

The Ohio Visitor Economy

Appalachia Region 2021

July 2022

Prepared for: Tourism Ohio





CONTENTS

Introduction Methodology & data sources	03
Key Findings Appalachia Region Summary economic & fiscal impacts	04
Ohio Summary	05
Ohio Regional Summary	09
Appalachia Region Tables Business sales, jobs, and labor income impacts	11
Appendix	17
About Tourism Economics Definitions and methodology	19



INTRODUCTION PROJECT BACKGROUND

The travel sector is an integral part of the Ohio's 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 7.3% 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 Ohio as it builds upon its tourism economy. By

establishing a baseline of economic impacts, the industry can track its progress over time.

To quantify the significance of the visitor economy in Ohio, 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.

METHODOLOGY AND DATA SOURCES

An IMPLAN input-output model was constructed for the state of Ohio. 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.

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 Ohio
- 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
- Tourism Economics: international travel data for overseas, Canadian, and Mexican travel to Ohio based on aviation, survey, and credit card information

APPALACHIA REGION

SUMMARY ECONOMIC IMPACTS

Direct visitor spending of \$4.0 billion generated tourism's total economic impact of \$6.9 billion, including 65,353 total jobs (including full-time and part-time jobs) with associated labor income of \$1.6 billion in 2021.



 **\$6.9B**
Total Economic Impact

 **\$4.0BM**
Direct Visitor Spending

 **\$1.6B**
Total Labor Income Impact

 **65,353**
Total Jobs Impact

FISCAL IMPACTS

TAX REVENUES

The economic impacts attributable to tourism generated significant fiscal (tax) impacts as they cycled through the regional economy. Overall, tourism generated \$925 million in tax revenues in 2021.

 **\$925M**
Total Tax Revenues

 **\$458M**
State & Local Tax Revenues

 **\$198M**
Local Tax Revenues

 **\$577**
Per household in tax burden relief

ECONOMIC IMPACTS
STATE OF OHIO



ECONOMIC IMPACTS

OHIO KEY FINDINGS

TOURISM'S DIRECT SPENDING IMPACT

The Ohio visitor economy spans multiple industries. International and domestic visitors support business in accommodations, food and beverage, recreation, retail shopping, local transportation and air travel. In 2021, total direct visitor spending tallied \$35.1 billion, including \$200 million from international visitors.



TOTAL VISITORS

Ohio welcomed 219 million visitors, mostly domestic, in 2021.

