

THE ENGINE OF ECONOMIC GROWTH IN SOUTHEAST TEXAS

by

Carl B. Montano, Ph.D.
Professor of Economics
Lamar University
Department of Economics & Finance
P.O. Box 10045
Beaumont, Texas 77710
Tel. (409) 880-8651
FAX: (409) 880-1752
E-mail: montanocb@hal.lamar.edu

and

Andrew W. Bacdayan, Ph.D.
Professor of Economics & Director, Center for Economic Education
Lamar University
Department of Economics & Finance
P.O. Box 10045
Beaumont, Texas 77710
Tel. (409) 880-8657
FAX: (409) 880-1752
E-mail: bacdayanaw@hal.lamar.edu

Paper presented at the 2004 Annual Meeting of the **Southwestern Society of Economists (SSE)**,
Federation of Business Disciplines (FBD), Orlando, Florida, March 4, 2004.

THE ENGINE OF ECONOMIC GROWTH IN SOUTHEAST TEXAS

Abstract

This paper presents results of shift-share and location quotient analyses of the Southeast Texas region to determine the area's engine of economic growth. The Texas Workforce Commission (TWC) employment data used (3-digit NAICS) were for the years 1997 and 2002. Presented first are the major employing industries in the region. Then, expanding and declining industries are identified. The Total Employment Change of the expanding industries are arranged in descending order, and the corresponding contributions of the National Growth Share, Industry Mix Share, and Local Share to this job growth are given. The results show which industries have comparative advantages in the region.

Exporting and importing industries in Southeast Texas were also identified. Thus, the results show which expanding or more competitive industries are engaged in exports. These are the region's engine of economic growth because they bring in new money/income and jobs to the area, with potentially higher multiplier effect. Policy implications of the research results are also derived for economic development planners in Southeast Texas.

THE ENGINE OF ECONOMIC GROWTH IN SOUTHEAST TEXAS

1.0 INTRODUCTION

This study was undertaken to help economic development planners in Southeast Texas identify the region's: (1) growing vs. declining industries, (2) exporting (basic) vs. importing (non-basic) industries, (3) areas of comparative advantage, and (4) promising emerging growth industries. The findings should be of interest to economic development entities such as local chambers of commerce and the **Partnership of Southeast Texas (POST)**.

The Southeast Texas Region is defined in this study as a nine-county area under the purview of POST. Later, because of data availability problem, one county was eliminated. Shift-share and location quotient methodologies were used to achieve the objectives of this study. The shift-share analysis was done over the span of five years, from First Quarter, 1997 to First Quarter 2002. National, state and county employment data were provided by the Texas Workforce Commission (TWC).

2.0 THE SOUTHEAST TEXAS REGION

In previous studies, traditionally, the Southeast Texas Region is defined as composed of Jefferson, Orange and Hardin counties, otherwise referred to as the **Beaumont-Port Arthur Metropolitan Statistical Area (MSA)** (Figure 1). This study purposely redefined the Southeast Texas region from the broader planning perspective of **POST** as a nine-county area that includes Chambers, Hardin, Jasper, Jefferson, Liberty, Newton, Orange, Tyler counties and the Bolivar Peninsula in Galveston County (Figure 2). Since no employment data was separately available for Bolivar Peninsula, this part of the region was not included in the analysis.

3.0 SHIFT-SHARE AND LOCATION QUOTIENT METHODOLOGIES

3.1 Data used

Employment data obtained from the Texas Workforce Commission (TWC) for 1st Quarter 1997 and 1st Quarter 2002 were at the National (U.S.), state (Texas), and county (aggregated into Southeast Texas) levels. Details of industry classification were down to 3-Digit NAICS (North American Industrial Classification System). Note that *public sector* employment (federal, state, and local governments) data are excluded from this study.

Employment data by counties for 1997 and 2002 are presented in Tables 1 and 2, respectively. Note that data by industry for eight (8) counties (after excluding Galveston county, of which Bolivar Peninsula is only a part) were added together to collectively represent the **Southeast Texas region**.

In Tables 3 and 4, national (U.S.) – and state (Texas) – level employment data are presented along with the local (Southeast Texas)-level data for 1997 and 2002, respectively. Because of the fact that the Bureau of Labor Statistics has not yet fully completed the conversion

of 1997 SIC (Standard Industrial Classification) data into 1997 NAICS, 1997 U.S. data were not available for NAICS 113 (Forestry and Logging), 114 (Fishing, Hunting and Trapping), 551 (Management of companies and enterprises), 814 (Private households) and 999 (Non-classifiable Establishments). Each industry share of Southeast Texas (SET) employment are also included in Tables 3 and 4.

3.2 Shift-Share Analysis

Shift-share analysis is used to account for the competitiveness of a region's industries and to analyze the local economic base. The analysis decomposes local industry employment change into three components:

1. The **National Growth Share (NGS)** refers to local job growth that is attributable to national economic growth. This component describes the change that would be expected due to the fact that the local area is part of a dynamic national economy. The *national growth share* measures the number of jobs lost or gained in a region if total employment in the region had changed at the same rate as overall total national employment. To calculate this component, one simply multiplies the base year employment (1997 in this study) for *each industry* by the *national average* employment growth rate over the time period (1997 to 2002 in this study). Adding these results up over each industry yields the national growth component for the entire local economy.

$NGS = \text{industry employment} * \text{national average growth rate of total employment}$

Note: To calculate the appropriate growth rate, use the following formula:

$\text{Growth} = (\text{employment in 2002} - \text{employment in 1997}) / \text{employment in 1997}$

2. The **Industrial Mix Share (IMS)** component reflects differences in industry "mix" between the local and national levels. The mix-factor examines how national growth or decline of a particular industry translates into local growth or decline of that industry. Thus, this component represents the effects that specific industry trends at the national level have had on the change in the number of jobs in the region. Some industries add jobs more rapidly than others and some lose jobs. The "mix" component helps one determine if the local industry is weighted toward industries that are growing faster or slower than the national average. To calculate this component, one simply multiplies the base year local employment in each industry (here 1997) by the difference between that industry's national growth rate and the national economy's overall growth rate. Adding these results up over each industry yields the industrial growth component for the entire local economy.

$IMS = \text{local industry employment} * (\text{national industry growth rate} - \text{national average growth rate})$

3. The **Local Share (LS)** component helps one determine whether local industries are growing faster or slower than similar industries at the national level. Accordingly, the local share is often interpreted as indicating whether local businesses are more or less competitive than the national average. The **local share** describes the extent to which unique local factors or comparative advantage such as natural resources, linked industries, or favorable local labor situations, relate to regional industrial employment growth or decline. The local share component aids in identifying a local area's economic strengths and represents how a region's competitive position can contribute to regional job growth. To calculate the **Local Share (LS)**, you simply need to multiply employment in the base year (here 1997) by the difference between the local and national industry growth rates. Adding these results up over each industry yields the competitive growth component for the entire local economy.

$$\text{LS} = \text{local industry employment} * (\text{local industry growth rate} - \text{national industry growth rate})$$

3.3 Location Quotient (LQ) Analysis

The location quotient helps one identify those local industries that are producing more than is needed for local use and selling outside the region (exporting) and those that are not meeting local needs and are a source of consumption leakage (importing).

The basic formula for the **location quotient (LQ)** is:

$$\text{LQ} = \frac{\% \text{ of Local Employment in Industry } i}{\% \text{ of National Employment in Industry } i}$$

$$= \frac{\text{Local Employment in Industry } i / \text{Total Local Employment}}{\text{National Employment in Industry } i / \text{Total National Employment}}$$

Simply put, the location quotient identifies how local industries stack up with national averages. In practice, location quotients are often used to identify importing and exporting industries. An *exporting industry* is one where the industry not only meets the local demand for its products, but also produces enough so as to sell outside of the region. An *importing industry* is one where local production levels are insufficient to meet local demand.

When interpreting the data, a location quotient of greater than 1.0 indicates that the economy is self-sufficient, and may even be exporting the good or service of that particular industry. (As a rule-of-thumb, a location quotient greater than 1.25 almost certainly identifies exporting industries.) On the other hand, a location quotient less than 1.0 suggests that the region tends to import the good or service. (The applicable rule-of-thumb is that a location quotient less than 0.75 indicates an importing industry.) (Shields, 2002).

4.0 FINDINGS

4.1 Major employers in the region: 1997 and 2002

The Industry Share of Southeast Texas (SET) Employment in 1997 (last column of Table 3) is sorted in descending order and presented in Table 5 (last column). This shows which industries are the major employers in Southeast Texas in 1997. A similar table for 2002 (Table 6) is derived from Table 4. Table 6 similarly shows which industries are the top employers in Southeast in 2002.

In 1997, the top employing industries in Southeast Texas, with more than 4,000 employees each, were:

3-Digit NAICS Code	Industry	Employment in Southeast Texas (SET)	Industry Share of SET (LOCAL)	Industry Share of LOCAL (%)
722	Food services and drinking places	12398	0.08876	8.88
621	Ambulatory health care services	10272	0.07354	7.35
325	Chemical manufacturing	9953	0.07125	7.13
238	Specialty trade contractors	7268	0.05203	5.20
622	Hospitals	6966	0.04987	4.99
561	Administrative and support services	5374	0.03847	3.85
541	Professional and technical services	5278	0.03779	3.78
236	Construction of buildings	5013	0.03589	3.59
445	Food and beverage stores	4855	0.03476	3.48
324	Petroleum and coal products manufacturing	4475	0.03204	3.20
623	Nursing and residential care facilities	4287	0.03069	3.07

Five years later, in 2002, the top employing industries in Southeast Texas, with more than 4,000 employees each, were:

3-Digit NAICS Code	Industry	Employment in Southeast Texas (SET)	Industry Share of SET (LOCAL)	Industry Share of LOCAL (%)
722	Food services and drinking places	13329	0.09322	9.32
621	Ambulatory health care services	11049	0.07728	7.73
326	Chemical manufacturing	8223	0.05751	5.75
311	Specialty trade contractors	7418	0.05188	5.19
561	Administrative and support services	6777	0.04740	4.74
622	Hospitals	6675	0.04669	4.67
237	Construction of buildings	6431	0.04498	4.50
541	Professional and technical services	5613	0.03926	3.93
445	Food and beverage stores	4955	0.03466	3.47
325	Petroleum and coal products manufacturing	4268	0.02985	2.99
623	Nursing and residential care facilities	4144	0.02898	2.90

The above industries are the mainstay of the Southeast Texas economy in terms of jobs.

4.2 National and local growth rates of industries, 1997-2002

Table 7a shows the growth rates of 3-Digit NAICS industries at the national (U.S.) level over the period 1997-2002. The national average growth rate of total employment is shown at the bottom of Table 7a (last column) as 1.2 percent. That is, all industries in the United States combined grew at the rate of 1.2 percent from 1997 to 2002.

At the local level (Southeast Texas), the same set of industries above grew at the rate of 2.3 per cent over the same 1997-2002 period (See bottom of Table 7b). On the basis of 1st Quarter employment between 1997 and 2002, one can conclude from this observation that the Southeast Texas region grew faster (2.3%) than the whole United States (1.2%).

4.3 Expanding and declining industries over the period 1997-2002

The **Total Employment Change** in each (3-Digit NAICS) industry in Southeast Texas over the 1997-2002 period are summarized in Table 8, along with the **National Growth Share (NGS)**, **Industry Mix Share (IMS)**, and **Local Share (LS)**. Expanding industries are those with positive **Total Employment Change**, here presented in descending order. Declining industries are those with negative (-) **Total Employment Change**, also arranged in descending order.

