California Travel Impacts

2010-2018p

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A Joint Marketing Venture of Visit California
and the Governor's Office of Business Development (GO-Biz)

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Executive Summary

This report provides detailed statewide, regional and county travel impact estimates for California from 2010 to 2018. The estimates for 2018 are preliminary. The report also provides an analysis of travel-generated tax revenue and transient occupancy tax receipts for jurisdictions through the 2018 fiscal year.

The California Travel Industry Continues to Expand

The California travel industry grew for the eighth consecutive year since 2010. All visitation and economic impact estimates increased for the year.

- ***Spending.*** Total direct travel spending in California was $140.6 billion in 2018 (preliminary). This represents a 5.4 percent increase over 2017 in current dollars and a 2.9 percent increase in real (inflation-adjusted) dollars.
- ***Employment.*** Direct travel generated employment was 1.16 million in 2018, a 1.7 percent increase over 2017. Travel-generated employment has increased an average of 3.5 percent per year since 2010.
- ***Tax Revenues.*** Travel-generated state and local tax revenue was $11.8 billion in 2018, an increase of 7.3 percent over the preceding year. Over seventy percent of these tax revenues were paid by visitors (e.g., lodging and sales taxes). The remainder were paid by travel industry employees and businesses (e.g., property and income taxes). This state and local tax revenue was equivalent to $890 per California resident household ($636 for taxes paid by visitors, $254 for taxes paid by employees and businesses.)
- ***Visitation.*** Visitor arrivals on domestic flights (41.9 million in 2018) increased by 7.3 percent.[1] Lodging rooms sold increased by 2.0 percent for the year.[2]
- ***Origin.*** Six out of ten dollars spent at California visitor destinations were attributable to residents of other states and countries.
- ***Secondary Impacts.*** The re-spending of travel industry income by businesses and employees produces secondary effects. In 2018, these secondary impacts were 795 thousand jobs with earnings of $53.3 billion. Total (direct and secondary) employment was 2.0 million jobs with earnings of $105.8 billion.
- ***Gross Domestic Product.*** The Gross Domestic Product (GDP) of the California travel industry was $79 billion in 2018. This represents about two and one-half percent of the total GDP of the state.

1. Department of Transportation Origin and Destination survey. Estimates by Dean Runyan Associates.
2. STR Inc. lodging report prepared for Visit California.

II. CALIFORNIA TRAVEL

The multi-billion dollar travel industry in California is a vital part of the state and local economies. The industry is represented primarily by retail and service firms, including lodging establishments, restaurants, retail stores, gasoline service stations, and other types of businesses that sell their products and services to travelers. The money that visitors spend on various goods and services while in California produces business receipts at these firms, which in turn employ California residents and pay their wages and salaries. State and local government units benefit from travel as well. The state government collects taxes on the gross receipts of businesses operating in the state, as well as sales and use taxes levied on the sale of goods and services to travelers. Local governments also collect sales and use taxes generated from traveler purchases.

Impacts of Travel in California: A Summary

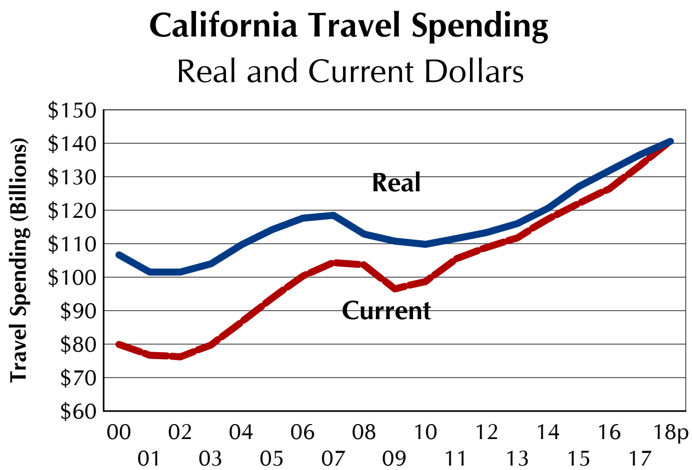
- Total direct travel spending in California was $140.6 billion in 2018 (preliminary). This represents a 5.4 percent increase over 2017.
- Direct travel-generated employment was 1.16 million in 2018, a 1.7 percent increase over 2017. Travel-generated employment has increased at an average annual rate of 3.5 percent since 2010.
- Direct travel-generated earnings was $52.5 billion in 2018, a 6.3 percent increase over 2017. Travel-generated earnings has increased at an average annual rate of 7.2 percent since 2010.
- Travel-generated state and local tax revenue was $11.8 billion in 2018, an increase of 7.3 percent over the preceding year. Over seventy percent of these tax revenues were paid by visitors (e.g., lodging and sales taxes). The remainder were paid by travel industry employess and businesses (e.g., property and income taxes). This state and local tax revenue was equivalent to $890 per California resident household ($636 for taxes paid by visitors, $254 for taxes paid by employees and businesses.)
- Visitor arrivals on domestic flights (41.9 million in 2018) increased by 7.3 percent.
- The Gross Domestic Product (GDP) of the California travel industry was $79 billion in 2018. This represents about two and one-half percent of the total GDP of the state.
- The re-spending of travel industry income by businesses and employees produces secondary effects. In 2018, these secondary impacts were 795 thousand jobs with earnings of $53.3 billion. Total (direct and secondary) employment was 2.0 million jobs with earnings of $105.8 billion.

Recent Travel Trends in California

Direct Travel Impacts, 2010-2018p

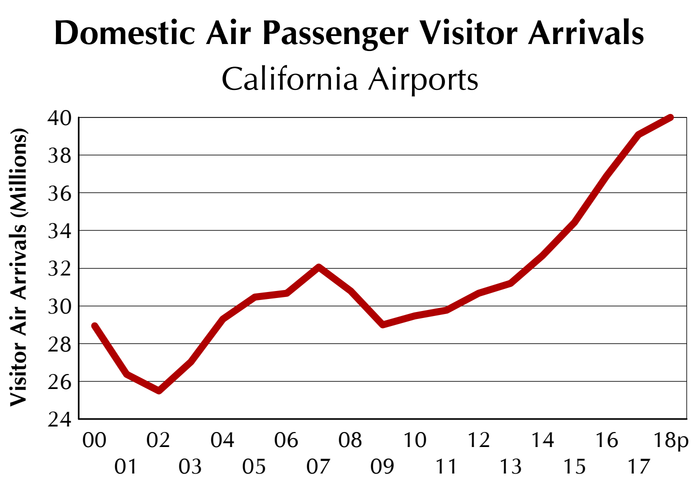
Spending ($Billions)	2010	2012	2014	2016	2017	2018p	Ave. Annual %Chg. 17-18p	Ave. Annual %Chg. 10-18p
Total (Current $)	98.7	108.9	117.4	126.4	133.3	140.6	5.4%	4.5%
Other	7.9	8.5	10.0	11.5	12.3	12.7	3.5%	6.0%
Visitor	90.8	100.4	107.4	114.9	121.0	127.9	5.6%	4.4%
Non-transportation	68.4	76.0	83.5	93.2	97.6	101.8	4.3%	5.1%
Transportation	22.4	24.4	24.0	21.7	23.4	26.1	11.2%	1.9%
Earnings ($Billions)								
Earnings (Current $)	30.0	33.7	38.1	46.1	49.4	52.5	6.3%	7.2%
Employment (Thousands)								
Employment	882	945	1,028	1,110	1,144	1,163	1.7%	3.5%
Tax Revenue ($Billions)								
Total (Current $)	13.3	13.7	15.6	17.4	18.1	19.3	7.1%	4.7%
Local	3.4	3.8	4.5	5.3	5.6	5.9	5.1%	7.1%
Visitor	2.2	2.6	3.2	3.7	4.0	4.2	5.4%	8.4%
Business or Employee	1.2	1.2	1.3	1.5	1.6	1.7	4.3%	4.2%
State	4.9	4.8	5.2	5.3	5.3	5.9	10.9%	2.5%
Visitor	3.8	3.7	3.9	3.8	3.9	4.5	14.2%	2.0%
Business or Employee	1.0	1.1	1.3	1.5	1.4	1.4	1.9%	4.1%
Federal	5.0	5.1	6.0	6.9	7.1	7.5	5.7%	5.1%

Other spending includes resident air travel, travel arrangement and reservation services, and convention and trade show organizers. **Non-transportation visitor spending** includes accommodations, food services, retail, food stores, and arts, entertainment & recreation. **Visitor transportation spending** includes private auto, auto rental, other local ground transportation and one-way airfares.
Earnings include wages & salaries, earned benefits and proprietor income.
Employment includes all full- and part-time employment of payroll employees and proprietors.
Local tax revenue includes lodging taxes, sales taxes, auto rental taxes and airport passenger facility charges paid by visitors, and the property tax payments and sales tax payments attributable to the travel industry income of employees and businesses.
State tax revenue includes lodging, sales and motor fuel tax payments of visitors, and the income tax and sales tax payments attributable to the travel industry income of businesses and employees.
Federal tax revenue includes motor fuel excise taxes and airline ticket taxes paid by visitors, and the payroll and income taxes attributable to the travel industry income of employees and businesses.



In real dollars (adjusted for inflation) California travel spending increased by 2.9 percent over 2017, following a 3.6 percent increase the preceding year (see top graph, left). Over the past five years, real and current travel spending have had similar rates of increase.

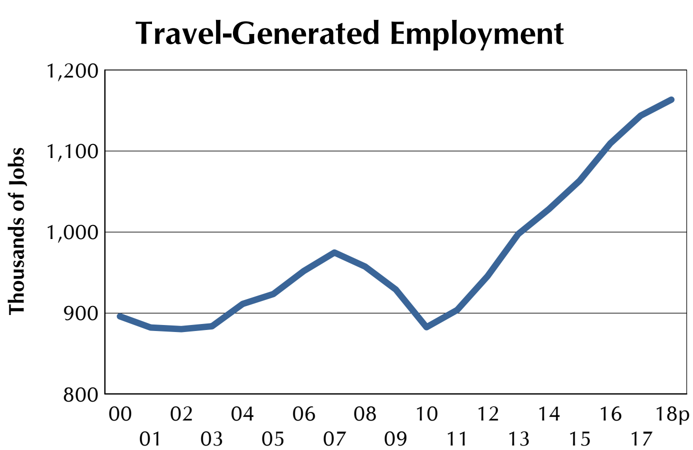
Sources: Real dollar travel spending was adjusted with a composite of price indices for the West Urban CPI, California room rates reported by STR, Inc., California gasoline prices reported by the Energy Information Administration, and airfares to California airports reported by the U.S. Department of Transportation Origin and Destination survey.



