

U.S. Travel and Tourism Satellite Accounts for 2013–2016

By Sarah Osborne and Seth Markowitz

THE TRAVEL and tourism industry—as measured by the real output of goods and services sold directly to visitors—increased 2.3 percent in 2016 after increasing 3.7 percent in 2015, according to the most recent statistics from the travel and tourism satellite accounts of the Bureau of Economic Analysis (BEA). In comparison, the broader economy as measured by real gross domestic product (GDP) increased 1.6 percent in 2016 after increasing 2.6 percent in 2015.¹ Revised statistics on travel and tourism reflect the incorporation of the annual update of the industry economic accounts, which was released on November 3, 2016.²

Highlights from the travel and tourism satellite accounts include the following:

- Real output increased in 18 of 24 commodities in 2016. The largest contributors to the increase include traveler accommodations, automotive rental and leasing, and food and beverage services.
- Real output slowed to 2.3 percent in 2016 from 3.7 percent in 2015, reflecting decelerations in gasoline, domestic passenger air transportation services, and motion pictures and performing arts.
- Prices for tourism goods and services decreased 0.5 percent in 2016 after decreasing 3.3 percent in 2015. The biggest contributor to the decrease in 2016 was gasoline, which decreased 11.8 percent. Seven of the 24 travel and tourism commodity prices decreased in 2016.

1. All measures of travel and tourism activity not identified as being in “real,” inflation-adjusted terms are current-dollar estimates.

2. For more information, see Kevin B. Barefoot, William A. Jolliff, and Vanessa M. Vogel, “The 2016 Annual Update of the Industry Economic Accounts: Initial Statistics for the Second Quarter of 2016 and Revised Statistics for 2013–2015 and the First Quarter of 2016,” SURVEY OF CURRENT BUSINESS 96 (December 2016).

Data Availability

The complete set of detailed annual statistics for 1998 through 2015, statistics of output and employment for 2016, and quarterly statistics of output and employment for 1998 through 2016, are available on [BEA’s Web site](#).

- The smaller decrease in price in 2016 reflects smaller price declines in gasoline and international passenger air transportation services and an acceleration in the price of passenger water transportation services.

The travel and tourism accounts are available on the BEA Web site; see the box “Data Availability.”

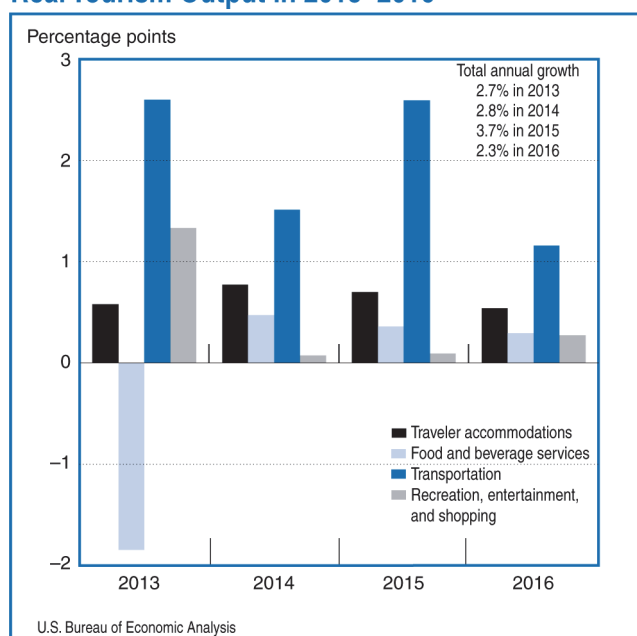
The remainder of this article includes a discussion of trends in travel and tourism output and prices, tourism value added, and employment.

Trends in Output and Prices

Real output

The leading contributors to the 2.3 percent growth in real travel and tourism output were traveler accommodations, which increased 2.7 percent and contributed 0.54 percentage point to real output growth, automotive rental and leasing, which increased 11.4 percent and contributed 0.44 percentage point, and food and beverage services which increased 2.1 percent and contributed 0.29 percentage point (table A and chart 1).