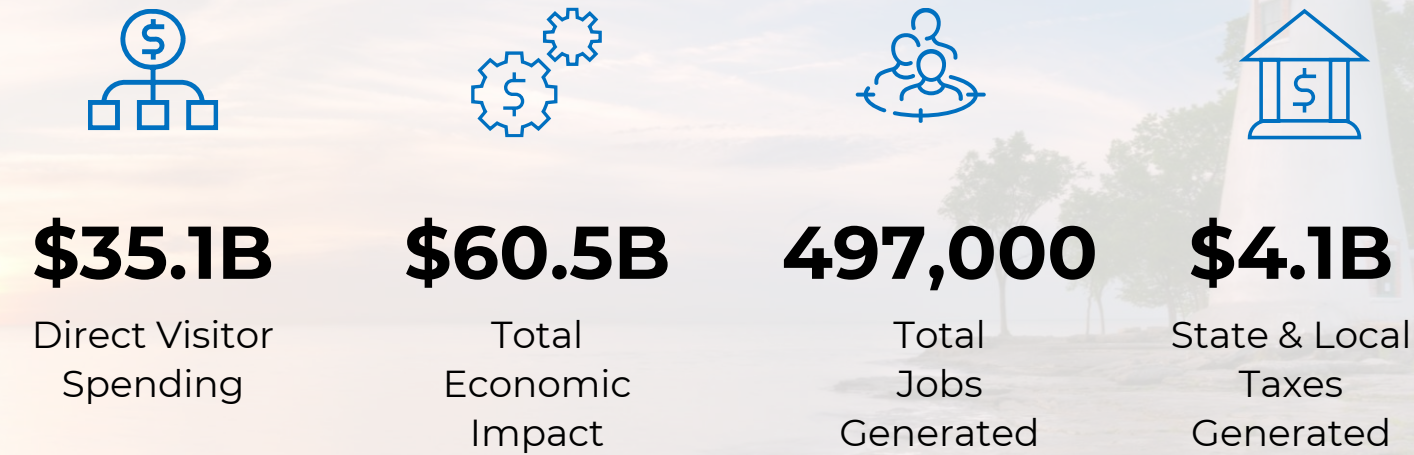


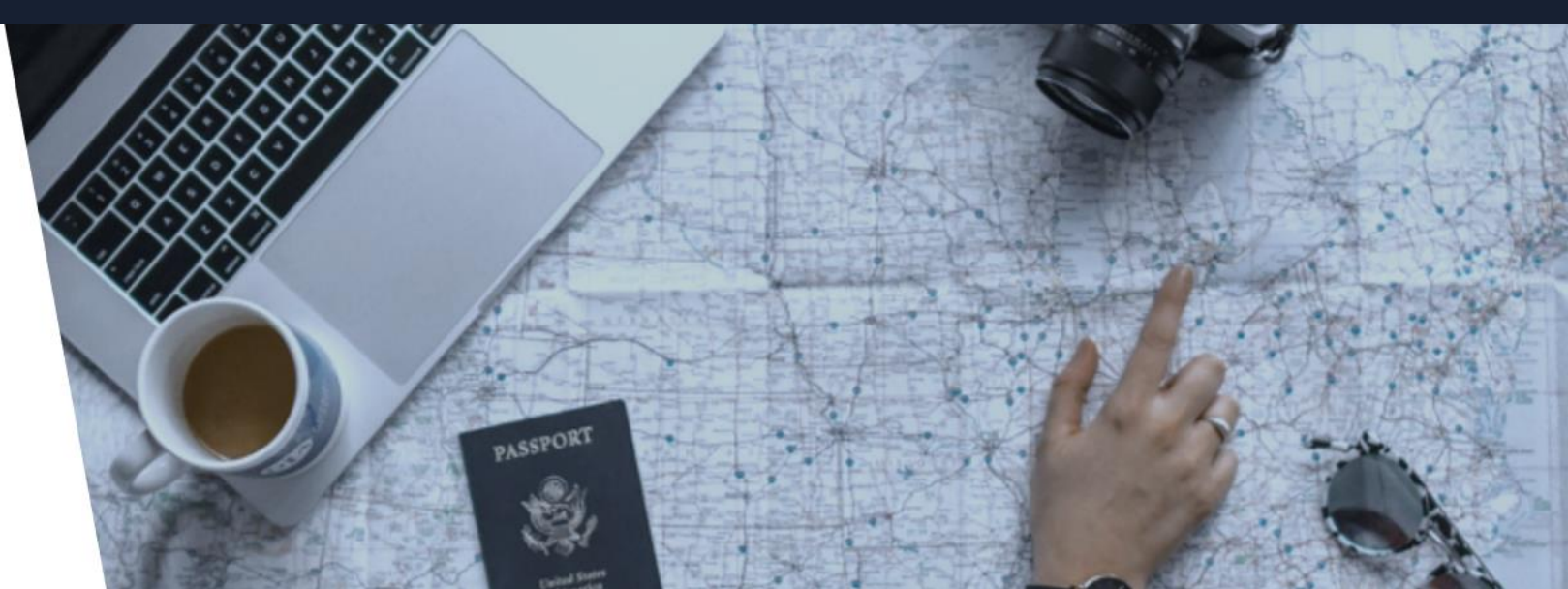
TOURISM'S TOTAL ECONOMIC IMPACTS

The direct visitor spending impact of \$35.1 billion generated a total economic impact of \$60.5 billion in Ohio in 2021 including indirect and induced impacts. This total economic impact sustained 497,000 jobs and generated \$4.1 billion in state and local tax revenues in 2021.



SUMMARY ECONOMIC IMPACTS Ohio Tourism (2021)





VISITATION & VISITOR SPENDING

Ohio hosts millions of visitors each year, including in-state and out-of-state travelers. Following severe COVID-related declines the prior year, 2021 was a year of recovery in which direct visitor spending reached \$35.1 billion. Visitor volume totaled 218.8 million, with domestic visitation accounting for 218.6 million.

VISITOR VOLUME

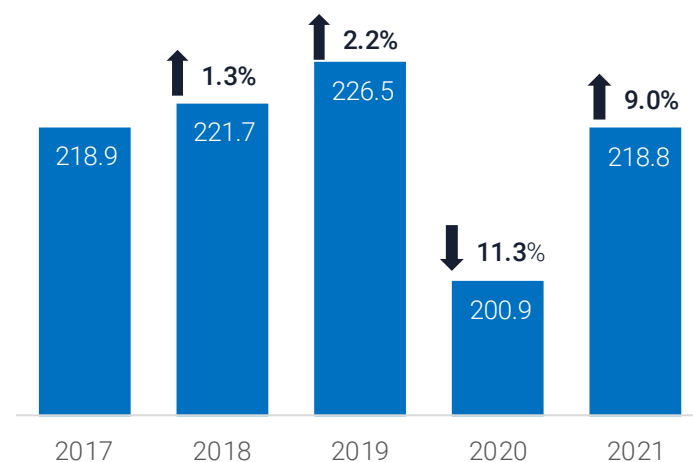
Recovery in 2021

Visitor volume and spending were severely impacted in 2020 by COVID-19 restrictions and closures.

In 2021, travel confidence rebounded with easing restrictions and effective vaccines. With a 9% gain in 2021, visitor levels nearly recovered to pre-pandemic levels and finished the year at 97% of 2019 volumes.

Ohio visitor volume

Amounts in millions



Sources: Longwoods Int'l, Tourism Economics

VISITOR SPENDING

Visitors to Ohio spent **\$35.1 billion** across a wide range of sectors in 2021.

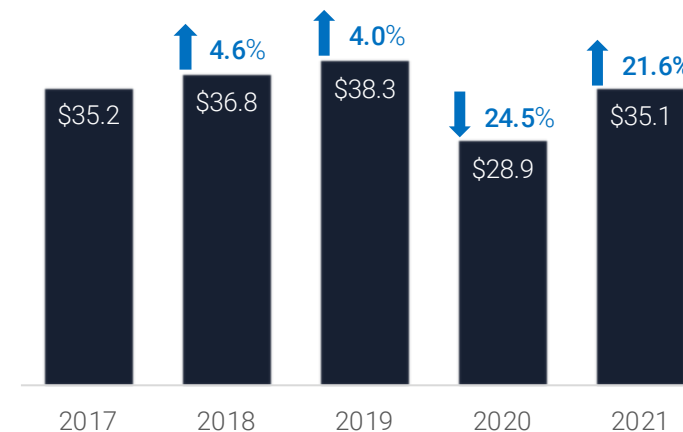
Visitor spending expanded 21.6% in 2021, driven by strong volume and higher prices in most sectors. With recovery in 2021, spending levels reached 92% of 2019 levels.

Of the \$35.1 billion spent in Ohio in 2021 by visitors, food and beverage accounted for \$8.5 billion, 24% of the average visitor dollar. Retail captured 15%, a total of \$5.3 billion.

Transportation, including both air and transportation within the destination, comprised 36%, with lodging spending capturing 11%. Recreational spending tallied \$4.9 billion in 2021—14% of each visitor dollar.

