

BINATIONAL BORDER TRANSPORTATION PLANNING AND PROGRAMMING STUDY

Task 1:

**Annotated Bibliography
U.S. and Mexican Documents**

Final Report

*La Empresa
Barton-Aschman*

May 8, 1997

**BINATIONAL BORDER TRANSPORTATION PLANNING AND PROGRAMMING STUDY
TASK 1 REPORT: ANNOTATED BIBLIOGRAPHY - U.S. & MEXICAN DOCUMENTS**

“This annotated bibliography represents a compilation of the top 198 most relevant United States and Mexican reports, proposed projects, studies, etc. which relate to the Binational Transportation Planning and Programming Study. These documents contain information regarding all modes of transportation (rail, truck, air, marine, intermodal) which directly affect the border area between Mexico and the United States. Also included are some reports concerning socioeconomic data, environmental, planning, law, administration, finance and urban development topics and how these relate to transportation across and near the United States/Mexico border. References were obtained from persons involved in the study, consultants, government officials, colleges and universities, previous studies, and various other sources.”

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Preface

U.S./Mexico Binational Border Transportation Planning and Programming Study implements a significant binational policy making document entitled "Memorandum of Understanding on the Planning process for Land Transport on Each Side of the Border" signed by the federal governments of Mexico and the United States at the first "NAFTA Transportation Summit" held in Washington D.C., April 29, 1994.

The purpose of this study is to provide policymakers with information needed to establish a continuous, joint, binational, transportation planning and programming process. A goal of this study is to improve the efficiency of the existing binational policy making, planning procedures and funding criteria affecting our Border Land Transportation Systems (BLTS). The BLTS should be seen as a binational transportation system made of international bridges and border crossings and its land connections to major urban and/or economic centers, principal seaports, airports and multimodal/transfer stations, and ultimately to its connections to national transportation facilities.

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1.1

Introduction

1.1.1 General Description

This task report represents the results of the study team's review of existing and/or proposed projects, reports, etc. In both Mexico and the U.S., the top 198 most relevant references for each country were placed in this annotated bibliography (100 Mexican documents and 98 U.S. documents). Selection criteria included relevance assessment primarily in terms of geographical area, recommendations from persons involved in the Binational Transportation Planning and Programming Process, perceived applicability to this project by report topic, and the timeliness of the material, the date study or report was performed or written.

This chapter contains assessments of prior research for the Mexican and U.S. efforts. It also contains four matrices which cross-reference each report by:

- Mexican state and report topic
- Transportation mode and report topic
- State and report topic and
- Transportation mode and report topic.

The Mexican reports are arranged by identification code. The U.S. reports are listed alphabetically. The index provides the U.S. reports sorted by identification code. The appendices contain a listing of all documents reviewed for purposes of the annotated bibliography.

1.1.2 Assessment of Prior Research

This report contains an annotated bibliography of the most relevant reports and references for binational transportation planning, available as of March 1996. The report also contains a listing of additional documents that are relevant to this topic. Collectively, these represent an impressive array of literature related to traffic, trade, infrastructure, socioeconomics, planning, and financing along the U.S./Mexico border.

Given the wide array of data and topics covered by this literature, it is difficult to draw general conclusions regarding the adequacy and quality of this prior research as related to current and future planning efforts. Therefore, the observations contained herein are based on the use of the included documents for the tasks conducted during the first six months of the binational transportation planning study effort.

As an overall observation and caution, none of these research documents should be relied on to be completely accurate or up to date without written confirmation, observation, or experience. Information regarding border transportation persons, places, or things ages quickly.

In compiling the Task 2 inventory of border transportation infrastructure, use of the best available documentation proved to be inadequate in terms of timeliness. Many of the best sources are not up to date. In addition, sources of information conflicted with one another over counts or classifications of objects. Adding to the challenge, reviewers had conflicting data sources of their own—hence, reality was difficult to establish. Based on this experience, we conclude and recommend that inventories contained in these reference materials be viewed as general approximations of reality rather than absolutes.

In conducting the Task 3 analysis of Port-of-Entry System operations, we found much larger discrepancies between prior research and the study team's current findings. Our overall impression is that the operational aspects of trade and traffic flows has not been researched to the extent necessary to understand transportation dynamics. Freight transportation operations are thinly reported or understood, and existing published research on this topic appears to be inaccurate or incomplete at best. This conclusion is significant insofar as planning for border transportation infrastructure is concerned.

Our literature search uncovered many plans and planning documents addressing needs for border infrastructure. These plans typically dealt with local, state, or regional needs on one side of the border (or the other); and almost universally did not address binational system needs. Also, while the plans and programs for transportation investments were generally well documented, the process for developing the plans and/or establishing priorities was not well documented, particularly in Mexico. Work undertaken in the Task 4 document for inventory planning and programming activities indicates that new ground will need to be broken to establish a binational transportation planning process.

Data regarding trade and traffic flows are continually collected by the U.S. and Mexican federal governments for customs and immigration purposes. None of the included reference documents provide comprehensive summaries of this information as it is typically reported in massive data files. Please see the Task 8 report for a listing and discussion of these data files, and a summary of their content.

Analysis of the available trade data indicates that it will be difficult, and potentially even erroneous, to attribute trade benefits to specific locations or even to specific border states, based on the export data collected by the federal governments since ultimate origin and destination information is not reported. Whereas such analysis is periodically conducted at the federal level, the accuracy of trade attributed to individual states has been seriously challenged by this and former studies. The implication of this finding is that it will be difficult to undertake Task 10, "Analyze and Evaluate Impacts of Current Commodity Movements on the Economies of the U.S. and Mexico Border States, Metropolitan Areas, Counties and Municipalities" (re: commodity movement impacts at various political levels) with any degree of confidence regarding the accuracy of the study's findings.

Information regarding financing and financial prospects for transportation infrastructure is widely available and well documented, but extremely temporal. Project funding allocations and funding priorities change from year to year and private investment strategies are changing at an even quicker pace. Financial planning will need to occur continuously;

therefore, the available research and documentation should be utilized primarily for its historical merit.

A significant challenge for binational transportation planning will occur when the issue of travel demand forecasting is addressed in later tasks of this study. The border economies, particularly in Mexico, are growing so quickly that demographers are facing the extremely difficult task of maintaining accurate census and socioeconomic data. Quotations of border city populations, found in the resource documents, may be underrepresented by as much as 50 percent. For instance, the U.S. Department of Commerce reports that its own estimates of international travelers from Mexico to the U.S. may be underreported by 80 to 85 percent.¹ Attributing population and employment to small geographic areas (traffic analysis zones) is even more problematic.

Reports selected for annotation do not delve heavily into legal, administrative, and institutional issues because these topics are not extensively researched or documented from a binational perspective. While quantity does not abound, a number of high-quality resources have been identified for reference.

All in all, the resource documents provide a good beginning to undertaking binational transportation planning. However, extensive review of the documents is necessary to capture the “big picture” of transportation needs, opportunities, and constraints. The reader is best advised to treat this research with some reservation, as the U.S.-Mexico border is a dynamic environment that is challenging to fully comprehend.

¹ U.S.-Mexico Border Economic Development Task Force, Directory of Border Related Programs, U.S. Department of Commerce, International Trade Administration, September 1995, p.67.

Mexican Bibliography Reports Cross-Referenced by Mexican State and Report Topic

Information	States					
	Baja California	Sonora	Chihuahua	Coahuila	Nuevo León	Tamaulipas
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Information	Transportation					
	Crossing & Bridge	Roadway	Railroad	Intermodal	Ports	Airports
Infrastructure	8, 9, 14, 15, 35, 36, 37, 39, 40, 41, 42, 50, 52, 53, 57, 60, 65, 71, 74, 75, 77, 78, 80, 81, 82, 85, 86, 90, 92, 93, 99	8, 9, 10, 14, 15, 29, 30, 31, 37, 38, 41, 42, 43, 52, 53, 65, 67, 72, 73, 81, 83, 84, 85, 87, 89, 91, 93	1, 8, 9, 15, 29, 30, 39, 40, 41, 52, 55, 57, 65, 67, 72, 73, 80, 81, 83, 85, 100	4, 8, 9, 15, 30, 39, 41, 52, 72, 85	8, 9, 15, 39, 52, 65, 67, 72, 73, 83, 85, 92	8, 9, 15, 52, 65, 67, 72, 73, 83, 85, 90
Operations	8, 14, 23, 35, 36, 37, 39, 40, 41, 48, 49, 57, 61, 62, 66, 67, 81, 82, 85, 86, 93	8, 12, 14, 17, 29, 30, 37, 38, 41, 42, 43, 44, 52, 53, 56, 66, 69, 72, 81, 89, 93, 97	1, 8, 29, 30, 39, 40, 41, 52, 55, 56, 57, 67, 72, 80, 81, 100	3, 4, 30, 39, 41, 52, 56, 57, 72, 97	2, 8, 33, 39, 52, 56, 62, 67, 72, 92, 95, 96	8, 52, 62, 67
Institutional Management	52, 61, 62, 66, 73, 74, 75, 76, 77, 78, 79, 80, 82, 85, 90, 92	31, 38, 42, 43, 52, 62, 66, 73, 83, 84, 85, 87, 89, 91	1, 40, 52, 55, 62, 73, 83, 85	52, 62, 85	52, 62, 73, 83, 85, 92	52, 62, 73, 83, 85
Planning	9, 14, 23, 35, 39, 40, 41, 48, 49, 52, 57, 60, 65, 71, 75, 76, 77, 78, 79, 81, 82, 85, 86, 90, 93, 94, 99	9, 12, 14, 30, 31, 37, 42, 52, 53, 72, 73, 76, 85, 87, 89, 91, 97	1, 9, 30, 39, 40, 41, 52, 57, 72, 73, 76, 81, 85	9, 30, 39, 41, 52, 56, 72, 73, 85	9, 39, 52, 72, 73, 85	9, 52, 72, 73, 85, 90
Environmental	35, 74, 75, 76, 77, 78, 79		80	92	92	
Urban Development	14, 35, 37, 50, 53, 59, 71, 73, 74, 75, 76, 77, 78, 80, 86, 92, 94, 98	14, 37, 53	14, 40, 80	14	14, 92	14
Legal Framework	60, 61, 62, 63, 66, 79, 99	43, 44, 63, 66, 87, 93	52, 55, 63, 80, 85	63, 85	2, 52, 63, 85	20, 21, 52, 63, 85
Administration	35, 53, 80, 90	12, 44, 87, 93	1		2, 92, 96	
Financial Aspects	35, 36, 39, 40, 52, 53, 63, 71, 82, 83, 90, 92, 93, 94	12, 31, 43, 44, 52, 63, 66, 67, 83, 84, 87, 91, 93	39, 40, 52, 55, 63, 67, 83	39, 83	39, 52, 63, 67, 83, 92	52, 67, 83

U.S. Bibliography Reports Cross-Referenced by U.S. State and Report Topic

Information	States			
	California	Arizona	New Mexico	Texas
Transportation Development Plans	8,9,15,17,18,26,30,39,40,41,43,46,49,54,55,56,59,60,62,64,68,82,84,90,93,94,95	4,5,6,8,24,25,26,30,40,52,54,55,59,60,62,63,64,66,73,74,87,93,98	7,8,11,12,16,23,26,30,40,42,48,50,54,55,59,60,62,64,93	1,8,13,14,19,21,26,30,32,33,34,35,40,44,45,51,53,54,55,59,60,62,64,70,77,86,88,89,92,93,99
Urban Development	8,39	8,73,74	8	8,70
Inter-Urban Aspects	18,28,49,54,56,93	52,54,63,76,93	54,93	34,51,54,70,93
Environmental	8,10,17,37,39,72,84	8,63,72,73,74	8,16,72	8,69,72,78,89
Commercial	28,29,57,58,60,61,71,75	36,58,60,61,71	58,60,61,71	14,19,58,60,61,71,92,96
Socioeconomics	17,18,28,30,39,49,54,55,68,75,83,84,93	3,4,30,52,54,55,65,66,73,4,76,83,87,93	11,12,22,23,30,48,50,54,55,83,93	14,30,44,45,54,55,70,78,80,83,86,91,93,97

U.S. Bibliography Reports Cross-Referenced by Transportation Mode and Report Topic

Information	Transportation					
	Bridges/Crossings	Roads	Railroads	Intermodal	Ports	Airports
Infrastructure	6,9,14,19,26,32,33,34,41,45,59,60,62,70,73,75,77,80,89,92,94,97,98,99	2,5,6,8,12,13,14,26,32,34,35,38,41,44,49,51,60,62,63,66,68,70,71,73,75,76,80,81,86,87,92,94,97,98	12,14,18,24,26,44,49,68,81,82,86,87	2,3,7,9,12,26,41,50,51,54,55,68,88,95	44,68,70,86,88	8,26,44,68,70,79,86,87
Operations	9,13,19,20,21,26,32,33,40,45,47,51,52,56,59,67,70,77,80,89,94,9,99	9,11,12,13,35,43,44,51,53,56,57,58,61,63,68,69,70,80,81,90,94,96,97	9,11,12,18,24,41,43,44,51,56,68,70,81,82	11,12,21,23,25,26,31,41,50,54,68	43,44,56,68,88	11,28,43,44,56,68,79
Planning	9,15,21,26,34,36,40,45,52,56,60,62,68,73,77,89	2,5,12,13,34,35,43,46,56,60,62,68,73,74,76	12,18,24,41,43,56,68,82	7,9,11,12,21,22,23,25,30,41,50,54,55,64,68,95	43,56,68,88	43,56,68
Environmental	10,72,89	8,10,17,29,63,69,73,74,84	16,17,84	16,26,39	84	8,84
Urban Development				9		
Legal Framework	36,40	29,49,71,73,74	49	7,39,54	26	
Administration	20,60,62,67	60,62,69	26	22,54	26	26,79
Financial Aspects	14,26,32,33,40,42,45,51,52,75,80,89,92,97,99	4,12,17,38,42,44,46,49,51,66,73,74,75,76,80,84,86,87,92,97	11,12,16,17,18,44,49,82,84,86,87	3,7,11,12,16,22,23,26,30,31,39,42,50,51,54,64	26,44,84,86,88	4,11,28,44,84,86,87

1.2 **Mexican Bibliography**

This chapter contains 100 selected documents from an extensive review of 480 documents including studies, projects in process and final reports, etc., done by the La Empresa team.

Each reference includes a brief summary or relevant excerpt from the document, the source of the document (either the producer or the sponsoring agency), a contact from which to request further information if desired, and a key word listing. These key words include topics which are covered by each report, agencies involved, and geographical coverages.

(1) OPERATION IMPROVEMENT AND MODERNIZATION STUDY FOR THE MEXICO- NUEVO LAREDO RAIL CORRIDOR, ADDENDA AND EXECUTIVE SUMMARY

In the study the Mexican exterior trade with the United States is analyzed by an origin-destination matrix of the principal export and import regional product flows, identifying entrance and exit points as well as railroad interchange places for Mexico-United States. This study identifies the Mexican exterior trade volume in tons carried by railroad transportation. Nuevo Laredo captures 60% of the imports and 40% of the exports that pass through Nuevo Laredo, Piedras Negras, Matamoros and Ciudad Juarez using this mode.

The executive summary identifies the potential capacity and the railroad infrastructure occupation level, specifying the characteristics by sections; includes an estimation of the railroad traffic increment growth associated with NAFTA through the analysis of the exporting and importing enterprise locations, and analyzes load by sections and intermodal behavior. The summary also contains distribution forecasts of load and passengers by bus and train, and integrates a infrastructure program for the different sections through the year 2005 complemented with an economic analysis of the railroad corridor operation and a corresponding financial proposal.

Date: 1991

Source: Ferrocarriles Nacionales de México

Contact: Técnicas Modernas de Ingeniería
Insurgentes Sur 550, 4° piso
Col. Roma Sur
06760 México, D.F.
(525) 584-0553 y 584 3794
(525) 574-2198 Fax

Key Words: Railroad Transportation, Mexico-Nuevo Laredo, Railroad Infrastructure Program. Operation

(2) CD. JUAREZ, CHIH. BORDER CUSTOMS OPERATIONS AND COLLECTION 1993-1994

The document presents operational statistics of imports and exports, bank collection and corresponding taxes of the Cordoba, Reforma I and II, Zaragoza and San Jeronimo bridges; it also contains information related to construction completed, statistical data, administration, and technical and operational system modifications in the management that have been established for the Ciudad Juarez border. At the Cordoba Bridge, four more lanes were opened to provide better traffic flow, and modifications and expansions were made to the tourist areas and the fiscal yard where the import paperwork is completed.

Date: February 1996

Source: Secretaría de Hacienda y Crédito Público

Contact: Secretaría de Hacienda y Crédito Público
Administración General de Aduanas
Av. Hidalgo 77 módulo 4 1er. piso
Col. Guerrero
06300 México, D.F.
(525) 521-0456

key words: Customs office, operations, collection, Ccd. Jjuárez, 1993-1994, import, export, statistics

(3) SOME ELEMENTS TO CHARACTERIZE MEXICAN INTERNATIONAL TRADE FLOW

Transportation is the basic link in the raw material to finished product physical handling chain. It contains potential elements for increasing trade competitiveness and plays an important role in the relation between Mexico and other countries.

One of the required tasks of the BTPPP is to identify the changes observed in the Mexican-International trade, and to analyze the way in which the transportation system adapts to the new requirements of the commercial activities.

The objective of this study is to contribute elements to help analyze the evolution of the Mexican International trade, the territorial distribution of flows, and estimate the participation of networks and transportation modes.

Publish Date: 1994

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: International Trade Territorial flow distribution, network and transportation mode.

(4) SOME IMBALANCE OF THE NATIONAL TRANSPORTATION SYSTEM

This paper presents cases of imbalance between the different elements involved in the performance of the transportation system. Its main purpose is to present the main imbalances in the national transportation system in an ordered but not extensive form.

It is considered that the imbalanced conditions presented in the paper should be recognized to guide the evolution of the transportation sector in a way in which such imbalances are avoided or overcome.

Date: 1988

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Cases of Imbalance, National transportation systems.

(5) COST-BENEFIT ANALYSIS IN THE “MAQUILADORA” EXPORTATION INDUSTRY (MEI) IN MÉXICO

This report analyses the following benefits of MEI: economic overflow, employment, consumption of national raw material, money received in capital assets, finished production, utilities (electricity, water, etc.), and external benefits for those who rent or are in charge of the process. It also identifies other benefits, difficult to quantify, such as training of national managers.

With regard to costs, it analyses the effects of the type of change, the infrastructure, the infrastructure investment, and the expenses due to population concentrations around the (MEI), and pollution.

Publish Date: 1993

Source: Centro de Investigación y Docencia Económicas, A.C.

Contact: Centro de Investigación y Docencia Económicas, A.C.
Carretera México-Toluca 3655 (km 16.5)
Lomas de Santa Fe
01210 México, D. F.
(525) 726-9004

Key Words: “Maquiladora” Industry, exportation, cost and benefits.

(6) ANALYSIS OF THE URBAN STRUCTURE IN CIUDAD JUAREZ, CHIHUAHUA

The urban structure in Ciudad Juárez shows important changes due to the re-composition of its productive structure. From the 1930's through the 1960's, the service and commerce sector showed an important presence. Ciudad Juárez in 1990 was the border city with the most participation in the transforming industry, specifically in the “maquiladora” industry. The spatial organization of the urban activities had relevant changes because of the emergence of two economical centers: the first one that had its origin in the 60's with a specialization in commerce and service sectors, and the second one, related to the industrial park, which has oriented the growth of the city toward the northeast, creating new residential and commercial zones.

Publish Date: 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Av. Campestre 100
Col. Campestre Juárez
Cd. Juárez, Chihuahua
(52 16) 17 89 58
(52 16) 18 40 55 Fax

Key Words: Urban Structure, Cd. Juárez, border city, spatial organization, commerce, services, habitational zones.

(7) HISTORICAL BACKGROUND OF THE BORDER ZONE

The first part of the document contains a brief overview of the events that have influenced the history of the border zone. The second part of the study describes the different programs implemented for the border zone and identifies them as an example of the priority attention that the federal government has historically paid to the border. Looking at the future, the report indicates that NAFTA, based on previous experiences, must consider a new scenario exemplified by the magnitude of transformation that the "maquiladora" industry will surely experience. By 2001 this industry will be able to commercialize 100% of its production through the country, activity that is not now allowed, and the systems of Total Quality Management and Just in Time will acquire an increasing importance.

The last part of the study considers that the border zone will maintain a fast-growing rhythm, and that it must establish a formal compromise with sustainable planning, avoiding pollution, and promoting a rational use of natural resources in order to avoid their extinction for future generations.

Publish Date: 1993

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Departamento de Estudios Económicos
Autopista Tijuana-Ensenada km 18
San Antonio del Mar
Rosarito, B.C.
(52 66) 13 35 35
(52 66) 13 30 65 Fax
Correo electrónico: NURED@BESTSD.SDSU.EDU

Key Words: Border History, NAFTA, border programs, development, future

(8) STATISTICAL YEAR BOOK OF THE TRANSPORT AND COMMUNICATION MINISTRY

This yearbook contains statistical information that shows the behavior of the communication and transport activities of the country. This presentation is structured by the following sectors: highway, railroad, maritime, aerial, and communication. It also includes tables of support and management services.

This yearbook contains the following information for each federal entity: length, highway network features, bridges managed by Caminos y Puentes Federales de Ingresos y Servicios Conexos (Capufe), freight and passenger terminals in operations, existing railroads, Pacific and Gulf port infrastructure, airports managed by Aeropuertos y Servicios Auxiliares (ASA) and information about communications.

Publish Date: 1989, 1990, 1991, 1992, 1993

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Planeación
Av. Universidad y Xola Cpo. C P.B.
03028 México, D.F.
(525) 519 9948 / 519 1270
(525) 530 5766 Fax

Key Words: Statistics, highways, railroads, ports, airports and communications.

(9) MEXICAN ATLAS OF COMMUNICATION AND TRANSPORT

This document contains 88 1:500,000 scale maps containing information about communication and transportation infrastructure considering the following aspects: complete highway network, including those concessioned to contractors and future projects of concessioned highways; regular and electric railroad networks, large, medium and short scope airports and the service that they provide (national or international); commercial, industrial, tourist, and fish maritime ports; information related to the communication sector with specifications about the population, their radio and television services, their microwave systems, telepac systems, earth antennas for satellite signals, etc.

The atlas also contains an alphabetical index of more than 45,000 populations contained in the maps with references to pages and coordinates for easy location.

Publish Date: 1995

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Planeación
Av. Universidad y Xola Cpo. C P.B.
Col. Narvarte
03028 México, D.F.
(525) 519 9948
(525) 530 5766 Fax

Key Words: Atlas, transportation, communications, highways, railroads airports and ports.

(10) HIGHWAY CLASSIFICATION FOR FREIGHT TRANSPORTATION

This report identifies the elements that integrate the national highway network and are located between the six border states by the road types A2, A4, B2, B4, C, D, and roads restricted to freight. For each road it describes the highway number, route, length, its classification, width, maximum degree of curvature and the types of vehicles allowed. The highway and segment classifications allow identification of those which are part of the process of planning and programming of the border transport.

Publish Date: 1992

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Servicios Técnicos
Av. Coyoacán 1875
Col. Acacias
México, D.F.
(525) 524-5919
(525) 524-5426 Fax

Key Words: Highway classification, border states, highway types, federal network.

(11) CIUDAD JUAREZ BORDER DEVELOPMENT COMMITTEE

This document identifies the Cd. Juarez region as the one that has the largest number of border bridges and crossings (11), it comments on tariff and tax mechanisms, that were discussed by the Comision Mixta of Industry and Commerce Promotion (COPIC) along the northern border and in the free zones of the country. It identifies a series of customs dispositions and administrative and fiscal applications of temporal importation.

On the other hand it identifies a integral environmental border plan by actions for different groups for air and water quality control, contingencies, and a municipal water and sewer committee.

Regarding the maquila industry, it presents statistical data from the States of Baja California, Sonora, Chihuahua, Coahuila and Tamaulipas. With charts and graphics it relates the average distribution in each state of employed personnel in the maquiladora industry, number of working hours, payments, and salaries. Due to its importance, it is necessary to mention the vehicle crossing reports at the customs booths of Juarez, Cordoba, Paso del Norte, Zaragoza, El Paso, Las Americas and Isleta, in which the number of gates, opening hours and transit volumes of the tourist and trade vehicles, waiting time in the principal international crossings according to the monthly average of tourists and traders are reported.

Publish Date: August 1995

Source: Comité de Desarrollo Fronterizo de Cd. Juárez

Contact: Presidencia Municipal de Cd. Juárez
(52 16) 15 03 91 / 15 06 90

Key Words: Border development, Cd. Juarez, bridges, crossings, projects, infrastructure, financing, environment, energetic, transportation.

**(12) COMPETITIVENESS OF THE FEDERAL PUBLIC LOAD
TRANSPORTATION ENTERPRISES SEEN THROUGH NAFTA PERSPECTIVES**

This work tries to identify the effect of NAFTA on the large changes in trade that will modify the economic structure of the country, changing the transportation requirements for the growing logistic demands of the exportation industries. It emphasizes the new policy requirements of the transportation industry. It underlines the new trends in the articulation between the national and American multimodal logistic services.

The work includes a brief diagnosis of the federal public freight transportation situation (truck transportation) to emphasize the operating limitations of the national freight transportation industry and potential conflicts with the users. Finally, it presents general and specific recommendations for the modernization of this subsector.

Publish Date: 1992

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Competitiveness, Mexican federal public freight transportation, transportation companies, services, truck transportation opening services, NAFTA

(13) WORKING AND TRAINING CONDITIONS IN THE EXPORT MAQUILADORA IN MEXICO

The economic and social importance of the export maquiladora industry is explained in this publication. This importance is explained through a work market analysis of the maquiladora industry. This analysis shows data and statistical procedures that have never been presented in the literature. The sample framework was based on information for three localities and three activities that allows a deeper knowledge of a diverse industrial sector with a large economic potential for the regions where is established and for the whole country. The work structure is integrated into seven actions that analyze the working opportunities in three locations, through the annual socioeconomic border surveys: ESAF 87 for Tijuana and Cd. Juarez and ESAF 88 for Monterrey. The project consisted fundamentally of a probabilistic for which managers of 358 maquiladora factories of Tijuana, Cd. Juarez, and Monterey were interviewed.

Publish Date: 1993

Source: Secretaría del Trabajo y Previsión Social

Contact: Secretaría del Trabajo y Previsión Social
Dirección Ejecutiva de la Coordinación General de Asuntos Internacionales
Periférico Sur 4271 A Planta Baja
Col. Fuentes del Pedregal
14149 México, D.F.
(525) 645-2841 / 645-3995 ext. 2005
(525) 645-4218 Fax

Key Words: Job and training, maquiladora, Tijuana, Cd. Juarez, Monterrey, industrial sector.

**(14) TRANSPORTATION AND DISTRIBUTION CONGLOMERATE IN THE
REGULATION OF THE SONORA-ARIZONA REGION:
DEVELOPMENT ANALYSIS AND RECOMMENDATION**

This work is part of a larger binational project called: Strategic Vision of the Economic Development in the Sonora-Arizona Region.

This element of the project tries to identify, analyze and evaluate the potential of the transportation and distribution services sector, within the NAFTA framework. The needs and opportunities to raise the trade level are identified, proposing the establishment of recommendations to both border governments in the zone.

The work was made by analysis of document information and statistics referring to the topic, at a state and national levels. Also a Consultive Technical Committee was also formed integrated by the experts in this topic from the public and private sectors, with the objective of obtaining feedback during the development of this work.

Publish Date: December 1995

Source: Arizona Department of Transportation

Contact: Arizona Department of Transportation
2065 17th Av.
Phoenix, AZ 85007
(602) 256 7563 Fax

Key Words: NAFTA and transportation conglomerate, Sonora-Arizona region, transborder transportation, regional development.

