

AN OXFORD ECONOMICS COMPANY

ECONOMIC IMPACT OF VISITORS IN KENTUCKY 2021

June 2022

Prepared for: Kentucky Department of Tourism





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Economic Im Impact model framew

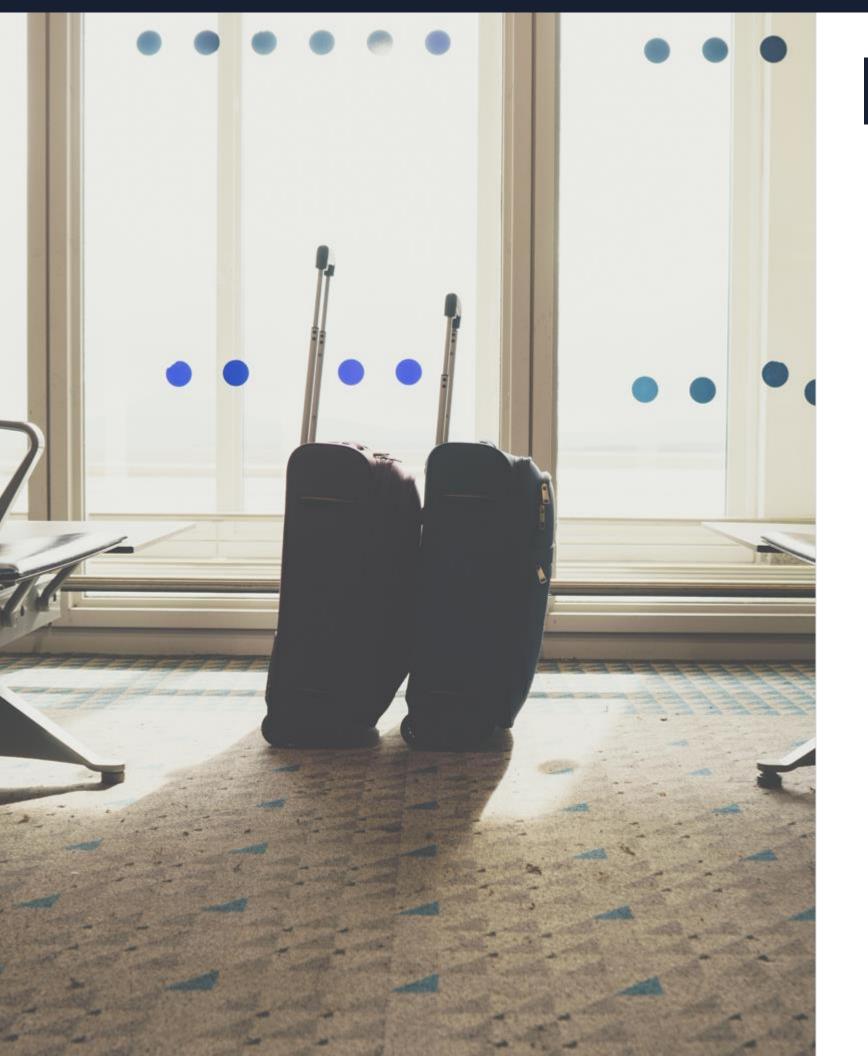
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INTRODUCTION PROJECT BACKGROUND

The travel sector is an integral part of the Kentucky economy. Visitors generate significant economic benefits to households, businesses, and government alike and represent a critical driver of the state's future. How critical? In 2021, tourism-supported jobs accounted for more than 3.3% of all jobs in the state.

By monitoring the visitor economy, policymakers can inform decisions regarding the funding and prioritization of the sector's development. They can also carefully monitor its successes and future needs. This is particularly true for Kentucky as it builds upon its tourism economy.

METHODOLOGY AND DATA SOURCES

An IMPLAN input-output model was constructed for the state of Kentucky. The model traces the flow of visitor-related expenditures through the state's economy and their effects on employment, wages, and taxes. IMPLAN also quantifies the indirect (supplier) and induced (income) impacts of tourism. Tourism Economics then cross-checked these findings with employment and wage data for each sector to ensure the findings are within reasonable ranges.

Visitors included those who stayed in overnight accommodations or those who came from a distance greater than 50 miles and deviated from their normal routine.

The primary source of the employment and wage data is the Regional Economic Information System (REIS), maintained by the Bureau of Economic Analysis. By establishing a baseline of economic impacts, the industry can track its progress over time.

To quantify the significance of the visitor economy in Kentucky, Tourism Economics developed a comprehensive model detailing the far-reaching impacts arising from visitor spending. The results of this study show the scope of the visitor economy in terms of direct visitor spending, along with total economic impacts, jobs, and fiscal (tax) impacts in the broader economy.

This is more comprehensive than Bureau of Labor Statistics (ES202/QCEW) data because sole-proprietors do not require unemployment insurance and are not counted in the ES202 data.