The top expanding industries in 1997-2002, which created over 200 jobs each, were:

3-Digit NAICS Code	Industry	SE Texas			NATIONAL GROWTH SHARE	INDUSTRY MIX SHARE	LOCAL SHARE
		1997	2002	Total Employment Change			
236	Construction of buildings	5013	6431	1418	60	505	853
561	Administrative and support services	5374	6777	1403	64	555	783
722	Food services and drinking places	12398	13329	931	149	983	-201
621	Ambulatory health care services	10272	11049	777	123	1148	-494
562	Waste management and remediation services	717	1396	679	9	69	602
332	Fabricated metal product manufacturing	2912	3526	614	35	-234	813
541	Professional and technical services	5278	5613	335	63	572	-300
624	Social assistance	1649	1953	304	20	349	-65
517	Telecommunications	899	1160	261	11	155	95
812	Personal and laundry services	1568	1812	244	19	73	153
522	Credit intermediation and related activities	3030	3271	241	36	279	-74
237	Heavy and civil engineering construction	2324	2561	237	28	418	-209

The worse declining industries in 1997-2002, which lost over 200 jobs each, were:

3-Digit NAICS Code	Industry	SE Texas			NATIONAL GROWTH SHARE	INDUSTRY MIX SHARE	LOCAL SHARE
		1997	2002	Total Employment Change			
333	Machinery manufacturing	890	686	-204	11	-148	-66
324	Petroleum and coal products manufacturing	4475	4268	-207	54	-605	344
452	General merchandise stores	3687	3426	-261	44	190	-495
622	Hospitals	6966	6675	-291	84	412	-786
447	Gasoline stations	2288	1898	-390	27	-156	-262
483	Water transportation	602	201	-401	7	16	-425
336	Transportation equipment manufacturing	1542	871	-671	19	-152	-538
321	Wood product manufacturing	2044	1251	-793	25	-147	-670
325	Chemical manufacturing	9953	8223	-1730	119	-640	-1209

4.4 Exporting (Basic) and Importing (Non-basic) industries of Southeast Texas (SET)

Following the advice of economic development practitioners like Martin Shields of Penn State University, we grouped *Exporting Industries* as those with **Location Quotient (LQ)** greater than 1.25. Accordingly, *Importing Industries* are those with **LQ** of less than 0.75. These groupings for 1997 and 2002 are presented in Tables 9 and 10, respectively.

In 1997, the *Exporting* and *Importing* industries in Southeast Texas were:

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
<i>Exporting Industries (LQ>1.25)</i>		
324	Petroleum and coal products manufacturing	25.49943
483	Water transportation	9.11285
486	Pipeline transportation	8.74447
325	Chemical manufacturing	7.60468
213	Support activities for mining	3.93783
236	Construction of buildings	2.78575
321	Wood product manufacturing	2.64114
237	Heavy and civil engineering construction	2.46797
488	Support activities for transportation	2.13255
211	Oil and gas extraction	2.07367
562	Waste management and remediation services	1.91399
621	Ambulatory health care services	1.90797
447	Gasoline stations	1.81999
238	Specialty trade contractors	1.68336
444	Building material and garden supply stores	1.61124
441	Motor vehicle and parts dealers	1.60532
115	Agriculture and forestry support activities	1.54760
811	Repair and maintenance	1.48239
532	Rental and leasing services	1.42738
622	Hospitals	1.37473
623	Nursing and residential care facilities	1.33230

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
<i>Importing Industries (LQ<0.75)</i>		
423	Merchant wholesalers, durable goods	0.73331
712	Museums, historical sites, zoos, and parks	0.72740
541	Professional and technical services	0.66085
517	Telecommunications	0.65268
561	Administrative and support services	0.64854
531	Real estate	0.59758
336	Transportation equipment manufacturing	0.57798
721	Accommodation	0.53349
713	Amusements, gambling, and recreation	0.50878
331	Primary metal manufacturing	0.48597
511	Publishing industries, except Internet	0.48230
425	Electronic markets and agents and brokers	0.47370
333	Machinery manufacturing	0.45005
454	Nonstore retailers	0.42779
524	Insurance carriers and related activities	0.42092
492	Couriers and messengers	0.34594
326	Plastics and rubber products manufacturing	0.32491
523	Securities, commodity contracts, investments	0.31515
339	Miscellaneous manufacturing	0.25521
813	Membership associations and organizations	0.25222
323	Printing and related support activities	0.22436
311	Food manufacturing	0.21398
533	Lessors of nonfinancial intangible assets	0.20529
111	Crop production	0.16708
314	Textile product mills	0.15567
512	Motion picture and sound recording industries	0.14929
481	Air transportation	0.13603
212	Mining, except oil and gas	0.13596
337	Furniture and related product manufacturing	0.13185
611	Educational services	0.12471
485	Transit and ground passenger transportation	0.12191
112	Animal production	0.07577
312	Beverage and tobacco product manufacturing	0.07393
525	Funds, trusts, and other financial vehicles	0.06651
711	Performing arts and spectator sports	0.03601
315	Apparel manufacturing	0.01472
313	Textile mills	0.00000
316	Leather and allied product manufacturing	0.00000
322	Paper manufacturing	0.00000
334	Computer and electronic product manufacturing	0.00000
335	Electrical equipment and appliance mfg.	0.00000

482	Rail transportation	0.00000
487	Scenic and sightseeing transportation	0.00000
491	Postal service	0.00000
516	Internet publishing and broadcasting	0.00000
518	ISPs, search portals, and data processing	0.00000
519	Other Information Services	0.00000
521	Monetary authorities - central bank	0.00000
551	Management of companies and enterprises	0.00000

In 2002, the *Exporting* and *Importing* industries in SET were:

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
<i>Exporting Industries (LQ>1.25)</i>		
324	Petroleum and coal products manufacturing	27.3563
486	Pipeline transportation	7.6798
113	Forestry and logging	7.4876
114	Fishing, hunting and trapping	7.4334
325	Chemical manufacturing	6.5385
213	Support activities for mining	3.5930
562	Waste management and remediation services	3.3161
236	Construction of buildings	3.1676
483	Water transportation	2.8966
237	Heavy and civil engineering construction	2.2505
488	Support activities for transportation	2.0115
621	Ambulatory health care services	1.8013
321	Wood product manufacturing	1.6963
332	Fabricated metal product manufacturing	1.6760
447	Gasoline stations	1.5769
441	Motor vehicle and parts dealers	1.5302
444	Building material and garden supply stores	1.5101
532	Rental and leasing services	1.4642
211	Oil and gas extraction	1.4615
811	Repair and maintenance	1.3818
238	Specialty trade contractors	1.3805
515	Broadcasting, except Internet	1.3201
221	Utilities	1.3154
445	Food and beverage stores	1.2817

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
<i>Importing Industries (LQ<0.75)</i>		
561	Administrative and support services	0.7233
493	Warehousing and storage	0.7215
517	Telecommunications	0.7012
423	Merchant wholesalers, durable goods	0.6992

712	Museums, historical sites, zoos, and parks	0.6796
451	Sporting goods, hobby, book and music stores	0.6513
541	Professional and technical services	0.6187
713	Amusements, gambling, and recreation	0.5355
531	Real estate	0.4833
115	Agriculture and forestry support activities	0.4725
813	Membership associations and organizations	0.4521
721	Accommodation	0.4442
524	Insurance carriers and related activities	0.4320
511	Publishing industries, except Internet	0.4209
333	Machinery manufacturing	0.4050
454	Nonstore retailers	0.4032
326	Plastics and rubber products manufacturing	0.3869
425	Electronic markets and agents and brokers	0.3699
336	Transportation equipment manufacturing	0.3524
111	Crop production	0.3430
112	Animal production	0.3310
492	Couriers and messengers	0.3134
523	Securities, commodity contracts, investments	0.3072
339	Miscellaneous manufacturing	0.2882
512	Motion picture and sound recording industries	0.2861
314	Textile product mills	0.2411
485	Transit and ground passenger transportation	0.2293
311	Food manufacturing	0.2173
323	Printing and related support activities	0.2028
337	Furniture and related product manufacturing	0.1935
999	Nonclassifiable Establishments	0.1800
551	Management of companies and enterprises	0.1544
611	Educational services	0.1526
533	Lessors of nonfinancial intangible assets	0.1174
711	Performing arts and spectator sports	0.0841
525	Funds, trusts, and other financial vehicles	0.0737
212	Mining, except oil and gas	0.0664
481	Air transportation	0.0536
518	ISPs, search portals, and data processing	0.0422
335	Electrical equipment and appliance mfg.	0.0208
315	Apparel manufacturing	0.0175
334	Computer and electronic product manufacturing	0.0027
312	Beverage and tobacco product manufacturing	0.0000
313	Textile mills	0.0000
316	Leather and allied product manufacturing	0.0000
322	Paper manufacturing	0.0000
482	Rail transportation	0.0000
487	Scenic and sightseeing transportation	0.0000
491	Postal service	0.0000
516	Internet publishing and broadcasting	0.0000
519	Other Information Services	0.0000

4.5 The Engine of Economic Growth in Southeast Texas

Expanding industries (Table 8) that are also exporting industries (Tables 9 and 10) are collectively the engine of economic growth in Southeast Texas, because they bring in new money/income and jobs to the area. Potentially, their multiplier effects are larger than non-exporting industries. These industries are highlighted (green) in Table 11, among those whose positive Total Employment Change in 1997-2002 was over 200 jobs. These industries are:

- Construction of buildings (NAICS 236),
- Ambulatory health care services (NAICS 621),
- Waste management and remediation services (NAICS 562),
- Fabricated metal product manufacturing (NAICS 332), and
- Heavy and civil engineering construction (NAICS 237)

The period 1997-2002 includes the recession year of 2001. Despite that, the above industries prospered in creating new jobs. Of this group, it is evident from Table 11 that Construction of buildings, Waste management and remediation services, and Fabricated metal product manufacturing have had comparative advantage in the Southeast Texas region. In each industry, the **Local Share** made a major contribution to the **Total Employment Change** (Table 11). For example, out of the 679 jobs added by the Waste management and remediation services industry from 1997 to 2002, 602 jobs were contributed by the **Local Share**. Further investigation is needed to determine exactly on what local factors this comparative advantage lies. It could be on ample availability of skilled labor and raw materials, or existence of new technology (e.g., in waste remediation).

Interestingly, Ambulatory health care services did not have local comparative advantage (**Local Share** = -494 jobs), yet this industry remained competitive in Southeast Texas (i.e., **Total Employment Change** = 777 jobs) because of the very significant contribution of the **Industry Mix Share** (1148 jobs). That is, Southeast Texas happened to have the right mix of this industry in the region.

4.5 Promising Emerging Industries

The result above indicates that not all of the expanding and exporting industries are part of the traditionally big employers (job mainstay) of the area in both 1997 and 2002. There are those that have newly emerged as engine of economic growth and are, therefore, promising to look into from the standpoint of economic development planning. Included in this group are: Waste management and remediation services, Fabricated metal product manufacturing, and Heavy and civil engineering construction.

5.0 POLICY IMPLICATIONS

It is important for economic development planners in Southeast Texas to monitor over time how local industries are faring in job creation and economic growth. This study has identified the job mainstay of this region. However, many of these big employers (e.g. Chemical manufacturing (NAICS 325), Hospitals (NAICS 622), and Petroleum and coal products manufacturing (NAICS 324) have declined, rather than expanded, during the 1997-2002 period. It is important to know the reasons why they have lost their competitiveness and/or comparative advantage. In the case of Chemical manufacturing, for example, is the lack of adequate supply of natural gas the major trigger of this problem? (See Gold, 2004) And what can local development planners do to alleviate the situation?

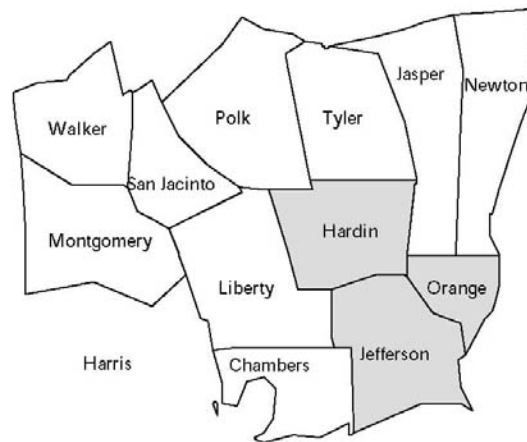
Meanwhile, this study has identified the expanding and exporting industries which constitute the engine of economic growth in Southeast Texas. Some of these highly competitive industries clearly have comparative advantage in the region, although the specific source(s) of this comparative advantage have yet to be determined. Once determined, it is important to nurture these industries by providing a favorable business environment for them to exploit this comparative advantage and grow. For instance, one of these “engine” industries is the newly emerged Waste management and remediation services (NAICS 562). Could it be that one source of comparative advantage by this industry is the waste management and remediation technology available from Lamar University? If so, Lamar has a role to play in the region’s economic development by having an environmental technology transfer program.