(15) CONSIDERATIONS TO MODERNIZE THE NATIONAL TRANSPORTATION INFRASTRUCTURE

This document identifies some forces that are modifying the national and international freight transportation sector, and presents elements to guide the national transportation infrastructure in a manner compatible with the role that the freight transportation sector will play in the modernization of the country. For each one of the modes it presents some basic considerations as a previous step, for the proposal of the specific orientation of infrastructure development.

Publish Date: 1991

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Modernization, national infrastructure, freight transportation.

(16) SUSTAINABLE GROWTH AND DEVELOPMENT IN THE MEXICAN NORTHERN BORDER

The dynamic economic growth in the border states of Mexico has been very fast, but has been affected by a equally fast demographic growth that has generated large pressure in the public services and the regional infrastructure. This has finally caused deficiencies in providing basic services, especially drinking water, drainage, and waste water treatment. Additionally it has generated a deficit in housing and a decrease in the quality of construction materials. In terms of roads and transportation, there is deficient coverage in the roadways, railroads, number of ports, and telecommunications. The circulation of truck trailers circulation through narrow downtown streets on their way to the international border crossings has made the need for constructing peripheral roads and heavy traffic bypasses relevant. On the other hand, the investments made in the construction of industrial parks have not produced the expected benefits due to insufficiencies that affect the basic services infrastructure.

In synthesis, during the last years the quality of life quality in the border cities has deteriorated. The solution consists in making large investments, for which the municipal and the state governments have any capacity. Due to this limitation, the only real possibility lies in project financing.

Publish Date: October 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Departamento de Estudios Económicos
Autopista Tijuana-Ensenada km 18
San Antonio del Mar
Rosarito, B.C.
(52 66) 13 35 35
(52 66) 13 30 65 Fax
Correo electrónico: NURED@BESTSD.SDSU.EDU

Key Words: Growth, sustainable development.

(17) MEXICAN REPUBLIC ROADWAY DATA

The roadway data contains information on origin-destination and traffic counts, as well as vehicular traffic ranges at a state level. This information is obtained through records for statistical data collection according to vehicle type classification: A = cars, B= buses and C= trucks, in order to obtain indicators of the average annual daily traffic (TPDA) to estimate the level of service (LOS) by sections and to forecast trends in the main network.

Publish Date: 1994

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Servicios Técnicos
Av. Coyoacán No. 1875
Col. Acacias
03240 México, D.F.
(525) 524 5919
(525) 524 5426 Fax

Key Words: road data, origin-destination, traffic counts, statistics, vehicle classification.

(18) URBAN DEVELOPMENT ALONG THE MEXICO-UNITED STATES BORDER

The northern border has been an important topic in terms of national problems. Now the focus is not limited to the old concept of how to integrate the border territories to the rest of Mexico, but the need to know with precision if this region can or cannot be a development locus, which not only competes with the central region but also could help the country to move out of the existing economic crisis.

This work shows its interpretation of the urban development in the border. It uses a historic vision to identify the processes that generated, and still move the border urbanization, and proposes a conceptual scheme of such processes. It also considers the urban regional organization at the border, analyzing its determinants and the urban population regional distribution is analyzed. Finally, three of the most important processes of the border urbanization are studied: itinerant migration, transmigration, and the maquila.

Publish Date: 1992

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Abelardo L. Rodríguez # 2925
Zona Río
22320 Tijuana, B.C.
(52 66) 13 35 35
(52 66) 13 35 55 Fax
Correo electrónico: NURED20@BESTSD.SDSU.ED

Key Words: Urbanization, migration, transmigration, and maquila.

(19) URBAN DEVELOPMENT ALONG THE MEXICO-UNITED STATES BORDER

The northern border has reached a high urbanization level comparable to few other zones in Mexico. This level is formed by cities which in this century have grown in population and economy above the country averages. This region has become a regional and national development locus.

This document discusses the singularity of that development from a structural point of view and supports its analysis in the relations that join the economic and spatial dimensions. In this way, the region's particularities are explained through the geographic proximity of the different economic structures that act upon each other in a selective and conflicting manner, generating more intense growth on the Mexican side than on the United States side.

Publish Date: 1992

Source: Tito Alegría Olazábal
Consejo Nacional para la Cultura y las Artes

Contact: Consejo Nacional para la Cultura y las Artes
Calz. México Coyoacán 371
Col. Xoco
03330 México, D.F.

Key Words: Urban development, Northern border.

(20) DECREE OF THE AIRPORTS LAW

This law is applicable to the airport infrastructure and operation in the entire country. It identifies the international public service airports and their corresponding infrastructure, facilities and equipment for maintaining the aircraft. It describes passengers, cargo, post, and complementary business services at the facilities. Through a master plan that will be reviewed every five years, this law establishes the conditions of construction, maintenance, and planning of the airports, conforming to the policies and programs of the National Airport System and their relation with other modes of transportation. This law establishes that the operation and the services of the airport will be achieved by means of the efficient use of the infrastructure, facilities, and existing equipment. The law further specifies that the maximum prices and tariffs will be regulated in such a form that the loan of services and the use of the goods will be achieved with satisfactory conditions of quality, competitiveness and permanency. The concessionaires and permit providers must observe the applicable requirements with regard to the environment, especially in terms of noise reduction and the effective control of air water, and soil pollution, as much in the facilities as in the corresponding protection area.

Publish Date: December 1994

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Av. Universidad y Xola
Colonia Navarte
03028 México D.F.
(525) 530-3060

Key Words: Airports, infrastructure, operation, facilities, equipment, services, tariffs, noise, environmental protection, master plan, policies, and programs

(21) CUSTOMS LAW

This law covers general taxes on imports and exports and the rest of the laws and applicable ordinances that regulate entry into and exit from the national territory. It covers merchandise, the means by which merchandise is transported or conducted, the activities of the Customs office and the acts that derive from the entry or exit of such merchandise. The Customs Law consists of the following categories: control of the customs and merchandise offices, payment of fees, compensatory tariffs, further regulations and restrictions pertaining to tariffs for external commerce, customs practices, border region practices, function of the Federal Executive Power and the federal authorities, customs agents, customs enforcers and infractions and sanctions. These categories of the laws apply without prejudice of application for the international treaties in which Mexico will participate.

Publish Date: December 15, 1995

Source: Secretaría de Hacienda y Crédito Público

Contact: Secretaría de Hacienda y Crédito Público
Administración General de Aduanas
Av. Hildalgo 77, Módulo 4 Primer piso
Colonia Guerrero
06300 México D.F.
(525) 521-0456

Key Words: Customs office, entry and exit of merchandise, border region, fiscal authorities

**(22) DIAGNOSIS OF THE REGIONAL BORDER DEVELOPMENT IN
BAJA CALIFORNIA, SONORA AND CHIHUAHUA**

This diagnosis on border development was prepared by planning and development consultants. In the synthesis of the results the socioeconomic process characteristics with their policy rules were identified as a scenario of trans-border flows with the development of the three border states. These states comprise a geographic zone strongly linked with the American economy which requires economic activity planning which takes this linkage into account. The general report contains relevant topics such as: planning of the institutions, the border state development plans with their growth tendencies, the development perspectives of the border, sector modernization and public investment programs, a social evaluation of the border development model with its strategic projects.

As a support for the general report, statistics are presented with graphics and tabulations for selected states and municipalities at the northern border for 1990.

Publish Date: 1992

Source: El Colegio de la Frontera Norte

Contact: Secretaría de Relaciones Exteriores
Dirección General para América del Norte
Flores Magón No. 1 ala B
Nonoalco Tlatelolco
México, D.F.
(525) 255-0988 ext. 2964
(525) 327-3045 Fax

Key Words: regional border development, Baja California, Sonora, Chihuahua, planning.

(23) DIAGNOSIS AND HISTORICAL DATA 1976-1994 OF THE 43 EXISTING CROSSINGS AND THE PROPOSAL ALONG THE NORTH BORDER (VOLUME II)

This document (5 binders) contains an update to 1994 of the existing border crossings and international bridges, the ones under construction, and the new facilities recommended by the binational Mexico -United States agenda. It includes planning, location, and maps, etc. for those locations. The content of the information is structured as follows:

- Crossing characteristics. Consideration of the entire port facilities, traffic counts, and crossing hours.
- Operation. Good, regular or bad, related to infrastructure and facilities, traffic volumes, roads, etc.
- Facility status. Bridges, buildings, exterior areas, etc.
- Management and bilateral agreement. Related to the agreements of the Binational Mexico-United States Group for new bridges and optimizing existing ones.
- Conclusions and photographic report, (1994)

Publish Date:

Source: Arq. Arturo García Alvarez

Contact: Arq. Arturo García Alvarez
Valle de Oro no. 15
Valle de Aragón
57100 Edo. de México
(525) 783-1041

Key Words: Border port, corridor or fiscal route, light vehicles, heavy vehicles, commercial traffic, random system, fiscal light toll, concession, custom booth.

(24) THE CASE OF TOURISM IN BAJA CALIFORNIA

In the context of tourist norms and regulations, the participation of the "municipio" in the regional development is emphasized considering the Tijuana-Ensenada tourist corridor, as a priority development area of the northern border to consolidate its development. The State Development Plan (1990-1995) of the Baja California government considers a literal spatial arrangement keeping the existing land-use, which is mainly tourist uses and finding the real potential of the region's growth, in local and visiting population, as well as in infrastructure and services. The plan also identifies the water scarcity in the zone, the problems of land ownership, the infrastructure for the resident local communities existing in the area, and also recognizes the irregular growth due to the increasing demand for space.

Considering the aforementioned points, the plan establishes the need for the development of a program to organize the Tijuana-Ensenada corridor, through municipal decentralization plans. As a whole, the document is oriented to the tourism program of the northern border considering the 3 government levels.

Publish Date: October 1992

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Blvd. Abelardo L. Rodríguez No. 2925
Zona del Río
22320Tijuana B.C.
(52 66) 13 35 35 ext. 3426
Fax. (66) 13 30 65

Key Words: Tourist, Baja California, Tijuana-Ensenada, priority development, state development.

(25) INTERNATIONAL COMMODITY TRADE IN THE MEXICAN NORTHERN BORDER: THE BAJA CALIFORNIA CASE

The exterior trade structure of the northern Mexican border is studied here in two levels: by sector and by type of commercial relationship (inter-industrial and intra-industrial). On one side the importation and exportation transactions are compared with the objective of identifying the specialization of the border, and on other side, the intra-industrial regional exterior trade is quantified, comparing it with other estimations made at a national level. The most important finding consists in identifying that the border trade, with the exception of the maquiladora industry, is less industrial than in the rest of the country.

The different border commercial pattern is explained by a combination of the following factors: a) the limited development of the non-maquiladora industry, b) a high level of border transactions, and c) the minimum linkage of the maquiladora industry exportation with the local industry supplier.

Future publication of the Frontera Norte Magazine Vol. 14

Publish Date: Próxima publicación en la Revista Frontera Norte Vol.14

Source: El Colegio de la Frontera Norte

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Key Words Intra-industrial trade, goods, Baja California, external trade, sector, commercial relationship, maquiladora (in-bond) industry, limit development, border transactions, minimum linkage.

(27) CIUDAD JUAREZ INDUSTRIALIZATION PROCESS EXPERIENCES AND ALTERNATIVES IN THE FINANCING OF URBAN INFRASTRUCTURE

The Border Industrialization Process (PIF) had a large influence during the 1966-1993 period on the existing urban structural configuration of Cd. Juarez, incorporating new areas for industrial, residential and trade uses. This municipio generated the largest number of employees produced by the maquiladora industry on a national level, which has motivated some industry promoters to name Cd. Juarez, the cable harness world capital, given the specialization in the automotive industry.

The location of the maquiladora industry in this city has not only transformed the economic structure, but also has increased the occupation level and income growth. This industry has introduced big changes in the job markets specifically in the job force demand, causing a large population and city growth because of migration.

In the context of industrialization, the alternatives for financing urban infrastructure are analyzed. A diagnostic of the secondary sector working life conditions of the Cd. Juarez is made. As for financing alternatives, different economic and social agents have been identified, and some studies to define investment were conducted.

Publish Date: 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Av. Campestre 100
Col. Campestre Juárez
32460 Cd. Juárez, Chih.
(52 16) 17 57 02 y 17 89 58
(52 16) 18 40 55 Fax

Key Words: Industrialization process, financing, Cd. Juarez, urban infrastructure, Border Industrialization Program.

(28) NAFTA AND THE REGIONAL DEVELOPMENT OF THE COAHUILA BORDER

Coahuila is one of the six states with production and employment growth higher than the national average. The border

region of Coahuila, because of its strategic location and scarce development, might play an important role in the medium- and long-term range with NAFTA. The goal of this paper is to analyze the regional development perspectives of the Coahuila border.

The regional development of this area has been presented in a unbalanced way, following the same strategy of the regional development in the national context. It is necessary that the state give more support to the border region because of its strategic location at the north of the state. The support has to be focused in improving the existing infrastructure and creating a new support that permits a balanced regional development.

Publish Date: 1995

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Oficina Coordinadora en Piedras Negras
Progreso y Hacienda #503
Col. Burócratas
26020 Piedras Negras, Coah.
(52 878) 2 76 08
(52 878) 2 50 20 Fax

Key Words: Border region, Coahuila, NAFTA, regional development, national context.

(29) THE SORGHUM TRANSPORTATION AT THE NORTHEAST OF MEXICO

This study analyzed the seasonal impact of the production of this grain on the border transportation system of the Matamoros Tamaulipas region. It presents a perspective analysis based on logistic and transportation chains, considering the situation at a national level, the exterior trade influences, the structure of the industrial demand and the commercialization of the grain. In this analysis the producers', consumers', government authorities', and the transportation system's roles are emphasized.

Finally, a general diagnosis is developed for the movement of this grain and a series of strategic guidelines are presented.

Publish Date: 1992

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Sorghum production, Matamoros Tamaulipas region, transportation system, logistic chains, seasonal production.

(30) LAND TRANSPORTATION AND DECENTRALIZATION

The document identifies the railway as a decentralized element in the actual economic context. The integration of financing and transportation is a relevant topic in the planning and programming of the border transportation process. Truck transportation and train modes are analyzed in the decentralization process of the national territory activities. This report emphasizes the federal public service of truck transportation and its development in the recent years. It examines the highway infrastructure as a pre-requirement of the decentralization and it takes into consideration the enterprise, tariff, financing, and operative points of view, that contribute in this process, as well as in the freight and passenger movements.

Publish Date: 1988

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
 Av. Popocatepetl 506 B
 Col. Xoco
 03330 México, D.F.
 (525) 688-7629 y 688-7603
 (525) 688-7608 Fax

Key Words: Train and truck transportation roll, highway infrastructure analysis, freight and passenger movements.

(31) HIGHWAY MASTER PLAN DRAFT STATE OF SONORA

This document contains a detailed diagnosis of the existing conditions of operation of the highway system in Sonora. It defines the needs and actions for the design, construction, maintenance, modernization, and extension of the highway network in the short and medium terms. This report helps as a base to guide the prioritization of projects. It covers the following aspects: general and socioeconomic characteristics of the State of Sonora, zonification, development nodes and desirable links. It defines the basic network, prognostic-diagnosis network, planning, programming and action evaluations.

Publish Date: 1995

Source: Centro SCT Sonora

Contact: Centro SCT Sonora
 Rosales y José Ma. Avila
 Col. Las Palmas
 83000 Hermosillo, Son.
 (525 62) 13 40 05 Tel. y Fax

Key Words: Highway network, socioeconomic characteristics, zonification, links, diagnosis, prognostic, strategies, actions.

(32) MIGRATION STATISTICS

This is a monthly publication that contains information on the relevant aspects of the international migration to Mexico. It presents statistics on migratory flow, migratory applications, expelled and rejected foreigners from the national territory, returned Mexican nationals from the United States, and disputes presented by the National Migration Institute related to legal applications on the subject and the fight against undocumented traffic.

The Volume II No. 1 version of January of 1996 is of a preliminary nature and is subject to revision.

Publish Date: January 1996

Source: Instituto Nacional de Migración

Contact: Instituto Nacional de Migración
Chapultepec 284 7o. piso
Col. Roma
06700 México, D.F.
(525) 626-7249
(525) 626-7236 Fax

Key Words: Migration statistics, migration flow, tourist flow, immigrants, nonimmigrants, immigrates, temporal entries, migratory applications, expelled.

(33) TOPOLOBAMPO PORT STATISTICS

The statistics from January to August 1992-1993 contain commentaries about maritime cargo movements, importation commodities, and coastal sailing, and presents charts and graphics that contain the global accumulated movement, coastal sailing and high sea importation tons, exportation tons, entries and exits, cargo tonnage by type, general cargo management. Products are recorded by main commodity of high sea and coastal sailing, origin-destination, users, and operated commodities. Cargo movements are recorded by flag and number of arrivals on high sea and coastal sailing.

Publish Date: August 1993

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Administración Portuaria Integral de Topolobampo, Sin.
(52 686) 20 037 / 20 127
(52 686) 20 494 Fax

Key Words: Port statistics, TOPOLOBAMPO, imports, exports, traffic, high sea, coastal sailing.

(34) STRATEGIES OF THE NUEVO LEON PACT 1991-1997

The document is made up of three chapters. Chapter 1 covers the challenges and perspectives in the medium-term. Chapter 2 establishes the pact and the compromise to improve quality of life for the people of Nuevo Leon. Chapter 3 outlines the strategy according to the following 7 theses of the government: 1) internationalization of Nuevo Leon, 2) Decentralization and regional development, 3) Ordered growth, 4) Improvement in the quality of life, 5) Security and justice, 6) Modernization of the finances and the public administration, and 7) Democracy and solidarity. With regard to the planning and programming process of the border transportation, the internationalization of Nuevo Leon establishes the location of Nuevo Leon as a strategic zone from the point of view of NAFTA. This document analyzes the state highways and railroads establishing the necessity to consolidate the development of the border port of Columbia/Solidaridad and identifies the comparative advantages that the train offers. It also emphasizes the highways of the basic network, the need to promote the regional communication in air terminals, and the need for infrastructure development to provide more facilities for transportation.

Publish Date: March 1992

Source: Gobierno del Estado de Nuevo León

Contact: Gobierno del estado de Nuevo León
Dirección General del Sistema de Caminos de Nuevo León
Ocampo y Zarco, Col. Centro
64000 Monterrey, N.L.
(528) 344-0550

Key Words: Strategies, pact, Nuevo Leon, 1991-1997, internationalization, NAFTA zone, land transportation.

(35) URBAN STRUCTURE AND GLOBALIZATION IN THE NORTHERN BORDER THE NUEVO LAREDO AND LAREDO TEXAS CASE

This paper was developed based on the results about the urban structure of the city obtained from the research project: The Northern Border Cities of the COLEF. It describes in a brief form the results and tries to identify some of the results on the urban structure of the Cities of Nuevo Laredo and Laredo, Texas that may be the consequence of changes in the economic policy of the country in recent years.

Publish Date: April 1995

Source: Instituto de Investigaciones Económicas. UNAM

Contact: El Colegio de la Frontera Norte
Oficina Coordinadora en Nuevo Laredo
Chihuahua 2509
Col. Guerrero
88240 Nuevo Laredo, Tamps.
(528) 715-1263 Tel. & Fax

Key Words: Urban structure, economic policy.

(36) TECHNICAL EVALUATION STUDY OF THE BORDER BRIDGES IN MATAMOROS

In the technical note proposals to provide a solution to the border transportation problems between Matamoros and Brownsville are identified. Environmental studies are contemplated and alternatives for the railroad access operations are presented. This paper also identifies the international bridges of the Matamoros municipality, by vehicular demand characteristics, tolls, existing problems, their causes and proposed solutions, through expansion of the M&B bridge and the construction of a new bridge.

The study compares the alternatives and makes recommendations. The causes of the existing delays in the Matamoros city urban bridges are analyzed as being caused by the lack of a sufficient number of customs/migration inspectors and considering the origin of the problem as a management problem and not as a lack of road capacity in the bridges. Nevertheless, with the increasing vehicular demand this anomaly prevails in the short-term, making it necessary to increase the road capacity. The study presents an annex list that contains, in addition to other data, the volumes at the international bridges, the demand analysis, capacity and traffic level of service, perspective of the enlargement project, regional plans of Valle del Rio Bravo, location of the bridges and highway accesses, and relocation of the railroad.

Publish Date: November 1994

Source: Gobierno del Estado de Tamaulipas

Contact: Presidencia Municipal de Matamoros, Tamps.
6ª Morelos y González
Col. Centro
Matamoros, Tamps.
(52 89) 12 06 04 / 12 05 02

Key Words: Border bridges, Matamoros-Brownsville, vehicular demand, tolls, access, environmental impact.

(37) INTEGRAL ROAD AND URBAN TRANSPORTATION STUDY OF MATAMOROS, TAMPS.

In this part of the study the integral road and urban transportation policies and strategies of Matamoros, Tamaulipas are established, as well as the identification and evaluation of immediate, short- and medium-term actions, through a proposal that contains the existing road structure. This proposal also outlines the proposed roads with their economic and financing evaluation according to the capacity of the municipio, considering the income and expense projections related to the payment and investment programs. The preliminary action program presents a detailed construction plan and costs with construction periods.

Publish Date: December 1994

Source: Secretaría de Desarrollo Social

Contact: Secretaría de Desarrollo Social
Dirección General de Infraestructura Vial y de Transporte
San Antonio Abad 124 6° piso
Col. Tránsito
06820 México, D.F.
(525) 273-3404

Key Words: Roads, urban transportation, Matamoros, program, investment, construction, costs, execution.

(38) STUDY TO DEFINE THE OPERATION AND VULNERABILITY OF THE BASIC HIGHWAY NETWORK

In the study an analysis of the background is made, the characterization of the integral transportation system, and the basic highway subsystem are identified and the parameters and critical points are defined. Also in this study an evaluation of the conflicting situations are made and scenarios and action strategies are included, identifying the principal highways in the 6 states of the border zone by sections and structures, such as bridges, geographic location, mile posting, construction date, and geometry among others. Also information is defined about the conservation residence (the road or section maintenance crew), the Federal Highway Police district, the daily annual average traffic, alternative routes to the highways, description of points of conflict in the sections according to the characteristics of main road or regional trunks and the socio-economic impacts in case of deterioration or blockage of the structures.

Publish Date: 1995

Source: Secretaría de Comunicaciones y Transportes

Contact: Impulsora Dinámica Skhema, S.A. de C.V.
 Insurgentes Sur 550 4o. piso
 Col. Roma Sur
 06760 México, D.F.
 (525) 584-0553 y 584-3794
 (525) 574-2198 Fax

Key Words: Operation, vulnerability, highway network.

(39) STUDIES TO DETERMINE THE PROPOSALS OF PRIVATE PARTICIPATION MECHANISMS IN THE CONSTRUCTION OF RAILROAD INFRASTRUCTURE AND THE MODERNIZATION OF THE MANZANILLO- NUEVO LAREDO TRANSVERSAL AXIS (CORRIDOR)

In this document, the potential capacity of the line, the saturation year, the investment projects, the construction of a new line, the sidings and centralized traffic control system are analyzed. This study contains information about traffic density and operation data, as well as the forecast of annual net tons transported for the year 2005.

This document presents substantial information about infrastructure needs in the different sections and priorities that have to be assigned in order to program investments for the future years. It makes an emphasis on the importance of the area served by the railroad to make an efficient transportation system that moves goods and people between the Pacific Coast and the northeast border with the United States.

The border infrastructure program in the area of influence of Nuevo Laredo was considered to evaluate the priorities of infrastructure. The traffic study contains a diagnosis and forecast of freight and passenger traffic in the most important sections. An infrastructure program in the different sections, as well as a quantification of the investment that is required for construction during its execution period was integrated.

Publish Date: 1990

Source: Ferrocarriles Nacionales de México

Contact: Técnicas Modernas de Ingeniería, S.A. de C.V.
 Insurgentes Sur 550 4° piso
 Col. Roma Sur
 06760 México, D.F.
 (525) 584-0553 y 584-3794

Key Words: Transversal axis (corridor), Manzanillo-Nuevo Laredo, Saltillo-Monterrey, Monterrey-Nuevo Laredo.

(40) STUDIES FOR THE IMPROVEMENT AND MODERNIZATION OF THE OPERATION OF THE MEXICO- NUEVO LAREDO RAILROAD AXIS (CORRIDOR)

This study considers the railroad corridor that joins Mexico City with Nuevo Laredo as a fundamental part of the Mexican railroad network, the principal link with the American rail system and the most important rail entrance and exit gate to the United States. It analyzes Mexican external trade with the United States with an origin-destination matrix of the regional flows for the main export and import products, identifying entrance and exit places, as well as the Mexico-United States railroad interchange points.

This study identifies the potential capacity and the occupancy level of the railroad infrastructure, stating its characteristics by sections. It also includes an estimation of the growth perspectives of railroad traffic as a consequence of the NAFTA, analyzes the load by sections, intermodal behavior, and passenger traffic.

This study forecasts freight and passenger distribution by bus and train, from the evolution of the suburban systems of the intermediate cities between Mexico and Nuevo Laredo. Finally, the study integrates an infrastructure program of the different sections up to the year 2005, complementing this program with an economic analysis of the railroad operation and a proposal of the corresponding financing.

Publish Date: 1991

Source: Ferrocarriles Nacionales de México

Contact: Técnicas Modernas de Ingeniería
Insurgentes Sur 550 4° piso
Col. Roma Sur
06760 México, D.F.
(525) 584-0553 y 584-3794

Key Words: Railroad, Mexico-Nuevo Laredo, railroad infrastructure program, operation.

(41) FIELD STUDIES AT BORDER CROSSINGS

These studies developed a model for the commercial land transportation flow between Mexicali B.C. -Calexico, Ca., Nogales, Son.-Nogales, AZ. (Mariposa), Ciudad Juarez, Chih. -El Paso, TX. (Zaragoza-Ysleta), Nuevo Laredo, Tamps. -Laredo, TX. (Bridge Systems, Laredo I y II), Reynosa, Tamps. -Hidalgo, TX (bridge system), Matamoros, Tamps. -Brownsville, TX (bridge system Puerta Mexico and B&M). The model consists of a data collection system focused on the assignment of freight flows over the transportation system to these border crossings in order to obtain vehicle composition and volume data, total processing time of the freight vehicles from the time they arrive at the crossings until they leave them), direction, time of day, distribution of freight vehicles by crossing direction identifying peak hours (HMD), total number of vehicles that cross per day and their composition, origin and destination by city, freight condition, desegregated by product type, tonnage, and identification of problems that arise from this process.

Publish Date: Estudio en proceso

Source: Cal y Mayor y Asociados

Contact: Cal y Mayor y Asociados
Dr. Pallares y Portillo 174 2° piso
Col. Parque San Andrés
04040 México, D.F.
(525) 544-3718 / 544-9139
(525) 544-6463 Fax

Key Words: Commercial flows, truck transportation, traffic counts, processing time, appraisal, origin and destination, peak hours, Mexicali, Nogales, Cd. Juarez, Nuevo Laredo, Reynosa, Matamoros.

**(42) WEIGHT AND DIMENSION STUDY OF VEHICLES THAT
CIRCULATE ON THE NATIONAL HIGHWAYS.
ECONOMIC IMPACTS OF THE 1993 WEIGHT CONTROLS RULES AND REGULATIONS**

This line of investigation actually has a series of four publications related to the same study objective and has an evaluation on the different impacts of the new rules in regard to: total number of extra trips required to transport the normal freight volumes, the impact on the average cost of the truck transportation and the negative effect on the highway conditions, the impact on the freight that is most frequently found on the highways, and the global impacts for all freight (inflation contribution). The comparative values are generated for the hypothetical scenario in which the rules were applicable in 1980. Finally, the most important conclusions and recommendations of this information are outlined.

Publish Date:

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525).688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Truck transportation, regulation, weights and dimensions, economic impacts, infrastructure costs, operation costs, damages, pavements.

