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SUMMARY INDUSTRY MARKET PROFILE CONSTRUCTION SERVICES SECTOR IN MEXICO

THE OPPORTUNITY

In the 1970s and early 80s the construction industry was one of Mexico's fastest growing industrial sectors, fueled by a booming economy based on oil exports. Following the economic crash of 1982, production declined dramatically hitting an all-time low in 1988. Five years later the industry has demonstrated a strong comeback and is beginning to offer Canadian construction, engineering and architectural firms significant opportunities.

Industry growth has averaged 30 percent per annum between 1988 and 1992. This growth is a direct result of a commitment by the current government to develop infrastructure.

Mexico's public infrastructure has been

INDUSTRY MARKET PROFILE:

The Department of Foreign Affairs and International Trade has prepared an extensive study of the Mexican Construction sector entitled Canada-Mexico Industry Market Profile: Opportunities in Mexico - The Construction Services Sector. The study's table of contents is listed below. It is available from:

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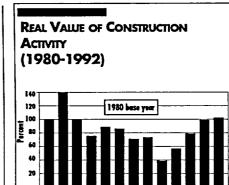
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one of the most critical constraints on the country's economic growth. Road and port construction have become major priorities, reflecting a sense of urgency in improving the country's transportation routes in order to facilitate trade. Large scale energy generation and water and sewage systems are planned as part of the government's promise to improve the overall standard of living. Private sector investment in housing, commercial buildings and tourism mega-projects is rising substantially.

OVERVIEW OF THE SECTOR

In 1992 construction activity represented 5.3 percent of Gross Domestic Product (GDP) and employed 10 percent of the Mexican labour force. The value of construction contracting in the formal sector of the economy — i.e. as reported by the 18,000 construction firms representing the industry — was approximately U.S. \$11 billion. It is estimated that the total value of the industry could be twice this figure if the informal industry is included. The informal sector includes house building, repairs, maintenance and remodeling performed by individuals.

In 1989 the government established the priorities for Mexico's social and economic development over the following 10-year period through its *Plan Nacional de Desarrollo* (National Development Plan). The Plan outlines an ambitious



Source: Mexican Construction Association (CNIC)

program for infrastructure development and has fueled much of Mexico's current construction activity.

KEY CUSTOMERS

Traditionally, the state has played the major role in the Mexican construction industry, funding the majority of projects. However, as a result of the structural changes in the Mexican economy, the privatization of government and parastatal organizations, and the reduced federal budget, there is considerably more private sector involvement in the industry today. Increasingly, projects which were the traditional domain of the public sector are being shifted to the private sector through a variety of turnkey and private financing methods.

HIGHLIGHTS OF THE 1989 TEN-YEAR DEVELOPMENT PLAN

- the construction of 15,000 km of new four-lane highway;
- new drinking water, sanitary sewer, and drainage systems to an estimated 3 million inhabitants per year;
- the construction of 1500 waste water treatment plants;
- increasing the area of land under irrigation by 2 million hectares;
- doubling the generation capacity of electrical plants;
- the construction of 6 to 8 million housing units;
- the modernization of 15,000 km of railroad;
- the expansion or installation of 3 industrial ports in the Gulf of Mexico and three more on the Pacific Coast; and
- plans to develop and upgrade industrial parks in order to double employment capacity.



PUBLIC SECTOR CUSTOMERS

Government entities and parastatal enterprises (public companies dedicated to producing goods and services for public consumption) generate 70 percent of the construction projects in Mexico today. Some of the most important government departments and parastatals are listed below.

Secretaria de Comunicaciones y Transportes (SCT) is the Ministry of Communications and Transportation. It is responsible for granting toll highway concessions to construction firms.

Secretaría de Agricultura y Recursos Hidráulicos (SARH) is the Ministry of Agriculture and Hydraulic Resources. It is responsible for all matters related to water in the federal jurisdiction. The Comisión Nacional del Agua (CNA) — National Water Commission — is the decentralized department of SARH which handles procurement of construction services for water infrastructure.

Departamento del Distrito Federal (DDF) is the Federal District Department responsible for the Mexico City area. The DDF is a significant contributor to overall government spending on public works. Nearly one fourth of the country's population lives in the Mexico City metropolitan area, which comprises the Federal District. Currently, in Mexico City more than U.S. \$5 billion is being invested in new building projects.