Visitor air travel on domestic flights to California destinations (41.9 million) increased by 7.3 percent in 2018. During the past three years, visitor arrivals on domestic flights have increased at 4.4 percent per year.

Sources: Dean Runyan Associates, Inc. and Bureau of Transportation Statistics (U.S. Dept. of Transportation).

Note: These estimates are for visitor arrivals only. They do not include return travel of California residents or connecting flights normally reported in air passenger statistics.

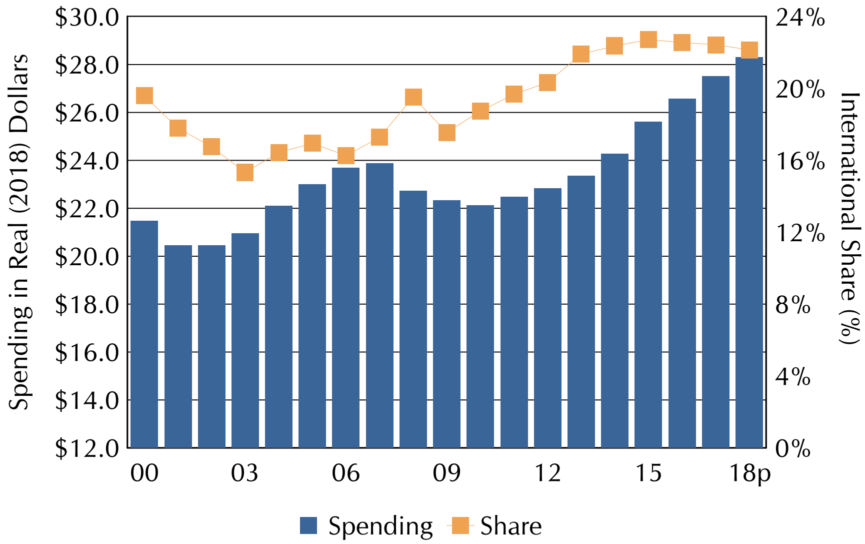


Travel-generated employment has increased by 3.5 percent per year since 2010.

Source: Dean Runyan Associates.

Origin

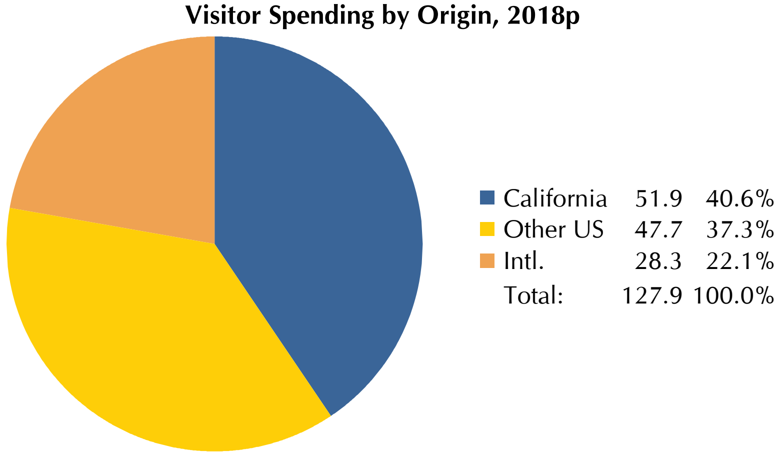
International Visitor Spending



The share of international travel spending in California has flattened over the past four years after substantial increases in previous years. Spending is in real dollars.

Sources: Tourism Economics, International Trade Administration (U.S. Department of Commerce) and Bureau of Economic Analysis (U.S. Department of Commerce).

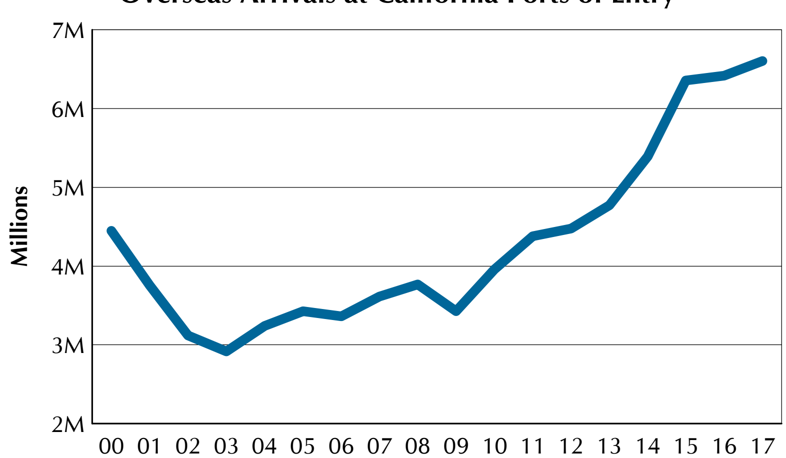
Visitor Spending by Origin, 2018p



In 2018, about six out of every ten dollars spent at California visitor destinations were attributable to residents of other states and countries.

Source: TNS Travels America visitor survey and sources cited for preceding graph.

Overseas Arrivals at California Ports of Entry



Overseas arrivals at California Ports of Entry is estimated to have increased by 2.9 percent in 2018.

Note: 2018 has been estimated using Tourism Economics annual change for overseas visitors from 2017 to 2018. The original source data is under review by the NTTO. NTTO press release. https://bit.ly/2JTgmH1

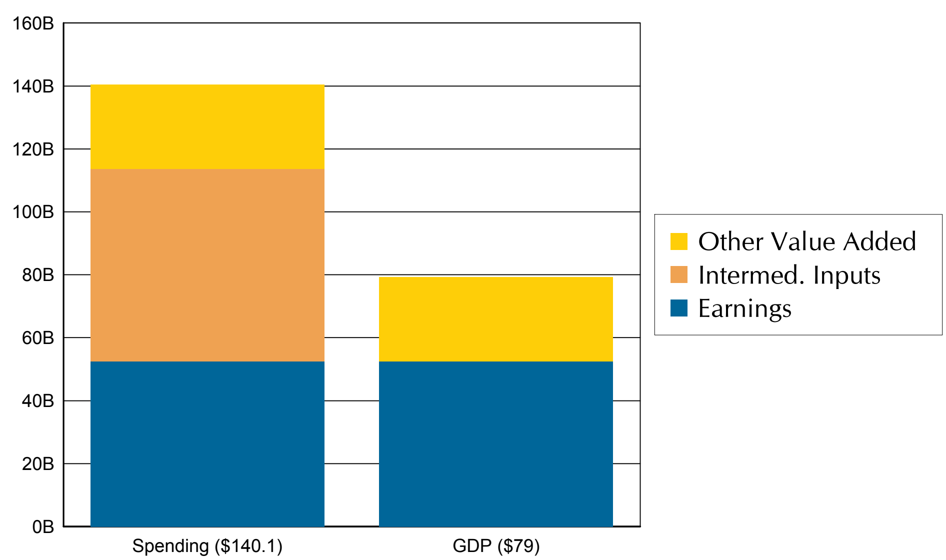
Sources: Office of Immigration Statistics (U.S. Department of Homeland Security). California total is the sum of LA and SF Ports of Entry. Tourism

California Travel Industry Gross Domestic Product

Gross Domestic Product (GDP, also referred to as value-added) is a measure of economic activity that reflects the market value of the labor and capital used to produce goods and services. The GDP for a particular industry within a state excludes the intermediate inputs purchased by businesses from other firms in the production process. It includes payments to individuals in the form of earnings, indirect business taxes to government, and other payments to individuals and corporations. The relationship between travel spending and the GDP of the California travel industry is shown below. California travel industry GDP of $79 billion represents approximately two and one-half percent of total California GDP.

The below estimates represent only the direct impacts of travel spending. A portion of the inputs purchased by travel businesses in California will be delivered by other California firms that are not strictly part of the travel industry. Restaurants, for example, will purchase agricultural products from other California businesses. These inputs are sometimes referred to as "indirect" effects.

Travel Spending and Gross Domestic Product of California Travel Industry, 2018p
($ Billions)



Direct, Secondary and Total Impacts

Travel spending within California brings money into many California communities in the form of business receipts. Portions of these receipts are spent within the state for labor and supplies. Employees, in turn, spend a portion of their earnings on goods and services in the state. This re-spending of travel-related revenues creates *indirect and induced impacts*. To summarize:

- **Direct** impacts represent the employment and earnings attributable to travel expenditures made directly by travelers at businesses throughout the state.
- **Indirect** impacts represent the employment and earnings associated with industries that supply goods and services to the direct businesses (i.e., those that receive money directly from travelers throughout the state).
- **Induced** impacts represent the employment and earnings that result from purchases for food, housing, transportation, recreation, and other goods and services made by travel industry employees, and the employees of the indirectly affected industries.

