

Economic Impact of the US Gaming Industry

American Gaming Association

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Overview

Overview

To quantify the impacts of US gaming industry for the American Gaming Association, Oxford Economics analyzed industry information from a variety of sources and prepared a comprehensive measure of industry significance during 2017. This represents an update of Oxford Economics' estimates for 2014.

As part of this analysis, Oxford Economics:

- conducted a survey of national casino operators;
- gathered information from secondary sources including gaming-sector employment, revenue, and expense benchmarks from federal, state, and private data sources; and,
- calculated direct, indirect, and induced economic impacts on a national basis in 2017.

The results show the US gaming industry supported a total economic impact of \$261.4 billion of output, with 1.8 million jobs and \$40.8 billion in tax revenue.

This document presents key elements of the research and findings.

What is included in this analysis of the US gaming industry?

- Casinos (commercial and Native American casinos, and card rooms)
- Gaming manufacturers
- Ancillary spending by patrons during trips to casinos (e.g. lodging, and food and beverage in the local area)

Economic Impact of the US Gaming Industry

In millions, except jobs

	2017
Total Economic Impact	
Output (business sales)	\$261,356
Employment	1,755,981
Labor Income	\$73,967
Tax Revenue	\$40,786
Federal Taxes	\$18,594
State and Local Taxes	\$11,493
Gaming Taxes	\$10,699
Direct Economic Impact	
Output (business sales)	\$108,974
Casino Revenue	\$89,414
Gaming Manufacturer Revenue	\$6,272
Ancillary Spending	\$13,288
Employment	726,811
Labor Income	\$33,306

Source: Oxford Economics

Executive summary

US gaming industry (2017)

- Gaming industry direct spending totaled \$109.0 billion.
 - This includes \$89.4 billion of spending at casinos, \$13.3 billion of ancillary spending by patrons on casino trips, and \$6.3 billion of purchases from gaming manufacturers.
- Casino revenue totaling \$89.4 billion included \$55.7 billion at commercial casinos, and \$33.7 billion at Native American casinos.
 - Of the total \$89.4 billion of consumer spending at casinos, 82% was on gaming, and 18% was on non-gaming, such as food, beverage, lodging and entertainment.
- Ancillary spending totaling \$13.3 billion represents spending by casino patrons at other businesses during their casino trip. For example, this includes \$2.4 billion of spending at restaurants and \$1.7 billion at retail stores.
- The gaming industry directly employed 727,000 people in the US, with \$33.3 billion of wages, salaries, tips, benefits and other labor income. This includes 559,000 jobs on-site at casinos and corporate offices, 17,000 at US-based operations of gaming manufacturers, and 151,000 at businesses providing goods and services to casino patrons during casino trips.
- Within the broader gaming industry, commercial casinos employed 361,000 employees who earned \$17.4 billion in wages and benefits and Native American casinos employed 198,000 employees who earned \$9.1 billion of wages and benefits.

Economic impact of the US gaming industry (2017)

The gaming industry supported a total economic impact including:

- \$261.4 billion of output (business sales)
- 1.8 million jobs with \$74.0 billion of labor income (wages, salaries, tips, benefits and other labor income)
- \$40.8 billion of federal, state and local taxes, including \$10.7 billion of gaming taxes

The gaming industry supported more direct jobs than in other industries such as plastics manufacturing, or the motion picture and sound recording industry. Additional highlights:

- Casino employment (559,000 jobs) is equivalent to more one in 30 leisure and hospitality jobs
- Direct employment (727,000 jobs) is equivalent to one in 175 jobs in the service sector, would be enough to fill every seat in the Dallas Cowboys' football stadium for every home game, and is almost as many people as work in the District of Columbia.
- Total employment (1.8 million jobs) is equivalent to one in 83 nonfarm jobs and would rank 28th among US states measured by nonfarm employment
- The total tax impact per household was \$343 per US household. This tax offset represents the federal, state and local taxes that would otherwise need to be paid per US household to compensate for the absence of gaming industry activity.