The analysis draws on the following data sources:

- Longwoods International: survey data, including spending and visitor profile characteristics for visitors to Kentucky
- Bureau of Economic Analysis and Bureau of Labor Statistics: employment and wage data, by industry
- STR lodging performance data, including room demand, room rates, occupancy, and room revenue, for hotels and short-term rentals.
- Tax collections: Lodging and sales tax receipts
- US Census: business sales by industry and seasonal second homes inventory
- Tourism Economics: international travel data for overseas, Canadian, and Mexican travel to Kentucky based on aviation, survey, and credit card information

ECONOMIC IMPACTS **KEY FINDINGS**

DIRECT VISITOR SPENDING IMPACT

The Kentucky visitor economy spans multiple industries. Visitors support business in accommodations, food and beverage, recreation, retail shopping, local transportation and air travel. In 2021, 70.5 million visitors spent \$7.7 billion across the Kentucky economy.

TOTAL ECONOMIC IMPACT

The direct visitor spending impact of \$7.7 billion generated a total economic impact of \$11.2 billion in Kentucky in 2021 including indirect and induced impacts. This total economic impact sustained 83,100 jobs and generated \$810 million in state and local tax revenues in 2021.



\$11.2 BILLION

Total Economic Impact of Tourism in Kentucky in 2021





Direct Visitor Spending



\$11.2B

Total Economic Impact



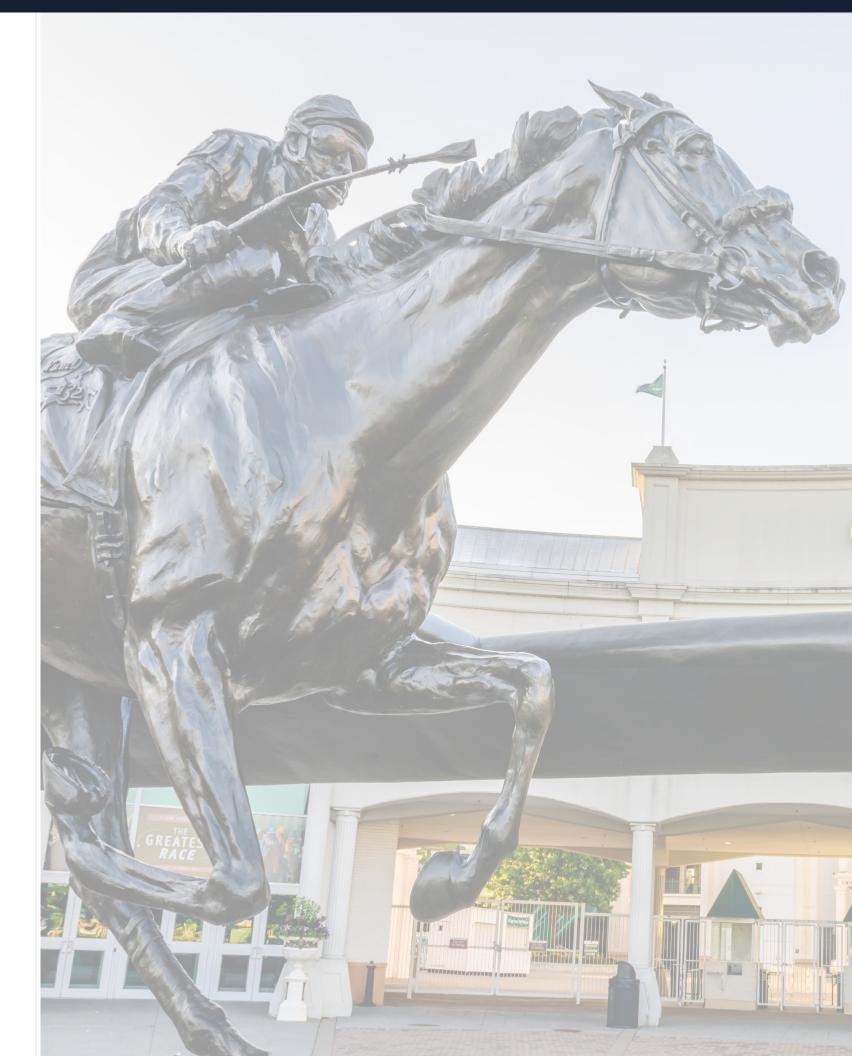
83,100

Total Jobs Generated





State & Local Taxes Generated





VISITS & VISITOR SPENDING

Kentucky hosts millions of visitors each year. Following severe COVID-related declines the prior year, 2021 was a year of recovery in which direct visitor spending reached \$7.7 billion and visitor volume totaled 70.5 million.

VISITOR VOLUME

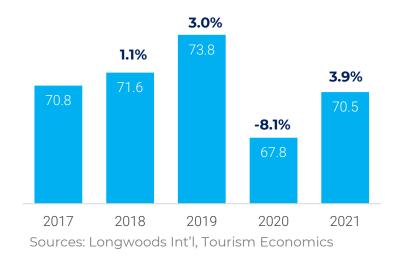
Recovery in 2021

Visitor volume was impacted in 2020 by COVID-19 restrictions and closures.