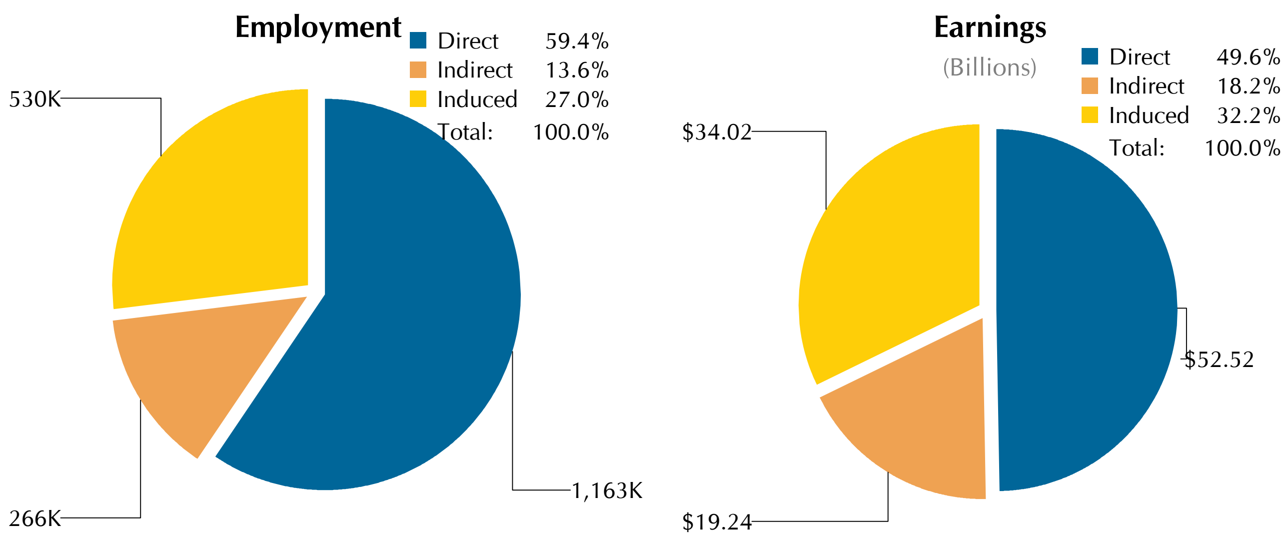
The impacts in this section are presented in terms of the employment and earnings of eleven major industry groups. These industry groups are similar, but not identical to the business service (or commodity) categories presented elsewhere in this report. (The specific industries that comprise these major groups are listed in Appendix D.) Direct travel impacts, such as those discussed in the first part of this section and the regional and county impacts presented elsewhere in this report are found in the following industry groups:

- **Accommodations & Food Services**
- **Arts, Entertainment and Recreation**
- **Trade**
- **Transportation**

As is indicated in the following tables and graphs, the total direct employment and earnings of these four industry groups is identical to the total direct employment and earnings shown in the first part of this section. The only difference is that these industry groups represent industry groupings (firms) rather than commodity or business service groupings.

The indirect and induced impacts of travel spending are found in all thirteen industry groupings shown in the following tables and graphs that summarize the primary secondary impacts.

Total Employment and Earnings Generated by Travel Spending in California, 2018p

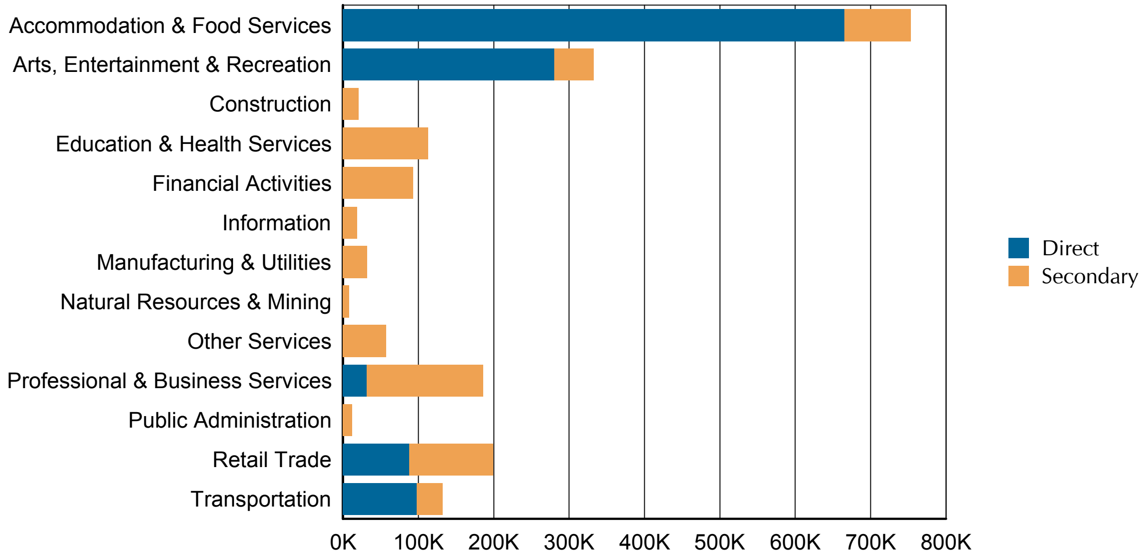


Sources: Dean Runyan Associates with IMPLAN GROUP, LLC. Total employment was 1,958,500 jobs. The employment multiplier for 2018 is 1.68 (1,958.50/1,163.23). Total earnings were $105.78 Billion. The earngins multiplier is 2.01 (105.78/52.52).

- **Professional and Business Services** (154,100 jobs and $11.8 billion earnings). A variety of administrative services (e.g., accounting and advertising) are utilized by travel businesses (indirect effect). Employees of these firms also purchase professional services (induced effect).
- **Education and Health Services** (113,400 jobs and $8.1 billion earnings). The secondary effects are primarily induced, such as employees of travel-related businesses use of medical services
- **Financial Activities** (92,700 jobs and $6.1 billion earnings). Both businesses and individuals make use of banking and insurance institutions.
- **Other Services** (57,100 jobs and $3.0 billion earnings). Employees of travel-related businesses purchase services from various providers, such as dry cleaners and repair shops.

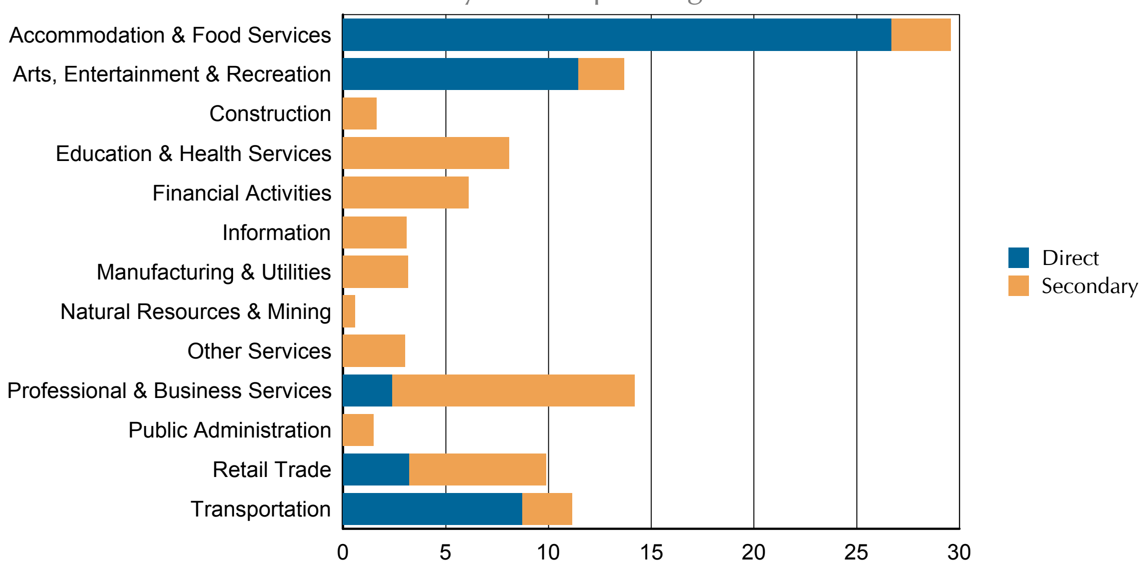
Direct and Secondary Employment

Generated by Travel Spending in California



Direct and Secondary Earnings

Generated by Travel Spending in California



Detailed estimates are reported in the following table. It should be emphasized that the estimates of indirect and induced impacts reported here apply to the entire state of California and do not necessarily reflect economic patterns for individual counties, regions or sub-regions within the state. While total economic impacts can be calculated on a county or regional level, such a detailed analysis is not included in this study. In general, geographic areas with lower levels of aggregate economic activity will have smaller secondary impacts within those same geographic boundaries.

Direct and Secondary Travel-Generated Earnings in California,
($Million)

Industry Group	Direct	Secondary Indirect	Secondary Induced	Secondary Total	Grand Total
Accommodation & Food Services	26,690	781	2,098	2,879	29,569
Arts, Entertainment & Recreation	11,455	1,534	688	2,222	13,677
Construction		513	1,138	1,651	1,651
Education & Health Services		83	8,010	8,093	8,093
Financial Activities		2,145	3,988	6,133	6,133
Information		1,847	1,261	3,109	3,109
Manufacturing & Utilities		1,441	1,732	3,173	3,173
Natural Resources & Mining		250	356	606	606
Other Services		792	2,220	3,012	3,012
Professional & Business Services	2,408	6,914	4,887	11,801	14,209
Public Administration		754	741	1,496	1,496
Retail Trade	3,235	848	5,811	6,658	9,893
Transportation	8,731	1,336	1,092	2,429	11,160
	52,519	**19,238**	**34,022**	**53,262**	**105,781**

Direct and Secondary Travel-Generated Employment in California,
(thousand jobs)

Industry Group	Direct	Secondary Indirect	Secondary Induced	Secondary Total	Grand Total
Accommodation & Food Services	665.5	24.0	63.9	88.0	753.5
Arts, Entertainment & Recreation	280.6	34.8	17.2	52.0	332.5
Construction		6.5	14.1	20.6	20.6
Education & Health Services		2.0	111.3	113.4	113.4
Financial Activities		34.0	58.7	92.7	92.7
Information		10.4	8.7	19.1	19.1
Manufacturing & Utilities		15.3	16.8	32.1	32.1
Natural Resources & Mining		4.0	4.4	8.4	8.4
Other Services		11.0	46.0	57.1	57.1
Professional & Business Services	31.5	89.7	64.4	154.1	185.5
Public Administration		6.0	6.2	12.2	12.2
Retail Trade	87.5	9.7	101.9	111.6	199.1
Transportation	98.2	18.3	16.0	34.3	132.4
	1,163	**266**	**530**	**795**	**1,958**

Source: Dean Runyan Associates and Minnesota Implan Group.

Note: These industry groups are not equivalent to the categories used in the direct impact tables used in this report. See Appendix G. Details may not add to totals due to rounding.

