

# The Economic Impact of Travel in Pennsylvania

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Pennsylvania Counties and  
Tourism Regions

Tourism Satellite Account  
Calendar Year 2015



TOURISM  
ECONOMICS

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# Why quantify the tourism economy?

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- By monitoring the impact of PA's travel and tourism industry's on the state's economy, policymakers can make informed decisions regarding the funding and prioritization of tourism development.
- Monitoring and quantifying travel and tourism's economic impact also enables policymakers and those involved in the industry to carefully monitor the industry's successes and determine future needs.
- In order to do this, tourism must be measured in the same manner as other economic sectors – i.e., tax generation, employment, wages, and gross domestic product.

# Why is this a challenge?

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- Most industry sectors, such as manufacturing, construction, financial services, insurance, and health care, for example, are easily defined within the country's national accounts statistics, with economic data specific to each industry computed and provided according to the industry's NAICS (North American Industry Classification System) code.
- The economic contributions of travel and tourism are not so easily measured and calculated because it is not a single industry but is responsible for varying amounts of economic activity in nearly a dozen industrial sectors, including lodging, recreation, retail, real estate, air passenger transport, food & beverage, car rentals, taxi services, and travel agents that are identified in the national accounts and each with its own unique NAICS code.
- A major challenge is determining the amount of economic activity attributable to travel and tourism by each of these industries versus the amount attributable to local residents. The share attributable to travelers differs for each industry, both directly and indirectly.

# The Tourism Satellite Account

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- The Tourism Satellite Account, or TSA, was conceived by the United Nations World Tourism Organization to estimate the total economic impact of the tourism industry on a nation's economy, including capital investment and government spending in addition to traveler spending.
- The TSA standard has since been ratified by the United Nations, Eurostat, and the Organization for Economic Cooperation and Development (OECD) and has been adopted by over 50 countries around the world, including the U.S., as well as a growing number of states.
- The U.S. Bureau of Economic Analysis (BEA) uses the TSA methodology to determine the economic contributions of business and leisure travelers to the U.S. economy, issuing quarterly and annual estimates for the nation under the Travel and Tourism Satellite Account (TTSA).
- The BEA presents TTSA estimates of traveler spending on 24 types of goods and services, as well as estimates of the income generated by travel and tourism and the output and employment generated by U.S. travel and tourism-related industries.

# Benefits of the Tourism Satellite Account

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Benefits of using the TSA methodology include:

- Provides a stable and consistent definition of the travel and tourism economy.
- Provides a methodology for calculating travel and tourism Gross Domestic Product (GDP) in a way that is consistent with economic accounts and that enables comparisons of the importance of travel and tourism relative to other sectors of the economy in terms of GDP, employment, and income.
- Allows for benchmarking relative to other destinations.
- Tracks the economic contribution of the travel and tourism industry over time.
- Monitors the industry's strength by tracking capital investments made in travel- and tourism-related projects.
- Allows for an analysis of the full impact of travel and tourism, i.e., the direct impact from sales made to travelers, the indirect impact from supplier contributions, induced impact derived from the spending of persons employed either directly or indirectly in the travel and tourism economy, government spending, and private sector investments.

# Key definitions

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1. **Tourism/Tourist:** Refers to the leisure travel/traveler segment.
2. **Travel/Traveler:** Includes both leisure and business travel/travelers.
3. **Travel and Tourism Industry:** The value of traveler activity within “travel characteristic industries.” This concept measures only the direct impact of the travel industry from the sales made to travelers.
4. **Travel and Tourism Economy:** The value of traveler activity plus government spending and capital investment in support of travel and tourism and certain personal consumption expenditures. This is the basis of the total economic impact analysis, including the direct impact and the downstream indirect and induced impacts.
5. **Visitor (or Traveler) Spending:** Estimates of the dollars travelers spent on their trip, derived from the self-reported expenditures on a national survey of U.S. travelers. The state level data also includes estimates of the spending by international travelers from Canada and overseas markets in the total(s).
6. **Direct Sales:** The term used to portray visitor spending for the major categories of travel-related expenditures and equates to visitor/traveler spending.

# Key definitions

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7. **Economic Impact:** Analysis that traces the flows of spending associated with travel activity within a specific geographic area to identify changes in sales, tax revenues, income and jobs derived from travelers.
8. **Direct Impact:** The economic impact – including jobs and income – from the initial sales made by travelers. Examples include sales made by travelers at lodging properties, souvenir shops, restaurants, gas stations, amusement parks, museums, etc.
9. **Indirect Impact:** The economic impact from the production, employment, and income occurring in other businesses/industries that supply the businesses making initial/direct sales to travelers. Examples of indirect impact include a restaurant's food supplier or a hotel's laundry service.
10. **Induced Impact:** The economic impact from the spending by households in the local economy as the result of the earnings from a business that directly or indirectly interacts with travelers. Examples include hotel desk clerks who use their wages to pay for their groceries and the accountants who work for companies that supply napkins and other goods to a restaurant frequented by travelers and who use their wages to purchase flowers from the local florist.