In 2021, travel confidence rebounded with easing restrictions and vaccines. With an increase of about 2.6 million visitors over the prior year, total visitation recovered to about 96% of 2019 volumes.

Kentucky visitor volume

Amounts in millions



VISITOR SPENDING

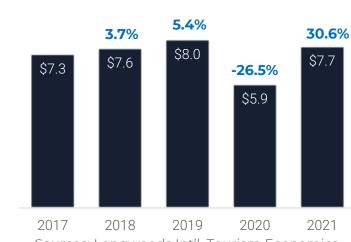
Visitors to Kentucky spent \$7.7 billion across a range of sectors in 2021.

Visitor spending expanded 30.6% in 2021, recovering to 96% of 2019 levels.

Of the \$7.7 billion spent in Kentucky in 2021 by visitors, food and beverage accounted for \$2.0 billion, 26% of the average visitor dollar. Spending on lodging, including the value of second homes, resulted in \$1.6 billion.

Retail spending captured 21%, a total of \$1.6 billion.

Transportation, including both air and transportation within the destination, comprised 19%, with recreation spending registering 12% of each visitor dollar.



Kentucky visitor spending

Amounts in \$ billions



Source: Tourism Economics

Note: Lodging spending is calculated as an industry. Spending also includes dollars spent on second homes. Transport includes both air and local transportation.

Sources: Longwoods Int'l, Tourism Economics

VISITATION & SPENDING TRENDS

Visitor spending increased by 31% in 2021, a bounce back after the significant declines in 2020. Spending grew across all sectors, driven by both pent-up demand as well as increases in prices of key commodities, especially in lodging and transportation. Indeed, average room rates at hotels in the state increased 18%.

Strong growth was seen in lodging, by far the hardest hit category during the pandemic. Lodging spending increased more than 52% after a fall of 40% in 2020. Despite the strong rebound, lodging spending remains at about 92% of 2019 levels.

Recreational spending grew 37% in 2021, bringing it back to 98% of pre-pandemic levels. While air transportation remains at 70% of pre-pandemic levels, transportation within the destination has slightly surpassed 2019 spending, as has spending on food and beverages.

	2017	2018	2019	2020	2021	2021 Growth	% relative to 2019
Total visitor spending	\$7.29	\$7.56	\$7.97	\$5.86	\$7.66	30.6%	96.0%
Food & beverage	\$1.84	\$1.91	\$2.01	\$1.66	\$2.01	21.1%	100.1%
Lodging*	\$1.63	\$1.68	\$1.77	\$1.06	\$1.62	52.3%	91.6%
Retail	\$1.48	\$1.52	\$1.61	\$1.35	\$1.60	18.6%	99.6%
Transportation**	\$1.45	\$1.54	\$1.61	\$1.09	\$1.47	34.5%	91.2%
Recreation	\$0.89	\$0.92	\$0.98	\$0.69	\$0.95	37.1%	97.6%

Source: Longwoods Int'l, Tourism Economics

* Lodging includes second home spending

** Transportation includes both ground and air transportation

Kentucky visitor volume and spending, by market

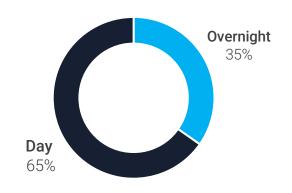
Amounts in millions of visitors, millions of nominal dollars, and dollars per person

	2017	2018	2019	2020	2021
Total visitors	70.83	71.59	73.77	67.81	70.46
Domestic	70.52	71.20	73.39	67.73	70.37
International	0.31	0.38	0.38	0.08	0.09
Total visitor spending	\$7,294	\$7,563	\$7,975	\$5,865	\$7,657
Domestic	\$7,294	\$7,563	\$7,975	\$5,865	\$7,657
International	\$0.31	\$0.32	\$0.33	\$0.06	\$0.07
Per visitor spending	\$103	\$106	\$108	\$86	\$109
Domestic	\$103	\$106	\$109	\$87	\$109
International	\$1,002	\$831	\$853	\$782	\$819

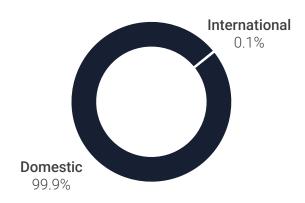
Source: Longwoods Int'l, Tourism Economics

Kentucky visitation share by segment

Expressed as percentage of total visitation by market



Source: Longwoods Int'l, Tourism Economics





ECONOMIC IMPACT METHODOLOGY

Our analysis of the Kentucky visitor economy begins with direct visitor spending and analyzes the downstream effects of this spending on the broader economy. To determine total economic impact, we input direct spending into a model of the Kentucky economy, constructed using an IMPLAN input-output (I-O) model. The model traces the full extent of industry impacts as dollars flow through the local economy.

