

Phase I Facts and Figures Florida's Ocean and Coastal Economies

Professor Judith Kildow, Principal Investigator

California State University Monterey Bay

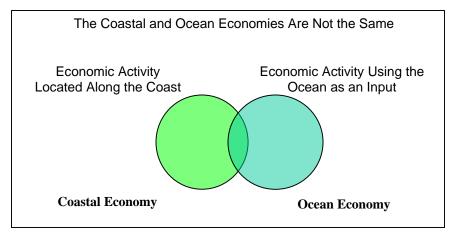
June 2006



Florida's Ocean and Coastal Economy: Phase I, prepared by the National Ocean Economics Program (NOEP) for the State of Florida Department of Environmental Protection, is in two forms: **Facts and Figures: Florida's Ocean and Coastal Economies** and **Florida's Ocean and Coastal Economies Report**. Facts and Figures is a quick reference guide to some of the more important findings from the study. The full study with complete explanations for terms, methodologies, and more detailed interpretations can be found in the Report. The information and views expressed in this report are those of the authors and do not reflect any official views or position of the State of Florida.

INFORMATION INCLUDED

The information in this Phase I is limited to the datasets compiled by the NOEP for all Coastal and Great Lakes states (www.OceanEconomics.org). The NOEP defines two separate but overlapping categories of economic activities to measure the value of Florida's coast to the economy: the Ocean Economy and the Coastal Economy. The NOEP currently uses six sectors of economic activities derived from broader categories of the National Income and Product Accounts as the foundation for the Ocean Economy: Coastal Construction, Marine Living Resources, Marine Transportation, Offshore Minerals, Ship & Boat Building and Repair, and Coastal Tourism & Recreation. All of these depend on the oceans in a direct way. The Coastal Economy represents the full range of all economic activities that occur in coastal geographies, reported as the aggregate of twelve Supersector categories developed and reported by the Department of Commerce Bureau of Economic Analysis and the US Department of Labor Bureau of Labor Statistics.



The information included here is based on consistent Federal statistics, so that all information can be compared within and across coastal state geographies and economic activities. The following pages give an overview of the value and size of Florida's Ocean and Coastal economies as they contribute to the nation, as Florida compares with other coastal states, and comparisons within Florida by regions and counties. Information is provided primarily for the period 1990-2003, using seven indicators: employment, wages, Gross State Product (GSP), production and value (of commercial fisheries), population and housing by land and density.

Important economic activities in Florida are not included in this Phase I report because they require multiple private and public data sources with customized data sets requiring a more extensive effort. Examples of those currently unavailable are the cruise industry, recreational fishing, shoreline real estate, and research and education. Those remain for a Phase II study.



RECOMMENDATIONS FOR FURTHER STUDY



This study omits some important industries that make large contributions to Florida's economy. With industries omitted and some information suppressed in federal datasets, this report is only a preliminary report of Florida's Ocean and Coastal Economies with much more remaining and much value to be considered in later studies. A more customized study based on the unique coastal and ocean-dependent economic activities of the State of Florida should be carried out to complete the picture of Florida's dependence upon its coasts. Florida's Phase II Report should include:

- Additional industries:
 - o Coastal Real Estate
 - Recreational Fishing
 - o International Cruise
 - o Coastal Agriculture
 - o Marine Science and Education
- Refinements of some of those sectors already included but for which data is either more difficult to acquire, or provided at such large aggregates they are not so useful.¹
 - o Commercial fisheries harvesting employment values are not included in the nation's employment database, and are not accurately and consistently available from any one source.
 - o Marinas and recreational boating and fishing, currently included in the Tourism & Recreation sector are at too large an aggregate to be useful to local managers.
 - o Tourism & Recreation values need to be re-categorized and refined to better reflect Florida's true picture. Travel needs to be disaggregated, if possible.
 - o Coastal Construction is incomplete in the federal database and needs coaxing from state and local files as well as private sector information. Activities such as beach nourishment

¹ The NOEP dataset is restricted by Federal agency suppressions considered proprietary industry data within any geographic unit with three or less establishments of a particular sector. As a result, certain industries are underestimated because of data holes in these instances. In the case of Florida, some of the limitations and omissions listed here represent a significant portion of Florida's Ocean and Coastal Economies.



_

- and restoration of natural areas as Mangroves, Estuaries, and watersheds are not included in current categories.
- o Port Cargo Data. While the Maritime Transportation sector includes the four basic indicators of establishments, employment, wages and GSP, it does not include value and types of imported and exported cargo at Florida's commercial ports. Local port construction and land ownership values should be included.
- Demographic and Housing data should include additional categories such as part-time or second homes, commuters, retirees, home ownership and rental units to provide a better backdrop to coastal economy dynamics, thereby giving managers a better picture of both social and physical infrastructure needs
- Legislative Districts. To provide more meaningful information for particular groups, information can be geographically classified in different areas. Legislative districts would be one option.
- Florida's investment in its coasts and coastal oceans. The government sector is excluded; the NAICS codes do not distinguish between coast and ocean-related sectors and non-ocean related activities of the federal, state, and local government agencies. A Florida government investment study of how much and where Florida invests its money in its ocean and coastal assets would provide indication of consistency of expenditures with strategic planning goals.
- Self-employment and income is not yet a part of this dataset. Much of the Living Marine Resources as well as the Tourism & Recreation sectors need to include these values.
- Ocean Economy is measured only in coastal counties at this time, although the ripple effects of
 Ocean Economy activities extend throughout the country and should be included to indicate the
 full extent of Florida's influence.
- Natural Resources. Fisheries landings and values can be presented by harbor, numbers of permits and boats, etc, which are available from Florida sources.
- Beyond Market values. Florida's broad spectrum of natural coastal-related assets merits further studies valuing either categories of these assets and/or selected sites to provide a more reliable estimate of Florida's natural assets, only peripherally covered in Phase I. Few studies have been done in Florida for such values; the Florida Keys and Indian Lagoon are among the few valued.
- A baseline of local coastal recreational activities within the state.



HIGHLIGHTS

FLORIDA'S IMPORTANCE TO THE NATION

- During the period 1990 to 2003 Florida's shoreline county/Coastal Economy grew at a faster rate than the Coastal Economy of California, the Gulf States and the nation: at 31% employment growth, 48% for wages, and 63% for GSP.
- Florida contributed 9.7% of the national Coastal Economy GSP in 2003, with only 4.6% of the national coastal county land area.
- In 2003, Florida's direct Ocean Economy (GSP) ranked second in the nation behind California with an estimated \$13.1 billion.
- Florida's shoreline county population ranked third in the nation and thirteenth for density per square mile in 2004.