1. Gaming industry direct spending

Overview of gaming direct spending

Industry size and scope

This section summarizes the size and scope of the gaming industry in the US.

The analysis **includes**:

- **Casino revenues**
 - Commercial casinos
 - Native American casinos
 - Card rooms (California, Florida, Minnesota, Washington)
- **Gaming manufacturers' revenues**
 - Includes all US sales/revenues of gaming manufacturers and excludes global sales outside the US
- **Ancillary spending**
 - Spending by casino patrons at leased third-party operations inside the casino
 - Off-site spending by casino patrons during their trip to the casino (e.g. transportation, lodging, restaurants, retail)

The analysis **excludes**:

- Pari-mutuel gaming (e.g. horse racing)
- Slots and video lottery terminals in bars and other non-casino locations (e.g. cruise ships)
- Lotteries and charitable gaming

Additional notes

- The analysis includes legalized internet gaming conducted by commercial casino operators and reported in state regulatory filings. For 2017, this includes Delaware, New Jersey and Nevada.
- Casino revenue refers to revenue net of promotional allowances, such as complimentary or discounted hotel rooms, or food and beverage, provided to patrons.

Casino gaming revenue

Casino revenue

Total casino revenues amounted to \$89.4 billion in 2017. This represents spending by patrons on-site at casinos, excluding leased outlets, such as restaurants.

As a share of total revenue, 62.3% was generated at commercial casinos, and 37.7% was generated at Native American casinos. In terms of revenue by type:

- Gaming revenues comprised 82% (\$73.0 billion) of total revenues; and,
- Non-gaming revenues comprised 18% (\$16.5 billion) of total revenues. These non-gaming revenues include food and beverage, hotel rooms, and other revenue, such as entertainment (net of promotional allowances, such as complimentary or discounted hotel rooms, meals and entertainment tickets).

Total revenue, and revenue by category, was estimated based on several key sources:

- Gaming revenue for commercial casinos was estimated based on reporting of gross gaming revenue to state regulatory agencies (e.g. state gaming control boards).
- Gaming revenue for Native American casinos was estimated based on the most recent reporting by the National Indian Gaming Commission (NIGC). This represents gaming revenue compiled by the NIGC from financial statements of gaming operations for fiscal years ending in calendar year 2016.
- Non-gaming revenue was estimated based on casino reporting to selected state regulatory agencies (e.g. Nevada and New Jersey), and the survey of casino operators conducted for this study.

Total Casino Revenue (2017)

Native American and Commercial Casinos

In millions

	Native American Casinos	Commercial Casinos	Total Casino Revenue	Share of Total
Gaming Revenue	\$31,196	\$41,758	\$72,953	82%
Non-Gaming Revenues	\$2,496	\$13,966	\$16,461	18%
Food & Beverage	\$1,264	\$5,159	\$6,423	7%
Rooms	\$414	\$5,211	\$5,625	6%
Other	\$818	\$3,596	\$4,414	5%
Total Casino Revenue	\$33,691	\$55,723	\$89,414	100%

Source: Oxford Economics

Gaming manufacturers and ancillary spending

Gaming manufacturers

Gaming manufacturer revenue totaled \$6.3 billion in 2017.

- Gaming manufacturers' revenue, employment, and labor income were estimated based on publicly available data from companies' annual reports and the Association of Gaming Equipment Manufacturers' (AGEM) 2017 Global Gaming Supplier Industry Impact Analysis.
- Gaming manufacturer revenues are limited to sales in the US, and the analysis excludes worldwide revenue/activity outside the US.

Ancillary spending

Ancillary spending by casino patrons totaled \$13.3 billion in 2017.

- Ancillary spending includes purchases by casino patrons at retailers and businesses outside the casino and at businesses inside the casino leased by third-party operators.
- Prior research by the AGA indicates that the majority of casino patrons spend time outside the casino and spend money at restaurants or shops outside the casino during their casino trip. Since this casino patron spending is primarily driven by the patrons' trips to the casino, it is included in the gaming industry's direct impact as ancillary spending.
- Our estimates of total ancillary spending is based on Longwoods International's Travel USA survey of domestic travel in 2016. It reflects total spending by travelers who indicated that a casino was the main purpose for their trip, adjusted to remove spending estimated to have occurred onsite at casinos.