**(43) FREIGHT TRANSPORTATION SITUATION ASSESSMENT IN
MEXICO 1990-1991: HIGHWAY MOVEMENTS**

In relation to the planning and programming process of the border transportation in Mexico, this assessment provides details that can identify the user's point of view. The research assists knowledge about some of the problems of transportation in Mexico for the 1990-1991 period. The report is divided into 2 sections. The first section refers to the opinion that the user has about the freight transportation services and the changes that have recently been observed in this sector. The second section refers to the opinion of the service providers, in particular truck transportation providers, before the changes to the truck industry rules and regulations.

Publish Date: 1992

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
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03330 México, D.F.
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(525) 688-7608 Fax

Key Words: Transportation problematic, auto (truck) transportation rules.

(44) RECENT EVALUATION AND TRENDS OF THE TRUCKING INDUSTRY OF THE US

After more than 10 years of regulation in the United States, it is now possible to detect clear enterprise behavior, new commercial practices, strategic alliances, associations, and fusion that are defining a new commercial structure of the truck transportation in this country. This publication succinctly shows which changes introduced by that deregulation are the most relevant, and which factors still stimulate the development of this activity.

Publish Date: 1993

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
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03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Evaluation, trends, truck transportation, de-regulation, United States.

(45) EVOLUTION AND DEPENDENCE IN THE NORTHEAST: THE TAMAULIPAS BORDER CITIES

The northern Mexican cities have a large interaction with the United States border cities. For the border transportation planning and programming process, this study provides an analysis of the problems border cities encounter, in order to establish a process for integral planning oriented to find alternatives for better development. This analysis is based on a deep knowledge of the social, economic, physical processes and a general knowledge of all other processes that deal with the border cities. With this methodology the existing regional structure of the Tamaulipas border zone is analyzed and the cities near the Rio Bravo are studied. The impact of the establishment of a free zone and its consolidation, the trade composition, the establishment of capital and the trade route of rail lines from United States that enters the Mexican territory through Nuevo Laredo with a destination in Monterrey and Saltillo are also evaluated.

Publish Date: 1990

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Camino al Ajusco 20 nivel 3
Col. Pedregal de Santa Teresa
01000 México, D.F.
(525) 645-0370 ext. 4155

Key Words: Border cities, Tamaulipas, evolution, dependence, northeast, border zone.

(46) LOCATION FACTORS OF THE EXPORTATION MAQUILADORA INDUSTRY IN MEXICO

From the middle of the 60's to the present, the maquiladora exportation industry (IME) in Mexico, has become established primarily in the border zone with the United States (USA). The main cities for this industry are: Tijuana, Mexicali, Cd. Juarez, and Matamoros. The preferred location along the USA-Mexico border, is evidence of the relation between IME and the USA. However, due to improvements in the industrial and urban infrastructure, and the recent improvements in communication systems, flexible methods of production, and in production technology, have initiated the proliferation of IME in the non-border zones of Mexico.

This study analyzes the following factors which influence IME location: cheap labor, large availability of labor, certain training level, high quality and productivity, absence of labor-union movements, absence of ecology regulations, lower costs of transportation, communication, raw materials, management and control of the activity, tax advantages, temporary importation of machinery, equipment, and vehicles, speed in customs paper work, proximity to the world's largest market, low energy costs, and a high regard for intellectual property rights.

Publish Date: 1993

Source: Centro de Investigación y Docencia Económicas, A.C.

Contact: Centro de Investigación y Docencia Económicas, A.C.
Carretera México-Toluca km. 16.5
Lomas de Santa Fe
01210 México, D. F.
(525) 726 90 04

Key Words: Maquiladora industry, exportation, benefits, costs.

(47) MUNICIPAL GOVERNMENT, PUBLIC SERVICES AND THE INSTITUTIONAL DEVELOPMENT IN THE NORTHERN BORDER

Beginning in 1983, the Federal Government has put formal pressure on the municipal governments, so they can have a more active and direct role in the provision of public services.

This paper tries to systemize and analyze information about the effectiveness and efficiency of the municipal administrations of the northern border in fulfilling their functions as a public service. This paper has a more general objective of drawing the profile of change or institutional development performance which has taken place in the seven selected municipios or emphasizing the level of institutional reserve on which the agencies meet. The selected entities are: (Tijuana, Mexicali, Cd. Juarez, Piedras Negras, Nuevo Laredo, and Matamoros), and the services considered were cleaning and garbage recollection, public utilities, street maintenance and construction, and public security.

Publish Date: 1995

Source: El Colegio de la Frontera Norte

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Key Words: Institutional development, public services, systematize, institutional left back

(48) VISITING GROUPS AND TOURIST ACTIVITIES IN TIJUANA

This work is a forecasting study of the tourist activity in Tijuana, beginning with seven analyzed topics to understand the tourist phenomena, in which conceptual settings are considered, that explain the tourist behavior on a regional level in the border context. Analyzing the groups of visitors in Tijuana identifies the existing and future affluence of foreign visitors and emphasizes the importance of Tijuana as a principal location of border crossings along the northern border, emphasizing the fact that it is the international port of entry which records the most of crossings in the world. During the last 15 years it has received 243.3 million crossings in the international ports of entry of San Ysidro and Otay Mesa. Forecasts of the number of foreign crossings up to year 2000 are also presented. International migration, temporal permanency and growth of the migratory flow are also analyzed.

Considering air transportation, the report presents a movement analysis of national and foreign passengers through the Tijuana international airport and also analyzes the movement of passengers and flights in other border cities, including Cd. Juarez, Matamoros, Mexicali, Nuevo Laredo and Reynosa verifying the service supply and relating it to the national total. This report determines the necessity of a new expansion of the Tijuana airport, so it can receive a larger number of passengers and flights.

Publish Date: 1991

Source: El Colegio de la Frontera Norte

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(525) 645-0370 ext. 4155

Key Words: Tourist activities, Tijuana, visitor affluence, border crossings, Puerta Mexico, customs booths air transportation, international migration, migratory flow, temporal permanence.

(49) QUANTITATIVE IMPLICATIONS OF THE OBSERVATION OF MIGRATORY FLOW ACROSS THE NORTHERN BORDER

The numerical volume of Mexican migration to the United States has been a question with no definitive answer. One of the central goals of the Migration Survey of the Northern Mexican Border (EMIF) is the direct estimation of the number of Mexicans that participate in the international migratory flow and migratory flow to the northern Mexican border. The advantages of the EMIF in relation to other sources or indirect methods, is that while other sources are based on hypotheses about the phenomena and the sources in question, the EMIF is the direct observation of the phenomena. An intense dynamic exists related to the movements to and from the border locations, as well as in such temporal aspects as the traveled distances.

Publish Date: October 1994

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Key Words: Migratory flows, northern border, EMIF migration, direct observation, dynamic.

(50) INDUSTRIALIZATION AND URBAN GROWTH: A SPATIAL VIEW

In Cd. Juarez, the maquiladora industry has experienced a large growth modifying the urban configuration. The high migration level which is a consequence of the new industrial park construction, has initialized a large physical growth of the city. This growth causes a deficit in the number of homes as well as in the public services for drinking water, drainage, public transportation, roads, and electricity among others. This document analyzes the impact of border industrialization, employment, and urban growth, the public service distribution, the maquiladora and compares quality of life indicators with variables such as workers living conditions, spatial location, and the infrastructure deficit. Finally, the report presents a methodical annex to determine the index covering infrastructure corresponding to each one of the base geostatistical areas.

Publish Date: 1993

Source: El Colegio de la Frontera Norte

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Key Words: Industrialization, urban growth, spatial view, Cd. Juarez, employment, migration.

(51) STATE OF CHIHUAHUA GOVERNMENT STATISTICAL INFORMATION

This document presents the state economic statistical information and regional indicators of the northern border and the rest of the country. It also contains trade variables of the border states and information about communication and transportation referring to airport cargo and passenger movements, the Chihuahua Pacifico Rail Corridor, state vehicle count, and federal truck movements. It emphasizes general employment data in the border cities, locations of commerce in the state and along the northern border, the maquiladora exportation industry, and a detailed description of the industrial sector which includes mining, construction, financial information, services, and the primary sector.

Publish Date: July 1995

Source: Gobierno del Estado de Chihuahua

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Key Words: Economic statistics, regional indicators, trade, transportation, employment, maquiladora, industrial sector, Chihuahua, Northern border.

(52) ANNUAL REPORT (1994-1995) OF THE SECRETARIA DE COMUNICACIONES Y TRANSPORTES

This report describes the principal actions of the communication and transportation sector during the period between December 1, 1994 and August 31, 1995, in relation with the National Development Plan (1995-2000) and the SCT Working Program (1995).

This report includes sections about highway infrastructure, truck transportation and security, railroads, and ports, maritime transportation, airport transportation and airports, multimodal transportation, communication, and administrative affairs.

It also contains the principal actions carried out in each one of the federal entities related to transportation, communication, and highway infrastructure.

Publish Date: August 1995

Source: Secretaría de Comunicaciones y Transportes

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(525) 530-5766

Key Words: Infrastructure, highway, auto transportation (truck transportation), road security, rail transportation, maritime transportation, ports, air transportation, airports, multimodal transportation, communication.

(53) FINANCIAL STRATEGIES AND URBAN INFRASTRUCTURES FOR THE MUNICIPAL GOVERNMENTS OF THE STATE OF BAJA CALIFORNIA, 1989-1993

This work is a descriptive report on the financing for urban infrastructure and the municipal public services of Baja California, as one of the largest border states.

Its principal objectives include: a) To offer a descriptive scenario of the sources and distribution of resources in the financing of urban infrastructure and the provision of public services; b) To identify the principal structure and normative obstacles for financing; and c) To try to identify, through a comparative analysis, the principal characteristics of the operative agencies in the municipios of Tijuana and Mexicali, that were present in those entities because of the political changes and the reforms made in 1983, to article 115 of the Constitution, and to try to identify the proper characteristics of regional border developments which characterize the state.

Publish Date: October 1994

Source: El Colegio de la Frontera Norte

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Key Words: Economic, regional demography, development poles, north border

(54) HIGHWAY INFRASTRUCTURE INTEGRATION WITH THE URBAN SETTING

This document permits the identification of the highway system framework located in the border zone from Ensenada to Matamoros, to consider the planing and programming of the highway infrastructure in its interrelationship with the urban setting.

Not solving the effects caused by highway penetration in the urban centers may present problems that will reduce the user benefits, which will bring with it this type of high specification highways and important traffic volumes, and also negatively affect the quality and condition of mobility that prevails in populations centers.

The recommendations presented in this work allow identification of the negative effects by means of studies that permit foreknowledge of consequences and have measurements to solve them or lessen the inconveniences of such effects.

Publish Date: 1993

Source: Instituto Mexicano del Transporte

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Key Words: Highway penetration effects, urban centers, mobility conditions

(55) RESCUE PLAN FOR THE TECATE RAILROAD STATION

The historical value of buildings constructed by American companies during the last century is an important cultural asset for the country. This work explains the cultural and socioeconomic meaning of the Tecate Railroad Station. It proposes guidelines for its preservation and rescue by means of a reactivation project for its conservation and use.

Publish Date: November 1995

Source: El Colegio de la Frontera Norte

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Key Words: Cultural patrimony, Tecate Railroad Station, revitalization and rescue project.

(56) THE INTEGRATION OF THE FREIGHT TRANSPORTATION AS AN ELEMENT OF NATIONAL AND BUSINESS COMPETITION

In freight transportation, growing international competitiveness has motivated users, especially in industrialized countries, to recognize the potential of logistics systems, of which transportation is an instrument to increase competitiveness. As a result of that potential and the possibilities offered by liberal regulatory transportation, the user demands high quality service in an environment that pressures service rates to keep low.

To resist that double pressure and to avoid bankruptcy the transportation businessmen could generate economies of scale, make efficient use of the different transportation modes, pursue market penetration based on quality service, and take advantage of economies of density or productivity increases within the organizations.

All these options support integration of intermodal transportation which is evident in the industrialized world, but not yet common in developing countries, specifically in Latin America.

Because of this lack of integration, a favorable framework for transport integration demands changes in the legal framework, the corresponding regulations, and the institutional framework. Such changes would favor the development of specific services, investment in infrastructure and proper equipment, consolidation of telecommunication and computer science support, and search for appropriate organizational models. Each working area includes a large number of actions which together can form a freight transportation development program in each country.

Publish Date: 1990

Source: Instituto Mexicano del Transporte

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Key Words: Integration, freight transportation, competitive

(57) JUST IN TIME ORGANIZATION IN THE NORTHERN AUTOMOBILE INDUSTRY, NEW PATTERNS OF EFFICIENCY AND LOCATION

The main automobile plants and auto parts producers are identified in this study along with their location, national sales, exportations, and total sales. This investigation was done with internal company information and interviews, with 27 producers from the northern part of Mexico and 22 from the central region, between 1991 and 1992.

This report analyzes the economic and industrial geography generated by production patterns and specialization of auto parts products. This specialization has integrated the national producers along the border in order to increase international competitiveness. The causes and effects of location of American automobile companies and their Northern Mexican suppliers are also analyzed. The effects of the introduction of the Just in Time (JIT) system and the efficiency of exportation plants through a flexible operation with production capacity ordered using programmable machinery are studied.

Publish Date: 1995

Source: Centro de Investigación y Docencia Económicas, A.C.

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Key Words: Automobile industry, location, efficiency, productivity, just in time, flexible production.

(58) THE CD. JUAREZ URBAN PROBLEM, A CONDENSED SOLUTION?

The social and economic actors expose the urban problems of Cd. Juarez. These problems include its geographic location relative to the USA which has accelerated its industrialization process, and high demographic growth which has translated into a strong lack of coverage in the urban infrastructure. The city also cannot satisfy the new demand for public services. Others involved with the maquiladora industry complain of the bad technical quality of the installed infrastructure in some industrial parks, and of provided maintenance lower than the requirements. In the present work, different investigation techniques were used, and questionnaires and surveys were applied. The perception of the urban problem was analyzed by different social and economic agents, including the general public, the municipal governments, the maquiladora managers, and the industrial park promoters. To conclude, the work presents series of questions about urban problems in Cd. Juarez.

Publish Date: April 1995

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Key Words: Cd. Juarez, urban problem, border cities, industry

(59) LAND USE REGULATION IN TIJUANA 1984-1990

The objective of this work is to analyze the level of implementation of regulation for Tijuana land use and the mechanisms of interrelation between the urban agents and the recommended institutional structure, including the urban activities in search of a special location.

This is carried out by a document analysis to study the urban planning problem and the institutional framework, so later, with a Geographic Information System, it is possible to analyze the urban development of the city and the pattern of spatial activity (residential, commercial and industrial) between 1984 and 1990.

Publish Date: September 1994

Source: El Colegio de la Frontera Norte

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Key Words: Regulation, urban growth, Tijuana, institutional structure, urban activity.

(60) NORTHERN BORDER CITIES

The project objective is to study the recent urban transformations in six cities along the Northern border (Tijuana, Mexicali, Nogales, Nuevo Laredo and Matamoros). A diagnostic of the urban structure is established, as well as the interurban and intraurban growth trends in the industrial production centers of the social urban groups, and the advantages and disadvantages that are offered for regional development.

The employed methodology is based on the conceptual definition of the principal urban structure elements by means of analysis techniques to measure their hierarchy and to establish their spatial distribution. Such elements are centrality, socio-spatial hierarchy, and economic-spatial structure, which includes employment density, specialization, spatial rentability, and infrastructure.

Both common and different aspects in the structure and function of each city are shown. All of the studied cities have an urban center created from the border crossings with commercial and service activities, and with a common characteristic in the appearance of the industrialized process (via maquiladora) which influenced the formation of the urban space.

Publish Date: August 1994

Source: El Colegio de la Frontera Norte

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Key Words: Urban structure, urban development, urban index, spatial distribution, centrality, socio-spatial hierarchy, economic-spatial structure.

(61) THE U.S. ANTI DRUG AND COMMERCIAL POLICIES ALONG THE NORTHERN MEXICAN BORDER

This study analyzes the background relationship between trade and drug smuggling along the Mexico-United States border. It evaluates the work of United States Customs in relationship with trade and drug smuggling policies, and their impacts on economics, politics, and society, studying with particular interest the process at the San Diego, Nogales, El Paso and Laredo crossings.

To analyze, evaluate, and identify the preceding, interviews with regional customs directors and federal functionaries of Washington, DC were made. The goals of these interviews was to determine the functions of United States Customs, opinions about its functions, the percentage of commercial traffic that is subject to secondary inspection by the customs personnel, links of customs with the private sector, opinions about the bureaucratic cooperation between customs and the rest of the federal border agencies, alternatives to achieve better communication, and coordination with the Mexican authorities. The collected statistics of 18 northern Mexican border customs offices were analyzed, eight crossings in the Laredo, Texas district, a district of value in Texas exportations to Mexico. This data permits the establishment of the economic integration of perspectives and the commercial crossings. The joint problem of drug smuggling and commercial policies at the border is a very important challenge for the regional participants in the process.

Publish Date: 1995

Source: El Colegio de la Frontera Norte

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Key Words: Drug smuggling and commercial policies, borders, customs, Texas exportations.

(62) GENERAL EXPORTATION TAX LAW

This document is applicable to commodity flows that are exported from Mexico through the border crossings. This document determines, in 98 chapters, the general tax that the exportation commodities will generate according to the corresponding tariff. Each chapter has the code, the commodity and service description, the unit of measure, and the "ad valorem" tax.

This work also establishes general and complementary rules for tariff application. The tariffs in the First Article of this law are divided into 22 sections, not affecting the numerical codes in the tariff fractions. The tariff classification criteria are of an application and compulsory character.

Three transitory articles are presented. The second one establishes that from the time the General Exportation Tax Law is in effect, its predecessor, published in the Federal Official Diary on February 8, 1988, is annulled.

Publish Date: December 22, 1995

Source: Secretaría de Comercio y Fomento Industrial

Contact: Secretaría de Comercio y Fomento Industrial
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Col. Hipódromo Condesa
06170 México, D.F.
(525) 211-0036 y 286-1035

Key Words: Exportation, laws.

(63) NAFTA NEGOTIATIONS

This book describes the trilateral agreement of NAFTA and considers freight transportation as a strategic sector because it is an intermediate basic resource. It analyzes the actual Mexico-United States situation referring to infrastructure, equipment for auto (truck) transportation, railroads, mode structure, highway and railroad junctions, traffic route structure, the commodities, and the institutional setting. In this context, the influence on the increase on domestic prices of products generated by the inefficiencies that are present in the transportation sector, as well as the existence of a structural monopoly in the market for their services, constitutes a burden for the other economic activities. The service providers are waiting for the opening of external competition in which the user's interests and the general economy are predominant. The study points out that the tax treatment of the transportation income should be harmonized with national requirements. Finally, it analyzes the transborder operations in which the inter-regional differences will be accentuated when new companies locate in the Northern Mexican States.

Publish Date: March 1995

Source: Impresora Publi-Mex, S.A. de C.V.
Calzada. San Lorenzo 279-32
Delegación Iztapalapa
México, 13 D.F.

Contact: Editorial Mc Graw-Hill / Interamericana de México, S.A. de C.V.
Atacomulco 499-501
Fracc. Ind. San Andrés Atoto
53500 Edo. de México

Key Words: NAFTA, negotiations, transportation, freight, infrastructure, equipment, truck transportation, railroads

(64) THE BORDER PROGRAMS IN THE HISTORY OF THE NORTHERN BORDER DEVELOPMENT

This document analyzes the air pollution by toxic gases produced as a result of the combustion of gasoline, chemical industrial waste, and domestic and industrial garbage burning. It also describes the pollution of water and soil by oil and its products, insecticides, fungicides, herbicides, detergents, industrial waste, and heavy metals. This pollution affects human beings through food.

The ancestral practice of forest demolition destroys soils, and the burning of forest pollutes the air, producing an artificial desert, the effects of which are added to the natural process that originates with a lack of rain.

The toxic garbage consists of non-biodegradable disposals and nuclear combustible waste, and it is principally generated in industrialized countries. Mexico, Guatemala and El Salvador are the only countries that still accept the importation of this kind of garbage.

This study promotes sustainable development through the application of politics linked to the preservation of the environment, and combats the characteristic plunderer development of third world countries. It promotes recycling of industrial products such as glass, paper, aluminum, copper, zinc and lead. For domestic and agricultural garbage it promotes their conversion to a natural fertilizer.

Publish Date: Special Number 1994

Source: El Colegio de la Frontera Norte

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Key Words: Pollution, effects, toxic garbage (waste), sustainable development, recycling.

(65) THE GEOGRAPHIC INFORMATION SYSTEMS AND TRANSPORTATION

The transportation system because of its territorial manifestation as a human activity and a means of regional articulation and integration, is considered a dynamic geographical multi-relational phenomenon. This is why the spatial analysis of transportation is inobjectable. But because of the interrelationship of variables implicated, and because of the need of cartographic expression, it results in a complex and time-consuming activity.

In this document a theoretic framework is presented that defines geographical information systems (GIS), as a tool sustained in the development of computer science, useful for supporting spatial analysis and decision making. Within this framework, the feasibility of applying GIS technology to different points surrounding transportation is explored and the utilization of proper areas for application are presented.

With this aim, the context that defines the national transportation system is stated. The instrumentation requirements for a GIS in the transportation sector are discussed as well as the principal characteristics of its function and use in order to derive the definition and establishment of several studies capable of being aided by GIS.

Publish Date: 1992

Source: Instituto Mexicano del Transporte

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Key Words: Geographic Information system, transportation.

(66) MANUAL FOR THE BORDER TRUCK TRANSPORTATION OPERATOR AND FOREIGN INVESTORS IN MEXICO WITHIN THE NAFTA FRAME WORK

This manual contains the background information and agreements for the opening of NAFTA, pertaining to border trade between Mexico and the United States, in which companies from both countries could make freight deliveries and pickups at the border states. Driver access requirements, time of validity and time of stay in Mexico are established for the freight operations of the northern Mexican border states. Import permit requirements are established for freight, as well as the description of the inspections by the Procuraduria General de la Republica and the Ministry of Agriculture. The requirements to import explosive and dangerous materials and dangerous wastes subject to customs law, environmental law, and explosive and firearms law are mentioned.

The vehicle access requirements are contained in the customs inspection. Disposal of vegetable health material, temporary importation of tugging equipment, permission to operate freight transportation services, as well as other authorizations such as the transportation of radioactive substances are established in this report.

Rules for foreign investment in Mexican enterprises which operate interurban passenger transportation, tourist transportation, or international freight transportation in the Mexican territory are also established.

Publish Date: December 1995

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
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(525) 684-0638 / 684-0757

Key Words: Manual, truck transportation operating systems, border states, NAFTA, transborder trade, permits to operate truck transportation.

(67) TRANSPORTATION SECTOR STATISTICS MANUALS

These documents contain general statistics of recent Mexican transportation evolution in relation with the national economy. The information is presented by transportation mode by weight and total values moved for domestic freight and passengers, as well as the country's trade movements, showing commercial interchanges with the different economic blocks and principal commodities. Also infrastructure characteristics and available national equipment are provided.

These reports present the evaluation of public investments in the sector during the previous year. They incorporate average prices of infrastructure and the corresponding equipment for different transportation modes, and establish a chronological relation of all legal measurements and dispositions, implemented in the previous years and oriented to promote the sector modernization.

Publish Date: 1989(data of 1976-1986), 1991 (data 1980-1989), 1992 (data until 1990), 1993(data 1991), 1994 (up to 1992), 1995 (data 1988-1993)

Source: Instituto Mexicano del Transporte

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Key Words: Transportation modes, total domestic freight movements, and in the trade, passengers, infrastructure, equipment, investments, judicial dispositions.

(68) JOB MARKETS IN THE MAQUILADORA EXPORTATION INDUSTRY

This publication is a synthesis of the research report for the labor training project, to support the modernization of production machinery and to participate competitively in the commercial expansion.

Today the maquiladora exportation industry (IME) is the second highest source of foreign currency, after the oil industry. With its 500,000 jobs it forms approximately 20% of the Active Economic Population (PEA) of the manufacturing industry on a national level. The research was conducted at the border cities of Tijuana, Cd. Juarez and Monterrey due to the economic importance of the (IME). Studies of the PEA in these cities, IME job offers, employment demands, occupational structure, labor conditions, training at the maquiladora plants, and the links and interchange between the educational sector and the maquiladora industry are made. The results of this research reflect in the number of persons that were trained internally: 5 of each 10 in Tijuana; 9 of each 10 in Cd. Juarez; and 7 of each 10 in Monterrey. This information is similar to that collected directly and indirectly. The document presents a series of graphics and charts of the occupied population according to the economic activity sector. In the appendix, a methodology of the probabilistic sample survey in maquiladora factories is provided.

Publish Date: 1991

Source: Secretaría del Trabajo y Previsión Social

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 Periférico Sur 4271 A Planta Baja
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Key Words: Job markets, maquiladora industry, commercial opening, border cities, probabilistic sampling, Tijuana, Cd. Juarez, Monterrey

(69) TERMINAL BUS MOVEMENT

This publication presents statistical information about the movement of passengers using the interurban transportation bus service in 86 bus stations in Mexico. This information contains the number of bus trips from terminal to terminal. The information is desegregated by type of service and provides data about the number of transported passengers by bus, as well as a criteria of the seasonal demand variations.

Publish Date: 1988,1991

Source: Instituto Mexicano del Transporte

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Key Words: Movement, buses, terminals, transported passengers, interurban transportation of passengers in Mexico

(70) WOMEN, MIGRATION, AND MAQUILADORA IN THE NORTHERN BORDER

The nine studies that integrate this volume constitute a wide reflection that is dispersed geographically and analyzes Tijuana and Cd. Juarez as urban points that are part of the Mexican border zone with the United States. This work emphasizes that in 1990, 16.3% of the total Mexican population lived in the border states. It analyzes the fact that the border region presents a different population dynamic than that of the rest of the country. It makes an evaluation of the demographic imbalance and the social consequences it brings.

This work studies labor and migratory dynamics, in which Tijuana and Ciudad Juarez stand out because of their intense Mexican migration, that corresponds to millions of compatriots trying in all ways to incorporate the productive activities of the United States. Tijuana is characterized for an undocumented migration from the center and south of the country, and Cd. Juarez for an intense transmigration where the feminine participation is similar to the masculine. Both interact with a complicated convergence of currents: internal migration, international migration, transmigration, migration (temporary or permanent) of documented and undocumented legal and illegal people. In this temporary spatial dimension, two realities of the feminine participation are presented: the northern border migration and the northern border maquiladora.

Publish Date: 1995

Source: El Colegio de México y El Colegio de la Frontera Norte

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Key Words: Women, migration, maquiladora, northern border, Cd. Juarez, Tijuana, dynamic labor.

(71) CIUDAD JUAREZ, CHIHUAHUA URBAN INFRASTRUCTURE, FINANCING ALTERNATIVES AND WELFARE LEVELS

To develop this document a geographic information system was used. Cd. Juarez was divided in 4 sections using the railroad lines as a reference.

The first experiences in finding financing sources for urban infrastructure are made. Donations by the Juarez Maquiladora Association (AMAC), the housing construction programs by the maquiladora companies, and the North American Development Bank (NADBANK) provided the most.

The requirements of each one of the northern border cities have been analyzed, identifying that the largest part of the investments, approximately 9 billion dollars, was provided to the municipalities of Juarez, Matamoros, Mexicali, Nogales, Nuevo Laredo and Tijuana. This study develops the topic related to the experiences and alternatives for productivity financing by private groups in Ciudad Juarez, Chih.

Publish Date: 1994

Source: El Colegio de la Frontera Norte

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(52 16) 18 40 55 Fax

Key Words: Welfare, financing alternatives, urban infrastructure, Cd. Juarez

(72) NEW TRANSPORTATION TECHNOLOGIES; SOME PERSPECTIVES AND IMPLICATIONS FOR MEXICO

This work presents the principal areas in which transportation technology is required and describes the areas considered relevant, are currently at use in the world, and will be of use in the future.

The principal generating forces of technology changes in modern transportation are also identified. Different considerations related to the application of transportation technologies in Mexico are made, with some conclusions and general recommendations.

