

THE ECONOMIC VALUE OF BEACHES – A 2002 UPDATE

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Introduction

Houston (1995a, 1996) described the economic value of America's beaches. He noted that the travel and tourism industry is becoming increasingly dominant in economies of developed countries. However, few realize that travel and tourism is already America's largest industry, employer, and earner of foreign exchange; and beaches are the largest factor in travel and tourism. The World Travel and Tourism Council (1998) notes that tourism is a key driver of 21st century economic activity and is the largest creator of jobs, wealth, and investment in the world. Although high-technology industries grab the news, travel and tourism is providing the economic growth, jobs, and foreign exchange that make the U.S. competitive in a world economy. This paper updates and supports the conclusions of Houston (1995a, 1996) on the economic importance of beaches to the national economy.

Travel and Tourism is Largest Industry

Travel and tourism is the world's largest industry with the broad measure of economic activity, Travel and Tourism Economy (TTE), contributing \$3.5 trillion in 2001 to the world's Gross Domestic Product (GDP) and exceeding the GDP of all countries other than the United States and Japan (World Travel and Tourism Council, 2001a). Travel and tourism also is the world's largest growth industry with average growth of 9% per year since 1985 (World Tourism Organization, 2001). Similarly, TTE contributes \$1.2 trillion to America's GDP (World Travel and Tourism Council, 2001b). This is 11.6% of U.S. output and makes TTE the largest contributor to GDP just ahead of retail trade that contributes 8.9% to GDP (World Travel and Tourism Council, 2001c). TTE also produces \$223.9 billion in annual tax revenue for all levels of government in the United States (Miller, 2001).

Travel and tourism is both the world's and America's largest employer, with TTE employing 207 million people throughout the world and 16.9 million people, or one out of every 8.1 people, in the United States (World Travel and Tourism Council, 2001a,b). In contrast, all U.S. manufacturing industries combined from IBM to General Motors to Intel employ only 18.8 million people (Research and Analysis Bureau, 2001). In addition, service industries such as travel and tourism are projected to produce almost 95% of all new U.S. jobs over the next ten years with TTE employment increasing to 18.6 million and manufacturing employment declining to 18.7 million by 2011 (World Travel and Tourism Council, 2001b; Research and Analysis Bureau, 2001). The increase in travel and tourism jobs and decline in manufacturing jobs is

largely unrecognized by local and state governments that still compete for a shrinking pie by trying to attract manufacturing. Their efforts often target high-technology industries that are reducing employment as rapidly as other manufacturing industries. Houston (1995a) notes that even Florida, with remarkable competitive advantages in travel and tourism, concentrates on attracting high-technology industries. Part of this benign neglect of travel and tourism may be due to perceptions that this industry has low-wage jobs. However, U.S. per-capita wages for travel and tourism jobs average 13% higher than average U.S. per-capita wages (Holecek, 1995).

Switzerland provides a good example of high wages in tourism, since it depends on tourism more than any developed country yet has one of the world's highest per-capita incomes.

Travel and Tourism: Key to International Competitiveness

The U.S. is a major player in the international travel and tourism industry. According to the U.S. Travel and Tourism Administration (1993), "There is probably no country in the world that has a greater comparative advantage in tourism than the United States." In fact, travel and tourism is one of a handful of developed-world industries that the U.S. dominates. The U.S. receives over 45 percent of the developed world's travel-and-tourism revenues and 60 percent of its profits (Wall Street Journal, 1994).