An I-O model represents a profile of an economy by measuring the relationships among industries and consumers and quantifies three levels of impact:

- **1. Direct impacts**: Visitor spending creates direct economic value within a discrete group of sectors (such as recreation and transportation). This supports a relative proportion of spending, jobs, wages, and taxes within each sector.
- **2. Indirect impacts**: Each directly affected sector also purchases goods and services as inputs (e.g. food wholesalers, utilities) into production. These impacts are called indirect impacts or supply-chain effects.
- **3. Induced impacts**: Lastly, the induced impact is generated when employees whose wages are generated either directly or indirectly by visitor spending spend those wages in the local economy. This is called the induced impact or income effect.

The Tourism Economics model calculates these three levels of impact - direct, indirect and induced - for a broad set of indicators, including:

• Spending

• Federal Taxes

- Wages
- Employment

- State Taxes
- Local Taxes



DIRECT IMPACTS

Tourism's contribution measured visitor spending



TOTAL IMPACTS Direct, indirect, and induced impacts



INDIRECT IMPACTS

Purchases of inputs from suppliers Suppliers' own supply chains



B2B GOODS & SERVICES PURCHASED

INDUCED IMPACTS

Consumer spending out of employees' wages:



HOUSEHOLD CONSUMPTION





GDP



JOBS



INCOME





ECONOMIC IMPACT **FINDINGS**

BUSINESS SALES IMPACTS

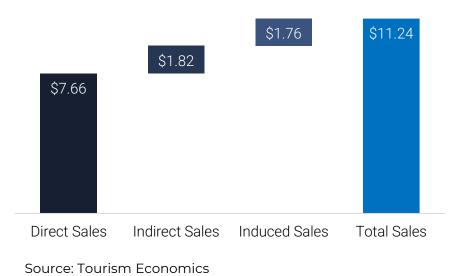
Visitors contributed a direct impact of \$7.7 billion in 2021. This direct impact of \$7.7 billion generated \$3.6 billion in indirect and induced impacts, resulting in a total economic impact of \$11.2 billion in the Kentucky economy, 27% more than a year earlier.

The indirect and induced effects add a total of \$3.6 billion in sales for businesses located in Kentucky.

Outside of direct impacts, significant benefits accrue in sectors like finance, insurance, and real estate, and business services.

Summary Economic impacts (2021)

Amounts in billions of nominal dollars



Business sales impacts by industry (2021)

Amounts in millions of nominal dollars

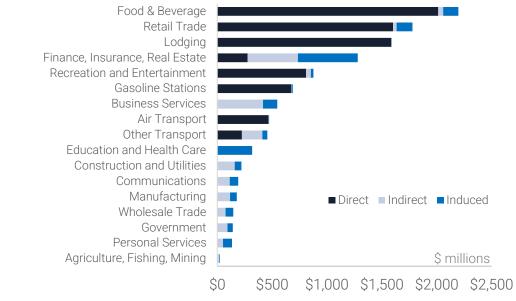
Total, all industries

Food & Beverage Retail Trade Lodging Finance, Insurance, Real Estate **Recreation and Entertainment Gasoline Stations Business Services** Air Transport Other Transport Education and Health Care Construction and Utilities Communications Manufacturing Wholesale Trade Government Personal Services Agriculture, Fishing, Mining

Source: Tourism Economics

Visitor economy business sales impacts by industry (2021)

Amounts in millions of nominal dollars



Source: Tourism Economics

Direct Business Sales	Indirect Business Sales	Induced Business Sales	Total Business Sales
\$7,656.7	\$1,817.7	\$1,762.5	\$11,236.8
\$2,014.5	\$44.8	\$138.7	\$2,198.0
\$1,602.4	\$32.7	\$143.6	\$1,778.8
\$1,586.6	\$1.4	\$0.9	\$1,588.9
\$276.3	\$458.4	\$546.0	\$1,280.7
\$809.7	\$43.0	\$23.4	\$876.2
\$674.9	\$3.0	\$9.7	\$687.7
	\$416.6	\$130.6	\$547.2
\$467.3	\$2.5	\$3.3	\$473.0
\$224.9	\$186.7	\$44.7	\$456.3
	\$2.9	\$314.8	\$317.7
	\$158.3	\$62.0	\$220.3
	\$113.1	\$77.4	\$190.4
	\$116.0	\$61.5	\$177.5
	\$76.4	\$69.2	\$145.5
	\$93.4	\$48.4	\$141.8
	\$52.9	\$81.7	\$134.5
	\$15.6	\$6.6	\$22.2

\$ millions



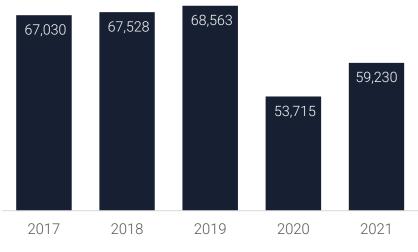
ECONOMIC IMPACT FINDINGS

DIRECT IMPACTS

Employment supported by visitor activity increased 10.3% in 2021, rebounding to more than 59,000 jobs. Despite the increase, the number of jobs directly supported by visitors remains at 86% of pre-pandemic levels.

