

U.S. Travel and Tourism Satellite Accounts for 1998–2003

By Peter D. Kuhbach, Mark A. Planting, and Erich H. Strassner

ON September 8, 2004, the revised estimates of the U.S. travel and tourism satellite accounts were released.¹ This release marks a significant improvement to the industry accounts of the Bureau of Economic Analysis (BEA). The newly released annual estimates from the travel and tourism satellite accounts (TTSAs) for 1998–2002 are consistent with the results of the 2003 comprehensive revision of the national income and product accounts (NIPAs), and they are consistent with the recently integrated annual industry accounts.² In addition, the annual estimates of tourism demand, tourism output, and tourism employment for 2003 are based on an improved methodology that was developed for preparing the quarterly T TSA estimates. (See the box “Annual and Quarterly Estimates of Travel and Tourism.”)

The TTSAs now include purchases by tourists not previously included, and they reflect updated information for other components. As a result, the estimate for 2002 has been increased by \$120 billion, or close to one-third of tourism output. The inclusion for the first time of more types of purchases is the major cause

of the revision.

The TTSAs present a rearrangement of information from the NIPAs, from the industry accounts, and from other sources so that travel and tourism activities can be analyzed more completely than is possible in the structure of the traditional national economic accounts.³ In the TTSAs, the flows of commodities that are related to travel and tourism activities link tourism expenditures to the industries that produce tourism goods and services in the United States. The TTSAs are particularly useful because tourism is not generally treated as a separate industry, so data for tourism are scattered among other industries—such as transportation services, accommodations, and food and beverage services; as a result, comprehensive data on tourism do not exist in most nations’ economic statistics. The TTSAs define tourism and measure travel expenditures within a production account framework that links these expenditures to producing industries; the TTSAs also measure the employment that is used to produce the tourism goods and services and the related income that is generated by these industries.

A major advance in the quality and in the consistency of the updated TTSAs is their relationship with the newly released annual input-output (I-O)

1. These accounts were first published in July 1998 by the Bureau of Economic Analysis with the support of the International Trade Administration, U.S. Department of Commerce. For more information, see Sumiye Okubo and Mark A. Planting, “U.S. Travel and Tourism Satellite Accounts for 1992,” *SURVEY OF CURRENT BUSINESS* 78 (July 1998): 8–22.

2. In June, BEA released the initial results of the comprehensive revision of the annual industry accounts; see Brian C. Moyer, Mark A. Planting, Paul V. Kern, and Abigail M. Kish, “Improved Annual Industry Accounts for 1998–2003” *SURVEY* 84 (June 2004): 21–57.

3. The definitions, framework, and estimating methods used for the U.S. TTSAs closely follow the guidelines for similar accounts that were developed by the World Trade Organization and the Organisation for Economic Co-operation and Development. See also the box on the key terms used in the TTSAs.

Annual and Quarterly Estimates of Travel and Tourism

The revised travel and tourism satellite accounts (TTSAs) present annual estimates of tourism demand, tourism output, and tourism employment for 2003. In addition, BEA prepares quarterly estimates that are released approximately 2 weeks after the preliminary GDP release.

These annual and quarterly estimates are based on limited source data because the annual input-output tables for 2003 are not yet available. These estimates are prepared at a more aggregated level than the full TTSAs. The estimates are only prepared for six goods and services and for six industry groups: Traveler accommodations, air transportation services, all other transportation related services, food services and drinking places, recreation and entertainment and shopping.

The estimates of tourism demand for 2003 and the quarterly estimates for 2003 and 2004 are extrapolated from the estimates of tourism demand for 2002 by the estimates of personal consumption expenditures from the national income and product accounts. The estimates of tourism output for 2003 are then calculated from the extrapolated estimates of tourism demand for 2003; this calculation uses information on tourism’s share of total demand, information on the share of domestic supply that excludes imports, and information on each industry’s share of commodity production. The estimates of tourism employment are extrapolated from tourism employment for 2002 by the estimates of employment by industry from the Bureau of Labor Statistics.

accounts that were prepared as part of the 2004 comprehensive revision of the annual industry accounts. In June, BEA concurrently published, for the first time, the annual I-O accounts with the gross-domestic-product-by-industry accounts. The concurrent publication was made possible by the use of an integration methodology that incorporates the relative strengths from each set of annual accounts.⁴ As a result of the improvements, the TTSA's can now be produced regularly on a schedule that follows the revision cycle of the annual industry accounts, so a full set of annual TTSA's can now be prepared less than 2 years after the end of the reference year. An additional benefit gained from the regular schedule of revisions is the enhanced accuracy and consistency of the quarterly estimates of tourism activities, which will now be derived from the most recently revised TTSA's.⁵

According to the revised TTSA's, the estimates of tourism output for 2002 were revised up \$120 billion; of this total, \$85 billion reflects the expanded coverage of tourism purchases, such as automotive repair services purchased by travelers that were not previously included in the TTSA's; \$22 billion reflects new and updated measures of tourism's share of total output, primarily based on data from the Consumer Expenditure Survey of the Bureau of Labor Statistics; and \$13 billion reflects the incorporation of revised estimates of output by industry from the annual I-O accounts.

In addition, the revised TTSA's feature a key indicator of tourism activity—total tourism-related output of goods and services.⁶ This indicator focuses on the output of tourism-related goods and services produced by all industries rather than the output of tourism industries only. (The TTSA's will continue to include tourism industry output.) In the revised TTSA's, the treatment of commissions earned by travel agents has also changed; they are now included in travel arrangement and reservation services rather than in the commodities on which the commissions were earned.

According to the updated TTSA annual estimates, the trends for recent years that were shown by the quarterly estimates are confirmed.⁷ The trends in tourism activity show three distinct periods of change.

4. For a discussion of the integration methodology, see Brian C. Moyer, Mark A. Planting, Mahnaz Fahim-Nader, and Sherlene K.S. Lum, "Preview of the Comprehensive Revision of the Annual Industry Accounts," *SURVEY* 84 (March 2004): 38–51.

5. Beginning with the release of the estimates for the second quarter of 2004 on September 8, 2004, the quarterly estimates are derived from a complete set of TTSA's that are less than 2 years old. Previously, the quarterly estimates were extrapolated from the TTSA estimates for 1997.

6. In the news release on September 8, 2004, this indicator is referred to as "total sales of tourism-related goods and services"; in this article, "output" replaces "sales" in order to be consistent with I-O terminology.

7. The quarterly TTSA estimates are available on BEA's Web site at <www.bea.gov >.

First, during the economic expansion of the late 1990s, travel and tourism demand and output grew strongly. Second, in 2001, this strong growth in travel and tourism demand and output dropped as the U.S. economy slowed overall and as a result of the events of September 11th. Third, in 2002 and 2003, they grew slowly as the economy began its recovery.

These revised annual TTSA estimates also show that travel and tourism still accounts for a significant proportion of U.S. economic activity (table A). In 2002, travel and tourism value added—that is, compensation of employees, "taxes on production and imports, less subsidies," and gross operating surplus—accounted for 2.5 percent, or \$263.1 billion, of gross domestic product (GDP). In 2002 and 2003, employment in tourism-related activities accounted for 4.2 percent of total U.S. employment. Other highlights from the annual TTSA estimates include the following:

- Total tourism output in 2003 surpassed its pre-2001 peak. In 1998–2000, it rose at an average annual rate of 5.9 percent, peaking at \$907.5 billion in 2000. After decreasing in 2001, it has slowly recovered to its current level of \$914.8 billion in 2003.
- Strong average annual growth (6.3 percent) in domestic tourism demand in 1998–2000 was followed by a sharp decrease (5.2 percent) in 2001, by a slow recovery (0.9 percent) in 2002, and by strong growth (4.7 percent) in 2003. The post-2000 pattern of growth is reflected in the slow rise in domestic tourism demand in 2000–2003, from \$548.9 billion in 2000 to \$550.0 billion in 2003.
- Business travel's share of total internal tourism demand has declined from 35.3 percent, or \$158.1 billion, in 2000 to 32.6 percent, or \$144.6 billion, in 2002. In contrast, leisure travel's share has increased from 60.1 percent, or \$269.5 billion, in 2000 to 62.4 percent, or \$277.2 billion, in 2002. Government

Table A. Key Indicators of Tourism Activity, 1998–2003

	Billions of dollars					Thousands	Percent			
	Domestic tourism output		Domestic tourism demand ³	Tourism value added	Tourism compensation		Tourism employment	Tourism value added share of GDP	Tourism compensation share of total compensation	Tourism employment share of total employment
	Direct and indirect output ¹	Direct output ²								
1998	808.7	458.5	485.7	243.2	145.1	5,516.7	2.8	2.9	4.4	
1999	845.8	480.1	509.1	256.0	154.2	5,587.4	2.8	2.9	4.4	
2000	907.5	515.5	548.9	267.3	164.1	5,654.6	2.7	2.8	4.4	
2001	860.0	488.5	520.4	258.1	165.3	5,512.3	2.6	2.8	4.2	
2002	872.9	495.4	525.2	263.1	165.9	5,402.1	2.5	2.8	4.2	
2003	914.8	518.4	550.0	n.a.	n.a.	5,387.2	n.a.	n.a.	4.2	

1. Direct tourism output plus indirect tourism-related output. Indirect tourism output comprises all output used as inputs in the process of producing direct tourism output (for example, toiletries for hotel guests and the food required to produce meals).

2. Direct tourism output comprises all U.S. output consumed directly by visitors (for example, traveler accommodations and passenger air transport). Direct output is equal to domestic tourism demand less the estimated import content of tourism purchases.

3. Domestic tourism demand is total tourism demand from table 3 of the TTSA's less travel by U.S. residents abroad.

n.a. Not available

TTSA's Travel and tourism satellite accounts

travel's share also increased, from 4.7 percent, or \$20.9 billion, in 2000 to 5.1 percent, or \$22.5 billion, in 2002.

- Inbound tourism has decreased almost twice as fast as outbound tourism since 2000. As a result, the U.S. trade surplus for tourism declined from \$14.6 billion in 2000 to \$5.7 billion in 2002.
- Traveler accommodations and air transportation services decreased from a peak of 43.2 percent, or \$115.6 billion, of tourism value added in 2000 to 39.9 percent, or \$105.0 billion in 2002.
- In 2003, employment in tourism-related industries had not yet recovered to its pre-2001 level. In 2000–2003, tourism industries lost 267,400 jobs, declining from a peak of 5.7 million employees, or 4.4 percent of total national employment, in 2000 to 5.4 million employees, or 4.2 percent, in 2003.

In this article, the trends in tourism activities in 1998–2003 are examined, and the changes in methodology and in the presentation of the accounts are de-

scribed. The detailed estimates for 2002 are presented in tables 1–5 at the end of this article. Detailed estimates for 1998–2003 are available from BEA's Web site; see the box "Data Availability."

Tourism Trends in 1998–2003

The trends in tourism can be analyzed in terms of the demand for tourism-related commodities (goods and services), in terms of tourism-related value added, employment, and employee compensation in the industries that produce the tourism commodities, and in terms of the supply of tourism goods and services from both domestic and foreign sources. The analysis is based on the annual TTSA estimates for 1998–2003.

Tourism demand

The trends in tourism demand provide information on the composition of tourism goods and services and on the expenditures by type of visitor (see the box "Key Terms").

Key Terms

The following key terms are used to describe the travel and tourism satellite accounts.

Domestic tourism demand. Travel-related expenditures in the United States. These expenditures consist of expenditures by residents (internal tourism demand) and by nonresidents (inbound tourism demand).

Inbound tourism demand. Travel-related expenditures by nonresidents traveling in the United States and for international air fares purchased from U.S. airlines. These expenditures exclude expenditures for travel to study in the United States and for medical reasons.

Internal tourism demand. Travel-related expenditures by U.S. residents in the United States.

Outbound tourism demand. Travel-related expenditures by U.S. residents traveling abroad and expenditures for international air fares purchased from foreign airlines.

Total tourism-related outputs. Consists of tourism output and the indirect output that is required to support the production of tourism goods and services (for example, purchases by restaurants, the maintenance and repair costs paid by hotels, and the insurance purchased by rental car companies).

Tourism commodities. Commodities that are typically purchased by visitors from the producer, such as airline passenger fares, meals, or hotel services.¹

Tourism demand. Travel-related expenditures by all

visitors before, during, and immediately after each trip. It consists of business travel, travel by government employees, and travel by U.S. residents both in the United States and abroad, and international travel by international visitors in the United States.

Tourism demand by type of visitor. Refers to the three types of visitors that purchase tourism-related commodities and that are identified by their reasons for travel—leisure, business, or government. It measures the composition of internal tourism demand.²

Tourism industries. Industries in which tourism commodities are a primary product, so that the industries' revenues and profits would be substantially affected if tourism ceased.