IMPORTANCE OF FLORIDA'S COASTS TO THE STATE OF FLORIDA

OCEAN ECONOMY

- In 2003, Florida's total (with multipliers) Ocean Economy was an estimated \$23.2 billion.
- Florida's total Ocean Economy contributes 3.2% of its employment and 4.5% of GSP.
- Employment forecasts for the Ocean Economy project a 73% growth with more than 268,000 new jobs by 2015.

COASTAL ECONOMY

- In 2003, Florida's shoreline counties contributed an estimated \$402 billion to the Florida economy, 77% of the state's total economy.
- In 2003, shoreline counties contributed more than 70% of all employment, population, and housing in the state with only 56% of the land area.
- Between 1990 and 2003, Florida's Coastal Economy grew at a faster rate than population. Wages grew 49% and GSP grew 65%, while population grew 30%, possibly indicating a slowing of population growth along the shore.

POPULATION AND HOUSING

- 77% of Florida's population lives in coastal counties, with 46% living on the Atlantic and 31% on the Gulf coast. The remaining population lives inland.
- Inland counties, with smaller population levels, have grown faster than shoreline counties with a population growth of 42% during the period 1990-2004, and a housing growth of 42%.

NON-MARKET

- Non-Market values of coastal and marine resources in 2000 generated high economic value in addition to market expenditures.
- The Natural Values of coastal resources and services sustain growth and economic vitality for Florida's economy.
- Florida ranks number one among the nation's destinations for Americans that swim, fish, dive, and otherwise enjoy the state's many beaches, coastal wetlands, and shores.
- More than 22 million people visited the Florida coasts in 2000.



OCEAN ECONOMY

Ocean Economy GSP Rankings of Coastal States 2003									
2003	State	Rank							
\$25,757,525,800	California	1							
\$13,035,087,800	Florida	2							
\$12,923,195,100	New York	3							
\$9,576,475,500	Louisiana	4							
\$7,172,176,200	Washington	5							
\$6,506,027,265	Texas	6							
\$5,887,835,200	Alaska	7							
\$4,941,612,000	New Jersey	8							
\$4,741,719,600	Virginia	9							
\$4,440,782,700	Hawaii	10							
\$3,326,643,189	Massachusetts	11							
\$3,182,261,600	Illinois	12							
\$2,517,656,400	Maryland	13							
\$2,295,064,400	Connecticut	14							
\$1,809,937,300	Maine	15							
\$1,734,209,100	Michigan	16							
\$1,588,838,400	South Carolina	17							
\$1,437,373,000	North Carolina	18							
\$1,281,732,400	Rhode Island	19							
\$1,205,391,900	Wisconsin	20							

Source: U.S. Bureau of Labor Statistics

• In 2003, Florida's Ocean Economy ranked second among coastal states behind California and for its Gross State Product (GSP).

Florida's Rank	Florida's Rank Among Coastal States 2003										
Sector	Employment	Wages	GSP								
Total Ocean Economy	2	3	3								
Construction**	15	17	15								
Living Resources**	7	7	9								
Minerals**	18	18	18								
Ship & Boat Building**	7	8	7								
Tourism & Recreation	2	3	3								
Transportation	2	3	2								

**GSP and Employment not available for some states in this industry Source: U.S. Bureau of Labor Statistics

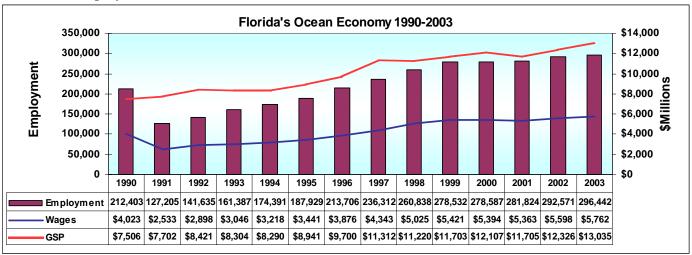
• Florida ranks in the top 5 in the total Ocean Economy, Tourism & Recreation, and Transportation sectors for employment, wages, and GSP.

Florida's Share of the U.S. Ocean Economy 2003										
Sector	Employment	Wages	GSP							
Total Ocean Economy	13.6%	10.7%	11.6%							
Construction	12.1%	10.1%	10.0%							
Living Resources	7.0%	6.9%	9.3%							
Minerals	1.5%	0.7%	0.2%							
Ship & Boat Building	7.6%	5.9%	5.8%							
Tourism & Recreation	15.3%	14.7%	16.0%							
Transportation	10.0%	7.6%	11.1%							

Source: U.S. Bureau of Labor Statistics

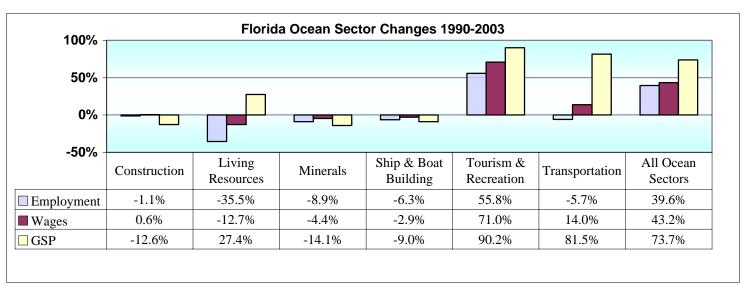


• In 2003, Florida contributed nearly 11% of the U.S. Ocean Economy in GSP and over 13% of employment.



Source: U.S. Bureau of Labor Statistics

• In 2003, Florida's direct Ocean Economy (GSP) was \$13.1 billion and total Ocean Economy (including multipliers) was \$23.2 billion.