# Key definitions

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- 11. Jobs/Employment:** Estimates of the number of jobs – both full-time and part-time – supported by travel and tourism, reflecting the annual average number of monthly jobs supported by travel and tourism throughout the year and includes wage and salary jobs, sole proprietorships, and individual general partners, but not unpaid family workers or volunteers. Note: The jobs estimates are not on a full-time-equivalent basis.
- 12. Labor Income:** Estimates of Employee Compensation (i.e., wages and benefits) and Proprietor Income including the profits realized by business owners derived from businesses supported by Pennsylvania’s travel and tourism industry.
- 13. Transportation:** Estimates of traveler spending on transportation are derived from the self-reported spending of travelers on surveys by Longwoods International. This spending may include purchases of gasoline and airline, bus, or train tickets, as well as costs for parking, tolls, car repairs while traveling, etc.



# Key definitions – Spending Categories

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| <b>Spending Category</b> | <b>Description</b>   |
|--------------------------|--|
| Lodging                  | Includes traveler spending in the accommodations sector and includes food and other services provided by hotels and similar establishments.  |
| Recreation               | Includes all traveler spending within the arts, entertainment and recreation sector.   |
| Air transportation       | Includes the local economic activity generated by travelers within the air transport (airline) and support services (on airport) sectors.  |
| Other transport          | Includes all forms of local transportation services, e.g., taxis, limos, trains, rental cars, and buses.   |
| Shopping                 | Includes traveler spending within all retail sectors.  |
| Service stations         | Traveler spending on gasoline, with just the margin included for the local economic impact.  |
| Second homes             | Spending associated with the operation of seasonal second homes for recreational use, as defined by the U.S. Census Bureau and based on an “imputed rent” calculation over an estimated peak season. |
| Food and beverage        | Includes all traveler spending at restaurants and bars.  |

# Spending Impacts



Travelers spend their \$\$ at a wide variety of businesses, including museums, restaurants, lodging facilities, events and attractions, gas stations, airports, retail shops, travel agents, and many others. This is the **direct impact**.

## Businesses Catering to the Traveling Public



Wages paid to employees

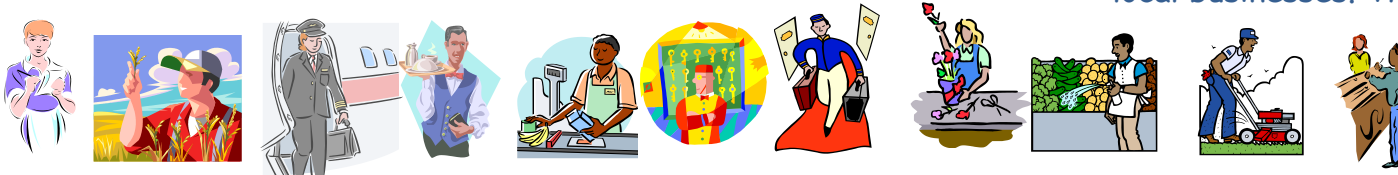


The businesses that directly cater to the traveling public purchase a wide variety of goods and services from suppliers, manufacturers, and service companies. This is the **indirect impact**.

## Manufacturers, Supplier and Support Businesses



The employees of the businesses catering to the traveling and the manufacturers, supplier and support companies whose wages are either direct or indirectly derived from visitor spending, in turn spend their wages at local businesses. This is the **induced impact**.



# Illustrating the concepts

## Travel & Tourism Industry

- The direct effect of tourism spending
- Focus of Tourism Satellite Account

## Travel & Tourism Economy

The flow-through effect of all tourism demand across the economy

- Expands the focus to measure the overall impact of tourism on all sectors of the economy



# **Pennsylvania's Tourism Regions**

## **2014 Traveler Spending and Economic Impact By Region and County**



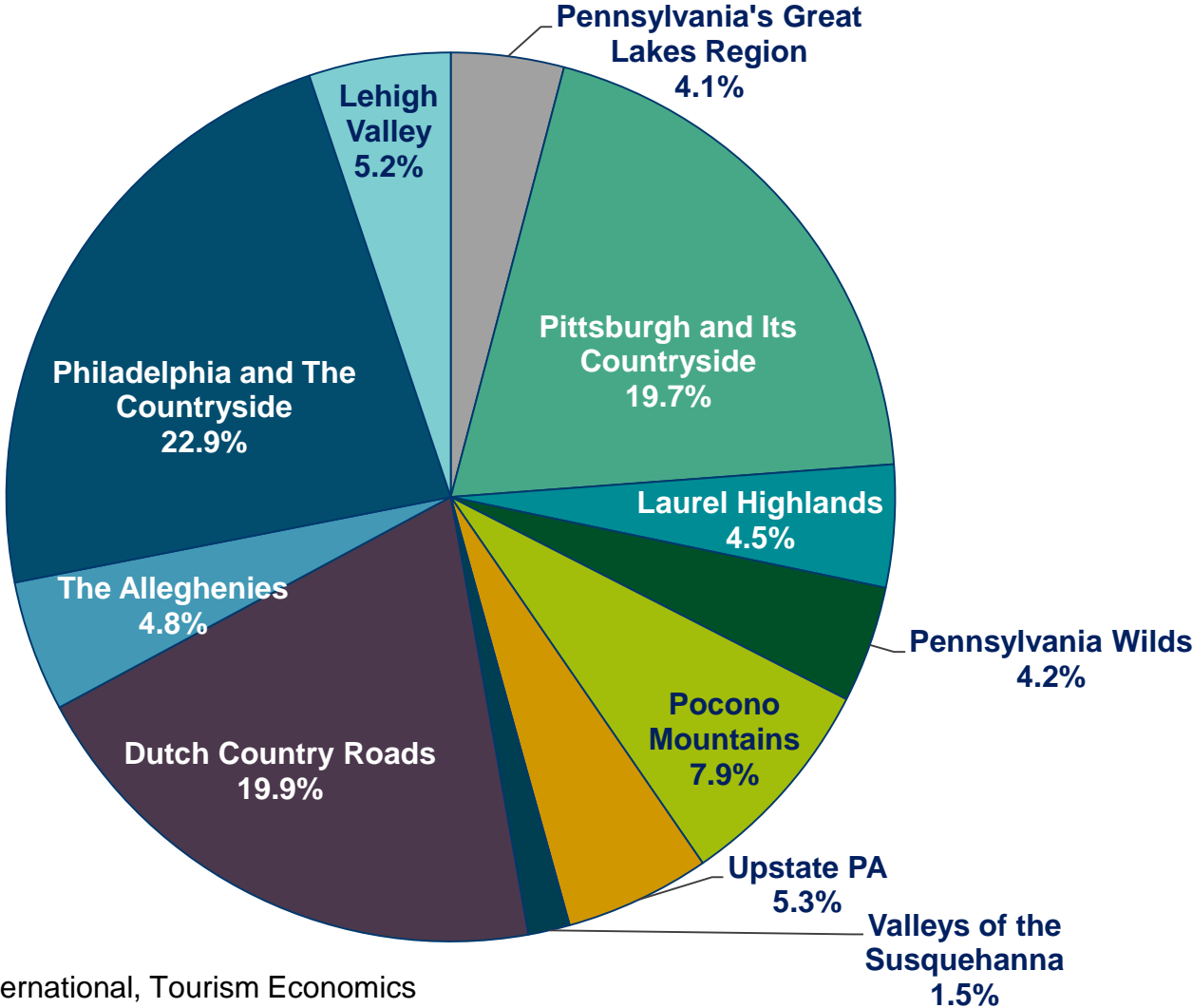
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# Percent of 2015 Traveler Spending by PA Region