International tourism is the world's largest export earner with foreign currency receipts from international tourism outstripping exports of petroleum products, motor vehicles, telecommunications equipment, textiles or any other product or service (World Tourism Organization, 2001). Travel and tourism contributed 16.5% of U.S. exports worth \$196.3 billion in 2001 (World Travel and Tourism Council, 2001b). This is larger than the combined export value of U.S. agricultural commodities, aircraft, computers, and telecommunications equipment (U.S. Department of Commerce, 2001). This spending by foreign tourists supports about 2.7 million American jobs or as many jobs as are in the U.S. computer industry (Bureau of Labor Statistics, 2001). The U.S. runs massive annual trade deficits of hundreds of billions of dollars, but travel and tourism is one of the few bright spots with a trade surplus in 1999 of \$13.9 billion (International Trade Administration and Bureau of Economic Analysis, 2000). This surplus is greater than the \$13.8 billion U.S. trade surplus for agricultural exports (U.S. Department of Commerce, 2000). Americans take pride in U.S. high-technology industries, but the U.S. ran a trade deficit in high-technology goods of \$34.6 billion in 2000 (U.S. Department of Commerce, 2001).

Foreign tourism produces annual tax revenues of about \$7.5 billion (U.S. Travel and Tourism Administration, 1995). The majority of these tax revenues (about 53% or \$4 billion) go to the Federal government. Local governments that provide most tourist-support infrastructure receive only 14.3 percent of the tax revenue from foreign tourists (U.S. Travel and Tourism Administration, 1994). The greatest tax revenues from foreign tourists are collected in Florida with annual revenues of \$1.43 billion. The Federal government receives about \$754 million of these revenues with local governments receiving only \$98 million (U.S. Travel and Tourism Administration, 1994).

Beaches: Key to U.S. Travel and Tourism

Beaches are the key element of U.S. travel and tourism, since they are the leading tourist destination (USA Today, 1993; Carlson Wagonlit Travel Agent Poll, 1998; Washingtonpost.com:Poll, 2001; Chivas Poll, 2001). Seventy-five percent of summer travelers plan to visit beaches (Morgan, 2000). Coastal states receive about 85% of tourist-related revenues in the U.S. largely because beaches are tremendously popular (World Almanac, 2001).

Although there are many interior attractions from Yellowstone to the Grand Canyon and from Las Vegas to Branson, Missouri; the popularity of beaches dominates tourism. For example, a single beach location, Miami Beach, reported more tourist visits (21 million) than were made to any National Park Service property (the Blue Ridge Parkway with 19 million visitors was the National Park Service property with the most visitors) (Wiegel, 1992; National Park Service, 2001). Miami Beach has almost twice as many tourist visits as the combined number of tourist visits to Yellowstone (3.4 million), the Grand Canyon (4.5 million), and Yosemite (3.4 million) (National Park Service, 2001). California beaches alone have more tourist visits (567 million) than combined tourist visits (286 million) to all 346 National Park Service properties (including national seashores and monuments such as the Lincoln Memorial and Washington Monument) and visits (106 million) to all Bureau of Land Management properties that cover 287 million acres, about one-eighth of the land of the United States (King, 1999; National Park Service, 2001; Bureau of Land Management, 2001). It is estimated that each year approximately 180 million Americans make 2 billion visits to ocean, gulf, and inland beaches (Clean Beaches Council, 2001). This is almost twice as many visits as the combined 1.16 billion visits made to properties of the National Park Service (286 million), Bureau of Land Management (106 million), and all state parks and recreation areas (767 million) (National Association of State Park Directors, 2000). Moreover, many of these visits to state parks and recreation areas were visits to beaches. For example, state beaches in California account for only 2.7% of California state park holdings, but account for 72% of visits (King, 1999).

Beaches make a large contribution to America's economy. The U.S. Travel and Tourism Administration estimated that in 1992 beaches contributed about \$170 billion annually to the economy (U.S. Travel and Tourism Administration, 1993). King (1999) shows that California beach tourism makes a total direct and indirect contribution of \$73 billion to the national economy, more than five times the \$14.2 billion contribution of the National Park Service system (International Ecotourism Society, 2001). Similarly, beach tourism in Florida makes a \$33.7 billion contribution to the national economy (Tait, 2001). Multiplying the ratio of visitors to national beaches (two billion) and visitors to California beaches (567 million) by the contribution of California beach visitors to the national economy (\$73 billion) yields an estimate that in 1999 U.S. beaches contributed approximately \$257 billion to the national economy. As was noted to be the case for foreign tourists, most taxes paid by beach tourists also flow primarily to the Federal government. For example, a study of tourism at Huntington Beach, California, showed that the Federal government is the main beneficiary of beach tourism with tourism at Huntington Beach generating \$135 million in federal revenues, \$25 million in state sales tax revenues, and \$4.8 million in local revenue sales tax and parking fees (King, 1999).

