	26.7	87.2	4,245	65,312%	15,900%	4,868%



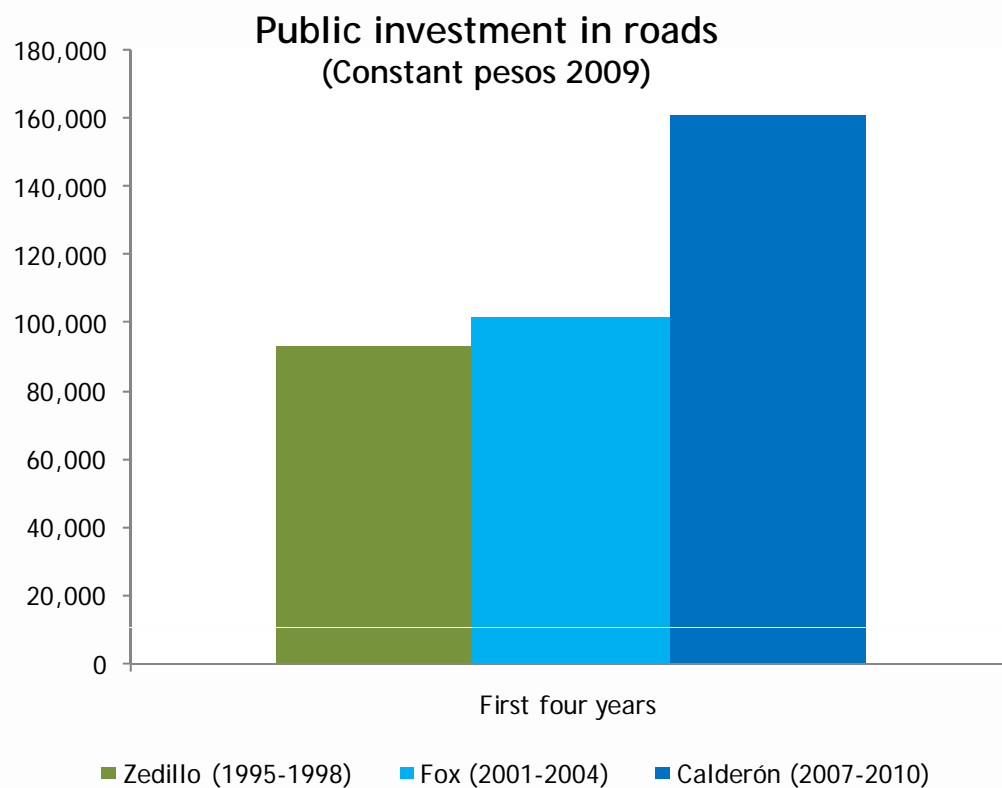
Historic public investment in Roads



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- ❖ With Budget 2010 approved, the Presidential strategy to rely on infrastructure development has been enhanced.
- ❖ The last three years, infrastructure investment has created 699,372 jobs. The estimate for 2010 is 281,000.



Transportation Network



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- ❖ Mexico has developed an extensive transportation network:
 - ❖ 356 thousand kilometers of highways
 - ❖ 26 thousand kilometers of railways
 - ❖ 114 ports and
 - ❖ 85 national and international airports

- ❖ However, we need to do better:
 - ❖ Competitiveness (68th place out of 134 countries)
 - ❖ Insufficient coverage (0.18 highway kilometers / km²)
 - ❖ High dependence on roads (67% of freight and 99% of passengers for domestic trips).



Core elements of infrastructure growth



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Core elements of infrastructure growth

	National Infrastructure Program 2007-2012	Projects 2009-2010
Highway Program	<ul style="list-style-type: none"> • 100 brand new highways • 20 bypasses • 42 modernized and extended highways • 3 cross-border bridges 	<ul style="list-style-type: none"> • 17 highways • 12 bypasses • 1 link between motorways • 2,535 km and over 8,082 million US dollars on a PPP scheme
Ports	<ul style="list-style-type: none"> • An increase in handling of containers. • Integral development of multimodal transport • Development of touristic ports 	<ul style="list-style-type: none"> • 1 port extension • 2 brand new specialized container terminals • 1 Multiple use terminal
Airports	<ul style="list-style-type: none"> • 3 new airports 	<ul style="list-style-type: none"> • 2 new airports
Railways	<ul style="list-style-type: none"> • An increase in railway coverage and an improvement in network connectivity • The development of multimodal corridors • Passenger suburban railways 	<ul style="list-style-type: none"> • 2 suburban railways • 5 railway bypasses