## Share of Total 2015 Visitor Spending in PA by Region

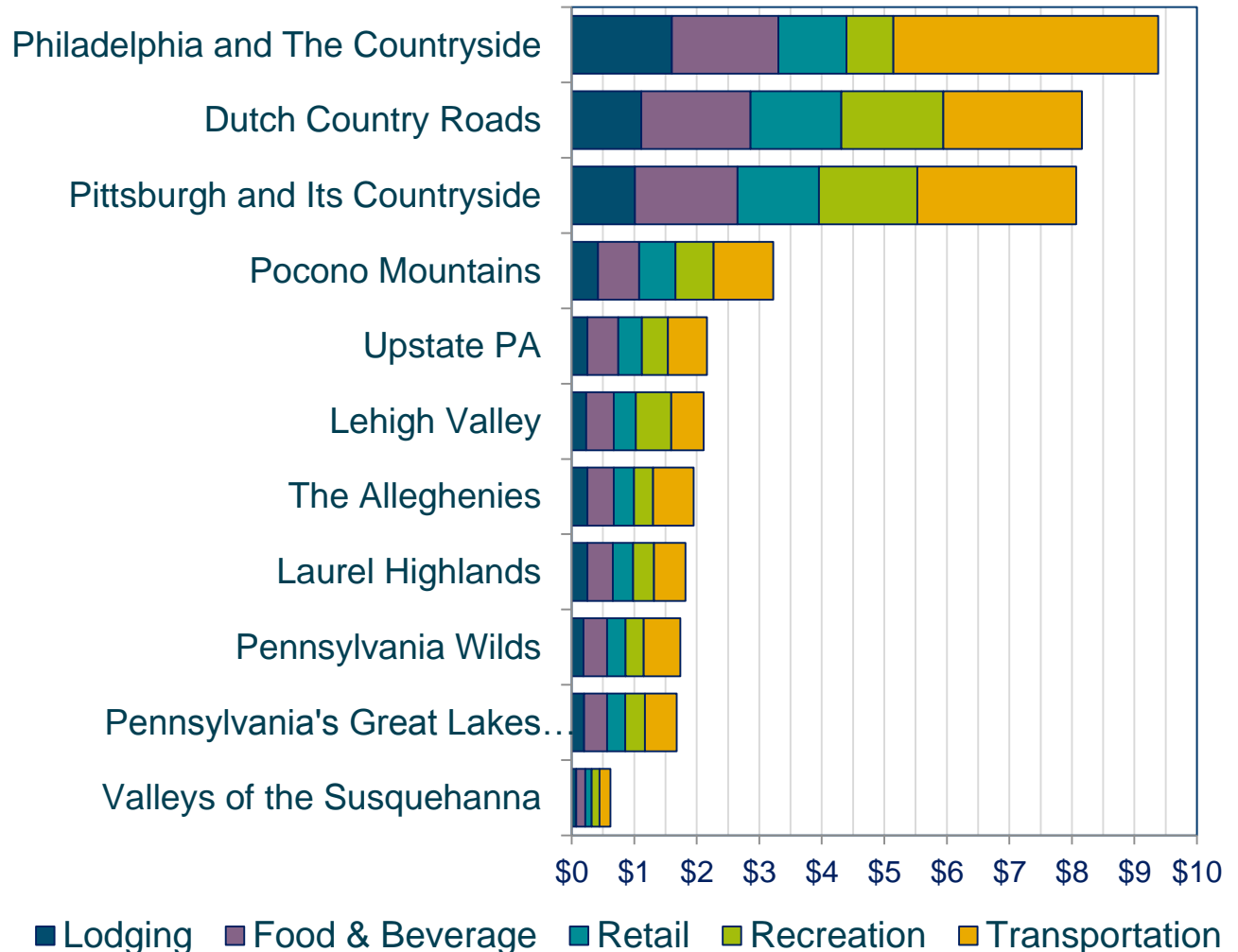


Source: Longwoods International, Tourism Economics

# 2015 Traveler Spending in PA Regions by Category

- Travelers to the Lehigh Valley, Valleys of the Susquehanna, Dutch Country Roads, Pittsburgh, and Upstate PA regions spent proportionally more of their trip dollars on recreation than travelers to other regions in 2015.