It is particularly important for the region to guard against losing its exporting industries because these are potentially the engine of growth in the area. Losing them would be particularly painful because of the huge downside multiplier effect. As a matter of fact, what is needed is an economic growth strategy whereby exporting industries have a chance to expand. An excellent example that comes to mind is the plan of the **Deep East Texas Council of Governments** to have a kiln and sawmill for the manufacture of wood products from the hard wood natural resources of East Texas (Wallach, 2004). In both 1997 and 2002, the result of this study shows that Wood product manufacturing (NAICS 321) in Southeast Texas is an *Exporting Industry*. Such a project, therefore, is entirely appropriate and welcome.

6.0 REFERENCES

- Gold, Russell, "Natural-Gas Costs Hurt U.S. Firms," *The Wall Street Journal*, February 17, 2004. http://online.wsj.com/article_print/
- Partnership of Southeast Texas (POST), "Economy of Southeast Texas", <http://setx.org/html/economy.php>
- Shields, Martin. "Tool 3. Use Location Quotients to Identify Local Strengths and Opportunities", **RESEARCH METHODS Supporting Successful Economic Development**, Workshop sponsored by ACCRA Center for Applied Community Research, George Mason University, Arlington, Virginia, September 16-20, 2002.
- _____. "Tool 4. Shift-share Analysis Helps Identify Local Growth Engines", **RESEARCH METHODS Supporting Successful Economic Development**, Workshop sponsored by ACCRA Center for Applied Community Research, George Mason University, Arlington, Virginia, September 16-20, 2002.
- Texas Workforce Commission (TWC)/Labor Market and Career Information, *SOCRATES (Standardized Occupational Components for Research and Analysis of Trends Employment System)*, <http://socrates.cdr.state.tx.us/index.asp>.
- Wallach, Dan, "East Texas Leaders Push for Kiln," *The Beaumont Enterprise*, January 25, 2004. <http://www.southeasttexaslive.com/site/news>.
- Weinstein, B.L. and Clower, T.L., "An Economic Profile and Business Development Opportunities for the Beaumont-Port Arthur MSA," Research report prepared for Entergy Texas, September 1997.

BEAUMONT-PORT ARTHUR MSA



**The Beaumont-Port Arthur Metropolitan Statistical Area (MSA)
consists of the following counties: Hardin, Jefferson
and Orange**

Fig. 1 Beaumont-Port Arthur Metropolitan Statistical Area (MSA)



Fig. 2 Map of Southeast Texas under the coverage of POST

Table 1. Employment in Southeast Texas Counties, First Quarter, 1997.xls

3-Digit NAICS Code	Industry	COUNTIES								TOTAL
		Chambers	Hardin	Jasper	Jefferson	Liberty	Newton	Orange	Tyler	SOUTHEAST TEXAS
111	Crop production	61	0	0	124	54	0	0	0	239
112	Animal production	21	0	3	34	29	0	12	0	99
113	Forestry and logging	0	128	260	0	224	121	0	214	947
114	Fishing, hunting and trapping	65	0	0	4	0	0	0	0	69
115	Agriculture and forestry support activities	5	27	121	64	12	0	0	54	283
211	Oil and gas extraction	141	73	0	135	26	0	26	0	401
212	Mining, except oil and gas	0	0	0	0	9	0	35	0	44
213	Support activities for mining	101	131	65	156	366	0	56	0	875
221	Utilities	0	24	0	858	44	12	44	33	1015
236	Construction of buildings	0	0	80	4688	50	7	179	9	5013
237	Heavy and civil engineering construction	64	65	139	1533	192	20	311	0	2324
238	Specialty trade contractors	257	240	366	4687	540	14	1127	37	7268
311	Food manufacturing	95	0	0	300	6	0	35	0	436
312	Beverage and tobacco product manufacturing	0	0	20	0	0	0	0	0	20
313	Textile mills	0	0	0	0	0	0	0	0	0
314	Textile product mills	0	0	0	45	0	0	0	0	45
315	Apparel manufacturing	0	0	0	14	0	0	0	0	14
316	Leather and allied product manufacturing	0	0	0	0	0	0	0	0	0
321	Wood product manufacturing	0	605	812	226	401	0	0	0	2044
322	Paper manufacturing	0	0	0	0	0	0	0	0	0
323	Printing and related support activities	0	0	11	201	10	0	22	0	244
324	Petroleum and coal products manufacturing	0	0	0	4475	0	0	0	0	4475
325	Chemical manufacturing	979	0	0	5579	0	0	3395	0	9953
326	Plastics and rubber products manufacturing	0	0	0	123	0	0	279	0	402
327	Nonmetallic mineral product manufacturing	0	0	0	302	186	0	48	0	536
331	Primary metal manufacturing	0	0	0	413	0	0	0	0	413
332	Fabricated metal product manufacturing	0	174	0	1977	225	0	536	0	2912
333	Machinery manufacturing	0	39	71	499	0	0	281	0	890
334	Computer and electronic product manufacturing	0	0	0	0	0	0	0	0	0
335	Electrical equipment and appliance mfg.	0	0	0	0	0	0	0	0	0
336	Transportation equipment manufacturing	0	0	0	1101	0	0	441	0	1542
337	Furniture and related product manufacturing	0	0	0	85	0	0	22	0	107
339	Miscellaneous manufacturing	0	0	0	208	0	0	36	0	244
423	Merchant wholesalers, durable goods	49	70	109	2257	282	0	186	3	2956

Table 1. Employment in Southeast Texas Counties, First Quarter, 1997.xls

424	Merchant wholesalers, nondurable goods	114	112	111	1327	184	0	104	52	2004
425	Electronic markets and agents and brokers	6	23	7	287	20	0	20	0	363
441	Motor vehicle and parts dealers	85	294	230	2215	368	0	356	93	3641
442	Furniture and home furnishings stores	0	30	11	471	26	0	74	0	612
443	Electronics and appliance stores	0	0	16	607	10	0	55	0	688
444	Building material and garden supply stores	51	85	198	1354	164	0	247	30	2129
445	Food and beverage stores	118	434	317	2392	551	125	775	143	4855
446	Health and personal care stores	31	52	67	929	93	0	172	28	1372
447	Gasoline stations	130	210	212	1025	232	61	336	82	2288
448	Clothing and clothing accessories stores	0	23	69	1448	53	0	199	0	1792
451	Sporting goods, hobby, book and music stores	0	0	9	580	0	0	27	0	616
452	General merchandise stores	31	0	0	3525	0	11	0	120	3687
453	Miscellaneous store retailers	13	76	58	882	115	0	151	8	1303
454	Nonstore retailers	23	19	23	112	54	0	21	0	252
481	Air transportation	0	0	0	97	0	0	0	0	97
482	Rail transportation	0	0	0	0	0	0	0	0	0
483	Water transportation	0	0	0	602	0	0	0	0	602
484	Truck transportation	107	71	156	884	207	11	294	67	1797
485	Transit and ground passenger transportation	0	0	0	58	0	0	0	0	58
486	Pipeline transportation	127	92	0	290	78	0	0	0	587
487	Scenic and sightseeing transportation	0	0	0	0	0	0	0	0	0
488	Support activities for transportation	19	0	0	1071	0	0	224	0	1314
491	Postal service	0	0	0	0	0	0	0	0	0
492	Couriers and messengers	0	0	0	253	0	0	0	0	253
493	Warehousing and storage	0	0	0	380	0	0	116	0	496
511	Publishing industries, except Internet	0	0	23	485	35	0	63	0	606
512	Motion picture and sound recording industries	0	0	0	61	0	0	7	0	68
515	Broadcasting, except Internet	0	0	0	393	0	0	63	0	456
516	Internet publishing and broadcasting	0	0	0	0	0	0	0	0	0
517	Telecommunications	0	35	0	818	46	0	0	0	899
518	ISPs, search portals, and data processing	0	0	0	0	0	0	0	0	0
519	Other Information Services	0	0	0	0	0	0	0	0	0
521	Monetary authorities - central bank	0	0	0	0	0	0	0	0	0
522	Credit intermediation and related activities	79	165	261	1778	284	0	381	82	3030
523	Securities, commodity contracts, investments	8	0	0	202	0	0	49	0	259
524	Insurance carriers and related activities	18	61	50	849	78	3	113	18	1190
525	Funds, trusts, and other financial vehicles	0	0	0	6	0	0	0	0	6

Table 1. Employment in Southeast Texas Counties, First Quarter, 1997.xls

531	Real estate	13	23	31	716	49	0	118	7	957
532	Rental and leasing services	81	73	82	611	119	9	151	0	1126
533	Lessors of nonfinancial intangible assets	0	0	0	6	0	0	0	0	6
541	Professional and technical services	84	131	151	4217	218	12	428	37	5278
551	Management of companies and enterprises	0	0	0	0	0	0	0	0	0
561	Administrative and support services	124	83	64	4233	240	0	583	47	5374
562	Waste management and remediation services	0	0	0	651	14	0	52	0	717
611	Educational services	0	8	0	337	4	0	20	0	369
621	Ambulatory health care services	56	769	668	6711	823	110	992	143	10272
622	Hospitals	0	0	0	6504	462	0	0	0	6966
623	Nursing and residential care facilities	0	399	304	2454	433	0	472	225	4287
624	Social assistance	58	110	92	957	151	0	258	23	1649
711	Performing arts and spectator sports	0	0	0	0	0	0	15	0	15
712	Museums, historical sites, zoos, and parks	0	0	0	48	0	0	35	0	83
713	Amusements, gambling, and recreation	0	53	82	422	0	0	115	0	672
721	Accommodation	0	0	83	829	67	0	187	0	1166
722	Food services and drinking places	426	689	581	7943	788	50	1762	159	12398
811	Repair and maintenance	24	122	102	1390	132	13	487	12	2282
812	Personal and laundry services	0	30	118	1148	134	0	138	0	1568
813	Membership associations and organizations	9	0	49	579	109	0	56	8	810
814	Private households	17	26	39	300	38	0	38	7	465
999	Nonclassifiable Establishments	0	0	0	35	0	0	57	0	92

From Covered Employment and Wages by Industry and County. Produced by TWC's Labor Market Information Department on August 15, 2003. Screened for confidentiality. Data is considered confidential if there are less than three employers in an industry in a given geographical area, or if one employer in an industry has 80% or more of the employees in that particular industry.