Petróleos Mexicanos (Pemex) is Mexico's state oil monopoly. Pemex is a major builder of petrochemical plants, waste-treatment plants and pipelines.

Comisión Federal de Electricidad (CFE) is the public corporation responsible for providing all of Mexico's electrical power. It is undertaking an aggressive modernization program to expand its generating capacity by 50,000 MW, building new power plants and transmission lines.

PRIVATE SECTOR CUSTOMERS

Increased reliance on the private sector to finance major infrastructure projects has raised its' profile as a market for contracting services. Today, key private sector customers are: the owners of highway concessions (generally the very large Mexican construction companies); the previously state-owned telephone company (Telmex); private banks; and a host of developers of housing and commercial projects.

OPPORTUNITIES IN ROAD AND HIGHWAY CONSTRUCTION

One of the most active sectors of infrastructure development in Mexico is highway construction. In 1989, the federal government introduced a program to construct 15,000 km of new four-lane highway by the year 2000. To date over 3,000 kilometres of toll highways have been built and approximately 2,000 kilometres are currently under construction. Each project is being handled through a Build-Operate-Transfer (BOT) concession program in which private construction companies finance the building and maintenance of the roads and undertake the collection of tolls.

With over 10,000 km of highway remaining to be built in Mexico, Canadian companies can still participate in the country's concession program. Companies can consider partnering with Mexican road construction firms. Initially, the first round of contracts went to large firms that had the capability to handle the projects by themselves. Increasingly, concessions are being handled by consortia of medium-sized Mexican firms. Canadian firms can augment such a group's abilities by bringing new technology, construction methods, equity and, in particular, financial management capabilities.

Even though the concession program has increased Mexican highway capacity, there is concern that local roads have deteriorated considerably. As such, significant effort is being put into maintenance, upgrading and new construction of secondary roads. Between 1988 and 1992, over 3,000 km of new paved

roads were constructed. Contracts for these projects are administered as public works at the federal, state and municipal levels. Companies can also investigate the World Bank pipeline of projects for possible contract opportunities, as the Bank has a current program to fund improvements to Mexico's secondary roads.

OPPORTUNITIES IN WATER INFRASTRUCTURE

The economic depression of the 1980s resulted in significant deterioration of Mexico's water infrastructure. Construction of new systems did not keep up with the needs of a rapidly increasing population. By 1988, less than 70 percent of the population had access to potable water, less than 50 percent had access to sewer systems, and only 15 percent of municipal discharge was treated. There are substantial opportunities in the construction of water works as the country moves to upgrade, rehabilitate, and create new infrastructure.

POTABLE WATER

Mexico's first priority was to provide access to potable water to as much of the population as possible. Considerable resources were dedicated to bringing coverage up to 90 percent of the population. The priority has now become maintenance and rehabilitation of existing systems; it is estimated that as much as 40 percent of the nation's network leaks. Future works will focus on new construction in keeping with population growth. Substantial activity is foreseen in building aqueducts to those cities whose requirements for water are already exceeding their local capacity.

SEWER AND STORM WATER DRAINAGE

Sewer and storm water drainage has become the area of major concentration. To achieve the government's desired coverage of 85 percent of the population by the year 2013, over 2,000 kilometres of sewer pipe will have to be installed per annum.



WATER TREATMENT PLANTS

One hundred and four municipalities have been targeted as priorities for upgrading existing facilities or building new plants. At the end of 1993, the National Water Commission was examining proposals for 18 new treatment plants that would be operated under a concession program.

In addition to public works projects, private-sector markets will emerge based on new environmental regulations. It is estimated that only 16 percent of private industry currently treats its waste water before discharge. Many companies are now forced to construct plants to treat their output. Canadian firms should investigate opportunities in industrial parks. Groups of Mexican companies, within these parks, are exploring the possibility of building communally-owned plants to treat their combined effluent.

OPPORTUNITIES IN THE ENERGY SECTOR

Mexico's energy sector offers significant construction opportunities. The two key customers — Petróleos Mexicanos (Pemex) and Comisión Federal de Electricidad (CFE) — are the major purchasers of construction services in Mexico, with combined construction budgets totaling over U.S. \$2 billion per year.