- As in prior years, travelers to the Philadelphia & Its Countryside region spent far more of their trip dollars on transportation than travelers to other regions.

**Traveler Spending by Category and Region**  
(in billions of U.S. dollars)

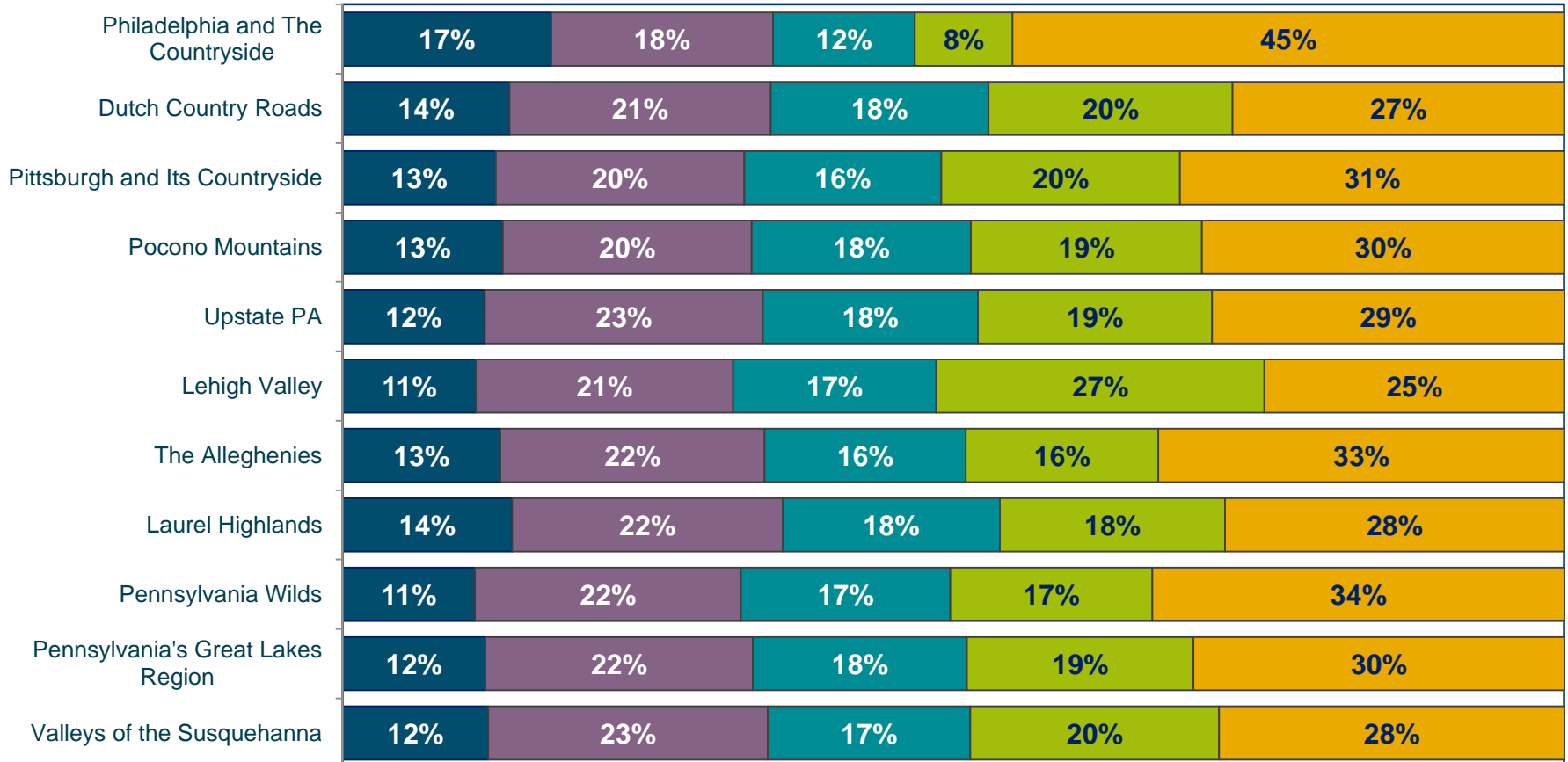


# 2015 PA Spending by Category -- % of Region Total

- While still capturing the largest share of traveler dollars, the share going to transportation costs dropped in each region in 2015 as a result of the drop in fuel costs.