Ohio visitor spending

Amounts in \$ billions



Sources: Longwoods Int'l, Tourism Economics

 **\$35.1 BILLION**

Total Visitor Spending in 2021
(Domestic & International)

-  **\$8.5B FOOD & BEVERAGE**
Full-service restaurants, fast food, convenience stores, bars, grocery stores
-  **\$5.3B RETAIL**
Souvenirs, general merchandise, malls, shopping centers
-  **\$12.5B TRANSPORTATION**
Taxis, buses, parking, public transportation, car rentals, gasoline
-  **\$3.9B LODGING**
Hotels, motels, private home rentals, second homes
-  **\$4.9B RECREATION**
Theaters, amusements, entertainment venues, other rec

Source: Tourism Economics

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

ECONOMIC IMPACTS

KEY FINDINGS

Ohio visitor spending and annual growth

Amounts in \$billions, 2021 % change, and % recovered relative to 2019

	2017	2018	2019	2020	2021	2021 Growth	% of 2019
Total visitor spending	\$35.16	\$36.78	\$38.26	\$28.88	\$35.12	21.6%	91.8%
Food & beverage	\$8.97	\$9.34	\$9.79	\$7.07	\$8.49	20.1%	86.7%
Retail	\$4.92	\$5.07	\$5.30	\$4.65	\$5.28	13.5%	99.6%
Transportation**	\$11.56	\$12.19	\$12.60	\$10.14	\$12.53	23.6%	99.5%
Lodging*	\$3.76	\$3.95	\$4.11	\$2.67	\$3.88	45.7%	94.6%
Recreation	\$5.96	\$6.23	\$6.47	\$4.36	\$4.94	13.3%	76.3%

Source: Tourism Economics

* Lodging includes second home spending

** Transportation includes both ground and air transportation

Visitor volume and spending

Amounts in mils of persons, \$mil, and \$ per person

	2017	2018	2019	2020	2021	2021 Growth
Total visitors, mils	218.9	221.7	226.5	200.9	218.8	9.0%
Domestic	218.0	220.7	225.6	200.7	218.6	9.0%
International	1.0	1.0	1.0	0.2	0.2	7.7%
Visitor spending, \$bils	\$35.16	\$36.78	\$38.26	\$28.88	\$35.12	21.6%
Domestic	\$34.04	\$35.57	\$37.05	\$28.68	\$34.88	21.6%
International	\$1.13	\$1.21	\$1.20	\$0.21	\$0.24	16.2%
Per visitor spending, \$	\$161	\$166	\$169	\$144	\$160	11.6%
Domestic	\$156	\$161	\$164	\$143	\$160	11.7%
International	\$1,172	\$1,201	\$1,239	\$1,058	\$1,141	7.9%

Source: Tourism Economics

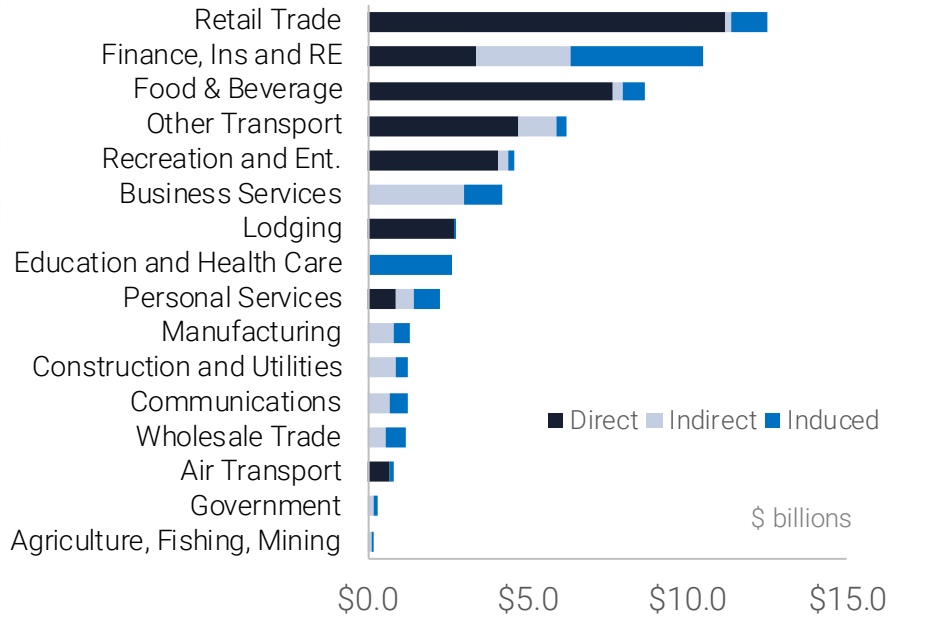
Business sales impacts by industry (2021)

Amounts in billions of nominal dollars

	Direct Business Sales	Indirect Business Sales	Induced Business Sales	Total Business Sales
Total, all industries	\$ 35.12	\$ 11.78	\$ 13.58	\$ 60.49
Retail Trade	\$ 11.15	\$ 0.19	\$ 1.17	\$ 12.51
Finance, Ins and RE	\$ 3.36	\$ 2.96	\$ 4.19	\$ 10.51
Food & Beverage	\$ 7.63	\$ 0.33	\$ 0.72	\$ 8.68
Other Transport	\$ 4.71	\$ 1.18	\$ 0.33	\$ 6.21
Recreation and Ent.	\$ 4.05	\$ 0.31	\$ 0.24	\$ 4.60
Business Services	\$ -	\$ 2.98	\$ 1.24	\$ 4.22
Lodging	\$ 2.68	\$ 0.00	\$ 0.00	\$ 2.69
Education and Health Care	\$ -	\$ 0.04	\$ 2.57	\$ 2.61
Personal Services	\$ 0.89	\$ 0.52	\$ 0.81	\$ 2.22
Manufacturing	\$ -	\$ 0.81	\$ 0.52	\$ 1.33
Construction and Utilities	\$ -	\$ 0.86	\$ 0.39	\$ 1.25
Communications	\$ -	\$ 0.71	\$ 0.51	\$ 1.22
Wholesale Trade	\$ -	\$ 0.57	\$ 0.63	\$ 1.19
Air Transport	\$ 0.66	\$ 0.05	\$ 0.07	\$ 0.78
Government	\$ -	\$ 0.15	\$ 0.12	\$ 0.27
Agriculture, Fishing, Mining	\$ -	\$ 0.12	\$ 0.08	\$ 0.20