Other Gaming Industry Direct Spending (2017) Gaming Manufacturers and Ancillary Spending

In millions

	2017
Gaming Manufacturers Revenue	\$6,272
Ancillary Spending	\$13,288
Lodging	\$993
Transportation to destination	\$4,825
Transportation within destination	\$2,493
Food and beverage	\$2,369
Retail	\$1,674
Recreation	\$935

Source: Oxford Economics, Longwoods International

Gaming industry direct spending

In total, the gaming industry generated \$109.0 billion of direct spending in 2017. This represents the total revenue of US casinos, the US portion of gaming manufacturer revenues, and ancillary spending by casino patrons in the US. This total direct spending represents the “direct output”, or sales, generated by the gaming industry.

This analysis excludes capital spending on casino construction and renovations other than purchases from gaming manufacturers.

Total Direct Spending (2017) Casinos, Manufacturers and Ancillary Spending

In millions

	2017
Total Casino and Manufacturer Revenues	\$95,686
Casino Revenue	\$89,414
Gaming Manufacturers Revenues	\$6,272
Total Ancillary Spending	\$13,288
Total Gaming Industry Direct Spending (Output)	\$108,974

Source: Oxford Economics

Gaming industry direct employment and labor income

In total, the gaming industry supported 727,000 direct jobs, with \$33.3 billion of wages, salaries, tips and other labor income (labor income) in 2017. These represent jobs on-site at casinos or gaming manufacturers, at corresponding corporate offices, and the jobs supported by ancillary spending by casino patrons during casino trips.

As part of this total:

- Casinos directly employed 559,000 employees with \$26.5 billion in labor income.
- Manufacturers directly employed 17,000 workers with \$1.1 billion in labor income.
- Ancillary spending by casino patrons directly generated 151,000 jobs with \$5.7 billion of labor income.

These estimates are based on several sources of information.

- Casino employment and labor income is based on employment, and wage and salary data reported by the Bureau of Labor Statistics at the state and national level for casinos (North American Industry Classification System code 71321 casinos except casino hotels, and code 72112 casino hotels); reporting by state regulatory agencies; industry ratios informed by responses to the survey of casino operators conducted as part of this study; and other sources. Estimates were adjusted to reflect estimated total labor income, including benefits, tips, wages, salaries and other labor income (e.g. bonuses).
- The direct impact of ancillary spending is estimated based on the IMPLAN input-output model.

Summary Direct Impacts (2017)

Casinos, Gaming Manufacturers, and Ancillary Spending

	Direct Output (business sales) (in millions)	Direct Employment	Direct Labor Income (in millions)
Casino Revenues	\$89,414	558,978	\$26,501
Gaming Manufacturers Revenues	6,272	17,132	1,144
Ancillary Spending	13,295	150,702	5,661
Total Direct Impacts	\$108,981	726,811	\$33,306

Source: Oxford Economics

2. Gaming industry economic impact

Economic impact: Approach

Our analysis of gaming industry direct spending served as an input for the economic impact model we used to estimate the downstream impacts of the sector. This model is also referred to as an input-output (I-O) model.

Components of economic impact analysis

There are three main components of a project or sector's overall economic impact:

- **Direct impacts** consist of the direct spending on-site at casinos, ancillary spending by casino patrons during their casino trip, the revenue of gaming manufacturers – and the corresponding jobs and labor income involved in providing those services. For example, employees of casinos and gaming manufacturers are considered direct impacts. Also, a share of the employees at off-site hotels and restaurants that benefit from ancillary spending by casino patrons are direct impacts.
- **Indirect impacts** represent downstream supplier industry impacts, also referred to as supply chain impacts. For example, casinos require inputs such as food; beverages; utilities; various services such as marketing, legal, technical, maintenance, repair and cleaning; and other professional and financial services. These are examples of indirect impacts.
- **Induced impacts** occur as employees spend their wages and salaries in the broader economy. For example, as casino employees spend money on rent, transportation, food and beverage, and entertainment this spending supports additional jobs. Indirect and induced impacts may also be referred to collectively as indirect effects.