## 2015 Traveler Spending by Category and Region

Percent of Region Total



■ Lodging  
 ■ Food & Beverage  
 ■ Retail  
 ■ Recreation  
 ■ Transportation



# 2015 Total Travel ECONOMY Employment & Intensity

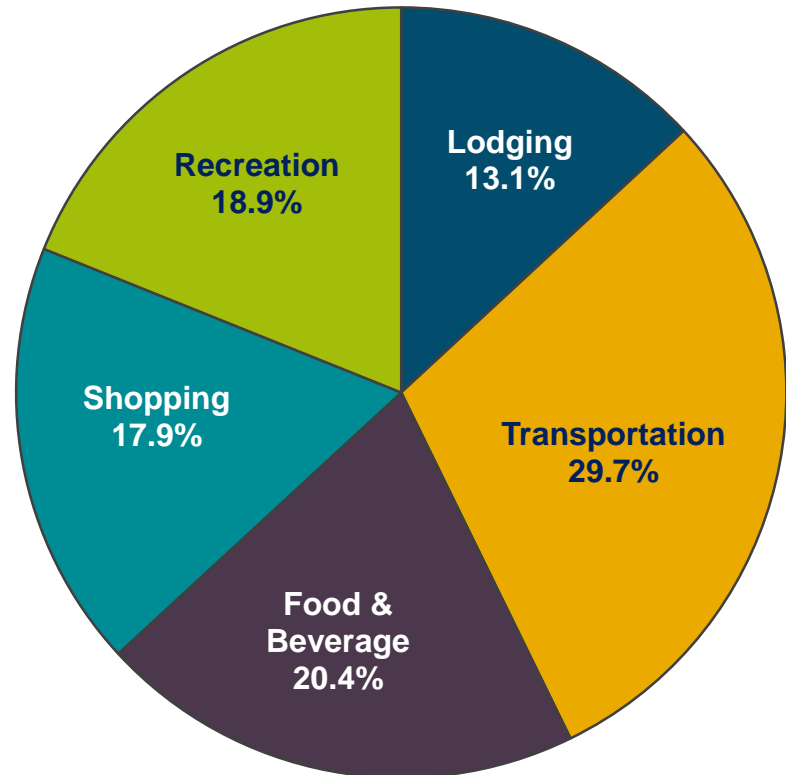
- Travel Employment Intensity is a measure of each county's reliance on the travel industry for jobs. The Pocono Mountains region is by far the most dependent of all PA tourism regions on the travel industry as a job provider in 2015. As in prior years, the Laurel Highlands region was a distant second, followed by the Pennsylvania Wilds.
- The Philadelphia region had the highest number of travel-related jobs, but the region's highly diverse economic base makes the region the least dependent with a similar pattern for the Pittsburgh & Its Countryside and Dutch Country Roads regions in 2015.



# Pocono Mountains

- The Pocono Mountains region is comprised of the following counties: Carbon, Monroe, Pike, and Wayne.
- Travelers spent over \$3.2 billion in the Pocono Mountains region in 2015 – the fourth highest of the state’s 11 tourism regions. The region’s 8.2% growth rate from 2014 was the strongest rate of increase among the regions and the third highest amount of increase in dollar terms.
- The Pocono Mountains region had the highest proportion of traveler dollars spent on shopping and the fourth highest on lodging among the state’s 11 tourism regions in 2015.