Tourism business sales impacts by industry (2021)

Amounts in billions of nominal dollars



Source: Tourism Economics

ECONOMIC IMPACTS
OHIO REGIONAL SUMMARY



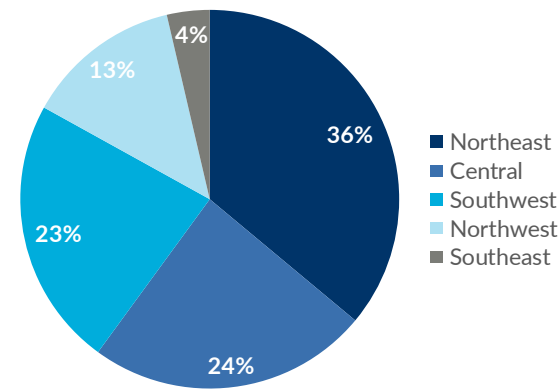
ECONOMIC IMPACTS

OHIO REGIONAL SUMMARY

Cleveland (Northeast), Columbus (Central), and Cincinnati (Southwest), are key destinations and influence the distribution of the tourism economy across Ohio.

Ohio tourism business sales by region

% of total



Ohio tourism business sales by region

Amounts in \$billions

	Direct Sales		Total Sales	
Total	\$	35.12	\$	60.49
Region				
Northeast	\$	12.65	\$	21.75
Central	\$	8.41	\$	14.46
Southwest	\$	8.16	\$	14.04
Northwest	\$	4.65	\$	8.03
Southeast	\$	1.26	\$	2.20

Source: Tourism Economics

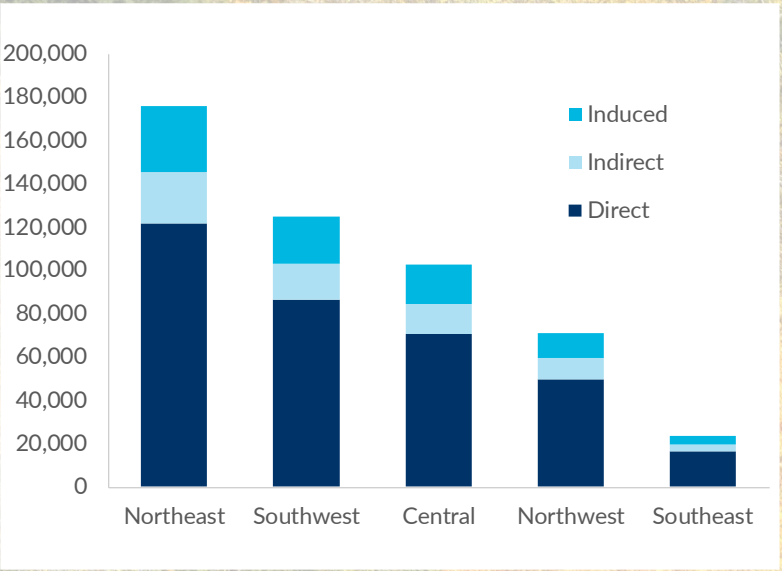
Ohio tourism business sales trends by region

Amounts in \$billions, growth in annual % change

	2017		2018		2019		2020		2021	
Ohio total	\$	35.16	\$	36.78	\$	38.26	\$	28.88	\$	35.12
Levels, \$bils										
Northeast	\$	13.00	\$	13.65	\$	13.84	\$	10.40	\$	12.65
Central	\$	8.51	\$	8.81	\$	9.31	\$	6.79	\$	8.41
Southwest	\$	8.23	\$	8.55	\$	9.04	\$	6.79	\$	8.16
Northwest	\$	4.26	\$	4.54	\$	4.81	\$	3.84	\$	4.65
Southeast	\$	1.16	\$	1.23	\$	1.25	\$	1.07	\$	1.26
Ohio total, % change										
Northeast				4.6%		4.0%		-24.5%		21.6%
Central				5.0%		1.5%		-24.9%		21.6%
Southwest				3.5%		5.7%		-27.1%		23.9%
Northwest				3.9%		5.8%		-24.9%		20.1%
Southeast				6.5%		5.9%		-20.2%		21.2%
				6.0%		1.5%		-14.8%		18.2%