Tourism output. Domestically produced tourism goods and services purchased by travelers. Tourism output, or direct tourism output, is calculated as domestic tourism demand less imports of goods and services purchased by travelers.

Usual environment. The area of normal, everyday activities within 50–100 miles of home.³

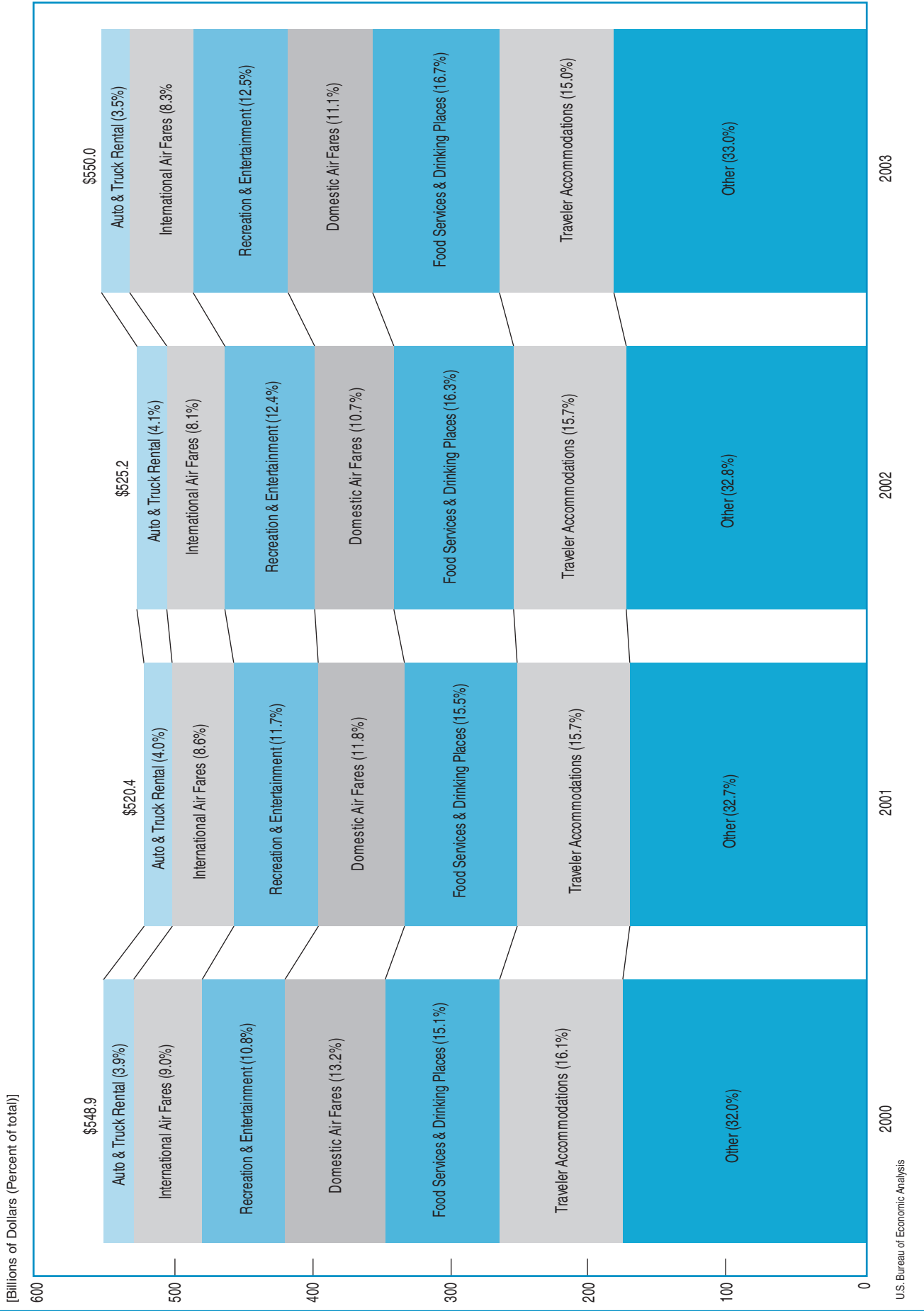
Visitor. A person who travels outside of his or her usual environment for less than a year or who stays overnight in a hotel or motel. The visitor may travel for pleasure or business. Visitors exclude travelers who expect to be compensated at the location of their visit (such as migrant workers, persons traveling to new assignments, and diplomatic and military personnel traveling from their duty stations to their home countries).

1. The classification of tourism commodities in the TTSA is based on a list of primary activities of visitors that was developed from recommendations by the World Trade Organization and by the Organisation for Economic Co-operation and Development, and from various surveys of U.S. visitors.

2. In the U.S. TTSA, inbound visitors are not differentiated by type of visitor, because the data to prepare these estimates are not available.

3. The usual environment depends on the availability of source data.

Chart 1. Tourism Demand



Domestic tourism demand. Domestic tourism demand shows three distinct periods of change in tourism activity in recent years: The expansion period in 1998–2000, the economic slowdown in 2001, and the recovery in 2002–2003. In 1998–2000, domestic tourism demand grew at an average annual rate of 6.3 percent, peaking at \$548.9 billion in 2000. This growth reflected strong demand for air transportation services—which increased 8.1 percent and accounted for 22.2 percent, or \$121.6 billion, of domestic tourism demand in 2000—and strong demand for traveler accommodations, which increased 7.9 percent and accounted for 16.1 percent, or \$88.1 billion, of domestic tourism demand in 2000 (chart 1). In 2001, domestic tourism demand decreased 5.2 percent, mainly reflecting a 12.4-percent drop in demand for air transportation services and a 7.3-percent decrease in demand for traveler accommodations.

In 2002, total domestic tourism demand recovered slowly, increasing 0.9 percent despite a 7.3-percent decrease in air transportation services, and traveler accommodations grew slowly, increasing 0.7 percent. In 2003, domestic tourism demand grew 4.7 percent, reaching a new peak of \$550.0 billion; this strong growth was led by an increase in air transportation services, which grew 7.7 percent to \$106.4 billion. Traveler accommodations continued its slow recovery, increasing 0.6 percent to \$82.7 billion in 2003.

Internal and inbound tourism demand. Internal tourism demand and inbound tourism demand provide information on the composition of domestic tourism demand. In 1998–2002, internal tourism demand's share of total domestic tourism demand increased from 81.6 percent to 84.6 percent, and inbound tourism's share decreased from 18.4 percent to 15.4 percent (table B).

In 1998–2000, when growth in domestic tourism demand was strong, internal tourism demand grew at an average annual rate of 6.4 percent (table C); in 2000, it accounted for 81.7 percent, or \$448.5 billion, of domestic tourism demand; inbound tourism demand grew at an average annual rate of 6.0 percent, and it accounted for 18.3 percent, or \$100.4 billion in 2000. In 2001, internal tourism demand decreased 3.5 percent, and inbound tourism demand decreased 12.7 percent. In 2002, internal tourism demand increased 2.7 percent, to \$444.2 billion, and inbound tourism demand continued to fall, decreasing 7.7 percent to \$80.9 billion.

Domestic tourism demand by type of visitor. Domestic tourism demand by type of visitor provides information on expenditures for travel by leisure visitors from the household sector and for work-related travel by visitors from both the business and government

sectors. In 1998–2002, the share of tourism demand by leisure visitors increased from 50.6 percent to 52.8 percent (table C). The share of tourism demand by business visitors increased from 27.0 percent to 27.5 percent, and the share of tourism demand by government visitors increased from 4.1 percent to 4.3 percent.

In 1998–2000, the tourism demand by business visitors increased at an average annual rate of 9.9 percent, peaking at \$158.1 billion in 2000, and the demand by leisure visitors increased 4.8 percent, to \$269.5 billion (table B). In 2001, the demand by business visitors decreased 9.1 percent, and the demand by leisure visitors decreased 0.8 percent. In 2002, the demand by business visitors increased slightly at 0.6 percent, to \$144.6 billion, and the demand by leisure visitors increased 3.6 percent, to a peak of \$277.2 billion.

Inbound and outbound tourism demand. Inbound tourism demand and outbound tourism demand provide information on the tourism-related expenditures for cross-border flows that enter into the U.S. international transactions accounts.

Inbound tourism demand's share of total international tourism demand declined 3.0 percentage points from 54.8 percent in 1998 to 51.8 percent in 2002

Table B. Components of Domestic Tourism Demand by Commodity Group as a Percentage of Domestic Tourism Demand, 1998–2002
[Percent]

	1998	1999	2000	2001	2002
All commodities	100.0	100.0	100.0	100.0	100.0
Internal	81.6	81.8	81.7	83.1	84.6
Resident households	50.6	50.1	49.1	51.4	52.8
Business	27.0	27.8	28.8	27.6	27.5
Government	4.1	4.0	3.8	4.2	4.3
Inbound	18.4	18.2	18.3	16.9	15.4
Traveler accommodations	100.0	100.0	100.0	100.0	100.0
Internal	73.8	73.8	74.2	75.0	77.2
Resident households	31.7	31.6	31.7	32.7	34.7
Business	34.7	35.3	36.0	35.3	35.1
Government	7.4	7.0	6.6	7.0	7.4
Inbound	26.2	26.2	25.8	25.0	22.8
Passenger air transportation services	100.0	100.0	100.0	100.0	100.0
Internal	79.1	80.2	81.0	81.7	81.4
Resident households	42.3	42.1	42.1	43.1	44.0
Business	32.8	34.1	35.1	34.4	32.9
Government	4.0	4.0	3.8	4.2	4.5
Inbound	20.9	19.8	19.0	18.3	18.6
All other transportation-related commodities	100.0	100.0	100.0	100.0	100.0
Internal	93.6	93.9	94.0	94.0	94.1
Resident households	54.2	53.9	53.7	54.1	54.7
Business	34.7	35.4	35.8	35.0	34.5
Government	4.7	4.7	4.4	4.9	5.0
Inbound	6.4	6.1	6.0	6.0	5.9
Food and beverage services	100.0	100.0	100.0	100.0	100.0
Internal	81.2	80.7	80.1	80.5	83.1
Resident households	51.5	50.0	47.3	49.7	50.8
Business	24.1	25.3	27.3	24.8	26.2
Government	5.6	5.4	5.5	6.0	6.1
Inbound	18.8	19.3	19.9	19.5	16.9
Recreation and entertainment	100.0	100.0	100.0	100.0	100.0
Internal	83.9	84.1	84.0	85.8	88.4
Resident households	70.9	70.9	70.0	73.7	74.0
Business	13.1	13.2	14.0	12.1	14.4
Government	0.0	0.0	0.0	0.0	0.0
Inbound	16.1	15.9	16.0	14.2	11.6
Internal	77.4	77.2	76.2	80.4	82.6
Resident households	60.7	59.6	57.8	61.8	63.4
Business	15.2	16.1	17.0	16.8	17.4
Government	1.6	1.5	1.5	1.8	1.8
Inbound	22.6	22.8	23.8	19.6	17.4

(chart 2). In 1998–2000, the U.S. trade surplus for tourism decreased from \$15.6 billion to \$14.6 billion, as inbound tourism increased at an average annual rate of 6.0 percent and as outbound tourism increased at an average annual rate of 7.9 percent.⁸ In 2001, the U.S. trade surplus for tourism decreased further, to \$7.7 billion, as inbound tourism decreased 12.7 percent, almost twice the rate of outbound tourism. In 2002, the U.S. trade surplus for tourism decreased again, to \$5.7 billion, as inbound tourism decreased 7.7 percent and as outbound tourism decreased 5.9 percent.

Tourism value added, employment, and compensation

The trends in tourism value added, employment, and compensation provide information on the growth in tourism-related industries.