Visitor supported employment in Kentucky

Amounts in number of jobs





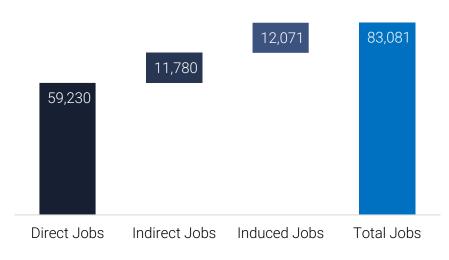


EMPLOYMENT IMPACTS

Visitor activity sustained 59,230 direct jobs in 2021, with an additional 23,851 jobs supported from the indirect and induced impacts of visitor activity. The total jobs impact recovered to nearly 83,100 in 2021, one of every 30 jobs in the state

Summary Employment Impacts (2021)

Amounts in number of jobs



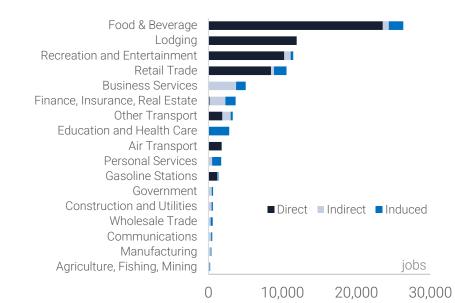
Source: Tourism Economics

Visitor spending supports the largest number of jobs in the food & beverage industry (26,353).

Spending by businesses directly impacted by visitor spending supports 3,755 jobs in the business services industry – in areas like accounting, advertising and building services.

Tourism Job Impacts by Industry (2021)

Amounts in number of jobs





Summary Employment Impacts by Industry (2021)

Amounts in number of jobs

Total, all industries

Food & Beverage Lodging **Recreation and Entertainment** Retail Trade **Business Services** Finance, Insurance, Real Estate Other Transport Education and Health Care Air Transport Personal Services **Gasoline Stations** Government Construction and Utilities Wholesale Trade Communications Manufacturing Agriculture, Fishing, Mining

Source: Tourism Economics

Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
59,230	11,780	12,071	83,081
23,576	800	1,976	26,353
11,913	13	7	11,933
10,249	879	346	11,474
8,451	413	1,699	10,563
	3,755	1,298	5,053
168	2,132	1,386	3,685
1,892	1,117	285	3,293
	64	2,747	2,811
1,785	9	11	1,805
	503	1,224	1,727
1,195	47	137	1,379
	460	170	630
	442	174	616
	309	272	581
	370	154	524
	307	106	413
	160	79	239

VALUE ADDED IMPACTS

The value of all visitor-associated goods and services produced in Kentucky in 2021 increased to \$4.9 billion, an increase of 20% over the prior year.

Summary Value-added Impacts (2021)

Amounts in billions of nominal dollars



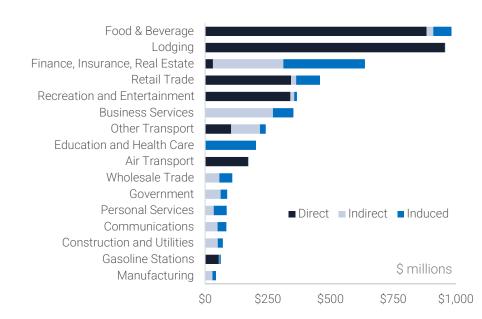
Source: Tourism Economics

The locally produced portion of visitor-associated sales in the food & beverage industry added \$983 million to state GDP in 2021.

Spending by visitorassociated workers supported \$201 million in GDP contribution in the education and health care industries, showing how visitors support businesses across the industrial spectrum.

Visitor Value-added Impacts by Industry (2021)

Amounts in millions of nominal dollars





Summary Value-added Impacts by Industry (2021)

Amounts in millions of nominal dollars

Total, all industries

Food & Beverage Lodging Finance, Insurance, Real Estate Retail Trade **Recreation and Entertainment Business Services** Other Transport Education and Health Care Air Transport Wholesale Trade Government Personal Services Communications Construction and Utilities **Gasoline Stations** Manufacturing Agriculture, Fishing, Mining