Detailed direct travel impacts for 2010 through 2018 follow:

CALIFORNIA
Travel Impacts, 2010-2018p

Total Direct Travel Spending ($Billion)	2010	2012	2013	2014	2015	2016	2017	2018
Destination Spending	90.8	100.4	102.4	107.4	111.3	114.9	121.0	127.9
Other Travel	7.9	8.5	9.3	10.0	10.7	11.5	12.3	12.7
Total	98.7	108.9	111.7	117.4	121.9	126.4	133.3	140.6

Visitor Spending by Type of Traveler Accommodation ($Billion)	2010	2012	2013	2014	2015	2016	2017	2018
Hotel, Motel	45.9	52.5	55.4	59.7	63.7	67.3	70.5	73.8
Private Home	14.8	16.0	15.7	16.1	15.9	15.8	17.2	18.8
Campground	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.9
Vacation Home	4.0	4.3	4.2	4.3	4.3	4.3	4.6	4.9
Day Travel	23.7	25.0	24.6	24.8	24.8	24.9	26.0	27.5
Total	90.8	100.4	102.4	107.4	111.3	114.9	121.0	127.9

Visitor Spending by Commodity Purchased ($Billion)	2010	2012	2013	2014	2015	2016	2017	2018
Accommodations	15.2	18.1	19.7	22.0	24.3	26.2	27.4	28.9
Food Service	23.3	25.5	26.3	27.2	28.7	30.4	32.0	33.5
Food Stores	3.0	3.4	3.5	3.6	3.8	3.9	3.9	3.9
Local Tran. & Gas	18.2	19.7	18.3	18.6	17.2	16.0	17.6	19.9
Arts, Ent. & Rec.	14.0	15.2	15.6	16.1	16.7	17.4	17.8	18.2
Retail Sales	12.7	13.7	14.0	14.5	15.0	15.3	16.5	17.3
Visitor Air Tran.	4.2	4.7	5.0	5.4	5.6	5.7	5.8	6.1
Total	90.8	100.4	102.4	107.4	111.3	114.9	121.0	127.9

Industry Earnings Generated by Travel Spending ($Billion)	2010	2012	2013	2014	2015	2016	2017	2018
Accom. & Food Serv.	14.9	17.0	18.1	19.4	21.2	23.4	25.0	26.7
Arts, Ent. & Rec.	7.4	8.2	8.7	9.3	9.9	10.6	11.0	11.5
Retail	2.3	2.5	2.5	2.7	2.8	3.0	3.1	3.2
Ground Tran.	1.1	1.2	1.2	1.3	1.4	1.5	1.7	2.2
Visitor Air Tran.	1.4	1.6	1.8	1.8	2.0	2.7	3.1	3.2
Other Travel	2.9	3.1	3.5	3.6	4.0	4.9	5.5	5.7
Total	30.0	33.7	35.9	38.1	41.4	46.1	49.4	52.5

Industry Employment Generated by Travel Spending (Thousand Jobs)	2010	2012	2013	2014	2015	2016	2017	2018
Accom. & Food Serv.	494.8	538.7	572.0	589.6	608.8	632.5	652.0	665.5
Arts, Ent. & Rec.	216.7	230.2	243.1	252.4	261.3	270.8	276.8	280.6
Retail	75.2	77.9	78.9	82.2	83.5	85.8	87.3	87.5
Ground Tran.	28.4	30.6	31.1	31.6	32.7	34.0	35.0	35.8
Visitor Air Tran.	20.4	21.5	22.7	22.8	24.2	27.5	30.2	30.7
Other Travel	46.9	46.6	49.4	49.8	52.6	59.0	62.4	63.2
Total	882.4	945.4	997.3	1,028.4	1,063.1	1,109.6	1,143.8	1,163.2

Tax Receipts Generated by Travel Spending ($Million)	2010	2012	2013	2014	2015	2016	2017	2018
Local Tax Receipts	3.4	3.8	4.1	4.5	4.9	5.3	5.6	5.9
State Tax Receipts	4.9	4.8	5.0	5.2	5.2	5.3	5.3	5.9
Federal Tax Receipts	5.0	5.1	5.6	6.0	6.4	6.9	7.1	7.5
Total	13.3	13.7	14.8	15.6	16.5	17.4	18.1	19.3

Details may not add to total due to rounding. * Other Travel includes air travel spending made by California residents for travel to out-of-state and other California visitor destinations and travel arrangement services.** Retail includes gasoline. Local tax receipts include transient occupancy taxes, sales taxes, and airport passenger facility charges paid by visitors, and the property tax payments and sales tax payments attributable to the travel industry income of employees and businesses. State tax receipts include sales tax payments and motor fuel tax payments of visitors, and the income tax payments and sales tax payments attributable to the travel industry income of employees and businesses. Historical revisions have been made on prior years based on the availability of revised source data for cities and counties throughout the state. Economic impacts are attributed to visitor trips which are defined as trips taken by individuals that stay overnight away from home, or travel more than 50 miles one-way on a non-routine trip, as defined by the California Tourism Marketing Act.

III. State and Local Government Revenue

This section is concerned with the contribution of the California travel industry to state and local government finance. The first part of the report compares the travel industry to various other sectors of the state economy. The remainder provides an overview of state and local finance and the revenue contribution of the travel industry.

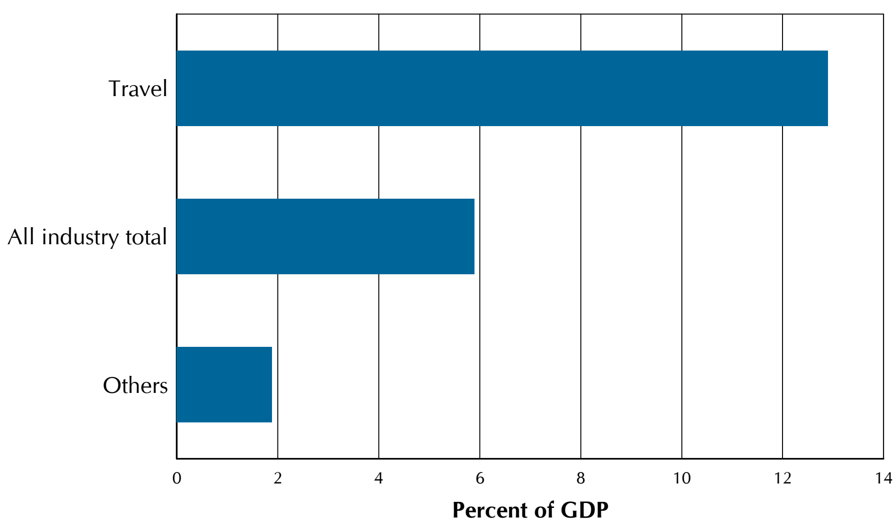
Industry Gross Domestic Product and Taxes

One way to consider the tax contributions of various sectors of the economy is to express the tax payments of businesses to government as a percentage of Gross Domestic Product. The bar chart and accompanying table show these tax payments (taxes on production and imports or TOPI) for a sample of goods-producing and service sectors in the state, including travel. TOPI include most of the taxes paid by the business firm to local, state and federal governments except for income taxes. This includes property taxes, licenses and fees and the sales and excise taxes collected from consumers. It is because of these later taxes that retail trade and travel have relatively high proportions of tax payments in relation to their gross domestic products.

Production & Import Taxes as a Percent of GDP

Selected California Industry Sectors, 2017 Calendar Year

	GDP	TOPI	Percent
Information	271,114	5,116	1.9%
Construction	101,498	1,245	1.2%
Health care and social a	174,939	3,000	1.7%
Manufacturing	297,459	10,836	3.6%
Retail trade	146,338	35,976	24.6%
Travel	76,878	9,915	12.9%
All industry total	2,797,601	164,903	5.9%



Sources: Bureau of Economic Analysis and Dean Runyan Associates.

*TOPI denotes taxes on production and imports less subsidies.

GDP & TOPI expressed in $Million.

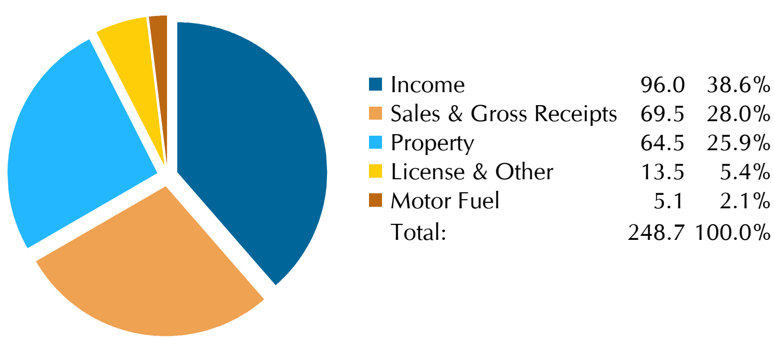
The remainder of this report will focus on the travel industry and the specific tax contributions made to state and local government in California. In addition to the taxes on production discussed in the previous section, the tax payments of travel industry employees derived from the income earned from travel industry businesses will be included.[1] The three primary sources of tax revenue generated by the travel industry are:

- Sales tax receipts generated by ***visitor spending.*** This includes local and state sales taxes, lodging taxes, alcoholic beverage taxes, motor vehicle rental taxes and motor fuel taxes.
- Taxes paid by ***travel industry businesses*** attributable to travel generated business receipts (property and income taxes).
- Taxes paid by ***travel industry employees*** attributable to travel generated earnings (sales and property taxes).

California Tax Structure

The pie chart below, adapted from the Bureau of the Census' State and Local Government Finance and other data sources, shows the main categories of tax revenue in California. More than one-quarter (28%) of all tax revenue is derived from sales and gross receipts taxes. Property taxes, paid primarily by homeowners and businesses to local governments, constitute one-fourth of all tax revenue (25.9%). Income taxes constitute more than one-third (38.6%) of all tax revenue.

California State and Local Government Tax Revenues
2017-2018 Fiscal Year ($Billions)



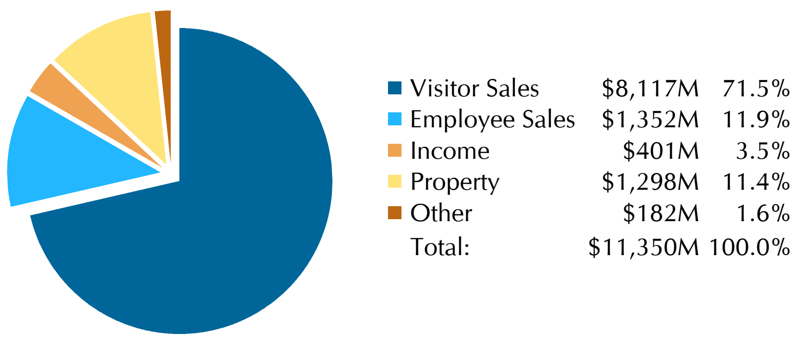
Sources: The 2017-18 fiscal year estimates of state and local tax revenues in California were prepared by Dean Runyan Associates from various sources, including the Bureau of the Census (State and Local Government Finance), the California Department of Revenue, the Bureau of Economic Analysis and a selection of annual financial reports for cities and counties. Sales and gross receipts taxes include the state privilege tax, local sales taxes and a variety of selective taxes, such as those on lodging.