Publish Date: 1993

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525) 688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Transportation technology

(73) TAMAULIPAS STATE DEVELOPMENT PLAN 1993-1999

This report contains a general diagnosis of social, economic, demographic, political, infrastructural, national and international relational aspects of the State of Tamaulipas. The diagnosis establishes the objective of building a "New Tamaulipas" with the "hand by hand" strategy to reach modernity.

To obtain the objective of reactivating the state economy, the development of agriculture, cattle raising, fishing, aquaculture, industry, national and international trade, and tourism will be promoted. In the specific case of transportation, the highways will be modernized, and the Matamoros-Tampico intracoastal channel development will be supported.

In order to reach the objectives and social goals, job creation, increasing the population's quality of life, culture, art, sports, health, security, justice, urban equipment, and environmental protection will be given priority.

The plan recognizes the State Border Region as a locus of attraction of population and of national and international investments. These characteristics have been intensified because of economic globalization, trade, and NAFTA. This is the reason why the plan includes chapters to combat deficiencies and to increase public services in order to foster the free flow of capital to the state.

Publish Date: 1993

Source: Gobierno del Estado de Tamaulipas

Contact: Gobierno del Estado de Tamaulipas

Key Words: Tamaulipas, state development, plan.

(74) PIEDRAS NEGRAS, COAH. DIRECTION OF URBAN DEVELOPMENT PLAN 1992-2012

In this document the economic border activity is identified within a microregion where important commercial transactions take place. A pedestrian and vehicle flow analysis across the international Eagle Pass-Piedras Negras bridge and its projections for the future are made, taking into consideration the requirement of a new international bridge that permits the fast circulation of people and goods in view of the modernization of the commercial activity between these two countries. The border development presents the physical-spatial interrelation of Eagle Pass and Piedras Negras, that is carried out by an international two-lane bridge. The short-term construction of another bridge is necessary, considering the highway network, railroad, and the railroad bypass to San Antonio which are fundamental factors for an efficient and direct communication.

The diagnosis analyzes the road systems and transportation in the medium-term (1996-2002) and the long-term (2002-2012), based on the programming level of the actions and goals of the interurban road and transportation system. Studies for the relocation of the railroad terminal, relocation studies the enlargement of the bus terminal and the construction of the freight terminal among others are considered.

Publish Date: April 1993

Source: Gobierno del Estado de Coahuila

Contact: Presidencia Municipal de Piedras Negras, Coah.
16 de Septiembre s/n
Col. Centro
Piedras Negras, Coah.
(52 878) 25 108

Key Words: Directing Plan, Piedras Negras Coahuila, pedestrians, vehicles, international bridge, Eagle Pass-Piedras Negras

(75) NUEVO LAREDO TAMPS. MUNICIPAL DIRECTION OF URBAN DEVELOPMENT PLAN 1993-2010

The goal of this document is to guide the growth of Nuevo Laredo, Tamps. in an ordered manner. It defines the rules for reserve delimitation of street spaces, communication, transportation, infrastructure, and public services. This document is divided into 5 levels: Background, Normativity, Strategy, Programming, and Instrumentation.

The programming and corresponding level limits and coordinates the participation and responsibility of the public, social, and private sectors and integrates the subprogram projects of planning, urban land, infrastructure, equipment, roads, transportation, environment, natural environment, and urban image programs.

Publish Date: November 1993

Source: Gobierno del Estado de Tamaulipas

Contact: Gobierno del Estado de Tamaulipas
Dirección de Planeación del Municipio de Nuevo Laredo, Tamps.
Nva. Planta Potabilizadora de Agua 2o. piso
Nvo. Laredo, Tamps.
(52 87) 13 58 36

Key Words: Nuevo Laredo, Urban Development plan, border transportation.

(76) CHIHUAHUA STATE DEVELOPMENT PLAN 1992-1998

This state plan was structured in 3 parts. The first part contains a general view of the situation and the events that characterize the national and international ambit, with its characteristics and potential. The second part establishes the "quality pledges" that the state administration has made with the society, due to an agreement and a service mission based on four objectives to improve the quality of life of the people of Chihuahua. In the third part, the strategies of seven major themes are presented. In the regional integration, because of NAFTA and specifically in the Mexico-United States border region, Chihuahua has with a key geographic position, infrastructure, and industrial experience, trained human resources, and a culture open to innovation to take advantage of the industrial, commercial, tourism, and exportation opportunities. In the urban development area problems were identified, determining actions in the urban, rural, and regional communication articulation, based on the modernization and integral transportation reorganization.

Publish Date: 1992

Source: Gobierno del Estado de Chihuahua

Contact: Gobierno del Estado de Chihuahua
 Dirección General de Comunicaciones y Obras Públicas
 Palacio de Gobierno 1er. piso
 Zona Centro
 Chihuahua, Chih.
 (52 14) 10 59 61
 (52 14) 10 31 07 Fax

Key Words: Development state plan 1992-1998, Chihuahua, strategies, infrastructure, transportation reorganization.

(77) COAHUILA STATE DEVELOPMENT PLAN 1994-1999

The state development plan is structured into 9 chapters, in which the challenges and state position within the national and international context are considered. This plan establishes the priority of objectives with general and regional strategies which permit the promotion of investments through action lines. It tries to fortify the communication and production infrastructure with private sector participation, with regional and micro-regional program development for the short, medium and long terms for highway network expansion and the railroad network improvement, with an integrated vision to access the central-east Texas markets and the neighboring states of Nuevo Laredo and Tamaulipas, to expedite exportation with the state of Chihuahua for goods from the northwest of the United States to the northeast of Mexico and with the center of the country, and to improve the access to this important market. This plan also refers to air transportation and freight and passenger transportation.

Publish Date: 1994

Source: Gobierno del Estado de Coahuila

Contact: Gobierno del Estado de Coahuila
 Dirección General de Comunicaciones y Obras Públicas
 Edif. de la Fuente 25280
 Saltillo, Coah.
 (52 84) 34 08 11

Key Words: State Development Plan 1994-1999, Coahuila, strategies, promotion of investment, short, medium, long term, private sector, infrastructure.

(78) BAJA CALIFORNIA STATE URBAN DEVELOPMENT PLAN

The plan is based on laws that sustain the planning and development of a diagnostic/forecast in 14 points from a regionalization. It contains a chapter dedicated to the communication and transportation sector, which includes the border transportation planning and programming process. It identifies the state highway network, land transportation, interurban buses, railways, air and maritime transportation. The plan establishes the general guidelines for urban regional structure consolidation and programs for the short-, medium- and long-terms, considering a planning horizon to the year 2000, and includes a financing, administrative, and law instrument analysis necessary to modernize the highway network, the railroad network and modernize the airports and port systems.

Publish Date: 1990

Source: Gobierno del Estado de Baja California

Contact: Gobierno del Estado de Baja California
 Secretaría de Asentamientos Humanos y Obras Públicas
 Dirección de Proyectos y Costos
 Edificio del Poder Ejecutivo 4o. piso
 Centro Cívico
 Mexicali, B.C.
 (52 65) 58 19 06
 (52 65) 58 11 50 Fax

Key Words: State Plan, Baja California, urban development, communication and transportation.

(79) INTEGRAL ENVIRONMENTAL BORDER PLAN, FIRST STAGE 1992-1994

This document, for the planning and programming process of the border transportation, contains a description of the border area with its physical, demographic, and economic characteristics, in which 14 paired border cities are mentioned. It presents an analysis of the existing regional situation for waste water treatments, final material dispositions, dangerous materials, and air-quality density in the populated areas. This report also identifies the current Mexican and United States efforts for environmental protection through the fulfillment of legislation and the treatment of international waste water. The Integral Environmental Border Plan 1992-1994 in its first stage presents a binational program of border environment protection prepared by the Secretaria de Desarrollo Urbano y Ecología (SEDUE) and the Environmental Protection Agency (EPA), which at the end of 1994 will be revised so that in its second stage, 1995-2000, the binational environmental protection efforts will be evaluated and reoriented towards investment projects related to environment conservation, in compliance with the water, air, land, and natural ecosystem integrated border protection plan.

Publish Date: 1992

Source: Secretaría de Desarrollo Urbano y Ecología

Contact: Instituto Nacional de Ecología
 Río Elba No. 4
 Col. Cuauhtémoc
 México, D.F.
 (525) 553-9481
 (525) 286-6629 Fax

Key Words: Plan, area description, physical characteristics, population, economy, border cities.

**(80) URBAN PLANNING, HISTORY, CULTURAL IDENTITY AND SOCIAL PARTICIPATION:
RAILROAD MATERIAL CULTURE AND THE MUNICIPIO OF TECATE B.C.**

In view of the legal reforms which provide autonomy to the municipios, decentralization and privatization actions exist that can affect the country's cultural resources.

This work analyzes the procedures that reflect problems in democratic power in relation to the management of the rail infrastructure of cultural value in Mexico. Special attention is given to the cultural value that the Tecate B.C. railroad resources have. The preservation of these resources is proposed through a recycling process that relates the identity, culture, and history, taking into consideration the community concern in economic, tourist, and transportation development.

Publish Date: September 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
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Zona Río, Tijuana, B.C.
(52 66) 13 35 35
(52 66)13 35 55 Fax
Correo electrónico: NURED20@BESTSD.SDSU.EDU

Key Words: Municipal actions, cultural resource preservation, railroad infrastructure, Tecate, B.C.

(81) CONNECTIVITY PROBLEMS IN NUEVO LAREDO, TAMPS.

Structural problems in the transportation of goods with a long itinerary are identified in this report. Such problems include the imbalance in the international flow of goods, because 2/3 of the movements correspond to imports and 1/3 to exports, the subordination manifested in the movement of north American trailers without doing loading and unloading movements, worsened by the asymmetry with Mexico because Mexican trailers don't enter the north American territory, and structural problems of Nuevo Laredo's economy. Specific problems were also identified such as the inadequate highway structure and management of many truck transportation companies, the automotive and auto part industry which uses the train for importation, but 70% of the railroad cars return empty from the south to the north, and so much of the exportation of auto parts is made by truck transportation, and in the North American territory by "piggy back".

Among the strategies mentioned to solve the existing problem are the following: improvement of the highway infrastructure between Nuevo Laredo and the cities of Monterrey and Mexico, reduction of the technological and operating differences between the US and Mexico, use of unitary trains, construction of load consolidation platforms, increase in the number of interior customs in both countries; provision of transportation related services; promotion of the just in time service, and separation of the flow of international traffic from the urban and suburban flows.

Publish Date: 1995

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
Col. Xoco
03330 México, D.F.
(525).688-7629 y 688-7603
(525) 688-7608 Fax

Key Words: Connectivity, importation, exportation, problematic, unbalance, asymmetry, subordination, solution strategies.

(82) BORDER LAND PORT DEVELOPMENT WITH INTERNATIONAL NEW BRIDGES PROGRAM

This document is a proposal of the Tamaulipas State Government to the Federal Government to establish the first phase of construction of the Nuevo Laredo III, Matamoros III(west), Diaz Ordaz, Lucio Blanco international bridges, and the completion of Reynosa II. In a second phase, the construction of Reynosa-Pharr, Reynosa-Mission, Matamoros IV(east), and Rio Bravo-Donna are outlined.

This development proposal of border ports with new international bridges is structured into a summary, introduction, justification, proposal, and financing sections integrating information and statistics to support its completion.

Publish Date: 1988

Source: Gobierno del Estado de Tamaulipas

Contact: Gobierno del Estado de Tamaulipas
Subsecretaría de Desarrollo Comercial e Infraestructura
Torre de Gobierno 10° piso
Blvd. Praxedis Balboa s/n
Tampico, Tamps.
(52 13) 12 36 80
(52 13) 12 51 35 Fax

Key Words: program, development, new bridges, justification, financing.

**(83) 1996 STATE INVESTMENT PROGRAM IN THE
COMMUNICATION AND TRANSPORT SECTOR**

For each one of the states (including the borders states) this report lists public investment for the communication and transport sector during 1996, by subsector. It makes a comparison against the 1995 investment figures.

This report identifies specific projects for the major highway network, with goals and totals, which are illustrated in maps.

This report also includes investment programs for different sector agencies: the National Highway Commission, Alimentadores y Aereopistas, Ferrocarriles Nacionales de Mexico, Aereopuertos y Servicios Auxiliares, etc. and the investments for administration and regulation actions.

Publish Date: 1996

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Planeación
Av. Universidad y Xola Cpo. C P.B.
(525) 519-9948 / 519-1270
(525) 530-5766 Fax

Key Words: Public investment, highway subsector, railroad, maritime, air, communication, regulation, administration

(84) COAHUILA STATE HIGHWAY MODERNIZATION AND FINANCING PROGRAM

This program is structured with a strategy that integrates the Torreon-Salttillo highway solution, a Saltillo-Piedras Negras highway development program, a Chihuahua-center region program, a Nuevo Laredo-coal region program, with an investment of 1.8 billion pesos (1996 figures), and with a financial structure from 1996 to the year 2000. Participation is structured into federal, state, and other sources that generate a larger state tax support for highway programs.

Publish Date: February 1996

Source: Gobierno del Estado de Coahuila

Contact: Gobierno del Estado de Coahuila
Dirección General de Comunicaciones y Obras Públicas
Edif. de la Fuente 25280
Saltillo, Coah.
(52 84) 34 08 11

Key Words: Highway modernization program, 1996-1999, financing, Coahuila.

(85) COMMUNICATION AND TRANSPORT SECTOR WORK PROGRAM

This program has as a framework the Communication and Transport Sector Development Program 1995-2000. It contains a 1995 action summary, as well as the principal strategic guidelines for 1996, and the allocated budget for the year. The objectives are described for each of the subsectors (highway, railroad, air, maritime, multimodal, and communication) and for the administrative areas, as well as the main actions to be carried out for 1996. Each state (including the border states) lists the highway infrastructure to be constructed, as well as the principal railroads, ports, and airports to be completed in the appendix of the document.

Publish Date: 1996

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Planeación
Av. Universidad y Xola Cpo. C P.B.
Col. Narvarte
03028 México, D.F.
(525) 519-9948
(525) 530-5766

Key Words: Program, Transport and Communication Sector, highway infrastructure, truck transportation, railroad transportation, aerial, maritime, multimodal, communication.

(86) INTEGRAL STREET AND TRANSPORTATION PROGRAM FOR NUEVO LAREDO TAMPS.

This document is organized into the following chapters: preliminary aspects, data gathering, integral diagnostics, policies and strategies, immediate actions, medium-term actions, alternative solution evaluation, final design list, and urban integral transportation program.

These chapters establish the components of the street and urban transportation system and the interrelations with the border planing and programming process, identifying the operative and physical characteristics of the bridges in Nuevo Laredo, Tamps, and doing vehicle and pedestrian counts, origin-destination surveys, and surveying vehicle and pedestrian fees to establish investment and financing.

Publish Date: January 1993

Source: Secretaría de Desarrollo Social

Contact: Secretaría de Desarrollo Social
Dirección General de Infraestructura Vial y de Transporte
San Antonio Abad 124 6° piso
Col. Transito
06820 México, D.F.
(525) 273-3404

Key Words: Integral program, road (street) and transportation, Nuevo Laredo, bridges, crossings, northern border.

(87) NATIONAL HIGHWAY PROGRAM

The program presents the objective of increasing the highway infrastructure by modernizing the existing roads transforming them into highways, reducing costs and time for users, and supporting the commercialization of different products. This program begins with the National Direct Highways scheme that covers the nation with 9 large trunk routes or transportation corridors, interconnecting urban centers, coasts, ports, airports, industrial, agriculture, tourist, and cattle zones. Is important to note that the transportation corridor of Tijuana-Santa Ana and Acuña-Matamoros integrates the main northern border stretches joining Baja California with Sonora, and Coahuila with Nuevo Laredo and Tamaulipas. This corridor also connects this zone with the United States through international bridges and crossings.

This program contains the national highway network evolution, establishes the financing procedures for the National Highway Program, the construction and investment progress, making an evaluation of the transportation efficiency according to the goals that are achieved and establishes the program benefits. It also contains the national highway in operation and construction with its general characteristics by highways and stretches.

Publish Date: July 1994

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Subsecretaría de Infraestructura
Av. Universidad y Xola Cuerpo A 5° piso
Col. Narvarte
03028 México, D.F.
(525) 519-9035
(525) 530-6384 Fax

Key Words: National Program, highways, highway modernization, trunk routes, transportation corridors, Tijuana-Santa Ana, Acuña-Matamoros.

(88) NATIONAL URBAN DEVELOPMENT PROGRAM 1995-2000

This National Urban Development Program 1995-2000 (PNDU 1995-2000) identifies the northeastern region of the country as an important zone in which important industrial cities and maquiladora centers are located. This zone is a geoeconomic region that extends along the border, and has commercial connections through the Nuevo Laredo-Mexico, Cd. Juarez-Zacatecas and Nogales-Guaymas economic corridors. The Program establishes that the binational metropolis will be promoted in the northern border cities, through infrastructure investment projects with private and public investment satisfying the population needs, and also through the One Hundred Cities Program which includes 12 border cities for their development.

The restructuring of the roadway system and public transportation in the cities is contemplated in the PNDU 1995-2000. Finally, this document contains 4 areas and operation topics which will have close collaboration and coordination with the Secretaria de Comunicaciones y Transportes.

Publish Date: September 1995

Source: Secretaría de Desarrollo Social

Contact: Secretaría de Desarrollo Social
Av. Constituyentes 947
México, D.F.
(525) 271-1836
(525) 515-8384 Fax

Key Words: Border line, economic corridors, Nuevo Laredo-Mexico, Cd. Juarez-Zacatecas, Nogales-Guaymas, binational metropolis.

(89) NATIONAL PROGRAM FOR THE MODERNIZATION OF HIGHWAY INFRASTRUCTURE

This program includes a project construction horizon to the year 2000, having identified modernization actions for the highway infrastructure in different areas of importance for the programming and planning process of border transportation. The existing situation and proposals are analyzed, identifying projects at the border zone from Ensenada, Tijuana, Mexicali, San Luis Rio Colorado, Sonoyta, Santa Ana, Nogales, Cd. Juarez, Chihuahua, Piedras Negras, Saltillo, Colombia, Nuevo Laredo, Monterrey, Reynosa, Cadereyta, and Matamoros among others. This document also has a study on the transportation impacts in the development of the country, analyzing the different transportation modes such as railroads, maritime ports, airports.

Publish Date: August 1991

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Subsecretaría de Infraestructura
Av. Universidad y Xola Cuerpo A 5° piso
Col. Narvarte
03028 México, D.F.
(525) 519-9035
(525) 530-6384 Fax

Key Words: Program, modernity, highway infrastructure, trunk network, toll highways, trains, maritime ports, airports.

**(90) URBAN DEVELOPMENT PROGRAM 1994 FOR THE BAJA CALIFORNIA STATE
BORDER CITIES OF TIJUANA, TECATE, MEXICALI, AND ENSENADA**

In these programs the socioeconomic characteristics of each of the cities from the State of Baja California that are located in the one hundred kilometer zone along the border are presented: Tijuana (publishing date July 1994), Tecate (January 1995), Mexicali (February 1995), and Ensenada (January 1995). The programs are the result of a public consultation to determine the conditions of the cities, identify causes of population growth, and evaluate the effects that these conditions produce, and to identify the municipal urban development trends.

The program goals are to know the urban growing trends, and to define the industrial, living, commercial, service, and recreation area locations, equipment, and new urban road location in the short and long terms.

Publish Date: Tijuana (July 1994), Tecate (January 1995) and Ensenada (January 1995).

Source: Ayuntamiento de Tijuana

Contact: Ayuntamiento de Tijuana
Dirección de Planeación del Desarrollo Urbano y Ecología
(52 66) 88 43 01

Key Words: Tijuana, Tecate, Mexicali, Ensenada, migration, Mexico, U.S. urban development, future projection, population centers, public transportation and roads, concession work, services and goods flows, port

**(91) AUTHORIZED HIGHWAY INFRASTRUCTURE INVESTMENT PROGRAMS FOR THE
BAJA CALIFORNIA, CHIHUAHUA, NUEVO LEON, SONORA AND
TAMAULIPAS BORDER STATES.**

In these documents the authorized investment programs are presented with their projects and subprograms. These subprograms permit identification of the corresponding public works for the border zone of each state. For the years of 1993-1995, these programs have the authorized budget designation for the project, contract number, contractor, or type of contract. For 1996 these programs contain the authorized budgetary designation, the contract being in process, or assignment by administration.

Publish Date: 1996 (internal work document)

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Subsecretaría de Infraestructura
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(525) 519-9035
(525) 530-6384 Fax

Key Words: Projects, highway infrastructure, investments 1993-1996, Baja California, Chihuahua, Nuevo Leon, Sonora, Tamaulipas.

(92) MUNICIPAL URBAN DEVELOPMENT PROGRAMS IN THE BORDER CITIES OF THE SONORA STATE: SAN LUIS RIO COLORADO, NOGALES, AGUA PRIETA, PUERTO PENASCO, CABORCA, GUAYMAS, CANANEA, EMPALME HERMOSILLO, CIUDAD OBREGON, HUATABAMPO, NAVOJOA, AND SANTA CLARA GULF

In these programs the socio-economic characteristics of each of the important cities of the state of Sonora that are within the one hundred kilometer border zone, and the corridors that join the northern border are pointed out. These programs also define the location of the industrial, living, commercial and service zones in these urban centers, as well as recreation areas, urban equipment and new roads.

The programs outline the conditions that permit establishing control and ordinances between the new construction that is required by the population and a rational use of land and also the development and maintenance of appropriate streets for the different city zones. San Luis Rio Colorado, Nogales and Agua Prieta, Guaymas, Cananea, Empalme, Cd. Obregon, Huatabampo, Navojoa and Gulf of Santa Clara (April of 1994), Puerto Peñasco (May of 1995), Caborca (May of 1994).

Publish Date: April 1994

Source: Gobierno del Estado de Sonora

Contact: Gobierno del Estado de Sonora
Secretaría de Infraestructura Urbana y Ecología
Subsecretaria de Planeación Urbana y Ecología
Palacio Administrativo 2o. piso
Tehuantepec y Comonfort
83270 Hermosillo, Sonora
(52 62) 13 21 86 / 17 26 53
(52 62) 13 19 66 Fax

Key Words: San Luis Rio Colorado, Nogales, Agua Prieta, Guaymas, Cananea, Empalme, Puerto Peñasco, Caborca, Hermosillo, Cd. Obregon, Huatabampo, Navojoa and Santa Clara Gulf, urban development, future projection, population centers, roads and public transportation, concession work, services and goods flow, ports.

(93) FINAL DESIGN OF THE NOGALES SON. BY PASS

This document contains a project description of the Nogales, Son. bypass and its traffic projections, as well as the design of the highway bridges and drainage structures, the toll booth location, signaling aspects, environmental impacts that would be generated, a cost estimate, an execution program and conclusions.

It is considered that the projected bypass construction is economically feasible, and its construction will solve various problems generated due to the fast development of the Nogales, Son. border zone.

Publish Date: 1993

Source: Centro SCT Sonora

Contact: Centro SCT Sonora
Rosales y José Ma. Avila
Col. Las Palmas
83000 Hermosillo, Son.
(525 62) 13 40 05 Tel. y Fax

Key Words: Project, toll road, Nogales, modernization plan, border port.

**(94) PRODUCTIVE RESTRUCTURE AND NORTHERN MEXICO TERRITORIAL CHANGE:
CONSOLIDATION OF A SECOND INDUSTRIALIZATION CORRIDOR**

The economic reorganization in Mexico, has been accompanied by a new northern industrialization. This industrial movement from the central metropolitan zones to the northern cities is verified by indicators, such as the relocation and reorganization of key sectors, changes in the dynamics and structures of the labor force, meaningful modifications in the labor relations associated with the relocation, structural changes, and the increase of the peso relative to the border industrialization of the maquiladora.

The proposed hypothesis gathers research experience accumulated in the last years of border industrialization. This hypothesis proposes that the industrial restructure is forming two different territorial zones in some way independent from each other.

Publish Date: July 1995

Source: El Colegio de la Frontera Norte

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Key Words: Indicators, labor force, re location, structural changes, maquiladora industrialization, industrial restructure.

**(95) STATISTICS REPORT OF FREIGHT AND PASSENGER MOVEMENT IN THE
MAIN PORTS OF THE COUNTRY**

This report consists of two statistical documents. The first one, January to July of 1992-1993, contains a comparative study of the freight (cargo) movement and the volumes of operation, through graphical and statistical summaries by cargo type, importation, exportation, movements, coastal sailing, number of ship arrivals, containers managed and their characteristics, passenger movement and the number of cruise arrivals. It also contains a historical graph of total monthly load during the 1989-1993 period. The second document presents traffic statistics in a similar form for the main Pacific, and Caribbean-Gulf ports, that correspond to the period from January to November 1994-1995.

Publish Date: 1995

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Dirección General de Puertos
Municipio Libre 377 7° piso ala B
Col. Santa Cruz Atoyac
México, D.F.
(525) 688-4422 / 604-2431
(525) 688-9264 / 601-1845 Fax

Key Words: Main ports, Pacific, Mexican gulf, Caribbean, statistics, freight(cargo), passengers, importation, exportation.

(96) ENSENADA PORT AND MARITIME PORT SERVICES

This document contains information about the Ensenada Port for 1991-1992 including import and export movements, freight (cargo), coastal sailing, significant commodities, cargo types, ship movements with their characteristics, containers, tourist cruises, as well as location and characteristic of the port infrastructure, equipment, provided services, ship agency directories, and customs brokers, and federal offices.

Publish Date: 1993

Source: Secretaría de Comunicaciones y Transportes

Contact: Secretaría de Comunicaciones y Transportes
Administración Portuaria Integral de Ensenada, S.A. de C.V.
Blvd. Tte. Azueta No. 224
22800 Ensenada, B.C.
(526) 178- 2860 / 8-2775
(526) 174-0 370 Fax

Key Words: Port services, Ensenada, imports and exports, containers and cargo types.

**(97) SOME PRODUCT MOVEMENT SITUATION OF THE
MEXICAN EXTERIOR COMMERCE (TRADE)**

In the planning and programming process of the Mexican border transportation, the analysis and evaluation of trade by each transportation chain is important from a user's point of view. This document identifies the transportation presence and trade flows and analyzes the country's participation in facilitating those flows for important import and export groups for Mexico. Through field interviews, the existing transportation situation for exports and imports was analyzed. Among the exports, the commodities analyzed were: shoes, clothing, marble, and canned goods. Among the imports, industrial resins, herbicides, and shoe leathers were studied. The most outstanding facts of each transportation chain were presented in summary tables.

Publish Date: 1992

Source: Instituto Mexicano del Transporte

Contact: Instituto Mexicano del Transporte
Av. Popocatepetl 506 B
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03330 México, D.F.
(525).688-7629 / 688-7603
(525) 688-7608 Fax

Key Words: Transportation chains, users interviews, trade, commodity movement.

(98) URBANIZATION AND ENVIRONMENT IN A BORDER CONTEXT

This document explores the relationship between urbanization and environment in a border context. This relationship is supported by the fact that the growth of the medium-sized border cities is associated with an intense and sustained degradation of the environment. Apparently the process of urbanization and environmental degradation has been so deep that not only has degraded the objective and subjective conditions that determine quality of life for the border residents and has created growing binational tension, but is conditioning heavily the future possibilities for regional development.

Publish Date: May 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Oficina Coordinadora en Nogales, Son.
Calle Campodónico 303
Col. Granja
A.P. 339-A
(526) 313-04 26
(526) 313-21 85 Fax

Key Words: Border context, medium border cities, urbanization, environment degradation, quality of life, Nogales, binational tension.

(99) LAND USES AND CENTRALITY OF NUEVO LAREDO, TEXAS, AND LAREDO

The interest for the present research starts with the need for understanding the two border cities as one. That is, that it is impossible to interpret one without knowing the other. The interrelations that are generated between the two cities influence in many ways their growth and development.

The principal objectives of this work are 1) to delimit the physical establishment of the principal economic activities of the city, and 2) to try to interpret the factors that conform to the physical organization of such economic activities.