Source: Tourism Economics

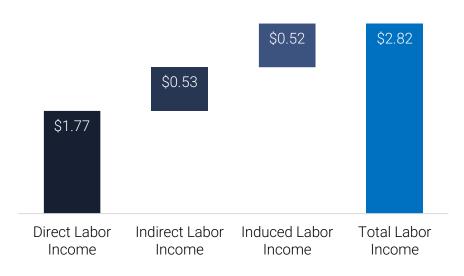
Direct			
GDP	Indirect GDP	Induced GDP	Total GDP
\$2,884.0 \$	51,020.5	\$1,019.2	\$4,923.6
\$883.2	\$26.7	\$73.1	\$983.1
\$956.7	\$0.8	\$0.5	\$958.0
\$31.1	\$281.1	\$325.2	\$637.3
\$342.4	\$20.4	\$95.4	\$458.2
\$340.4	\$15.3	\$10.7	\$366.4
	\$270.3	\$81.9	\$352.2
\$104.1	\$114.6	\$23.4	\$242.0
	\$1.7	\$201.4	\$203.1
\$171.0	\$1.1	\$1.3	\$173.4
	\$57.0	\$51.6	\$108.6
	\$62.0	\$25.8	\$87.8
	\$34.2	\$52.1	\$86.3
	\$49.7	\$35.2	\$84.8
	\$50.5	\$20.4	\$70.9
\$54.9	\$1.9	\$5.8	\$62.6
	\$29.4	\$13.7	\$43.1
	\$3.9	\$1.8	\$5.7

LABOR INCOME IMPACTS

Visitor activity generated \$3.2 billion in direct labor income and a total of \$5.2 billion when including indirect and induced impacts. Total tourism-generated income in Kentucky in 2021 rebounded 11% above 2020.

Summary labor income impacts (2021)

Amounts in millions of nominal dollars



Source: Tourism Economics

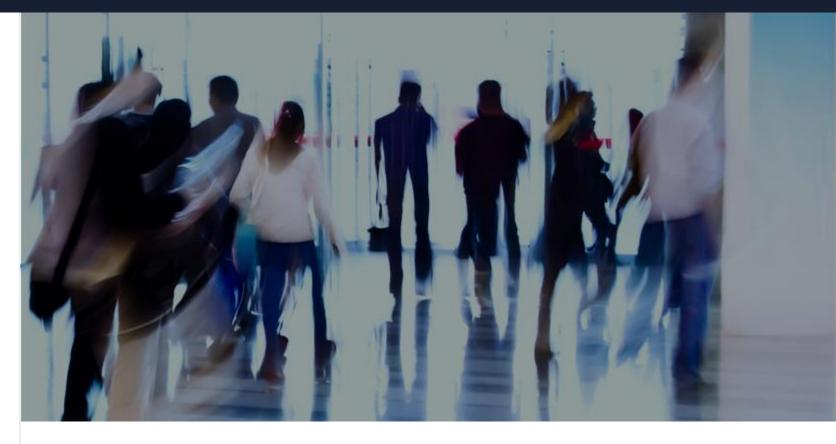
There are nine industries in which visitor activity supports more than \$100 million in personal income. These range from the obvious-food & beverage and lodging, to the less obvious-business services and education & healthcare.

Tourism labor income Impacts by Industry (2021)

Amounts in millions of nominal dollars



Source: Tourism Economics



Summary labor income impacts (2021) Amounts in millions of nominal dollars

Total, all industries

Food & Beverage Lodging Retail Trade Recreation and Entertainment **Business Services** Other Transport Air Transport Education and Health Care Finance, Insurance, Real Estate Personal Services Government Wholesale Trade Construction and Utilities Gasoline Stations Communications Manufacturing Agriculture, Fishing, Mining

Direct	Indirect	Induced	Total
Labor	Labor	Labor	Labor
Income	Income	Income	Income
\$1,766.3	\$533.5	\$519.2	\$2,819.0
\$609.5	\$24.4	\$50.2	\$684.1
\$411.8	\$0.4	\$0.2	\$412.5
\$235.1	\$11.8	\$50.7	\$297.6
\$229.8	\$12.7	\$5.7	\$248.2
	\$181.8	\$62.3	\$244.2
\$79.9	\$69.8	\$16.7	\$166.3
\$163.8	\$0.8	\$1.0	\$165.6
	\$1.4	\$163.6	\$165.1
\$7.5	\$70.9	\$57.4	\$135.9
	\$25.5	\$43.1	\$68.6
	\$42.1	\$15.1	\$57.2
	\$21.9	\$19.9	\$41.8
	\$26.8	\$11.2	\$38.0
\$28.9	\$1.3	\$4.0	\$34.2
	\$20.5	\$9.5	\$30.0
	\$17.7	\$6.9	\$24.6
	\$3.6	\$1.5	\$5.1

ECONOMIC IMPACT FINDINGS FISCAL (TAX) IMPACTS

Visitor spending, visitor supported jobs, and business sales generated \$1.5 billion in government revenues.