PETRÓLEOS MEXICANOS (PEMEX)

It is estimated that Pemex will have to spend approximately U.S. \$7 billion on construction between 1993 and 1997 to upgrade or replace current facilities. The focus will be on petrochemical plants, waste treatment plants and construction of pipelines. The company currently has 19 plants under construction. Each project is being handled on a turnkey basis where the builder assumes responsibility for financing the construction.

COMISIÓN FEDERAL DE ELECTRICIDAD (CFE)

The Federal Electricity Commission (CFE) is undergoing a modernization program to improve the country's infrastructure and to extend electricity to

over 700,000 new users per year. At the end of 1993, CFE had 26 new plants under construction. In addition to increasing its generating capacity, CFE is also investing in construction to expand its transmission network and the coal-handling infrastructure at various ports.

Like Pemex, CFE has implemented a build-lease-transfer (BLT) scheme in many of its large construction projects. Typically, a consortia of financiers, construction companies, operators, and equipment suppliers finance, design, build and operate a facility which is leased back to CFE. Canadian companies can consider bidding independently on a turnkey project, participating in a consortium, or acting as a sub-contractor.

OPPORTUNITIES IN HOUSING

In 1990, the Mexican government estimated that the country faced a deficit of 6.1 million houses. The greatest shortage existed on the outskirts of urban cities, such as Mexico City (2.7 million homes), Guadalajara (0.5 million), Monterrey (0.5 million), and cities in the northern states (1.2 million). The estimated housing shortage in rural areas was 1.2 million units.

Total housing production in Mexico averages 650,000 units per year. As much as 50 percent of this construction is provided by the informal housing sector — usually self-construction by the owner, often without title to the land. The remainder is built by the formal construction sector either through government-backed programs for low-income housing or private development for middle and upper-class dwellings.

Though reliable housing statistics are scarce in Mexico, it is estimated that the current annual demand for new units is as follows: over 70 percent of the need is for homes valued at less than U.S. \$25,000, while 25 percent of the requirement is for middle income homes (\$25-100 thousand) and a small percentage is for homes exceeding U.S. \$100,000.

OTHER OPPORTUNITIES

Tourism — Opportunity exists in the construction of hotels, marinas, shopping centers, condominiums, and golf courses, as well as the provision of services to new tourism sites — airports, water treatment plants, roads and electrical infrastructure.

Parts — Port and maritime infrastructure investment is up 50 percent in 1994 to nearly U.S. \$600 million. A further U.S. \$450 million is expected to be spent on airport construction.

Industrial Plants, Parks & Warehouses — At present Mexico has about 100 large industrial parks throughout the country, ranging from basic to worldclass production facilities. Many of these parks have arisen from the presence of foreign manufacturers in Mexico, particularly in the maquiladora regions of the north. Opportunities will emerge for Canadian industrial design and construction technologies. In addition, there will be a need for construction of private electricity-generating plants and water-treatment facilities for individual companies or groups of companies within an industrial park. The Association of Industrial Parks reports 75 new projects for 1994 totaling U.S. \$360 million.

COMPETING IN THE CONSTRUCTION CONTRACTING SECTOR

Canadian firms that have been active in Mexico's construction sector point to a number of factors that can contribute to a company's success.

- Establish a local presence A
 local partner can be a critical factor
 in the success of a project. A Mexican partner will know how to obtain
 the necessary permissions from local
 authorities and will be key in ensuring that materials and labour issues
 are routinely dealt with.
- Have staying power It takes time to understand who the key players and institutions are in the industry, the complexities of bidding systems, and the building methods employed in Mexico. A firm must



take a long-term approach to marketing in this highly competitive environment.

- Bid on what is being requested — Avoid telling the Mexican clients what they need. Respect your potential clients' needs and develop a sense of caoperation. If a rapport is established with that client, there may be more opportunity in the future to propose how projects could be improved.
- Consider equity participation - More and more infrastructure projects in Mexico are going to bidders that can offer project financing and are willing to operate the facilities which they are constructing. Companies that cannot undertake turnkey projects on their own should consider partnering with other Canadian or Mexican firms in order to bid on these contracts.
- Anticipate projects Try to be aware of project plans well in advance of the tender announcement date by establishing contacts within your customers' organizations. It is important to keep an eye on the funding plans of the World Bank and the InterAmerican Development Bank, two key lenders to Mexico.