Publish Date: October 1994

Source: El Colegio de la Frontera Norte

Contact: El Colegio de la Frontera Norte
Oficina Coordinadora en Nuevo Laredo
Chihuahua 2509
Col. Guerrero
88240 Nuevo Laredo, Tamps.
(528) 715-1263 Tel. y Fax

Key Words: Border cities, interrelations, growth and development.

(100) MEXICAN RAIL ROADS AS A BINATIONAL HERITAGE

The objective of this article is to define the railroads as a binational heritage. The binational preservation is discussed from the viewpoint of the privatization programs of the railroads in Mexico, as well as the economic phenomena of globalization and regional integration in the world.

Publish Date: July 1995

Source: Park Service e Instituto Nacional de Antropología e Historia

Contact: El Colegio de la Frontera Norte
Abelardo L. Rodríguez #2925
Zona Río
Tijuana, B.C.
(526) 613-3535
(526) 613 -3555 Fax
Correo electrónico: NURED20@BESTSD.SDSU.EDU

Key Words: Preservation, cultural resources, corridors, railroads, binational heritage.

1.3

U.S. Bibliography

This chapter contains the top 98 references chosen for the annotated bibliography. Each reference includes a brief summary or relevant excerpt from the document, the source of the document (either the producer or the sponsoring agency), a contact from which to request further information if desired, and a key word listing. These key words include topics which are covered by each report, agencies involved, and geographical coverages.

(1) **1992 WEIGH STATION INVENTORY OF NEEDS:
COMMERCIAL VEHICLE INSPECTION FACILITIES AND PLATFORM SCALES**

"This Inventory of Needs is intended to serve as the successor to the existing Master Plan for Commercial Vehicle Enforcement Facilities, commonly called weigh stations. It is necessitated by changes in the procedures for funding facility maintenance and improvement projects."

Publish Date: 1992

Source: California Department of Transportation

Contact: California Highway Patrol

Key Words: Weigh station, California Highway Patrol, CHP, commercial vehicle, Caltrans

(2) **A LOOK AT WHAT SOME STATES ARE DOING: BORDER TRANSPORTATION IN TEXAS**

"This article focuses on the Texas Department of Transportation's efforts to serve people along the U.S.-Mexico border with a multimodal transportation system that fills a variety of needs. With free flow of trade in the future, the border has become a transportation focal point. Infrastructure development has been expanded along the border, and a new district along the border has been planned for development. TxDOT will move swiftly throughout the border when new trade agreements and public needs require it; and an International Relations Office has been established in Austin. A 4-lane divided highway network called the Texas Trunk System has been proposed, that will provide direct access to every city in Texas with a population of 20,000 or more, and will connect with major entry ports. To identify other transportation needs, TxDOT has contracted with the Texas Transportation Institute.

Publish Date: 1993

Source: American Association of State Highway & Transportation Office

Contact: E. Willingham
American Association of State Highway & Transportation Office
444 North Capitol Street, NW, Suite 225
Washington, D.C. 20001

Key Words: Texas Department of Transportation, border, multimodal, TxDOT, port of entry, Mexico, United States, AASHTO, Texas Transportation Institute, TTI, American Association of State Highway and Transportation Office.

**(65) ARIZONA AT THE CROSSROADS: STRATEGIC ASSESSMENT:
VOLUME V: ECONOMIC DATA FOR ARIZONA'S COUNTIES**

"This volume of economic data for Arizona's counties has been prepared as a companion report to the *Arizona at the Crossroads: Strategic Assessment* report as a resource for the statewide planning process to be carried out in 1991 as Phase II of the Arizona Strategic Planning for Economic Development (ASPED) project. This volume provides background demographic and economic information at the county level for substate planning groups to use during the strategic planning process. In this volume, the economic data provided by county include:

General Economic Data Clusters (1979-1990)	Data by Key Industrial Concentrations and Clusters (1979-1987)
Non-agricultural Employment (by sector)	Employment by Key Industrial Population Concentrations and Clusters
Personal Income	Percent Growth in Employment by Wage and Salary Income Clusters
Per Capita Income	Relative Concentration of Average Wage per Job Employ- ment by Clusters

Publish Date: April 1991

Source: Arizona Strategic Planning for Economic Development

Contact: Center for Economic Competitiveness
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
(415) 326-6200 (415) 326-5512 FAX

Key Words: Arizona Strategic Plan for Economic Development, ASPED, demographic, SRI International

**(5) ARIZONA-SONORA BORDER PORTS OF ENTRY:
TRAFFIC FLOW, FACILITY DESCRIPTION AND INSTITUTIONAL PROFILE**

"Specific objectives of this study are: (1) to provide a descriptive profile of existing facilities at each port of entry along the Arizona-Sonora border; (2) to compile an institutional profile of the Arizona-Sonora border, including the role of government and quasi-government agencies involved in trade and transportation; (3) to identify infrastructure-improvement plans along the Arizona-Sonora border; and (4) to gather and analyze available statistical data on cross-border traffic."

Publish Date: August 25, 1993

Source: The Federal Highway Administration; Center for the New West

Contact: Office of Community and Public Service
The University of Arizona

Key Words: Sonora, border, port of entry, University of Arizona, FHWA, Center for the New West, transportation, infrastructure

**(66) ARIZONA-SONORA COMPLEMENTARITY:
A GATEWAY BETWEEN THE UNITED STATES AND MEXICO**

"Arizona has set the stage for a new economic relationship with Sonora by developing a innovative economic strategy organized around clusters of related industries. The recently completed Arizona Strategic Planning for Economic Development (ASPED) process identified strategies for ten driving industry clusters and targeted the infrastructure requirements for supporting these clusters...A joint strategy for developing mutually beneficial linkages in the Arizona-Sonora region should have two major thrusts: (1) *Promote linkages between Arizona and Sonora industry clusters*. For example, the combining of Mexican labor and Arizona management and marketing know-how to make products more competitive in global markets. (2) *Develop the necessary infrastructure on both sides of the border to facilitate economic complementarity*. This includes physical infrastructure such as roads, air routes, and telecommunications. It also requires a strategy for developing human resources and deploying technology appropriate to firms in the region."

Publish Date: July 1992

Source: Arizona Economic Council

Contact: Center for Economic Competitiveness
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
(415) 326-6200
(415) 326-5512 FAX

Key Words: Arizona Economic Council, Sonora, United States, Mexico, Arizona Strategic Planning for Economic Development, ASPED, infrastructure, economic complementarity, industry cluster

**(6) ARIZONA-SONORA TRANSPORTATION INFRASTRUCTURE STUDY:
ASSESSMENT OF ARIZONA-SONORA TRANSPORTATION PLANS**

The purpose of this report is to provide a review and assessment of transportation plans developed by the states of Arizona and Sonora. Specific factors considered in the development of the report included "the compatibility of transportation goals and objectives related to interstate transport; consistency of the level of detail and emphasis placed on the plan elements for highway, rail, airports and ports; the compatibility of existing facilities and related plan elements on either side of the international border; plant responsiveness to identified infrastructure needs; and plan responsiveness to stated international transportation goals and objectives." The analysis and conclusions are presented by transportation mode. Issues and opportunities were identified for each mode of transportation that could either hinder or enhance cross-border planning activities.

Publish Date: December 1995

Source: Arizona Department of Transportation; Gobierno del Estado de Sonora; Centro Secretaría de Comunicaciones y Transportes Sonora; JHK & Associates; Collins-Piña Consulting Engineers, Inc.

Contact: Arizona Department of Transportation
Transportation Planning Section
206 S. 17th Avenue
Phoenix, Arizona 85007

Key Words: Arizona Department of Transportation, ADOT, Sonora, planning, infrastructure, compatibility, highways, rail, airports, ports

**(3) ARIZONA TRADE CORRIDOR STUDY:
STRATEGIC OPTIONS FOR ECONOMIC, SOCIAL AND
INFRASTRUCTURE DEVELOPMENT IN ARIZONA**

"The purpose of the Arizona Trade Corridor Study is to gather and analyze information concerning trade-related opportunities, and to identify those opportunities that merit development. A strategy worth pursuing must yield benefits for the State, the region and for the U.S. economy as a whole. Therefore, this Study focuses on statewide, national and international considerations."

Publish Date: August 16, 1993

Source: Arizona Department of Transportation; Arizona Department of Commerce; The Federal Highway Administration; The Center for the New West; The Arizona University Consortium

Contact: The Arizona Department of Transportation; The University Consortium (University of Arizona, Northern Arizona University, Arizona State University and American Graduate School for International Management), and Hickling Corporation.

Key Words: Arizona Department of Transportation, ADOT, Trade Corridor, TRANSNET, Center for the New West, Hickling Corporation, The University Consortium

**(4) ARIZONA'S FIVE YEAR TRANSPORTATION
FACILITIES CONSTRUCTION PROGRAM: FY 1996-2000**

"The Five-Year Construction Program is basically a budget spelling out what Arizona expects to receive in funds from various sources and how it proposes to spend them project by project. Each year the program is evaluated and updated through a comprehensive review process. Public hearings are held to determine the final program. All citizens are invited to attend the hearings and present any questions or comments on the program to the State Transportation Board."

Publish Date: 1995

Source: Arizona Department of Transportation

Contact: Arizona Department of Transportation
206 South 17th Avenue
Phoenix, Arizona 85007

Key Words: Arizona Department of Transportation, ADOT, construction program, transportation facility, highway, air

(7) BACKGROUND WORK FOR CREATION OF A PORT AUTHORITY AND FEDERAL ZONE

"This report identifies the principal concerns arising at the state and national levels in establishing and operating a transborder intermodal transportation facility at or near the Santa Teresa port of entry. At the state level, a review of options related to the formation of a managing authority are explored. Alternative legal, organizational and financing structures are delineated and evaluated through an examination of several case studies, including the New Mexico Border Authority. These findings are used to develop draft legislation to create an intermodal port authority in New Mexico and to assess other structural options available to the State. The possibility of establishing a binational governing authority is included as part of this discussion."

Publish Date: May 31, 1994

Source: Sandia National Laboratories
Albuquerque, New Mexico 87185

Contact: Department of Government
Master of Public Administration Program
Box 30001, Dept. 3BN
New Mexico State University
Las Cruces, New Mexico 88003
(505) 646-4965

Key Words: Santa Teresa, New Mexico State University, Sandia National Laboratories, port of entry, transportation facility, intermodal, binational

(67) BORDER MANAGEMENT: DUAL MANAGEMENT STRUCTURE AT ENTRY PORTS SHOULD END

"The Customs Service and INS are the principal U.S. agencies providing inspection and clearance at U.S. border crossings. Customs is primarily responsible for the entry of goods and merchandise and INS handles the entry of persons. Customs and INS face persistent pressures to meet their enforcement responsibilities while minimizing disruptions to passenger and commercial traffic.

"Customs and INS have a long history of interagency rivalry coupled with ineffective cooperation and coordination pertaining to border crossing operations. These problems still exist today, and are deeply ingrained in the management cultures of these agencies.

"On the basis of historical evidence as well as its recent review of Customs' and INS' operations, GAO believes that the coordination problems at the land border crossings will not be resolved until the current dual management structure is ended."

Publish Date: December 10, 1993

Source: Testimony before the Subcommittee on Information, Justice, Transportation and Agriculture

Contact: United States General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015
(202) 512-6000
(301) 258-4066 FAX

Key Words: United States General Accounting Office, GAO, Customs, INS, inspection, land border crossing, dual management structure

(8) BORDER TRADE ALLIANCE SOUTHWEST BORDER INFRASTRUCTURE INITIATIVE

"For more than one year, the Border Trade Alliance (BTA) has conducted an exhaustive analysis of the infrastructure improvements required by communities, both large and small, along the southwest border of the United States. This borderwide effort conducted by this trade group has generated specific projects. To accomplish this, the BTA has solicited the advice, planning and input of hundreds of business leaders, local government officials, trade groups, academic experts, representatives from the governor's offices of the four southwest border states and economic development officials in 14 southwest border communities. The BTA infrastructure projects described in the following pages address the most critical capital and human infrastructure needs in seven priority categories: ports of entry; airports; education/technology transfer; environment/water and sewer; health; housing; and surface transportation."

Publish Date: February 1993

Source: Border Trade Alliance

Contact: The Institute for Manufacturing & Materials Management
The University of Texas at El Paso
500 West University, Burges Hall, Room 400
El Paso, Texas 79968
(915) 747-5336

Key Words: Southwest, Border Trade Alliance, BTA, Texas, California, New Mexico, Arizona, United States, transportation, infrastructure, air, port of entry, environment

(10) CALEXICO EAST BORDER STATION AND STATE ROUTE 7 BETWEEN THE NEW PORT OF ENTRY AND STATE ROUTE 98

"This document is in the form of a condensed final Environmental Impact Statement/Environmental Impact Report (EIS/EIR). It incorporates the Draft EIS/EIR by reference...Taken together with the Draft EIS/EIR, this Final EIS/EIR fulfills documentation requirements under California Environmental Quality Act as well as National Environmental Protection Act.

This Final EIS/EIR contains four main chapters. Beyond [the] introduction, there is:

- a summary of the Draft EIS/EIR, including a discussion of impacts and mitigation relevant to the identified Preferred Alternative;
- staff-initiated additions, deletions or changes to the text of the Draft EIS/EIR; and
- the complete set of comments received on the Draft EIS/EIR, including a transcript of comments at the Public Forum, along with responses to all comments."

Publish Date: August 6, 1993

Source: U.S. General Services Administration
525 Market Street
San Francisco, California 94105
California Department of Transportation, District 11
P.O. Box 85406
San Diego, California 92186-5406

Contact: Environmental Science Associates, Inc.
4221 Wilshire Blvd., Suite 480
Los Angeles, California 90010-3512
(213) 933-6111

Key Words: Environmental Science Associates (ESA), Calexico, SR 7, SR 98, transportation

(9) CALEXICO/COACHELLA VALLEY/LOS ANGELES RAIL CORRIDOR STUDY

"This study focused on origin, destination, volume, and type of freight crossing the U.S./Mexico border at the Calexico/Mexicali gateway, development of an intermodal transfer station at the gateway and cross border Customs procedures. Other topics [addressed] included a discussion of the potential for, and impediments to, through-rail passenger service across the international border." Key recommendations presented in the study include the following: Caltrans should monitor Mexican rail privatization efforts, coordination for a land-use plan accommodating future rail intermodal facility near the border should be carried out, rail passenger service in the area should be pursued (under certain conditions), and SANDAG and SCAG should coordinate a study regarding the San Diego and Arizona Eastern Railway.

Publish Date: March 1995

Source: California Transportation Commission

Contact: California Department of Transportation
District 11
2829 Juan Street
San Diego, California 92110
(619) 688-6699

Key Words: Calexico, Coachella Valley, Los Angeles, rail, corridor study, Caltrans, California Transportation Commission, Mexicali, border, customs, United States, Mexico, intermodal

(68) CALIFORNIA TRADE AND GOODS MOVEMENT STUDY

Barton-Aschman has recently completed a comprehensive study of trade and goods movement for the State of California, the seventh largest economy in the world. The study examined trade and goods movement to, through and within California and included an assessment of bordering states' and countries' transportation modes of highways, railroads, seaports, airports, pipelines, transmission lines, and telecommunications. Work elements included a review of existing transportation, economic, trade, and other studies relevant to the state's goods movement network for use in this study; an inventory of the goods movement network, including the overall multimodal transportation system, the hubs, corridors, and facilities of the goods movement network, both inside California and connecting with adjacent states, regions and countries; an inventory of current trade and goods movement patterns including intrastate and relevant interstate, and international trade; an investigation of the transportation-related impacts in California of national and international regulatory trade requirements and agreements on trade and goods movement in the state; the development of near-term and long-term forecasts of future trade and goods likely to affect transportation in California and their likely direct and indirect impacts on the economy and transportation needs of California; an analysis of organizational, infrastructure and funding impediments to efficient goods movement within, through and out of the state; and the development of short, mid-, and long-term institutional and investment strategies to improve efficiency of goods movement within, into and out of California.

Publish Date: June 1996

Source: San Diego Association of Governments

Contact: Barton-Aschman Associates, Inc.
100 Park Center Plaza, Suite 450
San Jose, CA 95113
(408) 280-6600
(408) 280-7533 FAX

Key Words: San Diego Association of Governments, SANDAG, Barton-Aschman Associates, Inc., California, trade, goods movement, truck, rail, air, marine port, Caltrans

(11) CAMINO REAL INTERMODAL CENTER INITIAL SITE ALTERNATIVES ANALYSIS

"The evaluation of an intermodal transportation facility in the vicinity of the Santa Teresa Port-of-Entry was initiated at the request of the Joint Economic Development Initiative Team, which was formed to address issues related to economic development in New Mexico. The facility would enable the efficient movement of freight between the United States and Mexico by providing a mechanism for the transfer of goods among the different modes of transportation, including rail, truck and air."

Publish Date: 1995

Source: New Mexico State Highway and Transportation Department
P.O. Box 1149
Santa Fe, New Mexico 87504-1149

Contact: Parsons Brinckerhoff Quade and Douglas, Inc.
5801 Osuna Road NE, Suite 220
Albuquerque, New Mexico 87109
(505) 883-0055

Key Words: Camino Real Intermodal Center, New Mexico State Highway & Transportation Department, NMSHTD, Parsons Brinckerhoff Quade & Douglas, PBQ&D, freight movement, United States, Mexico, rail, truck, air, port of entry, Santa Teresa, economic

(12) CAMINO REAL INTERMODAL CENTER FINAL REPORT

This report provides a detailed synopsis of the feasibility of the Camino Real Intermodal Center project proposed for southern New Mexico. The report covers many aspects of the feasibility consideration, the first of which was the railroads. The second section reviews the interview process and results for the project's marketing plan. Those interviewed include transportation users, transportation providers, and third party providers. Data collection, analysis, and evaluation is reviewed, followed by the financial model and benefit/cost analysis. The report is concluded with a look at identification of potential investors, investment strategies, and a developmental plan.

Publish Date: October 1995

Source: State of New Mexico Highway and Transportation Department
P.O. Box 1149
Santa Fe, New Mexico 87504-1149

Contact: Don Breazeale and Associates
6986 El Camino Real, Suite B
Rancho La Costa, California 92009
(619) 929-9989
(619) 929-9987 FAX

Key Words: Don Breazeale and Associates, Camino Real Intermodal Center, New Mexico State Highway & Transportation Department, NMSHTD, feasibility study

(13) CAPACITY UTILIZATION OF THE TEXAS-MEXICO BORDER INFRASTRUCTURE

"This paper discusses a key topic addressed in the study, namely a capacity analysis of the Texas-Mexico border crossing points. Literature on traffic facility capacity analysis did not reveal methods addressing the special characteristics of a binational environment, and a new capacity analysis method was therefore developed. This method is based on the concept of binational entry system, which takes into account all possible interferences in transborder traffic circulation, and includes all procedures a vehicle undergoes when crossing the border in either direction. This paper documents the development and implementation of this capacity analysis approach, identifying the main causes of existing and/or potential congestion and providing guidelines to improve the system efficiencies. The analysis results are based on a combination of secondary information and primary data collected specifically for this study. They provide insights about key characteristics of the border infrastructure, and enhance the literature on border transportation planning."

Publish Date: 1995

Source: Transportation Research Forum
11250-8 Roger Bacon Drive, Suite 8
Reston, Virginia 22090

Contact: The University of Texas at Austin
Center for Transportation Research
3208 Red River, Suite 200
Austin, Texas 78705-2650

Key Words: Transportation Research Forum, University of Texas, Austin, Mexico, border, infrastructure, capacity analysis, binational

(69) CITY OF LAREDO, TEXAS: COMMODITY FLOW STUDY

"This report presents the results of a Commodity Flow Study (CFS) conducted in Laredo, Webb County, Texas." The objective of the study was to characterize hazardous and non-hazardous commodities storage, transfer and transportation activities in this area. The study was designed to consider the volume of hazardous materials managed and moved through the City of Laredo and to identify transportation modes and routes used to transport these materials. Significant findings include the fact that an extremely high rate of hazardous materials (HazMat) transported through the Laredo area are done so by untrained drivers in poorly maintained trucks with inadequate insurance carrying improperly loaded materials with insufficient documentation. In addition, these materials are transported through all the densely populated major routes in Laredo. It is suggested that HazMat inspection points be established and HazMat transportation routes be designated which might possibly reduce the risk of an incident which could possibly affect the general population.

Publish Date: August 8, 1995

Source: The City of Laredo Local Emergency Planning Committee
The City of Laredo Urban Transportation Study

Contact: Code 3, Inc.
Environmental Services
4201 S. Expressway 77/83
Harlingen, Texas 78550
(210) 421-4911
(210) 421-3593 FAX

Key Words: Texas, commodity flow, hazardous material, Code 3, Inc., The City of Laredo Local Emergency Planning Committee, The City of Laredo Urban Transportation Study

(70) CITY OF LAREDO: ECONOMIC DEVELOPMENT CENTER

This report contains various information about the City of Laredo, Texas, and its status as an economic development center. Data presented includes information about the residents, the geographical location, the activities, and growth of the city. In addition, trade and goods movement flows are considered, along with data regarding planned infrastructure/land use changes and improvements. This report is primarily informational and presents no specific recommendations.

Publish Date: 1995

Source: City of Laredo

Contact: City of Laredo

Key Words: Laredo, Texas, economic development center, infrastructure

(14) COMMERCIAL SURFACE TRANSPORTATION EFFICIENCY AT THE TEXAS/MEXICO BORDER: A LOOK AT THE LAREDO GATEWAY

"As U.S.-Mexico trade experiences growth after the 1993 ratification of the North American Free Trade Agreement (NAFTA) with considerable economic benefits to the State of Texas, a look at the efficiency of transportation services and linkages at border ports-of-entry is a natural step in planning for future infrastructure. Even before the ratification of NAFTA, many ports-of-entry experienced the problem of congestion. The move toward trade expansion amplifies the problem. These inefficiency problems, witnessed by producers and shippers, are found in fuel consumption, substandard transportation infrastructures, dissimilar business practices between Mexico and the U.S., and regulatory practices. This report evaluates the efficiency of moving cargo at the Laredo gateway. The surface transportation modes investigated were motor carriers and railroads."

There are several suggestions offered regarding the improvement of efficiency, one of which involves the establishment of a new bridge and increased intermodal yard capacity for Union Pacific Railroad. In addition, shipment tracking technology needs to improve. At this point, there is no way to electronically track a shipment from origin to destination if it crosses the U.S./Mexican border. If this technology were enhanced, efficiency would increase greatly. Finally, fuel consumption needs to continue be minimized as much as possible for cost management purposes.

Publish Date: July 1995

Source: Texas Transportation Institute

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, Texas 78705

Key Words: Mexico, United States, Laredo, North American Free Trade Agreement, NAFTA, port of entry, transportation, cargo, infrastructure, Texas Transportation Institute, TTI

(71) COMMERCIAL TRUCKING: SAFETY AND INFRASTRUCTURE ISSUES UNDER THE NORTH AMERICAN FREE TRADE AGREEMENT

"The North American Free Trade Agreement (NAFTA) provided, among other things, for the U.S.-Mexican border to be opened on December 18, 1995, for increased commercial truck traffic within the respective border states—four in the United States (Arizona, California, New Mexico, and Texas) and six in Mexico. Before that date, the 11,000 trucks crossing daily from Mexico into the United States were limited to commercial zones along the border. Because there are major differences between U.S. and Mexican trucking regulations and operating practices that could adversely affect highway safety and infrastructure in the United States, we evaluated the major implementation efforts associated with opening the U.S.-Mexican border to commercial trucking. Specifically, we (1) reviewed efforts to make compatible the differing trucking regulations of the United States and Mexico; (2) identified major differences in U.S. and Mexican trucking regulations and operating and enforcement practices that could adversely affect highway safety and infrastructure; (3) reviewed federal and state governments' readiness to ensure that trucks from Mexico comply with U.S. trucking regulations."

Publish Date: February 1996

Source: Report to Congressional Recipients

Contact: United States General Accounting Office
Washington, D.C. 20548

Key Words: Truck, United States General Accounting Office, GAO, Mexico, highway safety, infrastructure, North American Free Trade Agreement, NAFTA, border, Arizona, California, Texas, New Mexico

(72) COMPENDIUM OF EPA BINATIONAL AND DOMESTIC U.S./MEXICO ACTIVITIES

"This compendium represents an effort by the Environmental Protection Agency (EPA) To compile a comprehensive inventory of ongoing United States/Mexico projects receiving EPA funding and/or involving EPA participation. These projects are designed to protect and improve the environment of the U.S./Mexico border area, improve our understanding of the border environment, increase cooperation between the U.S. and Mexico in the environmental arena, and address priority environmental issues of the two countries, both inside and outside the border area. Much of this work is done by state and local governments with EPA grants. Also described herein are recently completed projects and proposed projects likely to be implemented. EPA, in addition, sponsors expert speakers to participate in numerous conferences and workshops in Mexico and in the U.S. in support of the above goals and to share EPA's experiences on environmental protection and management; this is not specifically represented in the compendium."

Publish Date: June 1995

Source: United States Environmental Protection Agency

Contact: United States Environmental Protection Agency
Office of International Activities
Attention: Mexico Team
401 M Street, SW
Washington, D.C. 20460
(202) 260-4870

Key Words: Environmental Protection Agency, EPA, Mexico, United States, border, New Mexico, Arizona, California, Texas

**(73) CREATING A 21ST CENTURY ECONOMY:
ARIZONA'S STRATEGIC PLAN FOR ECONOMIC DEVELOPMENT:
VOLUME III: ASPED REGIONAL TOWNHALLS AND PUBLIC FORUM REPORTS**

"On June 21, 1991, one of a series of regional town halls on Arizona Strategic Planning for Economic Development (ASPED) was convened in the Kingman Chamber of Commerce building. This Town Hall brought together elected officials, business people, economic development professionals, and other community leaders from Mohave County. Similar Town Halls were held during the months of June and July in: Casa Grande (Pinal); Yuma (Yuma/La Paz); Pinetop-Lakeside (The White Mountains); Willcox (Southeast Arizona); Flagstaff (Northern Arizona). This series of six town halls began Phase II of the ASPED process. The purpose of ASPED's Phase II is to introduce the findings of the Strategic Assessment to each region of the state in order to establish and refine the goals and initiatives for encouraging economic development in Mohave County...This document provides a framework for (1) establishing and ranking specific regional and state economic development goals as well as (2) determining specific initiatives that should be taken so as to achieve those goals. Future ASPED Town Halls can use this report for accomplishing these tasks."

Publish Date: November 1991

Source: Arizona Strategic Planning for Economic Development

Contact: Center for Economic Competitiveness
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
(415) 326-6200 (415) 326-5512 FAX

Key Words: Arizona Strategic Plan for Economic Development, ASPED, Town Hall, SRI International, Kingman Chamber of Commerce, Mohave County

**(74) CREATING A 21ST CENTURY ECONOMY:
ARIZONA'S STRATEGIC PLAN FOR ECONOMIC DEVELOPMENT:
VOLUME VI: STRATEGIC FRAMEWORK:
DEFINITION OF ECONOMIC DEVELOPMENT FOR THE 90'S**

"This economic development framework was designed to provide Arizona leaders with a practical guide to the "state-of-the-art" in economic development today...[It] is based on a careful review of innovative approaches and best practices developed by states, communities and regions in the United States and around the world...The economic development framework has two major purposes. The first and most immediate purpose is to provide Arizona leaders in both urban and rural areas with the analytic tools that they can use in conducting a state-wide strategic planning process beginning in 1991. The framework provides a basis for understanding how to examine the key economic development issues facing the state, choose new directions, and develop effective strategies...A second and long-term purpose of this document is to stimulate debate and discussion in Arizona about the goals of economic development and the value of alternative economic development approaches, given the new realities of the economy today. This economic development framework asks a series of fundamental questions that Arizona should be addressing as it enters in the 1990s: What is economic development? What are the foundations for a successful economy? What tools does Arizona have to shape its economic future?"