Source: U.S. Bureau of Labor Statistics

 Tourism & Recreation significantly lead all Ocean Economy Growth in the period from 1990 to 2003, representing a significant change toward service uses and away from production



Changes in Employ	yment, Wa	ages, and	GSP in th	e Ocean T	ourism 8	Recreation	n Sector 1	990-2003	3
	F	Employme	nt	Wa	ges (\$Mill	ions)	GSP (\$Millions)		
Industry	1990	2003	% Change	1990	2003	% Change	1990	2003	% Change
Amusement & Recreation									
Services	2,704	4,862	79.8%	\$43.8	\$86.9	98.3%	\$103.2	\$775.5	651.5%
Boat Dealers	2,208	3,851	74.4%	\$63.4	\$124.1	95.8%	\$104.1	\$290.9	179.5%
Eating & Drinking Places	95,703	167,014	74.5%	\$1,172.5	\$2,199.8	87.6%	\$1,925.6	\$3,937.4	104.5%
Hotels & Lodging Places	53,130	65,687	23.6%	\$874.0	\$1,327.4	51.9%	\$2,271.2	\$3,514.8	54.8%
Marinas	2,686	3,202	19.2%	\$66.4	\$72.9	9.8%	\$108.4	\$161.0	48.5%
Recreational Vehicles Parks									
& Campsites	811	1,031	27.1%	\$14.4	\$18.0	25.4%	\$55.4	\$47.7	-14.0%
Scenic Water Tours	888	1,333	50.1%	\$17.3	\$25.7	48.1%	\$37.5	\$47.9	27.8%
Sporting Goods	527	662	25.6%	\$10.4	\$19.6	88.2%	\$19.6	\$46.7	138.8%
Zoos, Aquaria	929	968	4.2%	\$16.7	\$21.8	30.6%	\$33.7	\$38.7	14.9%
Tourism & Recreation									
Total	159,585	248,609	55.8%	\$2,278.9	\$3,896.1	71.0%	\$4,658.6	\$8,860.6	90.2%

Source: U.S. Bureau of Labor Statistics

• GSP in the Tourism & Recreation sector almost doubled between 1990 and 2003, largely because of the Amusement & Recreation Service Industry.

Changes	Changes in Employment, Wages, and GSP in the Marine Transportation Sector 1990-2003													
		Employn	nent	W	ages (\$Million	s)	GSP (\$Millions)							
Industry	1990	2003	% Change	1990	2003	% Change	1990	2003	% Change					
Deep Sea Freight														
Transportation	1,788	2,711	51.6%	\$89.3	\$151.5	69.6%	\$137.7	\$371.0	169.4%					
Marine Passenger														
Transportation	4,092	8,029	96.2%	\$141.0	\$340.2	141.2%	\$219.6	\$833.1	279.4%					
Marine Transportation														
Services	7,770	7,757	-0.2%	\$225.0	\$261.5	16.2%	\$355.7	\$487.4	37.0%					
Search and Navigation														
Equipment	14,035	8,073	-42.5%	\$573.9	\$425.3	-25.9%	\$854.1	\$1,194.8	39.9%					
Warehousing	1,667	1,096	-34.3%	\$37.2	\$37.5	0.9%	\$61.1	\$68.8	12.7%					
Total	29,351	27,666	-5.7%	\$1,066.4	\$1,216.1	14.0%	\$1,628.2	\$2,955.2	81.5%					

Source: U.S. Bureau of Labor Statistics

• Marine Passenger Transportation, (e.g.: cruise industry) grew dramatically from 1990 to 2003; employment by 96% and GSP by 280%.

Changes in Employment, Wages, and GSP in Ocean Ship & Boat Building Sector 1990-2003										
		Employn	nent	Wages			GSP			
Industry						%				
	1990	2003	% Change	1990	2003	Change	1990	2003	% Change	
Boat Building & Repair	9,842	8,955	-9.0%	\$295.1	\$273.2	-7.4%	\$421.4	\$367.3	-12.8%	
Ship Building & Repair	2,690	2,784	3.5%	\$100.5	\$111.0	10.5%	\$146.0	\$149.2	2.2%	
Total	12,532	11,739	-6.3%	\$395.5	\$384.2	-2.9%	\$567.4	\$516.5	-9.0%	

Source: U.S. Bureau of Labor Statistics

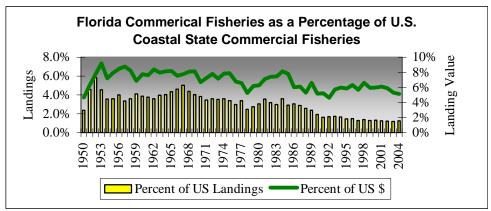
• The Ship & Boat Building Sector GSP increase was largely attributable to the Ship Building & Repair Industry.



	Employment			Wag	es (\$Million	ns)	GSP (\$Millions)		
			%			%			%
Industry	1990	2003	Change	1990	2003	Change	1990	2003	Change
Fishing	809	N/A	N/A	\$17.8	N/A	N/A		N/A	N/A
Fish Hatcheries &									
Aquaculture	171	N/A	N/A	\$4.3	N/A	N/A		N/A	N/A
Seafood Markets	1,347	1,289	-4.3%	\$22.0	\$27.9	26.9%	\$35.7	\$65.5	83.3%
Seafood Processing	4,630	2,515	-45.7%	\$89.3	\$73.0	-18.3%	\$246.3	\$188.1	-23.6%
Total	6,956	4,474	-35.7%	\$133.5	\$116.5	-12.7%	\$334.6	\$426.4	27.4%

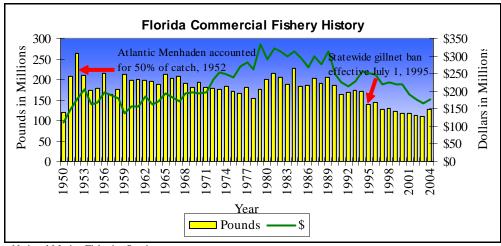
Source: U.S. Bureau of Labor Statistics

All indicators in the Living Resources sector decreased between 1990 and 2003.



Source: National Marine Fisheries Service

• At peak Florida accounted for 9.2% of the U.S. total commercial landed values; Florida accounted for 5.1% in 2004.



Source: National Marine Fisheries Service

• Florida landed values peaked in 1979 with over \$332 million, and since the late 1980s has declined. In 2004, the value of landings was nearly \$177 billion (constant 2000 dollars).



Employment, Wages, and GSP Changes in Ocean Construction Sector 1990-2003											
	Employment			Wages (\$Millions)			GSP (\$Millions)				
Industry	1990	2003	% Change	1990	2003	% Change	1990	2003	% Change		
Marine Construction	3,628	3,588	-1.1%	\$134	\$135	0.6%	284	248	-12.6%		

Source: U.S. Bureau of Labor Statistics

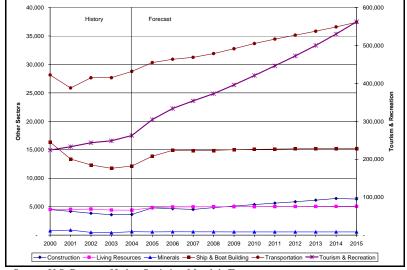
Overall, the Marine Construction sector declined during the period from 1990 to 2003.

