

APPENDIX C

MAQUILADORAS / TWIN PLANTS

Maquiladora Impact on Yuma

Maquiladoras, also known as maquilas, are factories that produce for export, primarily on the basis of assembly or conversion of components and raw materials imported from abroad. These facilities are not required to pay duties on the goods they import, provided that these imported inputs are included in the export shipments. Similarly, items imported into the United States pay duty only on the value added in Mexico plus any non-U.S. components.

Most of Mexico's maquilas are located at or near the border where they have access to U.S. supplies, transportation and communications. Some maquiladora operators set up “twin plants” on the U.S. side of the border where such tasks as procurement, distribution, marketing, and high tech manufacturing take place.

Senior management is often from the maquiladora's country of origin, although, increasingly, investors look to Mexico for their management needs.

NAFTA has resulted in tremendous growth in the number of maquiladoras. According to the National Maquila Association, throughout Mexico the number of maquiladoras grew from 2,064 plants with about 600,000 employees at the end of 1994 to 3,408 maquiladoras providing 1,195,070 jobs by December 1999.

Also, as of December 1999, there were 28 maquiladoras in San Luis Rio Colorado. Maquiladora operators are being attracted to the city because of the availability of water and reliable electric power together with relatively low labor costs and worker turnover. Affordable housing is a constraint to rapid growth in the labor force, and the Maquiladora Association is looking at solutions.

MAQUILADORAS IN SAN LUIS RIO COLORADO
(July 2000)¹

Company	Product
Am-Mex Brake	Automobile Brake Components
Acero Ameri-Mex	Steel Structures and Containers
B & B de Mexico	Textile Products
Bose	Sound Equipment
Compañía de Juguetes Mexicanos	Toys and Games
Daewoo Electronics Mexico	TVs, VCRs and Related Items
Daewoo Electro Components Mexico	Electronic Components
Devanshi de Mexico	Clothing
Exportex de Mexico	Textile Products
Exportex de Mexico (Lavanderia)	Textile Processing
Fashion Fabrics	Clothing
Fenix Manufacturas	Clothing
Hyo Seung de Mexico	Electronic Equipment
Industria de Papalote	Toys and Games
Industrias Frenco	Cut and Polish Metallic Parts
J. Marcel de Mexico	Clothing Items
Manufacturas y Representaciones BCJ	Furniture
Lorita de Mexico	Clothing
Map West de Mexico	Rebuilt Brake Parts
Manufacturas y Representaciones	Metal Furniture
Meadowcraft de Mexico	Metal Furniture
Mercox Resources	Truck Parts
Mecoxim Distribuidora	Electronic Components
Moreno Manufacturas	Wooden Cabinets and Furniture
Olguita de Mexico	Women's Garments
Paul-Son Mexicana	Playing Cards, Dice, Chips
Poder Uno de Mexico	Wiring Harnesses, Power Packs
Prestigio de Mexico	Shelter Co. for Maquila Services
Rio Colorado Textil	Specialty Fabrics
SANA Internacional	Food Products
San Luis Blasting	Clothing Items Conditioning
Sheiwa de Mexico	Meat Products
Sirenamex	Swimwear
Sportif de Mexico	Clothing
TSE de Mexico	Brake Parts for Trucks

Maquiladora employment in San Luis Rio Colorado is also growing rapidly. While credible employment figures are available only for the companies that are members of the

Maquiladora Association, total maquiladora employment in San Luis Rio Colorado probably exceeds 13,000.

**San Luis Rio Colorado
Maquiladora Employment, 1989 - July 2000
(Association Members Only)^{2,3}**

Year	No. Employees	Change
1989	3,281	-
1990	3,423	4.3
1991	3,765	9.9
1992	4,202	11.6
1993	4,410	4.9
1994	4,738	7.4
1995	6,169	30.2
1996	7,253	17.6
1997	8,322	10.2
1998	9,044	13.0
1999	12,500	38.2
2000	11,857	-5.1

The stakes for Yuma County in the maquiladora business of San Luis Rio Colorado are high. It is estimated that each maquiladora job results in two ancillary jobs in Mexico. Counting dependents, a single maquiladora job, directly or indirectly, supports about nine people in Mexico. These people are likely to do some of their shopping in Yuma County.

While twin plant operations near the San Luis Port of Entry are not of a scale found in Calexico or Otay Mesa, some important investments have been made. Meadowcraft, Bose and TSE Brakes each have operations in Yuma County. Meadowcraft's 500,000 square foot plant, south of Yuma on U.S. 95, ships to retailers throughout the western United States.

The maquiladora plants also require many services on the U.S. side of the border, from materials procurement to telecommunications to management. Indeed, Vera Pavlakovich of the

¹ Maquiladora Association of San Luis Rio Colorado.

² Maquiladora Association of San Luis Rio Colorado.

³ The Maquiladora Association attributes the slight decrease in employment between 1999 and 2000 to the fact that some clothing contracts were finished and not renewed. Based on company surveys, however, the Association predicts an increase of several thousand jobs by the end of the year 2000.