Chart 1. Contributions to Total Annual Growth in Real Tourism Output in 2013–2016



The slowdown in real output growth was led by gasoline, which increased 1.9 percent in 2016 after increasing 7.6 percent in 2015. Other large contributors to the deceleration include domestic passenger air transportation services, which increased 1.7 percent after increasing 6.2 percent in 2015, and motion pictures and performing arts, which turned down to -3.6 percent growth in 2016 after increasing 5.1 percent in 2015. The deceleration was partly offset by an acceleration in automotive rental and leasing, which increased 11.4 percent in 2016 after increasing 10.8 percent.

Prices

Travel and tourism prices declined 0.5 percent in 2016. The decrease was led by an 11.8 percent decrease in the price of gasoline; the fourth consecutive year of falling prices. Gasoline contributed -1.13 percentage points to the overall price decrease. Other contributors were international passenger air transportation services, which fell 5.0 percent and contributed -0.31 percentage point to the price decline, and automotive rental and leasing, which decreased 6.7 percent and contributed -0.28 percentage point. The decrease in overall

Table A. Annual Growth, Contributions to Growth, and Levels of Real Output by Tourism Commodity in 2013–2016

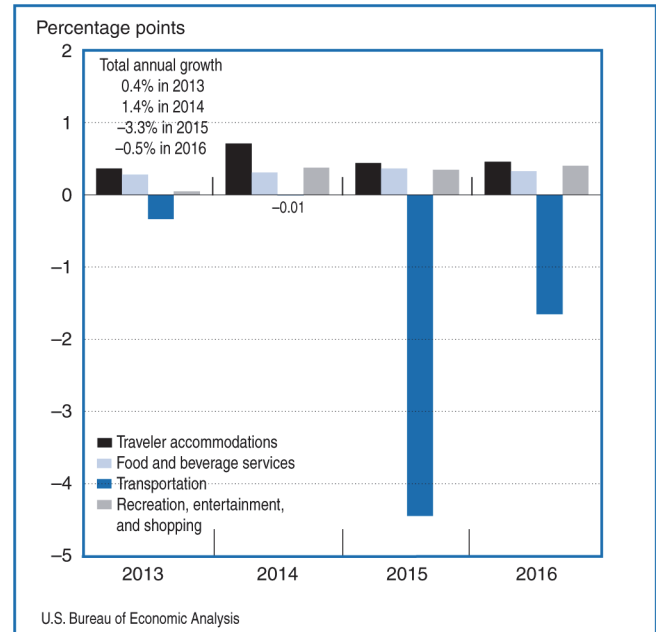
Commodity	Annual growth rates (percent change from preceding period)				Contributions (percentage points)				Real output (millions of chained 2009 dollars)			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
All tourism goods and services	2.7	2.8	3.7	2.3	2.66	2.82	3.74	2.27	747,491	768,571	797,313	815,447
Traveler accommodations.....	3.2	4.1	3.6	2.7	0.58	0.77	0.70	0.54	145,333	151,329	156,709	160,897
Food and beverage services.....	-12.6	3.7	2.7	2.1	-1.85	0.47	0.36	0.29	97,101	100,735	103,479	105,701
Transportation.....	6.0	3.4	6.1	2.8	2.60	1.51	2.59	1.16	310,359	320,967	340,488	350,048
Passenger air transportation.....	4.8	2.5	6.0	2.5	0.82	0.43	1.02	0.44	118,593	121,554	128,830	132,103
Domestic passenger air transportation services.....	3.2	2.6	6.2	1.7	0.15	0.28	0.68	0.19	75,418	77,348	82,147	83,518
International passenger air transportation services.....	11.2	2.4	5.6	4.2	0.67	0.15	0.34	0.25	44,552	45,618	48,171	50,190