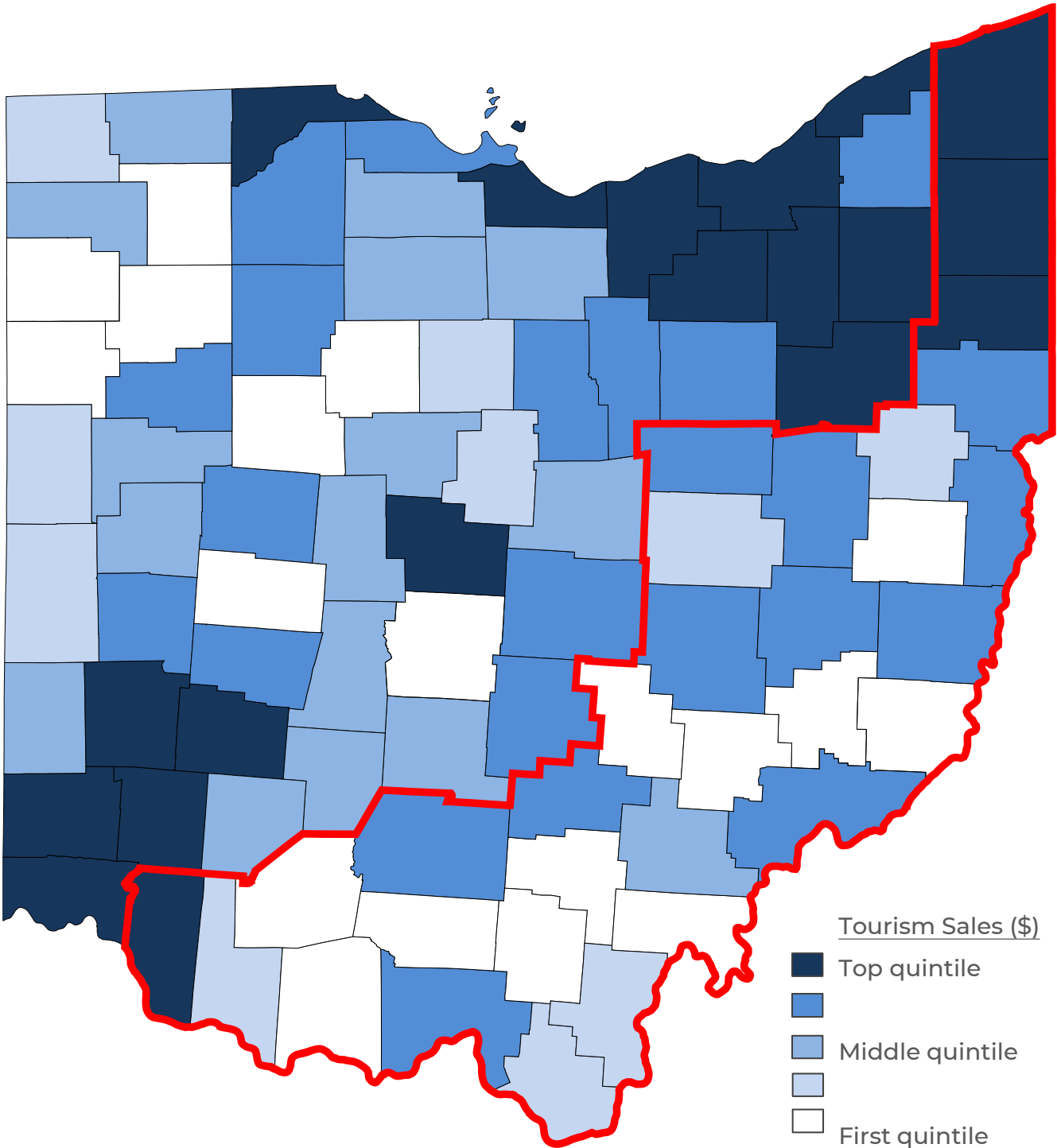
Ohio tourism jobs by region

Amounts in number of jobs



ECONOMIC IMPACTS
APPALACHIA REGION

APPALACHIA REGION



ECONOMIC IMPACTS

APPALACHIA REGION

Appalachia region tourism impacts

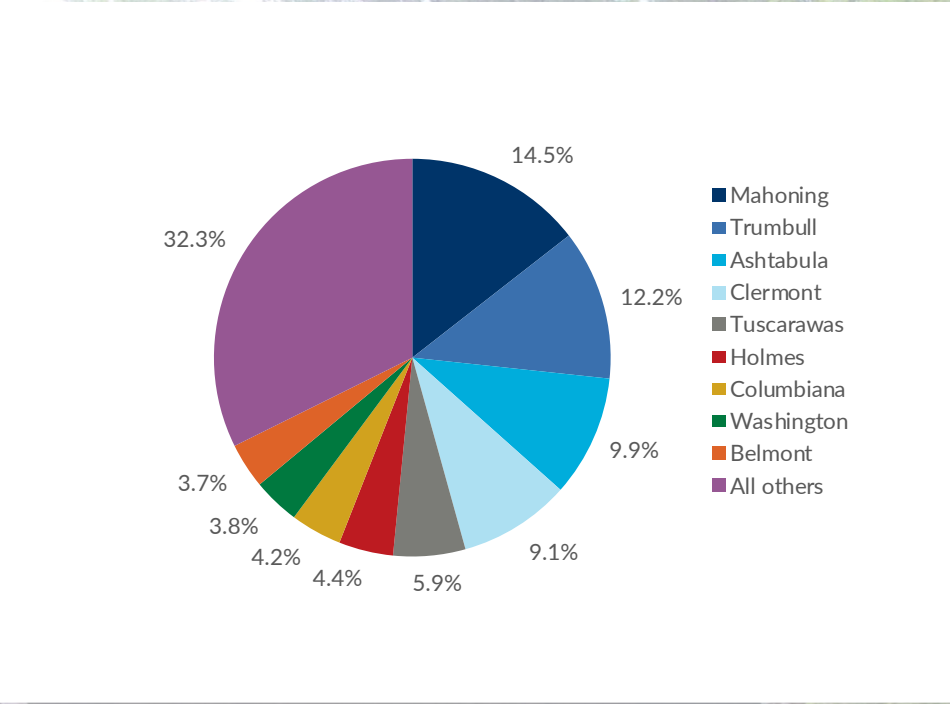
	Total Sales \$mils	Total Jobs	Total Income \$mils	Total Tax Revenue \$mils
Regional Total	\$6,903.4	65,353	\$1,560.1	\$924.6
County				
Adams	\$49.6	723	\$20.1	\$7.0
Ashtabula	\$682.4	4,009	\$90.6	\$86.6
Athens	\$203.9	2,323	\$59.0	\$28.4
Belmont	\$255.0	2,489	\$65.6	\$35.0
Brown	\$56.6	931	\$20.4	\$7.9
Carroll	\$88.6	698	\$17.9	\$11.5
Clermont	\$629.0	5,772	\$170.3	\$84.8
Columbiana	\$288.9	2,514	\$58.3	\$37.3
Coshocton	\$62.6	752	\$16.4	\$8.3
Gallia	\$85.5	1,007	\$24.3	\$11.7
Guernsey	\$219.2	1,792	\$49.4	\$30.0
Harrison	\$16.2	170	\$3.1	\$2.0
Highland	\$52.3	1,051	\$15.8	\$7.1
Hocking	\$233.6	1,569	\$33.6	\$33.5
Holmes	\$306.1	2,250	\$50.7	\$40.7
Jackson	\$45.1	955	\$18.0	\$6.5
Jefferson	\$223.3	2,290	\$58.1	\$29.9
Lawrence	\$53.2	1,034	\$26.7	\$8.2
Mahoning	\$999.6	9,967	\$234.0	\$135.1
Meigs	\$15.4	266	\$6.3	\$2.0
Monroe	\$8.3	122	\$2.4	\$1.0
Morgan	\$22.2	173	\$2.6	\$2.6
Muskingum	\$254.5	3,148	\$76.5	\$35.7
Noble	\$6.0	151	\$2.7	\$0.8
Perry	\$12.1	283	\$6.4	\$1.7
Pike	\$32.4	577	\$12.5	\$4.6
Ross	\$217.1	2,836	\$68.0	\$30.7
Scioto	\$247.7	2,380	\$54.7	\$32.5
Trumbull	\$842.4	7,674	\$165.8	\$110.7
Tuscarawas	\$405.6	3,304	\$75.8	\$53.0
Vinton	\$25.5	199	\$4.7	\$3.4
Washington	\$263.3	1,944	\$49.5	\$34.4