Economic Return of Beach Nourishment

Beach erosion is the number one concern that beach tourists have about beaches (Hall and Staimer, 1995). With 33,000 kilometers of eroding shoreline and 4300 kilometers of critically eroding shoreline, beach erosion is a serious threat to the Nation's beach tourism and, therefore, a threat to the national economy (U.S. Army Corps of Engineers, 1994). Restoring beaches through beach nourishment can greatly increase their attractiveness to tourists. For example, in 1989, 74 percent of those polled in New Jersey said the New Jersey shore was "going downhill." By 1998, only 27 percent thought the New Jersey shore was in decline with 86 percent saying that the shore was one of New Jersey's best features (Zukin, 1998). The difference between 1989 and 1998 was construction of the beach nourishment project from Sandy Hook to Barnegat Inlet, New Jersey, which is the largest beach nourishment project (in terms of volume) in the world (U.S. Army Corps of Engineers, 2001).

Houston (1996) cites beach nourishment at Miami Beach as a good example of the economic benefits of beach restoration. Miami Beach had virtually no beach by the mid-1970's. As a result, facilities were run down, and Miami Beach was not the place to visit. Beach nourishment in the late 1970's rejuvenated Miami Beach and opened its beaches to the public. Beach attendance, based on lifeguard counts and aerial surveys, increased from eight million in 1978 to 21 million in 1983 (Wiegel, 1992). The number of foreign tourists visiting Miami increased from 2.3 to 5.6 million from 1980 to 2000 (Lang, 2001). Four million overnight visitors stay in Miami Beach annually, and seven million of the ten million tourists visiting Miami visit South Beach, Miami Beach. These visitors spend \$4.4 billion annually in Miami Beach including expenditures of \$2.4 billion by foreign tourists (City of Miami Beach, 2001).

The annual foreign revenue from tourists at Miami Beach of \$2.4 billion is about 50 times the \$52-million cost of the Miami Beach beach-nourishment project that has lasted over 20 years (Houston, 1996). The capitalized annual cost of the project over its current 20-year life is about \$2.5 million. Stronge (2000) reports that half of Florida tourists are beach tourists. Assuming half of the foreign tourists at Miami Beach are beach tourists, foreign beach tourists spend \$1.2 billion annually at Miami Beach. Using the capitalized annual cost of the Miami Beach project of \$2.5 million, this means that for every \$1 that has been invested annually to nourish the beaches at Miami Beach, Miami Beach has received almost \$500 annually in foreign exchange. This compares with a return of less than \$0.50 in agricultural-trade surplus (\$13.8 billion in 2000) for each \$1 of crop subsidy (\$32.2 billion in U.S producer support in 2000) (Bureau of Labor Statistics, 2001; Alcorn, 2001). It is an extreme example, but if the Miami Beach experience of receiving \$500 from foreign beach tourists for every \$1 invested in beach renourishment were successfully repeated in a national beach restoration program, an investment of 1% of the annual U.S. crop subsidy would wipe out the average annual U.S. trade deficit of the past decade (U.S. Department of Commerce, 2001).