Publish Date: January 1992

Source: Arizona Department of Commerce

Contact: Center for Economic Competitiveness
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
(415) 326-6200 (415) 326-5512 FAX

Key Words: Arizona Strategic Plan for Economic Development, ASPED, SRI International, economic development framework

**(15) CROSS BORDER CONCERNS IN THE SAN DIEGO REGION ISSUE:
THE NEED FOR NEW BORDER CROSSINGS**

"The San Diego County Transborder Affairs Advisory Board held a series of panel discussions during the summer and fall of 1991 to assess...the need for a new border crossing...In the long run, new facilities will be needed. The question is where and how. This report offers some suggestions...The concept of a binational authority should be explored, but in a binational forum. The County of San Diego should take the initiative in scheduling such a meeting, taking into account these lessons from past efforts." The report also contains recommendations produced by the panel discussions and deliberations by the Transborder Affairs Advisory Board. More High Occupancy Vehicle lanes are suggested, along with the construction of a new port of entry for long-term needs.

Publish Date: January 1992

Source: San Diego County Transborder Affairs Advisory Board

Contact: San Diego County Transborder Affairs Advisory Board

Key Words: San Diego County Transborder Affairs Advisory Board, border crossing, binational authority, California, Mexico, Otay Mesa, San Ysidro

**(75) CROSS-BORDER TRANSPORTATION AND THE
NORTH AMERICAN FREE TRADE AGREEMENT: A CALIFORNIA PERSPECTIVE**

"In addition to other social and economic impacts, this free trade agreement will have a significant impact on the transportation industry and facilities in California. Most of the initial impact is anticipated to be on the transportation facilities in southern California and northern Mexico, especially on the border crossing areas...Since Mexico currently has few rail facilities close to the California border, most of the expected increase in the volume of trade will have to be accommodated by trucks." In order to facilitate trade between the two countries, several measures will have to be taken. Customs' personnel as well as customs' hours of operation would have to be increased, specialized or exclusive lanes for certain types of vehicles should be established, all federal, state and local agencies should coordinate in terms of actual truck inspections and the production of paperwork, incentives such as faster processing and better facilities should be implemented at less congested border crossings in order to attract more commercial traffic, and water transport methods should be used when possible to minimize surface transportation traffic.

Publish Date: August 1992

Source: California Department of Transportation

Contact: Division of Transportation Planning
Economic Analysis Branch
P.O. Box 942873
Sacramento, CA 94273-0001

Key Words: California, California Department of Transportation, CALTRANS, cross-border transportation, Economic Analysis Branch, Division of Planning, North American Free Trade Agreement, NAFTA, Mexico, economic

(16) DONA ANA COUNTY MULTIMODAL FACILITY FEASIBILITY STUDY

"Wilson & Company was requested by Sandia National Laboratories to revise the preliminary design and construction cost estimate for the proposed Multimodal Facility to be located in Dona Ana County, New Mexico, shown in the report entitled "Feasibility Study, Santa Teresa Intermodal Facility" dated 6 January 1993. Wilson & Company coordinated closely with the Southern Pacific Transportation Company, the Atchison, Topeka and Santa Fe Railway Company, Don Breazeale & Associates, the United States Customs, and Science Applications International Corporation, to modify the previous conceptual layouts. Several meetings were conducted to obtain input to facility requirements and operations. This cooperative effort resulted in the streamlined Initial Phase Two Track Layout and total buildout phase Eight Track Layout located in the back of this report. Also, investigation of offsite infrastructure requirements and a review of all existing environmental documents in the vicinity of the facility were completed."

Publish Date: June 11, 1993

Source: Sandia National Laboratories
Albuquerque, New Mexico 87185

Contact: Wilson & Company
P.O. Box 3548
Albuquerque, New Mexico 87190
(505) 254-4000

Key Words: Dona Ana County, multimodal, Wilson & Company, New Mexico, Sandia National Laboratories, Santa Teresa, Camino Real Intermodal Facility, transportation, rail

(17) ECONOMIC AND EMISSIONS ANALYSIS OF INTERMODAL GOODS MOVEMENT FOR THE CALIFORNIA I-40 CORRIDOR

"The College of Engineering Center for Environmental Research and Technology (CE-CERT) at the University of California, Riverside, was selected as a consultant to carry out a goods movement and emissions impact analysis of the California I-40 corridor. The purpose of the study is to analyze several issues associated with intermodal goods movement, specifically to characterize goods movement by trucks as well as railroads into/outside the region, perform a corridor emissions analysis, and to determine the impact of reformulated diesel fuel on the trucking industry. This report also addresses the capacity and level-of-service issues along the I-40 corridor." The study recommends that further analysis be done in terms of seasonal variations in trucking and railroad operations. Additionally, the impact of reformulated diesel fuel on truck engine operations needs to be considered in more detail. The authors also recommend further investigation in the case of impacts of exclusive truck lanes, economic impacts of changing goods from trucks to rail, impacts of new intermodal facilities on goods movement, and the impacts of NAFTA on goods movement in California.

Publish Date: November 1995

Source: California Department of Transportation, District 8

Contact: College of Engineering
Center for Environmental Research and Technology
University of California, Riverside, CA 92521

Key Words: Economic, University of California, Riverside, Intermodal, I-40, transportation, truck, goods movement, rail, Caltrans, level of service, capacity, diesel fuel

(18) ECONOMIC FEASIBILITY STUDY OF THE SAN DIEGO AND ARIZONA EASTERN RAILWAY

This report represents an assessment of the economic feasibility of restoring freight service on the Desert Line of the SD&AE Railway and extending a rail line to Otay Mesa. The economic feasibility of both projects is evaluated with respect to market opportunities and constraints, project costs and revenues, and economic benefits to the region. There are several recommendations given in the report which include the following: support of reopening the service; possible use of BNSF tracks into the Port of San Diego; no spur track to Otay Mesa; financial responsibility for operation and maintenance by the operator of the line; and private investment to open the line, but private/public partnership for modernization.

Publish Date: June 1995

Source: San Diego Association of Governments

Contact: San Diego Association of Governments
First Interstate Plaza
401 B Street, Suite 800
San Diego, California 92101
(619) 595-5300
(619) 595-5305 FAX

Key Words: Rail, Arizona, economic, San Diego Association of Governments, SANDAG, transportation, SD&AE Railway, Otay Mesa

**(76) ECONOMIC IMPACT OF THE NORTH AMERICAN
FREE TRADE AGREEMENT ON ARIZONA'S ECONOMY**

"Arizona's infrastructure will undoubtedly be affected by NAFTA. Already, Arizona's transportation and other areas of infrastructure cannot meet the needs imposed on the region from recent trade growth trends. Improvements are required in moving goods efficiently and effectively through Arizona and Sonora while maximizing the benefits of increased trade. Solutions by way of short and long term planning and investments will further assure Arizona's infrastructure to meet the needs of NAFTA, while assuring decent quality-of-life standards for Arizona's residents and visitors...The agreement with Mexico will benefit Arizona's economy in several ways: increases in sales of products and services by Arizona firms to Mexican businesses and households, new investment opportunities for Arizona financial firms, increased infrastructure investments in Arizona by local, state and federal governments to meet the rapidly growing volume of transportation demand, increases in the number of Mexican businesses and general visitors to Arizona, and the availability of more Mexican products and services to Mexican consumers and businesses."

Publish Date: April 1993

Source: Arizona Department of Commerce

Contact: Arizona Department of Commerce
3800 N. Central Avenue, Suite 1400
Phoenix, AZ 85012
(602) 280-1300

Key Words: North American Free Trade Agreement, NAFTA, Arizona Department of Commerce, economic, Mexico, Sonora, infrastructure investments

(19) EFFECT OF THE NORTH AMERICAN FREE TRADE AGREEMENT ON THE TRANSPORTATION INFRASTRUCTURE IN THE LAREDO- NUEVO LAREDO AREA

"This study analyzes the extent to which the transportation infrastructure of the Laredo-Nuevo Laredo area is and will be affected by the increasing flow of commercial traffic...In looking specifically at the Laredo-Nuevo Laredo crossing—the main port of entry for Mexican freight moving through Texas—this report provides insight into the overall dynamics of the trade issue from the point of view of its transportation impacts in both Texas and Mexico." The study concludes that a binational freight transportation plan should be enacted that takes into account future commercial traffic growth in the Laredo-Nuevo Laredo area. The authors also feel that "the efficient movement of transborder commercial traffic will rely, first, on Mexico's ability to improve its freight transportation system, and, second, on future international commercial traffic regulations."

Publish Date: November 1993

Source: Texas Department of Transportation
Office of Research and Technology Transfer
P.O. Box 5051
Austin, Texas 78763

Contact: The University of Texas at Austin
Center for Transportation Research
Austin, Texas 78712-1075

Key Words: University of Texas, Austin, Laredo, Nuevo Laredo, Infrastructure, North American Free Trade Agreement, NAFTA, Texas Department of Transportation, TxDOT, import, export, port of entry, Mexico, commercial traffic

(20) ENFORCEMENT AND FACILITATION: AN ANALYSIS OF THE SAN YSIDRO PORT OF ENTRY AND THE IMPLEMENTATION OF GATEKEEPER PHASE II

"The purpose of the contract was to provide a report examining the implementation of Operation Gatekeeper Phase II (starting July 14, 1995) and Operation Eagle's Nest (September-October 1) and their impacts on enforcement and facilitation in the San Ysidro Port of Entry...Other important areas of concern in this report are: (1) Level of Staffing: The number of staff available at San Ysidro is short for the tasks to be done; (2) Analysis Tools to Support Management Decisions: The staff of the port need the opportunity to make use of the available statistics to understand the demands placed on the port; (3) Cooperative and Flexible Staffing Decisions: Almost all staffing decisions regarding San Ysidro need to be made in the framework of a cooperative and flexible scheduling model; (4) Resources that Support Staff: San Ysidro has also been last in line to receive support for its operations: computers, training, appropriate facilities that are lacking; and (5) Communication with the Public: The Immigration and Naturalization Service needs to take its message public."

Publish Date: January 1996

Source: San Diego District Director
Immigration and Naturalization Service

Contact: San Diego Dialogue Division of Extended Studies and Public Service
University of California, San Diego
9500 Gilman Drive
La Jolla, California 92093-0176
(619) 534-8638

Key Words: San Diego Dialogue, Immigration and Naturalization Service, San Ysidro, port of entry staffing, Operation Eagle's Nest, Operation Gatekeeper Phase II, University of California, customs, transportation

**(21) EXECUTIVE SUMMARY TRUCK TRAFFIC IN LAREDO, TEXAS:
A CASE STUDY OF ISSUES AND REMEDIES**

"Although intermodal traffic is growing strongly, the majority of goods are still moved by trucks. Moreover, such truck traffic is channeled through a relatively small number of key border gateways. Focusing on the Laredo, Texas, gateway, this study examined the issues and potential remedies associated with U.S.-Mexico border area truck flows." This investigation leads to many recommendations regarding truck traffic along with various other transportation modes in this area. Some of these suggestions are as follows: harmonization of customs rules and related transportation measures, establishment of a method to predict future truck traffic, new bridge construction at the Laredo gateway, a method for more effective cost recovery (such as toll increases), development of new infrastructure in Laredo in order to take advantage of available funding, and more intermodal recognition of air freight. Additionally, the authors suggest that planning activities need to be enhanced at local, regional and international levels (including the collection of traffic data), a common data base for both sides of the border should be used, intermodal traffic should be tracked at both the local and regional level, and finally, new (Laredo) bridges located outside of town may be needed.

Publish Date: 1993

Source: Texas Department of Transportation
Office of Research and Technology Transfer
P.O. Box 5051
Austin, Texas 78763

Contact: The University of Texas at Austin
Center for Transportation Research
Austin, Texas 78712-1075

Key Words: Truck, Laredo gateway, Texas Department of Transportation, TxDOT, intermodal, Mexico, United States, border, University of Texas, Austin

(77) EXISTING AND PROPOSED INTERNATIONAL BRIDGES AND BORDER CROSSINGS

"This report provides general information about each of the bridges and border crossings that connect Texas and the Mexican states of Tamaulipas, Nuevo Leon, Coahuila and Chihuahua. The January 10, 1995 opening of the Pharr-Reynosa International Bridge on the Rise brings to 21 the number of Texas international bridges in operation. Two dam crossings and one hand-drawn ferry join Texas and Mexico, bringing the total number of international bridges and border crossings to 24...There are eight bridges proposed in Texas along the U.S.-Mexican border which are listed in this report." Information provided about each bridge includes the description of the bridge and its location, the name of the bridge operator or owner, toll/funding information and hours of operation, construction and connecting roadway information, average daily traffic counts, and planned improvements. If the bridge was either under construction or merely proposed at the time of this report, permit/approval status is also given.

Publish Date: July 1995

Source: Texas Department of Transportation

Contact: Texas Department of Transportation

Key Words: Texas Department of Transportation, TxDOT, international bridge, Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, border crossing, traffic counts, Presidential Permit

**(22) FEASIBILITY STUDY TO CREATE AN INTERMODAL TRANSPORTATION FACILITY
SANTA TERESA, NEW MEXICO**

"The following is the final report on results of interviews done in Juárez, Chihuahua. Because the scope of work provided offered only a broad outline of objective and purpose, the research team had to define the issue and further, examine how best to respond to the issue." The issue can be outlined as determining "the extent of Mexican interest and present involvement at the federal, state, and local levels, in the Santa Teresa International Border Crossing in relation to an intermodal transportation facility to be located in that area. At the local level, there was overall positive reaction to the concept, conditioned on targeting appropriate markets and proper planning and financing, including significant and inclusive private sector participation. No one admitted to a present involvement in the Santa Teresa International Border Crossing."

Publish Date: 12/18/92

Source: Sandia National Laboratories
1515 Eubank Blvd., SE, Bldg 957
Albuquerque, New Mexico 87123

Contact: KIRA, Incorporated
1110 Brickell Avenue, Suite 510
Miami, Florida 33131
(305) 374-7775

Key Words: Mexico, Camino Real Intermodal Center, Santa Teresa, New Mexico, Sandia National Laboratories, transportation, KIRA Incorporated, private sector

(78) FREE TRADE WITH MEXICO: WHAT'S IN IT FOR TEXAS?

This report was performed by the Lyndon B. Johnson School of Public Affairs as part of the U.S.-Mexican Policy Studies Research Program binational policy issue consideration. This publication is an outgrowth of other similar studies including the labor and environmental impacts of a free-trade agreement, opposition governments in Mexico and their impact both on the border region and on the binational relationship, and a variety of studies investigating the effects of industrial integration on the U.S.-Mexico border region. This report examines the effects of the North American Free Trade Agreement (NAFTA) on the State of Texas. General recommendations in terms of transportation include infrastructure improvements (highways are "in need of repair") preceded by a study determining infrastructure needs and the cost associated with these needs.

Publish Date: 1992

Source: U.S.-Mexican Policy Studies Program

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: Mexico, Lyndon B. Johnson School of Public Affairs, University of Texas, Austin, North American Free Trade Agreement, binational, border region

(23) FUNDING AND OPERATION OF AN INTERMODAL TRANSPORTATION FACILITY AT THE SANTA TERESA BORDER CROSSING

"This report identifies alternatives and provides recommendations for the operation and funding of an intermodal transportation facility at the Santa Teresa Border Crossing. In determining the appropriate operational design for the facility, one must consider issues related to location, access, and infrastructure. The eight major functions within an intermodal facility, equipment management, transfer operations, staging and parking, train spotting and switching, gate operations, drayage, storage, and security present potential divisions of work along which contracts with different companies might be drawn. Additional operational concerns arise due to the proximity to the border of the proposed facility. The Santa Teresa facility should be designed to take full advantage of the computer systems recently installed in the customs offices in both the U.S. and Mexico. In addition, the experiences of several intermodal facilities in Texas provide some insight into the unique problems encountered in the operation of facilities at or near the Mexican border. Primary funding alternatives for the Santa Teresa facility include the sale of revenue bonds, contracting with private companies, partial funding from the general budget, or some combination of these methods. Nine case studies are examined to illustrate the strengths and limitations of each of the alternatives, and to support the recommendations included in the report."

Publish Date: December 4, 1992

Source: New Mexico State University

Contact: Department of Government, Public Administration Program
New Mexico State University
Las Cruces, New Mexico 88003

Key Words: Santa Teresa, border, New Mexico State University, intermodal, infrastructure, Camino Real Intermodal Center, transportation, United States, Mexico

(24) FY 1994 STATE RAIL PLAN UPDATE

"The 1994 Arizona 'State Rail Plan Update' represents Arizona's most significant involvement with the railroad industry since the first state rail plan was completed in the late 1970's. While the state completed a number of plan updates in the early 1980's, the 1994 plan update is the first time since the initial plan was prepared that the entire rail network has been analyzed in a comprehensive manner...The incentive for this new plan update is the passage in 1991 of the Intermodal Surface Transportation Efficiency Act."

Publish Date: June 1994

Source: Arizona Department of Transportation
Transportation Planning Section
206 S. 17th Avenue
Phoenix, Arizona 85007

Contact: Parsons Brinckerhoff Quade & Douglas
1501 W. Fountainhead Parkway, Suite 400
Tempe, Arizona 85282
(602) 966-8295

Key Words: Parsons Brinckerhoff Quade & Douglas, PBQ&D, State Rail Plan, Arizona Department of Transportation, ADOT, Intermodal Surface Transportation Efficiency Act, ISTEA

(25) INTERMODAL MANAGEMENT SYSTEM STUDY

"The purpose of an IMS for the PAG Region is to improve the efficiency of intermodal movements. The PAG IMS focuses on points of connection between transportation modes, the interface of these points with the publicly-owned transportation system, and the movement of both people and goods through these points." The study involved eight steps, they are as follows: Identification of goals and objectives for the IMS; Identification and inventory of the intermodal facilities; Development of performance measures; Inventory and evaluation of the facilities; Identification of issues, opportunities and constraints; and Development of implementation strategies and recommendation of the IMS.

Publish Date: September 1995

Source: Pima Association of Governments
177 North Church, Suite 405
Tucson, Arizona 85701
(520) 792-1093

Contact: Parsons Brinckerhoff Quade and Douglas
1501 W. Fountainhead Parkway, Suite 400
Tempe, Arizona 85282
(602) 966-8295

Key Words: Parsons Brinckerhoff Quade & Douglas, PBQ&D, intermodal, Pima Association of Governments, PAG, Management System, IMS, Arizona, transportation

**(26) INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991:
SECTIONS 1089 AND 6015: ASSESSMENT OF BORDER CROSSINGS AND
TRANSPORTATION CORRIDORS FOR NORTH AMERICAN TRADE**

ISTEA Section 1089 called for a study of the "advisability and feasibility of an international border highway infrastructure discretionary program; Section 6015 called for an assessment of existing and emerging international trade corridors between the United States, Mexico and Canada, and to make recommendations on how to improve the integration and operation of trade-related transportation subsystems. This study addresses both Section 1089 and 6015. The recommendations presented here are to fully fund ISTEA, the development of funding options for infrastructure improvements, the development of a federal-aid program for international trade infrastructure needs, the creation of a task force to address border area congestion problems, establishment of binational zones to facilitate a binational planning process, and the development/implementation of an improved data collection program.

Publish Date: 1993

Source: U.S. Department of Transportation

Contact: U.S. Department of Transportation
Federal Highway Administration

Key Words: ISTEA, 6015, 1089, Border Crossings, trade, United States Department of Transportation, US DOT, Federal Highway Administration, FHWA, Intermodal Surface Transportation Efficiency Act

(79) LAREDO INTERNATIONAL AIRPORT: FOREIGN TRADE ZONE

"Foreign-Trade Zone No. 94, a general purpose zone, completed its tenth year of continuous operation as of September 30, 1994. Strategically located, Foreign-Trade Zone No. 94 is 154 miles from San Antonio, Texas; 150 miles from the seaport of Corpus Christi, Texas; and 150 miles from the Mexican industrial center of Monterrey. This location serves as the regional nucleus of a dynamic international trading environment which is comprised of highly skilled U.S. and Mexican customs house brokers, freight forwarders and a highly developed conventional warehousing environment."

Publish Date:

Source: Laredo International Airport

Contact: Laredo International Airport
Foreign Trade Zone Division
4719 Maher
Laredo, Texas 78041
(210) 722-9826
(210) 726-4950 FAX

Key Words: Laredo International Airport, Foreign Trade Zone No. 94, international trade

**(80) LINKING OR ISOLATING ECONOMIES?:
A LOOK AT TRUCKING ALONG THE TEXAS-MEXICO BORDER**

"This work introduces in one volume some of the NAFTA transportation issues pertaining to Mexico and the United States, particularly emphasizing trucking issues at the Texas-Mexico border...We will also review possible outcomes which current common wisdom indicates are not as likely, but which must be considered. Many of the issues discussed will remain highly relevant no matter how NAFTA is finally implemented...In reviewing the future of the U.S.-Mexico trucking industries, we must consider several factors, including the degree of interaction between the two economies, the drastic changes occurring in the Mexican economy and transportation sector, and the likely impact the implementation of NAFTA will have on the demand for trucking services...we must address specific issues such as infrastructure and customs, as well as others that are important to transnational trucking services."

Publish Date: 1994

Source: U.S.-Mexican Policy Studies Program

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: Mexico, University of Texas, Austin, trucking, economics, Lyndon B. Johnson School of Public Affairs, North American Free Trade Agreement, NAFTA, transportation, infrastructure, customs

**(81) LOGISTICS MANAGEMENT AND U.S.-MEXICO TRANSPORTATION SYSTEMS:
A PRELIMINARY INVESTIGATION**

"The U.S.-Mexico international boundary represents a major obstacle to efficient trade. It is along the border that national regulations, inadequate infrastructure, and cumbersome customs procedures can slow down the movement of trucks, buses and railroads. The preferred solution would be to establish national and international regulations that, in effect, make the boundary invisible to trade flows, allowing goods to move freely between the two countries...This report provides a preliminary investigation into the ways in which growing transportation needs in this binational context are driving changes in infrastructure, modal agreements, and regulatory harmonization. Both shippers and carriers are being challenged to seek out nontraditional transportation systems in order to create linkages that overcome obstacles originating from a history of structural and regulatory disparities between the two nations. Through a case study approach, new logistical patterns now developing in response to the expanding trade opportunities in the bilateral trade environment will be discussed." The authors have concluded that shipments between ports need to be more effectively coordinated. Port managers on both sides of the border need easier access to port information—at this point, some ports are plagued with inadequate documentation regarding origins and destinations of cargo.

Publish Date: 1994

Source: Lyndon B. Johnson School of Public Affairs

Contact: Policy Research Project on Texas/Northern Mexico Infrastructure and Free Trade
Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: Mexico, United States, Texas, North American Free Trade Agreement, NAFTA, University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, goods movement, infrastructure, truck, rail, bus, shipper, carrier, transportation

**(27) LOGISTICS MEASUREMENT AND PERFORMANCE FOR THE
UNITED STATES-MEXICAN OPERATIONS UNDER NAFTA**

"The objective of this article is to explore the state of logistics performance in the coordination and support of Mexican production strategies under the framework of a North American competitive strategy. The following section briefly presents the research methodology. The article then turns to a discussion of the basic operating environment currently found in Mexico. This discussion is followed by an evaluation of the value-added performance of logistics activities. The article concludes by considering important managerial and theoretical implications."

Publish Date: Spring 1995

Source: Transportation Journal

Contact: Stanley E. Fawcett; Sheldon R. Smith
Transportation Journal
Vol. 34/No. 3
pp. 25-34

Key Words: United States, Mexico, NAFTA, North American Free Trade Agreement, production strategies, logistics

**(82) LOS ANGELES/COACHELLA VALLEY/IMPERIAL COUNTY
INTERCITY RAIL FEASIBILITY STUDY**

"This report presents a recommended program for the implementation of intercity passenger rail service on existing railroads between Los Angeles, Riverside, and the Coachella and Imperial Valleys, a distance of 239 miles. The report was prepared...to explore the technical and financial aspects of implementing the proposed passenger rail service under the auspices of the California Department of Transportation (Caltrans) intercity rail program." The authors recommended that this proposal be forwarded to Caltrans for consideration in the 1992-93 fiscal year. In addition, the Coachella Valley Association of Governments should be the lead agency responsible for a competitive bidding process for the location of station sites. Lastly, the specific trackwork should be investigated in more detail—both in terms of capacity and engineering

Publish Date: December 1991

Source: Riverside County Transportation Commission

Contact: Schiermeyer Consulting Services
17390 Brookhurst Street, Suite 100
Fountain Valley, CA 92708

Key Words: Los Angeles, Coachella Valley, Imperial County, California, Mexico, feasibility study, Riverside County Transportation Commission, Schiermeyer Consulting Services, Wilbur Smith Associates, passenger rail, Caltrans

**(28) MARKET DEMAND AND OPPORTUNITIES STUDY FOR
AIR TRANSPORTATION IN THE SAN DIEGO REGION**

"The study explored issues related to [Lindbergh Field's] passenger and cargo market bases, by examining historic and current information on area socioeconomics and airport activity. A number of surveys were conducted to help understand decisions made by a variety of airport users, from residents, to businesses, to travel agencies, freight companies, to the airlines themselves. Emerging technologies in telecommunications, aircraft and railway systems also were investigated relative to their potential impact on San Diego and air travel industry as a whole. Finally, air travel demand and airport passenger forecasts also were developed for the region."

Publish Date: January 1996

Source: San Diego Association of Governments
First Interstate Plaza
401 B Street, Suite 800
San Diego, California 92101
(619) 595-5300
(619) 595-5305 FAX

Contact: SH&E
International Transportation Consultancy

Key Words: San Diego Association of Governments, SANDAG, air, transportation, Baja California, Lindbergh Field, Mexico, LAX, cargo, SH&E, telecommunications, rail

(96) MEASUREMENT AND ANALYSIS OF TRAFFIC LOADS ACROSS THE TEXAS-MEXICO BORDER

"Axle load and gross-vehicle weight characteristics of Mexican-origin commercial trucks processed through the U.S. Customs yard in the City of Laredo, Texas, are described in this report...Load summaries are presented on five basic truck classes (by axle count) and are based on the original Association of American State Highway and Transportation Officials (AASHTO) pavement damage relationships." Damage implications for Texas-Mexican traffic are also explored. The results of this investigation point to the idea that perhaps special "trade route" designations should be explored to retard or minimize widespread pavement damage. In addition, Weigh-In-Motion systems should be placed near each highway port-of-entry in order to detect overweight violators. The penalties for such violators should be strict and should be based upon cost-recovery measures such as "assessing damage attributable by equivalent fatigue weight" for bridge cost recovery.

Publish Date: March 1995

Source: Texas Department of Transportation

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, TX 78705-2650

Key Words: Axle load, gross-vehicle weight, GVW, truck, pavement damage, Texas Department of Transportation, TxDOT, weigh-in-motion, Association of American Highway and Transportation Officials, AASHTO, equivalent single axle load, ESAL, North American Free Trade Agreement, Laredo, University of Texas, Austin

**(83) NAFTA TRADE: PAST, PRESENT AND FUTURE:
A 50 STATE ANALYSIS AND FORECAST OF U.S. EXPORTS TO MEXICO**

"This report discusses the impact of NAFTA, specifically analyzing U.S. exports to Mexico. It is divided into several sections. The first section is an overview of the trade between the three NAFTA nations, the U.S., Mexico and Canada, during the 1987-1994 period. The overview additionally contains explanations of the observations related to the data used in this report. The next section presents statistical tables and graphs of bilateral trade between each of the NAFTA nations from 1987-1994, and includes a forecast of this trade for the 1995-2000 period. The final and largest sections first presents a summary and description of total U.S. exports to Mexico from 1987-1994 and a forecast of exports from 1995-2000. The forecast also provides an estimation of the number of jobs that will be created each year as a result of export trade."

Publish Date: 1996

Source: Dean International, Inc.