To conduct the economic impact analysis, we used a customized model based on the IMPLAN modeling system, a well-respected economic impact analysis tool, to quantify key relationships in the economy. The IMPLAN model traces the flow of direct expenditures through the economy and the effects on employment, labor income, and taxes. IMPLAN also quantifies the indirect (supplier) and induced (income) impacts.

For example, when a casino patron makes a visit to a casino, a portion of their spending supports direct wages of employees at the casino, while a portion of the sale may pay for locally produced inputs, such as food and beverages. The IMPLAN model captures these types of spending relationships based on a structured analysis of economic statistics. Additionally, the IMPLAN model includes a component that measures the typical levels of federal, state and local taxes generated by specific types of economic activity.

Economic impact: Summary

Our estimates of the overall economic impact of the US gaming industry are summarized as follows.

- Direct casino and manufacturer revenues of \$95.7 billion generated \$58.5 billion in indirect impacts and \$74.0 billion in induced impacts, resulting in \$228.1 billion in total output. Ancillary spending of \$13.3 billion generated \$8.6 billion in indirect impacts and \$11.3 billion in induced impacts, resulting in \$33.3 billion in total output. **Overall, the total economic impact of the gaming industry in terms of output (business sales) was \$261.4 billion.**
- Casinos and manufacturers directly supported 576,000 jobs. When combined with additional jobs supported through ancillary spending, and indirect and induced effects, **the gaming industry supported 1.8 million total jobs.**
- **Overall, the gaming industry generated \$74.0 billion in total labor income.** This includes \$33.3 billion of direct wages, salaries, tips, benefits and other income earned by casino employees and other directly supported jobs.

The tables on the following pages provide a more detailed breakdown of industry impacts in terms of output, employment, and labor income.

Summary Economic Impacts (2017) Gaming Industry Impacts

In millions

	Output Impacts (business sales) (in millions)	Employment Impacts	Labor Income Impacts (in millions)
Casino and Manufacturer Total Impacts	\$228,101	1,502,033	\$62,052
Direct Impacts	95,686	576,110	27,645
Indirect Impacts	58,457	373,909	15,778
Induced Impacts	73,958	552,014	18,629
Ancillary Spending Total Impacts	\$33,262	253,948	\$11,915
Direct Impacts	13,295	150,702	5,661
Indirect Impacts	8,633	38,554	2,571
Induced Impacts	11,334	64,693	3,683
Total Impact, US Gaming Industry	\$261,363	1,755,981	\$73,967
Direct Impacts	108,981	726,811	33,306
Indirect Impacts	67,090	412,463	18,349
Induced Impacts	85,292	616,707	22,312

Source: Oxford Economics

Economic impact: Output

The accompanying table provides a breakdown of the \$261.4 billion economic impact of the US gaming industry in terms of output, which represents sales of US businesses.

- Direct output, as previously discussed, totaled \$109.0 billion.
- Indirect output totaled \$67.1 billion, representing additional supply chain effects supported by the gaming industry.
- Induced output totaled \$85.3 billion, representing additional purchases supported by the earnings of directly and indirectly supported jobs.

Detailed Economic Impacts: Output (2017) Gaming Industry Impacts

In millions

	Output (business sales)				
	Direct	Indirect	Induced	Total	% of Total
Casinos and Manufacturers	\$95,686	\$58,457	\$73,958	\$228,101	87%
Casinos	\$89,414	\$53,764	\$69,027	\$212,206	81%
Commercial Casinos	55,723	27,847	38,941	122,511	47%
Native American Casinos	33,691	25,917	30,086	89,694	34%
Gaming Manufactueres	\$6,272	\$4,692	\$4,930	\$15,895	6%
Ancillary Spending Impacts	\$13,288	\$8,633	\$11,334	\$33,255	13%
Total Impact, US Gaming Industry	\$108,974	\$67,090	\$85,292	\$261,356	100%

Source: Oxford Economics

Economic impact: Employment

The accompanying table provides a breakdown of the 1.8 million total jobs supported by the US gaming industry.