Tourism value added. Tourism value added indicates the contributions of the tourism-related industries to the Nation's GDP. The share of GDP that was

8. The tourism trade surplus is calculated by subtracting imports (outbound tourism demand) from exports (inbound tourism demand). The estimates of this surplus differ from those calculated in the U.S. international transactions accounts (ITAs), because U.S. territories and Puerto Rico are included in the rest of the world in the input-output accounts and the national income and product accounts; in the ITAs, these areas are treated as part of the United States.

accounted for by tourism value added declined from 2.8 percent, or \$243.2 billion, in 1998 to 2.5 percent, or \$263.1 billion, in 2002 (table A); this change

Chart 2. Trends in the U.S. Trade for Tourism (Inbound and Outbound Tourism)

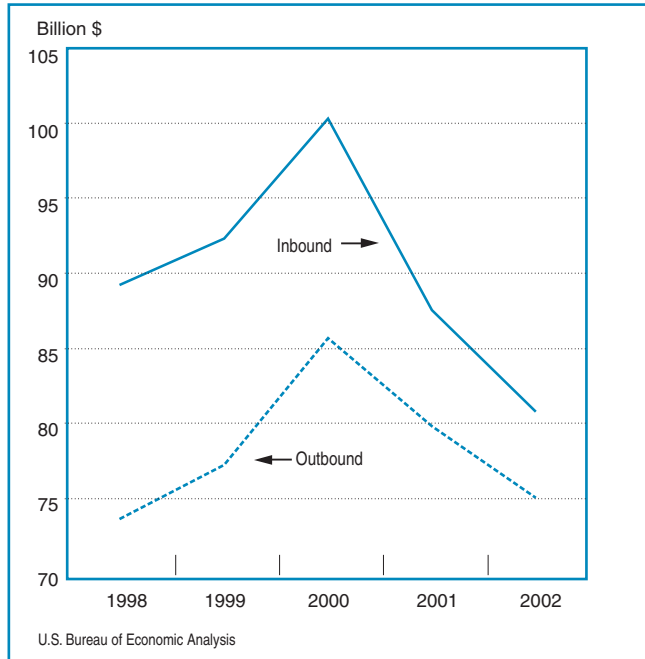


Table C. Domestic Demand and Percent Changes in the Components of Domestic Tourism Demand by Commodity Group, 1998–2003

	Billions of dollars						Percent change from preceding period						
	1998	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	1998–2000	1998–2002
All commodities	485.7	509.1	548.9	520.4	525.2	550.0	4.8	7.8	-5.2	0.9	4.7	6.3	2.0
Internal.....	396.3	416.6	448.5	432.7	444.2	n.a.	5.1	7.7	-3.5	2.7	n.a.	6.4	2.9
Resident households.....	245.6	254.9	269.5	267.4	277.2	n.a.	3.8	5.7	-0.8	3.6	n.a.	4.8	3.1
Business.....	131.0	141.5	158.1	143.7	144.6	n.a.	8.0	11.7	-9.1	0.6	n.a.	9.9	2.5
Government.....	19.8	20.2	20.9	21.6	22.5	n.a.	2.1	3.5	3.5	4.0	n.a.	2.8	3.3
Inbound.....	89.3	92.5	100.4	87.7	80.9	n.a.	3.5	8.6	-12.7	-7.7	n.a.	6.0	-2.4
Traveler accommodations	75.7	79.6	88.1	81.7	82.2	82.7	5.2	10.7	-7.3	0.7	0.6	7.9	2.1
Internal.....	55.8	58.8	65.4	61.3	63.5	n.a.	5.3	11.3	-6.3	3.6	n.a.	8.2	3.3
Resident households.....	24.0	25.1	27.9	26.7	28.6	n.a.	4.8	11.0	-4.2	6.9	n.a.	7.9	4.5
Business.....	26.3	28.1	31.7	28.9	28.9	n.a.	6.9	13.0	-9.1	0.0	n.a.	9.9	2.4
Government.....	5.6	5.5	5.8	5.7	6.1	n.a.	-0.7	4.5	-1.4	6.3	n.a.	1.9	2.1
Inbound.....	19.8	20.8	22.7	20.4	18.8	n.a.	5.0	9.1	-10.1	-8.1	n.a.	7.0	-1.4
Passenger air transportation services	104.1	109.6	121.6	106.6	98.8	106.4	5.3	10.9	-12.4	-7.3	7.7	8.1	-1.3
Internal.....	82.3	87.9	98.5	87.0	80.4	n.a.	6.8	12.0	-11.6	-7.7	n.a.	9.4	-0.6
Resident households.....	44.0	46.2	51.2	45.9	43.4	n.a.	4.9	10.9	-10.3	-5.4	n.a.	7.9	-0.3
Business.....	34.2	37.3	42.7	36.7	32.5	n.a.	9.3	14.3	-14.1	-11.3	n.a.	11.7	-1.2
Government.....	4.1	4.4	4.6	4.5	4.4	n.a.	6.1	5.1	-3.4	-1.1	n.a.	5.6	1.6
Inbound.....	21.8	21.7	23.1	19.5	18.4	n.a.	-0.3	6.3	-15.5	-5.7	n.a.	2.9	-4.1
All other transportation-related commodities	93.0	98.1	102.7	102.7	103.8	107.1	5.5	4.7	-0.1	1.1	3.2	5.1	2.8
Internal.....	87.0	92.2	96.5	96.5	97.6	n.a.	5.9	4.7	-0.1	1.2	n.a.	5.3	2.9
Resident households.....	50.4	52.9	55.2	55.5	56.7	n.a.	4.9	4.3	0.6	2.2	n.a.	4.6	3.0
Business.....	32.3	34.7	36.8	35.9	35.8	n.a.	7.5	6.0	-2.3	-0.5	n.a.	6.8	2.6
Government.....	4.3	4.6	4.6	5.0	5.1	n.a.	5.2	-0.1	9.5	2.8	n.a.	2.5	4.3
Inbound.....	6.0	6.0	6.2	6.2	6.1	n.a.	0.2	3.9	-0.2	-0.7	n.a.	2.0	0.8
Food and beverage services	78.5	79.6	83.0	80.9	85.7	91.7	1.4	4.2	-2.5	6.0	7.0	2.8	2.2
Internal.....	63.7	64.3	66.4	65.1	71.2	n.a.	0.8	3.4	-2.0	9.4	n.a.	2.1	2.8
Resident households.....	40.4	39.8	39.3	40.2	43.6	n.a.	-1.6	-1.3	2.4	8.4	n.a.	-1.4	1.9
Business.....	18.9	20.1	22.7	20.1	22.4	n.a.	6.4	12.5	-11.3	11.7	n.a.	9.4	4.3
Government.....	4.4	4.3	4.5	4.8	5.2	n.a.	-0.9	4.4	6.7	8.5	n.a.	1.7	4.6
Inbound.....	14.7	15.3	16.5	15.8	14.5	n.a.	4.1	7.8	-4.7	-8.1	n.a.	5.9	-0.4
Recreation and entertainment	50.7	54.8	59.4	60.7	64.9	68.6	8.1	8.3	2.2	7.0	5.6	8.2	6.4
Internal.....	42.6	46.1	49.9	52.1	57.4	n.a.	8.2	8.2	4.5	10.2	n.a.	8.2	7.8
Resident households.....	36.0	38.9	41.6	44.7	48.0	n.a.	8.1	6.9	7.7	7.4	n.a.	7.5	7.5
Business.....	6.6	7.2	8.3	7.3	9.4	n.a.	9.1	14.9	-11.5	27.7	n.a.	12.0	9.1
Government.....	0.0	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0
Inbound.....	8.2	8.7	9.5	8.6	7.5	n.a.	7.3	8.9	-9.7	-12.4	n.a.	8.1	-2.0
Shopping	83.7	87.3	94.1	87.9	89.7	93.5	4.2	7.8	-6.5	2.0	4.3	6.0	1.7
Internal.....	64.8	67.4	71.7	70.7	74.1	n.a.	3.9	6.4	-1.4	4.7	n.a.	5.2	3.4
Resident households.....	50.8	52.0	54.4	54.3	56.8	n.a.	2.4	4.5	-0.1	4.6	n.a.	3.5	2.9
Business.....	12.7	14.0	16.0	14.8	15.6	n.a.	10.3	13.8	-7.4	5.7	n.a.	12.0	5.3
Government.....	1.3	1.4	1.4	1.6	1.6	n.a.	1.6	2.9	16.3	0.7	n.a.	2.2	5.2
Inbound.....	18.9	19.9	22.4	17.2	15.6	n.a.	5.3	12.5	-23.1	-9.4	n.a.	8.8	-4.7

reflects the impact of the economic slowdown in 2001. In 1998–2000, tourism value added grew at an average annual rate of 4.8 percent, and GDP grew at an average annual rate of 5.9 percent; in 2001, tourism value added decreased 3.5 percent, and GDP growth slowed to 2.9 percent; in 2002, tourism value added recovered, increasing a modest 1.9 percent, and GDP increased 3.8 percent (table D).

In 1998–2000, traveler accommodations and air transportation services grew strongly: Traveler accommodations increased at an average annual rate of 7.2 percent, accounting for 25.0 percent, or \$66.8 billion, of tourism value added in 2000; air transportation services increased at an average annual rate of 5.7 percent, accounting for 18.3 percent, or \$48.8 billion, in 2000. In 2001, both industries were particularly hard hit: Traveler accommodations decreased 4.1 percent, and air transportation services decreased 12.6 percent. In 2002, these industries had not yet recovered to their 2000 peaks in value added: Traveler accommodations increased 0.9 percent and accounted for 24.6 percent, or \$64.7 billion, of tourism value added; air transportation services decreased 5.6 percent and accounted for 15.3 percent, or \$40.3 billion, of tourism value added.

Tourism employment. In 2003, employment in tourism-related industries had not yet recovered from the economic slowdown of 2001 and from the impact of September 11th.

In 2000–2003, 267,400 jobs in tourism-related industries were lost. Employment in these industries declined from a peak of 5.7 million, or 4.4 percent of total national employment in 2000, to 5.4 million, or

4.2 percent of total national employment in 2003 (table A).⁹

In 1998–2000, employment in tourism-related industries increased at an average annual rate of 1.2 percent, and total national employment increased at an average annual rate of 1.9 percent. Traveler accommodations increased at an average annual rate of 3.3 percent, accounting for 24.7 percent of total tourism employment or 1.4 million employees in 2000;

9. Total tourism employment is probably higher than the TTSA's show, because it excludes the self-employed.

Acknowledgments

Mark A. Planting, Chief of the Industry Studies Branch, and Peter D. Kuhbach of the Industry Economics Division supervised the preparation of the estimates. Sumiye Okubo, Associate Director for Industry Accounts, and Ann M. Lawson, Chief of the Industry Economics Division, provided overall guidance. Stephen G. Gross, Bradlee A. Herauf, Edward A. Kocis, and Gabriel W. Medeiros prepared the estimates. Karen J. Horowitz and Erich H. Strassner provided valuable assistance.

Staff members of the Annual Industry Branch, of the National Income and Wealth Division, and of the Government Division contributed to the development of the estimates.

The Tourism Industries Office of the International Trade Administration provided funding for the preparation of the TTSA's.

Table D. Tourism Value Added and Percent Changes in Tourism Value Added by Industry

	Billions of dollars					Percent change from preceding period				Average annual rate of change	
	1998	1999	2000	2001	2002	1999	2000	2001	2002	1998–2000	1998–2002
Tourism industries	243.2	256.0	267.3	258.1	263.1	5.3	4.4	-3.5	1.9	4.8	2.0
Traveler accommodations.....	58.1	62.4	66.8	64.1	64.7	7.3	7.0	-4.1	0.9	7.2	2.7
Food services and drinking places.....	33.3	34.0	35.3	34.3	35.9	2.1	3.9	-2.8	4.6	3.0	1.9
Air transportation.....	43.7	46.0	48.8	42.7	40.3	5.1	6.2	-12.6	-5.6	5.7	-2.0
Rail transportation.....	1.0	1.1	1.2	1.1	1.2	7.7	11.1	-2.7	1.8	9.4	4.3
Water transportation.....	1.7	1.9	2.2	2.4	2.3	9.0	19.0	6.1	-1.1	13.9	8.0
Interurban bus transportation.....	0.7	0.8	0.9	0.9	1.0	11.6	14.8	4.2	5.8	13.2	9.0
Interurban charter bus transportation	0.8	0.8	0.7	0.7	0.8	-3.0	-8.9	2.5	3.1	-6.0	-1.7
Urban transit systems and other transportation	0.8	0.9	1.1	1.2	1.3	8.3	15.3	9.2	11.8	11.7	11.1
Taxi service	2.6	2.6	2.3	2.4	2.5	-0.6	-9.3	5.3	1.4	-5.1	-1.0
Scenic and sightseeing transportation	1.3	1.5	1.6	1.5	1.6	12.5	5.5	-2.2	3.4	8.9	4.6
Automotive equipment rental and leasing	6.1	6.4	6.6	6.7	7.2	5.5	3.1	1.2	6.8	4.3	4.1
Automotive repair services.....	3.5	3.2	2.7	3.3	3.5	-7.9	-15.2	19.3	6.1	-11.6	-0.3
Parking lots and garages	0.6	0.7	0.6	0.8	0.8	4.6	-1.5	19.4	2.5	1.5	6.0
Toll highways	0.5	0.5	0.4	0.4	0.5	-6.7	-11.5	-0.7	8.0	-9.1	-3.0
Travel arrangement and reservation services	13.2	14.6	14.6	14.8	14.6	10.2	0.3	0.8	-1.5	5.2	2.4
Motion pictures and performing arts	2.2	2.3	2.6	2.4	3.2	4.3	12.4	-9.2	34.8	8.2	9.4
Spectator sports.....	4.3	4.8	5.2	5.1	5.8	10.4	9.3	-1.8	12.1	9.9	7.4
Participant sports	4.8	5.4	5.7	5.8	5.9	11.9	5.7	1.7	1.6	8.8	5.1
Gambling.....	6.2	6.9	7.5	7.9	8.2	11.2	7.8	4.9	4.8	9.5	7.1
All other recreation and entertainment.....	6.6	7.0	7.0	7.2	7.4	5.9	0.1	2.4	2.7	2.9	2.7
Petroleum refineries	1.5	1.1	1.3	1.5	1.1	-26.4	18.4	16.5	-27.4	-6.7	-7.4
Industries producing nondurable PCE commodities, excluding petroleum refineries	15.6	16.3	16.7	15.7	15.9	4.2	2.6	-6.1	1.5	3.4	0.5
Wholesale trade and transportation services.....	11.6	11.9	12.1	12.1	12.6	3.0	1.4	0.3	3.6	2.2	2.0
Gasoline service stations	3.2	3.2	3.4	3.4	3.6	0.7	4.7	1.3	6.6	2.7	3.3
Retail trade services, excluding gasoline service stations	16.3	17.1	16.9	16.7	18.4	5.0	-1.1	-1.0	10.2	1.9	3.1
All other industries	2.8	2.8	3.0	3.0	3.2	1.6	6.4	0.2	5.8	4.0	3.5
Addenda:											
Gross domestic product.....	8,738.8	9,259.8	9,808.0	10,091.6	10,471.1	6.0	5.9	2.9	3.8	5.9	4.6

