

TRAVEL ECONOMIC IMPACT MODEL

TIA used its proprietary Travel Economic Impact Model (TEIM) to measure the impact of travel on the U.S. Economy. The TEIM was created to capture the highly complex nature of the U.S. travel industry at the national, regional and local levels and to provide annual estimates of travel expenditures and the effect of these expenditures on employment, payroll and tax revenue in each of the 50 states and the District of Columbia. The TEIM can also estimate the economic impact of travel at the county level, allowing localities throughout the state to document the importance of travel and tourism within their own area. TIA has produced a time series of estimates for more than twenty years through the TEIM.

The TEIM is a disaggregated model comprised of 16 travel categories, including lodging, food, retail, public transportation, auto transportation, and amusement/recreation. The TEIM has the capability of estimating the economic impact of various types of travel, such as business and leisure, by transport mode, by type of accommodations used, and other trip and traveler characteristics as well.

The TEIM employs highly detailed data from a variety of government and proprietary sources and uses a combination of data inputs derived from U.S federal government and state government, nationally-known private and non-profit travel organizations and other TIA's travel statistics.

Definition of Terms

There is no commonly accepted definition of travel in use at this time. For the purposes of the estimates herein, *travel* is defined as activities associated with all overnight and day trips to places 50 miles or more, one way, from the traveler's origin and any overnight trips away from home in paid accommodations.

The *travel industry*, as used herein, refers to the collection of 16 types of businesses that provide goods and services to the traveler or potential traveler at the retail level (see Glossary of Terms). With the exception of Amtrak and second home ownership and rental, these business types are defined by the Office of Management and Budget in the 1997 North American Industry Classification System (NAICS) as well as in its predecessor, the 1987 Standard Industrial Classification System (SIC). In each case, the relevant NAICS and SIC codes are included.

Economic impact is represented by measures of spending, employment, payroll, business receipts and tax revenues generated by traveler spending. *Travel expenditures* are assumed to take place whenever travelers exchange money for activities considered part of their trips. One category, travel agents, receives no travel expenditures as these purchases are allocated to the category (i.e. air transportation) actually providing the final good or service to the traveler. Travel expenditures are allocated among states by simulating where the exchange of money for goods or service actually took place. By their nature, some travel expenditures are assumed to occur at the traveler's origin, some at his/her destination, and some enroute.

Travel-generated Payroll includes all forms of compensation, such as salaries, wages, commissions, bonuses, vacation allowances, sick leave pay and the value of payments in kind paid during the year to all employees working for providing products and services to travelers. Payroll is reported before deductions for social security, income tax insurance, union dues, etc. This definition follows that used by the U.S. Census Bureau in the quinquennial Census of Service Industries.

Travel-generated Employment represents the number of jobs generated by traveler spending, both full and part-time. As such, it is consistent with the U.S. Department of Labor series on nonagricultural payroll employment.

Travel-generated Tax revenues include corporate income, individual income, sales and gross receipts, and excise taxes by level of government generated by travel spending. *Business receipts* reflect travel expenditures less the sales and excise taxes imposed on those expenditures.

Limitations of the Study

This study is designed to indicate the impact of U.S. traveler expenditures on employment, payroll, business receipts and tax revenue in each of the states. These impact estimates reflect the limitations inherent in the definition of travel expenditures. Two important classes of travel-related expenses have not been estimated due to various reasons. Consumers purchase certain goods and services in anticipation of a trip away from home. These include sports equipment (tennis racquet, skis, scuba gear, etc.), travel books and guides, and services such as language lessons and lessons for participatory sports (tennis, skiing, underwater diving, etc.). The magnitude of these purchases in preparation for a trip cannot be quantified due to lack of sound, relevant data.

The second type of spending not covered due to lack of sufficient data is the purchase of major consumer durables generally related to outdoor recreation on trips. Further research is required in this area to determine to what extent pre-trip spending on consumer durable products can justifiably be included within a travel economic impact study.

GLOSSARY OF TERMS – TEIM

Automobile Transportation Expenditure. This category includes a prorated share of the fixed costs of owning an automobile, truck, camper, or other recreational vehicle, such as insurance, license fees, tax, and depreciation costs. Also included are the variable costs of operating an automobile, truck, camper, or other recreational vehicle on a trip, such as gasoline, oil, tires, and repairs. The costs of renting an automobile or other motor vehicle are included in this category as well.