It is instructive to compare the Federal investment in beach infrastructure (beach nourishment) versus Federal tax revenues from tourists. From 1950-1993 the Federal government and its cost-sharing partners spent an average of \$34 million (1993 dollars) annually on beach nourishment (U.S. Army Corps of Engineers, 1994). The Federal investment has increased since the mid-1990's and is approximately \$100 million a year (Marlowe, 1999). Travel and tourism produces \$223.9 billion in tax revenues and 53% or about \$119 billion of these tax revenues go to the Federal government (World Travel and Tourism Council, 2001c; U.S. Travel and Tourism

Administration, 1994). Assuming the Florida experience that half of these tourists are beach tourists (Stronge, 2000), beach tourists produce Federal taxes of about \$60 billion a year. This number is consistent with annual Federal taxes of \$14 billion from California beach tourists (King, 1999) and about one quarter of national beach visits occurring in California. Federal taxes of \$4 billion come annually from foreign tourists with about \$2 billion from foreign beach tourists (U.S. Travel and Tourism Administration, 1994). Therefore, for every dollar in annual Federal expenditures for beach nourishment, the Federal government is receiving tax revenues of approximately \$600 from beach tourists including \$20 from foreign beach tourists.

Miami Beach is an example of the return on investment of beach nourishment. With a \$2.5 million annual capitalized cost of the Miami Beach nourishment project and annual Federal tax revenues just from foreign tourists at Miami Beach of over \$130 million (U.S. Travel and Tourism Administration, 1994), the Federal government is receiving over 50 times as much tax revenue from foreign-tourist spending at Miami Beach than it spends on beach nourishment at Miami Beach. It receives about seven times as much tax revenue annually from foreign-tourist spending at Miami Beach than it spends to restore all Florida beaches and more tax revenue annually than it spends to restore all of the Nation's beaches. Similarly, California received just about \$2 million annually in Federal beach nourishment funds from 1995 to 1999 (King, 1999), and the Federal government receives \$14 billion in tax revenues annually from California beach tourists. This yields the Federal government receiving 7000 times as much in tax revenues from California beach tourists as it spends on beach nourishment in California. Houston (1996) noted that the Federal government is receiving a huge return on its beach-nourishment investment just from foreign-tourist taxes and not including taxes from domestic tourists nor reduction of storm damage and resulting emergency-relief spending.

Worldwide Competition Facing U.S.

Houston (1996) noted that travel and tourism's importance to world economies, employment, and international competitiveness has not been lost on America's economic competitors. Germany and Japan have out spent the U.S. in infrastructure investment for decades including spending freely to maintain their beaches as infrastructure investments. For example, Germany has spent about \$3.3 billion over 40 years on shore protection (Kelletat, 1992). This is about five times corresponding U.S. expenditures over the same period and about 25 to 50 times a greater share of GDP (Houston, 1995b). These expenditures were made to protect a coastline less than five percent the length of the U.S. coast. Japan's budget for shore protection and restoration has topped \$1.5 billion in a single year (Marine Facilities Panel, 1991). This is more spent in a single year than the U.S. has spent in over 40 years from about 1950 to 1990 (U.S. Army Corps of Engineers, 1994). Spain with its extensive beaches is a major competitor for tourists. It conducted a five-year program to both restore existing beaches and build new ones and spent more than the U.S. has spent for beach restoration over 40 years (Ministerio de Obras Publicas y Transportes, 1993). Of course, tourism is the dominant and critical industry in Spain. Even so, Spain's tourist revenues are only about seven percent of those of the U.S (World Almanac, 2001).

U.S Beginning to Lose Lead

Houston (1996) noted that abundant natural attractions, including the world's most extensive beaches, make the U.S. attractive to tourists. However, there is a world economy in tourism that gives consumers ample choices and produces stiff worldwide competition for tourists. If Florida beaches become run down, German tourists can choose Spanish beaches. If Hawaiian beaches decline, Japanese tourists can choose Australia's Gold Coast. This worldwide competition is well recognized outside the U.S. For example, Houston (1996) noted that in the mid-1990's the U.S. spent only \$16.3 million in advertising to its international tourist markets, and this compared to Spain's \$170 million in advertising (Washington Post, 1995). The U.S. ranked 31 in tourism advertisement behind countries such as Malaysia and Tunisia (Brooks, 1995). Ireland spent 180 times more per capita on tourism advertisement than the U.S. (National Oceanic and Atmospheric Administration, 1998). However, even this minimal U.S. spending of \$16.3 million on advertisement to international tourist markets was eliminated when Congress abolished the U.S. Travel and Tourism Administration in 1996. The National Oceanic and Atmospheric Administration (1998) notes, "The U.S. is (the) only country in the developed world without a government-funded National Tourism Office and (it) bodes badly for the country's future tourism growth." The U.S. currently has no nationally-funded tourism advertising while countries such as Australia, Canada, France, Greece, Singapore, and Spain each spend about \$100 million on international marketing (Brooks, 1995; Hotel-online, 1998; Balzer, 1998).