- Direct employment, as previously discussed, totaled 727,000 jobs.
- Indirect employment totaled 412,000 jobs, representing additional supply chain effects supported by the gaming industry.
- Induced employment totaled 617,000 jobs, representing additional jobs supported by the earnings of directly and indirectly supported jobs.

Within the broader gaming industry, commercial casinos employed 361,000 employees and Native American casinos employed 198,000 employees.

Detailed Economic Impacts: Employment (2017) Gaming Industry Impacts

	Employment				
	Direct	Indirect	Induced	Total	% of Total
Industry Impacts	576,110	373,909	552,014	1,502,033	86%
Casinos	558,978	360,911	535,989	1,455,878	83%
Commercial Casinos	361,445	120,895	181,823	664,163	38%
Native American Casinos	197,533	240,015	354,167	791,715	45%
Gaming Manufactueres	17,132	12,998	16,025	46,155	3%
Ancillary Spending Impacts	150,702	38,554	64,693	253,948	14%
Total Impact, US Gaming Industry	726,811	412,463	616,707	1,755,981	100%

Source: Oxford Economics

Economic impact: Labor income

The accompanying table provides a breakdown of the \$74.0 billion of total labor income supported by the US gaming industry.

- Direct labor income totaled \$33.3 billion.
- Indirect labor income totaled \$18.3 billion, representing additional supply chain effects supported by the gaming industry.
- Induced labor income totaled \$22.3 billion, representing the impact as employees in jobs directly and indirectly supported by the gaming industry spend a portion of their earnings on goods and services from other industries.

Within the broader gaming industry, commercial casino employees earned \$17.4 billion in wages and benefits and Native American casinos employees earned \$9.1 billion of wages and benefits.

Detailed Economic Impacts: Labor Income (2017) Gaming Industry Impacts

In millions

	Labor Income				% of Total
	Direct	Indirect	Induced	Total	
Industry Impacts	\$27,645	\$15,778	\$18,629	\$62,052	84%
Casinos	\$26,501	\$14,918	\$17,826	\$59,244	80%
Commercial Casinos	\$17,415	\$9,497	\$11,565	\$38,478	52%
Native American Casinos	\$9,086	\$5,420	\$6,260	\$20,766	28%
Gaming Manufactueres	\$1,144	\$861	\$803	\$2,808	4%
Ancillary Spending Impacts	\$5,661	\$2,571	\$3,683	\$11,915	16%
Total Impact, US Gaming Industry	\$33,306	\$18,349	\$22,312	\$73,967	100%

Source: Oxford Economics

Economic impact: Fiscal (tax)

The US commercial casino industry supported \$40.8 billion in total tax revenues in 2017.

- Nearly \$18.6 billion in federal taxes, including \$8.0 billion in social security taxes
- Nearly \$11.5 billion in state and local taxes, including \$4.5 billion in sales taxes and \$4.2 billion in property tax revenues
- Nearly \$10.7 billion in gaming taxes

We estimated this tax impact using the following approach.

- We estimated certain direct taxes, such as gaming taxes and payments by Native American tribes (e.g. in accordance with state compacts), on the basis of state regulatory filings and public reporting.
- We estimated other taxes paid by casinos, such as property taxes, sales taxes, and occupancy taxes, on the basis of the survey of casino operators and our prior research on casino operations.
- We estimated other direct and indirect taxes based on the IMPLAN framework of federal, state, and local tax categories.