[1]In effect, this means re-allocating some of the sales and excise payments made by other industries to the travel industry because the payments are ultimately made by consumers that earned their income in the travel industry.

Travel Industry Tax Revenue

The distribution of taxes generated by the travel industry for the 2017-18 fiscal year is shown in the following pie chart. The categories are the same as the preceding figure, with the exception that sales tax receipts are also distinguished between those that are generated by visitor spending and those that are generated by the spending of travel industry employees.

California Travel Industry State and Local Government Tax Revenues
2017-2018 Fiscal Year ($Million)



Source: Dean Runyan Associates. "Other" travel generated tax revenue includes passenger facility charges for visitors who travel to California Airports.

Whereas about one-quarter of all state and local tax revenue in California was attributable to sales tax collections in the 2017-18 fiscal year, 83.4 percent of all travel industry tax revenue was attributable to sales tax receipts from visitors (71.5%) and the purchases of employees in the travel industry (11.9%).

Travel industry state and local tax revenues are compared to total California state and local tax revenues in the following table. Because the travel industry generates a relatively high proportion of sales tax revenues, it is associated with proportionately more tax revenues than would be expected given the size of the industry, as measured by earnings or gross domestic product. Whereas the earnings and GDP of the travel industry are approximately 2.5 percent of the state totals, travel industry tax revenues represent 4 percent of all state and local tax revenues in California (see table, following page). This is consistent with the initial analysis that compared different industries within the state.

California State and Local Tax Revenues
2017-2018 Fiscal Year ($Million)

Type	Total	Travel Generated	Percent Travel
Sales & Gross Receipts	$69,505	$8,293	11.9%
Property	$64,496	$1,298	2.0%
Motor Fuel	$5,136	$1,176	22.9%
Income	$96,005	$401	0.4%
License & Other	$13,532	$182	1.3%
Total	**$248,673**	**$11,350**	**4.6%**

Source: Dean Runyan Associates and Bureau of the Census, State and Local Government Finance.

Summary
This analysis of the tax revenue generated by the California travel industry can be summarized as follows:

- The California travel industry contributes more tax revenue to state and local governments than would be expected based on the size of the industry. Whereas the gross domestic product and employee earnings represent about two and one half percent of the state economy, the travel industry generated 4.6 percent of tax revenue in the 2018 fiscal year.
- Over eighty percent of all travel-generated tax revenue is attributable to sales and gross receipts taxes. The travel industry share of the state total is more than 10 percent. Not only are most travel industry goods and services taxed, but a large share of these commodities (lodging and motor fuel) are taxed at rates that are greater than the general sales tax.
- State and local tax revenue was equivalent to $890 per California resident household.
- A large share of these tax revenues are borne by visitors who reside in other states and countries.

The revenue contributions of California's fifty-eight counties are detailed in the following two tables. (Note: The 2017 calendar taxable sales were the most current data available from the California State Board of Equalization at the time that this report was prepared.)

APPENDICES

Appendix A	2018 Travel Impact Estimates
Appendix B	Key Terms and Definitions
Appendix C	Regional Travel Impact Model
Appendix D	Travel Industry Accounts
Appendix E	California Earnings and Employment by Industry Sector
Appendix F	Industry Groups

2018 TRAVEL IMPACT ESTIMATES

This appendix provides a brief overview of the methodology, terminology and limitations of the travel impact and visitor volume estimates.

DIRECT IMPACTS

The estimates of the direct impacts associated with traveler spending in California were produced using the Regional Travel Impact Model (RTIM) developed by Dean Runyan Associates. The input data used to detail the economic impacts of the California travel industry were gathered from various local, state and federal sources.

Travel impacts consist of estimates of travel spending and the employment, earnings, and state and local taxes generated by this spending. These estimates are also broken out by type of traveler accommodation and by the type of business in which the expenditures occur.

PRELIMINARY ESTIMATES

Preliminary estimates for 2018 were prepared at the state, regional and county level. These estimates take advantage of the most current available data. However, because full-year data was not available in all cases, these estimates are subject to subsequent revision as additional information relating to travel and its economic impact in 2018 becomes available.

TRANSPORTATION IMPACTS

The treatment of ground transportation expenditures depends upon the level of geography (county, region or state). County and regional level estimates of destination spending include only a portion of ground transportation expenditures because some county and regional transportation expenditures are for travel to other California destinations. These expenditures are allocated to “other travel.” State level estimates include all in-state expenditures for ground transportation.

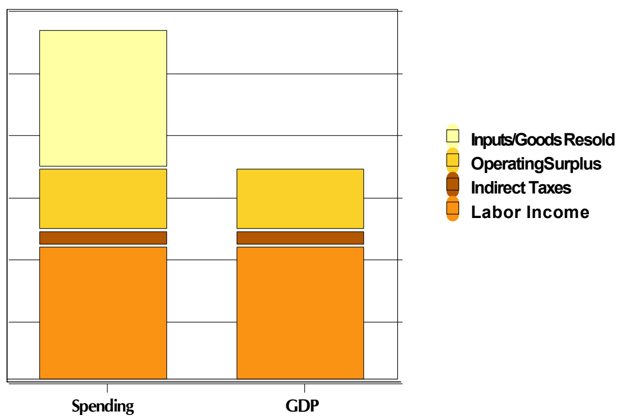
SECONDARY (INDIRECT AND INDUCED) IMPACTS

Direct impacts are reported for all counties within California. Secondary employment and earnings impacts over and above direct impacts are reported at the state level only for the year 2018. These indirect and induced impacts are generated from the direct impacts produced by the RTIM, discussed above, and an input-output model of the California economy prepared by the IMPLAN Group, Inc. Indirect impacts represent the purchases of goods and services from other firms by businesses that directly receive expenditures part derived from travel expenditures. The sum of the direct, indirect and induced impacts equals the total impact of all spending by visitors in the state. The "multiplier" refers to the ratio of the total impacts to the direct impacts for employment or earnings.

GROSS DOMESTIC PRODUCT

An estimate of the Gross Domestic Product (GDP) of the California travel industry based on the RTIM direct travel impacts is also provided in this report. The GDP of an industry is equal to gross output (sales or receipts) minus intermediate inputs (the goods and services purchased from other industries).GDP is always less than output or sales because GDP measures only the "value added" of an industry and does not include the cost of the inputs that are also necessary to produce a good or service. GDP is a useful concept because it permits comparisons of the economic contributions of different industries. The relationship between spending and gross domestic product is illustrated inthe figure below. Examples of inputs are the food or accounting services that restaurants purchase from suppliers. "Goods resold" are the commodities that retail establishments purchase from manufacturers or wholesale trade

Relationship Between Spending and Gross Domestic Product



It is for this reason that "travel spending" - as measured from surveys of visitors - is not the best measure of the travel industry's real economic contribution. This is because some visitor spending is actually counted as the GDP of other industries (e.g., agriculture, accounting, manufacturing). Furthermore, these other industries may or may not be located within the geographic area of interest. If the farm were located within the region of interest, then the GDP of the local farm would be included as an indirect or secondary effect. If not (e.g., a manufacturing firm in another state or country), then that portion of GDP is not counted.

The preceding graph also shows the three main components of GDP. For most industries, labor income (essentially equivalent to earnings in this report) is the primary component of GDP. This is true of the travel industry. A second component is the tax payments that businesses make to government, such as sales, excise and property taxes. In the case of excise taxes, businesses are essentially a collection agency for the government. The final component, operating surplus, represents the income and payments (e.g., dividends, interest) to other stakeholders of the firm.

The concept of GDP also illustrates that with small geographic units of analysis (e.g., counties), earnings, employment, and tax revenues are the best measures of the economic value of the travel industry to the local economy. Small area measures of GDP are less reliable and much of the operating surplus may leak out of the local economy anyway. Indirect effects are also generally less in smaller economies.

INTERPRETATION OF IMPACT ESTIMATES

Users of this report should be aware of several issues regarding the interpretation of the impact estimates contained herein:

- The estimates contained in this report are based on the most current data available and supersede all previous estimates of travel impacts.
- The estimates in this report are expressed in *current* dollars unless otherwise noted.
- The employment estimates in this report are estimates of the total number of full and part-time jobs directly generated by travel spending, rather than the number of individuals employed. Both payroll and self-employment are included in these estimates. Caution should therefore be used in comparing these estimates with other employment data series.
- In general, estimates of small geographic areas (e.g., rural counties) are less reliable than estimates for regions or metropolitan counties. Trend analysis and comparisons of counties with relatively low levels of travel related economic activity should therefore be interpreted cautiously.
- The estimates of travel impacts published in this report will necessarily differ somewhat from estimates generated from different models, methodologies and data sources. Nonetheless, it should be emphasized that all credible estimates of direct travel impacts at the state level, including those of Dean Runyan Associates, are of similar magnitude.

DEFINITION OF TERMS

Commodity: A classification of a product or service, such as lodging or food service. An establishment or industry may produce more than one commodity.

Direct Impacts: Employment, earnings and tax receipts *directly* generated by travel spending, as distinguished from secondary and total impacts.

Earnings: Earnings include wage and salary disbursements, other earned income or benefits, and proprietor income. Only the earnings attributable to travel expenditures are included.

Employment: Industry employment (jobs) associated with travel-generated *earnings*. Includes both full-time and part-time positions, and salaried or self-employed individuals. Employment is reported as an average for a time period, typically annual. (Unless otherwise noted, the employment estimates refer to establishment or industry employment at place of work, not the employment status or residence of the individual.)

Federal Taxes: Federal taxes include the motor fuel excise tax, airline ticket taxes, and personal income and payroll taxes.

Industry: A classification of business or government establishments based on their primary technological process. (See NAICS Appendix table.)

Local Taxes: Lodging and sales taxes imposed by cities, counties and other regional tax jurisdictions in California. These taxes are levied on sales to visitors and the spending of employees attributable to travel industry earnings. Passenger Facility Charges attributable to visitors (a fee imposed on airline tickets) are included in counties with airports. Property tax payments attributable to travel industry businesses and employees are also included.

Other spending: Other spending includes spending by residents on ground and air transportation for travel to other destinations, spending on travel arrangement services, and convention/ trade shows.

Private Home: Unpaid overnight accommodations of friends and relatives.

Receipts: Travel expenditures less the sales and excise taxes paid by the consumer.