As world tourism grew dramatically in the 1990's, the number of foreign tourists visiting the U.S. actually declined slightly from 1992 to 1999. Although foreign tourist numbers declined, spending by foreign tourists in the U.S. increased 70% from 1990 to 1997. However, this trend also has stalled with spending by foreign tourists in the U.S. declining from 1997 to 1999 (Cable News Network (CNN), 2000). The U.S. has slipped behind France and Spain as the leading tourist destination, and the U.S. share of the international tourism market has declined in the 1990's. The trade surplus that the U.S. enjoys in travel and tourism has dropped almost in half from \$26.3 billion in 1996 to \$13.9 billion in 1999 (International Trade Administration and Bureau of Economic Analysis, 2000). Moreover, with no action by the U.S., the downward trend in the U.S. share of the world market will continue. The World Travel and Tourism Council (2001d) estimates that the U.S. will rank a disappointing 122 in the world in international tourism growth from 2001 to 2011 and lag growth in countries such as Burkina Faso, Mauritius, Mali, Laos, Botswana, and Poland – countries that are hardly known as tourist destinations.

Conclusion

Travel and tourism is America's leading industry, employer, and earner of foreign exchange; and beaches are the leading factor in travel and tourism. Few in America realize that beaches are a key driver of America's economy and its competition in a world economy. Perhaps Americans do not appreciate the importance of tourism to the national economy because 98 percent of the 1.4-million tourism-related businesses in the United States are classified as small

businesses, and this makes the industry extremely fragmented (U.S. Travel and Tourism Administration, 1995). Lacking national advertising from either this fragmented industry or a national travel office, the importance of travel and tourism to the national economy has not been communicated to the American people. The conclusion one draws today is the same as that noted by Houston (1995), "Without a paradigm shift in attitudes toward the economic significance of travel and tourism and necessary infrastructure investment to maintain and restore beaches, the U.S. will relinquish a dominant worldwide lead in its most important industry."

References

- Alcorn, Gay, 2001, "Congress helps out down on the farm," World News, September 3, 2001,
<http://www.theage.com.au/news/world/2001/09/03/FFXBIU5Q3RC.html>
- Balzer, Stephanie, 1998, "Congress weighs \$100M dowry for U.S. tourism," The Business Journal, <http://phoenix.bcentral.com/phoenix/stories/1998/08/17/story7.html>
- Brooks, Browning, 1995, "Interview with Professor Robert Bryer, Florida State School of Business," Florida State Times,
<http://www.fsu.edu/~fstime/FSTimes/Volume2/Issue1/qanda.html>
- Bureau of Labor Statistics, 2001, "Occupational Employment and Wages in 1999 Based on the New Standard Occupational Classification System Summary,"
<http://www.bls.gov/news.release/ocwage.nr0.htm>
- Bureau of Land Management, 2001, "Technical Appendix 3: Comparison of RMIS with other Recreational Data Sources," <http://www.blm.gov:80/nhp/efoia/wo/fy01/im2001-131,attach 4.pdf>
- Cable News Network (CNN), 2000, "Luring international tourists to the United States,"
<http://www10.cnn.com/2000/TRAVEL/NEWS/05/11/visiting.america/>
- Carlson Wagonlit Travel Agent Poll, 1998, "BEACH BLANKET BINGO,"
http://www.carlsontravel.com/About_Us/News_Release/9801/980625.htm
- Chivas Poll, 2001, "The best place to vacation is the beach,"
http://www.chivas.com/polls/vacation_results.html
- City of Miami Beach, 2001, "Tourism Overview,"
<http://ci.miami-beach.fl.us/newcity/dcpts/econdev/visitors%20Profile.htm>
- Clean Beaches Council, 2001, "The Blue Wave Campaign, Protecting a Precious Resource at Risk," <http://www.cleanbeaches.org/bluewave/default.cfm>