Detailed Fiscal (Tax) Impacts (2017)

Federal, State and Local, and Gaming Taxes

	2017
In millions	
Federal Taxes	\$18,594
Personal Income	\$6,358
Corporate	\$3,089
Indirect Business	\$1,214
Social Security	\$8,044
State and Local Taxes	\$11,493
Sales	\$4,513
Personal Income	\$1,667
Corporate	\$473
Social Security	\$158
Excise and Fees	\$1,301
Property	\$4,176
Gaming Taxes	\$10,699
Total Taxes	\$40,786

Source: Oxford Economics

Economic impact: Fiscal impacts in context

We prepared the following comments to help put the fiscal impacts of the US gaming industry in context.

- The \$40.8 billion of tax revenues supported by the gaming represents an injection into public budgets that pays for a range of services including public safety, hospitals and schools. In fact, total tax revenues (federal, state and local, and gaming taxes) generated by the gaming industry are enough to pay for the salaries of approximately 692,000 teachers.
- The \$22.2 billion of state, local and gaming taxes, supported by the gaming industry would cover the annual education cost for almost two million pupils. This implies that each direct casino job is supporting state and local taxes equivalent to the cost of educating more than three school children for an entire school year.
 - This estimate is based on Census Bureau research that shows spending per pupil for public elementary-secondary school (pre-k to 12th grade) averaged \$11,392 in 2015 (most recent available). This spending covers costs such as teacher salaries and benefits, supplies, and support activities such as guidance counseling and building operations and maintenance.
 - $1,948,034 \text{ pupils} / 559,589 \text{ direct casino jobs} = 3.4 \text{ pupils per job}$

The \$10.7 billion in gaming taxes and payments under Native American compacts represents the equivalent to:

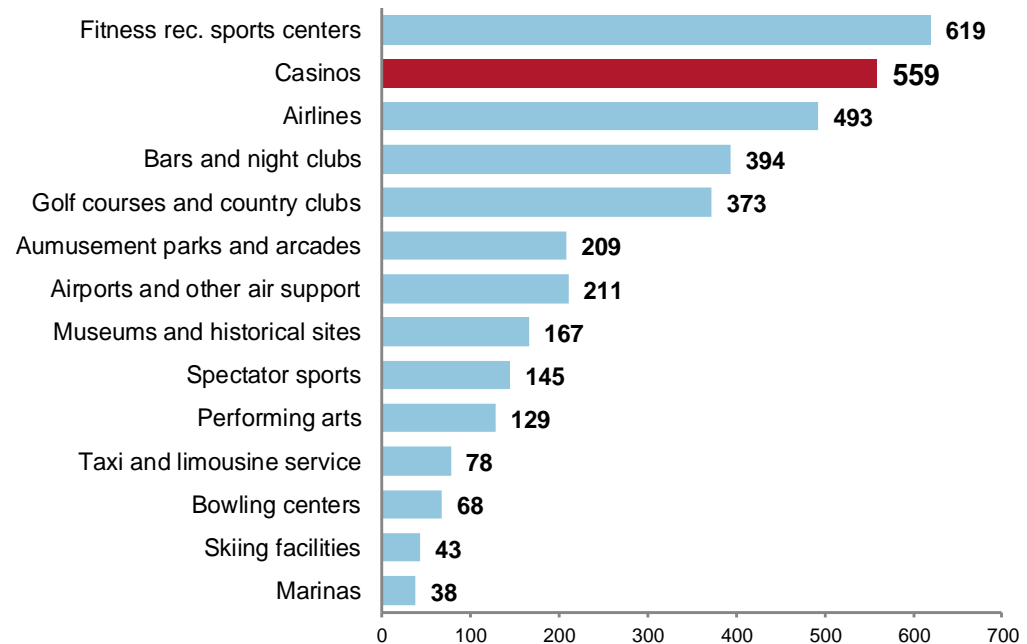
- 2.2% of state and local government property tax revenues collected nationwide;
- 1.8% of state and local government spending on elementary and secondary education nationwide;
- 27.1% of state and local government spending on parks and recreation nationwide; or,
- 93.2% of state and local spending on libraries nationwide.

3. Comparisons to other sectors

Casino employment compared to recreational sectors

Casinos are one of the largest recreational employers in the US. (Note that this focuses specifically on casinos, which represent a portion of the overall gaming industry impact.)