Source: Tourism Economics

Tourism business sales by county

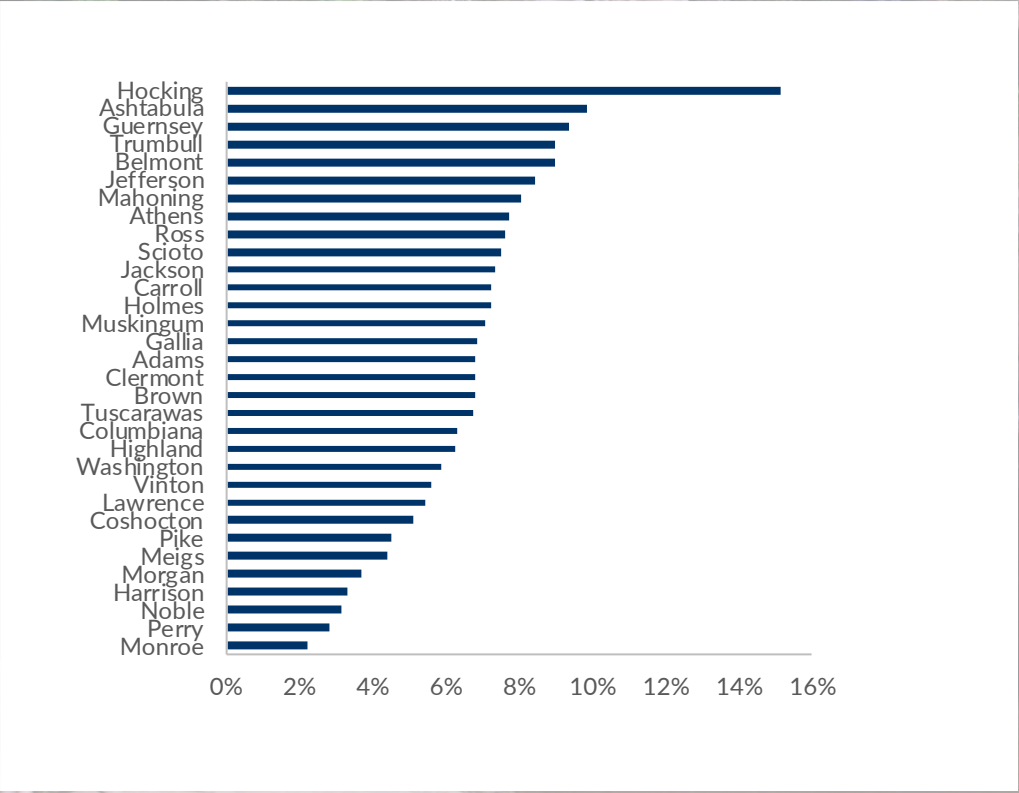
Amounts in \$millions

	Direct Sales \$mils	Total Sales \$mils
Region total	\$3,976.8	\$6,903.4
County		
Mahoning	\$581.2	\$999.6
Trumbull	\$489.2	\$842.4
Ashtabula	\$396.6	\$682.4
Clermont	\$358.1	\$629.0
Tuscarawas	\$235.4	\$405.6
Holmes	\$176.4	\$306.1
Columbiana	\$166.9	\$288.9
Washington	\$152.3	\$263.3
Belmont	\$147.3	\$255.0
All others	\$1,273.2	\$2,231.0



Tourism job intensity by county

Share of total jobs, %





ECONOMIC IMPACT APPALACHIA REGION

BUSINESS SALES IMPACTS

Visitors contributed a direct impact of **\$4.0 billion** in 2021 in the Appalachia Region , which included spending by day and overnight visitors.

This direct spending generated **\$6.9 billion** in total impact, including indirect and induced impacts.