All other transportation-related commodities.....	6.8	4.0	6.1	3.0	1.78	1.08	1.57	0.72	191,816	199,510	211,769	218,116
Passenger rail transportation services.....	-1.5	2.8	-3.6	-0.5	0.00	0.01	-0.01	0.00	1,934	1,987	1,915	1,905
Passenger water transportation services.....	5.1	6.6	1.6	-5.3	0.07	0.09	0.02	-0.08	12,679	13,512	13,733	13,002
Intercity bus services.....	-3.4	1.8	8.7	-3.4	-0.01	0.00	0.01	-0.01	1,260	1,283	1,395	1,348
Intercity charter bus services.....	-0.2	3.4	9.7	-2.4	0.00	0.01	0.02	-0.01	1,494	1,544	1,694	1,654
Local bus and other transportation services.....	-4.6	5.5	0.9	0.1	-0.03	0.03	0.01	0.00	3,926	4,143	4,179	4,183
Taxicab services.....	-6.9	4.7	-4.0	-8.9	-0.04	0.02	-0.02	-0.05	3,660	3,831	3,679	3,350
Scenic and sightseeing transportation services.....	5.7	1.3	7.0	1.2	0.02	0.00	0.03	0.00	2,992	3,031	3,243	3,282
Automotive rental and leasing.....	0.8	2.9	10.8	11.4	0.03	0.11	0.41	0.44	32,928	33,890	37,545	41,815
Other vehicle rental and leasing.....	5.5	2.9	7.1	13.3	0.01	0.00	0.01	0.01	797	820	878	996
Automotive repair services.....	12.4	-10.1	3.4	1.4	0.18	-0.16	0.05	0.02	12,470	11,206	11,592	11,753
Parking.....	-1.8	4.0	8.9	3.9	0.00	0.01	0.02	0.01	1,852	1,927	2,099	2,180
Highway tolls.....	9.5	-0.6	12.4	8.0	0.01	0.00	0.01	0.01	674	670	753	814
Travel arrangement and reservation services.....	4.1	5.6	3.5	3.4	0.21	0.29	0.19	0.19	42,101	44,450	46,013	47,589
Gasoline.....	11.2	5.3	7.6	1.9	1.33	0.66	0.81	0.17	70,586	74,351	79,985	81,530
Recreation, entertainment, and shopping.....	5.6	0.3	0.4	1.1	1.33	0.07	0.09	0.27	193,510	194,053	194,758	196,934
Recreation and entertainment.....	-2.9	-2.6	3.9	2.1	-0.33	-0.28	0.41	0.22	84,043	81,869	85,052	86,796
Motion pictures and performing arts.....	-16.8	-0.9	5.1	-3.6	-0.38	-0.28	0.09	-0.07	14,471	14,343	15,078	14,539
Spectator sports.....	1.9	-16.7	3.4	9.3	-0.04	-0.11	0.02	0.06	5,208	4,339	4,488	4,906
Participant sports.....	3.7	-7.1	-0.4	3.6	0.05	-0.10	0.00	0.05	12,002	11,147	11,107	11,505
Gambling.....	2.2	0.8	5.4	2.3	0.12	0.04	0.29	0.13	42,101	42,429	44,706	45,723
All other recreation and entertainment.....	-6.4	-6.5	0.5	4.5	-0.09	-0.09	0.01	0.06	10,609	9,918	9,967	10,417
Shopping.....	13.2	2.5	-2.3	0.4	1.66	0.35	-0.32	0.05	109,554	112,316	109,774	110,189