Table 2. Employment in Southeast Texas Counties, First Quarter, 2002..xls

3-Digit NAICS Code	Industry	COUNTIES								TOTAL
		Chambers	Hardin	Jasper	Jefferson	Liberty	Newton	Orange	Tyler	SOUTHEAST TEXAS
111	Crop production	51	0	0	107	50	0	0	0	208
112	Animal production	19	0	0	22	32	0	9	8	90
113	Forestry and logging	0	68	264	0	123	72	0	212	739
114	Fishing, hunting and trapping	98	0	0	5	0	0	0	0	103
115	Agriculture and forestry support activities	9	29	117	0	10	6	0	0	171
211	Oil and gas extraction	135	27	0	28	28	0	24	0	242
212	Mining, except oil and gas	0	0	0	0	0	0	19	0	19
213	Support activities for mining	127	114	67	218	270	0	65	0	861
221	Utilities	0	28	0	889	58	10	44	30	1059
236	Construction of buildings	0	0	71	5589	114	6	651	0	6431
237	Heavy and civil engineering construction	123	213	127	1607	233	11	247	0	2561
238	Specialty trade contractors	164	419	187	5312	556	16	691	73	7418
311	Food manufacturing	0	0	14	408	0	0	21	0	443
314	Textile product mills	0	0	0	63	0	0	0	0	63
315	Apparel manufacturing	0	0	0	9	0	0	0	0	9
321	Wood product manufacturing	0	617	405	181	0	0	0	48	1251
323	Printing and related support activities	0	0	10	163	4	0	20	0	197
324	Petroleum and coal products manufacturing	0	0	0	4268	0	0	0	0	4268
325	Chemical manufacturing	1033	0	0	4313	0	0	2877	0	8223
326	Plastics and rubber products manufacturing	0	0	0	193	0	0	250	0	443
327	Nonmetallic mineral product manufacturing	0	0	0	221	242	0	111	0	574
331	Primary metal manufacturing	0	0	0	483	0	0	47	0	530
332	Fabricated metal product manufacturing	0	154	0	2049	172	0	1093	58	3526
333	Machinery manufacturing	0	60	28	598	0	0	0	0	686
334	Computer and electronic product manufacturing	0	0	0	0	6	0	0	0	6
335	Electrical equipment and appliance mfg.	0	14	0	0	0	0	0	0	14
336	Transportation equipment manufacturing	0	0	0	573	0	0	298	0	871
337	Furniture and related product manufacturing	0	8	0	126	0	0	24	0	158
339	Miscellaneous manufacturing	0	10	0	236	0	0	22	0	268
423	Merchant wholesalers, durable goods	195	63	120	2039	205	0	191	18	2831
424	Merchant wholesalers, nondurable goods	184	196	123	1250	177	0	125	32	2087
425	Electronic markets and agents and brokers	19	25	17	208	0	0	38	0	307
441	Motor vehicle and parts dealers	109	359	241	2190	410	0	422	80	3811
442	Furniture and home furnishings stores	0	32	20	404	41	0	61	0	558
443	Electronics and appliance stores	0	0	0	798	23	0	60	0	881

Table 2. Employment in Southeast Texas Counties, First Quarter, 2002..xls

444	Building material and garden supply stores	53	95	175	1303	361	5	228	36	2256
445	Food and beverage stores	102	479	300	2492	579	79	756	168	4955
446	Health and personal care stores	25	47	76	843	110	0	214	36	1351
447	Gasoline stations	133	137	124	808	227	47	332	90	1898
448	Clothing and clothing accessories stores	0	41	60	1440	43	0	131	12	1727
451	Sporting goods, hobby, book and music stores	0	0	7	521	5	0	49	0	582
452	General merchandise stores	38	0	0	3388	0	0	0	0	3426
453	Miscellaneous store retailers	6	100	50	866	71	0	169	6	1268
454	Nonstore retailers	20	14	0	129	53	0	28	0	244
481	Air transportation	0	0	0	40	0	0	0	0	40
483	Water transportation	0	0	0	201	0	0	0	0	201
484	Truck transportation	66	90	129	1015	225	0	288	105	1918
485	Transit and ground passenger transportation	0	0	0	119	0	0	0	0	119
486	Pipeline transportation	147	60	0	159	38	0	43	0	447
488	Support activities for transportation	12	0	0	1245	0	0	125	7	1389
492	Couriers and messengers	0	0	0	238	0	0	0	0	238
493	Warehousing and storage	0	0	0	383	0	0	112	0	495
511	Publishing industries, except Internet	0	0	14	449	30	0	59	0	552
512	Motion picture and sound recording industries	0	0	0	146	0	0	0	0	146
515	Broadcasting, except Internet	0	0	0	566	0	0	31	0	597
517	Telecommunications	6	78	0	950	40	0	86	0	1160
518	ISPs, search portals, and data processing	0	0	0	0	0	0	26	0	26
522	Credit intermediation and related activities	89	132	283	1935	316	0	409	107	3271
523	Securities, commodity contracts, investments	9	0	11	257	23	0	32	0	332
524	Insurance carriers and related activities	26	52	46	841	102	2	133	27	1229
525	Funds, trusts, and other financial vehicles	0	0	0	8	0	0	0	0	8
531	Real estate	21	14	13	676	53	0	81	6	864
532	Rental and leasing services	50	65	53	817	158	0	115	0	1258
533	Lessors of nonfinancial intangible assets	0	0	0	4	0	0	0	0	4
541	Professional and technical services	117	173	120	4378	275	7	495	48	5613
551	Management of companies and enterprises	0	0	0	356	0	0	0	0	356
561	Administrative and support services	165	41	55	5352	228	0	936	0	6777
562	Waste management and remediation services	62	0	0	1191	87	0	56	0	1396
611	Educational services	0	0	0	379	0	0	23	0	402
621	Ambulatory health care services	93	637	788	7051	873	49	1480	78	11049
622	Hospitals	0	0	0	6225	450	0	0	0	6675
623	Nursing and residential care facilities	0	472	301	2161	459	0	556	195	4144

Table 2. Employment in Southeast Texas Counties, First Quarter, 2002..xls

624	Social assistance	39	144	125	1171	162	10	280	22	1953
711	Performing arts and spectator sports	0	0	0	38	0	0	0	0	38
712	Museums, historical sites, zoos, and parks	0	0	0	52	0	0	45	0	97
713	Amusements, gambling, and recreation	47	54	95	473	37	0	131	0	837
721	Accommodation	25	7	63	702	61	0	152	0	1010
722	Food services and drinking places	505	904	735	8210	915	29	1864	167	13329
811	Repair and maintenance	69	128	107	1457	144	15	362	18	2300
812	Personal and laundry services	0	32	87	1332	121	0	233	7	1812
813	Membership associations and organizations	17	44	34	568	69	0	37	4	773
814	Private households	17	29	20	280	73	0	29	10	458
999	Nonclassifiable Establishments	0	21	0	21	0	0	9	0	51

From Covered Employment and Wages by Industry and County. Produced by TWC's Labor Market Information Department on August 15, 2003. Screened for confidentiality. Data is confidential if there are less than three employers in an industry in a given geographical area, or if one employer in an industry has 80% or more of the employees in that particular industry.

Table 3. Employment in the U.S., Texas, and Southeast Texas, First Quarter, 1997 (Rev.).xls

3-Digit NAICS Code	Industry	United States	Texas	Southeast Texas (SET)	Industry Share of SET (LOCAL) (%)
111	Crop production	1,071,870	23,881	239	0.17
112	Animal production	979,048	20,956	99	0.07
113	Forestry and logging	na	3,259	947	0.68
114	Fishing, hunting and trapping	na	383	69	0.05
115	Agriculture and forestry support activities	137,022	14,029	283	0.20
211	Oil and gas extraction	144,900	74,173	401	0.29
212	Mining, except oil and gas	242,500	9,432	44	0.03
213	Support activities for mining	166,500	70,221	875	0.63
221	Utilities	608,468	44,298	1015	0.73
236	Construction of buildings	1,348,400	121,298	5013	3.59
237	Heavy and civil engineering construction	705,600	76,096	2324	1.66
238	Specialty trade contractors	3,235,200	249,821	7268	5.20
311	Food manufacturing	1,526,800	91,393	436	0.31
312	Beverage and tobacco product manufacturing	202,700	11,693	20	0.01
313	Textile mills	436,600	3,421	0	0.00
314	Textile product mills	216,600	10,284	45	0.03
315	Apparel manufacturing	712,900	50,277	14	0.01
316	Leather and allied product manufacturing	91,100	7,351	0	0.00
321	Wood product manufacturing	579,900	31,769	2044	1.46
322	Paper manufacturing	629,600	29,398	0	0.00
323	Printing and related support activities	814,900	45,685	244	0.17
324	Petroleum and coal products manufacturing	131,500	25,989	4475	3.20
325	Chemical manufacturing	980,700	86,994	9953	7.13
326	Plastics and rubber products manufacturing	927,100	48,410	402	0.29
327	Nonmetallic mineral product manufacturing	508,100	40,458	536	0.38
331	Primary metal manufacturing	636,800	29,087	413	0.30
332	Fabricated metal product manufacturing	1,668,900	117,301	2912	2.08
333	Machinery manufacturing	1,481,800	82,334	890	0.64
334	Computer and electronic product manufacturing	1,767,000	157,460	0	0.00
335	Electrical equipment and appliance mfg.	588,200	20,825	0	0.00
336	Transportation equipment manufacturing	1,999,100	86,217	1542	1.10
337	Furniture and related product manufacturing	608,100	28,237	107	0.08
339	Miscellaneous manufacturing	716,400	38,125	244	0.17
423	Merchant wholesalers, durable goods	3,020,500	232,683	2956	2.12
424	Merchant wholesalers, nondurable goods	1,972,800	140,191	2004	1.43
425	Electronic markets and agents and brokers	574,200	42,606	363	0.26
441	Motor vehicle and parts dealers	1,699,500	130,348	3641	2.61
442	Furniture and home furnishings stores	478,700	33,873	612	0.44
443	Electronics and appliance stores	487,400	39,269	688	0.49
444	Building material and garden supply stores	990,100	67,069	2129	1.52
445	Food and beverage stores	2,926,500	207,630	4855	3.48
446	Health and personal care stores	841,200	50,431	1372	0.98
447	Gasoline stations	942,000	73,933	2288	1.64
448	Clothing and clothing accessories stores	1,204,700	85,068	1792	1.28
451	Sporting goods, hobby, book and music stores	613,200	38,541	616	0.44
452	General merchandise stores	2,585,000	203,455	3687	2.64
453	Miscellaneous store retailers	883,500	60,289	1303	0.93
454	Nonstore retailers	441,400	19,846	252	0.18
481	Air transportation	534,300	64,868	97	0.07

Table 3. Employment in the U.S., Texas, and Southeast Texas, First Quarter, 1997 (Rev.).xls

482	Rail transportation	217,800	0	0	0.00
483	Water transportation	49,500	6,046	602	0.43
484	Truck transportation	1,262,500	93,595	1797	1.29
485	Transit and ground passenger transportation	356,500	15,259	58	0.04
486	Pipeline transportation	50,300	16,436	587	0.42
487	Scenic and sightseeing transportation	22,900	825	0	0.00
488	Support activities for transportation	461,700	47,044	1314	0.94
491	Postal service	868,200	177	0	0.00
492	Couriers and messengers	548,000	32,300	253	0.18
493	Warehousing and storage	449,700	12,981	496	0.36
511	Publishing industries, except Internet	941,500	47,887	606	0.43
512	Motion picture and sound recording industries	341,300	16,782	68	0.05
515	Broadcasting, except Internet	311,800	22,305	456	0.33
516	Internet publishing and broadcasting	22,300	388	0	0.00
517	Telecommunications	1,032,100	95,815	899	0.64
518	ISPs, search portals, and data processing	329,200	34,478	0	0.00
519	Other Information Services	39,600	674	0	0.00
521	Monetary authorities - central bank	22,500	1,854	0	0.00
522	Credit intermediation and related activities	2,394,400	164,104	3030	2.17
523	Securities, commodity contracts, investments	615,800	28,569	259	0.19
524	Insurance carriers and related activities	2,118,400	132,979	1190	0.85
525	Funds, trusts, and other financial vehicles	67,600	4,936	6	0.00
531	Real estate	1,200,000	94,570	957	0.69
532	Rental and leasing services	591,100	50,902	1126	0.81
533	Lessors of nonfinancial intangible assets	21,900	1,994	6	0.00
541	Professional and technical services	5,984,532	363,870	5278	3.78
551	Management of companies and enterprises	na	3,326	0	0.00
561	Administrative and support services	6,209,000	440,443	5374	3.85
562	Waste management and remediation services	280,700	18,707	717	0.51
611	Educational services	2,217,045	61,977	369	0.26
621	Ambulatory health care services	4,034,100	336,334	10272	7.35
622	Hospitals	3,796,900	220,199	6966	4.99
623	Nursing and residential care facilities	2,411,100	125,647	4287	3.07
624	Social assistance	1,545,000	83,237	1649	1.18
711	Performing arts and spectator sports	312,100	15,846	15	0.01
712	Museums, historical sites, zoos, and parks	85,500	4,822	83	0.06
713	Amusements, gambling, and recreation	989,700	56,603	672	0.48
721	Accommodation	1,637,700	84,643	1166	0.83
722	Food services and drinking places	7,424,100	548,533	12398	8.88
811	Repair and maintenance	1,153,500	92,847	2282	1.63
812	Personal and laundry services	1,164,700	86,150	1568	1.12
813	Membership associations and organizations	2,406,400	49,588	810	0.58
814	Private households	na	27,555	465	0.33
999	Nonclassifiable Establishments	na	3,177	92	0.07
	na = data not available				