## Pocono Mountains Region 2015 Spending by Category

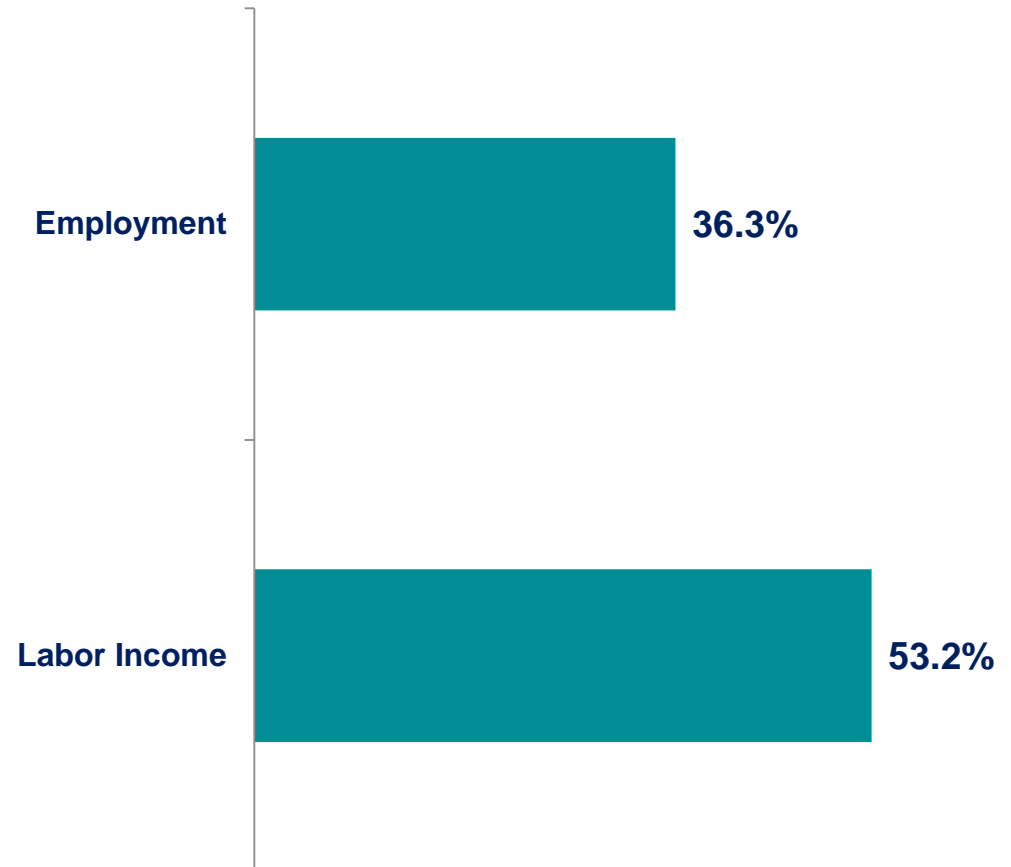


Source: Tourism Economics

# Pocono Mountains

- The chart shows the travel economy's share (including indirect and induced impacts) of the region's total for both labor income and employment.
- The region's share of travel-supported labor income topped 50% for the first time in 2015 – increasing to 53.2%, while the employment share grew to 36.3% of the region's economy.
- As in prior years, the Pocono Mountains region continued to have, by far, the highest proportion of labor income and employment supported by travel of the state's 11 tourism regions.

**Travel Industry Share of Regional Economy**



# Pocono Mountains – Traveler Spending & Employment Timelines

## POCONO MOUNTAINS TRAVEL INDUSTRY EMPLOYMENT, 2005 – 2015

| County       | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Carbon       | 2,819  | 2,775  | 2,816  | 2,792  | 2,766  | 2,717  | 2,733  | 2,638  | 2,693  | 2,722  | 2,759  |
| Monroe       | 13,123 | 13,192 | 13,719 | 13,777 | 12,780 | 12,937 | 13,011 | 12,847 | 12,912 | 12,890 | 13,411 |
| Pike         | 5,629  | 5,658  | 5,758  | 5,715  | 5,257  | 4,856  | 4,852  | 4,760  | 4,853  | 4,922  | 5,084  |
| Wayne        | 3,072  | 3,170  | 3,157  | 3,212  | 3,151  | 3,107  | 3,120  | 3,143  | 3,120  | 3,049  | 3,103  |
| Region Total | 24,642 | 24,794 | 25,451 | 25,496 | 23,954 | 23,617 | 23,717 | 23,388 | 23,579 | 23,582 | 24,358 |
| % Change     | ---    | 0.6%   | 2.6%   | 0.2%   | -6.0%  | -1.4%  | 0.4%   | -1.4%  | 0.8%   | 0.0%   | 3.3%   |

## POCONO MOUNTAINS TRAVELER SPENDING, 2005 – 2015 (dollar amounts in millions)

| County       | 2005      | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Carbon       | \$299.4   | \$288.8   | \$303.3   | \$320.2   | \$294.5   | \$314.7   | \$332.4   | \$343.7   | \$345.4   | \$344.8   | \$366.3   |
| Monroe       | 1,371.4   | 1370.7    | 1,472.5   | 1,665.3   | 1,372.6   | 1,502.1   | 1,552.0   | 1,607.5   | 1,596.5   | 1,606.3   | 1,788.2   |
| Pike         | 545.4     | 543.5     | 559.6     | 616.5     | 520.7     | 538.0     | 553.5     | 575.1     | 606.0     | 607.0     | 636.6     |
| Wayne        | 371.4     | 382.6     | 409.3     | 437.6     | 400.4     | 422.4     | 432.7     | 429.5     | 424.2     | 419.7     | 433.1     |
| Region Total | \$2,587.5 | \$2,585.6 | \$2,744.7 | \$3,039.6 | \$2,588.2 | \$2,777.2 | \$2,870.7 | \$2,955.9 | \$2,972.1 | \$2,977.7 | \$3,224.2 |
| % Change     | ---       | -0.1%     | 6.2%      | 10.7%     | -14.9%    | 7.3%      | 3.4%      | 3.0%      | 0.5%      | 0.2%      | 8.3%      |

# Pocono Mountains – Traveler Spending by Category

## POCONO MOUNTAINS TRAVELER SPENDING BY CATEGORY, 2014 and 2015 (dollar amounts in millions)

| 2015         | Lodging | Food & Beverage | Retail  | Recreation | Transportation | Total     |
|--------------|---------|-----------------|---------|------------|----------------|-----------|
| Carbon       | \$40.2  | \$72.5          | \$54.9  | \$72.2     | \$126.5        | \$366.3   |
| Monroe       | 259.8   | 355.3           | 349.6   | 354.9      | 468.5          | 1,788.2   |
| Pike         | 77.9    | 136.2           | 103.3   | 106.1      | 213.2          | 636.6     |
| Wayne        | 44.7    | 93.1            | 70.7    | 76.7       | 147.9          | 433.1     |
| Region Total | \$422.6 | \$657.1         | \$578.5 | \$610.0    | \$956.0        | \$3,224.2 |
| % Change     | 18.7%   | 10.9%           | 7.6%    | 4.5%       | 5.3%           | 8.3%      |

| 2014         | Lodging | Food & Beverage | Retail  | Recreation | Transportation | Total     |
|--------------|---------|-----------------|---------|------------|----------------|-----------|
| Carbon       | \$36.4  | \$67.4          | \$51.4  | \$69.2     | \$120.4        | \$344.8   |
| Monroe       | 204.4   | 306.7           | 317.2   | 338.0      | 440.0          | 1,606.3   |
| Pike         | 71.5    | 128.7           | 99.4    | 102.4      | 204.9          | 607.0     |
| Wayne        | 43.7    | 89.7            | 69.5    | 74.2       | 142.5          | 419.7     |
| Region Total | \$356.1 | \$592.5         | \$537.5 | \$583.8    | \$907.8        | \$2,977.7 |