Employment, Wages, and GSP Changes in Offshore Minerals Sector 1990-2003										
Industry	Employment			Wages (\$Millions)			GSP (\$Millions)			
	1990	2003	% Change	1990	2003	% Change	1990	2003	% Change	
Oil & Gas Exploration and										
Production	N/A	388	N/A	N/A	\$11.9	N/A	N/A	\$22.5	N/A	
Limestone, Sand & Gravel	N/A	43	N/A	N/A	\$2.1	N/A	N/A	\$5.8	N/A	
Total	473	431	-8.9%	\$14.6	\$13.9	-4.4%	\$32.9	\$28.3	-14.1%	

Source: U.S. Bureau of Labor Statistics

The Offshore Minerals sector declined during the period from 1990 through 2003; by all indications Florida has no offshore oil or natural gas production.



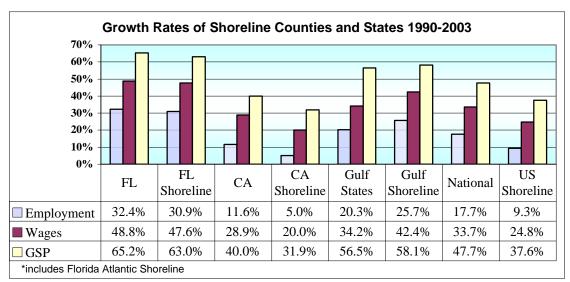


Source: U.S. Bureau of Labor Statistics; Moody's/Economy.com

Florida's Ocean Economy will grow strongly during the next decade led by employment in the Ocean Tourism & Recreation sector. Employment projections from 2005-2015 predict a 73% growth and show more than 268,000 new jobs.

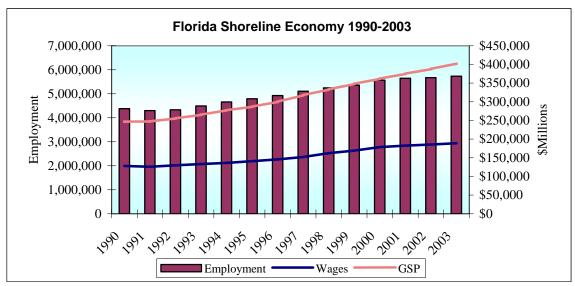


COASTAL ECONOMY



Source: U.S. Bureau of Labor Statistics

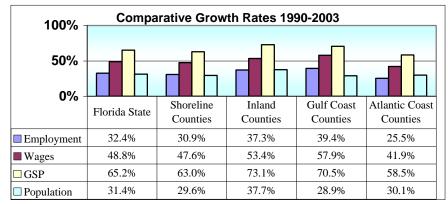
• In some cases, such as in the National shoreline and California shoreline, employment increased only 9%, and 5% respectively. However, the Florida coastline counties showed an increase in employment around 31%, wages 48% and GSP 63%.



Source: U.S. Bureau of Labor Statistics

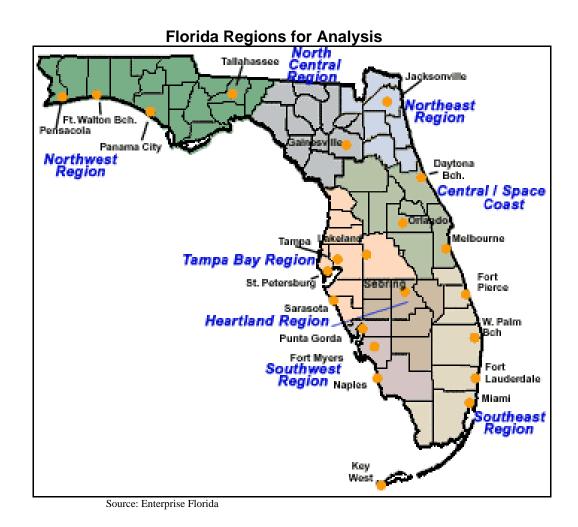
- Coastal Economy growth from 1990-2003 followed some general trends across the nation. Wages increased more than employment and GSP more than both.
- Employment growth was steady until 2000, when it leveled off, despite the continued rise in GSP.





Source: U.S. Bureau of Labor Statistics, United States Census Bureau

• Florida's shoreline counties since 1990, when compared to the overall state growth, was relatively similar over these thirteen years, with slightly less growth in employment and wages in the shoreline counties than the overall state.



	Regional Eco	onomic Growth 19	990-2003	
		Employment		Percent
Region	1990	2003	Change	Change
STATE	5,682,989	7,521,606	1,838,617	32.4%
Shoreline	4,382,455	5,736,343	1,353,888	30.9%
Inland	1,300,506	1,785,229	484,723	37.3%
Gulf Coast	1,705,127	2,376,318	671,191	39.4%
Atlantic Coast	2,677,328	3,360,025	682,697	25.5%
Southeast	1,961,346	2,475,465	514,119	26.2%
Tampa Bay	1,291,730	1,780,068	488,338	37.8%
Central	1,017,519	1,410,068	392,549	38.6%
Southwest	233,309	355,125	121,816	52.2%
Northeast	497,929	635,038	137,109	27.5%
Northwest	454,068	572,914	118,846	26.2%
North Central	158,531	205,254	46,723	29.5%
Heartland	68,529	87,640	19,111	27.9%
		Wages (\$Millions)		Percent
Region	1990	2003	Change	Change
STATE	\$162,360.0	\$241,667.9	\$79,307.8	48.8%
Shoreline	\$128,149.4	\$189,195.9	\$61,046.5	47.6%
Inland	\$34,210.6	\$52,471.9	\$18,261.4	53.4%
Gulf Coast	\$45,830.2	\$72,362.5	\$26,532.2	57.9%
Atlantic Coast	\$82,319.2	\$116,833.5	\$34,514.3	41.9%
Southeast	\$61,302.1	\$87,475.6	\$26,173.5	42.7%
Tampa Bay	\$35,265.0	\$54,524.9	\$19,259.9	54.6%
Central	\$28,543.5	\$44,114.6	\$15,571.2	54.6%
Northeast	\$14,597.9	\$21,085.2	\$6,487.3	44.4%
Southwest	\$5,993.8	\$11,237.2	\$5,243.4	87.5%
Northwest	\$11,599.6	\$16,275.7	\$4,676.0	40.3%
North Central	\$3,893.8	\$5,294.8	\$1,401.0	36.0%
Heartland	\$1,164.3	\$1,659.9	\$495.6	42.6%
Danian	1000	GSP (\$Millions)	Chamas	Percent
Region	1990	2003	Change	Change
STATE Shoreline	\$315,282.3	\$520,902.6	\$205,620.2	65.2%
	\$246,797.8	\$402,378.0	\$155,580.2	63.0%
Inland Gulf Coast	\$68,484.5	\$118,524.6	\$50,040.0	73.1%
	\$93,793.6	\$159,925.7	\$66,132.1	70.5%
Atlantic Coast	\$153,004.2	\$242,452.3	\$89,448.1	58.5%
Southeast Tampa Bay	\$114,391.4 \$71,523.8	\$182,839.5 \$110.740.5	\$68,448.1 \$48.225.7	59.8%
Central	\$53,689.6	\$119,749.5 \$96,109.9	\$48,225.7 \$42,420.3	67.4% 79.0%
Northwest	\$23,533.4	\$37,016.6	\$13,483.3	57.3%
Northeast	\$23,333.4	\$43,400.4	\$15,463.3	60.1%
Southwest	\$13,742.2	\$24,829.3	\$10,297.1 \$11,087.1	80.7%
North Central	\$8,278.8	\$12,614.5	\$4,335.8	52.4%
Heartland	\$3,019.9	\$4,342.8	\$1,322.9	43.8%
1 icai tialiu	\$5,019.9	Φ4,542.0	\$1,342.9	45.6%