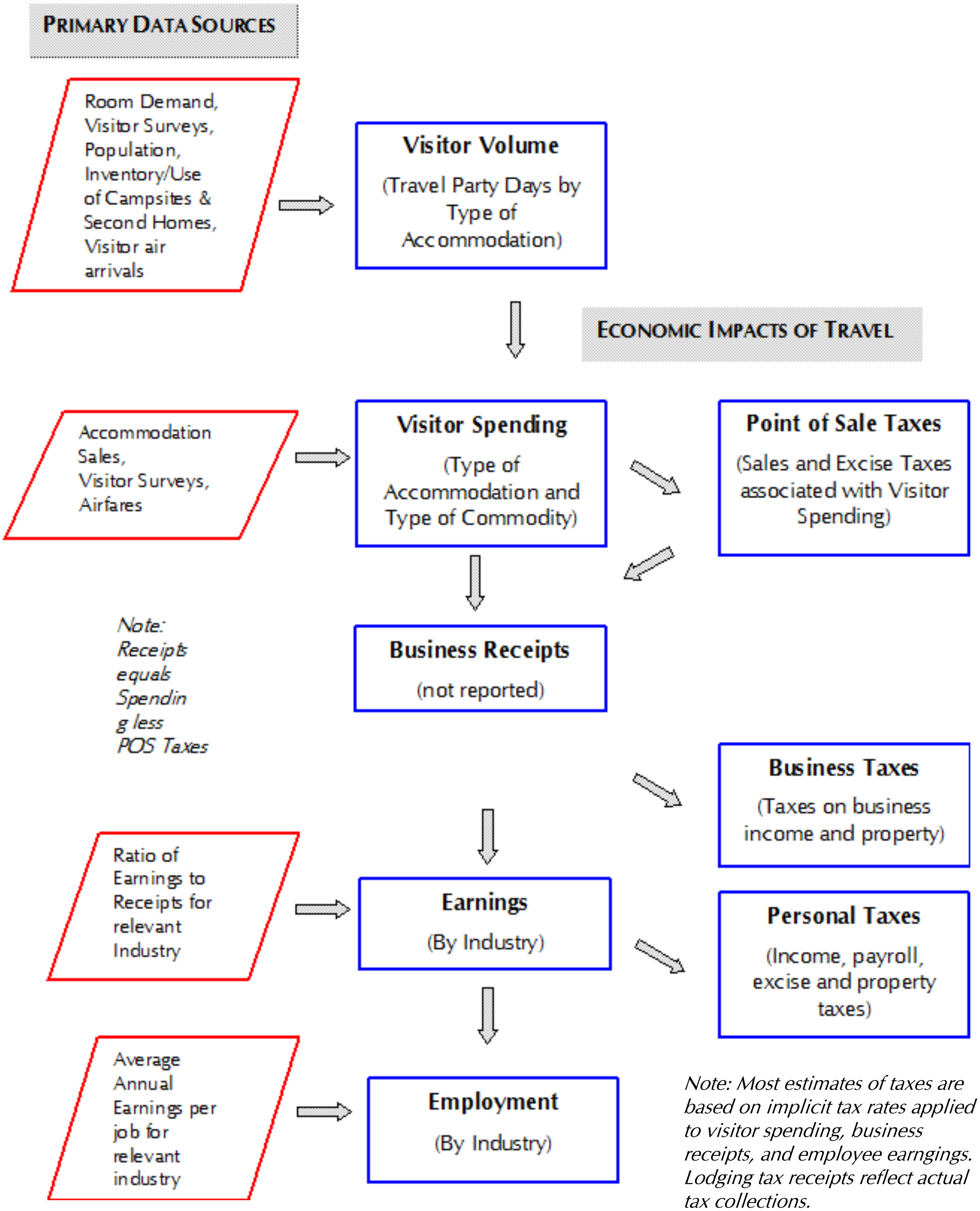
State Taxes: Sales, motor fuel, and business and personal income taxes imposed by the state of California. These taxes are levied on sales to visitors and the spending of employees attributable to travel industry earnings.

Total Impacts: The sum of *Direct* and *Secondary* impacts.

Travel spending: The sum of visitor and other spending related to travel.

Visitor spending: All spending on goods & services by visitors at the destination. Also referred to as destination spending.

REGIONAL TRAVEL IMPACT MODEL



TRAVEL INDUSTRY ACCOUNTS: A COMPARISON OF THE REGIONAL TRAVEL IMPACT MODEL AND TRAVEL & TOURISM SATELLITE ACCOUNTS

An economic account is a method for displaying inter-related information about a set of economic activities. A travel industry account is a method to report different types of related information about the purchase of goods and services by visitors. The Bureau of Economic Analysis (BEA), which now provides annual and quarterly estimates of travel and tourism at the national level, describes a Travel and Tourism Satellite Account (TTSA) as "present(ing) a rearrangement of information from the National Income and Product Accounts, 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."[1] Similarly, the RTIM has been developed by Dean Runyan Associates to estimate travel spending, earnings, employment, and tax receipts at the state, county, and regional levels. These initial findings can, in turn, be used as input data for deriving estimates of other economic measures, such as value-added and indirect effects.

This appendix provides an overview of the Regional Travel Impact Model (RTIM) and travel and tourism satellite accounts (TTSAs). Although there is no single or absolute form of a TTSA, the one developed by the Bureau of Economic Analysis (BEA) will be the basis of the analysis here. The definitions, framework, and estimating methods used for the U.S. BEA TTSA follow, as closely as is practicable, the guidelines for similar travel satellite accounts that were developed by the World Tourism Organization (WTO) and the Organization for Economic Co-operation and Development (OECD).

The primary focus is on the direct impacts of visitor spending. Visitors are defined as persons that stay overnight away from home, or travel more than fifty miles one- way on a non-routine trip. Only the expenditures related to specific trips are counted as visitor spending. Other travel related expenditures such as the consumption of durable goods (e.g., recreational vehicles or sporting equipment) or the purchase of vacation homes are not considered.

While such a definition of the travel industry (i.e., the trip related expenditures of visitors) is conservative, it is also in keeping with the notion of the travel industry as being an export-oriented industry for specific local communities. That is, visitors are important to regions because they inject money into the local economy. This focus on the export-oriented nature of the travel industry for local communities becomes blurred if the industry is defined so as to include non-trip related expenditures.

[1] Peter D. Kuhbach, Mark A. Planting, and Erich H. Strassner, "U.S. Travel and Tourism Satellite Accounts for 1998-2003," Survey of Current Business 84 (September 2004): 43-59.

PRIMARY CONCEPTS, CATEGORIES & DATA REQUIREMENTS

There are three primary types of information that are measured and/or estimated in a travel industry account. The first is a measure of the ***travel industry*** in terms of both the characteristics of the business firms that sell travel goods and services and the characteristics of consumers that purchase travel industry goods and services. The second is a measure of the ***demand segments*** that consume travel industry goods and services. For example, the distinction between business and leisure travel is a measure of demand segments. The third is a measure of the ***components of economic output*** associated with the travel industry. The employee earnings generated by visitor spending is one such component. Travel-generated tax receipts are another. These three categories of information represent different aspects of the accounting ledger - they represent different ways of viewing or analyzing the travel industry.

The bulk of this paper will discuss these three types of information in terms of their conceptual foundations, the data requirements, and some of the more salient issues that users of this information should be aware of. There will also be some discussion of ***indirect and induced effects*** in that these effects can be reasonably estimated from the direct travel industry accounts. These secondary (versus direct) effects describe the relationship of the travel industry to other sectors of the larger economy.

The intent of this discussion will be to provide a general overview of the process of constructing travel industry accounts and the underlying similarity between the RTIM and a TTSA. More technical issues are generally placed in footnotes.

TRAVEL INDUSTRY

Defining the travel industry is probably the most critical and data intensive effort involved in developing a travel industry account. It is an exercise in matching supply (sellers of goods and services) with demand (the travelers that purchase those particular goods and services). It is complicated by the fact that no single industrial classification scheme provides a valid measure of the travel industry.[2] There are only three significant industrial classifications (Accommodations [NAICS 721], Scheduled Passenger Air Transportation [NAICS 481111] and Travel Arrangement and Reservation Services [NAICS 5615]) that *primarily* sell travel industry goods and services.[3] Firms in other industries (retail, recreation, transportation) provide goods and services to both travelers and other types of consumers.

Because of this, most satellite accounts, as well as the RTIM, incorporate at least some information about the expenditures of visitors in order to define the supply of

[2] The North American Industrial Classification System (NAICS) is the current standard in the United States.

[3] Even these industries are not purely travel. For example, the accommodations industry provides services to local residents (food service and meeting rooms). Passenger airlines also ship cargo on the same planes that carry passengers. Fortunately, it is usually possible to make adjustments for these non-travel components through the use of additional data.

visitor industry firms. For example, if there is an estimate of visitor-days and an estimate of how much the average visitor spends on food services per day, then an estimate of visitor spending on food services can be calculated. In most cases, this will be only a fraction of all food service sales in that residents are a larger market for most restaurants.[4]
The industry sectors that are usually matched to visitor spending in this way are: accommodations (NAICS 721), food service (722), arts, entertainment and recreation (71), and retail trade (44-45). A portion of transportation business is also part of the travel industry for obvious reasons.

In the case of the transportation sector, the definition and measurement of the travel industry component is more complicated because most transportation spending by visitors involves travel to and from the destination, rather than travel at or within the destination market. This is not an issue if the geographic scope of the travel industry market includes the origin and destination of travel. National travel industry accounts thus include all domestic passenger air transportation in the travel industry. The issue is more complicated at the state or regional level, however.

Suppose, for example, that the focus of a travel industry account is the state of California. How should the purchase of a round trip airline ticket by a Chicago resident traveling to Phoenix be treated in that only some of the economic impact of this spending will occur in California? A reasonable approach would be to allocate only a portion of this spending (and related payroll, taxes, etc.) to California and ignore the remainder for the purpose of creating a travel industry account for California. However, if this procedure were followed for every state, the sum of the state accounts would be less than the national travel account. The state accounts would be additive if outbound air travel from each state were included. However, this is methodologically inconsistent with the construction of a national account, which does not include outbound travel as a component of domestic tourism demand. The approach used in the RTIM is to make a distinction between the *visitor industry*, that includes only visitor demand, and the *travel industry*, which includes visitor demand and that portion of outbound travel that can be attributed to the resident economy. For example, the passenger air transportation employment in California can be divided between three groups of travelers: inbound, outbound, and pass-through. Only that employment attributable to inbound travel is part of the California *visitor industry*. Employment attributable to outbound and pass- through travelers is included with the larger *travel industry*.[5]

[4] The proportion can vary enormously among regions and localities, however. In many popular visitor destinations, the primary market for food service will be visitors. It should also be noted that even with reliable visitor survey data, there is still the issue of how to translate spending on food service *commodities* to the supply of food service by *industry*. As indicated in the footnote above, food service is also supplied by the accommodation industry.
[5] The same issue arises with travel agencies and reservation services (NAICS 5615). Most of these services are probably related to outbound travel and are treated as such in the RTIM.