- Hall, C. and Staimer, M., 1995, "Concerns about the coast," USA Today, Page 1A, August 9, 1995.
- Holecek, Donald F., 1995, "Tourism," Special Report 76, Michigan Agricultural Experiment Station, Michigan State University,
<http://www.msue.msu.edu/msue/imp/modsr/04089576.html>
- Hotel-online, 1998, "Increased Pressure on National Promotional Budgets,"
http://www.hotel-online.com/Neo/News/PressReleases1998_4th/Nov98_PATA.html
- Houston, J. R., 1995a, "The Economic Value of Beaches," The CERCular, Coastal Engineering Research Center, Waterways Experiment Station, Vol. CERC-95-4, Dec 1995, pp. 1-4.
- Houston, James. R., 1995b, "Beach Nourishment," Coastal Forum, Shore and Beach, 21-24, January 1995.
- Houston, J.R., 1996, "International Tourism & U.S. Beaches," Shore and Beach, Journal of the American Shore and Beach Preservation Association, Vol. 64, No. 2, pp. 3-4, April 1996.
- International Ecotourism Society, 2001, "Ecotourism Statistical Fact Sheet,"
<http://www.ecotourism.org/textfiles/statsfaq.pdf>
- International Trade Administration and Bureau of Economic Analysis, 2000, "U.S. International Travel and Tourism Balance of Trade (Receipts/Exports and Payments/Imports) 1990 – 1999pr, <http://tinet.ita.doc.gov/view/f-1999-03-001/>
- Kelletat, D., 1992, "Coastal Erosion and Protection Measures at the German North Sea Coast," Journal of Coastal Research, 8 (3), pp. 699-711.
- King, Philip, 1999, "The Fiscal Impact of Beaches in California," Public Research Institute, University of San Francisco,
<http://online.sfsu.edu/~pgking/handouts/thefiscalimpactofbeaches.pdf>
- Lang, Jones, 2001, "Overview of the Miami Lodging Market," August, 23, 2001,
<http://www.hospitalitynet.org/ihra/news/4008918.htm>
- Marine Facilities Panel, 1991, U.S. Japan Wind and Seismic Effects Panel, 17th Joint Meeting, J-(4), 1-9, Tokyo, Japan .
- Marlowe, Howard, 1999, "Assessing the Economic Benefits of America's Coastal Regions,"
<http://www.coastalcoalition.org/facts/coastalregions.html>
- Miller, Richard, R., 2001, "Economics of Travel and Tourism, New York University's 7th Annual Stephen W. Brener Distinguished Lecture Series, World Travel and Tourism Council,
<http://www.scps.nyu.edu/images2/WTTCCNYU.pdf>
- Ministerio de Obras Publicas y Transportes, 1993, "Recuperando La Costa," Serie Monografias,

Centro de Publicaciones, Madrid, Spain.