Private sector in infrastructure development



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Project funding
experience

- ❖ Private
 - ✓ Rescue programs with expensive fiscal
- ❖ Public
 - ✓ Scarce resources and large opportunity costs
- ❖ Public Private Partnerships (PPP)
 - ✓ Minimization of disadvantages from both schemes.

PPPs are essentials to attract private investment

There is an opportunity for infrastructure development that must be exploited to promote national competitiveness, create jobs and to overcome social and economic inequalities that affect entire regions.



What are we doing?



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1. Due to the international environment, we are reducing the size of projects.
2. Better combination of “greenfields” and “brownfields” to create a fair distribution of risks.
3. Financing through Banobras and Fonadin.
4. Developing an important amount of “greenfields” order to concession them later.
5. Restructuring some concessions to allow the development of new infrastructure.
6. We are opening new financing options allowing the participation of pension funds
7. We are making public bid documentation more friendly, transparent and accessible.



We are also providing a better regulatory environment



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- ❖ Reform the Expropriation Law to facilitate land acquisition (Right of Way).
- ❖ New PPP's Federal Law
 - One Law fits all
 - Additional legal certainty for construction, financing and operation
 - Non-demanded projects
 - Homogeneous structuring and allocation parameters
- ❖ Miscellaneous legal amendments:
 - Direct hiring of studies and projects
 - Dual or mix public bid schemes
 - Unfolding
 - Extra flexibility to land acquisition valuation processes (Right of Way).



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TELECOMM SPECTRUM



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- **Coverage:**
Regional and National.
- **Foreign investment:**
100% for mobile phone services and limited to 49% for landline services.
The 49% limit may be increased via a "neutral" foreign investment scheme.
- **Limits to the accumulation of spectrum.**
Yes
- **Publication of the bidding rules:**
AWS and PCS: November 2009.
3400-3500 MHz band:
December 2009 - January 2010.
- **Description:** Three biddings will take place:
1) 90 MHz of spectrum in the 1710-1755/2110-2155 MHz AWS (Advanced Wireless Services) frequency range,
2) 30 MHz of spectrum in the 1850-1910/1930-1990 MHz PCS (Personal Communication Service) band, and
3) 150 MHz of spectrum in the 3400-3700 MHz band.
- **Benefits:** To strengthen competition in the communications sector in order to achieve higher quality and lower prices in third generation mobile services. At the moment, three companies offer mobile phone services in Mexico. These auctions intend to foster the entry of at least two new operators to the market.
- **Impact:** The goal is to promote economic growth through the use of information technologies. The number of mobile phone users is expected to increase from 55.4 million in 2006 to 86 million in 2012. It is also expected that these biddings will increase broadband coverage from 2.9 to 22 users per 100 population in the same period.



CFE BACKBONE



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- **Coverage:**
19,467 km with over 300 network access points.
- **Foreign investment:**
Limited to 49% which may be increased via a "neutral" foreign investment scheme.
- **Probable publication of the bidding rules:**
December 2009.
- **Probable bidding award:**
1st quarter of 2010.

- **Description:** Auction of a pair of dark fiber threads that are part of the Federal Electricity Commission's network. The term of the concession is 20 years, which is renewable for a maximum of 10 years. The bidding winner will decide the date in which the fiber will be lit and the equipment to do so.
- **Benefits:** A reduction in interurban network prices, which at the moment are, on average, up to four times higher than in other countries. Telecommunications providers will be able to operate under more competitive conditions along with the largest broadband provider.
- **Impact:** It will contribute to increase broadband coverage from 2.9 per 100 population in 2006 to 22 in 2012.