Employment by business type: Recreation sectors
Thousands of jobs, 2017



Source: Bureau of Labor Statistics; Oxford Economics

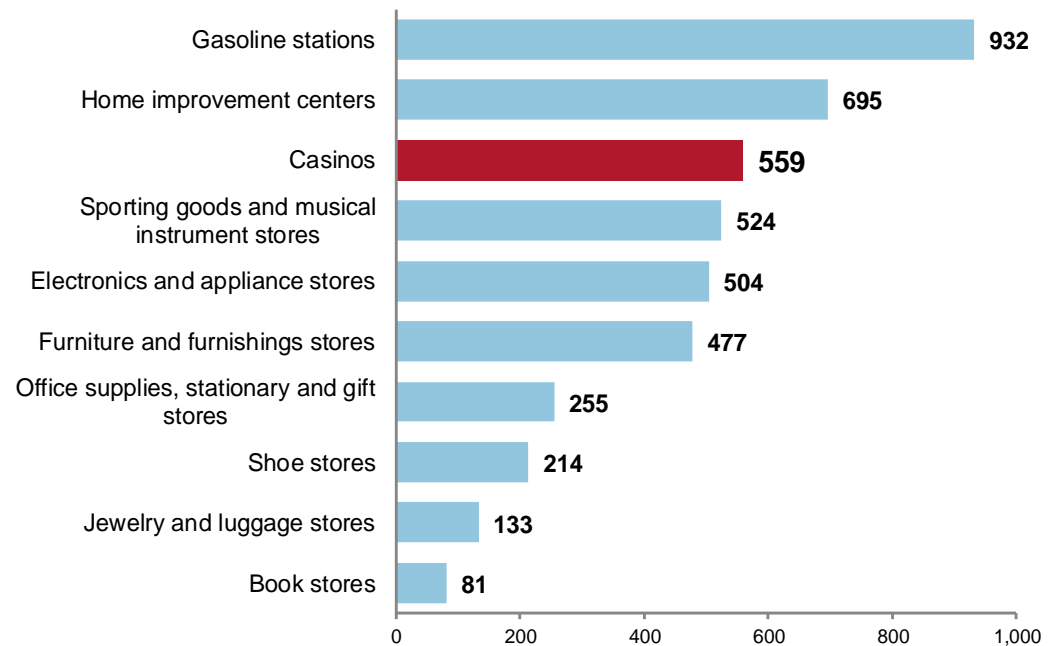
Casino employment compared to retail sectors

Casinos support more direct jobs than many categories of retail stores.

(Note that this focuses specifically on casinos, which represent a portion of the overall gaming industry impact.)