University of Arizona has estimated that for every 100 maquiladora jobs generated in Sonora, about 81 jobs are created in the U.S. Many of these are concentrated in the border area.

Based on surveys conducted by Dr. Christopher Mead for the Yuma Economic Development Corporation in December 1992, the approximate annual maquiladora payroll (including fringe benefits and taxes) to residents of Mexico totaled \$13,838,860 and \$1,257,200 to residents of Yuma County. This did not include payments to U.S. twin plant employees, which amounted to an additional \$4,590,000. The surveys covered 16 companies with plants in San Luis Rio Colorado.⁴

Dr. Mead's surveys developed the following additional information on the real and potential impacts on Yuma County of the maquiladora industry:

Question: What does your San Luis Rio Colorado plant spend on services from Yuma County-based firms or other organizations?

Service	Spending
Customs Brokerage	\$327,800
Transportation/Shipping	275,000
Warehouse Rental	333,400
Insurance	4,200
Advertising/Public Relations	5,125
Data Processing	62,800
Hotels/Motels	171,540
Medical/Health	10,000
Consulting	180,000
Equipment Rental/Leasing	224,800
Legal	8,000
Accounting	15,300
Job Training, Development and Education	10,000
Other	56,000
Total	\$1,684,005

⁴ This and the following survey information is excerpted from Maquiladoras and the Economy of Yuma County, a study prepared by Christopher Mead for the Yuma Economic Development Corporation.

These spending totals did not include all the funds expended by maquiladoras for services provided from Yuma County. For example, payments to non-Yuma County-based service providers, such as health insurance or communications firms were not recorded even though some of the payment in all likelihood will revert to Yuma County. Moreover, only a portion of some payments made to Yuma-based firms, for example for equipment rental, will be retained by the dealer. Mead noted that tracking such minutiae was beyond the scope of his study, which was aimed at providing a rough idea of the economic impact of the San Luis Rio Colorado maquiladoras on Yuma County business.

Question: What products does your San Luis Rio Colorado plant buy from Yuma County firms? What is your total annual spending on these products?

Combined spending on products by the 16 firms that Mead interviewed totaled \$1,710,000. The most frequently cited item was office supplies; one company said it spent \$175,000 annually on them. Another firm stated that it spent \$500,000 per year on cardboard boxes for its products. Other products cited included welding supplies, bearings and machined parts, forklift parts, tubing, electrical and plumbing supplies, furniture, stains, paint, party supplies, tools and blades.

Mead concluded that the survey demonstrated a vigorous and growing maquiladora sector in San Luis Rio Colorado. Plant managers appeared satisfied with San Luis Rio Colorado. Although wages were seen as basically the same as those in other border cities, the average monthly worker turnover of 3.9 percent was thought to be considerably below the figures for Mexicali, Nogales and Tijuana.

The survey also indicated that the maquiladoras had a strong economic impact on Yuma County. According to survey responses, the direct annual economic impact was well over \$12 million, without taking into consideration the amounts that Mexican maquiladora workers resident in Mexico would spend in the United States on the purchase of goods and services.

Direct Economic Impact

Payrolls of Yuma County Twin Plants	4,590,000
Payrolls of Maquilas to Yuma County Residents	1,257,200
Total Wage Impact	\$ 5,847,200
Twin Plant Purchases of Products in Yuma County	2,740,000
Twin Plant Purchases of Services in Yuma County	328,000
Maquila Purchases of Products in Yuma County	1,710,000
Maquila Purchases of Services in Yuma County	1,684,005
Total Product and Service Purchases	\$ 6,462,105
Total Direct Impact	\$ 12,309,305

As noted, there is also a considerable indirect economic impact of the maquiladoras on Yuma County. Mead quotes other studies, including one by Dr. Vera Pavlakovich of the University of Arizona, which show that fully 30 percent of the wages of Mexican maquiladora workers are spent in the United States. Applying this 30 percent figure to the earnings of maquiladora workers in San Luis Rio Colorado (total wages of \$13,838,860) gives us a result of an additional \$4 million spent on goods and services in Yuma County.⁵

Counting other indirect and induced impacts, Mead estimated that the total effect of the maquiladoras on Yuma County would be considerably more than \$20 million per year. On that basis, he concluded that for every dollar in wages paid to Mexican workers by the maquiladoras in San Luis Rio Colorado, Yuma County received more than a dollar in direct and indirect benefits. Based on late 1992 employment levels, each maquila job in San Luis Rio Colorado generated more than \$5,000 annually in economic benefits for Yuma County.⁶

⁵ Total spending by individuals will have been impacted by the December 1994 devaluation of the peso as well as by the growth in maquiladora employment in San Luis Rio Colorado.

⁶ Although the data is dated, Mead's conclusions are as important today as they were in late 1992 and early 1993. According to a report in the July 28, 1996 edition of the Arizona Republic, during the first three months of that year maquiladoras in San Luis Rio Colorado spent \$5.3 million on payroll costs. In addition, the plant manager of Bose, one of the major plants, is quoted as saying that his company spends "about \$4 - 5 million a year that goes into the economy on the Yuma side of the border in wages and things we buy."