PCE Personal consumption expenditures

air transportation services increased 5.6 percent, accounting for 10.6 percent of total tourism employment or 599,600 employees in 2000 (table E). In 2001, tourism employment decreased 2.5 percent, and total national employment decreased 0.1 percent; traveler accommodations decreased 2.6 percent, and air transportation services decreased 0.7 percent. In 2002, tourism employment decreased 2.0 percent, and total employment decreased 1.1 percent; traveler accommodations fell 3.8 percent, and air transportation services fell 8.6 percent. In 2003, tourism employment decreased 0.3 percent, and total employment decreased 0.3 percent; traveler accommodations increased 0.3 percent, to 1.3 million employees, or 24.3 percent of total tourism employment. Air transportation services continued to fall, decreasing 5.2 percent to 515,700 employees, or 9.6 percent of total tourism employment.

Compensation of employees. In 1998–2002, the average compensation of employees in the tourism-related industries increased at an average annual rate of 4.0 percent, from \$26,299 in 1998 to \$30,707 in 2002 (tables F and G); in 2002, the average compensation of all employees in the United States was \$46,952. Despite the increase in tourism's level of compensation from \$145.1 billion in 1998 to \$165.9 billion in 2002, its share of total compensation of all employees decreased from 2.9 percent in 1998 to 2.8 percent in 2002 (table G).

The employees' share of income, which is calculated as the ratio of compensation to value added, tends to be larger in tourism industries than in other industries.

In 1998, the employees' share was 59.7 percent in the tourism industries; the ratio of total national compensation to GDP was 57.5 percent. In 2000, the difference between these two shares increased: The tourism share was 61.4 percent, and the national share was 59.0 percent. In 2001 and 2002, the differences increased

Table F. Percent Changes in Tourism Compensation of Employees by Industry

	Percent change from preceding period				Average annual rate of change	
	1999	2000	2001	2002	1998–2000	1998–2002
Tourism industries	6.3	6.4	0.8	0.3	6.3	3.4
Traveler accommodations.....	8.3	8.6	-0.3	-0.6	8.5	3.9
Food services and drinking places.....	1.7	4.2	-1.6	5.5	2.9	2.4
Air transportation.....	7.2	9.6	5.4	-4.5	8.4	4.3
Rail transportation.....	7.5	6.4	-3.1	3.0	6.9	3.3
Water transportation.....	15.8	13.4	8.6	-0.5	14.6	9.1
Interurban bus transportation.....	7.4	4.5	4.7	3.1	5.9	4.9
Interurban charter bus transportation.....	7.7	3.4	4.3	3.7	5.5	4.8
Urban transit systems and other transportation.....	5.4	-2.2	1.5	5.0	1.5	2.4
Taxi service.....	4.4	-4.8	-0.1	0.2	-0.3	-0.1
Scenic and sightseeing transportation.....	8.3	8.0	0.2	0.7	8.2	4.2
Automotive equipment rental and leasing.....	7.4	11.0	2.8	-1.1	9.2	4.9
Automotive repair services.....	-0.5	-14.5	10.7	16.6	-7.8	2.4
Parking lots and garages.....	5.0	0.0	13.6	12.0	2.4	7.5
Toll highways.....	-9.3	-6.5	-0.1	6.2	-7.9	-2.6
Travel arrangement and reservation services.....	9.4	-0.5	0.1	-0.6	4.3	2.0
Motion pictures and performing arts.....	13.6	13.6	-1.0	5.1	13.6	7.7
Spectator sports.....	10.8	12.1	-2.2	10.8	11.5	7.7
Participant sports.....	10.3	11.0	0.3	2.0	10.6	5.8
Gambling.....	7.3	10.9	4.6	1.4	9.1	6.0
All other recreation and entertainment.....	5.3	7.7	1.9	2.9	6.5	4.4
Petroleum refineries.....	-5.1	-2.6	-1.0	-1.2	-3.9	-2.5
Industries producing nondurable PCE commodities, excluding petroleum refineries.....	3.4	7.3	-7.6	-1.4	5.3	0.3
Wholesale trade and transportation services.....	4.5	3.9	0.2	0.1	4.2	2.1
Gasoline service stations.....	1.2	4.1	0.9	0.6	2.6	1.7
Retail trade services, excluding gasoline service stations.....	6.4	2.4	-1.3	0.8	4.4	2.1
All other industries.....	2.3	8.1	0.0	3.7	5.1	3.5
Addenda:						
Total compensation of employees.....	6.7	7.9	2.7	1.3	7.3	4.6

PCE Personal consumption expenditures

Table E. Tourism Employment and Percent Changes in Tourism Employment by Industry

	Thousands of employees						Percent change from preceding period					Average annual rate of change	
	1998	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	1998–2000	1998–2003
Tourism industries	5,516.7	5,587.4	5,654.6	5,512.3	5,402.1	5,387.2	1.3	1.2	-2.5	-2.0	-0.3	1.2	-0.5
Traveler accommodations.....	1,307.6	1,346.2	1,395.8	1,359.2	1,307.6	1,311.0	3.0	3.7	-2.6	-3.8	0.3	3.3	0.1
Food services and drinking places.....	1,621.2	1,602.1	1,607.3	1,544.6	1,588.5	1,617.5	-1.2	0.3	-3.9	2.8	1.8	-0.4	0.0
Air transportation.....	537.8	566.1	599.6	595.4	544.3	515.7	5.3	5.9	-0.7	-8.6	-5.2	5.6	-0.8
Rail transportation.....	9.2	9.8	10.1	9.6	9.6	10.1	7.0	3.0	-5.5	0.2	5.5	5.0	1.9
Water transportation.....	22.7	24.4	27.1	28.3	27.3	27.5	7.6	10.8	4.5	-3.6	0.9	9.2	3.9
Interurban bus transportation.....	23.5	24.4	24.0	25.0	25.3	25.2	4.1	-1.8	4.3	0.9	-0.2	1.1	1.4
Interurban charter bus transportation.....	20.5	21.2	22.7	22.9	21.8	20.6	3.8	6.6	1.3	-5.2	-5.2	5.2	0.2
Urban transit systems and other transportation.....	52.5	52.9	49.9	49.8	51.7	52.7	0.7	-5.8	-0.1	3.9	2.0	-2.6	0.1
Taxi service.....	63.9	63.5	58.3	56.5	53.8	52.5	-0.7	-8.2	-3.0	-4.9	-2.3	-4.5	-3.8
Scenic and sightseeing transportation.....	18.1	18.9	20.3	19.8	18.1	17.7	4.4	7.3	-2.1	-8.9	-2.1	5.8	-0.4
Automotive equipment rental and leasing.....	96.8	104.1	110.8	111.2	105.2	103.3	7.5	6.5	0.3	-5.3	-1.9	7.0	1.3
Automotive repair services.....	70.3	62.4	52.3	54.8	58.2	57.6	-11.2	-16.2	4.9	6.0	-1.0	-13.7	-3.9
Parking lots and garages.....	10.2	10.4	10.1	10.8	12.1	12.2	2.1	-2.5	7.3	11.3	0.9	-0.3	3.7
Toll highways.....	5.2	4.7	4.3	4.2	4.4	4.4	-10.3	-8.6	-3.0	5.9	0.3	-9.5	-3.3
Travel arrangement and reservation services.....	302.1	301.4	256.6	251.0	223.3	208.0	-0.2	-14.9	-2.2	-11.0	-6.9	-7.8	-7.2
Motion pictures and performing arts.....	32.6	33.5	34.4	31.9	31.8	31.8	2.5	2.7	-7.1	-0.3	0.0	2.6	-0.5
Spectator sports.....	49.0	52.1	54.6	52.4	56.7	57.9	6.1	5.0	-4.2	8.3	2.0	5.6	3.4
Participant sports.....	198.4	216.6	206.2	208.5	211.1	216.3	9.2	-4.8	1.1	1.3	2.5	1.9	1.7
Gambling.....	103.8	106.9	164.8	173.4	168.9	173.1	3.0	54.3	5.2	-2.5	2.5	26.0	10.8
All other recreation and entertainment.....	133.6	131.1	124.7	124.3	123.5	122.3	-1.9	-4.9	-0.4	-0.6	-1.0	-3.4	-1.8
Petroleum refineries.....	5.6	5.0	4.6	4.4	4.2	4.1	-10.1	-7.3	-5.0	-4.1	-2.1	-8.7	-5.8
Industries producing nondurable PCE commodities, excluding petroleum refineries.....	193.1	189.3	187.8	168.4	161.1	155.4	-2.0	-0.8	-10.4	-4.3	-3.5	-1.4	-4.3
Wholesale trade and transportation services.....	133.8	132.1	130.1	127.1	124.9	124.1	-1.2	-1.6	-2.2	-1.8	-0.6	-1.4	-1.5
Gasoline service stations.....	59.1	55.2	52.9	51.2	49.1	48.3	-6.5	-4.2	-3.3	-4.0	-1.7	-5.4	-4.0
Retail trade services, excluding gasoline service stations.....	407.5	415.1	406.6	390.1	381.5	379.7	1.9	-2.0	-4.1	-2.2	-0.5	-0.1	-1.4
All other industries.....	38.6	37.9	38.6	37.4	38.0	37.9	-1.7	1.9	-3.1	1.6	-0.2	0.1	-0.3
Addenda:													
Total national employment.....	125,128.3	128,019.3	129,881.0	129,709.7	128,305.3	127,864.6	2.3	1.5	-0.1	-1.1	-0.3	1.9	0.4

PCE Personal consumption expenditures

significantly: In 2001, the tourism share was 64.0 percent, and the national share was 58.9 percent; in 2002, the tourism share was 63.0 percent, and the national share was 57.5 percent. The increasing difference between the tourism shares and the national shares suggests that tourism-related industries have become relatively more labor intensive than other industries.

Total tourism-related output. Total tourism-related output (direct and indirect) surpassed its 2000 peak, increasing from \$907.5 billion in 2000 to \$914.8 billion in 2003 (table H). Direct tourism output, the U.S. goods and services sold to visitors, increased \$23.0 billion to a peak of \$518.4 billion in 2003 (chart 3 and table I). The \$23.0 billion increase reflected a \$6.4 billion increase in air transportation services, a \$6.0 billion increase in food and beverage services, and a \$3.6 billion increase in recreation and entertainment.

The TTSA's are tied to the I-O accounts, so the ripple effects of these tourism expenditures on other commodities can also be estimated. These expenditure effects, or indirect output, include all the output used as inputs in the process of producing tourism output—for example, toiletries for hotel guests, the ingredients used to prepare meals served at restaurants, and the cloth used to make T-shirts.

