



**National Estuary Program
Coastal Bend Bays and Estuaries
Economic Profile**

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Coastal Bend Bays and Estuaries Program Economic Profile

Introduction

This document is an economic profile of the Coastal Bend National Estuary Program (NEP). It includes data on the output and employment of businesses, and the employment and incomes of workers in the region. This data has been compiled as a resource for NEP program staff to characterize the regional economy in which the NEP exists. The authors hope the data is useful and welcome feedback and comments.

Data

Most of the data used in this economic profile is taken from Federal sources such as the US Bureau of Economic Analysis, US Bureau of Labor Statistics, and US Census Bureau, and was compiled by the Minnesota Implan Group (MIG, 2001). The data represent 1998, which is the most recent year available. EPA's National Center for Environmental Economics has purchased and maintains the Implan data and modeling system and made them available to the Coastal Management Branch for this analysis. Although the same models could be used to estimate economic impacts, analysis of the regional economic impacts of specific policy scenarios on particular sectors is beyond the scope of the present work.²

County Estimates

The NEP lies within the following counties:

Texas Counties: Aransas, Bee, Brooks, Duval, Jim Wells, Kennedy, Kleberg, Live Oak, McMullen, Nueces, San Patricio, Refugio

Table 1: Summary Data, Coastal Bend NEP, Sum of County Estimates

Population	Employment	Households	Area (mi ²)	Income per household	Tot Personal Income*	Gross Output*
562,679	284,574	210,559	11,508	\$52,520	\$11,059	\$24,792

*millions

For comparison purposes, the average income per household for the United States as a whole is \$69,409.

² For more information about economic profiles or economic impact analysis see Chapter 9 "Distributional Analyses" in U.S. Environmental Protection Agency, Guidelines for Preparing Economic Analyses. EPA 240-R-00-003. September, 2000. The document may be downloaded from <http://www.epa.gov/economics/>

The estimates given in Table 1 include all economic activity from all counties. In the case of Coastal Bend, the NEP boundary coincides with county borders, allowing county level data to accurately describe the NEP. **See appended map.**

Leading Industries

Table 2 lists industry sectors ranked by the value of output produced in 1998. The top three sectors; Refining, Cyclic Crudes, and Natural Gas and Crude Petroleum; accounted for over \$5.8 billion.

Table 3 shows that Education employed the most workers in 1998, followed by Eating and Drinking and Government.

Table 2: Top 10 Industries by Output, 1998

Rank	Industry	Output*	Employment	Employee Compensation*
1	Petroleum Refining	3,929	3,012	265
2	Cyclic Crudes, Interm. & Indus. Organic Chem.	1,041	1,869	145
3	Natural Gas & Crude Petroleum	884	3,311	129
4	Federal Government – Military	831	8,458	481
5	Wholesale Trade	796	8,183	289
6	Real Estate	770	4,973	38
7	State & Local Government – Education	721	24,160	721
8	New Residential Structures	670	5,267	93
9	Doctors and Dentists	650	6,960	325
10	Hospitals	606	10,020	302
Total	Coastal Bend NEP Totals	247,912	284,574	7,069

*millions of dollars

Table 3: Top 10 Industries by Employment, 1998

Rank	Industry	Output*	Employment	Employee Compensation*
1	State & Local Government – Education	721	24,160	721
2	Eating & Drinking	593	17,633	205
3	State & Local Government - Non-Education	387	10,702	303
4	Hospitals	606	10,020	302
5	Other Medical and Health Services	378	9,388	119
6	Federal Government - Non-Military	459	8,930	395
7	Federal Government - Military	831	8,458	481
8	Wholesale Trade	796	8,183	289
9	Food Stores	258	7,806	138
10	Miscellaneous Retail	253	7,106	80
Total	Coastal Bend NEP Totals	24,792	284,574	7,069

*millions of dollars

Tourism GDP

Responding to increased interest in the effect of tourism on local economies, particularly on those rich in environmental amenities, Table 4 gives the “Tourism GDP” of the estuary. The U.S. Department of Commerce has defined tourism industry ratios (Okubo and Cass, 2000). Tourism ratios express the proportion of sector output that is consumed by travelers more than 50-100 miles from home. For example, the ratio for Eating and Drinking is 0.17, meaning that about 17 percent of restaurant meals are sold to tourists nationwide. Table 4 also shows that the industry ratio for Lodging is 0.80, meaning that about 80 percent of hotel revenue is generated by tourists (meeting rooms and subsidiary dining facilities would be included in the remainder). Industry ratios have been matched with model data following Creason (2000). The data was then multiplied by these industry ratios to estimate tourism output and employment by sector.

Table 4: Selected Tourism Industries

Industry	Output*	Employment	Industry Ratio	Tourism Output*	Tourism Employment
Railroads and Related Services	35,751	190	0.03	1,073	6
Local, Interurban Passenger Transit	22,199	479	0.31	6,882	148
Water Transportation	79,989	449	0.17	13,598	76
Air Transportation	92,348	1,044	0.76	70,184	793
Arrangement Of Passenger Transportation	44,539	430	0.21	9,353	90
General Merchandise Stores	152,348	4,940	0.03	4,570	148
Automotive Dealers & Service Stations	258,391	4,946	0.07	18,087	346
Eating & Drinking	592,783	17,633	0.17	100,773	2,998
Hotels and Lodging Places	126,164	3,061	0.8	100,931	2449
Automobile Rental and Leasing	31,130	432	0.58	18,055	251
Motion Pictures	43,897	679	0.18	7,901	122
Theatrical Producers, Bands Etc.	9,083	128	0.18	1,635	23
Commercial Sports Except Racing	492	3	0.09	44	0
Amusement and Recreation Services, N.E.C.	32,349	1,140	0.2	6,470	228
Membership Sports and Recreation Clubs	21,719	763	0.32	6,950	244
Tourism Totals	1,543,182	36,317	-	366,508	7923

*thousands of dollars

Table 4 shows that Tourism industries together have over \$366 million in output, and nearly 8,000 employees in the Coastal Bend NEP. Taken together, tourism would be the 9th largest employment sector, accounting for about 2.7 percent of those working in the NEP. In 1997, U.S. tourism expenditures totaled \$291.5 billion, or 3.5 percent of gross

domestic product. Also, tourism industries employed nearly 4.5 million people, 3.5 percent of all employees nationally (Kass and Okubo, 2000).

References

Creason, Jared. *Analyzing the Environmental and Economic Impacts of Tourism*. Proceedings of the 2000 National IMPLAN User's Conference, October 12-13, 2000. Fort Collins, CO. pp. 29-39.

Environmental Systems Research Institute, Inc. *ArcView GIS Version 3.1 Data and Software*.

Minnesota Implan Group, Inc. *IMPLAN Professional 2.0 Data and Software*. 1998 data released June, 2001. www.implan.com

Okubo, Sumiye and David I. Kass. *U.S. Travel and Tourism Satellite Accounts for 1996 and 1997*. Survey of Current Business, July, 2000, pp. 8-24.

U.S. Census Bureau. *Zip Code Business Patterns, 1998*

U.S. Census Bureau. *County Business Patterns, 1998*