Table 4. Employment in the U.S., Texas and Southeast Texas, First Quarter, 2002.xls

3-Digit NAICS Code	Industry	Unites States	Texas	Southeast Texas (SET)	Industry Share of SET (LOCAL) (%)
111	Crop production	446,656	23,077	208	0.15
112	Animal production	201,108	21,213	90	0.06
113	Forestry and logging	72,961	2,478	739	0.52
114	Fishing, hunting and trapping	10,235	533	103	0.07
115	Agriculture and forestry support activities	268,386	14,607	171	0.12
211	Oil and gas extraction	122,186	64,578	242	0.17
212	Mining, except oil and gas	206,724	9,681	19	0.01
213	Support activities for mining	177,042	70,588	861	0.60
221	Utilities	595,255	51,876	1059	0.74
236	Construction of buildings	1,500,475	145,748	6431	4.50
237	Heavy and civil engineering construction	840,930	99,400	2561	1.79
238	Specialty trade contractors	3,971,068	320,760	7418	5.19
311	Food manufacturing	1,507,508	93,001	443	0.31
312	Beverage and tobacco product manufacturing	201,519	11,047	0	0.00
313	Textile mills	296,350	3,222	0	0.00
314	Textile product mills	192,802	8,450	63	0.04
315	Apparel manufacturing	362,267	21,717	9	0.01
316	Leather and allied product manufacturing	50,776	4,901	0	0.00
321	Wood product manufacturing	545,050	30,095	1251	0.88
322	Paper manufacturing	549,965	25,332	0	0.00
323	Printing and related support activities	719,017	41,192	197	0.14
324	Petroleum and coal products manufacturing	115,300	24,250	4268	2.99
325	Chemical manufacturing	929,409	80,079	8223	5.75
326	Plastics and rubber products manufacturing	846,612	47,632	443	0.31
327	Nonmetallic mineral product manufacturing	506,301	44,172	574	0.40
331	Primary metal manufacturing	514,883	26,336	530	0.37
332	Fabricated metal product manufacturing	1,554,766	116,507	3526	2.47
333	Machinery manufacturing	1,252,507	83,197	686	0.48
334	Computer and electronic product manufacturing	1,559,385	137,952	6	0.00
335	Electrical equipment and appliance mfg.	508,869	20,012	14	0.01
336	Transportation equipment manufacturing	1,826,196	78,675	871	0.61
337	Furniture and related product manufacturing	606,190	31,968	158	0.11
339	Miscellaneous manufacturing	685,514	35,128	268	0.19
423	Merchant wholesalers, durable goods	2,992,514	268,974	2831	1.98
424	Merchant wholesalers, nondurable goods	1,988,494	150,888	2087	1.46
425	Electronic markets and agents and brokers	614,105	41,740	307	0.22
441	Motor vehicle and parts dealers	1,840,321	149,556	3811	2.67
442	Furniture and home furnishings stores	527,197	41,346	558	0.39
443	Electronics and appliance stores	530,877	43,291	881	0.62
444	Building material and garden supply stores	1,104,219	79,411	2256	1.58
445	Food and beverage stores	2,857,435	203,548	4955	3.47
446	Health and personal care stores	930,214	56,142	1351	0.95
447	Gasoline stations	889,220	70,013	1898	1.33
448	Clothing and clothing accessories stores	1,286,169	95,635	1727	1.21
451	Sporting goods, hobby, book and music stores	660,272	39,271	582	0.41
452	General merchandise stores	2,749,356	231,688	3426	2.40
453	Miscellaneous store retailers	943,999	65,285	1268	0.89
454	Nonstore retailers	448,172	25,618	244	0.17
481	Air transportation	552,072	71,190	40	0.03

Table 4. Employment in the U.S., Texas and Southeast Texas, First Quarter, 2002.xls

482	Rail transportation	297	16	0	0.00
483	Water transportation	51,437	5,272	201	0.14
484	Truck transportation	1,310,640	102,472	1918	1.34
485	Transit and ground passenger transportation	382,548	16,778	119	0.08
486	Pipeline transportation	43,066	16,023	447	0.31
487	Scenic and sightseeing transportation	20,301	656	0	0.00
488	Support activities for transportation	510,081	54,994	1389	0.97
491	Postal service	2,584	142	0	0.00
492	Couriers and messengers	559,759	34,290	238	0.17
493	Warehousing and storage	506,715	20,578	495	0.35
511	Publishing industries, except Internet	969,149	53,946	552	0.39
512	Motion picture and sound recording industries	376,713	16,622	146	0.10
515	Broadcasting, except Internet	334,599	24,569	597	0.42
516	Internet publishing and broadcasting	35,137	1,215	0	0.00
517	Telecommunications	1,222,161	118,897	1160	0.81
518	ISPs, search portals, and data processing	451,168	39,877	26	0.02
519	Other Information Services	46,157	1,279	0	0.00
521	Monetary authorities - central bank	23,260	1,917	0	0.00
522	Credit intermediation and related activities	2,643,283	197,358	3271	2.29
523	Securities, commodity contracts, investments	797,944	39,328	332	0.23
524	Insurance carriers and related activities	2,103,627	146,231	1229	0.86
525	Funds, trusts, and other financial vehicles	86,043	8,528	8	0.01
531	Real estate	1,320,545	108,670	864	0.60
532	Rental and leasing services	635,062	58,490	1258	0.88
533	Lessors of nonfinancial intangible assets	27,002	2,054	4	0.00
541	Professional and technical services	6,704,982	463,540	5613	3.93
551	Management of companies and enterprises	1,703,958	36,400	356	0.25
561	Administrative and support services	6,924,813	517,847	6777	4.74
562	Waste management and remediation services	311,001	22,320	1396	0.98
611	Educational services	1,946,069	84,750	402	0.28
621	Ambulatory health care services	4,533,348	385,087	11049	7.73
622	Hospitals	4,066,839	245,333	6675	4.67
623	Nursing and residential care facilities	2,709,819	142,848	4144	2.90
624	Social assistance	1,890,938	106,507	1953	1.37
711	Performing arts and spectator sports	339,160	18,503	38	0.03
712	Museums, historical sites, zoos, and parks	105,729	6,399	97	0.07
713	Amusements, gambling, and recreation	1,154,303	61,560	837	0.59
721	Accommodation	1,679,567	86,946	1010	0.71
722	Food services and drinking places	8,101,926	644,381	13329	9.32
811	Repair and maintenance	1,230,442	102,772	2300	1.61
812	Personal and laundry services	1,232,623	89,759	1812	1.27
813	Membership associations and organizations	1,264,527	55,947	773	0.54
814	Private households	438,065	27,205	458	0.32
999	Nonclassifiable Establishments	211,347	5,041	51	0.04

Table 5. Industry shares of Local employment, arranged in descending order, First Quarter, 1997.xls

3-Digit NAICS Code	Industry	Employment in Southeast Texas (SET)	Industry Share of SET (LOCAL)	Industry Share of LOCAL (%)
722	Food services and drinking places	12398	0.08876	8.88
621	Ambulatory health care services	10272	0.07354	7.35
325	Chemical manufacturing	9953	0.07125	7.13
238	Specialty trade contractors	7268	0.05203	5.20
622	Hospitals	6966	0.04987	4.99
561	Administrative and support services	5374	0.03847	3.85
541	Professional and technical services	5278	0.03779	3.78
236	Construction of buildings	5013	0.03589	3.59
445	Food and beverage stores	4855	0.03476	3.48
324	Petroleum and coal products manufacturing	4475	0.03204	3.20
623	Nursing and residential care facilities	4287	0.03069	3.07
452	General merchandise stores	3687	0.02640	2.64
441	Motor vehicle and parts dealers	3641	0.02607	2.61
522	Credit intermediation and related activities	3030	0.02169	2.17
423	Merchant wholesalers, durable goods	2956	0.02116	2.12
332	Fabricated metal product manufacturing	2912	0.02085	2.08
237	Heavy and civil engineering construction	2324	0.01664	1.66
447	Gasoline stations	2288	0.01638	1.64
811	Repair and maintenance	2282	0.01634	1.63
444	Building material and garden supply stores	2129	0.01524	1.52
321	Wood product manufacturing	2044	0.01463	1.46
424	Merchant wholesalers, nondurable goods	2004	0.01435	1.43
484	Truck transportation	1797	0.01286	1.29
448	Clothing and clothing accessories stores	1792	0.01283	1.28
624	Social assistance	1649	0.01181	1.18
812	Personal and laundry services	1568	0.01123	1.12
336	Transportation equipment manufacturing	1542	0.01104	1.10
446	Health and personal care stores	1372	0.00982	0.98
488	Support activities for transportation	1314	0.00941	0.94
453	Miscellaneous store retailers	1303	0.00933	0.93
524	Insurance carriers and related activities	1190	0.00852	0.85
721	Accommodation	1166	0.00835	0.83
532	Rental and leasing services	1126	0.00806	0.81
221	Utilities	1015	0.00727	0.73
531	Real estate	957	0.00685	0.69
113	Forestry and logging	947	0.00678	0.68
517	Telecommunications	899	0.00644	0.64
333	Machinery manufacturing	890	0.00637	0.64
213	Support activities for mining	875	0.00626	0.63
813	Membership associations and organizations	810	0.00580	0.58
562	Waste management and remediation services	717	0.00513	0.51
443	Electronics and appliance stores	688	0.00493	0.49
713	Amusements, gambling, and recreation	672	0.00481	0.48
451	Sporting goods, hobby, book and music stores	616	0.00441	0.44
442	Furniture and home furnishings stores	612	0.00438	0.44
511	Publishing industries, except Internet	606	0.00434	0.43
483	Water transportation	602	0.00431	0.43
486	Pipeline transportation	587	0.00420	0.42
327	Nonmetallic mineral product manufacturing	536	0.00384	0.38

Table 5. Industry shares of Local employment, arranged in descending order, First Quarter, 1997.xls

493	Warehousing and storage	496	0.00355	0.36
814	Private households	465	0.00333	0.33
515	Broadcasting, except Internet	456	0.00326	0.33
311	Food manufacturing	436	0.00312	0.31
331	Primary metal manufacturing	413	0.00296	0.30
326	Plastics and rubber products manufacturing	402	0.00288	0.29
211	Oil and gas extraction	401	0.00287	0.29
611	Educational services	369	0.00264	0.26
425	Electronic markets and agents and brokers	363	0.00260	0.26
115	Agriculture and forestry support activities	283	0.00203	0.20
523	Securities, commodity contracts, investments	259	0.00185	0.19
492	Couriers and messengers	253	0.00181	0.18
454	Nonstore retailers	252	0.00180	0.18
323	Printing and related support activities	244	0.00175	0.17
339	Miscellaneous manufacturing	244	0.00175	0.17
111	Crop production	239	0.00171	0.17
337	Furniture and related product manufacturing	107	0.00077	0.08
112	Animal production	99	0.00071	0.07
481	Air transportation	97	0.00069	0.07
999	Nonclassifiable Establishments	92	0.00066	0.07
712	Museums, historical sites, zoos, and parks	83	0.00059	0.06
114	Fishing, hunting and trapping	69	0.00049	0.05
512	Motion picture and sound recording industries	68	0.00049	0.05
485	Transit and ground passenger transportation	58	0.00042	0.04
314	Textile product mills	45	0.00032	0.03
212	Mining, except oil and gas	44	0.00032	0.03
312	Beverage and tobacco product manufacturing	20	0.00014	0.01
711	Performing arts and spectator sports	15	0.00011	0.01
315	Apparel manufacturing	14	0.00010	0.01
525	Funds, trusts, and other financial vehicles	6	0.00004	0.00
533	Lessors of nonfinancial intangible assets	6	0.00004	0.00
313	Textile mills	0	0.00000	0.00
316	Leather and allied product manufacturing	0	0.00000	0.00
322	Paper manufacturing	0	0.00000	0.00
334	Computer and electronic product manufacturing	0	0.00000	0.00
335	Electrical equipment and appliance mfg.	0	0.00000	0.00
482	Rail transportation	0	0.00000	0.00
487	Scenic and sightseeing transportation	0	0.00000	0.00
491	Postal service	0	0.00000	0.00
516	Internet publishing and broadcasting	0	0.00000	0.00
518	ISPs, search portals, and data processing	0	0.00000	0.00
519	Other Information Services	0	0.00000	0.00
521	Monetary authorities - central bank	0	0.00000	0.00
551	Management of companies and enterprises	0	0.00000	0.00