Contact: Dean International, Inc.
Public Policy Advisors & Consultants
325 North St. Paul Street, Suite 4444
Dallas, Texas 75201-3827
(214) 871-7272
(214) 871-2782 FAX

Key Words: North American Free Trade Agreement, NAFTA, Dean International, Inc., Mexico, United States, export

**(29) NAFTA TRUCKERS GUIDE: A HANDBOOK FOR COMMERCIAL CARRIERS
CROSSING THE INTERNATIONAL BORDER BETWEEN MEXICO AND CALIFORNIA**

This booklet provides information for truckers regarding crossing of the international border between Mexico and California and is available in Spanish as well as English translations. Information includes the following: a checklist for truck drivers to review before entering California; information regarding licensing/registration and permits; insurance requirements; transportation of hazardous cargo; air quality standards; safety information; size and weight standards; transport of produce; required documents; agency contacts for all relevant establishments; and access/authorization requirements.

Publish Date: 1995

Source: California Department of Transportation

Contact: California Department of Transportation

Key Words: North American Free Trade Agreement, NAFTA, truck, California, Mexico, border, hazardous cargo, transportation, Caltrans

**(30) NEW ALLIANCES: THE SOUTHWEST BORDER CONFERENCE ON
TRANSPORTATION AND TRADE**

"The purpose of the conference was to bring together researchers and potential users of these planning studies to share their activities, their concerns and their information needs. Such sharing is meant to contribute to the quality, relevance and timeliness of each of the efforts and to foster cooperation to ensure comparability, avoid unnecessary duplication and, hopefully, develop joint activities to get 'more for our money' and better understand the dynamics of the Southwest Border Region."

Publish Date: November 1992

Source: Center for the New West

Contact: Center for the New West
Albuquerque Center
916 Ildewilde SE
Albuquerque, New Mexico 87108
(505) 255-8700
(505) 255-5466 FAX

Key Words: Center for the New West, Southwest Border Region, TRANSNET, United States, Mexico, Arizona, New Mexico, Texas, California

(31) NORTH AMERICAN TRANSPORTATION

"This document describes the transportation system of North America with comparable statistics for Canada, Mexico, and the United States. It was published to simulate further efforts to describe and understand the continental transportation system, especially as the use of that system is fundamentally altered by the North American Free Trade Agreement. The report contains extensive data on the size and scope, use, employment, fuel consumption, and economic role of each country's transportation system. Many of these data are for 1990, the most recent year for which information for all three countries was generally available. Time series data for 1987 to 1991 are included where possible."

Publish Date: May 1994

Source: The North American Transportation Summit

Contact: The Bureau of Transportation Statistics
The U.S. Department of Transportation

Key Words: United States, Mexico, Bureau of Transportation Statistics, BTS, North American Free Trade Agreement, NAFTA

**(32) OVERVIEW OF THE TEXAS-MEXICO BORDER:
ASSESSMENT OF TRAFFIC FLOW PATTERNS**

"Effective transportation planning for the 1,230-mile long Texas-Mexico border must take into account not only the unique characteristics of a binational environment, but also the possible impacts of the North American Free Trade Agreement (NAFTA)." The study considers two concepts useful in binational transportation planning. Sector analysis provides aggregated revenue and/or demand estimates that address regional transportation planning issues. The second concept, super-crossing, is based on the Intermodal Surface Transportation Efficiency Act (ISTEA) guidelines intended to foster multi- and intermodal facilities. Two significant findings in this study were that traffic congestion results predominantly from low vehicle occupancy rates and unloaded trucks—if these two problems could be alleviated, some of the congestion could be minimized. It is also suggested that additional origin-destination surveys be conducted in order to identify seasonal changes in traffic. Other recommendations include the construction of new, smaller international bridges between Brownsville and Laredo. This construction would impel commercial development and lead to an increase of jobs in areas with high unemployment levels. In other border areas, mass transportation should be improved/implemented in order to assuage some of the congestion. Finally, the report suggests an increase in utilization of the Mexican railroad. The construction of new rail lines should be considered to more effectively facilitate the development of intermodal facilities on both sides of the border.

Publish Date: February 1994

Source: Texas Department of Transportation
Office of Research and Technology Transfer
P.O. Box 5051
Austin, Texas 78763-5051

Contact: The University of Texas at Austin
Center for Transportation Research
3208 Red River, Suite 200
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Mexico, traffic flow patterns, border, North American Free Trade Agreement, NAFTA, Texas Department of Transportation, TxDOT, Intermodal Surface Transportation Efficiency Act, ISTEA, multimodal, super-crossing, binational

(34) OVERVIEW OF THE TEXAS-MEXICO BORDER: BACKGROUND

"Economic growth along the Texas-Mexico border has prompted new concerns regarding the adequacy of that area's transportation infrastructure. In response, both the Texas Department of Transportation (TxDOT) and the Texas Turnpike Authority (TTA) are investigating new ways in which the border infrastructure might be upgraded. As part of this statewide planning effort, the Center for Transportation Research (CTR)...has conducted a planning-level needs study along the 1,230-mile Texas-Mexico border." In order to create a more comprehensive binational transportation plan, the results of this investigation suggest that a binational committee consisting of federal, state and local officials from both the United States and Mexico be established to ensure that all parties' interests are addressed. Additionally, the conduct of a comprehensive travel survey along the entire Texas/Mexico border is recommended. This investigation concludes with a series of recommendations for the border area. These include a red-green signal atop all toll and customs primary inspection booths to indicate which booths are staffed; the designation of a commercial traffic only lane at selected binational bridge crossings; elimination of traffic congestion caused by waiting trucks at border crossings by providing a designated waiting area; and consideration of a commercial lane for loops around cities which have heavy commercial traffic.

Publish Date: January 1994

Source: Texas Department of Transportation

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Texas Department of Transportation, TxDOT, infrastructure, highway, bridge, border, Mexico, Texas Turnpike Authority

(33) OVERVIEW OF THE TEXAS-MEXICO BORDER: CAPACITY, DEMAND, AND REVENUE ANALYSIS OF BORDER SEGMENT 2 (EAGLE PASS TO EL PASO)

"This report supplements Research Report 1976-4, which presents the results for Segment 1 (from Gulf to Laredo). For each sector, the current capacity utilization of each binational entry system component was assessed, using a methodology that takes into account all possible interruptions in transborder traffic circulation. The capacity analysis is complemented by estimates of potential demand and revenues of new toll bridges in each sector. Recommendations on the potential feasibility of new toll bridges were developed using a financial analysis model that simulates the effect of managerial decisions upon the predicted gross revenues and estimated costs. Together, the capacity and feasibility analyses provide a comprehensive picture of border transportation needs." The study found that toll booths and inspection facilities present the majority of the problems in most binational border crossings, followed by insufficient access to and from the bridge. New bridges should possibly be considered when existing facilities cannot be expanded or improved.

Publish Date: March 1994

Source: Texas Department of Transportation

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Eagle Pass, El Paso, Texas Department of Transportation, TxDOT, border, toll bridge, traffic circulation

(97) OVERVIEW OF THE TEXAS-MEXICO BORDER: DATA BASE

"The TRANSBORDER data base described in this report has been a major objective of the Texas-Mexico Toll Bridge Study. Designed to serve research and planning purposes, this data base compiles information and survey data gathered during the course of this project. The data are stored and organized in several files that can be linked by binational entry system, geographical location (such as city or municipality), and time. The selected data base language (SAS) is simultaneously a powerful relational data base software and one of the most comprehensive statistical packages available. TxDOT, as an SAS subscriber, has many personnel acquainted with this software." The implementation of a geographic information system (GIS) interface would enhance data reporting capabilities and is included in the recommendations reached at the conclusion of this report. Additionally, the creation of a centralized Border Information System is suggested in order to reduce the duplication of efforts between different agencies involved in border transportation. Finally, according to the authors of this report, the coordination between agencies involved in the Texas-Mexico border area transportation facilitation is crucial. If this were accomplished effectively, additional origin-destinations surveys could be conducted as needed in a cost-effective manner (if all were to contribute).

Publish Date: December 1993

Source: Texas Department of Transportation

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, TX 78705-2650

Key Words: Mexico, infrastructure, border traffic data, border socioeconomic data, data base, University of Texas, Austin, Texas Department of Transportation, TxDOT

(35) PLANNING ACTIVITIES ALONG THE TEXAS/MEXICO BORDER

"The Texas Department of Transportation has been directed by the Texas legislature to review its proposed highway projects annually and to report, not later than February 1 of each odd-numbered year, on the ability of the state highway system to handle the projected volume of highway traffic resulting from a free trade agreement with Mexico and increased international trade." This report is informative in nature concerning border-related planning activities.

Publish Date: January 1, 1993

Source: Texas Department of Transportation

Contact: Texas Department of Transportation
Division of Highway Design

Key Words: Mexico, border, highway projects, Texas Department of Transportation, TxDOT

(84) PLANNING FOR PROSPERITY IN THE SAN DIEGO/BAJA CALIFORNIA REGION

"A joint program of economic development between San Diego and Baja California is now possible and necessary. The program should include the following:

- A cross-border industrial strategy to promote higher wage, higher skilled, higher value-added employment on both sides of the border;
- A cross-border environmental strategy to attract private-sector financing to the region for the construction of major infrastructure projects such as modern power plants; water and sewer system, wastewater treatment facilities, and solid and toxic waste sites;
- A cross-border transportation strategy to enhance the economic viability of highway, rail, port, and airport projects needed to improve the region's role in international commerce; and
- A quasi-public transportation and development agency, governed by a binational board of directors, to facilitate joint planning and investment for cross-border projects.

Publish Date: September 1993

Source: San Diego Dialogue

Contact: Binational Task Force on Economic Development and Transportation Infrastructure

Key Words: San Diego Dialogue, San Diego, Baja California, Binational Task Force on Economic Development and Transportation Infrastructure, cross-border

(36) PORT OF ENTRY WEIGH-IN-MOTION FEASIBILITY STUDY

"This research effort analyzes the feasibility of using a slow speed Weigh-in-Motion (WIM) equipment for enforcement applications in Arizona. The technical performance of one WIM System was assessed at the Ehrenberg Port of Entry on the Arizona/California state line.

"The effects of variation on platform smoothness and profile on scale accuracy were assessed. Legal and institutional issues were also addressed and recommendations for implementation and further research were presented."

Publish Date: March 1989

Source: Arizona Department of Transportation

Contact: Castle Rock Consultants
18 Liberty Street SW
P.O. Box 429
Leesburg, Virginia 22075

Key Words: Arizona Department of Transportation, ADOT, Castle Rock Consultants, port of entry, weigh-in-motion, Ehrenberg, California

(37) PRELIMINARY CALIFORNIA-MEXICO BORDER ENVIRONMENT NEEDS ASSESSMENT

"The Boards and Departments of Cal/EPA Air Resources Board, Integrated Waste Management Board, State Water Resources Control Board, Department of Pesticide Regulation, Department of Toxic Substances Control, and Office of Environmental Health Hazard Assessment were asked to prepare an inventory of Border environmental needs and potential projects...This report contains a 'preliminary' summary of Border environmental projects. No attempt was made to prioritize the projects or to establish rating criteria. All projects submitted by April 10, 1995 are included."

Publish Date: April 20, 1995

Source: California Environmental Protection Agency
555 Capitol Mall, Suite 235
Sacramento, California 95814
(916) 445-3846
(916) 445-6401 FAX

Contact: California Environmental Protection Agency
555 Capitol Mall, Suite 235
Sacramento, California 95814
(916) 445-3846
(916) 445-6401 FAX

Key Words: California Environmental Protection Agency, Mexico, border

**(38) PROCEEDINGS OF THE U.S./MEXICO ROUNDTABLE ON
CONCESSIONARY TRANSPORTATION INFRASTRUCTURE**

"The three day meeting covered finance, project development, construction and operation facets of the Mexican road concessions program along with a briefing and tour of the Port of Manzanillo. There were nearly 350 persons in attendance, 250 Mexican executives and officials and 95 Americans from public and private sectors."

Publish Date: March 1992

Source: Secretariat of Communications and Transport, United States of Mexico, U.S. Department of Transportation, Federal Highway Administration, Office of International Programs

Contact: Secretariat of Communications and Transport, United States of Mexico, U.S. Department of Transportation, Federal Highway Administration, Office of International Programs

Key Words: United States Department of Transportation, US DOT, Mexico, Manzanillo, concessionary infrastructure, Federal Highway Administration, FHWA, construction

(39) PROPOSAL TO ESTABLISH A BORDER DEVELOPMENT AUTHORITY OF THE CALIFORNIAS

"Mexico and the U.S. should establish a Border Development Authority of the Californias (BDAC) for the San Diego/Tijuana metropolitan region. The BDAC would be a bi-national development authority with power to plan, finance and implement transportation and other infrastructure projects in the cross-border region.

Although an initial focus for the BDAC would be to develop a solution to border area transportation problems, it could provide many more benefits. Area of possible interest, beyond transportation, include simplification of border crossings, law enforcement, environmental concerns, economic development and housing...In this paper, we propose a plan for the establishment of the BDAC. We will address the legal justification under U.S. law for the creation of the BDAC as well as a proposal for its structure and operations."

Publish Date: November 25, 1995

Source: San Diego Dialogue

Contact: Luce, Forward, Hamilton & Scripps
600 West Broadway, Suite 2600
San Diego, California 92101
(619) 236-1414

Key Words: BDAC, Mexico, United States, San Diego Dialogue, Luce, Forward, Hamilton & Scripps, border crossing, transportation, economic development, housing, Border Development Authority of the Californias

**(40) REPORT ON CAPITAL IMPROVEMENTS ON THE U.S./MEXICO BORDER:
BORDER STATION FIVE-YEAR PLAN**

"This document discusses General Services Administration (GSA) responsibilities, the GSA planning process, the current program under Southwest Border Station Capital Improvement Program, Federal Inspection Services concerns, report methodology, and a discussion of each crossing. The following crossings are discussed: Brownsville, Progreso, Donna, McAllen, Los Ebanos, Rio Grande City, Roma, Falcon Dam, Laredo, Eagle Pass, Del Rio, Amistad Dam, Presidio, Ft. Hancock, and El Paso, Texas; Columbus and Antelope Wells, New Mexico; Douglas, Naco, Nogales, Sasabe, Lukeville, and San Luis, Arizona; and Andrade, Calexico, Tecate, Otay Mesa and San Ysidro, California."

Publish Date: April 14, 1993

Source: General Services Administration

Contact: General Services Administration
Washington, D.C. 20405

Key Words: General Services Administration, United States, Mexico, Border, transportation, capital improvement

**(41) SAN DIEGO & ARIZONA EASTERN RAILWAY:
PORT OF SAN DIEGO EXTENSION AND RAILWAY ANCILLARY FACILITIES**

"This report examines rail facility requirements to accommodate projected freight on the reopened San Diego & Arizona Eastern (SD&AE) 'Desert Line'. This analysis focused on examining alternatives to provide rail access to the two Port of San Diego Marine Terminals, intermodal facility requirements and locations and rail storage yard requirements." The study found that improvements are feasible in terms of engineering. Many options exist regarding service to the Port of San Diego and location of a rail intermodal yard. The authors recommend that funding to reopen the SD&AE line between Tecate and Imperial Valley should be pursued.

Publish Date: January 27, 1996

Source: San Diego Association of Governments

Contact: BRW, Inc.
701 B Street, Suite 850
San Diego, California 92101
(619) 557-0580

Key Words: Rail storage, San Diego & Eastern Arizona Railway, port of entry, intermodal facility, marine terminal, BRW, Inc., San Diego Association of Governments, SANDAG

(95) SAN YSIDRO INTERMODAL TRANSPORTATION CENTER FEASIBILITY STUDY

"The San Ysidro Intermodal Transportation Center Feasibility Project was initiated by the Metropolitan Transit Development Board (MTDB) to investigate options for short-and long-term improvements to the San Ysidro International Border Trolley station of the San Diego Trolley South Line. The purpose of this report is to document the assumptions, analysis process and findings of the study and to present recommendations for further action. This Final Report represents a compilation of over six months work and four technical memorandums prepared for this study." The study recommends that the recommend alternative should proceed in terms of preliminary design and environmental studies.

Publish Date: June 1994

Source: Metropolitan Transit Development Board
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

Contact: BRW, Inc.
701 B Street, Suite 850
San Diego, CA 92101
(619) 557-0580
(619) 557-8307 FAX

Key Words: San Ysidro, BRW, Inc., transportation center feasibility study, San Diego Trolley South Line, Metropolitan Transit Development Board, MTDB

**(85) SPATIAL CONCENTRATION IN MEXICAN INDUSTRY:
A TEST OF THE BENEFITS VERSUS THE COSTS**

"This paper explores the links between industrial location, concentration, and economic efficiency in Mexican manufacturing. Using a linear programming approach, the authors calculate indices of overall, technical, allocative, and scale efficiency for Mexican manufacturing industries by state to test whether in 1985 those regions with high levels of industrial concentration were suffering from the costs of congestion. The evidence suggests that, at least at the aggregate level, there continued to be a positive relationship between industry concentration and efficiency in production. There is also evidence that overall efficiency was related to scale efficiency, although highly industrialized regions on the production frontier often operated at inefficient scales. In particular, the most concentrated regions (the Federal District, the state of Mexico, Jalisco and Nuevo Leon) consistently display decreasing returns to scale, indicating that the process of industrial concentration may be leading to diseconomies of scale. Finally, an econometric analysis suggests that scale, urbanization, and agglomeration economies are positively related to overall and technical efficiency at the regional level, while foreign ownership is negatively related. Agglomeration economies at the industry level were not significant."

Publish Date: 1993

Source: Lyndon B. Johnson School of Public Affairs

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, industry, Mexico, economics, manufacturing

**(43) STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 11 1996 SYSTEM MANAGEMENT PLAN DRAFT**

"The 1996 District 11 System Management Plan (DSMP) is a strategic planning document that presents the Department's and the District's vision of planning, maintaining, managing, and developing the transportation system over the next 20 years and beyond. The DSMP is responsive to the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

"The 1996 DSMP updates the District's 1994 DSMP to reflect recent changes in the District 11/District 8 boundaries. In addition, the 1996 DSMP does not include the Goals, Strategies, and Actions that were part of the 1994 DSMP. These items will now be addressed in the Department's Business Plan."

Publish Date: January 1996

Source: Caltrans District 11

Contact: Caltrans District 11 System Planning Branch
P.O. Box 85406
San Diego, California 92186-5406

Key Words: Caltrans District 11, Management Plan, California, transportation system, DSMP

(42) STATE OF NEW MEXICO INTERNATIONAL BORDER DEVELOPMENT PROJECTS

This report was created for presentation to the Border Development Committee and provides an overview along with graphic representations and cost estimates of 12 areas for which projects are either planned or currently underway in the New Mexico international border region. They are as follows: **New Mexico State Road 273, Paso Del Norte Intermodal Facility** (now known as the Camino Real Intermodal Center), **Artcraft Road, Sunland Park Drive Extension, Columbus/Anapra Road, High Mesa Road, Cattleman's Road, Dona Ana County Airport, New Mexico Road 404 Extension, Doniphan Drive, Santa Teresa Port of Entry, and the Border Crossing in Sunland Park/Anapra.**

Publish Date: August 1994

Source: Border Development Committee

Contact: New Mexico State Highway and Transportation Department
P.O. Box 1149
Santa Fe, New Mexico 87504-1149

Key Words: New Mexico State Highway & Transportation Department, NMSHTD, Border Development Committee, border improvement project

(86) TEXAS MEXICO MULTIMODAL TRANSPORTATION

"As Canada, Mexico and the United States prepare for greater economic integration under the North American Free Trade Agreement (NAFTA), benefits of liberalized trade will depend heavily upon the transportation infrastructure linking the three nations. Texas, with its proximity to Mexico and extensive economic and cultural ties to that nation, is expected to benefit greatly from the NAFTA provisions. These advantages will bring little gain, however, if substandard transportation services and linkages between Texas and Mexico cause producers and shippers to bypass the state. The report will examine the transportation system already in place, current plans for improvements or expansion, and the opportunities and constraints faced by each transportation mode." Specifically, the study reveals that Mexican rail operations could be improved in terms of international trade if the following ideas were implemented: privatization of equipment and railway maintenance, communications and tracking systems modernization, and a more successful, profit-oriented marketing strategy. In general, the study finds that Mexican port facilities are inadequate in terms of operations as well as infrastructure when compared with those in the United States. A general conclusion reached about the air transportation systems of the two countries is that delays at customs checkpoints and border crossings need to be reduced, and "necessary" improvements are needed in terms of infrastructure and facilities. Finally, in terms of trucking regulation in Texas, the authors suggest that some "loosening" of regulations would allow the state to better "exploit the opportunities furnished by NAFTA".

Publish Date: 1993

Source: Lyndon B. Johnson School of Public Affairs

Contact: Policy Research Project on Texas/Northern Mexico Infrastructure and Free Trade
Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: Mexico, United States, Texas, North American Free Trade Agreement, NAFTA, University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, maritime, truck, rail, transportation, air, customs, infrastructure

(44) TEXAS-MEXICO TRANSBORDER TRANSPORTATION SYSTEM

"The purpose of this study is to provide a comprehensive overview of the Texas-Mexico transborder transportation system. Two-way trade in 1988 totaled \$44 billion, with much of it passing along the 1,200 mile-long Texas-Mexico border. As a result, the modal operations (motor carriers, rail, air, and ocean transport) and supporting infrastructure (highways and bridges, rail terminals and track, airports, and seaports) that comprise the Texas-Mexico transborder transportation system are important to the economic vitality of both nations." The study findings reveal that Mexican transportation infrastructure, in general, is in great need of repair as well as improvement. And although the U.S. infrastructure is basically in better shape than that of Mexico, it still remains inadequate to efficiently accommodate the high levels of traffic to be generated by a "free-trade agreement". In addition, most congestion at border crossing locations is caused by customs operations bottlenecks. The authors of this report feel that interline agreements and extensive equipment exchanges between the two countries would permit a more efficient distribution of goods, while remaining within Mexican regulations.

Publish Date: 1996 reprint

Source: University of Texas at Austin

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Mexico, transborder transportation system, seaport, air, rail, highway, border, infrastructure

(45) TEXAS-MEXICO TOLL BRIDGE STUDY: SUMMARY REPORT

"In the study, the project staff pursued three main objectives. The first objective, the subject of Report 1976-1, was to provide a comprehensive overview of the infrastructure on both sides of the Texas-Mexico border. From this overview, a study team developed a U.S.-Mexico database, termed TRANSBORDER, that could prove useful in coordinated transportation planning along the Texas-Mexican border. The database is described in Report 1976-2. The second objective was to provide macroeconomic and traffic pattern analyses under different post-NAFTA scenarios. These traffic pattern analyses, based on border-wide origin and destination information collected at the bridges, provide a current overview of transborder traffic flows. This information is presented in Report 1976-3. The final objective was to provide estimates of the potential demand for and revenue from additional bridges along the infrastructure."

Publish Date: April 1994

Source: Texas Department of Transportation
Office of Research and Technology Transfer
P.O. Box 5051
Austin, Texas 78763-5051

Contact: The University of Texas at Austin
Center for Transportation Research
3208 Red River, Suite 200
Austin, Texas 78705

Key Words: Texas Department of Transportation, TxDOT, toll-bridge, Mexico, infrastructure, binational environment, TRANSBORDER, North American Free Trade Agreement, NAFTA

(87) THE ARIZONA BORDER INFRASTRUCTURE NEEDS ASSESSMENT

"The North American Free Trade Agreement (NAFTA) holds considerable economic promise for [the United States and Mexico] and particularly, for the states strategically located on major trade corridors. Arizona and Sonora share such prime locations. In Arizona, national east-west highway and rail corridors are linked through the southern part of the state to principal highway and rail facilities in northern Mexico. Commerce and economic development ride on the transportation systems available and the quality of these systems can foster trade and economic growth. The converse is also true: inadequate transportation facilities are barriers to commerce and discourage economic development...ADOT's response to this challenge is this assessment of Arizona's transportation infrastructure needs along its border with Mexico. Transportation needs are assessed for the decade ahead for border region roadways, airports and rail lines. Needed roadway improvements are separately assessed for state highways, county roads, and city streets."

Publish Date: June 1993

Source: Arizona Department of Transportation

Contact: Arizona Department of Transportation
Transportation Planning Division
Phoenix, Arizona 85007

Key Words: Arizona Department of Transportation, ADOT, infrastructure needs assessment, state highway, airport, rail, trade corridor, Sonora, Mexico, North American Free Trade Agreement, NAFTA

(89) THE BRIDGES OF CAMERON AND HIDALGO COUNTIES

"In the wake of closer economic integration between the United States and Mexico, and with the passage of the North American Free Trade Agreement (NAFTA), there is increasing pressure on the cross-border highway and bridge infrastructure in the Texas/Mexico border region. International bridge crossings at the border are infamous for long delays and bottle-necked customs clearance. Trade promoters have issued dire warnings about the need for new international bridge crossings and rapid highway improvements. Responding to these pressures...many elected officials and development interests...have been engaged in costly attempts to be the first kid on the block with a new bridge crossing. Lured by visions of sky-rocketing bridge toll revenues and ever-increasing truck and vehicle traffic, each community have reviewed its own proposal almost in isolation from those of its neighbor. As this report documents, there has not been any realistic or sustained attempt to engage in an evaluation and planning effort for the Lower Rio Grande Valley as a whole to determine how many new bridges are really needed or where they could best be located." This study reveals that congestion in this area is not always a result of insufficient or inadequate infrastructure, but results primarily from a lack of coordination between Mexican and U.S. customs, inadequate staffing in immigration and customs offices and "a lack of full implementation of traffic management alternatives." Alternatives for a more effective binational evaluation of new international bridges should be considered, including joint efforts between the United States and Mexico.

Publish Date: June 1995

Source: Texas Center for Policy Studies

Contact: Texas Center for Policy Studies
44 East Avenue, Suite 306
Austin, Texas 78701
(512) 474-0811
(512) 474-7846 FAX

Key Words: North American Free Trade Agreement, NAFTA, Texas Center for Policy Studies, Mexico, Cameron County, Hidalgo County, bridge, Lower Rio Grande Valley, Los Indios, Pharr, Reynosa, Los Tomates, Port of Brownsville, Anzalduas, Los Ebanos, Mission, Donna, Wildlife Corridor Project, border industrialization

**(46) THE INTERNATIONAL BORDER TRANSPORTATION CASE STUDY:
CHALLENGES OF BINATIONAL HIGHWAY PLANNING AND FINANCING IN THE
SAN DIEGO-TIJUANA/TECATE BORDER REGION**

"The goal of this case study was to provide documentation and analysis of the highway planning process on each side of the border, with emphasis on differences between the U.S./California and Mexican/Baja California approaches, and the challenges posed by the absence of an institutionalized cross-border planning process. This report summarizes the results of that case study. [The] methodology was designed to accomplish both the descriptive and prescriptive objectives of the case study. The first (descriptive) approach involved a detailed mapping of each country's highway planning and programming (i.e., budgeting) policies and procedures in the border region. The second (prescriptive) approach consisted of a systematic analysis of the data assembled, an assessment of the challenges to binational highway planning that are implied by the differences between the two countries' planning and financing approaches, and identifications of options for resolving those challenges." The study's primary finding is that although it will not happen "overnight" and that it will be a tedious and formidable process, the establishment of a binationally integrated transportation planning system is a necessity for the United States/Mexico border.

Publish Date: June 1995

Source: San Diego Association of Governments

Contact: Hamilton, Rabinovitz & Alschuler, Inc.
10 Universal City Plaza, Suite 1960
Universal City, California 91608

Key Words: Highway planning, transportation, San Diego Association of Governments, SANDAG, Tijuana, Tecate, Hamilton, Rabinovitz & Alschuler, Inc., financing, border

(49) THE NAFTA TRANSPORTATION IMPACTS IN SCAG REGION STUDY

"The purpose of the study was to conduct an intensive analysis of the impacts of NAFTA on the transportation infrastructure in the six-county area [Ventura County, San Bernardino County, Los Angeles County, Riverside County, Orange County, and Imperial County] covered by the Southern California Association of Governments...The Study is in effect an assessment of current economic, financial, political, and other conditions surrounding NAFTA. From this baseline, the Team will undertake a technical identification of issues, conduct a technical and policy assessment of the issues, develop a series of strategies, and prepare a draft and final report documenting the impacts of NAFTA on the Southern California transportation infrastructure, including a series of recommendations for action."