MEXICO CITY SOUTHERN BYPASS



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- **Total length:**
235.0 km
- **Highway corridor:**
México- Puebla-Oaxaca-Ciudad Hidalgo
- **Investment:**
1,926.0 million dollars
- **Location:**
States of Mexico, Puebla, Morelos and the Federal District
- **Expected traffic:**
Between 5,000 and 30,000 veh/day in the different sections of the project
- **PPP model:**
Individual concession
- **Bidding process information:** Second half of 2010
- **Duration of construction:**
36 months

- **Description:** The first 25 kilometers (La Venta-Topilejo stretch) will consist of six lanes with an initial 30,000 vehicles. The stretch Topilejo-Chalco will be 51 km long and will consist of four lanes. The branch to Atlixco and to San Martin Texmelucan will consist of 114 km and four lanes with an expected traffic of 8,000 vehicles. The Puebla south ring road will be 45 km long on 2 lanes, and estimates a flow of 5,000 vehicles .
- **Benefits:** The project will offer alternatives to free the cities of Mexico and Puebla from through traffic and interconnect the zones of the southeast south, east and west of the country. It will avoid the crossing of long range journeys through the urban zone, giving a connection between the following highways: Mexico-Puebla, Puebla-Cuatla, State of Mexico exterior ring road, Mexico-Cuernavaca, Mexico-Toluca and Chamapa-Lecheria.
- **Regional Impact:** The project will integrate a huge circumvallation ring to the Mexico City Metropolitan Area, and together with the North Ring Road will state deep transformations in travelling and activity location in a broad area of the central region of Mexico.



JALA - COMPOSTELA - PUERTO VALLARTA HIGHWAY



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- **Length:**
130.0 km
- **Highway corridor:**
Outside of corridors
- **Investment:**
664.0 million dollars
- **Location:**
States of Jalisco and Nayarit
- **Expected traffic:**
2,500 veh/day
- **PPP model:**
Individual concession
- **Bidding process information:** Second half of 2010
- **Duration of construction:** 24 months
- **Description:** The project consists of the construction of a 130 km four lane highway from Jala, over the Guadalajara-Tepic highway, to the Puerto Vallarta junction.
- **Benefits:** The project will provide an efficient access from the center of the country as far as Puerto Vallarta and the Nayarit Riviera. It will reduce current journey times, especially during the vacation period, and increase safety. It will also eliminate a bottle neck at the access to Puerto Vallarta and will promote its development as weekend destination..
- **Regional Impact:** The project will make the access from the center of the country towards the tourist destinies of the Nayarit Coast and Puerto Vallarta easier, promoting the regional development and opening new tourist markets in a zone with an ample national and international projection.



MANZANILLO RAILROAD BYPASS



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- **Length:**
12.1 km
- **Corridor:**
Manzanillo - Mexico City
- **Investment:**
223 US million dollars
- **Location:**
Colima
- **Expected traffic:**
2.7 million TEU per year
- **Scheme to be used:**
Public investment
- **Probable bidding process time:** Tender publication: October 6th, 2009 (Number 00009018-008-09)
- **Construction time:**
Until April 2011
- **Description:** The project consists of a railroad bypass, a railroad tunnel, the construction of a railway viaduct (Omega Project) and a multimode project (designed for the long term, 15 to 20 years).
- **Benefits:** To allow the development of the natural gas plant of the Federal Electricity Commission, solve the road problem of the city of Manzanillo, improve the urban and industrial infrastructure, and improve quality of life.
- **Regional Impact:** The infrastructure that is being built in this project will allow the eventual growth of the port and the development of a multimodal project of huge dimensions. It is foreseen that the port might achieve the capacity to handle around 2.7 million TEU per year, once the expansion of the north zone of the port is operating. At the same time, it allows to establish favorable conditions for investment .