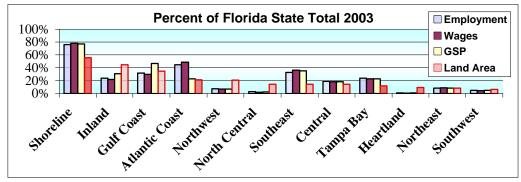
- Source: U.S. Bureau of Labor Statistics
- Inland counties, with a smaller base, grew more rapidly than either the shoreline counties or the state as a whole in all categories.
- Shoreline county Coastal Economy GSP is three times the size of the inland county Coastal Economy.



		Regio	n Contributi	on to State	Totals, 2003	}		
	Emplo	yment	Wa	ges	GS	SP	Land	Area
Region	Employed	% of State	(\$Millions)	% of State	(\$Millions)	% of State	(sq. miles)	% of State
STATE	7,521,606	100.0%	\$241,667.9	100.0%	\$520,902.6	100.0%	53,927	100.0%
Shoreline	5,736,343	76.3%	\$189,195.9	78.3%	\$402,378.0	77.2%	29,971	55.6%
Inland	1,785,229	23.7%	\$52,471.9	21.7%	\$159,925.7	30.7%	23,956	44.4%
Gulf Coast	2,376,318	31.6%	\$72,362.5	29.9%	\$242,452.3	46.5%	18,574	34.4%
Atlantic Coast	3,360,025	44.7%	\$116,833.5	48.3%	\$118,524.6	22.8%	11,398	21.1%
Northwest	572,914	7.6%	\$16,275.7	6.7%	\$37,016.6	7.1%	11,304	21.0%
North Central	205,254	2.7%	\$5,294.8	2.2%	\$12,614.5	2.4%	7,855	14.6%
Southeast	2,475,465	32.9%	\$87,475.6	36.2%	\$182,839.5	35.1%	7,754	14.4%
Central	1,410,068	18.7%	\$44,114.6	18.3%	\$96,109.9	18.5%	7,737	14.3%
Tampa Bay	1,780,068	23.7%	\$54,524.9	22.6%	\$119,749.5	23.0%	6,325	11.7%
Heartland	87,640	1.2%	\$1,659.9	0.7%	\$4,342.8	0.8%	5,003	9.3%
Northeast	635,038	8.4%	\$21,085.2	8.7%	\$43,400.4	8.3%	4,427	8.2%
Southwest	355,125	4.7%	\$11,237.2	4.6%	\$24,829.3	4.8%	3,523	6.5%

Source: U.S. Bureau of Labor Statistics, United States Census Bureau

• Shoreline counties with 56% of the land, contributed 77% of the State's GSP, and 76% of employment in 2003.



Source: U.S. Bureau of Labor Statistics, United States Census Bureau

• The Southeast (shoreline) region with 14.5% of the land, contributed 35% of Florida's GSP. The Heartland (inland) region with 10% of the land, contributed less than 1% of GSP in 2003.

HOUSING AND POPULATION

	Florida Regional Population and Housing 1990–2004											
			Population		Housing							
Region	1990199020042004PopulationPopulationPopulationDensityPopulationDensityGrowthHoward						1990 Density	2004 Housing	2004 Density	Housing Growth		
Shoreline	10,066,343	336	13,320,811	444	32.3%	4,889,752	163	6,285,851	210	28.6%		
Inland	2,871,728	120	4,064,619	170	41.5%	1,210,510	51	1,723,576	72	42.4%		
Atlantic	5,996,664	526	7,947,569	697	32.5%	2,837,562	249	3,584,174	314	26.3%		
Gulf	4,069,679	219	5,373,242	289	32.0%	2,052,190	110	2,701,677	145	31.6%		
Florida	12,938,071	240	17,385,430	322	34.4%	6,100,262.00	113	8,009,427	149	31.3%		

Source: United States Census Bureau

- Inland counties grew faster, at 42%, than shoreline counties at 32%.
- In 2004, shoreline population, housing, and their associated densities were approximately three times greater than the inland values.