The following two tables display the specific industries that are included in the travel industry for the BEA's national TTSA and the RTIM. Although not identical, the industries are equivalent with only a few exceptions.[6]

Bureau of Economic Analysis Tourism Industries
Distribution of Travel-Generated Compensation
in United States, 2007

Accommodation & Food Services	**38.1%**
Traveler accommodations	21.5%
Food services and drinking places	16.6%
Transportation	**23.3%**
Air transportation	15.4%
Rail transportation	0.4%
Water transportation	1.2%
Interurban bus transportation	0.3%
Interurban charter bus transportation	0.2%
Urban transit systems & other tran.	1.7%
Taxi service	1.0%
Automotive equipment rental & leasing	2.0%
Automotive repair services	0.8%
Parking lots and garages	0.2%
Toll highways	0.1%
Recreation	**11.2%**
Scenic and sightseeing transportation	0.4%
Motion pictures and performing arts	1.1%
Spectator sports	2.3%
Participant sports	2.4%
Gambling	3.0%
All other recreation and entertainment	2.0%
Retail & Nondurable Goods Production	**16.2%**
Petroleum refineries	0.6%
Industries producing nondurable PCE commodities, excluding petroleum refineries	4.4%
Wholesale trade & tran. services	4.2%
Gasoline service stations	1.3%
Retail trade services, excluding gasoline service stations	5.8%
Travel Arrangement	**7.3%**
All other industries	**2.2%**
Total Tourism Compensation	**100.0%**

Source: Adapted from Eric S. Griffith and Steven L. Zemanek, "U.S. Travel and Tourism Satellite Accounts for 2005-2008," Survey of Current Business (June 2009): 37, table 6.

[6] The major exception is that the BEA includes the production of consumer non-durables that are sold through retail outlets. This is not a major component and would be even less so at the level of the state.

RTIM Travel Impact Industries Matched to NAICS

Travel Impact Industry	NAICS Industry (code)
Accommodation & Food Services	
	Accommodation (721)
	Food Services and Drinking Places (722)
Arts, Entertainment & Recreation	
	Performing Arts, Spectator Sports (711)
	Museums (712)
	Amusement, Gambling (713)
	Scenic and Sightseeing Transportation (487)
Retail	
	Food & Beverage Stores (445)
	Gasoline Stations (447)
	Clothing and Clothing Accessories Stores (448)
	Sporting Goods, Hobby, Book, and Music Stores (451)
	General Merchandise Stores (452)
	Miscellaneous Store Retailers (453)
Ground Transportation	
	Interurban and rural bus transportation (4852)
	Taxi and Limousine Service (4853)
	Charter Bus Industry (4855)
	Passenger Car Rental (532111)
	Parking Lots and Garages (812930)
Air Transportation	
	Scheduled Air Passenger Transportation (481111)
	Support Activities for Air Transportation (4881)
Administrative/Support Services	
	Travel Arrangement and Reservation Services (5615)
	Convention and Trade Show Organizers (56192)

Source: Dean Runyan Associates

DEMAND SEGMENTS

The distinction between inbound and outbound travel has already been discussed in the previous section and in terms of the concepts of the *visitor industry* and the *travel industry*. Three other types of demand segments that are related exclusively to the *visitor industry* will be discussed here. The first two demand categories are reported by the BEA in their national TTSA. They are: ***leisure versus business travel***, and ***resident versus non-resident travel***. The third demand category is typically reported in the RTIM: ***type of traveler accommodation***. These three demand categories will be discussed in turn.

The distinction between ***leisure versus business travel*** is useful for several reasons. Economists like to distinguish between personal consumption expenditures on the one hand and business expenditures on the other. Indeed, this distinction is central for the National Income and Product Accounts (NIPAs). Those in the travel industry are more likely to be interested in this distinction because leisure travelers represent a more "marketable" segment because their travel choices are less determined by economic and business factors. Futhermore, business and leisure travelers tend to have different spending profiles. The availability of this information in either a state or regional TTSA or RTIM is essentially dependent on the availability of survey data (as it is at the national level). It should be noted, however, that such estimates are considerably less reliable for smaller geographic areas because of the limitations of survey data. Even at the state level, year-to-year changes in the composition of this demand segment should be interpreted in conjunction with other data.

The distinction between ***resident versus non-resident travel*** is fundamental to a national TTSA because it mirrors the distinction between the domestic economy and international transactions. Non-resident travel in the United States is considered an export in the official international transaction accounts.[7] The distinction is obviously also important because it is based on different political, legal, and currency regimes - factors that in themselves influence travel behavior. At the level of the state or region, the distinction between resident and nonresident travel is less important, although it is often reported.[8] There are at least two reasons why this distinction is less useful at state and regional levels.

First, there is considerably less of an economic rationale for distinguishing resident and non-resident travel at the level of the state, or any other political jurisdiction within the United States, than there is at the national level. States do not maintain interstate trade balance sheets that chart the flow of goods and services across state boundaries. From an economic point of view, the administration of the tax system is the primary, if only, reason for this distinction. In the case of travel and tourism,

[7] Conversely, the spending of U.S. visitors in other countries is treated as an import in the international transaction accounts.

[8] The issues discussed with regard to the reliability of survey data for leisure versus business travel also applies to this category

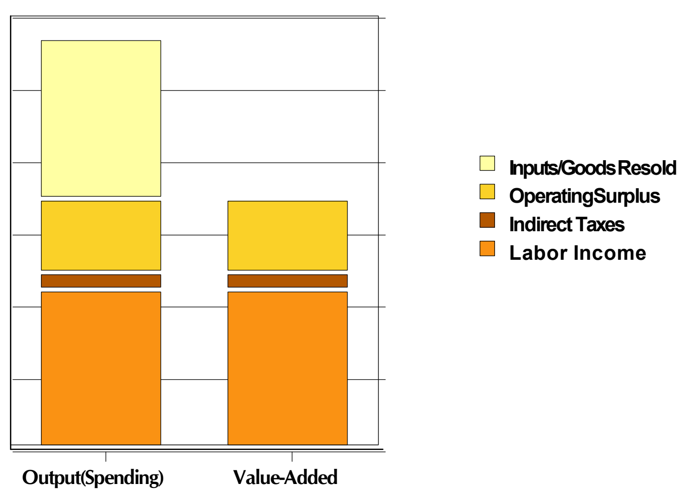
COMPONENTS OF INDUSTRY OUTPUT

Because both the RTIM and the TTSA are empirically linked to NAICS industry accounts, it is possible to provide estimates of different components of economic output. The major economic components most often estimated are:[11]

- Travel spending (Gross Output)
- Value-added (Gross Product)
- Earnings (labor income)
- Indirect business taxes (sales, excise, property taxes & fees).

The relationship of these components is shown below. As indicated, the value- added of a particular industry (the bar on the right) is equal to gross output (travel spending) minus the intermediate inputs used by travel industry businesses to produce the good or service. Restaurants, for example, prepare and serve the food products that are purchased from suppliers. Airlines purchase or lease airplanes from other firms. These intermediate inputs are not counted as part of the value- added of the travel industry. They are counted as value-added in other industries (e.g., agriculture, aerospace manufacturing).

Components of Industry Output



The distinction between gross output and value-added is probably even more important at the state or regional level. This is because the intermediate inputs that are purchased from other industries are even more likely to be purchased from businesses located in different regions or states. For example, the economic impact

[11] There are some small differences between the BEA TTSA and the RTIM in what these components include. The BEA allocates proprietor income to Operating Surplus, the RTIM allocates it to Labor Income. The RTIM does not have an estimate of property taxes in indirect taxes. Overall, property taxes on businesses are a relatively small proportion of indirect taxes.

of air passenger travel in the state of Hawaii should not include the purchase of airplanes manufactured in other parts of the world. Travel industry value-added is a more meaningful measure of the true economic impact of visitor spending in Hawaii because a portion of the economic impact of visitor spending in the state will actually occur elsewhere.[12] Value-added can also be viewed in terms of the distribution or payout of industry receipts, exclusive of those paid to other firms for intermediate inputs. Some of the receipts are distributed to labor as wages, benefits, and proprietor income. Some receipts are paid to government as indirect taxes. These taxes are called "indirect" because most of them are actually paid by consumers in the form of sales or excise taxes.[13] The remainder leaves gross operating surplus. Out of gross operating surplus various payments are made in the form of dividends, interest, and other payments, or retained by the firm. The sum of these three broad categories of payments is equal to travel industry value-added. To summarize:

Value-added = Spending *less* intermediate goods & services, or
Value-added = Labor Income *plus* indirect business taxes *plus* gross operating surplus.

The RTIM is similar to the TTSA in that it also provides estimates of these components of economic output. Travel spending, earnings, and tax impacts are generally provided at the state or regional level. Value-added is generally reported at the state-level only (sometimes referred to as Travel Industry Gross State Product). At the level of the state, travel industry value-added or GSP is an important measure -- more economically meaningful than travel spending.[14] For smaller geographic areas, however, the rationale for reporting value-added is less clear. First, there are real data limitations and data costs in deriving these estimates. Second, ***the most important components of value added for the travel industry are earnings and tax receipts***. Because the travel industry is relatively labor intensive and because a large proportion of travel industry goods and services are subject to excise and sales taxes, these two components of value-added (labor income and indirect taxes) are relatively high for the travel industry. The local effects of gross operating surplus are generally less important and certainly much more difficult to assess than are earnings and tax impacts. The relevance of earnings and tax receipts is also in keeping the export-oriented emphasis of the travel industry: earnings and tax receipts are more likely to stay in the local economy than is operating surplus.