Tourism business trends

Recent Trends in Tourism Sales (Output)

	2019	2020	2021
Appalachia Region direct sales trend			
Sales volume (\$mils)	3,850.0	3,278.0	3,976.8
Sales growth, % change	2.8%	-14.9%	21.3%
Wider region and state direct sales trends:			
Ohio sales growth, % change	4.0%	-24.5%	21.6%

Business sales impacts by industry (2021)

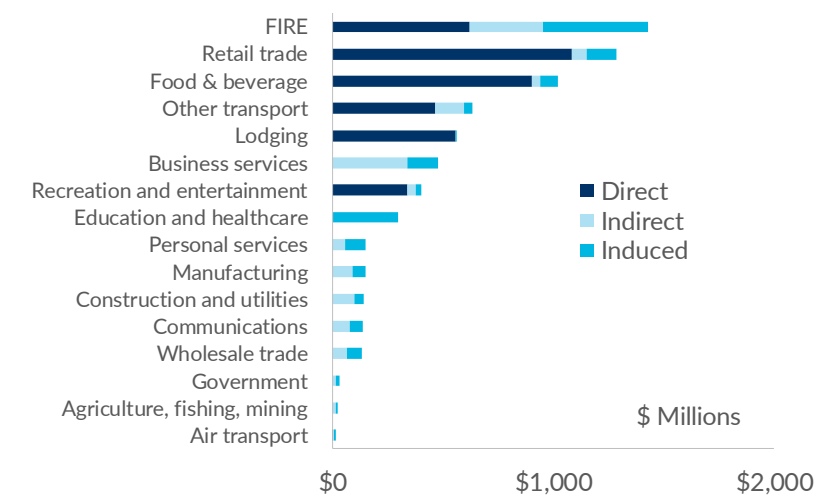
Amounts in millions of nominal dollars

	Direct Business Sales	Indirect Business Sales	Induced Business Sales	Total Business Sales
Total, all industries	\$ 3,976.8	\$ 1,383.2	\$ 1,543.4	\$ 6,903.4
FIRE	\$ 620.1	\$ 335.9	\$ 475.8	\$ 1,431.8
Retail trade	\$ 1,087.1	\$ 67.5	\$ 133.3	\$ 1,287.9
Food & beverage	\$ 902.3	\$ 37.9	\$ 81.7	\$ 1,021.9
Other transport	\$ 464.3	\$ 133.7	\$ 37.1	\$ 635.2
Lodging	\$ 557.0	\$ 0.2	\$ 0.6	\$ 557.8
Business services	\$ -	\$ 338.4	\$ 140.4	\$ 478.8
Recreation and entertainment	\$ 341.8	\$ 35.1	\$ 26.9	\$ 403.8
Education and healthcare	\$ -	\$ 4.0	\$ 292.3	\$ 296.3
Personal services	\$ -	\$ 59.4	\$ 92.4	\$ 151.8
Manufacturing	\$ -	\$ 91.8	\$ 59.0	\$ 150.8
Construction and utilities	\$ -	\$ 98.1	\$ 43.9	\$ 142.0
Communications	\$ -	\$ 80.3	\$ 57.8	\$ 138.2
Wholesale trade	\$ -	\$ 64.4	\$ 71.3	\$ 135.7
Government	\$ -	\$ 17.1	\$ 14.0	\$ 31.1
Agriculture, fishing, mining	\$ -	\$ 14.1	\$ 8.7	\$ 22.9
Air transport	\$ 4.1	\$ 5.2	\$ 8.2	\$ 17.5

Source: Tourism Economics

Tourism business sales impacts by industry (2021)

Amounts in millions of nominal dollars



Source: Tourism Economics

JOB IMPACTS

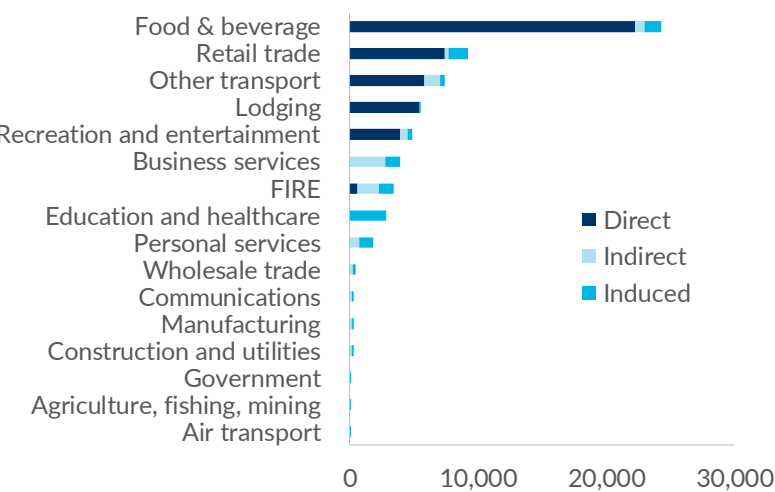
Visitor activity sustained 45,773 direct jobs and an additional 19,580 indirect and induced jobs in the Appalachia Region.

The total 65,353 jobs in the region supported by visitor spending accounts for 7.4% of all jobs in the region.



Tourism Job Impacts by industry (2021)

Amounts in number of full-time and part-time jobs



Source: Tourism Economics

Summary Job impacts by industry (2021)

Amounts in number of full-time and part-time jobs

Amounts in number of jobs	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Total, all industries	45,773	8,952	10,628	65,353
Food & beverage	22,324	692	1,288	24,303
Retail trade	7,455	249	1,550	9,255
Other transport	5,845	1,208	379	7,432
Lodging	5,508	3	7	5,517
Recreation and entertainment	3,985	568	339	4,892
Business services	-	2,803	1,151	3,954
FIRE	657	1,607	1,216	3,480
Education and healthcare	-	58	2,836	2,894
Personal services	-	746	1,120	1,866
Wholesale trade	-	243	235	478
Communications	-	200	143	343
Manufacturing	-	209	122	332
Construction and utilities	-	218	100	318
Government	-	71	55	126
Agriculture, fishing, mining	-	63	63	126
Air transport	-	15	22	37