The effects of these expenditures differ for each tourism commodity. For example, in 2002, every dollar spent on traveler accommodations generated an additional \$0.53 of commodity output, and every dollar spent on food services and drinking places generated

an additional \$0.91 of commodity output. On average, every dollar of direct tourism expenditure generated an additional \$0.76 of commodity output (table J).¹⁰

10. The multipliers for 2003 were not estimated, because the annual I-O accounts for 2003 will not be available until late 2004.

Chart 3. Direct Tourism-Related Output, 1998–2003

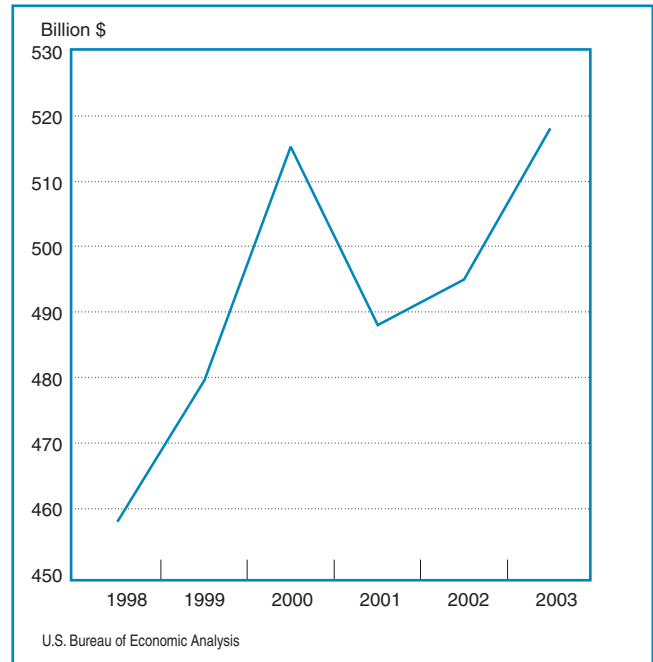


Table G. Tourism Compensation of Employees by Industry, 1998–2002
(Millions of dollars)

	1998	1999	2000	2001	2002
Tourism industries	145,085.5	154,224.2	164,056.0	165,309.4	165,881.0
Traveler accommodations	29,880.8	32,367.3	35,164.0	35,058.7	34,864.8
Food services and drinking places	21,630.9	21,996.5	22,914.8	22,542.6	23,783.8
Air transportation	29,042.7	31,124.0	34,101.5	35,934.0	34,313.1
Rail transportation	674.6	724.9	771.0	747.2	769.4
Water transportation	1,020.1	1,181.5	1,339.9	1,454.7	1,446.8
Interurban bus transportation	547.4	588.1	614.5	643.4	663.5
Interurban charter bus transportation	478.9	515.8	533.5	556.4	576.8
Urban transit systems and other transportation	2,383.9	2,511.7	2,457.0	2,493.8	2,617.4
Taxi service	1,535.1	1,602.6	1,524.9	1,523.0	1,526.7
Scenic and sightseeing transportation	675.5	731.7	790.3	792.1	797.8
Automotive equipment rental and leasing	3,351.6	3,601.0	3,995.8	4,108.1	4,064.0
Automotive repair services	1,793.5	1,784.1	1,525.4	1,688.4	1,968.3
Parking lots and garages	233.6	245.1	245.1	278.3	311.8
Toll highways	180.2	163.5	152.9	152.7	162.2
Travel arrangement and reservation services	10,704.0	11,708.5	11,646.7	11,654.4	11,589.3
Motion pictures and performing arts	1,535.7	1,745.2	1,981.8	1,962.2	2,062.6
Spectator sports	2,654.7	2,940.9	3,297.8	3,226.6	3,575.6
Participant sports	3,356.4	3,701.4	4,109.1	4,123.1	4,204.9
Gambling	3,118.5	3,346.3	3,709.6	3,881.8	3,937.7
All other recreation and entertainment	3,256.3	3,429.8	3,695.1	3,765.0	3,874.4
Petroleum refineries	436.8	414.5	403.7	399.7	395.0
Industries producing nondurable PCE commodities, excluding petroleum refineries	7,793.6	8,055.7	8,642.0	7,989.5	7,874.4
Wholesale trade and transportation services	6,367.2	6,651.1	6,913.6	6,926.3	6,932.0
Gasoline service stations	1,385.4	1,402.7	1,459.7	1,472.9	1,482.3
Retail trade services, excluding gasoline service stations	9,445.0	10,051.1	10,295.3	10,163.9	10,250.2
All other industries	1,602.9	1,639.1	1,771.0	1,770.5	1,836.1
Addenda:					
Total compensation of employees	5,023,945.5	5,362,241.2	5,787,177.1	5,945,301.3	6,024,252.7

PCE Personal consumption expenditures

Table H. Total Tourism Commodity Output, 1998–2003
(Millions of dollars)

	1998	1999	2000	2001	2002	2003
Total tourism-related output	808,713.1	845,845.3	907,501.8	859,958.5	872,881.9	914,750.8
Traveler accommodations	115,444.8	121,443.7	134,484.0	124,668.4	125,486.9	126,255.1
Air transportation	147,163.1	154,292.7	170,283.4	147,607.5	138,756.8	149,527.5
Domestic passenger air transportation	104,609.9	110,723.0	122,539.5	104,387.1	95,530.0	103,123.2
International passenger air transportation	42,553.2	43,569.7	47,743.9	43,220.4	43,226.8	46,404.3
All other transportation-related services	155,299.2	163,996.2	171,456.8	170,855.5	172,507.0	178,468.2
Passenger rail transportation	1,580.8	1,715.1	1,943.8	2,053.3	2,182.7	2,145.5
Passenger water transportation	8,485.3	9,532.5	10,885.4	11,433.2	11,057.5	11,870.3
Interurban bus transportation	1,890.0	2,362.5	2,547.5	2,607.5	2,505.7	2,414.8
Interurban charter bus transportation	2,597.8	2,080.6	1,605.6	1,503.2	1,521.1	1,465.9
Urban transit systems and other transportation services	5,226.6	5,387.4	5,140.1	5,062.3	5,090.2	4,905.5
Taxi service	7,411.3	6,781.8	5,908.8	5,812.5	5,831.2	6,409.6
Scenic and sightseeing transportation services	3,232.5	3,552.2	3,469.5	3,326.7	3,371.3	3,507.5
Automotive rental and leasing	28,765.4	32,052.9	34,197.3	33,250.0	34,528.9	31,188.3
Other vehicle rental and leasing	724.2	803.4	841.3	789.3	767.1	692.9
Automotive repair services	22,522.3	21,299.0	18,148.5	20,059.1	20,845.3	21,529.9
Parking lots and garages	1,988.0	2,144.7	2,214.5	2,465.6	2,609.6	2,619.2
Highway tolls	1,168.0	1,090.7	1,036.2	1,045.9	1,115.6	1,269.6
Travel arrangement and reservation services	43,402.5	47,042.2	50,289.1	49,851.2	50,908.7	53,006.4
Gasoline	26,304.3	28,151.3	33,229.3	31,595.7	30,171.9	35,442.8
Food services and drinking places	149,662.7	151,819.7	158,269.1	154,240.3	163,532.5	174,925.0
Recreation and entertainment	85,556.4	92,476.6	100,209.9	102,318.6	109,538.6	115,575.0
Motion pictures and performing arts	14,747.3	16,059.6	17,213.0	17,277.0	18,523.9	18,871.5
Spectator sports	5,505.4	6,014.3	7,133.0	6,715.6	7,928.8	8,308.3
Participant sports	14,060.1	15,613.5	16,387.3	16,162.7	17,000.1	17,912.3
Gambling	28,717.3	32,117.5	36,613.1	39,143.9	42,199.5	45,670.9
All other recreation and entertainment	22,526.3	22,671.7	22,863.5	23,019.4	23,886.3	24,812.1
Shopping	155,586.9	161,816.4	172,798.7	160,268.2	163,060.1	170,000.1

Table I. Direct Tourism Commodity Output, 1998–2003

(Millions of dollars)

	1998	1999	2000	2001	2002	2003
Tourism commodities.....	458,547.0	480,079.2	515,495.5	488,482.1	495,401.4	518,386.7
Traveler accommodations.....	75,664.0	79,595.8	88,142.5	81,709.3	82,245.8	82,749.2
Air transportation.....	86,832.5	91,039.3	100,474.5	87,094.7	81,872.4	88,227.6
Domestic passenger air transportation.....	61,724.3	65,331.3	72,303.6	61,592.8	56,366.7	60,847.1
International passenger air transportation.....	25,108.2	25,708.0	28,170.9	25,501.9	25,505.7	27,380.5
All other transportation-related services.....	92,464.4	97,643.9	101,844.5	101,480.8	102,601.8	105,817.3
Passenger rail transportation.....	941.2	1,021.2	1,157.3	1,222.5	1,299.5	1,277.4
Passenger water transportation.....	4,426.4	4,972.7	5,678.4	5,964.2	5,768.2	6,192.2
Interurban bus transportation.....	1,140.3	1,425.4	1,537.0	1,573.2	1,511.8	1,456.9
Interurban charter bus transportation.....	1,567.4	1,255.3	968.7	906.9	917.8	884.5
Urban transit systems and other transportation services.....	3,153.5	3,250.5	3,101.3	3,054.3	3,071.2	2,959.7
Taxi service.....	4,471.6	4,091.8	3,565.0	3,507.0	3,518.2	3,867.2
Scenic and sightseeing transportation services.....	2,162.4	2,376.2	2,320.9	2,225.4	2,255.2	2,346.3
Automotive rental and leasing.....	17,817.1	19,853.3	21,181.6	20,594.8	21,387.0	19,317.8
Other vehicle rental and leasing.....	448.6	497.6	521.1	488.9	475.2	429.2
Automotive repair services.....	13,488.3	12,755.7	10,868.9	12,013.1	12,484.0	12,894.0
Parking lots and garages.....	1,190.6	1,284.4	1,326.2	1,476.6	1,562.8	1,568.6
Highway tolls.....	616.3	575.5	546.7	551.9	588.6	669.9
Travel arrangement and reservation services.....	26,521.2	28,745.2	30,729.2	30,461.6	31,107.8	32,389.6
Gasoline.....	14,519.6	15,539.1	18,342.1	17,440.3	16,654.5	19,563.9
Food services and drinking places.....	78,473.8	79,604.7	82,986.4	80,874.0	85,746.2	91,719.7
Recreation and entertainment.....	50,655.2	54,757.3	59,353.7	60,626.0	64,901.7	68,518.3
Motion pictures and performing arts.....	8,100.0	8,820.9	9,454.4	9,489.5	10,174.4	10,365.3
Spectator sports.....	3,278.9	3,582.0	4,248.3	3,999.7	4,722.2	4,948.3
Participant sports.....	8,490.8	9,428.8	9,896.1	9,760.5	10,266.2	10,817.0
Gambling.....	17,342.0	19,395.4	22,110.2	23,638.5	25,483.8	27,580.1
All other recreation and entertainment.....	13,443.4	13,530.2	13,644.7	13,737.7	14,255.1	14,807.6
Shopping.....	74,457.1	77,438.3	82,693.9	76,697.4	78,033.5	81,354.6

Table J. Indirect and Total Output per Dollar of Direct Tourism-Related Sales, 2002

Tourism commodity	Direct output	Indirect output	Total output
Traveler accommodations.....	\$1.00	\$0.53	\$1.53
Food services and drinking places.....	\$1.00	\$0.91	\$1.91
Domestic passenger air transportation.....	\$1.00	\$0.69	\$1.69
International passenger air transportation.....	\$1.00	\$0.69	\$1.69
Passenger rail transportation.....	\$1.00	\$0.68	\$1.68
Passenger water transportation.....	\$1.00	\$0.92	\$1.92
Interurban bus transportation.....	\$1.00	\$0.66	\$1.66
Interurban charter bus transportation.....	\$1.00	\$0.66	\$1.66
Urban transit systems and other transportation services.....	\$1.00	\$0.66	\$1.66
Taxi service.....	\$1.00	\$0.66	\$1.66
Scenic and sightseeing transportation services.....	\$1.00	\$0.49	\$1.49
Automotive rental and leasing.....	\$1.00	\$0.61	\$1.61
Other vehicle rental and leasing.....	\$1.00	\$0.61	\$1.61
Automotive repair services.....	\$1.00	\$0.67	\$1.67
Parking lots and garages.....	\$1.00	\$0.67	\$1.67
Highway tolls.....	\$1.00	\$0.90	\$1.90
Travel arrangement and reservation services.....	\$1.00	\$0.64	\$1.64
Motion pictures and performing arts.....	\$1.00	\$0.82	\$1.82
Spectator sports.....	\$1.00	\$0.68	\$1.68
Participant sports.....	\$1.00	\$0.66	\$1.66
Gambling.....	\$1.00	\$0.66	\$1.66
All other recreation and entertainment.....	\$1.00	\$0.68	\$1.68
Gasoline.....	\$1.00	\$0.81	\$1.81
Shopping.....	\$1.00	\$1.09	\$2.09
All tourism commodities.....	\$1.00	\$0.76	\$1.76

Changes in the Methodology and Presentation

The TTSA's for 1998–2003 incorporate a number of significant changes that were designed to improve the quality, the consistency, and the usefulness of the accounts. An overview of the TTSA's and methodology is first presented, and the following changes are described: The effects of incorporating the results of the

integrated annual industry accounts into the TTSA's, the changes to the definition of tourism demand, the incorporation of private sector data, the use of the 1997 North American Industry Classification System (NAICS), and the changes in the presentation.