[12] It should also be noted the value of the intermediate inputs used by travel industry firms will not necessarily disappear if the travel industry stops buying them. Aerospace firms will shift their production to other users (e.g., military). Agriculture will seek new markets for their products.
[13] Other taxes included here are property taxes, business franchise taxes, and other fees. Income taxes are not included, because they are paid out of operating surplus.
[14] It is also possible to compare different industries with respect to their value-added. It is more difficult and less useful to compare industries on the basis of sales.

Indirect, Induced and Secondary effects

To this point, the discussion of travel industry accounts has referred only to the direct output components. That is, the ripple effects of the re-spending of travel industry receipts throughout the larger economy have not been analyzed. The structure of both the TTSA and the RTIM permit such analysis.

- **Indirect** effects refer to the intermediate inputs used to produce the final product or service, providing that those inputs are themselves produced within the designated geographic area.

- **Induced** effects refer to the purchase of goods and services by *employees* that are attributable to direct and indirect impacts. These induced impacts are derived from economic data that describe the purchasing patterns of households. For example, employees of all the designated export-oriented industries will spend their income on food, household durables, health care, and so on.

- The sum of indirect and induced impacts is sometimes referred to as the **secondary** effect. These secondary impacts may be as great or greater than the direct impact alone.

- The ratio of the total effects (direct plus either indirect, induced, or secondary) to the direct effects is the **multiplier**.

The BEA reports the **indirect** components of economic output. This is equivalent to domestic travel spending less the goods and services imported from abroad to meet domestic demand. For travel, these imports would include souvenirs manufactured in China and petroleum extracted in Saudi Arabia. The indirect output multiplier for 2002 was 1.76. The ratio of domestic travel spending to travel industry value-added was 1.88. The difference reflects the intermediate inputs for travel imported from abroad.

At the state level, these indirect output multipliers are typically lower because relatively more of the intermediate inputs are purchased from outside of the state. At the county or metropolitan level, the multipliers are generally even lower for the same reason. Furthermore, the estimates are usually less reliable because of the data limitations of the regional input-output model used to estimate the indirect effects.

The BEA does not report **induced** effects - the effect of household spending of the direct and indirect labor income. Typically, these induced effects will be larger than the indirect effects at the state or regional level, in part because they are based on both the direct and indirect components.[15] As with indirect effects, the induced effects will also tend to be lower for smaller economic areas and the reliability of the estimates will be less.

[15] The induced effects can be estimated with the Implan model maintained by the Minnesota Implan Group.

Secondary effects should be interpreted cautiously. These effects describe the relationship of economic transactions at a point in time. These relationships will not necessarily remain constant with a change in direct economic output. This is because all economic resources have alternative uses. Because of this, it is often difficult to determine the effect of an increase or decrease in visitor spending on the larger economic system over time.

THE REGIONAL TRAVEL IMPACT MODEL AND TRAVEL & TOURISM SATELLITE ACCOUNTS COMPARED

This appendix has provided an overview of Dean Runyan Associates RTIM and the Bureau of Economic Analysis' domestic TTSA. These travel industry accounts are similar in terms of how they define the travel industry and the measures of the industry that are reported. The differences stem largely from their different levels of analysis - the BEA provides estimates at the national level only, while the RTIM's are typically constructed on a state or regional level. Because of this geographic focus, the RTIM provides a distinction between the visitor industry and the travel industry. The RTIM also provides measures of all of the components of economic output and secondary effects at the state or large region level. At smaller units of analysis, however, the emphasis is on earnings and tax receipts generated by travel spending as these are the most reliable and meaningful measures of the economic impact of travel at the local level.

California Earnings and Employment by Industry Sector, 2016

Industry Sector	Earnings ($Billion)	Percent of Total	Employment (Thousand)	Percent of Total
Primarily Export-Oriented	**175.6**	**11.1%**	**1,961**	**8.4%**
Agriculture, Forestry, Fishing and related	26.0	1.6%	489	2.1%
Mining	4.2	0.3%	59	0.3%
Manufacturing	145.3	9.2%	1,412	6.1%
***Travel*	46.1	*2.9%*	1,109	*4.8%*
Primarily Non Export-Oriented	**728.1**	**45.9%**	**11,257**	**48.4%**
Construction	84.0	5.3%	1,103	4.7%
Utilities	10.6	0.7%	63	0.3%
Wholesale trade	70.5	4.4%	875	3.8%
Retail trade	87.5	5.5%	2,106	9.1%
Real estate and rental and leasing	50.4	3.2%	1,175	5.0%
Management of companies and enterprises	33.8	2.1%	251	1.1%
Administrative and waste services	63.5	4.0%	1,484	6.4%
Other services, except public administration	57.3	3.6%	1,450	6.2%
Government and government enterprises	270.4	17.1%	2,751	11.8%
Mixed	**681.2**	**43.0%**	**10,047**	**43.2%**
Transportation and warehousing	47.8	3.0%	881	3.8%
Information	103.0	6.5%	612	2.6%
Finance and insurance	80.6	5.1%	1,026	4.4%
Professional and technical services	193.1	12.2%	2,007	8.6%
Educational services	23.9	1.5%	536	2.3%
Health care and social assistance	150.1	9.5%	2,599	11.2%
Leisure and Hospitality	82.6	5.2%	2,386	10.3%
California Total**	**1,584.9**	**100.0%**	**23,265**	**100.0%**

**Travel is not included in the sub and grand totals because it is also represented in other sectors (primarily leisure and hospitality, transporation, and retail trade).

Industry Groups

Accommodation & Food Services

Food services and drinking places
Hotels and motels, including casino hotels
Other accommodations

Arts, Entertainment & Recreation

Amusement parks, arcades, and gambling
industries Bowling centers
Fitness and recreational sports centers
Independent artists, writers, and performers
Museums, historical sites, zoos, and parks
Other amusement and recreation industries
Performing arts companies
Promoters of performing arts and sports and agents for public figures
Spectator sports companies

Construction

Construction of new nonresidential commercial and health care structures
Construction of new nonresidential manufacturing structures
Construction of new residential permanent site single- and multi-family structures
Construction of other new nonresidential structures
Construction of other new residential structures
Maintenance and repair construction of nonresidential structures
Maintenance and repair construction of residential structures

Education and Health Services

Child day care services
Community food, housing, and other relief services, including rehabilitation
services Home health care services
Individual and family services
Medical and diagnostic labs and outpatient and other ambulatory care services
Nursing and residential care facilities
Offices of physicians, dentists, and other health practitioners
Other private educational services
Private elementary and secondary schools
Private hospitals
Private junior colleges, colleges, universities, and professional schools

Financial Activities

Commercial and industrial machinery and equipment rental and leasing
Funds, trusts, and other financial vehicles
General and consumer goods rental except video tapes and
discs Imputed rental activity for owner-occupied dwellings
Insurance agencies, brokerages, and related
activities Insurance carriers
Lessors of nonfinancial intangible assets
Monetary authorities and depository credit intermediation activities
Nondepository credit intermediation and related activities
Real estate establishments
Securities, commodity contracts, investments, and related activities
Video tape and disc rental

Information

- Book publishers
- Cable and other subscription programming
- Data processing, hosting, ISP, web search portals and related services
- Directory, mailing list, and other publishers
- Internet publishing and broadcasting
- Motion picture and video industries
- Newspaper publishers
- Other information services
- Periodical publishers
- Radio and television broadcasting
- Software publishers
- Sound recording industries
- Telecommunications

Manufacturing & Utilities

(280 industries)

Natural Resources and Mining

- All other crop farming
- Animal production, except cattle and poultry and eggs
- Cattle ranching and farming
- Commercial Fishing
- Commercial hunting and trapping
- Commercial logging
- Cotton farming
- Dairy cattle and milk production
- Drilling oil and gas wells
- Extraction of oil and natural gas
- Forestry, forest products, and timber tract production
- Fruit farming
- Grain farming
- Greenhouse, nursery, and floriculture production
- Mining and quarrying other nonmetallic minerals
- Mining and quarrying sand, gravel, clay, and ceramic and refractory minerals
- Mining and quarrying stone
- Mining coal
- Mining copper, nickel, lead, and zinc
- Mining gold, silver, and other metal ore
- Mining iron ore
- Oilseed farming
- Poultry and egg production
- Sugarcane and sugar beet farming
- Support activities for agriculture and forestry
- Support activities for oil and gas operations
- Support activities for other mining
- Tobacco farming
- Tree nut farming
- Vegetable and melon farming

Other Services

- Automotive repair and maintenance, except car washes
- Car washes
- Civic, social, professional, and similar organizations
- Commercial and industrial machinery and equipment repair and maintenance
- Death care services
- Dry-cleaning and laundry services
- Electronic and precision equipment repair and maintenance
- Grantmaking, giving, and social advocacy organizations
- Other personal services
- Personal and household goods repair and maintenance
- Personal care services
- Private household operations
- Religious organizations

Professional and Business Services

- Accounting, tax preparation, bookkeeping, and payroll services
- Advertising and related services
- All other miscellaneous professional, scientific, and technical services
- Architectural, engineering, and related services
- Business support services
- Computer systems design services
- Custom computer programming services
- Employment services
- Environmental and other technical consulting services
- Facilities support services
- Investigation and security services
- Legal services
- Management of companies and enterprises
- Management, scientific, and technical consulting services
- Office administrative services
- Other computer related services, including facilities management
- Other support services
- Photographic services
- Scientific research and development services
- Services to buildings and dwellings
- Specialized design services
- Travel arrangement and reservation services
- Veterinary services
- Waste management and remediation services

Public Administration

- Federal electric utilities
- Other Federal Government enterprises
- Other state and local government enterprises
- State and local government electric utilities
- State and local government passenger transit
- US Postal Service

Trade

Retail Nonstores - Direct and electronic sales
Retail Stores - Building material and garden supply
Retail Stores - Clothing and clothing accessories
Retail Stores - Electronics and appliances
Retail Stores - Food and beverage
Retail Stores - Furniture and home furnishings
Retail Stores - Gasoline stations
Retail Stores - General merchandise
Retail Stores - Health and personal care
Retail Stores - Miscellaneous
Retail Stores - Motor vehicle and parts
Retail Stores - Sporting goods, hobby, book and music
Wholesale trade businesses

Transport

Automotive equipment rental and leasing
Couriers and messengers
Scenic and sightseeing transportation and support activities for transportation
Transit and ground passenger transportation
Transport by air
Transport by pipeline
Transport by rail
Transport by truck
Transport by water
Warehousing and storage