	Coastal State Coastal Population and Density, 2004										
			Coastal % of								
Rank	State	Population	State	Coastal Land	Density*	State	Rank				
1	California	27,261,347	76.0%	1,393	4,321	Illinois	1				
2	New York	16,311,041	84.8%	1,729	1,692	Pennsylvania	2				
3	Florida	13,320,811	76.7%	5,639	1,386	New Jersey	3				
4	New Jersey	7,818,724	89.9%	3,546	1,358	Massachusetts	4				
5	Illinois	6,020,672	47.4%	1,045	1,034	Rhode Island	5				
6	Texas	5,548,520	24.7%	2,267	961	Connecticut	6				
7	Michigan	5,092,918	50.4%	19,066	856	New York	7				
8	Massachusetts	4,816,558	75.1%	3,758	728	Ohio	8				
9	Virginia	4,722,679	63.3%	39,094	697	California	9				
10	Washington	4,261,306	68.7%	8,826	535	Virginia	10				
11	Pennsylvania	2,925,104	23.6%	1,513	499	Indiana	11				
12	Maryland	2,899,232	52.2%	5,897	492	Maryland	12				
13	Ohio	2,736,803	23.9%	29,971	444	Florida	13				
14	Connecticut	2,177,746	62.2%	1,954	425	Delaware	14				
15	Wisconsin	2,012,245	36.5%	1,064	386	New Hampshire	15				
16	Louisiana	1,941,296	43.0%	15,091	368	Texas	16				
17	Oregon	1,399,993	38.9%	18,884	226	Washington	17				
18	Hawaii	1,262,840	100.0%	1,785	209	Mississippi	18				
19	Rhode Island	1,080,632	100.0%	2,829	197	Alabama	19				
20	South Carolina	1,057,345	25.2%	6,423	197	Hawaii	19				
21	Maine	981,382	74.5%	10,525	191	Wisconsin	21				
22	North Carolina	873,890	10.2%	10,852	179	Louisiana	22				
23	Delaware	830,364	100.0%	31,422	162	Michigan	23				
24	Indiana	755,560	12.1%	6,839	155	South Carolina	24				
25	Georgia	565,431	6.4%	5,635	100	Georgia	25				
26	Alabama	557,227	12.3%	9,361	93	North Carolina	26				
27	Alaska	555,231	84.7%	12,051	81	Maine	27				
28	New Hampshire	410,743	31.6%	19,241	73	Oregon	28				
29	Mississippi	373,762	12.9%	10,635	23	Minnesota	29				
30	Minnesota	248,310	4.9%	365,574	2	Alaska	30				
	United States	109,185,031	37.2%	653,909	167	United States					

* Density per square mile Source: United States Census Bureau

- Florida ranks third among coastal states for shoreline county population and 13th for shoreline county population density.
- Both Florida and California show 76% of their population living in shoreline counties.



	T	Coastal		ousing and Den	sity, 2004	Г	
Rank	State	Housing	Coastal % of State	Coastal Land	Density*	State	Rank
1	California	9,731,593	76.0%	1,393	1,706	Illinois	1
2	New York	6,488,096	83.0%	1,729	712	Pennsylvania	2
3	Florida	6,285,851	78.5%	3,546	569	Massachusetts	3
4	New Jersey	3,082,822	90.3%	5,639	547	New Jersey	4
5	Illinois	2,377,039	46.7%	1,045	427	Rhode Island	5
6	Michigan	2,244,167	50.6%	2,267	386	Connecticut	6
7	Texas	2,195,246	24.8%	19,066	340	New York	7
8	Massachusetts	2,016,560	75.5%	3,758	325	Ohio	8
9	Virginia	1,914,080	61.4%	39,094	249	California	9
10	Washington	1,824,090	70.0%	8,826	217	Virginia	10
11	Maryland	1,236,157	54.9%	29,971	210	Florida	11
12	Pennsylvania	1,230,261	22.8%	5,897	210	Maryland	11
13	Ohio	1,220,068	24.6%	1,513	206	Indiana	13
14	Wisconsin	890,896	36.2%	1,954	188	Delaware	14
15	Connecticut	874,164	61.8%	1,064	158	New Hampshire	15
16	Louisiana	812,965	42.3%	15,091	145	Texas	16
17	Oregon	601,000	39.1%	18,884	97	Washington	17
18	South Carolina	526,188	27.8%	1,785	93	Mississippi	18
19	Maine	494,771	73.1%	2,829	91	Alabama	19
20	Hawaii	482,873	100.0%	10,525	85	Wisconsin	20
21	North Carolina	458,044	11.9%	6,839	77	South Carolina	21
22	Rhode Island	446,305	100.0%	6,423	75	Hawaii	22
23	Delaware	367,448	100.0%	10,852	75	Louisiana	22
24	Indiana	312,256	11.6%	31,422	71	Michigan	24
25	Alabama	258,118	12.5%	9,361	49	North Carolina	25
26	Georgia	243,255	6.6%	5,635	43	Georgia	26
27	Alaska	228,987	84.3%	12,051	41	Maine	27
28	New Hampshire	168,069	29.2%	19,241	31	Oregon	28
29	Mississippi	165,100	13.5%	10,635	12	Minnesota	29
30	Minnesota	125,026	5.7%	365,574	1	Alaska	30
	United States	39,982,585	32.6%	653,909	61	United States	

*Density per square mile Source: United States Census Bureau

Florida ranks third among the coastal states for number of coastal housing units and 11^{th} for coastal housing density.



NON-MARKET VALUES

Coastal Recreation by State, 2000								
	Participation Rate (% of national population)	Participants (in state where activities took place)	National Rank					
Florida	10.7	22,060,908	1					
California	8.71		2					
		17,654,215						
South Carolina	3.14	6,469,023	3					
New Jersey	3.02	6,224,769	4					
Texas	2.99	6,167,691	5					
North Carolina	2.7	5,576,629	6					
New York	2.67	5,503,395	7					
Massachusetts	2.38	4,904,006	8					
Maryland	2.38	4,901,728	9					
Virginia	2.37	4,878,313	10					
Hawaii	2.2	4,540,543	11					
Maine	1.82	3,753,337	12					
Washington	1.66	3,429,729	13					
Oregon	1.54	3,183,483	14					
Rhode Island	1.28	2,641,812	15					
Alabama	1.24	2,549,078	16					
Connecticut	1.11	2,294,362	17					
Georgia	1.1	2,262,763	18					
Delaware	1.05	2,168,108	19					
Louisiana	1.05	2,165,830	20					
New Hampshire	1.03	2,120,282	21					
Mississippi	0.87	1,801,442	22					
Alaska	0.84	1,725,078	23					
District of Columbia	0.13	258,559	24					

Source: National Survey on Recreation and the Environment

• More than 22 million visitors, or one in ten Americans, visited the Florida coasts in 2000.

Annual Participation in Coastal Recreation in Florida 1999-2000								
	Participants (in state where activities	Activity Days						
Activities	took place) (millions)	(millions)						
Beach-going	15.246	177.153						
Bird Watching	3.373	77.952						
Canoeing	0.019	n/a						
Fishing	4.698	56.285						
Hunting	0.072	*						
Kayaking	0.338	n/a						
Motorboating	3.337	46.624						
Other Wildlife	2.846	50.264						
Personal Watercraft	1.626	14.54						
Photography Scenery	3.92	96.591						
Rowing	0.153	n/a						
SCUBA	0.802	5.42						
Snorkeling	2.866	23.956						
Swimming	14.033	161.098						
Waterside	1.801	22.59						
Waterskiing	0.613	4.475						

^{*} Too few to estimate; N/A data not collected Source: National Survey on Recreation and the Environment

• Coastal areas support a variety of recreational activities where visitors and locals come to swim, sunbathe, watch wildlife (especially birds), photograph scenery, boat, fish, and dive.