Table 6. Industry shares of Local employment, arranged in descending order, First Quarter, 2002.xls

3-Digit NAICS Code	Industry	Employment in Southeast Texas (SET)	Industry Share of SET (LOCAL)	Industry Share of LOCAL (%)
722	Food services and drinking places	13329	0.09322	9.32
621	Ambulatory health care services	11049	0.07728	7.73
326	Chemical manufacturing	8223	0.05751	5.75
311	Specialty trade contractors	7418	0.05188	5.19
561	Administrative and support services	6777	0.04740	4.74
622	Hospitals	6675	0.04669	4.67
237	Construction of buildings	6431	0.04498	4.50
541	Professional and technical services	5613	0.03926	3.93
445	Food and beverage stores	4955	0.03466	3.47
325	Petroleum and coal products manufacturing	4268	0.02985	2.99
623	Nursing and residential care facilities	4144	0.02898	2.90
441	Motor vehicle and parts dealers	3811	0.02665	2.67
333	Fabricated metal product manufacturing	3526	0.02466	2.47
452	General merchandise stores	3426	0.02396	2.40
522	Credit intermediation and related activities	3271	0.02288	2.29
423	Merchant wholesalers, durable goods	2831	0.01980	1.98
238	Heavy and civil engineering construction	2561	0.01791	1.79
811	Repair and maintenance	2300	0.01609	1.61
444	Building material and garden supply stores	2256	0.01578	1.58
424	Merchant wholesalers, nondurable goods	2087	0.01460	1.46
624	Social assistance	1953	0.01366	1.37
484	Truck transportation	1918	0.01341	1.34
447	Gasoline stations	1898	0.01327	1.33
812	Personal and laundry services	1812	0.01267	1.27
448	Clothing and clothing accessories stores	1727	0.01208	1.21
562	Waste management and remediation services	1396	0.00976	0.98
488	Support activities for transportation	1389	0.00971	0.97
446	Health and personal care stores	1351	0.00945	0.95
453	Miscellaneous store retailers	1268	0.00887	0.89
532	Rental and leasing services	1258	0.00880	0.88
322	Wood product manufacturing	1251	0.00875	0.88
524	Insurance carriers and related activities	1229	0.00860	0.86
517	Telecommunications	1160	0.00811	0.81
236	Utilities	1059	0.00741	0.74
721	Accommodation	1010	0.00706	0.71
443	Electronics and appliance stores	881	0.00616	0.62
337	Transportation equipment manufacturing	871	0.00609	0.61
531	Real estate	864	0.00604	0.60
213	Support activities for mining	861	0.00602	0.60
713	Amusements, gambling, and recreation	837	0.00585	0.59
813	Membership associations and organizations	773	0.00541	0.54
113	Forestry and logging	739	0.00517	0.52
334	Machinery manufacturing	686	0.00480	0.48
515	Broadcasting, except Internet	597	0.00418	0.42
451	Sporting goods, hobby, book and music stores	582	0.00407	0.41
331	Nonmetallic mineral product manufacturing	574	0.00401	0.40
442	Furniture and home furnishings stores	558	0.00390	0.39
511	Publishing industries, except Internet	552	0.00386	0.39
332	Primary metal manufacturing	530	0.00371	0.37

Table 6. Industry shares of Local employment, arranged in descending order, First Quarter, 2002.xls

493	Warehousing and storage	495	0.00346	0.35
814	Private households	458	0.00320	0.32
486	Pipeline transportation	447	0.00313	0.31
312	Food manufacturing	443	0.00310	0.31
327	Plastics and rubber products manufacturing	443	0.00310	0.31
611	Educational services	402	0.00281	0.28
551	Management of companies and enterprises	356	0.00249	0.25
523	Securities, commodity contracts, investments	332	0.00232	0.23
425	Electronic markets and agents and brokers	307	0.00215	0.22
221	Miscellaneous manufacturing	268	0.00187	0.19
454	Nonstore retailers	244	0.00171	0.17
211	Oil and gas extraction	242	0.00169	0.17
492	Couriers and messengers	238	0.00166	0.17
111	Crop production	208	0.00145	0.15
483	Water transportation	201	0.00141	0.14
324	Printing and related support activities	197	0.00138	0.14
115	Agriculture and forestry support activities	171	0.00120	0.12
339	Furniture and related product manufacturing	158	0.00111	0.11
512	Motion picture and sound recording industries	146	0.00102	0.10
485	Transit and ground passenger transportation	119	0.00083	0.08
114	Fishing, hunting and trapping	103	0.00072	0.07
712	Museums, historical sites, zoos, and parks	97	0.00068	0.07
112	Animal production	90	0.00063	0.06
315	Textile product mills	63	0.00044	0.04
999	Nonclassifiable Establishments	51	0.00036	0.04
481	Air transportation	40	0.00028	0.03
711	Performing arts and spectator sports	38	0.00027	0.03
518	ISPs, search portals, and data processing	26	0.00018	0.02
212	Mining, except oil and gas	19	0.00013	0.01
336	Electrical equipment and appliance mfg.	14	0.00010	0.01
316	Apparel manufacturing	9	0.00006	0.01
525	Funds, trusts, and other financial vehicles	8	0.00006	0.01
335	Computer and electronic product manufacturing	6	0.00004	0.00
533	Lessors of nonfinancial intangible assets	4	0.00003	0.00
313	Beverage and tobacco product manufacturing	0	0.00000	0.00
314	Textile mills	0	0.00000	0.00
321	Leather and allied product manufacturing	0	0.00000	0.00
323	Paper manufacturing	0	0.00000	0.00
482	Rail transportation	0	0.00000	0.00
487	Scenic and sightseeing transportation	0	0.00000	0.00
491	Postal service	0	0.00000	0.00
516	Internet publishing and broadcasting	0	0.00000	0.00
519	Other Information Services	0	0.00000	0.00
521	Monetary authorities - central bank	0	0.00000	0.00

Table 7a. Industry's national growth rates, United States, 1997-2002.xls

3-Digit NAICS Code	Industry	U.S. Employment			
		1997	2002	Change in Jobs	Percent Change
111	Crop production	1,071,870	446,656	-625,214	-58.3
112	Animal production	979,048	201,108	-777,940	-79.5
		na			
		na			
115	Agriculture and forestry support activities	137,022	268,386	131,364	95.9
211	Oil and gas extraction	144,900	122,186	-22,714	-15.7
212	Mining, except oil and gas	242,500	206,724	-35,776	-14.8
213	Support activities for mining	166,500	177,042	10,542	6.3
221	Utilities	608,468	595,255	-13,213	-2.2
236	Construction of buildings	1,348,400	1,500,475	152,075	11.3
237	Heavy and civil engineering construction	705,600	840,930	135,330	19.2
238	Specialty trade contractors	3,235,200	3,971,068	735,868	22.7
311	Food manufacturing	1,526,800	1,507,508	-19,292	-1.3
312	Beverage and tobacco product manufacturing	202,700	201,519	-1,181	-0.6
313	Textile mills	436,600	296,350	-140,250	-32.1
314	Textile product mills	216,600	192,802	-23,798	-11.0
315	Apparel manufacturing	712,900	362,267	-350,633	-49.2
316	Leather and allied product manufacturing	91,100	50,776	-40,324	-44.3
321	Wood product manufacturing	579,900	545,050	-34,850	-6.0
322	Paper manufacturing	629,600	549,965	-79,635	-12.6
323	Printing and related support activities	814,900	719,017	-95,883	-11.8
324	Petroleum and coal products manufacturing	131,500	115,300	-16,200	-12.3
325	Chemical manufacturing	980,700	929,409	-51,291	-5.2
326	Plastics and rubber products manufacturing	927,100	846,612	-80,488	-8.7
327	Nonmetallic mineral product manufacturing	508,100	506,301	-1,799	-0.4
331	Primary metal manufacturing	636,800	514,883	-121,917	-19.1
332	Fabricated metal product manufacturing	1,668,900	1,554,766	-114,134	-6.8
333	Machinery manufacturing	1,481,800	1,252,507	-229,293	-15.5
334	Computer and electronic product manufacturing	1,767,000	1,559,385	-207,615	-11.7
335	Electrical equipment and appliance mfg.	588,200	508,869	-79,331	-13.5
336	Transportation equipment manufacturing	1,999,100	1,826,196	-172,904	-8.6
337	Furniture and related product manufacturing	608,100	606,190	-1,910	-0.3
339	Miscellaneous manufacturing	716,400	685,514	-30,886	-4.3
423	Merchant wholesalers, durable goods	3,020,500	2,992,514	-27,986	-0.9

Table 7a. Industry's national growth rates, United States, 1997-2002.xls

424	Merchant wholesalers, nondurable goods	1,972,800	1,988,494	15,694	0.8
425	Electronic markets and agents and brokers	574,200	614,105	39,905	6.9
441	Motor vehicle and parts dealers	1,699,500	1,840,321	140,821	8.3
442	Furniture and home furnishings stores	478,700	527,197	48,497	10.1
443	Electronics and appliance stores	487,400	530,877	43,477	8.9
444	Building material and garden supply stores	990,100	1,104,219	114,119	11.5
445	Food and beverage stores	2,926,500	2,857,435	-69,065	-2.4
446	Health and personal care stores	841,200	930,214	89,014	10.6
447	Gasoline stations	942,000	889,220	-52,780	-5.6
448	Clothing and clothing accessories stores	1,204,700	1,286,169	81,469	6.8
451	Sporting goods, hobby, book and music stores	613,200	660,272	47,072	7.7
452	General merchandise stores	2,585,000	2,749,356	164,356	6.4
453	Miscellaneous store retailers	883,500	943,999	60,499	6.8
454	Nonstore retailers	441,400	448,172	6,772	1.5
481	Air transportation	534,300	552,072	17,772	3.3
482	Rail transportation	217,800	297	-217,503	-99.9
483	Water transportation	49,500	51,437	1,937	3.9
484	Truck transportation	1,262,500	1,310,640	48,140	3.8
485	Transit and ground passenger transportation	356,500	382,548	26,048	7.3
486	Pipeline transportation	50,300	43,066	-7,234	-14.4
487	Scenic and sightseeing transportation	22,900	20,301	-2,599	-11.3
488	Support activities for transportation	461,700	510,081	48,381	10.5
491	Postal service	868,200	2,584	-865,616	-99.7
492	Couriers and messengers	548,000	559,759	11,759	2.1
493	Warehousing and storage	449,700	506,715	57,015	12.7
511	Publishing industries, except Internet	941,500	969,149	27,649	2.9
512	Motion picture and sound recording industries	341,300	376,713	35,413	10.4
515	Broadcasting, except Internet	311,800	334,599	22,799	7.3
516	Internet publishing and broadcasting	22,300	35,137	12,837	57.6
517	Telecommunications	1,032,100	1,222,161	190,061	18.4
518	ISPs, search portals, and data processing	329,200	451,168	121,968	37.0
519	Other Information Services	39,600	46,157	6,557	16.6
521	Monetary authorities - central bank	22,500	23,260	760	3.4
522	Credit intermediation and related activities	2,394,400	2,643,283	248,883	10.4
523	Securities, commodity contracts, investments	615,800	797,944	182,144	29.6
524	Insurance carriers and related activities	2,118,400	2,103,627	-14,773	-0.7
525	Funds, trusts, and other financial vehicles	67,600	86,043	18,443	27.3