Publish Date: 1995 and in progress

Source: Southern California Association of Governments

Contact: Cordoba Corporation
811 Wilshire Boulevard, 18th Floor
Los Angeles, California 90017
(213) 895-0224
(213) 895-6656 FAX

Key Words: North American Free Trade Agreement, NAFTA, Southern California Association of Governments, SCAG, Cordoba Corporation, infrastructure, transportation, Mexico, San Bernardino, Los Angeles, Ventura, Riverside, Orange, Imperial, truck, rail

(47) THE NORTH AMERICAN FREE TRADE AGREEMENT TESTIMONY

Through their testimony, the subcommittee suggests three improvements which will expedite movement of goods and people binationally while ensuring safety and equity. The three improvements are: uniform regulatory criteria, ports of entry which "maintain" jurisdictional autonomy while promoting an efficient, complete 'one stop' approach" and an expansion of the Safety Net Database to provide instant access to safety records on vehicles and drivers.

Publish Date: June 11, 1993

Source: California State Department of Transportation
District 11
2829 Juan Street
San Diego, California 92110
(619) 688-6699

Contact: Regulatory Subcommittee of the Caltrans Bi-National Border Transportation Study Committee

Key Words: North American Free Trade Agreement, NAFTA, Caltrans, border, transportation, goods movement, port of entry, Safety Net Database

**(50) THE SANTA TERESA/DONA ANA COUNTY
INTERMODAL FACILITY FEASIBILITY STUDY, PHASE I**

"At the request of the New Mexico State Highway and Transportation Department, Sandia National Laboratories performed a feasibility study for an intermodal facility for rail and highway transportation providers to be located in the vicinity of the Santa Teresa border crossing in southern New Mexico. Because of time constraints, SNL contracted with four companies to conduct studies to identify basic operating functions of an intermodal facility and possible funding mechanisms, to identify the economic feasibility of a facility based on commodity flows and projected traffic, to prepare a basic design for the facility and obtain preliminary cost estimates, and to survey Mexican government and industry leaders to determine their interest in the facility. The preliminary conclusion is that the facility appears to be economically and technically feasible. However, additional detailed traffic flow and commodity flow modeling and simulation must be completed before a final determination is made."

Publish Date: July 1993

Source: New Mexico State Highway and Transportation Department
P.O. Box 1149
Santa Fe, New Mexico 87504-1149

Contact: Sandia National Laboratories
Transportation Systems Center
Albuquerque, New Mexico 87185

Key Words: Dona Ana County, Camino Real Intermodal Center, Santa Teresa, Sandia National Laboratories, New Mexico State Highway & Transportation Department, NMSHTD

(48) THE SANTA TERESA INTERMODAL BORDER CROSSING STUDY

"The purpose of the study was to provide the Santa Teresa Intermodal Border Crossing Steering Committee with a detailed understanding of cost recovery issues and operation of the proposed multi-modal facility. The second goal was to provide specific recommendations for the funding and operation of multi-modal transportation facility at the Santa Teresa border crossing. The third and final goal was to conduct a thorough evaluation of commodity and traffic flows for a market analysis to support the funding and operational recommendations. The three deliverables for the project were financing options for yard construction and individual yard operations; details of yard operations and associated background costs; and commodity and traffic flows."

Publish Date:

Source: Sandia National Laboratories

Contact: Don Breazeale and Associates
6986 El Camino Real, Suite B
Rancho La Costa, California 92009
(619) 929-9989
(619) 929-9987 FAX

Key Words: Don Breazeale and Associates, transportation, Santa Teresa Intermodal Center, border crossing, commodity flow, Sandia National Laboratories

(88) THE TEXAS SEAPORT AND INLAND WATERWAY SYSTEM

"This report presents a comprehensive overview of the Texas seaport and inland waterway system, the results of which are intended to be integrated into the Texas Transportation Plan. Next year's report, the second in a two-report series, will explore possible remedies to statewide maritime issues, as well as other aspects of Texas waterborne commerce. As Texas prepares for greater economic prosperity and integration under the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT), the benefits of anticipated increased trade flows will depend heavily on the ability of the state's intermodal transportation infrastructure to efficiently accommodate additional traffic. The term 'intermodal' refers to a combination of various forms of transport—primarily ship, truck and rail. The Texas seaport and inland waterway system is an integral part of the state's intermodal transportation infrastructure." The report reveals that serious problems exist at the majority of Texas seaports in terms of landside access—insufficient access via state and federal highways, lack of rail service and infrastructure. Some ports need more direct freeway access, others need improved intermodal access and still others need more effective general port access.

Publish Date: 1995

Source: Lyndon B. Johnson School of Public Affairs

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: Texas, North American Free Trade Agreement, NAFTA, seaport, waterway, University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, General Agreement on Tariffs and Trade, GATT, intermodal, truck, rail, ship

(51) TRANSBORDER TRAFFIC AND INFRASTRUCTURE IMPACTS ON THE CITY OF LAREDO, TEXAS

"This study examines the effects of the recent and projected growth of transborder truck traffic on the City of Laredo, a key gateway for U.S.-Mexico trade. It concludes that additional investments in city infrastructure are needed to manage truck and auto traffic, and that dedicated truck routes could be financed by raising bridge tolls to incorporate user fees for their provision and maintenance. Additionally, truck forecast models (which include rail) capable of encompassing the whole U.S.-Mexico border area must be developed to validate specific infrastructure investment decisions, from both a highway and multimodal planning perspective."

Publish Date: 1993

Source: Texas Department of Transportation
Office of Research and Technology Transfer
P.O. Box 5051
Austin, Texas 78763

Contact: The University of Texas at Austin
Center for Transportation Research
Austin, Texas 78712-1075

Key Words: Laredo, University of Texas, Austin, Texas Department of Transportation, TxDOT, border, United States, Mexico, truck, infrastructure, rail, multimodal planning

(52) TRANSPORTATION AND DISTRIBUTION CLUSTER IN THE ARIZONA-SONORA REGION: ANALYSIS AND RECOMMENDATIONS FOR DEVELOPMENT

"The main objective of this component of the Strategic Economic Development Vision for the Arizona/Sonora Region is to analyze and evaluate, within the framework of NAFTA, the Transportation and Distribution sector as a driving force in the regional economy. The specific objectives of this study are the identification of the needs and opportunities that may lead to increased trade flows, and, based on these findings, the formulation of recommendations for the governments of both states. The factors of this study include (1) Evaluation of the current situation of the transboundary transportation and distribution sector in the Arizona-Sonora region; (2) Identification of the principal problems and needs of the sector; and (3) Identification of the appropriate actions needed to enhance the productivity of the sector."

Publish Date: December 7, 1995

Source: Arizona-Mexico Commission; Comision Sonora-Arizona

Contact: Vera Pavlakovich
Office of Economic Development
The University of Arizona
888 Euclid, 4th Floor
Tucson, Arizona 85721
(602) 621-5398
(602) 621-9022 FAX

Key Words: University of Arizona, Sonora, transportation, distribution, transboundary, border, North American Free Trade Agreement, NAFTA, port of entry, Arizona-Mexico Commission, Strategic Economic Development Vision

(54) TRANSPORTATION AND TRADE BETWEEN THE UNITED STATES AND MEXICO

TRANSNET West project is part of the national North American Trade and Transportation Project Authorized under Section 6015 of the Intermodal Surface Transportation Efficiency Act. Reports include the following: **Making Things Work: Transportation and Trade Expansion in North America** (Center for the New West); **Making Things Work: Transportation and Trade Expansion between the U.S. and Mexico** (Barton-Aschman Associates, Inc.); **Making Things Work: Profiles of the U.S.-Mexico Border** (Barton-Aschman Associates, Inc.); **Making Things Work: Commissioned Special Studies** (these include Disparities in the Law and Practices of Surface Transportation of Goods Between the U.S. and Mexico, Transportation Technology Trends and North American Trade by Meinel/Bosma Research, Financing Options for U.S.-Mexico Border Transportation Projects by Apogee Research, Trends in International Trade and Impacts on North American Transportation by Dr. Philip Burgess and Mike Kelly [Center for the New West], and The Impact of Expanded U.S.-Mexico Trade on the Western U.S. by Drs. Timothy Hogan and Lee R. McPheters [Arizona State University]).

Publish Date: 1993

Source: Center for the New West
Albuquerque Center
916 Idlewilde SE
Albuquerque, New Mexico 87108
(505) 255-8700
(505) 255-5466 FAX

Contact: (See Abstract)

Key Words: TRANSNET, United States, Mexico, Center for the New West, trade, 6015, ISTEA, Intermodal Surface Transportation Efficiency Act

(53) TRANSPORTATION ASPECTS OF THE MAQUILADORA INDUSTRY LOCATED ON THE TEXAS/MEXICO BORDER

"This report documents the study findings on truck traffic generated from the maquila industries along the Texas/Mexico border. The transportation needs of Texas are defined...Also included is a preliminary assessment of some potential impacts of the proposed North American Free Trade Agreement (NAFTA)." This report suggests that in general, additional construction, operational improvements and different operating policies could be enacted in order to ease some of the problems which exist in the system. Specifically, two possibilities are recommended for traffic flow involving trucks. The first is the designation of a specific lane on bridges along the border for trucks only, and the second is (in cities having more than one bridge) to use one bridge for trucks exporting goods and another for imports.

Publish Date: 1992

Source: Texas Department of Transportation
Transportation Planning Division
P.O. Box 5051
Austin, Texas 78763

Contact: Texas Transportation Institute
Texas A&M University
College Station, Texas 77843

Key Words: Maquiladora, Texas Department of Transportation, TxDOT, United States, Mexico, border, truck, North American Free Trade Agreement, NAFTA, Texas Transportation Institute, TTI

**(90) TRANSPORTATION CONCEPT REPORT
STATE ROUTE 905 11-SD-905 P.M. S.D. 0.0 - 12.0**

"The components of the (Year) 2015 Transportation Concept report include State highway, arterial street, and transit improvements...The State highway component examines the route in segments for traffic analysis and other purposes. This component includes projections for the year 2015 for the facility type and the number of lanes, the Average Daily Traffic (ADT), the peak hour Volume to Capacity (V/C) Ratio, the peak hour Operating Level of Service (LOS), the Transportation Concept LOS, and whether the segment is currently in the rural or urban area. The future traffic projections for State Route 905 (SR-905) are based on Caltrans' traffic projections and the San Diego Association of Governments' (SANDAG) Series 8 regional population and employment forecasts and assume completion of the future regional transportation system."

Publish Date: September 1994

Source: State of California Department of Transportation

Contact: State of California Department of Transportation
District 11 - System Planning Branch
2829 Juan Street
P.O. Box 85406
San Diego, CA 92138-5406

Key Words: San Diego Association of Governments, SANDAG, California Department of Transportation, Caltrans, State Route 905, SR-905

(56) TRANSPORTATION ISSUES ALONG THE CALIFORNIA/MEXICO INTERNATIONAL BORDER

"This report has been prepared by the California Department of Transportation (Caltrans) in an effort to document its on-going transportation planning activities in the California/Mexico border region ... This report provides an overview of transportation concerns and issues that impact existing and proposed transportation facilities in the region." Relevant conclusions and recommendations for Caltrans include the following: (1) establish working partnerships between California and Mexico to address efficient cross-border goods movement; (2) perform a multi-jurisdictional study of the border region; (3) work on the improvement of international border crossings; (4) develop a border plan for transportation improvements; and (5) integrate the identified needs into the transportation planning process."

Publish Date: September 1993

Source: California Department of Transportation
District 11 Transportation Planning Branch

Contact: Sergio Pallares
CALTRANS District 11
2829 Juan Street
P.O. Box 85406
San Diego, California 92186-5406
619-688-3136

Key Words: California Department of Transportation, Mexico, Intermodal Surface Transportation Efficiency Act, ISTEA, North America Free Trade Agreement, NAFTA, San Diego, Baja California, Tijuana, Tecate, Mexicali, Ensenada, trade flow, truck, rail, port of entry, air, seaport, privatization

(55) TRANSPORTATION, NAFTA AND INCREASING NORTH AMERICAN TRADE: THE LITERATURE

"This literature survey and analysis addresses transportation infrastructure, the North American Free Trade Agreement (NAFTA) and increased trade among the United States and Mexico and Canada. It ranges from descriptions of individual projects to macro-level analyses of the effects of NAFTA on national and international economies and trade routes. This literature survey highlights major past, ongoing and proposed studies addressing transportation infrastructure in the Western states. However, its principal focus is the border states: California, Arizona, New Mexico and Texas which are undertaking extensive research to prepare themselves for expanding North American free trade areas."

Publish Date: November 1993

Source: Center for the New West

Contact: Center for the New West
Albuquerque Center
916 Ildewilde SE
Albuquerque, New Mexico 87108
(505) 255-8700
(505) 255-5466 FAX

Key Words: Center for the New West, NAFTA, North American Free Trade Agreement, United States, Mexico, transportation, literature survey, California, Arizona, New Mexico, Texas

(57) TRUCK KILOMETERS OF TRAVEL ON THE CALIFORNIA STATE HIGHWAY SYSTEM

"This is the eleventh of a series of annual reports that provides estimates of truck travel on the California State Highway System. This report differs from previous editions in that estimates are reported in kilometers instead of miles. The kilometers of travel estimates are stratified by truck axle group, vehicle type and geographical area. The report begins with a brief review of the methodology used to develop the vehicle kilometers of travel estimates. The results are then summarized in tabular and graphical format. The results are presented at the route, county and statewide level."

Publish Date: July 1994

Source:

Contact: California Department of Transportation
Office of Traffic Improvements
1120 N Street
Sacramento, California 95814
(916) 654-4702

Key Words: California, truck travel, Caltrans, vehicle kilometers, transportation, highway

**(59) U.S. BORDER CROSSINGS WITH CANADA AND MEXICO:
PORT FACILITIES, INVENTORY AND CONSTRAINTS. VOLUME 2**

"The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 calls for a study of the U.S. international border crossings. The objective of the study is to identify existing and emerging trade corridors and transportation subsystems that facilitate trade between the United States, Canada and Mexico."

Publish Date: 1993

Source: Federal Highway Administration
Office of Policy Development
Washington, D.C.

Contact: Volpe National Transportation Systems Center
Research and Special Programs Administration
Cambridge, Massachusetts 02142

Key Words: Border crossing, Mexico, United States, port facility, trade, Volpe National Transportation Systems Center, Intermodal Surface Transportation Efficiency Act, ISTEA, Federal Highway Administration, FHWA

**(91) U.S.-MEXICAN FREE TRADE: THE EFFECT ON TEXTILES AND APPAREL,
PETROCHEMICALS, AND BANKING IN TEXAS**

"The sweeping changes in production and commerce that are expected as a result of liberalized trade [NAFTA - the North American Free Trade Agreement] will have a strong impact in Texas, where proximity to Mexico has already led to close production and trade ties, particularly in the heavily integrated border economy...The results of NAFTA...will be mixed. Some industry and service sectors in Texas will benefit from the increased market and investment opportunities offered by liberalized trade; others will see increased competition. Expanded trade and investment under NAFTA—and the extent to which Texas benefits from them—may be affected by many factors: how well industry leaders and policymakers understand the way business is conducted in Mexico, implications of Mexican liberalization in certain nontrade areas such as foreign investment, the treatment of intellectual property rights, improvements in Mexico's transportation systems, and the extent to which Mexico enforces its labor and environmental laws. These issues represent potential challenges as well as opportunities for the three industries that are the focus of this report."

Publish Date: 1993

Source: U.S.-Mexican Policy Studies Program

Contact: Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
Austin, Texas 78705-2650

Key Words: United States, Mexico, University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, North American Free Trade Agreement, NAFTA, banking, textiles, petrochemicals

(61) U.S.-MEXICO SHIPPING OPPORTUNITIES AND THE NORTH AMERICAN FREE TRADE AGREEMENT

"The rapid growth of truck-transported U.S.-Mexico trade and the national debate in 1993 over the North American Free Trade Agreement (NAFTA) have created a growing interest among shippers and U.S. trucking firms to develop U.S.-Mexico trade related opportunities. However, many of the discussions about NAFTA and trade between the U.S. and Mexico have been biased and fail to present U.S.-Mexico trade in a way that explains the opportunities for shippers and trucking firms. This discussion will attempt to give an 'opportunity' perspective, with particular attention to truck transported shipping opportunities.

Publish Date: April 9, 1994 (has been updated)

Source: McCray Research

Contact: John P. McCray, P.E., Ph.D.
 McCray Research
 14007 Foothills Court
 San Antonio, Texas 78249
 (210) 641-7481
 (210) 641-9815 FAX

Key Words: United States, Mexico, shipping, truck, North American Free Trade Agreement, NAFTA, McCray Research, export, import, port

(93) U.S.-MEXICO TRADE AND TRANSPORTATION: CORRIDORS, LOGISTICS PRACTICES AND MULTIMODAL PARTNERSHIPS

"This report provides a detailed investigation into the ways in which U.S. and Mexican firms are attempting to overcome the difficulties of cross-border transportation and distribution. In great part, this is occurring via partnerships, strategic alliances, and other kinds of business ventures designed to facilitate cross-border transfers of technology, capital, and expertise. Through a case study approach, we explore how several firms involved in cross-border transportation and distribution are using these types of cooperative ventures to expand effectively and profitably into the markets opened in Mexico by the North American Free Trade Agreement (NAFTA)...As the third in a three-report series, this report explores in detail the development and evolution of logistics management techniques in both the United States and Mexico via partnerships and strategic alliances."

Publish Date: 1995

Source: Lyndon B. Johnson School of Public Affairs

Contact: Policy Research Project on Texas/Northern Mexico Infrastructure and Free Trade
 Lyndon B. Johnson School of Public Affairs
 The University of Texas at Austin
 Austin, Texas 78705-2650

Key Words: Mexico, United States, Texas, North American Free Trade Agreement, NAFTA, University of Texas, Austin, Lyndon B. Johnson School of Public Affairs, logistics management, transportation, border

(60) U.S.-MEXICO TRADE: CONCERNS ABOUT THE ADEQUACY OF BORDER INFRASTRUCTURE

"This report, as requested, contains information and our preliminary observations on (1) the process for planning and expanding border inspection facilities, (2) steps taken by the U.S. and Mexican authorities to expedite processing of border control traffic, (3) staffing patterns for the principal U.S. federal agencies involved in inspections along the border, (4) road and highway infrastructure needs at major border entry ports, and (5) transborder access for commercial trucks. We also developed information on the four southwest border Customs Districts to illustrate recent trends in trade and commercial traffic flows."

Publish Date: May 1991

Source: Chairman, Committee on Finance, U.S. Senate

Contact: United States General Accounting Office
National Security and International Affairs Division
Washington, D.C. 20548

Key Words: Infrastructure, United States General Accounting Office, Mexico, trade, traffic flows, transportation, Senate, border inspection facility, port of entry

(62) U.S.-MEXICO TRADE: SURVEY OF U.S. BORDER INFRASTRUCTURE NEEDS

"We have reviewed current and projected U.S. border infrastructure needs associated with increased U.S.-Mexican trade. This report provides information on such needs as inspector staffing, inspection facilities, highways and bridges, and coordination in border management and planning efforts."

Publish Date: November 1991

Source: Report to the Chairman, Committee on Finance, U.S. Senate

Contact: United States General Accounting Office
National Security and International Affairs Division
Washington, D.C. 20548
(202) 275-4812

Key Words: United States Senate, Mexico, border, infrastructure, inspection facility, highway, bridge, General Accounting Office

(92) U.S.-MEXICO TRUCK TRADE: FOUR STUDIES INVESTIGATING THE "IMPACTS OF BIGGER TRUCKS ON TEXAS"

"This Special Research Project identified some of the major infrastructure costs that will be incurred if bigger commercial trucks are allowed to transport U.S./Mexico trade over Texas highways...Serious efforts are underway to use the NAFTA harmonization process as a means to increase the currently legal U.S. truck size and weight limits to match, or at least approximate, the limits that are legal in Canada and Mexico...This Project is comprised of four separate but related Studies. First, it was necessary to identify the key highway corridors over which present U.S./Mexico trade flows (Study Number I). Once this was accomplished it was then possible to determine the pavement impacts (Study Number II) and the bridge impacts (Study Number III) that would result from the operation of the bigger truck configurations being considered in the NAFTA harmonization negotiations. Finally, a cost allocation analysis (Study Number IV) was completed to ascertain what share of the infrastructure costs, based upon current Texas tax law, could be expected to be recovered from each of the proposed bigger truck configurations." The primary finding of these studies was that Texas would not be "well-served" by any agreement regarding the increase of truck size and weight limits. Major infrastructure improvement and/or strengthening efforts, for which funding is not available, would then be necessary. Also, this study concludes that any such "enrichment" of trucking efforts would have to be done at the expense of other transportation modes.

Publish Date: December 1995

Source: The American Association of Railroads
Washington, D.C.

Contact: Ray Barnhart & Associates
1012 East 38 1/2 Street
Austin, Texas 78751
(512) 451-5171

Key Words: Texas, Mexico, North American Free Trade Agreement, NAFTA, United States, truck, highway, The American Association of Railroads, Ray Barnhart & Associates, bridge, cost allocation analysis, infrastructure

(58) U.S. MOTOR CARRIER PERSPECTIVES ON TRUCKING TO MEXICO

"The primary purpose of this article is to identify the most serious problems encountered by U.S. motor carriers in cross-border trade. A survey of U.S. Class I motor carriers (i.e. those carriers that generate at least \$5 million annual revenue) is utilized to investigate several alleged problems described in the transportation trade literature. Conclusions and recommendations include the following: (1) problems with incompatibility and deficiencies have a negative effect on U.S./Mexican truck transportation; (2) U.S. carriers' satisfaction with Mexican carriers appears "not be as bad as popular press portrays," (3) U.S./Mexican communication between trucking firms and shippers/receivers is insufficient; and (4) this study might indicate that other studies be warranted regarding more effective communication, issues of deregulation, and regulatory policy changes.

Publish Date: Summer 1994

Source: Transportation Journal

Contact: Rafael J. Valdes; Michael R. Crum
Transportation Journal
Vol. 33/ No. 4
pp. 5-20

Key Words: Truck, Mexico, United States, Transportation Journal, motor carrier problems, cross-border trade

**(63) U.S. 95 DESIGN CONCEPT STUDY, SAN LUIS TO 32ND STREET:
INITIAL DESIGN CONCEPT REPORT**

"The US 95 Design Concept Study evaluates alternatives for modifying US 95 to provide four through traffic lanes. The primary objective of the proposed improvements is to maintain level of service B on the facility through the 20-year planning period...The study includes a review of existing conditions along US 95, an environmental inventory, a presentation of the AASHTO controlling design criteria, discussions on traffic and drainage, the development and evaluation of seven initial alternatives, the evaluation of the final three alternatives, and a recommended alternative for the corridor."

Publish Date: January 1995

Source: Arizona Department of Transportation

Contact: Parsons Brinckerhoff Quade & Douglas
1501 West Fountainhead Parkway, Suite 400
Tempe, Arizona 85282
(602) 966-8295
(602) 966-9234 FAX

Key Words: Parsons Brinckerhoff Quade & Douglas, PBQ&D, US 95, San Luis, transportation, Arizona Department of Transportation, ADOT, design concept study, AASHTO

(94) VIRGINIA AVENUE INTERNATIONAL BORDER CROSSING FEASIBILITY STUDY

"The principal purposes of the study are to address the following: 1) Can the Virginia Border Crossing, located about 400 meters west of the San Ysidro Border Crossing between Tijuana and San Diego be used to alleviate congested conditions at the San Ysidro site and what are the best uses for an added border entry point; and 2) Can the southbound lanes of I-5 be converted to add northbound capacity on the freeway point of entry into the United States? The goal of this project is to develop a feasibility study examining options for improving the existing border crossing between San Diego and Tijuana at San Ysidro by opening a southbound entry at the Virginia Avenue/El Chaparral portal, allowing modifications of the existing I-5 crossing to handle additional northbound movements."

Publish Date: February 1996

Source: San Diego Association of Governments
First Interstate Plaza
401 B Street, Suite 800
San Diego, CA 92101
(619) 595-5300

Contact: P&D Consultants, Inc.

Key Words: Virginia Avenue, San Diego Association of Governments, SANDAG, P&D Consultants, Inc., San Ysidro, Tijuana, feasibility study, border crossing, El Chaparral, I-5

(64) WESTERN NORTH AMERICAN TRANSNATIONAL TRADE CORRIDORS

"The objective of this study is to develop a conceptual framework and a descriptive body of information for use by government and private decision-makers at the national, regional, and state level in the analysis of trade corridor and intermodal transportation needs and the opportunities and challenges they represent to the Western states within the emerging North American economy."

Publish Date: June 22, 1992

Source: Center for the New West

Contact: Center for the New West
#600 World Trade Center
1625 Broadway
Denver, Colorado 80202
(303) 592-5310

Key Words: Trade corridor, North America, Center for the New West, intermodal, transportation

**(98) ARIZONA-SONORA TRANSPORTATION INFRASTRUCTURE STUDY:
TECHNICAL REPORT ASSESSMENT OF TRANSPORTATION
INFRASTRUCTURE INVENTORIES, DATA AND FACILITIES**

The purpose of this study was to assist members of the infrastructure study team in "(1) the review and assessment of transportation infrastructure and facilities information and (2) recommending actions to be taken by Arizona and Sonora as part of the transportation planning efforts associated with international transportation infrastructure and facilities." The seven tasks of the study included the following: 1. Inventory of Existing Facilities; 2. Goodness of Fit-Infrastructure Inventory; 3. Development of Transportation Plans; 4. Goodness of Fit Analysis-Transportation Plans; 5. Recommendations for Future Actions; 6. Action Plan Development; and 7. Technical Support to Arizona-Sonora Transportation Infrastructure Study Team.

Publish Date: May 1995

Source: Arizona Department of Transportation; Gobierno del Estado de Sonora; Centro Secretaría de Comunicaciones y Transportes Sonora; JHK & Associates; Collins-Piña Consulting Engineers, Inc.

Contact: Arizona Department of Transportation
Transportation Planning Section
206 S. 17th Avenue
Phoenix, Arizona 85007

Key Words: Arizona Department of Transportation, ADOT, Sonora, infrastructure

(99) OVERVIEW OF THE TEXAS-MEXICO BORDER: CAPACITY, DEMAND, AND REVENUE ANALYSIS OF BORDER SEGMENT 1 (GULF TO LAREDO)

This report documents the results of a study conducted to examine transportation planning techniques along the Texas-Mexico border. The study focused on understanding capacity utilization at border crossing facilities and methods to identify if new bridges are needed and where they are likely to be constructed. New analysis techniques were developed as a part of this study.

"Specifically, this report documents the application of these analytical methods to the Texas-Mexico border Segment 1, which begins at the Gulf of Mexico and ends immediately west of Colombia Bridge in Laredo. This report is supplemented by Research Report 1976-5, which documents the analogous results for Segment 2 (Laredo to El Paso). For each sector, the current capacity utilization of each binational entry system component was assessed using a methodology that takes into account all possible interruptions in transborder traffic circulation. The capacity analysis is complemented by estimates of potential demand and revenues of new toll bridges in each sector. Recommendations concerning the potential feasibility of new toll bridges were developed using a financial analysis model that simulates the effect of managerial decisions upon the predicted gross revenues and estimated costs. Together, the capacity and feasibility analyses provide a comprehensive picture of border transportation needs, including identification of those sectors where new toll bridges are financially attractive."

The study found that toll booths and inspection facilities present the majority of the problems in most binational border crossings, followed by insufficient access to and from the bridge. New bridges should possibly be considered when existing facilities cannot be expanded or improved.

Publish Date: April 1994

Source: Texas Department of Transportation

Contact: Center for Transportation Research
The University of Texas at Austin
3208 Red River, Suite 200
Austin, Texas 78705-2650

Key Words: University of Texas, Austin, Laredo, Los Indios, Brownsville, Texas Department of Transportation, TxDOT, border, toll bridge, traffic circulation

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