WHERE TO GET HELP

The Department of Foreign Affairs and International Trade (DFAIT) is

the Canadian federal government department most directly responsible for trade development. The InfoEx Centre is the first contact point for advice on how to start exporting; it provides information on export-related programs and services; helps find fast answers to export problems; acts as the entry point to DFAITs trade information network; and can provide companies with copies of specialized export publications.

InfoEx Centre

Tel.: 1-800-267-8378

or (613) 944-4000

Fax: (613) 996-9709

The Commercial Division of the **Embassy of Canada** in Mexico City promotes trade with Mexico. There are several trade commissioners at

the Embassy, and there is a satellite office in Monterrey. Trade Commissioners can provide a range of services including introducing Canadian companies to potential customers in Mexico, advising on marketing channels, assisting those wishing to participate in trade fairs, helping identify suitable Mexican firms to act as agents, and compiling credit and business information on potential foreign customers.

Commercial Division The Embassy of Canada in Mexico Schiller No. 529 Col. Polanco Apartado Postal 105-05 11560 México, D.F. México

Tel.: 724-7900 Fax: 724-7982

Industry Canada (IC)

The Distribution Services Directorate of Industry Canada monitors trends and developments in international franchising and maintains contact with franchisors, associations and professionals in Canada, and selected countries such as Mexico.

Distribution Services Directorate Distribution and Construction Industries Branch Industry Canada 235 Queen Street Ottawa, ON K1A 0H5

Tel.: (613) 954-2987 Fax: (613) 952-9054

International Trade Centres have been established across the country as a first point of contact to support the exporting efforts of Canadian firms. Co-located with the regional offices of Industry Canada, the centres operate under the guidance of DFAIT and all have resident Trade Commissioners. They help companies determine whether or not they are ready to export; assist firms with marketing research and market planning; provide access to government programs designed to promote exports; and arrange for assistance from the Trade Development Division in Ottawa and trade officers abroad. Contact the International Trade Centre nearest you.

The World Information Network for Exports (WIN Exports) is a computer-based information system designed by DFAIT to help Canada's trade development officers abroad match foreign needs to the capabilities, experience and interests of more than 30,000 Canadian exporters. To be registered on WIN Exports, call (613) 996-5701.

The Market Intelligence Service provides Canadian business with detailed market information on a product-specific basis. The service assists Canadian companies in the exploitation of domestic, export, technology transfer, and new manufacturing investment opportunities. The intelligence is used by Canadian business in decisions regarding manufacturing, product development, marketing, and market expansion. The information includes values, volume and unit price of imports, characteristics of specific imports (e.g. material, grade, price, range, etc.), names of importers, major countries of export, identification of foreign exporters to Canada, Canadian production, Canadian exports, and U.S. imports. Two-thirds of the clientele for this service are small businesses. Call: (613) 954-4970.

The Embassy of Mexico, Mexican Trade Commissioners in Canada, and Mexican consulates can provide assistance and guidance to Canadian companies in need of information about doing business in Mexico.

Embassy of Mexico 130 Albert Street, Suite 1800 Ottawa ON KIP 5G4 Tel.:(613) 233-8988 Fax:(613) 235-9123

KEY CONTACTS IN CANADA

Canadian Construction Association (CCA)

85 Albert Street

Ottawa, Canada K1P 6A4 Tel.: (613) 236-9455

Fax: (613) 239-9526





KEY CONTACTS IN MEXICO

MEXICAN GOVERNMENT DEPARTMENTS AND AGENCIES

Secretariat of Communications and Transportation

Secretaría de Comunicaciones y Transportes Av. Universidad y Xola, Cuerpo C, Piso 1 Col. Navarte 03028 México. D.F.

México

Tel.: 538-5148/0450 Fax: 519-9748

Secretariat of Agriculture and Hydrological Resources

Secretaría de Agricultura y Recursos Hidráulicos Insurgentes sur No. 476, Piso 13

Col. Roma Sur 06760 México, D.F.