Estimated Non-Market Values for Selected Activities, 2000								
Activities	Low Estimates*	High Estimates*						
Activities	(\$2005, millions)	(\$2005, millions)						
Beach	\$3,543	\$17,715						
Swimming	\$3,222	\$16,110						
Bird Watching	\$3,898	\$7,795						
Other Wildlife	\$2,513	\$5,026						
Fishing	\$3,377	\$5,629						
Scuba Diving	\$27	\$81						
Snorkeling	\$239	\$1,198						

^{*(}Rounded to nearest \$millions)

Values cannot be added across activities due to double counting.

Source: NOEP

• Based on year 2000 activity levels, the Non-Market value, in 2005 dollars, of beach use would have been between \$3.5 billion and \$18 billion in 2000.

Beach Destinations in Florida Seaside/Beaches of South Walton Area Pensacola Area Jacksonville/ Amelia Island Area Tallahassee Area St. Augustine Area Panama City Beach Area Flagler Beach/ Palin Coast Area Cedar Key/ Steinhatchee Apalachicola/ Port St. Joe Destin/ Daytona Beach/ New Smyrna Beach Ft. Walton Beach Area Агеа **Área** Area Crystal River Area Cocoa Beach Area St. Petersburg Tampa Clearwater Ft. Pierce/Vero Beach Area Area Sarasota/Braderiton Area Charlotte Harbor Area Palm Beach Area Ft. Myers/Sanibel Area Fort Lauderdale Area Naples/Marco Island Area Miami Area Florida Keys/ Key West Area

Source: Visit Florida (http://www.visitflorida.com/cms/index.php/id=522)



County Contributions to State Totals, 2003									
	Populat	tion	Employ	ment	Wages	s			
County	Population	% State	Employed	% State	(\$Millions)	% State	(\$Millions)	% State	GSP \$/employee
STATE	16,999,181	100.00%	7,521,606	100.00%	\$241,667.9	100.00%	\$520,902.6	100.00%	\$69,254
Alachua	221,717	1.30%	125,902	1.67%	\$3,481.1	1.44%	\$8,207.5	1.58%	\$65,190
Baker	23,435	0.14%	6,804	0.09%	\$151.5	0.06%	\$398.5	0.08%	\$58,566
Bay	154,888	0.91%	72,448	0.96%	\$2,059.1	0.85%	\$4,835.1	0.93%	\$66,740
Bradford	26,969	0.16%	7,876	0.10%	\$189.1	0.08%	\$394.8	0.08%	\$50,130
Brevard	505,756	2.98%	198,907	2.64%	\$6,875.8	2.85%	\$12,894.5	2.48%	\$64,827
Broward	1,728,916	10.17%	706,774	9.40%	\$25,116.5	10.39%	\$52,896.9	10.15%	\$74,843
Calhoun	12,987	0.08%	3,502	0.05%	\$70.2	0.03%	\$197.7	0.04%	\$56,451
Charlotte	152,810	0.90%	39,296	0.52%	\$1,245.5	0.52%	\$2,636.6	0.51%	\$67,097
Citrus	126,678	0.75%	32,440	0.43%	\$816.9	0.34%	\$2,277.0	0.44%	\$70,190
Clay	156,995	0.92%	40,313	0.54%	\$1,019.6	0.42%	\$2,537.6	0.49%	\$62,948
Collier	286,125	1.68%	122,193	1.62%	\$3,973.6	1.64%	\$8,263.6	1.59%	\$67,628
Columbia	60,281	0.35%	21,803	0.29%	\$526.9	0.22%	\$1,282.9	0.25%	\$58,841
DeSoto	33,972	0.20%	11,835	0.16%	\$220.4	0.09%	\$652.3	0.13%	\$55,118
Dixie	13,967	0.08%	2,874	0.04%	\$59.0	0.02%	\$146.1	0.03%	\$50,848
Duval	812,321	4.78%	482,575	6.42%	\$17,073.7	7.06%	\$33,639.3	6.46%	\$69,708
Escambia	297,035	1.75%	144,629	1.92%	\$4,115.0	1.70%	\$8,922.9	1.71%	\$61,695
Flagler	62,696	0.37%	15,861	0.21%	\$412.4	0.17%	\$1,334.1	0.26%	\$84,112
Franklin	10,090	0.06%	3,607	0.05%	\$77.0	0.03%	\$316.1	0.06%	\$87,622
Gadsden	45,255	0.27%	16,936	0.23%	\$374.5	0.15%	\$1,013.3	0.19%	\$59,832
Gilchrist	15,628	0.09%	3,609	0.05%	\$68.0	0.03%	\$181.8	0.03%	\$50,377
Glades	11,010	0.06%	1,708	0.02%	\$35.8	0.01%	\$77.2	0.01%	\$45,209
Gulf	13,580	0.08%	4,105	0.05%	\$100.8	0.04%	\$318.7	0.06%	\$77,635
Hamilton	14,009	0.08%	4,225	0.06%	\$110.6	0.05%	\$226.2	0.04%	\$53,540
Hardee	27,657	0.16%	10,447	0.14%	\$183.1	0.08%	\$458.6	0.09%	\$43,901
Hendry	37,130	0.22%	17,513	0.23%	\$318.5	0.13%	\$854.0	0.16%	\$48,765
Hernando	143,514	0.84%	36,817	0.49%	\$888.8	0.37%	\$2,165.6	0.42%	\$58,822
Highlands	91,052	0.54%	33,655	0.45%	\$652.2	0.27%	\$1,672.0	0.32%	\$49,681
Hillsborough	1,073,450	6.31%	664,958	8.84%	\$22,181.5	9.18%	\$45,765.7	8.79%	\$68,825
Holmes	19,028	0.11%	4,224	0.06%	\$74.1	0.03%	\$195.0	0.04%	\$46,157
Indian River	120,246	0.71%	47,827	0.64%	\$1,407.2	0.58%	\$3,191.2	0.61%	\$66,725
Jackson	46,865	0.28%	16,407	0.22%	\$362.8	0.15%	\$931.3	0.18%	\$56,760
Jefferson	14,073	0.08%	3,739	0.05%	\$72.5	0.03%	\$211.9	0.04%	\$56,673