prices was offset by a 2.3 percent increase in traveler accommodations prices and a 2.4 percent increase in food and beverage services prices (table B and chart 2).

The smaller decrease in price growth in 2016 was led by gasoline, which decreased 11.8 percent in 2016 after a decrease of 27.1 percent in 2015. The smaller decrease also reflects smaller declines in the price of international passenger air transportation services, which decreased 5.0 percent after decreasing 9.4 per-

cent in 2015, and the price of domestic passenger air services, which decreased 0.9 percent in 2016 after decreasing 2.9 percent.

Chart 2. Contributions to Total Annual Growth in the Chain-Type Price Index for Tourism Goods and Services in 2013–2016



Acknowledgments

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Table B. Annual Growth, Contributions to Growth, and Levels of Chain-Type Price Indexes for Tourism Commodities in 2013–2016

Commodity	Annual growth rates (percent change from preceding period)				Contributions (percentage points)				Price indexes (index number, 2009=100)			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
All tourism goods and services	0.4	1.4	-3.3	-0.5	0.35	1.38	-3.29	-0.46	112.0	113.5	109.8	109.3
Traveler accommodations	2.0	3.9	2.3	2.3	0.36	0.71	0.44	0.46	106.0	110.1	112.6	115.2
Food and beverage services.....	2.1	2.4	2.8	2.4	0.28	0.31	0.36	0.33	109.0	111.7	114.8	117.6
Transportation	-0.8	0.0	-9.9	-3.9	-0.34	-0.01	-4.44	-1.65	119.8	119.8	107.9	103.7
Passenger air transportation.....	-0.9	1.8	-5.3	-2.3	-0.16	0.31	-0.92	-0.41	120.9	123.1	116.6	113.9
Domestic passenger air transportation services	-0.4	2.5	-2.9	-0.9	-0.04	0.27	-0.32	-0.10	120.7	123.7	120.2	119.1
International passenger air transportation services	-1.9	0.6	-9.4	-5.0	-0.12	0.04	-0.61	-0.31	121.3	122.1	110.6	105.0
All other transportation-related commodities	-0.6	-1.2	-12.9	-5.0	-0.18	-0.32	-3.51	-1.24	119.1	117.7	102.5	97.3
Passenger rail transportation services	3.0	0.8	1.6	1.8	0.01	0.00	0.00	0.00	112.6	113.5	115.3	117.3
Passenger water transportation services	-0.9	-0.7	0.9	7.4	-0.01	-0.01	0.01	0.11	96.6	95.9	96.7	103.8
Intercity bus services.....	3.5	-0.4	-6.2	2.5	0.01	0.00	-0.01	0.00	118.6	118.1	110.9	113.6
Intercity charter bus services	3.5	-0.4	-6.1	2.5	0.01	0.00	-0.01	0.01	118.6	118.1	111.0	113.8
Local bus and other transportation services	4.2	1.0	0.6	1.3	0.02	0.01	0.00	0.01	117.3	118.4	119.1	120.6
Taxicab services	4.3	1.2	2.1	1.7	0.02	0.01	0.01	0.01	117.0	118.4	121.0	123.0
Scenic and sightseeing transportation services.....	1.4	1.5	2.3	2.5	0.01	0.01	0.01	0.01	104.0	105.6	108.0	110.6
Automotive rental and leasing	1.9	3.3	-6.0	-6.7	0.07	0.13	-0.24	-0.28	96.8	100.0	94.0	87.8
Other vehicle rental and leasing	0.2	-2.6	0.7	-7.2	0.00	0.00	0.00	-0.01	110.4	107.5	108.3	100.5
Automotive repair services	1.6	1.7	1.8	1.6	0.02	0.02	0.02	0.02	107.5	109.3	111.3	113.1
Parking	3.6	2.4	2.6	2.8	0.01	0.01	0.01	0.01	118.9	121.8	125.0	128.5
Highway tolls	0.5	1.5	-5.7	-2.0	0.00	0.00	-0.01	0.00	114.5	116.3	109.7	107.5
Travel arrangement and reservation services.....	1.3	0.5	1.3	-0.1	0.06	0.03	0.07	0.00	103.4	103.9	105.3	105.3
Gasoline	-3.2	-4.0	-27.1	-11.8	-0.40	-0.51	-3.39	-1.13	150.3	144.3	105.2	92.8
Recreation, entertainment, and shopping	0.2	1.5	1.4	1.7	0.05	0.37	0.34	0.40	106.2	107.9	109.4	111.2
Recreation and entertainment	1.6	1.8	1.5	1.7	0.17	0.19	0.16	0.18	106.9	108.8	110.5	112.4
Motion pictures and performing arts.....	1.3	2.2	3.0	3.7	0.03	0.04	0.05	0.07	105.8	108.2	111.4	115.6
Spectator sports	2.7	2.9	7.2	3.3	0.02	0.02	0.04	0.02	108.2	111.4	119.4	123.2
Participant sports	1.6	1.6	1.0	0.3	0.02	0.02	0.01	0.00	102.8	104.5	105.6	105.9
Gambling	1.5	1.6	0.1	1.3	0.08	0.09	0.01	0.07	108.6	110.4	110.5	111.9
All other recreation and entertainment	1.8	1.7	3.7	1.4	0.03	0.02	0.04	0.02	105.6	107.5	111.5	113.0
Shopping.....	-0.9	1.3	1.3	1.6	-0.12	0.18	0.18	0.22	105.6	107.0	108.5	110.2

Total output

Total tourism-related output increased to \$1.54 trillion in 2016, increasing 2.0 percent from \$1.51 trillion in 2015. In 2016, total output consisted of \$893.7 billion in direct tourism output and \$646.6 billion in indirect tourism output. The 1.72 ratio of total output to direct output in 2016 means that every dollar of direct tourism output required an additional 72 cents of indirect tourism output (chart 3).