Overview of the accounts and methodology

The TTSA's are presented as a set of five tables. The production account table shows the production of tourism commodities by domestic industries, the supply and consumption table shows the supply and consumption of tourism commodities, the tourism demand table shows the tourism-related demand for tourism commodities, the tourism output and value added table shows the tourism-related output and value added of domestic industries, and the tourism employment table shows the tourism employment and employee compensation by industry. (This article presents the complete set of tables for 2002. See the box "Data Availability.")

The production account table and the supply and consumption table present a rearrangement of information from the make and use tables in the annual industry accounts. In each table, the travel and tourism-related industries and commodities are emphasized rather than summed into aggregates as in the annual I-O accounts.

The production account table shows the tourism commodities (rows) produced by each tourism industry (columns) from the annual industry accounts.¹¹ The table also shows the components of value added for each industry: Compensation of employees, "taxes on production and imports, less subsidies," and gross operating surplus. Table K shows the TTSA commodity definitions.

The supply and consumption table shows the supply of tourism commodities and all other commodities and the intermediate and final demand for these

11. For a list of the principal sources of data for the annual I-O accounts, see table D in Moyer, Planting, Fahim-Nader, and Lum, 48–49.

Data Availability

This article presents the summary annual estimates of the travel and tourism satellite accounts (TTSA's) for 1998–2003. It includes the set of five TTSA "core" tables for 2002. The detailed annual estimates of the TTSA's for 1998–2002 and the estimates of tourism demand, tourism employment, and tourism output for 2003 are available on BEA's Web site; go to <www.bea.gov>, and under "Industry," click on "Travel and Tourism."

commodities. Supply is the total amount of each commodity that is available to be purchased by business, by government, by resident households, and that is available to be exported. It is the sum of domestic production, imports, wholesale and retail trade margins, and transportation costs, less change in private inventories. This table shows consumption in purchasers' prices; in the I-O use table, consumption is shown in producers' prices.

The tourism demand table rearranges the information from the supply and consumption table and separates tourism demand from nontourism demand. Tourism demand consists of internal tourism demand (demand by business, by government, and by resident households) and inbound tourism demand (demand by nonresidents traveling in the United States).

For most tourism commodities, tourism demand is taken from the I-O accounts. For commodities in

which only a share of the total supply is consumed by visitors, the estimates are based on data from the Consumer Expenditure Survey (CEX) of the Bureau of Labor Statistics and on data from D.K. Shifflet & Associates.¹² Table L presents a summary of methods for estimating tourism commodity demand.

In order to prepare estimates of expenditures of resident households and of nonresidents, estimates of the expenditures by nonresidents were subtracted from the estimates of personal consumption expenditures (PCE). Data from the In-Flight Survey of the International Trade Administration were used to disaggregate international tourism expenditures into five categories: Traveler accommodations; food and beverages; transportation in the United States; recreation and entertainment; and shopping. Expenditures for transportation and for recreation and entertainment were disaggregated to TTSA commodities by weights calculated from domestic tourism demand.

The tourism demand table also derives the

Table K. Commodity Definitions and Methods of Estimating Personal Consumption Expenditures in the TTSA's

TTSA commodity	Commodity definition
Traveler accommodations	Receipts from hotels, motels, and all other traveler accommodation; receipts from recreational vehicle parks, campgrounds, and recreational and vacation camps; excludes meals served by hotels and motels
Food services and drinking places.....	Receipts for food and beverage
Domestic passenger air transportation	Receipts from domestic air passengers for airfares
International passenger air transportation ...	Receipts from international air passengers for airfares
Passenger rail transportation	Receipts for rail transportation and tips
Passenger water transportation	Receipts from passengers for water transportation
Interurban bus transportation.....	Receipts for interurban and rural bus transportation
Interurban charter bus transportation	Receipts from passengers for charter bus services
Urban transit systems and other transportation services	Receipts for urban transit systems, limousine services, and other transit and ground passenger transportation
Taxi service	Receipts for taxicab services, including taxi dispatchers
Scenic and sightseeing transportation services	Receipts for scenic and sightseeing transportation
Automotive rental and leasing.....	Receipts for rental of passenger car and truck
Other vehicle rental and leasing.....	Receipts for rentals of recreation vehicle and utility trailer
Automotive repair services.....	Receipts for automotive repair and maintenance
Parking lots and garages	Receipts for parking lots and garages
Highway tolls	State and local government highway toll revenues
Travel arrangement and reservation.....	Commissions for the arrangement of passenger transportation and other travel arrangement and reservation
Motion pictures and performing arts	Receipts for admissions to movies and theater and music programs
Spectator sports.....	Receipts for sports teams and clubs
Participant sports	Receipts for golf courses and country clubs, skiing facilities, and fitness and recreational sports centers
Gambling.....	Receipts for gambling
All other recreation and entertainment.....	Receipts for miscellaneous entertainment, such as amusement parks, museums, historical sites, and other recreation and amusements
Gasoline.....	Sales of gasoline, diesel fuel, lubricating oils, and grease
Shopping.....	Sales of all other nondurable commodities
Travel by U.S. residents abroad.....	Travel expenditures by U.S. residents abroad
All other commodities.....	All other commodities not considered above

12. The CEX is the only public, national source of data that allocates the share of consumer spending between visitors and nonvisitors. This survey collects data on consumer expenditures, including expenditures on tourism, or out-of-town trips, for selected categories of commodities. The ratios of CEX travel expenditures to total CEX expenditures for appropriate commodities were applied to I-O personal consumption expenditures weights. These ratios were also applied to business and government consumption if no other data were available.

Table L. Methods of Estimating Commodity Demand Attributable to Tourism

	Resident households ¹	Business	Government	Nonresidents
Traveler accommodations	I-O value	I-O value	I-O value	Inflight Survey ²
Food services and drinking places	CEX ³	Private survey ⁴	Private survey	Inflight Survey
Domestic passenger air transportation.....	I-O value	I-O value	I-O value	Inflight Survey
International passenger air transportation.....	I-O value	I-O value	I-O value	I-O value
Passenger rail transportation.....	I-O value	I-O value	I-O value	Inflight Survey
Passenger water transportation	I-O value	I-O value	I-O value	Inflight Survey
Interurban bus transportation	I-O value	I-O value	I-O value	Inflight Survey
Interurban charter bus transportation	I-O value	I-O value	I-O value	Inflight Survey
Urban transit systems and other transportation services	CEX	CEX	CEX	Inflight Survey
Taxi service	CEX	CEX	CEX	Inflight Survey
Scenic and sightseeing transportation services	I-O value	I-O value	I-O value	Inflight Survey
Automotive rental and leasing.....	CEX	I-O value	I-O value	Inflight Survey
Other vehicle rental and leasing	CEX	I-O value	I-O value	Inflight Survey
Automotive repair services	CEX, private survey	CEX, private survey	CEX, private survey	Inflight Survey
Parking lots and garages	CEX	CEX	CEX	Inflight Survey
Highway tolls	CEX	CEX	CEX	Inflight Survey
Travel arrangement and reservation	I-O value	I-O value	I-O value	Inflight Survey
Motion pictures and performing arts.....	CEX	Private survey	0	Inflight Survey
Spectator sports	CEX	Private survey	0	Inflight Survey
Participant sports	CEX	Private survey	0	Inflight Survey
Gambling	Other ⁵	0	0	Inflight Survey
All other recreation and entertainment.....	CEX	Private survey	0	Inflight Survey
Gasoline.....	CEX	Private survey	Private survey	Inflight Survey
Shopping.....	Private survey	Private survey	Private survey	Inflight Survey

1. All estimates are of total domestic consumption/consumption by nonresidents.
 2. International Trade Administration Inflight Survey of international travelers.
 3. Out-of-town domestic consumption and total domestic consumption from the Consumer Expenditure Survey of the Bureau of Labor Statistics.
 4. Private survey conducted by D.K. Shifflet & Associates.
 5. Gambling by resident households, based on data from studies by the Nevada Gaming Commission and by the National Gambling Impact Study Commission.
 CEX Consumer Expenditure Survey
 I-O Input-output

“tourism-commodity ratio” for each tourism commodity. This ratio is the proportion of the supply of the commodity that is purchased by visitors. For example, 93 percent of the supply of “travel arrangement and reservation services” was consumed by visitors, but only 19 percent of the supply of “food services and drinking places” was purchased by visitors.

Tourism value added is derived from the production account table and the tourism demand table. It shows the relative importance of tourism industries and of other industries that produce tourism output. The tourism commodity ratio is applied to the production of commodities by industries in the production account table in order to estimate the amount of each industry’s total output that is consumed as tourism demand. The sum of tourism output by each industry is then divided by total industry output to derive an “industry tourism ratio,” or the share of each industry’s output that is consumed by tourism. This ratio is applied to industry value added to estimate the value added derived from tourism demand.

The tourism employment table shows the estimates of tourism-related employment and employee compensation. The tourism industry ratio from the output and value added table is applied to employment and compensation by industry to derive estimates of tourism employment and compensation.

Incorporation of the integrated annual industry accounts

The TTSAAs are based on the revised annual I-O accounts for 1998–2002. As a result of the incorporation of these accounts into the TTSAAs, the estimates of tourism output for 2002 increased \$13.0 billion. In June, BEA released the initial results of its integrated annual industry accounts. The integrated annual industry accounts incorporate the relative strengths from both the annual I-O accounts and the GDP-by-industry accounts by incorporating the most timely and best source data, including the gross-domestic-income-based measures of value added from the GDP-by-industry accounts. In consequence, the TTSAAs for 1998–2003 have been significantly improved by being tied to the time series of the annual I-O accounts.

In addition, the TTSAAs can now be prepared on a more timely and accurate basis because of their link to the annual I-O accounts. A complete set of TTSAAs can now be prepared in less than 2 years after the end of the reference year; previously, 3 years were required. The accuracy of the quarterly estimates is improved by moving the base period for the estimates up to the latest complete set of TTSAAs. Previously, the quarterly estimates were extrapolated from the annual TTSAAs for 1997.

Definition of tourism industries and commodities

Two significant changes in definition were made to the TTSAAs. First, the definition of tourism industries was expanded to include all output purchased by visitors. Second, the commissions paid for travel arrangement and reservation services are now recognized as a component of tourism demand.

Tourism industries. In the TTSAAs, the tourism industries have been expanded to include the manufacturing output of gasoline and other nondurable goods, wholesale trade and transportation services, automotive repair services, parking lots and garages, and toll highways. In the previously published accounts, tourism industries included only those industries whose output was purchased directly by travelers. For example, tourism industry output included only the retail output of gasoline service stations and the retail output of other nondurable goods (of retailers with direct contact with travelers).

This change affects the production account table, the tourism output and value added table, and the tourism employment table. In the production account table, the production of commodities now includes “wholesale trade and transportation margins on gasoline,” “wholesale trade and transportation margins on nondurable PCE commodities other than gasoline,” and “retail trade margins on nondurable PCE commodities other than gasoline” and the output of the petroleum refineries industry and of the wholesale trade and transportation services industry. The tourism output and value added table and the tourism employment table now include estimates for petroleum refineries, for industries producing “nondurable PCE commodities, excluding petroleum refineries,” and for wholesale trade and transportation services.

As a result of this change, total tourism-related output for 2002 was revised up \$85.3 billion, and tourism-related value added was revised up \$34.3 billion. In addition, total tourism-related employment increased 364,000, and total tourism-related compensation of employees increased \$17.6 billion.