Morgan, David, 2000, "Catch the Blue Wave, Environmental Group Releases List of Cleanest U.S. Beaches," ABC News,
<http://abcnews.go.com/sections/travel/DailyNews/CleanBeaches000519.html>

National Association of State Park Directors, 2000, "State Park Statistics,"
<http://www.indiana.edu/~nasdp/statistics.html>

National Oceanic and Atmospheric Administration, 1998, "Promotion of International Tourism to the United States," http://www.yoto98.noaa.gov/yoto/meeting/tour_rec_316.html

National Park Service, 2001, "Visitation Statistics; 2000 Visitation,"
<http://www2.nature.nps.gov/stats/>

Research and Analysis Bureau, 2001, "Job Projections for U.S. Industries, 1998 – 2008,"
<http://rad.dli.state.mt.us/project/Project8/projUS8.htm>

Stronge, William B., 2000, "The Economic Benefits of Florida's Beaches: Local, State and National Impacts," <http://www.coastalcoalition.org/ACCarticles/stronge.htm>

Tait, Stan, 2001, "Thanks, Kirby Green for a job well done," Shoreline, May 2001,
<http://www.fsbpa.com/shorelinemay01>

U.S. Army Corps of Engineers, 1994, "Shoreline Protection and Beach Erosion Control Study, Phase I: Cost Comparison of Shoreline Protection Projects of the U.S. Army Corps of Engineers," Water Resources Support Center, Washington, D.C., USA.

U.S. Army Corps of Engineers, 2001, "Sandy Hook to Barnegat Inlet, New Jersey Beach Erosion Control Project,"
<http://www.nan.usace.army.mil/business/prjlinks/coastal/seabrite/index.htm>

U.S. Department of Commerce, 2000, "The Exports and Trade Balance Picture for the United States for 1998 & 1999 With a Focus on International Travel Exports,"
<http://tinet.ita.doc.gov/analysis/export99.html>

U.S. Department of Commerce, 2001, "U.S. Foreign Trade Highlights,"
<http://www.ita.doc.gov/td/industry/otea/usftb/tabccon.html>

U.S. Travel and Tourism Administration, 1993, "World Tourism at the Millennium," U.S. Department of Commerce, April 1993, 97 pp.

U.S. Travel and Tourism Administration, 1994, "Impact of International Visitor Spending on State Economies," U.S. Department of Commerce, December 1994.

U.S. Travel and Tourism Administration, 1995, "Travel Outlook Forum, Forging New Strategies in

- Tourism Research," U.S. Department of Commerce, October 17, 1995.
- USA Today, 1993, "More plan vacations this year," Page D1, March 17, 1993.
- Wall Street Journal, 1994, "The Other American Dream Team," February 15, 1994.
- Washington Post, 1995, "Chefs Bemoan a Reduction in Their Favorite Deduction," Page D4, April 11, 1995.
- Washingtonpost.com: Poll, 2001, "Where do you like to spend your spring vacation,"
www.washingtonpost.com/wp-dyn/education/kidspost/poll/
- Wiegel, R.L., 1992, "Dade County, Florida, Beach Nourishment and Hurricane Surge Study," Shore and Beach, Vol 60, No. 4, 2-26, October 1992.
- World Almanac, 2001, Funk & Wagnalls Corp., Mahwah, New Jersey.
- World Tourism Organization, 2001, Leading the World's Largest Industry,"
<http://www.world-tourism.org/aboutwto/aboutwto.html>
- World Travel & Tourism Council, 1998, "World Travel Tourism Development, A Global Opportunity." <http://gocalif.ca.gov/research/intrnl.html>
- World Travel and Tourism Council, 2001a, "Year 2001, World, TSA Research Summary and Highlights," <http://www.wttc.org/ecres/pdfs/WLD.pdf>
- World Travel and Tourism Council, 2001b, "Year 2001, United States, TSA Research Summary and Highlights," <http://www.wttc.org/ecres/pdfs/a111.pdf>
- World Travel and Tourism Council, 2001c, "Year 2001, TSA Research, Overview, and Definitions," <http://www.wttc.org/ecres/pdfs/overview.pdf>
- World Travel and Tourism Council, 2001d, "Year 2001 TSA Research, Country League Tables," http://www.wttc.org/ecres/pdfs/cnty_rk.pdf
- Zukin, Cliff, 1998, "The Shore – Looking up (Save the Beach Passes), The Star-Ledger/Eagleton-Rutgers Poll, http://slerp.rutgers.edu/releases/419_3.htm