Entertainment/Recreation Expenditure. Traveler spending on recreation facility user fees, admissions at amusement parks and attractions, attendance at nightclubs, movies, legitimate shows, sports events, and other forms of entertainment and recreation while traveling.

Food Expenditure. Traveler spending in commercial eating facilities and grocery stores or carry-outs, as well as on food purchased for off-premise consumption.

Retail Expenditure. Traveler spending on retail trade purchases including gifts for others, medicine, cosmetics, clothing, personal services, souvenirs, and other items of this nature.

Lodging Expenditure. Traveler spending on hotels and motels, B&Bs, campgrounds and trailer parks, rental of vacation homes and other types of lodging.

Public Transportation Expenditures. This includes traveler spending on air, bus, rail and boat/ship transportation, and taxicab or limousine service between airports and central cities.

Travel-generated Tax Receipts. Those federal, state and local tax revenues attributable to travel in an area. For a given state locality, all or some of the taxes may apply. "Local" includes county, city or municipality, and township units of government actually collecting the receipts and not the level that may end up receiving it through intergovernmental transfers.

Federal Tax Receipts: include corporate income taxes, individual income taxes, employment taxes, gasoline excise taxes, and airline ticket taxes generated by travel expenditures.

State Tax Receipts: include corporate income taxes, individual income taxes, sales and gross receipts taxes, and excise taxes generated by travel expenditures.

Local Tax Receipts: include county and city receipts from individual and corporate income taxes, sales, excise and gross receipts taxes, and property taxes generated by travel expenditures.

TRAVEL-RELATED INDUSTRY MEASUREMENT

TEIM: NAICS Industry Categories

With the transition to NAICS, TIA has adjusted its selection of the travel-related business types using the new NAICS codes and brought its travel economic research into conformity with NAICS. For measurement purposes, TIA's Travel Economic Impact Model tracks business activity in seven (7) major travel-related industry groups. These, in turn, are comprised of sixteen (16) business subcategories.

The industry groups and subcategories used in the model are outlined below, followed by a detailed table of NAICS Codes.

Automobile Transportation Industry: Gasoline service stations, motor vehicle/parts dealers and passenger car rental.

Entertainment/Recreation Industry: Entertainment, art and recreation industry.

Foodservice Industry: Eating & drinking places, and grocery stores.

Retail Trade Industry: General merchandise group stores and miscellaneous retail stores, including gift and souvenir shops.

Lodging Industry: This industry includes hotels, motels, and motor hotels, camps and trailer parks.

Public Transportation Industry: Air transportation, taxicab companies, interurban & rural bus transportation, railroad passenger transportation (Amtrak) and water passenger transportation. Also is the "dummy" industry of "other transportation."

Travel Arrangement Industry: This includes travel agencies, tour operators, and other travel arrangement & reservation services.

TRAVEL AND TOURISM INDUSTRY DEFINITION BY NORTH AMERICAN INDUSTRIAL CLASSIFICATION SYSTEM

ACCOMMODATIONS

7211 Traveler Accommodation
7212 Recreational Vehicle Parks & Campgrounds

AUTO TRANSPORTATION

532111 Passenger Car Rental
447110 Gasoline Stations with Convenience Stores
447190 Other Gasoline Stations
4411 Automobile Dealers
4412 Other Motor Vehicle Dealers
4413 Automotive Parts, Accessories and Tire Stores

ENTERTAINMENT AND RECREATION

711 Performing Arts, Spectator Sports & Related Industries
712 Museums, Historical Sites & Similar Institutions
713 Amusement, Gambling & Recreation Industries

FOOD

7221 Full service Restaurants
7222 Limited Service Eating Places
7224 Drinking Places
445 Food and Beverage stores

PUBLIC TRANSPORTATION

481 Passenger Air Transportation
4881 Airport Support Activities
4821 Rail Transportation
4852 Interurban and Rural Bus Transportation
4853 Taxi & Limousine Services
485510 Charter Bus
483112 Deep Sea Passenger Transportation
483114 Coastal and Great Lakes Passenger Transportation
483212 Inland Water Passenger Transportation
487 Scenic & Sightseeing Transportation

RETAIL

452 General Merchandise Stores
453 Miscellaneous Store Retailers
44611 Pharmaceutical and Drug Stores
4483 Jewelry, Luggage, and Leather Good Stores
4511 Sporting Goods Stores
4512 Hobby, Toy, and Game Stores
45121 Book Stores and News Dealers

TRAVEL ARRANGEMENT

5615 Travel Arrangement & Reservation Services (includes travel agencies and tour operators)