Direct tourism output includes goods and services sold directly to visitors, such as passenger air travel. Indirect tourism output includes sales of all goods and services used to produce that direct output, such as jet

fuel to fly the plane and catering services for longer flights.

Tourism Value Added and Employment Value added

A sector’s value added measures its contribution to gross domestic product (GDP). In 2015 (the most recent year for which data are available), the travel and tourism industry’s share of GDP was 2.7 percent (table C). Travel and tourism accounted for a larger share of GDP than other industries, such as broadcasting and telecommunications, utilities, mining, and educational services.

Chart 3. Total Tourism-Related Output in 2013–2016

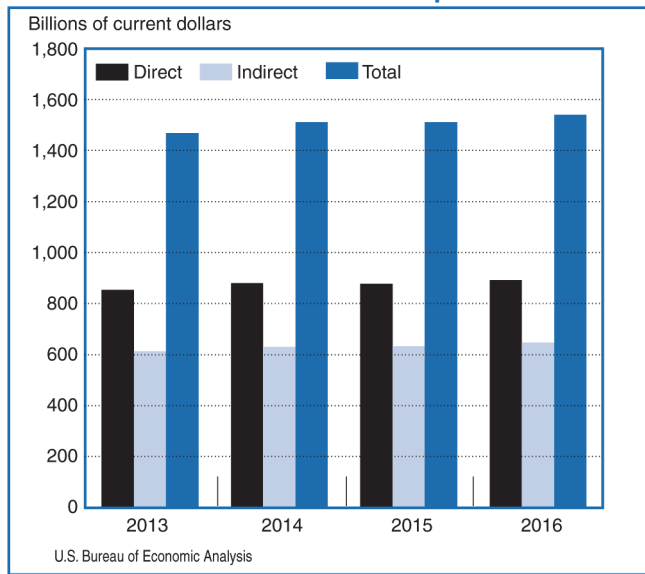


Table C. Travel and Tourism as a Share of Gross Domestic Product (GDP) in 2007–2015

	GDP	Tourism value added	Tourism value added as a share of GDP
2007.....	14,478	402	2.78
2008.....	14,719	391	2.66
2009.....	14,419	366	2.54
2010.....	14,964	377	2.52
2011.....	15,518	404	2.60
2012.....	16,155	422	2.61
2013.....	16,692	435	2.61
2014.....	17,393	453	2.61
2015.....	18,037	479	2.65

Direct employment

Direct tourism employment includes jobs that involve producing goods and services that are sold directly to visitors. Airline pilots, hotel clerks, and travel agents are examples of such employees. Overall, direct employment accelerated to 1.8 percent in 2016 from 1.5 percent growth in 2015. The largest contributor was food services and drinking places, which added 32,000 jobs and 0.61 percentage point to the increase in 2016 (table D and chart 4).

Total employment

Total tourism-related employment (the sum of direct and indirect jobs) increased to 7.6 million jobs in 2016 from 7.5 million jobs in 2015. The 7.6 million jobs consisted of 5.3 million direct tourism jobs and 2.3

Chart 4. Contributions to Total Annual Growth in Direct Tourism Employment in 2013–2016