# Pocono Mountains – Tourism Satellite Account

## POCONO MOUNTAINS TOURISM SATELLITE ACCOUNT CATEGORIES, 2014 and 2015 (dollar amounts in millions)

| 2015         | Traveler Spending | Government Expenditures | Investment & Non-Travel Personal Consumption Expenditures* | Total Travel Demand |
|--------------|-------------------|-------------------------|--|---------------------|
| Carbon       | \$366.3           | \$0.7                   | \$19.2   | \$386.2             |
| Monroe       | 1,788.2           | 5.1                     | 93.9   | 1,887.1             |
| Pike         | 636.6             | 1.3                     | 33.4   | 671.3               |
| Wayne        | 433.1             | 0.6                     | 22.7   | 456.5               |
| Region Total | \$3,224.2         | \$7.7                   | \$169.3  | \$3,401.2           |
| % Change     | 8.3%              | 19.8%                   | 10.4%  | 8.4%                |

| 2014         | Traveler Spending | Government Expenditures | Investment & Non-Travel Personal Consumption Expenditures* | Total Travel Demand |
|--------------|-------------------|-------------------------|--|---------------------|
| Carbon       | \$344.8           | \$0.6                   | \$17.8   | \$363.1             |
| Monroe       | 1,606.3           | 4.0                     | 82.7   | 1,693.0             |
| Pike         | 607.0             | 1.2                     | 31.3   | 639.5               |
| Wayne        | 419.7             | 0.6                     | 21.6   | 441.9               |
| Region Total | \$2,977.7         | \$6.4                   | \$153.4  | \$3,137.5           |

\*Non-Traveler Personal Consumption Expenditures represent travel-related consumer durable purchases, such as an RV, boat, or furniture for a vacation home.

# Pocono Mountains – Travel Industry Impacts, 2014 & 2015

## POCONO MOUNTAINS TRAVEL INDUSTRY IMPACTS, 2014 and 2015 (dollar amounts in millions)

| 2015         | Traveler Spending | Employment | Labor Income | Taxes         |         |
|--------------|-------------------|------------|--------------|---------------|---------|
|              |                   |            |              | State & Local | Federal |
| Carbon       | \$366.3           | 2,759      | \$66.6       | \$18.6        | \$16.2  |
| Monroe       | 1,788.2           | 13,411     | 433.2        | 102.6         | 94.0    |
| Pike         | 636.6             | 5,084      | 174.2        | 37.9          | 36.2    |
| Wayne        | 433.1             | 3,103      | 98.8         | 23.7          | 21.9    |
| Region Total | \$3,224.2         | 24,358     | \$772.8      | \$182.8       | \$168.3 |
| % Change     | 8.3%              | 3.3%       | 7.8%         | 6.8%          | 8.0%    |

| 2014         | Traveler Spending | Employment | Labor Income | Taxes         |         |
|--------------|-------------------|------------|--------------|---------------|---------|
|              |                   |            |              | State & Local | Federal |
| Carbon       | \$344.8           | 2,722      | \$62.8       | \$17.7        | \$15.3  |
| Monroe       | 1,606.3           | 12,890     | 400.8        | 94.2          | 86.0    |
| Pike         | 607.0             | 4,922      | 159.5        | 36.1          | 33.6    |
| Wayne        | 419.7             | 3,049      | 93.9         | 23.1          | 21.0    |
| Region Total | \$2,977.7         | 23,582     | \$717.0      | \$171.1       | \$155.9 |

# Pocono Mountains – Travel Economy Impacts, 2014 & 2015

## POCONO MOUNTAINS TRAVEL ECONOMY IMPACTS, 2014 and 2015 (dollar amounts in millions)

| 2015         | Total<br>Travel Demand | Employment | Labor Income | Taxes         |         |
|--------------|------------------------|------------|--------------|---------------|---------|
|              |                        |            |              | State & Local | Federal |
| Carbon       | \$386.2                | 4,091      | \$125.3      | \$32.7        | \$32.6  |
| Monroe       | 1,887.1                | 19,237     | 746.5        | 180.0         | 189.4   |
| Pike         | 671.3                  | 7,207      | 294.3        | 67.0          | 73.0    |
| Wayne        | 456.5                  | 4,605      | 177.1        | 41.9          | 44.2    |
| Region Total | \$3,401.2              | 35,140     | \$1,343.3    | \$321.6       | \$339.3 |
| % Change     | 8.4%                   | 3.7%       | 6.6%         | 6.5%          | 7.9%    |

| 2014         | Total<br>Travel Demand | Employment | Labor Income | Taxes         |         |
|--------------|------------------------|------------|--------------|---------------|---------|
|              |                        |            |              | State & Local | Federal |
| Carbon       | \$363.1                | 4,006      | \$119.7      | \$31.2        | \$30.7  |
| Monroe       | 1,693.0                | 18,424     | 697.8        | 165.9         | 173.5   |
| Pike         | 639.5                  | 6,948      | 272.3        | 63.8          | 67.8    |
| Wayne        | 441.9                  | 4,493      | 169.7        | 41.0          | 42.3    |
| Region Total | \$3,137.5              | 33,871     | \$1,259.6    | \$301.9       | \$314.3 |