Table 7a. Industry's national growth rates, United States, 1997-2002.xls

531	Real estate	1,200,000	1,320,545	120,545	10.0
532	Rental and leasing services	591,100	635,062	43,962	7.4
533	Lessors of nonfinancial intangible assets	21,900	27,002	5,102	23.3
541	Professional and technical services	5,984,532	6,704,982	720,450	12.0
		na			
561	Administrative and support services	6,209,000	6,924,813	715,813	11.5
562	Waste management and remediation services	280,700	311,001	30,301	10.8
611	Educational services	2,217,045	1,946,069	-270,976	-12.2
621	Ambulatory health care services	4,034,100	4,533,348	499,248	12.4
622	Hospitals	3,796,900	4,066,839	269,939	7.1
623	Nursing and residential care facilities	2,411,100	2,709,819	298,719	12.4
624	Social assistance	1,545,000	1,890,938	345,938	22.4
711	Performing arts and spectator sports	312,100	339,160	27,060	8.7
712	Museums, historical sites, zoos, and parks	85,500	105,729	20,229	23.7
713	Amusements, gambling, and recreation	989,700	1,154,303	164,603	16.6
721	Accommodation	1,637,700	1,679,567	41,867	2.6
722	Food services and drinking places	7,424,100	8,101,926	677,826	9.1
811	Repair and maintenance	1,153,500	1,230,442	76,942	6.7
812	Personal and laundry services	1,164,700	1,232,623	67,923	5.8
813	Membership associations and organizations	2,406,400	1,264,527	-1,141,873	-47.5
		na			
		na			
	TOTAL	102,047,985	103,231,016	1,183,031	1.2
Private Three-Digit Covered Employment, U.S. - 1QTR, 1997 & 2002 (without NAICS 113, 114, 551, 814, and 999)					
	na = Data not available				

Table 7b. Industry's local growth rates, Southeast Texas (SET), 1997-2002.xls

3-Digit NAICS Code	Industry	Southeast Texas (SET) Employment			
		1997	2002	Change in Jobs	Percent Change
111	Crop production	239	208	-31	-13.0
112	Animal production	99	90	-9	-9.1
115	Agriculture and forestry support activities	283	171	-112	-39.6
211	Oil and gas extraction	401	242	-159	-39.7
212	Mining, except oil and gas	44	19	-25	-56.8
213	Support activities for mining	875	861	-14	-1.6
221	Utilities	1015	1059	44	4.3
236	Construction of buildings	5013	6431	1418	28.3
237	Heavy and civil engineering construction	2324	2561	237	10.2
238	Specialty trade contractors	7268	7418	150	2.1
311	Food manufacturing	436	443	7	1.6
312	Beverage and tobacco product manufacturing	20	0	-20	-100.0
313	Textile mills	0	0	0	#DIV/0!
314	Textile product mills	45	63	18	40.0
315	Apparel manufacturing	14	9	-5	-35.7
316	Leather and allied product manufacturing	0	0	0	#DIV/0!
321	Wood product manufacturing	2044	1251	-793	-38.8
322	Paper manufacturing	0	0	0	#DIV/0!
323	Printing and related support activities	244	197	-47	-19.3
324	Petroleum and coal products manufacturing	4475	4268	-207	-4.6
325	Chemical manufacturing	9953	8223	-1730	-17.4
326	Plastics and rubber products manufacturing	402	443	41	10.2
327	Nonmetallic mineral product manufacturing	536	574	38	7.1
331	Primary metal manufacturing	413	530	117	28.3
332	Fabricated metal product manufacturing	2912	3526	614	21.1
333	Machinery manufacturing	890	686	-204	-22.9
334	Computer and electronic product manufacturing	0	6	6	#DIV/0!
335	Electrical equipment and appliance mfg.	0	14	14	#DIV/0!
336	Transportation equipment manufacturing	1542	871	-671	-43.5
337	Furniture and related product manufacturing	107	158	51	47.7
339	Miscellaneous manufacturing	244	268	24	9.8
423	Merchant wholesalers, durable goods	2956	2831	-125	-4.2

Table 7b. Industry's local growth rates, Southeast Texas (SET), 1997-2002.xls

424	Merchant wholesalers, nondurable goods	2004	2087	83	4.1
425	Electronic markets and agents and brokers	363	307	-56	-15.4
441	Motor vehicle and parts dealers	3641	3811	170	4.7
442	Furniture and home furnishings stores	612	558	-54	-8.8
443	Electronics and appliance stores	688	881	193	28.1
444	Building material and garden supply stores	2129	2256	127	6.0
445	Food and beverage stores	4855	4955	100	2.1
446	Health and personal care stores	1372	1351	-21	-1.5
447	Gasoline stations	2288	1898	-390	-17.0
448	Clothing and clothing accessories stores	1792	1727	-65	-3.6
451	Sporting goods, hobby, book and music stores	616	582	-34	-5.5
452	General merchandise stores	3687	3426	-261	-7.1
453	Miscellaneous store retailers	1303	1268	-35	-2.7
454	Nonstore retailers	252	244	-8	-3.2
481	Air transportation	97	40	-57	-58.8
482	Rail transportation	0	0	0	#DIV/0!
483	Water transportation	602	201	-401	-66.6
484	Truck transportation	1797	1918	121	6.7
485	Transit and ground passenger transportation	58	119	61	105.2
486	Pipeline transportation	587	447	-140	-23.9
487	Scenic and sightseeing transportation	0	0	0	#DIV/0!
488	Support activities for transportation	1314	1389	75	5.7
491	Postal service	0	0	0	#DIV/0!
492	Couriers and messengers	253	238	-15	-5.9
493	Warehousing and storage	496	495	-1	-0.2
511	Publishing industries, except Internet	606	552	-54	-8.9
512	Motion picture and sound recording industries	68	146	78	114.7
515	Broadcasting, except Internet	456	597	141	30.9
516	Internet publishing and broadcasting	0	0	0	#DIV/0!
517	Telecommunications	899	1160	261	29.0
518	ISPs, search portals, and data processing	0	26	26	#DIV/0!
519	Other Information Services	0	0	0	#DIV/0!
521	Monetary authorities - central bank	0	0	0	#DIV/0!
522	Credit intermediation and related activities	3030	3271	241	8.0
523	Securities, commodity contracts, investments	259	332	73	28.2
524	Insurance carriers and related activities	1190	1229	39	3.3
525	Funds, trusts, and other financial vehicles	6	8	2	33.3

Table 7b. Industry's local growth rates, Southeast Texas (SET), 1997-2002.xls

531	Real estate	957	864	-93	-9.7
532	Rental and leasing services	1126	1258	132	11.7
533	Lessors of nonfinancial intangible assets	6	4	-2	-33.3
541	Professional and technical services	5278	5613	335	6.3
561	Administrative and support services	5374	6777	1403	26.1
562	Waste management and remediation services	717	1396	679	94.7
611	Educational services	369	402	33	8.9
621	Ambulatory health care services	10272	11049	777	7.6
622	Hospitals	6966	6675	-291	-4.2
623	Nursing and residential care facilities	4287	4144	-143	-3.3
624	Social assistance	1649	1953	304	18.4
711	Performing arts and spectator sports	15	38	23	153.3
712	Museums, historical sites, zoos, and parks	83	97	14	16.9
713	Amusements, gambling, and recreation	672	837	165	24.6
721	Accommodation	1166	1010	-156	-13.4
722	Food services and drinking places	12398	13329	931	7.5
811	Repair and maintenance	2282	2300	18	0.8
812	Personal and laundry services	1568	1812	244	15.6
813	Membership associations and organizations	810	773	-37	-4.6
	TOTAL	138109	141271	3162	2.3
Private Three-Digit Covered Employment, SE Texas, 1QTR, 1997 and 2002 (without NAICS 113, 114, 551, 814 and 999)					

Table 8. Total Employment Change in descending order, Southeast Texas 1997-2002.xls

3-Digit NAICS Code	Industry	SE Texas			NATIONAL GROWTH SHARE	INDUSTRY MIX SHARE	LOCAL SHARE
		1997	2002	Total Employment Change			
236	Construction of buildings	5013	6431	1418	60	505	853
561	Administrative and support services	5374	6777	1403	64	555	783
722	Food services and drinking places	12398	13329	931	149	983	-201
621	Ambulatory health care services	10272	11049	777	123	1148	-494
562	Waste management and remediation services	717	1396	679	9	69	602
332	Fabricated metal product manufacturing	2912	3526	614	35	-234	813
541	Professional and technical services	5278	5613	335	63	572	-300
624	Social assistance	1649	1953	304	20	349	-65
517	Telecommunications	899	1160	261	11	155	95
812	Personal and laundry services	1568	1812	244	19	73	153
522	Credit intermediation and related activities	3030	3271	241	36	279	-74
237	Heavy and civil engineering construction	2324	2561	237	28	418	-209
443	Electronics and appliance stores	688	881	193	8	53	132
441	Motor vehicle and parts dealers	3641	3811	170	44	258	-132
713	Amusements, gambling, and recreation	672	837	165	8	104	53
238	Specialty trade contractors	7268	7418	150	87	1566	-1503
515	Broadcasting, except Internet	456	597	141	5	28	108
532	Rental and leasing services	1126	1258	132	14	70	48
444	Building material and garden supply stores	2129	2256	127	26	220	-118
484	Truck transportation	1797	1918	121	22	47	52
331	Primary metal manufacturing	413	530	117	5	-84	196
445	Food and beverage stores	4855	4955	100	58	-173	215
424	Merchant wholesalers, nondurable goods	2004	2087	83	24	-8	67
512	Motion picture and sound recording industries	68	146	78	1	6	71
488	Support activities for transportation	1314	1389	75	16	122	-63
523	Securities, commodity contracts, investments	259	332	73	3	74	-4
485	Transit and ground passenger transportation	58	119	61	1	4	57
337	Furniture and related product manufacturing	107	158	51	1	-2	51
221	Utilities	1015	1059	44	12	-34	66
326	Plastics and rubber products manufacturing	402	443	41	5	-40	76
524	Insurance carriers and related activities	1190	1229	39	14	-23	47
327	Nonmetallic mineral product manufacturing	536	574	38	6	-8	40
611	Educational services	369	402	33	4	-50	78
339	Miscellaneous manufacturing	244	268	24	3	-13	35

Table 8. Total Employment Change in descending order, Southeast Texas 1997-2002.xls

711	Performing arts and spectator sports	15	38	23	0	1	22
314	Textile product mills	45	63	18	1	-5	23
811	Repair and maintenance	2282	2300	18	27	125	-134
712	Museums, historical sites, zoos, and parks	83	97	14	1	19	-6
311	Food manufacturing	436	443	7	5	-11	13
525	Funds, trusts, and other financial vehicles	6	8	2	0	2	0
493	Warehousing and storage	496	495	-1	6	57	-64
533	Lessors of nonfinancial intangible assets	6	4	-2	0	1	-3
315	Apparel manufacturing	14	9	-5	0	-7	2
454	Nonstore retailers	252	244	-8	3	1	-12
112	Animal production	99	90	-9	1	-80	70
213	Support activities for mining	875	861	-14	11	45	-69
492	Couriers and messengers	253	238	-15	3	2	-20
312	Beverage and tobacco product manufacturing	20	0	-20	0	0	-20
446	Health and personal care stores	1372	1351	-21	16	129	-166
212	Mining, except oil and gas	44	19	-25	1	-7	-19
111	Crop production	239	208	-31	3	-142	108
451	Sporting goods, hobby, book and music stores	616	582	-34	7	40	-81
453	Miscellaneous store retailers	1303	1268	-35	16	74	-124
813	Membership associations and organizations	810	773	-37	10	-394	347
323	Printing and related support activities	244	197	-47	3	-32	-18
442	Furniture and home furnishings stores	612	558	-54	7	55	-116
511	Publishing industries, except Internet	606	552	-54	7	11	-72
425	Electronic markets and agents and brokers	363	307	-56	4	21	-81
481	Air transportation	97	40	-57	1	2	-60
448	Clothing and clothing accessories stores	1792	1727	-65	22	100	-186
531	Real estate	957	864	-93	11	85	-189
115	Agriculture and forestry support activities	283	171	-112	3	268	-383
423	Merchant wholesalers, durable goods	2956	2831	-125	35	-63	-98
486	Pipeline transportation	587	447	-140	7	-91	-56
623	Nursing and residential care facilities	4287	4144	-143	51	480	-674
721	Accommodation	1166	1010	-156	14	16	-186
211	Oil and gas extraction	401	242	-159	5	-68	-96
333	Machinery manufacturing	890	686	-204	11	-148	-66
324	Petroleum and coal products manufacturing	4475	4268	-207	54	-605	344
452	General merchandise stores	3687	3426	-261	44	190	-495
622	Hospitals	6966	6675	-291	84	412	-786