Source: Tourism Economics

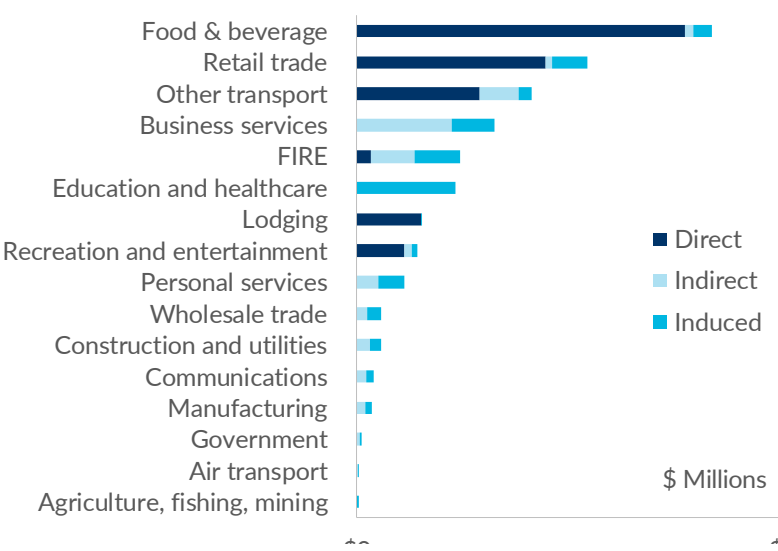
LABOR INCOME IMPACTS

Visitor activity generated \$873 million in direct household income and a total of \$1.6 billion including indirect and induced impacts.



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

	Direct Labor Income	Indirect Labor Income	Induced Labor Income	Total Labor Income
Total, all industries	\$ 872.6	\$ 311.9	\$ 375.5	\$ 1,560.1
Food & beverage	\$ 373.4	\$ 10.2	\$ 20.9	\$ 404.5
Retail trade	\$ 215.3	\$ 6.8	\$ 40.5	\$ 262.7
Other transport	\$ 139.8	\$ 44.6	\$ 15.1	\$ 199.5
Business services	\$ -	\$ 108.5	\$ 48.8	\$ 157.4
FIRE	\$ 16.1	\$ 50.5	\$ 51.3	\$ 117.9
Education and healthcare	\$ -	\$ 1.1	\$ 112.0	\$ 113.1
Lodging	\$ 73.4	\$ 0.0	\$ 0.1	\$ 73.6
Recreation and entertainment	\$ 54.6	\$ 8.7	\$ 6.3	\$ 69.6
Personal services	\$ -	\$ 24.9	\$ 30.0	\$ 54.8
Wholesale trade	\$ -	\$ 12.9	\$ 15.6	\$ 28.5
Construction and utilities	\$ -	\$ 16.0	\$ 12.5	\$ 28.5
Communications	\$ -	\$ 11.0	\$ 9.0	\$ 20.1
Manufacturing	\$ -	\$ 10.4	\$ 7.1	\$ 17.5
Government	\$ -	\$ 3.6	\$ 2.7	\$ 6.3
Air transport	\$ -	\$ 1.3	\$ 2.0	\$ 3.3
Agriculture, fishing, mining	\$ -	\$ 1.2	\$ 1.6	\$ 2.9

Source: Tourism Economics

ECONOMIC IMPACT FINDINGS

FISCAL (TAX) IMPACTS

Visitor spending, visitor supported jobs, and business sales generated **\$924.6 million** in government revenues.

State and local taxes alone tallied **\$458.4 million** in the region in 2021.

Each household in the region would need to be taxed an additional **\$577** to replace the visitor-generated taxes received by state and local governments in 2021.

Fiscal (tax) impacts

Amounts in nominal dollars

Total Taxes	
Total tax revenues	\$924.6
Federal Taxes	\$466.2
State Taxes	\$260.7
Local Taxes	\$197.7
State/Local Tax Savings Per Household	\$577

Source: Tourism Economics



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 sales, jobs, income, and taxes) created directly from spending by visitors to a destination within a discreet group of tourism-related sectors (e.g. recreation, transportation, lodging).
Indirect Impact	Impacts created from purchase of goods and services used as inputs (e.g. food wholesalers, utilities, business services) into production by the directly affected tourism-related sectors (i.e. economic effects stemming from business-to-business purchases in the supply chain).
Induced Impact	Impacts created from spending in the local economy by employees whose wages are generated either directly or indirectly by visitor spending.
Employment	Jobs directly and indirectly supported by visitor activity (includes part-time and seasonal work). One job is defined as one person working at least one hour per week for fifty weeks during the calendar year.
Labor income	Income (wages, salaries, proprietor income and benefits) supported by visitor spending.
Value Added (GDP)	The economic enhancement a company gives its products or services before offering them to customers.
Local Taxes	City and County taxes generated by visitor spending. This includes any local sales, income, bed, usage fees, licenses and other revenues streams of local governmental authorities – from transportation to sanitation to general government.
State Taxes	State tax revenues generated by visitor spending. This will include sales, income, corporate, usage fees and other assessments of state governments.



ECONOMIC IMPACT METHODOLOGY

Our analysis of the Ohio 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 Ohio 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
- Wages
- Employment
- Federal Taxes
- State Taxes
- Local Taxes

ECONOMIC IMPACT FRAMEWORK

DIRECT IMPACTS

Ohio tourism's contribution measured visitor spending



RETAIL



ENTERTAINMENT/REC



FOOD & BEVERAGE



TRANSPORTATION



LODGING

INDIRECT IMPACTS

Purchases of inputs from suppliers
Suppliers' own supply chains



SUPPLY
CHAIN
EFFECTS



B2B GOODS &
SERVICES
PURCHASED

INDUCED IMPACTS

Consumer spending out of
employees' wages:



INCOME
EFFECT



HOUSEHOLD
CONSUMPTION

TOTAL IMPACTS

Direct, indirect, and
induced impacts



SALES



GDP



JOBS



INCOME



TAXES

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 highly-specialized 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