Travel arrangement and reservation services. In the TTSAAs for 1998–2003, the commissions that are paid for travel arrangement and reservation services are now recognized as a component of tourism demand.¹³ In the previously published estimates, these commissions were included in the tourism commodity on which they were earned; for example, when a travel

13. This recognition was suggested by an international working group on tourism satellite accounts; see Organisation for Economic Co-operation and Development, World Trade Organization, and United Nations Statistics Division, *Tourism Satellite Account: Recommended Methodological Framework* (Luxembourg, Madrid, New York, and Paris, 2001).

agent earned a \$10 commission on the sale of a \$100 airline ticket, the \$100 was included in tourism demand for air transportation services. In the updated TTSA's, when a travel agent earns a \$10 commission on the sale of a \$100 airline ticket, \$10 is included in tourism demand for travel arrangement and reservation services, and \$90 is included in tourism demand for air transportation services.

In addition, \$10 of production is included in the production of the travel arrangement and reservation services industry, and \$90 of production is included in the production of the air transportation services industry. By crediting the service to the producing industry, the accounts now provide a more accurate picture of the contribution of this industry to total travel and tourism activity. In 2002, the value of these commissions totaled \$18.5 billion; \$9.8 billion was paid by airlines, \$3.2 billion was paid by hotels and casino hotels, \$3.0 billion was paid by automobile rental and leasing companies, and \$1.0 billion was paid by cruise lines.

Improved measures of the tourism share of output

In the revised TTSA's, the estimates of the tourism share of output incorporate new survey data from a private sector information vendor in the travel industry in order to augment the estimates from the inte-

grated annual industry accounts.¹⁴ Specifically, these new data were used to prepare improved estimates of shopping (traveler consumption of nondurable goods other than gasoline) and to improve the allocation of estimates for eating and drinking services, entertainment, and auto repair services to business and government travelers. As a result of the incorporation of these new data and the revision of tourism shares, total tourism output for 2002 was revised up \$22.0 billion.

NAICS

The industry and commodity definitions that are presented in the TTSA's are now based on the 1997 North American Industry Classification System (NAICS) (table M). In NAICS, establishments that have similar production processes are classified in the same industry. In the previously published TTSA's, the industry and commodity definitions were based on the Standard Industrial Classification system; this system primarily uses demand-based criteria to classify establishments by industry—that is, establishments that produce similar products are classified in the same industry.

Changes in the presentation

The TTSA's include three presentational changes. First, the accounts now include only one estimate for each component of tourism demand, tourism output, and tourism employment. In the prototype accounts for 1992 and in the TTSA's for 1996 and 1997, three estimates—high, middle, and low values—were prepared for each component. A range of estimates is no longer prepared because of the improved quality of the source data.

Second, intermediate consumption in the tourism supply and consumption table now includes government expenditures. Third, more information is now available on the supply and the consumption of gambling products, including the output of the Indian gaming industry. The changes to government consumption and gambling products are a result of incorporating the results of the 2003 comprehensive revision of the NIPAs into the integrated annual industry accounts.

14. The data are from D.K. Shifflet & Associates Ltd., but they are not available for public use.

Table M. Industries in the Travel and Tourism Satellite Accounts

TTSA Industries	2002 NAICS codes
Traveler accommodations.....	7211, 7212
Food services and drinking places.....	722
Air transportation.....	481, 4881
Rail transportation.....	48211, 48821
Water transportation.....	483, 4883
Interurban bus transportation.....	48521
Interurban charter bus transportation.....	48551
Urban transit systems and other transportation.....	4851, 48532, 4859, 4884
Taxi service.....	48531
Scenic and sightseeing transportation.....	487
Automotive equipment rental and leasing.....	5321
Automotive repair services.....	8111
Parking lots and garages.....	81293
Toll highways.....	n.a.
Travel arrangement and reservation services.....	5615
Motion pictures and performing arts.....	51213, 7111, 7115
Spectator sports.....	7112, 7113, 7114
Participant sports.....	71391, 71392, 71394
Gambling.....	7132
All other recreation and entertainment.....	1142, 51912, 711212, 7121, 7131, 7139
Petroleum refineries.....	32411
Industries producing nondurable PCE commodities, excluding petroleum refineries.....	111, 112, 113, 11411, 212, 22133, 31, 32, 33, 511, 512, 56142, 811
Wholesale trade and transportation services.....	42, 48
Gasoline service stations.....	4471
Retail trade services, excluding gasoline service stations.....	44, 45

PCE Personal consumption expenditures

Tables 1 through 5 follow.

Table 1. Production of Commodities by Industry, 2002

[Millions of dollars]

Commodity	Industry													
	Traveler accommodations	Food services and drinking places	Air transportation	Rail transportation	Water transportation	Interurban bus transportation	Interurban charter bus transportation	Urban transit systems and other transportation	Taxi service	Scenic and sightseeing transportation	Automotive equipment rental and leasing	Automotive repair services	Parking lots and garages	Toll highways
Traveler accommodations	80,440	449	0	0	0	0	0	0	0	0	0	0	0	0
Food services and drinking places	24,853	408,703	0	91	0	0	0	0	0	0	0	0	0	0
Domestic passenger air transportation	0	0	56,367	0	0	0	0	0	0	0	0	0	0	0
International passenger air transportation	0	0	25,506	0	0	0	0	0	0	0	0	0	0	0
Passenger rail transportation	0	0	0	1,300	0	0	0	0	0	0	0	0	0	0
Passenger water transportation	0	0	0	0	6,360	0	0	0	0	10	0	0	0	0
Interurban bus transportation	0	0	0	0	0	1,471	11	11	0	18	0	0	0	0
Interurban charter bus transportation	0	0	0	0	0	38	803	62	0	14	0	0	0	0
Urban transit systems and other transportation services	0	0	0	0	0	39	185	17,214	34	29	24	0	0	0
Taxi service	0	0	0	0	0	0	0	9	9,791	0	0	0	0	0
Scenic and sightseeing transportation services	0	0	4	0	11	0	28	28	0	2,185	0	0	0	0
Automotive rental and leasing	0	0	0	0	0	0	0	0	0	0	22,158	0	0	0
Other vehicle rental and leasing	0	0	0	0	0	0	0	0	0	0	469	0	0	0
Automotive repair services	0	0	0	0	0	0	4	19	3	1	0	91,727	0	0
Parking lots and garages	0	0	0	0	0	0	0	0	0	0	0	0	9,970	0
Highway tolls	0	0	0	0	0	0	0	0	0	0	0	0	0	7,762
Travel arrangement and reservation services	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motion pictures and performing arts	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spectator sports	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Participant sports	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gambling	20,751	0	0	0	0	0	0	0	0	0	0	0	0	0
All other recreation and entertainment	0	430	0	0	1	0	0	0	0	1	0	0	0	0
Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale trade and transportation margins on gasoline	0	0	0	1,294	874	0	0	0	0	0	0	0	0	0
Retail trade margins on gasoline	11	123	0	0	0	0	0	0	0	0	0	27	0	0
Nondurable PCE commodities other than gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale trade and transportation margins on nondurable PCE commodities other than gasoline	0	0	3,329	16,732	2,969	0	0	0	0	0	0	0	0	0
Retail trade margins on nondurable PCE commodities other than gasoline	1,494	1,882	0	0	0	0	0	4	3	0	0	0	3	0
All other commodities, except all other trade and transportation margins	2,669	983	15,904	8,547	21,925	49	24	3,532	32	27	13,550	10,175	-3	203
All other wholesale trade and transportation margins	0	0	2,045	17,846	2,003	0	0	0	0	0	0	0	0	0
All other retail trade margins	3	86	0	0	0	0	0	0	0	7	194	1,473	0	0
Travel by U.S. residents abroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industry output	130,220	412,656	103,154	45,809	34,142	1,597	1,056	20,879	9,864	2,292	36,396	103,402	9,970	7,965
Intermediate inputs	41,887	219,215	52,463	19,717	20,791	582	129	12,239	2,931	648	23,926	50,161	4,744	1,814
Compensation of employees	47,028	136,036	40,223	17,214	8,091	701	725	17,672	4,252	814	6,624	30,286	2,062	2,195
Taxes on production and imports, less subsidies	12,785	21,188	5,941	173	2,306	12	19	-39	358	268	2,770	7,024	716	0
Gross operating surplus	28,520	36,217	4,526	8,705	2,954	302	183	-8,994	2,323	562	3,075	15,930	2,448	3,955

Table 1. Production of Commodities by Industry, 2002—Continued

[Millions of dollars]

Commodity	Industry												
	Travel arrangement and reservation services	Motion pictures and performing arts	Spectator sports	Participant sports	Gambling	All other recreation and entertainment	Petroleum refineries	Industries producing nondurable PCE commodities, excluding petroleum refineries	Wholesale trade and transportation services	Gasoline service stations	Retail trade services, excluding gasoline service stations	All other industries	Domestic Production
Traveler accommodations.....	0	0	0	345	0	0	0	0	0	0	1,012	82,246	
Food services and drinking places.....	0	4	5	5,904	1,614	4,277	0	0	4,811	11,088	0	461,349	
Domestic passenger air transportation.....	0	0	0	0	0	0	0	0	0	0	0	56,367	
International passenger air transportation.....	0	0	0	0	0	0	0	0	0	0	0	25,506	
Passenger rail transportation.....	0	0	0	0	0	0	0	0	0	0	0	1,300	
Passenger water transportation.....	0	0	0	0	0	0	0	0	0	0	0	6,370	
Interurban bus transportation.....	0	0	0	0	0	0	0	0	0	0	0	1,512	
Interurban charter bus transportation.....	0	0	0	0	0	0	0	0	0	0	0	918	
Urban transit systems and other transportation services.....	0	0	0	0	0	0	0	0	0	0	0	17,525	
Taxi service.....	0	0	0	0	0	0	0	0	0	0	0	9,801	
Scenic and sightseeing transportation services.....	0	0	0	0	0	0	0	0	0	0	0	2,255	
Automotive rental and leasing.....	0	0	0	0	0	0	0	0	0	1,017	0	23,176	
Other vehicle rental and leasing.....	0	0	0	0	0	0	0	0	6	54	0	529	
Automotive repair services.....	0	0	0	0	0	0	0	26	6,182	3,627	0	170,373	
Parking lots and garages.....	0	0	0	0	0	0	0	0	0	0	367	10,337	
Highway tolls.....	0	0	0	0	0	0	0	0	0	0	0	7,762	
Travel arrangement and reservation services.....	33,396	0	0	0	0	0	0	0	0	0	0	33,396	
Motion pictures and performing arts.....	0	19,462	9,801	0	54	150	0	0	0	0	404	29,870	
Spectator sports.....	0	0	12,317	0	0	0	0	0	0	0	0	12,317	
Participant sports.....	0	0	0	31,806	0	2,889	0	0	0	0	46	34,742	
Gambling.....	0	0	0	0	31,044	53	0	0	0	0	0	51,848	
All other recreation and entertainment.....	0	35	2,210	63	26	33,086	0	1,079	0	511	8,203	45,645	
Gasoline.....	0	0	0	0	0	0	93,753	0	0	0	0	93,753	
Wholesale trade and transportation margins on gasoline.....	0	0	0	0	0	0	0	0	72,494	0	0	74,662	
Retail trade margins on gasoline.....	0	0	0	1	0	64	0	0	30,673	3,812	124	34,836	
Nondurable PCE commodities other than gasoline.....	0	0	0	0	0	0	71,534	1,125,194	9,228	0	9,489	31,113	1,246,560
Wholesale trade and transportation margins on nondurable PCE commodities other than gasoline.....	0	0	0	0	0	0	0	0	338,607	0	0	361,637	
Retail trade margins on nondurable PCE commodities other than gasoline.....	69	152	244	501	61	1,673	0	147	17	16,065	483,696	15,443	521,454
All other commodities, except all other trade and transportation margins.....	86	20,937	7,768	621	6,603	1,703	20,414	701,863	207,510	2,342	33,320	13,228,866	14,309,649
All other wholesale trade and transportation margins.....	0	0	0	0	0	0	84	21,931	487,641	0	0	28,734	560,283
All other retail trade margins.....	0	4	12	40	0	208	0	1,170	0	1,172	424,918	15,402	444,690
Travel by U.S. residents abroad.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Industry output.....	33,550	40,595	32,356	39,282	39,403	44,103	185,784	1,851,411	1,121,679	58,695	1,036,688	13,329,715	18,732,663
Intermediate inputs.....	17,858	21,230	11,043	17,917	18,579	17,260	166,102	1,142,127	385,917	8,534	320,441	5,683,303	8,260,366
Compensation of employees.....	12,498	12,600	13,190	15,313	9,869	14,159	7,120	350,420	406,117	20,487	399,222	4,444,606	6,019,436
Taxes on production and imports, less subsidies.....	765	1,508	1,521	2,151	1,789	3,907	1,424	26,778	143,976	9,090	136,271	338,910	721,235
Gross operating surplus.....	2,429	5,257	6,603	3,901	9,166	8,777	11,139	332,086	185,670	20,585	180,754	2,862,896	3,731,627