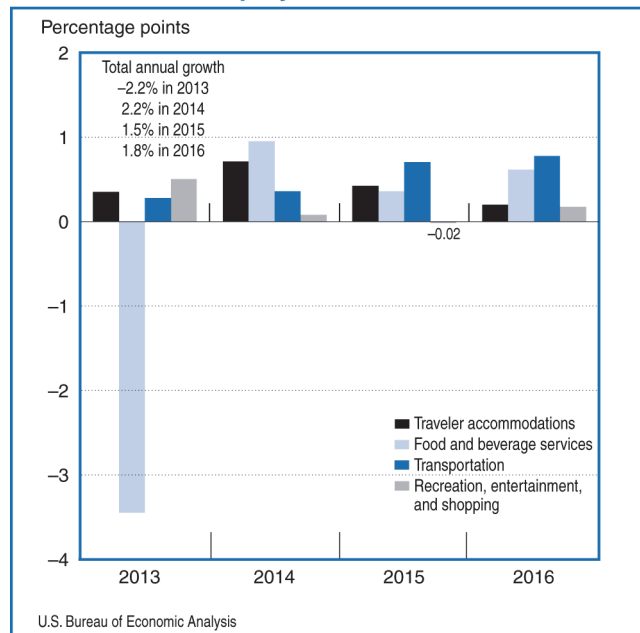


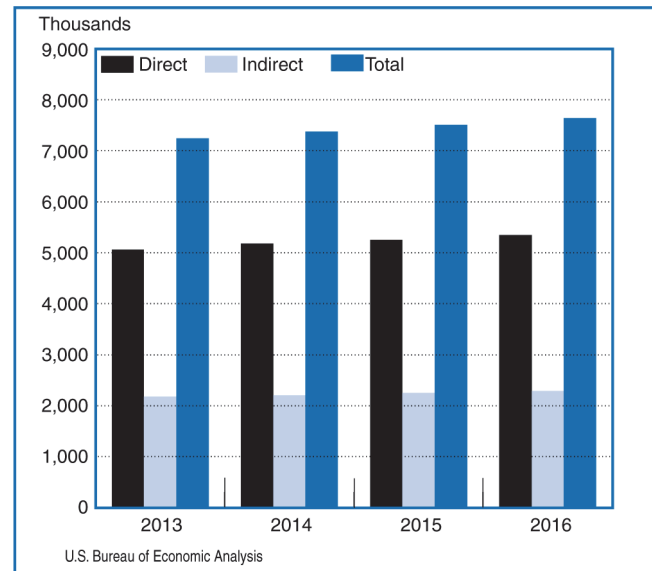
Table D. Annual Growth, Contributions to Growth, and Levels of Direct Employment by Tourism Industry in 2013–2016