Table 8. Total Employment Change in descending order, Southeast Texas 1997-2002.xls

447	Gasoline stations	2288	1898	-390	27	-156	-262
483	Water transportation	602	201	-401	7	16	-425
336	Transportation equipment manufacturing	1542	871	-671	19	-152	-538
321	Wood product manufacturing	2044	1251	-793	25	-147	-670
325	Chemical manufacturing	9953	8223	-1730	119	-640	-1209
313	Textile mills						
316	Leather and allied product manufacturing						
322	Paper manufacturing						
334	Computer and electronic product manufacturing						
335	Electrical equipment and appliance mfg.						
482	Rail transportation						
487	Scenic and sightseeing transportation						
491	Postal service						
516	Internet publishing and broadcasting						
518	ISPs, search portals, and data processing						
519	Other Information Services						
521	Monetary authorities - central bank						
	TOTAL	138109	141271	3116	1657	6388	-4929
Private Three-Digit Covered Employment, SE Texas, 1QTR, 1997 and 2002 (without NAICS 113, 114, 551, 814 and 999)							

Table 9. Location quotients in descending order, Southeast Texas, First Quarter, 1997.xls

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
113	Forestry and logging	#DIV/0!
114	Fishing, hunting and trapping	#DIV/0!
814	Private households	#DIV/0!
999	Nonclassifiable Establishments	#DIV/0!
	Exporting Industries (LQ>1.25)	
324	Petroleum and coal products manufacturing	25.49943
483	Water transportation	9.11285
486	Pipeline transportation	8.74447
325	Chemical manufacturing	7.60468
213	Support activities for mining	3.93783
236	Construction of buildings	2.78575
321	Wood product manufacturing	2.64114
237	Heavy and civil engineering construction	2.46797
488	Support activities for transportation	2.13255
211	Oil and gas extraction	2.07367
562	Waste management and remediation services	1.91399
621	Ambulatory health care services	1.90797
447	Gasoline stations	1.81999
238	Specialty trade contractors	1.68336
444	Building material and garden supply stores	1.61124
441	Motor vehicle and parts dealers	1.60532
115	Agriculture and forestry support activities	1.54760
811	Repair and maintenance	1.48239
532	Rental and leasing services	1.42738
622	Hospitals	1.37473
623	Nursing and residential care facilities	1.33230
332	Fabricated metal product manufacturing	1.30745
722	Food services and drinking places	1.25133
221	Utilities	1.24995
445	Food and beverage stores	1.24309
446	Health and personal care stores	1.22213
448	Clothing and clothing accessories stores	1.11461
453	Miscellaneous store retailers	1.10510
515	Broadcasting, except Internet	1.09585
452	General merchandise stores	1.06875
484	Truck transportation	1.06655
443	Electronics and appliance stores	1.05771
812	Personal and laundry services	1.00878
442	Furniture and home furnishings stores	0.95797
522	Credit intermediation and related activities	0.94822
493	Warehousing and storage	0.82646
624	Social assistance	0.79975
327	Nonmetallic mineral product manufacturing	0.79046
424	Merchant wholesalers, nondurable goods	0.76116
451	Sporting goods, hobby, book and music stores	0.75273
	Importing Industries (LQ<0.75)	
423	Merchant wholesalers, durable goods	0.73331
712	Museums, historical sites, zoos, and parks	0.72740
541	Professional and technical services	0.66085

Table 9. Location quotients in descending order, Southeast Texas, First Quarter, 1997.xls

517	Telecommunications	0.65268
561	Administrative and support services	0.64854
531	Real estate	0.59758
336	Transportation equipment manufacturing	0.57798
721	Accommodation	0.53349
713	Amusements, gambling, and recreation	0.50878
331	Primary metal manufacturing	0.48597
511	Publishing industries, except Internet	0.48230
425	Electronic markets and agents and brokers	0.47370
333	Machinery manufacturing	0.45005
454	Nonstore retailers	0.42779
524	Insurance carriers and related activities	0.42092
492	Couriers and messengers	0.34594
326	Plastics and rubber products manufacturing	0.32491
523	Securities, commodity contracts, investments	0.31515
339	Miscellaneous manufacturing	0.25521
813	Membership associations and organizations	0.25222
323	Printing and related support activities	0.22436
311	Food manufacturing	0.21398
533	Lessors of nonfinancial intangible assets	0.20529
111	Crop production	0.16708
314	Textile product mills	0.15567
512	Motion picture and sound recording industries	0.14929
481	Air transportation	0.13603
212	Mining, except oil and gas	0.13596
337	Furniture and related product manufacturing	0.13185
611	Educational services	0.12471
485	Transit and ground passenger transportation	0.12191
112	Animal production	0.07577
312	Beverage and tobacco product manufacturing	0.07393
525	Funds, trusts, and other financial vehicles	0.06651
711	Performing arts and spectator sports	0.03601
315	Apparel manufacturing	0.01472
313	Textile mills	0.00000
316	Leather and allied product manufacturing	0.00000
322	Paper manufacturing	0.00000
334	Computer and electronic product manufacturing	0.00000
335	Electrical equipment and appliance mfg.	0.00000
482	Rail transportation	0.00000
487	Scenic and sightseeing transportation	0.00000
491	Postal service	0.00000
516	Internet publishing and broadcasting	0.00000
518	ISPs, search portals, and data processing	0.00000
519	Other Information Services	0.00000
521	Monetary authorities - central bank	0.00000
551	Management of companies and enterprises	0.00000

Table 10. Location quotients in descending order, Southeast Texas, First Quarter, 2002.xls

3-Digit NAICS Code	Industry	Location Quotient (LQ) for SET (LOCAL)
<i>Exporting Industries (LQ>1.25)</i>		
324	Petroleum and coal products manufacturing	27.3563
486	Pipeline transportation	7.6798
113	Forestry and logging	7.4876
114	Fishing, hunting and trapping	7.4334
325	Chemical manufacturing	6.5385
213	Support activities for mining	3.5930
562	Waste management and remediation services	3.3161
236	Construction of buildings	3.1676
483	Water transportation	2.8966
237	Heavy and civil engineering construction	2.2505
488	Support activities for transportation	2.0115
621	Ambulatory health care services	1.8013
321	Wood product manufacturing	1.6963
332	Fabricated metal product manufacturing	1.6760
447	Gasoline stations	1.5769
441	Motor vehicle and parts dealers	1.5302
444	Building material and garden supply stores	1.5101
532	Rental and leasing services	1.4642
211	Oil and gas extraction	1.4615
811	Repair and maintenance	1.3818
238	Specialty trade contractors	1.3805
515	Broadcasting, except Internet	1.3201
221	Utilities	1.3154
445	Food and beverage stores	1.2817
443	Electronics and appliance stores	1.2261
722	Food services and drinking places	1.2158
622	Hospitals	1.2131
623	Nursing and residential care facilities	1.1301
812	Personal and laundry services	1.0861
484	Truck transportation	1.0812
446	Health and personal care stores	1.0735
453	Miscellaneous store retailers	0.9929
448	Clothing and clothing accessories stores	0.9925
452	General merchandise stores	0.9209
522	Credit intermediation and related activities	0.9146
327	Nonmetallic mineral product manufacturing	0.8369
442	Furniture and home furnishings stores	0.7817
424	Merchant wholesalers, nondurable goods	0.7758
814	Private households	0.7719
624	Social assistance	0.7633
331	Primary metal manufacturing	0.7614
<i>Importing Industries (LQ<0.75)</i>		
561	Administrative and support services	0.7233
493	Warehousing and storage	0.7215
517	Telecommunications	0.7012
423	Merchant wholesalers, durable goods	0.6992
712	Museums, historical sites, zoos, and parks	0.6796
451	Sporting goods, hobby, book and music stores	0.6513

Table 10. Location quotients in descending order, Southeast Texas, First Quarter, 2002.xls

541	Professional and technical services	0.6187
713	Amusements, gambling, and recreation	0.5355
531	Real estate	0.4833
115	Agriculture and forestry support activities	0.4725
813	Membership associations and organizations	0.4521
721	Accommodation	0.4442
524	Insurance carriers and related activities	0.4320
511	Publishing industries, except Internet	0.4209
333	Machinery manufacturing	0.4050
454	Nonstore retailers	0.4032
326	Plastics and rubber products manufacturing	0.3869
425	Electronic markets and agents and brokers	0.3699
336	Transportation equipment manufacturing	0.3524
111	Crop production	0.3430
112	Animal production	0.3310
492	Couriers and messengers	0.3134
523	Securities, commodity contracts, investments	0.3072
339	Miscellaneous manufacturing	0.2882
512	Motion picture and sound recording industries	0.2861
314	Textile product mills	0.2411
485	Transit and ground passenger transportation	0.2293
311	Food manufacturing	0.2173
323	Printing and related support activities	0.2028
337	Furniture and related product manufacturing	0.1935
999	Nonclassifiable Establishments	0.1800
551	Management of companies and enterprises	0.1544
611	Educational services	0.1526
533	Lessors of nonfinancial intangible assets	0.1174
711	Performing arts and spectator sports	0.0841
525	Funds, trusts, and other financial vehicles	0.0737
212	Mining, except oil and gas	0.0664
481	Air transportation	0.0536
518	ISPs, search portals, and data processing	0.0422
335	Electrical equipment and appliance mfg.	0.0208
315	Apparel manufacturing	0.0175
334	Computer and electronic product manufacturing	0.0027
312	Beverage and tobacco product manufacturing	0.0000
313	Textile mills	0.0000
316	Leather and allied product manufacturing	0.0000
322	Paper manufacturing	0.0000
482	Rail transportation	0.0000
487	Scenic and sightseeing transportation	0.0000
491	Postal service	0.0000
516	Internet publishing and broadcasting	0.0000
519	Other Information Services	0.0000
521	Monetary authorities - central bank	0.0000

Table 11. Engine of economic growth in Southeast Texas (highlighted yellow) - Expanding and Exporting Industries, 1997-2002.xls

3-Digit NAICS Code	Industry	SE Texas			NATIONAL GROWTH SHARE	INDUSTRY MIX SHARE	LOCAL SHARE
		1997	2002	Total Employment Change			
236	Construction of buildings	5013	6431	1418	60	505	853
561	Administrative and support services	5374	6777	1403	64	555	783
722	Food services and drinking places	12398	13329	931	149	983	-201
621	Ambulatory health care services	10272	11049	777	123	1148	-494
562	Waste management and remediation services	717	1396	679	9	69	602
332	Fabricated metal product manufacturing	2912	3526	614	35	-234	813
541	Professional and technical services	5278	5613	335	63	572	-300
624	Social assistance	1649	1953	304	20	349	-65
517	Telecommunications	899	1160	261	11	155	95
812	Personal and laundry services	1568	1812	244	19	73	153
522	Credit intermediation and related activities	3030	3271	241	36	279	-74
237	Heavy and civil engineering construction	2324	2561	237	28	418	-209