# Methodology and Background



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# Methods and data sources

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- Domestic traveler expenditure estimates are derived from a representative survey of U.S. travelers provided by Longwoods International. The estimates are broken out by sectors (lodging, transport at destination, food & beverage, retail, and recreation), by purpose (business and leisure), and by type of stay (day and overnight).
- Tourism Economics (TE) then adjusts these levels of spending based on a range of known measures of travel and tourism activity:
  - Overseas traveler spending (source: National Travel and Tourism Office, TE)
  - Canadian traveler spending (source: Statistics Canada, TE)
  - Bed tax receipts
  - Sales tax by sector
  - Spending on air travel which accrues to all airports and locally-based airlines
  - Gasoline purchases by visitors (source: TE calculation)
  - Smith Travel Research data on hotel revenues
  - Construction Value by McGraw-Hill Construction
  - Industry data on employment, wages, GDP, and sales (source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census Bureau)

# Methods and data sources

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- An IMPLAN model was compiled for the Commonwealth of Pennsylvania, tracing the flow of traveler-related expenditures through the local economy and their effects on employment, wages, and taxes. The IMPLAN model also provides estimates of the indirect (supplier) and induced (income) impacts of travel and tourism.
- All results are benchmarked and cross-checked and adjusted based on the following:
  - U.S. Bureau of Labor Statistics and Bureau of Economic Analysis (employment and wages by industry)
  - U.S. Census (business sales by industry)
- The source of the employment and wage data is the Regional Economic Information System (REIS), Bureau of Economic Analysis, U.S. Department of Commerce. All employment rankings are based on U.S. Bureau of Labor Statistics employment statistics (ES202/QCEW) data.

# Selected recent economic impact clients

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## Associations / Companies

Center for Exhibition Industry Research (Economic Impact of Visa Restrictions)

DMAI (Event Impact Calculator for 80 CVBs)

U.S. Travel Association (Impact of travel promotion)

InterContinental Hotels

## States

California

Georgia

Maryland

New York

North Carolina

Ohio

Pennsylvania

Wisconsin

## Cities

Baltimore, MD

Columbus, OH

Kansas City, MO

London, United Kingdom

New York City

Omaha, NE

Orlando, FL

Philadelphia, PA

Pittsburgh, PA

Rockford, IL

## Countries / Provinces

Bahamas

Bermuda

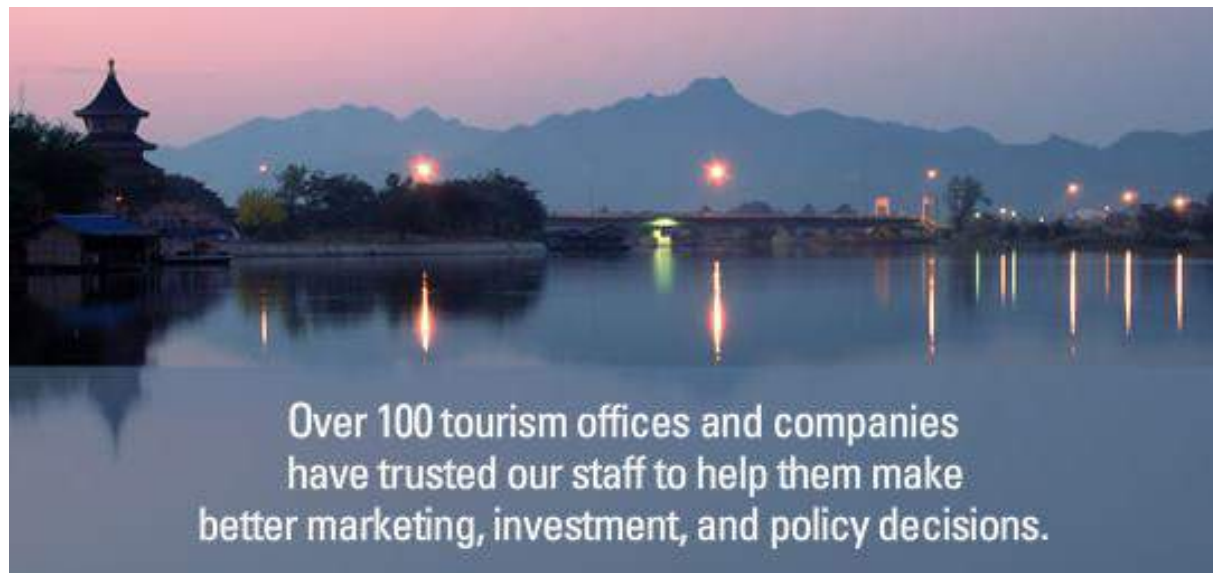
Cayman Islands

Dubai

Ontario Canada

St. Lucia

United Kingdom



# About Tourism Economics

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- Tourism Economics, headquartered in Philadelphia, is an Oxford Economics company dedicated to providing high value, robust, and relevant analyses of the tourism sector that reflects the dynamics of local and global economies. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, project feasibility analysis, tourism forecasting models, tourism policy analysis, and economic impact studies.
- Our staff have worked with over 100 destinations to quantify the economic value of tourism, forecast demand, guide strategy, or evaluate tourism policies.
- Oxford Economics is one of the world's leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics is founded on a reputation for high quality, quantitative analysis and evidence-based advice. For this, it draws on its own staff of 40 highly-experienced professional economists; a dedicated data analysis team; global modeling tools; close links with Oxford University, and a range of partner institutions in Europe, the U.S. and in the United Nations Project Link.
- For more information: [info@tourismeconomics.com](mailto:info@tourismeconomics.com).



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