		C	ounty Contri	butions to S	State Totals 200	03 (Continu	ed)		
	Popula	ation	Emplo	yment	Wages			GSP	
County	Population	% State	Employed	% State	(\$Millions)	% State	(\$Millions)	% of State	GSP \$/employee
Lafayette	7,338	0.04%	1,539	0.02%	\$38.4	0.02%	\$64.3	0.01%	\$41,752
Lake	246,844	1.45%	78,529	1.04%	\$1,987.0	0.82%	\$5,134.5	0.99%	\$65,383
Lee	492,489	2.90%	193,636	2.57%	\$6,018.1	2.49%	\$13,929.0	2.67%	\$71,934
Leon	242,099	1.42%	144,924	1.93%	\$4,539.5	1.88%	\$9,483.0	1.82%	\$65,434
Levy	36,358	0.21%	9,777	0.13%	\$194.8	0.08%	\$540.1	0.10%	\$55,245
Liberty	7,320	0.04%	2,333	0.03%	\$56.3	0.02%	\$127.9	0.02%	\$54,807
Madison	18,791	0.11%	6,604	0.09%	\$116.4	0.05%	\$352.3	0.07%	\$53,345
Manatee	287,569	1.69%	130,062	1.73%	\$3,508.6	1.45%	\$7,851.4	1.51%	\$60,367
Marion	281,152	1.65%	92,441	1.23%	\$2,452.1	1.01%	\$5,830.0	1.12%	\$63,068
Martin	134,999	0.79%	53,859	0.72%	\$1,662.7	0.69%	\$3,489.9	0.67%	\$64,796
Miami-Dade	2,336,140	13.74%	1,020,345	13.57%	\$36,693.2	15.18%	\$76,542.6	14.69%	\$75,016
Monroe	79,010	0.46%	42,403	0.56%	\$1,146.1	0.47%	\$2,631.9	0.51%	\$62,068
Nassau	61,632	0.36%	18,704	0.25%	\$527.0	0.22%	\$1,168.1	0.22%	\$62,453
Okaloosa	177,838	1.05%	97,209	1.29%	\$2,954.5	1.22%	\$6,715.3	1.29%	\$69,081
Okeechobee	37,537	0.22%	12,482	0.17%	\$250.0	0.10%	\$628.6	0.12%	\$50,358
Orange	964,073	5.67%	647,275	8.61%	\$21,594.3	8.94%	\$45,524.8	8.74%	\$70,333
Osceola	205,993	1.21%	61,080	0.81%	\$1,573.9	0.65%	\$4,397.5	0.84%	\$71,996
Palm Beach	1,212,395	7.13%	540,741	7.19%	\$19,703.5	8.15%	\$39,817.1	7.64%	\$73,634
Pasco	388,224	2.28%	89,595	1.19%	\$2,248.3	0.93%	\$5,750.3	1.10%	\$64,181
Pinellas	925,997	5.45%	466,190	6.20%	\$14,494.9	6.00%	\$32,267.8	6.19%	\$69,216
Polk	510,841	3.01%	198,931	2.64%	\$5,634.8	2.33%	\$13,121.4	2.52%	\$65,959
Putnam	71,775	0.42%	22,239	0.30%	\$548.2	0.23%	\$1,336.2	0.26%	\$60,084
Santa Rosa	132,266	0.78%	31,712	0.42%	\$820.1	0.34%	\$1,934.4	0.37%	\$61,000
Sarasota	346,891	2.04%	161,075	2.14%	\$4,751.1	1.97%	\$10,550.3	2.03%	\$65,499
Seminole	385,395	2.27%	157,017	2.09%	\$5,064.2	2.10%	\$11,290.7	2.17%	\$71,907
St. Johns	142,949	0.84%	48,542	0.65%	\$1,352.8	0.56%	\$2,986.7	0.57%	\$61,527
St. Lucie	214,031	1.26%	63,516	0.84%	\$1,746.5	0.72%	\$4,269.8	0.82%	\$67,225
Sumter	59,290	0.35%	12,445	0.17%	\$305.1	0.13%	\$815.8	0.16%	\$65,554
Suwannee	36,783	0.22%	11,652	0.15%	\$220.8	0.09%	\$692.4	0.13%	\$59,423
Taylor	19,380	0.11%	7,241	0.10%	\$181.3	0.08%	\$429.6	0.08%	\$59,331
Union	13,943	0.08%	2,152	0.03%	\$108.3	0.04%	\$96.4	0.02%	\$44,807
Volusia	467,651	2.75%	162,374	2.16%	\$4,262.2	1.76%	\$10,222.0	1.96%	\$62,954
Wakulla	26,072	0.15%	4,717	0.06%	\$115.9	0.05%	\$312.1	0.06%	\$66,161
Walton	46,388	0.27%	15,595	0.21%	\$339.2	0.14%	\$1,154.0	0.22%	\$73,999
Washington	21,593	0.13%	6,827	0.09%	\$144.4	0.06%	\$348.0	0.07%	\$50,977

Source: US Bureau of Labor Statistics; US Census Bureau for chart above and below



Acknowledgment

The State of Florida Department of Environmental Protection sponsored this Preliminary Phase One study of Florida's Ocean and Coast Economies. The research team from the National Ocean Economics Program (NOEP) prepared this report from the most reliable sources available through the NOEP information system. The information on the following pages reflects the views and work of the staff of this project, and not necessarily those of the sponsor. Professor Judith Kildow led the team; Professor Linwood Pendleton of UCLA contributed the Non-Market chapter, Dr, Charles Colgan, consultant, wrote the Forecasting chapter and contributed the data and reviewed the Ocean Economy work, and Dr. Rosa Moller, a consultant reviewed and edited several chapters. Other members of the team who compiled and formatted the data, edited and prepared the report were Ms. Bonnie Lockwood, Project Manager, and Mr. Pat Johnston, Information Systems Manager. Finally, CSUMB student assistants Kirstin Csik and Caitlin Moehrke, Alana Rivadeneyra, Scott Norris, and Monterey Institute for International Studies student, Laura Engeman prepared chapters and charts for the report.

We want to thank Charles Adams, James Cato, James Murley, Tom Murray, John Ogden, Valerie Seidel, William Stronge, Ken Wieand, and Steven Wolfe for taking time to comment and make suggestions that will improve this draft report.