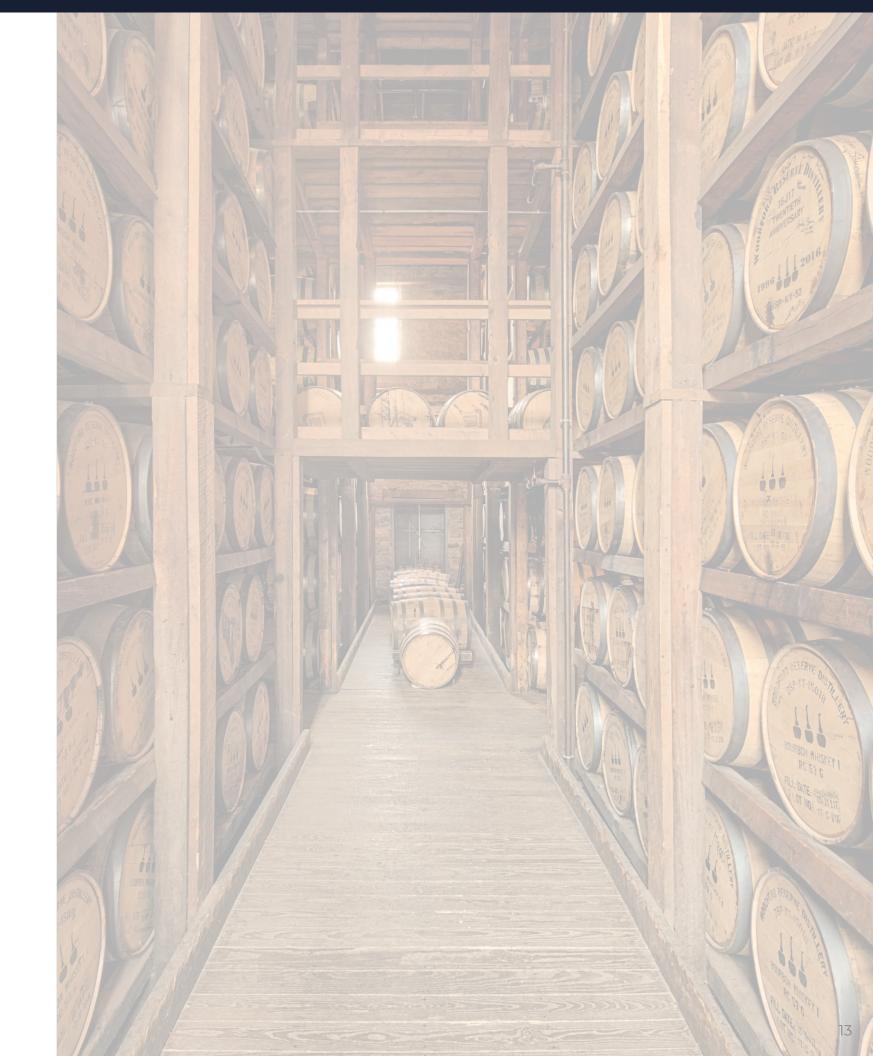
State and local taxes alone tallied \$808 million in 2021.

Each household in Kentucky would need to be taxed an additional \$462 to replace the visitor-generated taxes received by Kentucky state and local governments in 2021.

Fiscal (tax) impacts

Amounts in millions of nominal dollars

	Direct	Indirect / Induced	Total
Total Tax Revenues	\$1,022.9	\$427.5	\$1,450.4
Federal Taxes	\$403.1	\$239.4	\$642.6
Personal Income	\$97.7	\$58.1	\$155.8
Corporate	\$55.5	\$45.9	\$101.4
Indirect Business	\$56.8	\$19.3	\$76.1
Social Insurance	\$193.2	\$116.2	\$309.3
State and Local Taxes	\$619.7	\$188.1	\$807.8
Sales	\$337.8	\$96.4	\$434.2
Bed Tax	\$70.9	\$0.0	\$70.9
Personal Income	\$44.4	\$26.4	\$70.8
Corporate	\$11.0	\$9.1	\$20.0
Social Insurance	\$2.9	\$2.7	\$5.6
Excise and Fees	\$28.0	\$10.7	\$38.7
Property	\$124.7	\$42.8	\$167.5