Commodity	Annual growth rates (percent change from preceding period)				Contributions (percentage points)				Direct employment (thousands)			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
All tourism industries	-2.2	2.2	1.5	1.8	-2.16	2.18	1.52	1.78	5,064	5,174	5,253	5,346
Traveler accommodations	1.4	2.7	1.6	0.8	0.35	0.71	0.42	0.20	1,338	1,374	1,396	1,406
Vacation home rentals	-1.5	-3.1	-5.4	2.7	0.00	0.00	-0.01	0.00	8	8	7	8
Food services and drinking places	-10.7	3.3	1.2	2.1	-3.45	0.95	0.36	0.61	1,481	1,530	1,548	1,580
Transportation	1.4	1.8	3.4	3.7	0.28	0.36	0.70	0.77	1,045	1,063	1,099	1,140
Air transportation services	-1.3	1.3	3.2	3.2	-0.11	0.12	0.27	0.28	434	440	454	468
All other transportation-related industries	3.4	2.1	3.6	4.0	0.39	0.25	0.44	0.49	611	623	646	672
Rail transportation services	2.3	0.9	8.0	-2.2	0.00	0.00	0.02	0.00	10	10	11	11
Water transportation services	-0.5	6.6	4.2	-2.9	0.00	0.04	0.03	-0.02	31	33	34	33
Interurban bus transportation	-2.6	-0.1	2.6	-1.5	-0.01	0.00	0.01	-0.01	18	18	19	19
Interurban charter bus transportation	-1.6	1.3	-1.3	2.5	0.00	0.00	0.00	0.01	13	13	13	13
Urban transit systems and other transportation	-7.3	3.6	3.5	3.5	-0.06	0.03	0.03	0.03	40	41	42	44
Taxi service	-9.0	6.5	-1.6	-0.1	-0.07	0.05	-0.01	0.00	39	41	41	41
Scenic and sightseeing transportation services	4.0	3.9	2.2	6.3	0.01	0.01	0.01	0.02	15	16	16	17
Automotive equipment rental and leasing	3.5	3.9	5.7	2.9	0.06	0.07	0.10	0.06	91	95	100	103
Automotive repair services	32.1	-9.4	4.2	5.2	0.27	-0.10	0.04	0.05	57	51	53	56
Parking lots and garages	17.0	5.5	7.5	9.0	0.05	0.02	0.02	0.03	16	17	19	20
Toll highways	7.3	1.6	4.2	10.5	0.01	0.00	0.00	0.01	4	4	4	5
Travel arrangement and reservation services	1.0	1.6	1.6	7.4	0.03	0.05	0.05	0.25	173	176	179	192
Petroleum refineries	5.6	4.8	7.1	1.8	0.01	0.01	0.01	0.00	8	9	9	9
Gasoline service stations	6.0	3.5	6.7	3.2	0.11	0.07	0.13	0.06	96	99	106	109
Recreation, entertainment, and shopping	2.7	0.4	-0.1	0.9	0.50	0.08	-0.02	0.17	983	987	986	995
Recreation and entertainment	-0.9	-1.5	-2.3	0.8	-0.09	-0.15	-0.23	0.07	522	515	503	507
Motion pictures and performing arts	-17.8	20.6	-19.6	-0.6	-0.10	0.09	-0.11	0.00	23	28	23	22
Spectator sports	-5.0	2.1	-6.1	-1.4	-0.05	0.02	-0.06	-0.01	54	55	52	51
Participant sports	2.4	-4.7	0.0	3.3	0.10	-0.20	0.00	0.13	211	201	201	208
Gambling	0.6	-1.1	-2.3	-2.2	0.02	-0.04	-0.08	-0.07	177	175	171	168
All other recreation and entertainment	-5.1	-2.9	1.4	3.1	-0.06	-0.03	0.01	0.03	57	55	56	58
Shopping	7.1	2.6	2.3	1.1	0.59	0.23	0.21	0.10	460	472	483	488
Industries producing nondurable PCE commodities, excluding petroleum refineries	8.1	2.2	3.3	1.2	0.17	0.05	0.08	0.03	118	120	124	126
Retail trade services, excluding gasoline service stations	6.8	2.7	2.0	1.1	0.42	0.18	0.13	0.07	342	352	359	363
All other industries	4.3	1.9	1.4	0.3	0.17	0.08	0.06	0.01	210	213	216	217
All other industries, excluding wholesale trade and transportation services	-5.9	-1.7	-1.3	1.1	-0.07	-0.02	-0.01	0.01	58	57	56	57
Wholesale trade and transportation services	8.7	3.2	2.4	0.1	0.24	0.10	0.07	0.00	152	157	160	160

PCE Personal consumption expenditures

million indirect tourism jobs (chart 5). While direct tourism employment includes jobs that produce direct tourism output, such as airline pilots, indirect tourism employment comprises jobs that produce indirect tourism output, such as refinery workers producing jet fuel. The most recent data indicate that for every 100 direct tourism jobs required, an additional 43 indirect tourism jobs are required.

Chart 5. Total Tourism-Related Employment in 2013–2016



Key Terms

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

Domestic tourism. Travel-related expenditures by U.S. residents traveling within the United States. It comprises travel by resident households, business travel, and travel by government employees.

Inbound tourism. Travel-related expenditures by non-residents traveling within the United States and expenditures by nonresidents on international transportation purchased from U.S. providers. These expenditures exclude expenditures for travel to study in the United States and for medical reasons.¹

Tourism commodities. Goods and services that are typically purchased by visitors, such as airline passenger transportation, hotel accommodations, and meals.²

Tourism employment. Total tourism-related employment consists of direct tourism employment plus indirect tourism employment. Direct tourism employment comprises all jobs where the workers are engaged in the production of direct tourism output (for example, hotel staff

and airline pilots), and indirect tourism employment comprises all jobs where the workers are engaged in the production of indirect tourism output (for example, workers producing hotel toiletries and delivering fuel to airlines).

Tourism output. Total tourism-related output consists of direct tourism output and indirect tourism output. Direct tourism output comprises all domestically produced goods and services purchased by travelers (for example, traveler accommodations and passenger air transportation), and indirect tourism output comprises all output required to support the production of direct tourism output (for example, toiletries for hotel guests and fuel for airplanes).

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 (private sector or government). 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 to and from their duty stations and their home countries).

1. In the travel and tourism satellite accounts, inbound and outbound visitors are not differentiated by type of visitor, because the data to prepare these estimates are not available.

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

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