Mévico

Tel.: 5840010/0808 Fax: 584-1887

Nacional Water Commission - Office of Construction Management

Comisión Nacional del Agua - Gerencía de Construcciones

Cda. J. Sanchez Azcona No. 1723 Col. del Valle

03100 México, D.F.

México

Tel.: 524-6985, 534-4650

Fax: 524-1129

Pemex

Petróleos Mexicanos Av. Marina Nacional 329 Col Huasteca 11311 México, D.F. México

Tel.: 250-2611

Federal Electricity Commission

Comisión Federal de Electricidad Río Ródano No. 14 Col. Cuauhtemoc 06598 México, D.F. México

Tel.: 553-7133 Fax: 553-6424

Department of the Federal District

Departamento del Distrito Federal Dirección General de Construcción y Operación Hidráulicas Via Miguel No. 507 08400 México, D.F.

México Tel.: 650-2664

Secretariat of Social Development (Subsecretariat of Housing)

Secretaría de Desarrollo Social - Subsecretaría de Vivienda Av. Constituyentes No. 947 Col. Belén de las Flores

01110 México, D.F.

Tel.: 271-1441 Fax: 271-1659

Secretariat of Tourism

Secretaría de Turismo Presidente Masaryk No. 172, Piso 8 Col. Polanco 11587 México, D.F.

México

Tel.: 250-8171/8828 Fax: 254-0014

National Tourism Development Fund

Fondo Nacional de Fomento al Turismo (FONATUR) Insurgentes Sur No. 800 03100 México, D.F.

México

Tel.: 687-7437, 600-4222

Fax: 687-7533

Mexican Port Authority

Puertos Mexicanos (Portuarios) Municipio Libre 377, Piso 11 Col. Santa Cruz Atoyac 03310 México, D.F.

México

Tel.: 6047875, 688-2266

Fax: 688-9081

Federal Roads and Bridges Commission

Caminos y Puentes Federales de Ingresos y Servicios Conexos (CAPFISC) Av. Plan de Ayala No. 629 Lomas del Mirador 62350 Cuemavaca, Morelos México

Tel.: (73)-11-5400 Fax: (73)-16-0519

Associations

National Chamber of the Construction Industry

Cámara Nacional de la Industria de la Construcción Periférico Sur No. 4839 Parques del Pedregal 14010 México, D.F.

México

Tel.: 665-0424/1500 Fax: 606-6720

Promotion Centre for Construction and Housing

Centro Impulsor de la Construcción y la Habitación, A.C. (CIHAC) Av. Minerva No. 16 Col. Credito Constructor 03940 México, D.F. México

Tel.: 661-0844, 662-5085 Fax: 661-0600

National Chamber of Commerce for the City of Mexico

Cámara Nacional de Comercio de la Ciudad de México (CANACO) Paseo de la Reforma No. 42, Piso 3 Col. Juárez

06048 México, D.F.

México

Tel.: 592-2677/2665 Fax: 592-3403

National Chamber of Industrial Transformation

Cámara Nacional de la Industria de Transformación (CANACINTRA) Av. San Antonio No. 256 Col. Napoles 03849 México, D.F.

México Tel.: 563-3400 Fax: 598-9467

The Canadian Chamber of Commerce in Mexico

La Cámara de Comercio de Canadá en México c/o Royal Bank Hamburgo 172, Piso 5

06600 México, D.F. México

Tel.: 207-2400 Fax: 208-1592

Association of Private Industrial Parks

Asociación Mexicana de Parques Industriales Privados, A.C. Genova No. 33-902

Col. Juárez 06600 México, D.F.

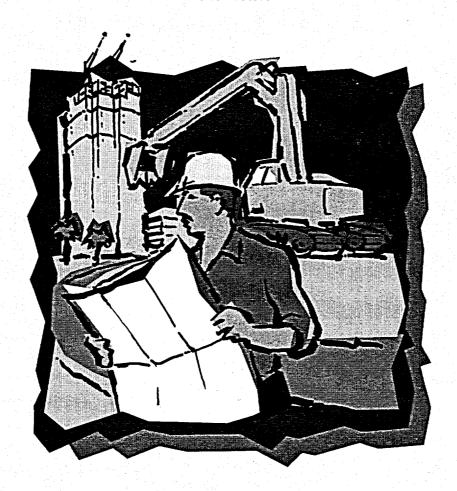
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Tel.: 207-4934 Fax: 208-3822





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OPPORTUNITIES IN MEXICO: THE CONSTRUCTION SERVICES MARKET

A C C E S S N O R T H A M E R I C A

For further information, this publication is available from InfoEx: Toll free: 1-800-267-8376 Telephone: (613) 944-4000