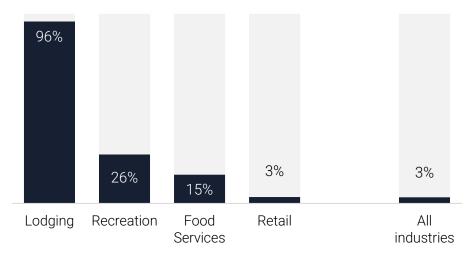


ECONOMIC IMPACTS **IN CONTEXT**

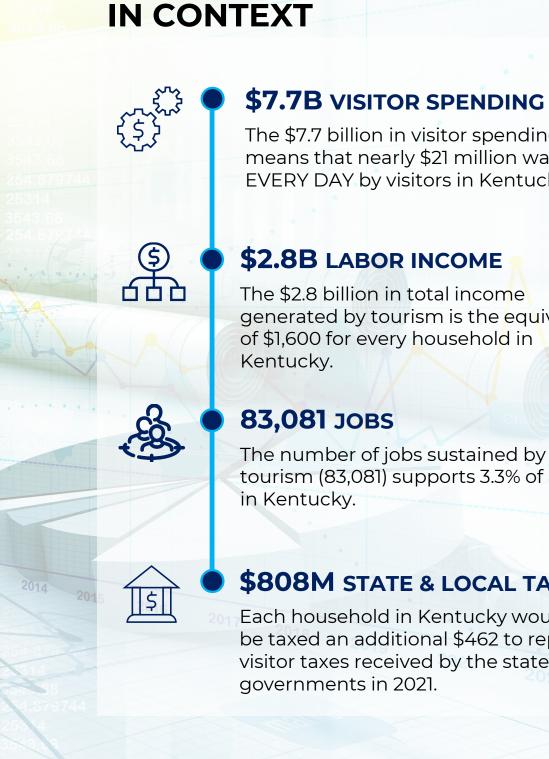
Visitors sustain nearly all employment in the lodging sector, just over a quarter of recreation employment, and 15% of food services employment is supported by visitor spending.

Tourism employment intensity

Amounts in percentage of total industry employment



Source: BEA, BLS, Tourism Economics



ECONOMIC IMPACTS

\$7.7B VISITOR SPENDING

The \$7.7 billion in visitor spending means that nearly \$21 million was spent EVERY DAY by visitors in Kentucky.

generated by tourism is the equivalent of \$1,600 for every household in

tourism (83,081) supports 3.3% of all jobs

\$808M STATE & LOCAL TAXES

Each household in Kentucky would need to be taxed an additional \$462 to replace the visitor taxes received by the state and local

APPENDIX

Glossary – Spending Definitions

Term	Description
Lodging	Includes visitor spending in the accommodation sub-sector. This includes food and other services provided by hotels, rentals and similar establishments.
Food and beverage	Includes all visitor spending on food & beverages, including at restaurants, bars, grocery stores and other food providers.
Recreation	Includes visitors spending within the arts, entertainment and recreation sub-sector.
Shopping	Includes visitor spending in all retail sub-sectors within the local economy.
Local transport	Includes visitor spending on local transport services such as taxis, limos, trains, rental cars, buses, and the local share of air transportation spending.
Service stations	Visitor spending on gasoline.
Second homes	Where applicable, spending associated with the upkeep of seasonal second homes for recreational use as defined by the Census Bureau.

Glossary – Economic Impact Definitions

Term	Description
Direct Impact	Impacts (business sa from spending by visi of tourism-related sec lodging).
Indirect Impact	Impacts created from inputs (e.g. food who production by the dire economic effects ste purchases in the supp
Induced Impact	Impacts created from employees whose wa by visitor spending.
Employment	Jobs directly and indi part-time and season working at least one h calendar year.
Labor income	Income (wages, salar supported by visitor s
Value Added (GDP)	The economic enhane services before offeri
Local Taxes	City and County taxes any local sales, incom revenues streams of transportation to san
State Taxes	State tax revenues ge sales, income, corpor state governments.

ales, jobs, income, and taxes) created directly sitors to a destination within a discreet group ectors (e.g. recreation, transportation,

m purchase of goods and services used as blesalers, utilities, business services) into rectly affected tourism-related sectors (i.e. emming from business-to-business oply chain).

m spending in the local economy by ages are generated either directly or indirectly

lirectly supported by visitor activity (includes nal work). One job is defined as one person hour per week for fifty weeks during the

ries, proprietor income and benefits) spending.

ncement a company gives its products or ing them to customers.

es generated by visitor spending. This includes me, bed, usage fees, licenses and other local governmental authorities – from nitation to general government.

enerated by visitor spending. This will include rate, usage fees and other assessments of

ABOUT TOURISM ECONOMICS

Tourism Economics is an Oxford Economics company with a singular objective: combine an understanding of the travel sector with proven economic tools to answer the most important questions facing our clients. More than 500 companies, associations, and destination work with Tourism Economics every year as a research partner. We bring decades of experience to every engagement to help our clients make better marketing, investment, and policy decisions. Our team of highlyspecialized economists deliver:

- Global travel data-sets with the broadest set of country, city, and state coverage available
- Travel forecasts that are directly linked to the economic and demographic outlook for origins and destinations
- Economic impact analysis that highlights the value of visitors, events, developments, and industry segments
- Policy analysis that informs critical funding, taxation, and travel facilitation decisions
- Market assessments that define market allocation and investment decisions

Tourism Economics operates out of regional headquarters in Philadelphia and Oxford, with offices in Belfast, London, Frankfurt, Ontario, and Sydney.

Oxford Economics is one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities. Our best-of-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact. Headquartered in Oxford, England, with regional centers in London, New York, and Singapore, Oxford Economics has offices across the globe in Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC, we employ over 400 full-time staff, including 300 professional economists, industry experts and business editors—one of the largest teams of macroeconomists and thought leadership specialists.

For more information: admin@tourismeconomics.com

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