PCE Personal consumption expenditures

Table 2. Supply and Consumption of Commodities, 2002

[Millions of dollars]

Commodity	Supply						Consumption						
	Domestic production	Imports	Change in private inventories	Wholesale trade margins and transportation costs	Retail trade margins	Total supply	Intermediate		Personal consumption expenditures	Gross private fixed investment	Government final expenditures	Exports of goods and services	Total consumption
							Private expenditures	Government expenditures					
Traveler accommodations	82,246	0	0	0	0	82,246	28,852	6,064	47,329	0	0	0	82,246
Food services and drinking places	461,349	0	0	0	0	461,349	74,281	11,521	375,115	0	0	432	461,349
Domestic passenger air transportation	56,367	0	0	0	0	56,367	24,847	3,463	28,056	0	0	0	56,367
International passenger air transportation	25,506	16,912	0	0	0	42,418	7,676	961	19,306	0	0	14,474	42,418
Passenger rail transportation	1,300	0	0	0	0	1,300	595	157	548	0	0	0	1,300
Passenger water transportation	6,370	689	0	0	0	7,058	0	0	6,392	0	0	667	7,058
Interurban bus transportation	1,512	0	0	0	0	1,512	5	40	1,467	0	0	0	1,512
Interurban charter bus transportation	918	0	0	0	0	918	0	0	918	0	0	0	918
Urban transit systems and other transportation services	17,525	0	0	0	0	17,525	5,161	217	12,147	0	0	0	17,525
Taxi service	9,801	0	0	0	0	9,801	5,864	621	3,316	0	0	0	9,801
Scenic and sightseeing transportation services	2,255	0	0	0	0	2,255	60	3	2,193	0	0	0	2,255
Automotive rental and leasing	23,176	0	0	0	0	23,176	12,844	2,365	7,967	0	0	0	23,176
Other vehicle rental and leasing	529	0	0	0	0	529	328	0	201	0	0	0	529
Automotive repair services	170,373	0	0	0	0	170,373	41,684	3,858	124,820	0	0	10	170,373
Parking lots and garages	10,337	0	0	0	0	10,337	1,924	1,230	7,183	0	0	0	10,337
Highway tolls	7,762	0	0	0	0	7,762	1,783	399	5,579	0	0	0	7,762
Travel arrangement and reservation services	33,396	0	0	0	0	33,396	20,862	1,051	10,328	0	0	1,155	33,396
Motion pictures and performing arts	29,870	88	0	0	0	29,958	5,743	20	24,056	0	0	139	29,958
Spectator sports	12,317	10	0	0	0	12,327	6,896	13	5,402	0	0	16	12,327
Participant sports	34,742	0	0	0	0	34,742	4,862	66	29,814	0	0	0	34,742
Gambling	51,848	0	0	0	0	51,848	1,880	0	49,968	0	0	0	51,848
All other recreation and entertainment	45,645	2	1	0	0	45,646	3,680	1,499	40,463	0	0	3	45,646
Gasoline	93,753	7,309	567	74,662	34,836	209,993	40,832	5,969	161,590	0	0	1,601	209,993
Wholesale trade and transportation margins on gasoline	74,662	0	0	0	0	0	0	0	0	0	0	0	0
Retail trade margins on gasoline	34,836	0	0	0	0	0	0	0	0	0	0	0	0
Nondurable PCE commodities other than gasoline	1,246,560	322,506	5,045	361,637	521,454	2,447,112	615,275	121,935	1,582,705	5,921	1,547	119,730	2,447,112
Wholesale trade and transportation margins on nondurable PCE commodities other than gasoline	361,637	0	0	0	0	0	0	0	0	0	0	0	0
Retail trade margins on nondurable PCE commodities other than gasoline	521,454	0	0	0	0	0	0	0	0	0	0	0	0
All other commodities, except all other trade and transportation margins	14,309,649	988,843	-249	560,283	444,690	16,303,714	6,553,492	639,565	4,829,606	1,577,940	1,930,987	772,125	16,303,714
All other wholesale trade and transportation margins	560,283	0	0	0	0	0	0	0	0	0	0	0	0
All other retail trade margins	444,690	0	0	0	0	0	0	0	0	0	0	0	0
Travel by U.S. residents abroad	0	57,623	0	0	0	57,623	11,499	0	46,124	0	0	0	57,623
Total	18,732,663	1,393,982	5,364	996,582	1,000,980	20,121,281	7,470,925	801,017	7,422,593	1,583,860	1,932,534	910,352	20,121,281

PCE Personal consumption expenditures

Table 3. Demand for Commodities by Type of Visitor, 2002

[Millions of dollars]

Commodity	Total demand	Total tourism demand	Business	Government	Resident households	Nonresidents	Nontourism demand	Tourism commodity ratio
Traveler accommodations	82,246	82,246	28,852	6,064	28,565	18,764	0	1.00
Food services and drinking places	461,349	85,746	22,437	5,239	43,564	14,505	375,603	0.19
Domestic passenger air transportation	56,367	56,367	24,847	3,463	24,124	3,933	0	1.00
International passenger air transportation	42,418	42,418	7,676	961	19,306	14,474	0	1.00
Passenger rail transportation	1,300	1,300	595	157	471	77	0	1.00
Passenger water transportation	7,058	6,392	0	0	5,496	896	667	0.91
Interurban bus transportation	1,512	1,512	5	40	1,261	206	0	1.00
Interurban charter bus transportation	918	918	0	0	789	129	0	1.00
Urban transit systems and other transportation services	17,525	3,071	862	36	1,999	174	14,453	0.18
Taxi service	9,801	3,518	2,065	219	1,132	102	6,283	0.36
Scenic and sightseeing transportation services	2,255	2,255	60	3	1,886	307	0	1.00
Automotive rental and leasing	23,176	21,387	12,844	2,365	5,698	480	1,789	0.92
Other vehicle rental and leasing	529	475	328	0	120	27	54	0.90
Automotive repair services	170,373	12,484	3,522	321	7,570	1,070	157,889	0.07
Parking lots and garages	10,337	1,563	280	179	1,033	71	8,774	0.15
Highway tolls	7,762	589	123	27	379	59	7,173	0.08
Travel arrangement and reservation services	33,396	31,108	10,203	1,357	18,393	1,155	2,288	0.93
Motion pictures and performing arts	29,958	10,204	2,543	0	6,741	921	19,754	0.34
Spectator sports	12,327	4,726	3,053	0	1,366	307	7,601	0.38
Participant sports	34,742	10,266	2,153	0	7,511	603	24,475	0.30
Gambling	51,848	25,484	0	0	20,835	4,648	26,364	0.49
All other recreation and entertainment	45,646	14,255	1,629	0	11,578	1,048	31,390	0.31
Gasoline	209,993	17,207	4,883	445	10,494	1,386	192,786	0.08
Nondurable PCE commodities other than gasoline	2,447,112	89,666	15,611	1,631	56,839	15,585	2,357,447	0.04
All other commodities	16,303,714	0	0	0	0	0	16,303,714	0.00
Total domestic tourism demand	20,063,658	525,156	144,570	22,507	277,151	80,927	19,538,502
Travel by U.S. residents abroad	57,623	57,623	11,499	0	46,124	0	0	1.00
Total tourism demand	20,121,281	582,779	156,069	22,507	323,275	80,927	19,538,502

PCE Personal consumption expenditures

Table 4. Output and Value Added by Industry, 2002

(Millions of dollars)

Industry	Industry output	Intermediate consumption	Value added	Tourism industry ratio	Tourism output	Tourism intermediate consumption	Tourism value added
Traveler accommodations.....	130,220	41,887	88,333	0.73	95,314	30,659	64,655
Food services and drinking places.....	412,656	219,215	193,442	0.19	76,624	40,705	35,919
Air transportation.....	103,154	52,463	50,690	0.79	81,998	41,704	40,294
Rail transportation.....	45,809	19,717	26,092	0.04	2,036	876	1,159
Water transportation.....	34,142	20,791	13,352	0.17	5,950	3,623	2,327
Interurban bus transportation.....	1,597	582	1,015	0.95	1,516	553	963
Interurban charter bus transportation.....	1,056	129	927	0.83	876	107	769
Urban transit systems and other transportation.....	20,879	12,239	8,640	0.15	3,122	1,830	1,292
Taxi service.....	9,864	2,931	6,933	0.36	3,521	1,046	2,475
Scenic and sightseeing transportation.....	2,292	648	1,644	0.97	2,232	631	1,602
Automotive equipment rental and leasing.....	36,396	23,926	12,469	0.57	20,874	13,722	7,151
Automotive repair services.....	103,402	50,161	53,241	0.07	6,723	3,262	3,462
Parking lots and garages.....	9,970	4,744	5,226	0.15	1,508	717	790
Toll highways.....	7,965	1,814	6,150	0.07	589	134	455
Travel arrangement and reservation services.....	33,550	17,858	15,692	0.93	31,110	16,559	14,551
Motion pictures and performing arts.....	40,595	21,230	19,365	0.16	6,646	3,476	3,171
Spectator sports.....	32,356	11,043	21,313	0.27	8,761	2,990	5,771
Participant sports.....	39,282	17,917	21,365	0.28	10,879	4,962	5,917
Gambling.....	39,403	18,579	20,824	0.40	15,587	7,350	8,238
All other recreation and entertainment.....	44,103	17,260	26,842	0.27	12,125	4,745	7,380
Petroleum refineries.....	185,784	166,102	19,683	0.06	10,303	9,212	1,092
Industries producing nondurable PCE commodities, excluding petroleum refineries.....	1,851,411	1,142,127	709,284	0.02	41,573	25,646	15,927
Wholesale trade and transportation services.....	1,121,679	385,917	735,762	0.02	19,139	6,585	12,554
Gasoline service stations.....	58,695	8,534	50,162	0.07	4,267	620	3,647
Retail trade services, excluding gasoline service stations.....	1,036,688	320,441	716,247	0.03	26,631	8,232	18,399
All other industries.....	13,329,715	5,683,303	7,646,412	0.00	5,496	2,343	3,153
Total tourism industries.....	18,732,663	8,261,558	10,471,105		495,401	232,290	263,112

PCE Personal consumption expenditures

Table 5. Employment and Compensation of Employees by Industry, 2002

Industry	Total employment (thousands of employees)	Tourism industry ratio	Tourism employment (thousands of employees)	Compensation (millions of dollars)	Tourism compensation (millions of dollars)	Average compensation per tourism employee
Traveler accommodations.....	1,787	0.73	1,308	47,633	34,865	26,663
Food services and drinking places.....	8,555	0.19	1,589	128,087	23,784	14,972
Air transportation.....	685	0.79	544	43,166	34,313	63,043
Rail transportation.....	216	0.04	10	17,315	769	80,187
Water transportation.....	157	0.17	27	8,301	1,447	53,005
Interurban bus transportation.....	27	0.95	25	699	663	26,257
Interurban charter bus transportation.....	26	0.83	22	696	577	26,515
Urban transit systems and other transportation.....	346	0.15	52	17,504	2,617	50,603
Taxi service.....	151	0.36	54	4,277	1,527	28,399
Scenic and sightseeing transportation.....	19	0.97	18	819	798	44,123
Automotive equipment rental and leasing.....	184	0.57	105	7,086	4,064	38,614
Automotive repair services.....	894	0.07	58	30,272	1,968	33,847
Parking lots and garages.....	80	0.15	12	2,062	312	25,832
Toll highways.....	60	0.07	4	2,195	162	36,834
Travel arrangement and reservation services.....	241	0.93	223	12,498	11,589	51,896
Motion pictures and performing arts.....	194	0.16	32	12,598	2,063	64,782
Spectator sports.....	210	0.27	57	13,206	3,576	63,017
Participant sports.....	762	0.28	211	15,183	4,205	19,916
Gambling.....	427	0.40	169	9,954	3,938	23,308
All other recreation and entertainment.....	449	0.27	124	14,093	3,874	31,367
Petroleum refineries.....	76	0.06	4	7,122	395	93,652
Industries producing nondurable PCE commodities, excluding petroleum refineries.....	7,173	0.02	161	350,680	7,874	48,891
Wholesale trade and transportation services.....	7,318	0.02	125	406,262	6,932	55,519
Gasoline service stations.....	676	0.07	49	20,389	1,482	30,174
Retail trade services, excluding gasoline service stations.....	14,851	0.03	382	399,020	10,250	26,868
All other industries.....	92,200	0.00	38	4,453,139	1,836	48,299
Total.....	137,761		5,402	6,024,253	165,881	30,707

PCE Personal consumption expenditures