Vivir Mejor

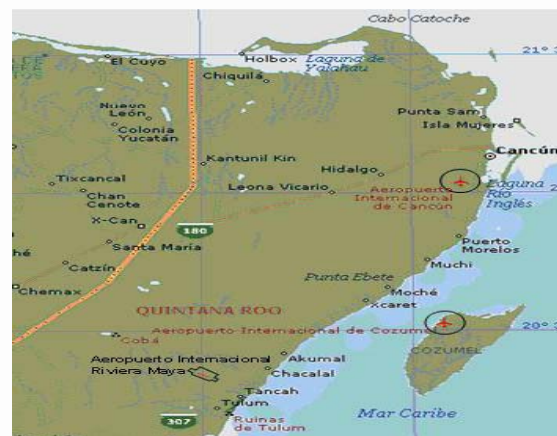
RIVIERA MAYA AIRPORT



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- **Capacity:**
3 million passengers per year (initially)
- **Runway length:** 3,450 m
- **Location:**
Quintana Roo: Playa del Carmen (Solidaridad and Tulum municipalities)
- **Investment:**
4,100 million pesos (airport complex and access roads)
- **Expected traffic:**
700 thousand passengers per year (first year)
- **Scheme to be used:**
Concession: private investment
- **Probable bidding process date:** 4th quarter 2009
- **Construction time:**
3-4 years
- **Description:** Construction of a new airport, category OACI "4F" (with a capacity for Airbus 380 and Boeing 787). It includes the construction of the terminal building, a runway, taxiing runways, platform, operation areas, CREI (rescue team), fuel station and control tower.
- **Benefits:** Reduction in journey times, avoiding road transportation from Cancun or Cozumel to the destinations in the Maya Riviera. At the same time, it will allow the diversification of the airport service offer in a region with a tourist runway with a dynamic growth.
- **Regional Impact:** A higher accessibility to the region, support for the development of an international tourist attraction pole and the creation, of both direct and indirect jobs.



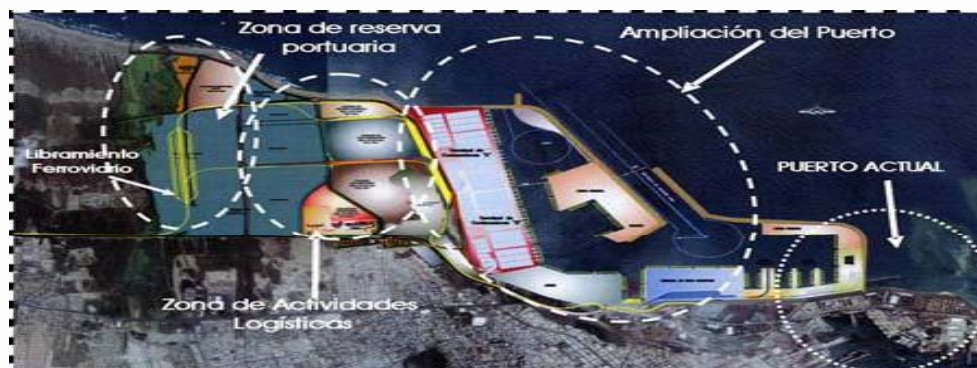
PORT OF VERACRUZ EXANSION



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- **Surface:**
950 hectare
- **Investment:**
4,100 million dollars
Public: 1,410 million dollars
Private: 2,690 million dollars
- **Location:**
Veracruz (Port of Veracruz)
- **Expected capacity:**
95 million tons per year
- **Breakwater length:**
8.0 km
- **Probable bidding process date:** July 30, 2010
- **Construction time:**
4 years
- **Description:** The project comprises the development of the natural expansion of the port of Veracruz in the north zone, including specialized terminals for containers, agricultural and mineral bulk, fluids and vehicles. It includes breakwaters, dredging, filling and docks for 37 new dockage positions.
- **Benefits:** To cover the demand of maritime transport in the shore of the Gulf of Mexico/Atlantic Ocean, for foreign commerce of the central region of Mexico, as well as to develop logistic activity areas. With this project the future growth of the Veracruz port will be viable. It will reduce the level of the installed capacity saturation and the docks and storage areas congestions. It will improve the operation efficiency and productivity.
- **Regional Impact:** The project of the expansion of the Veracruz port will have a high regional impact, mainly in the states of Veracruz, State of Mexico, Federal District, Morelos, Puebla, Queretaro, Hidalgo and Nuevo Leon.





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Thank you!