Employment by business type: Retail sectors

Thousands of jobs, 2017



Source: Bureau of Labor Statistics; Oxford Economics

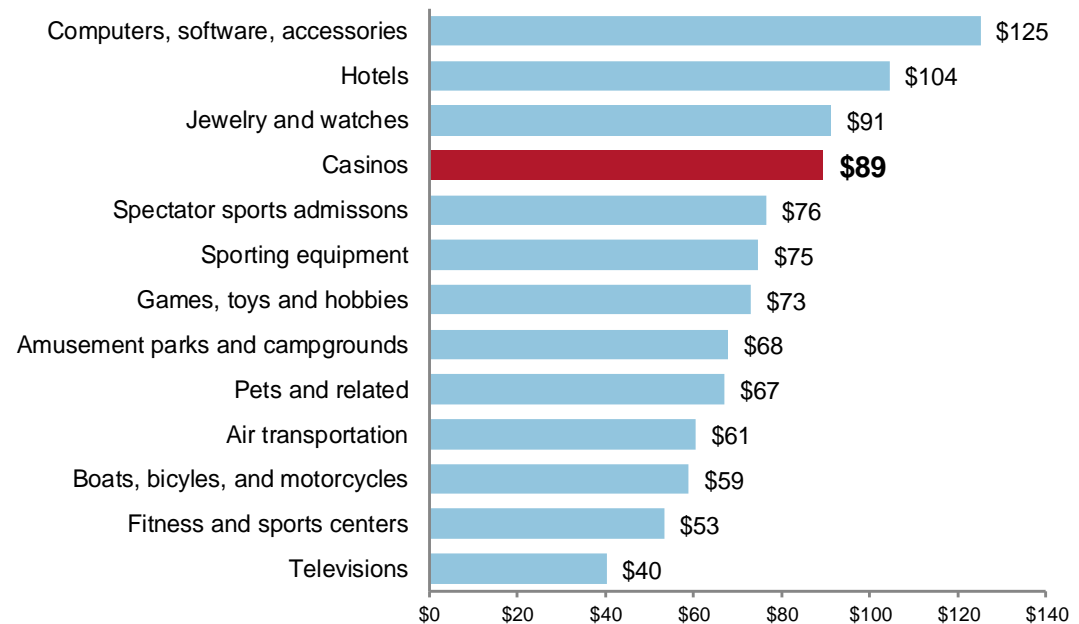
Consumer spending on gaming in context

Consumers spend almost as much at casinos as on hotel accommodations.

(Note that this focuses specifically on casinos, which represent a portion of the overall gaming industry impact.)

Consumer spending by type of product

In billions of dollars, 2017



Source: Bureau of Economic Analysis; Oxford Economics

Gaming industry output compared to other industries

The direct output (business sales) of the gaming industry is larger than that of the furniture manufacturing industry and almost as large as the appliance manufacturing sector.

Industry Comparisons: Direct Output (business sales)

In billions

	2017
Truck transportation (484)	340.2
Insurance carriers and related activities	180.5
Amusement, gambling, and recreation industries (713)	168.3
Motion picture and sound recording industries (512)	161.6
Nonmetallic mineral product manufacturing (327)	127.2
Electrical equipment, appliance, and component manufacturing (335)	122.5
Wood product manufacturing (321)	112.8
Gaming industry	109.0
Waste management and remediation services (562)	98.8
Furniture and related product manufacturing (337)	80.9
Rail transportation (482)	79.6
Printing and related support activities (323)	77.8
Support activities for mining (213)	66.6
Transit and ground passenger transportation (485)	62.6
Water transportation (483)	60.2
Forestry, fishing, and related activities (113)	51.9
Pipeline transportation (486)	34.6

Note: Numbers indicate three-digit North American Industry Classification System (NAICS) code corresponding to each industry sector.

Source: Bureau of Economic Analysis; Oxford Economics

Gaming industry employment compared to other industries

Direct employment in the gaming industry is almost as large as the air, rail and water transportation sectors combined.

There are more direct jobs in the gaming industry than in plastics manufacturing, or the motion picture and sound recording industry.

Industry Comparisons: Direct Employment

In thousands

	2016
Gasoline stations (447)	970
Motor vehicles, bodies and trailers, and parts manufacturing (3361MV)	949
Forestry, fishing, and related activities (113)	916
Publishing industries (except Internet) (511)	882
Oil and gas extraction (211)	854
Chemical manufacturing (325)	850
Sporting goods, hobby, musical instrument, and book stores (451)	794
Air, rail and water transportation (481, 482, 483)	773
Gaming industry	727
Plastics and rubber products manufacturing (326)	718
Electronics and appliance stores (443)	543
Motion picture and sound recording industries (512)	535
Furniture and home furnishings stores (442)	530
Printing and related support activities (323)	507
Waste management and remediation services (562)	440
Wood product manufacturing (321)	435
Nonmetallic mineral product manufacturing (327)	434
Furniture and related product manufacturing (337)	432
Electrical equipment, appliance, and component manufacturing (335)	402
Paper manufacturing (322)	375
Rail transportation (482)	189
Museums, historical sites, and similar institutions (712)	171
Water transportation (483)	75
Pipeline transportation (486)	50

Note: Numbers indicate three-digit North American Industry Classification System (NAICS) code corresponding to each industry sector. Figures are 2016 (most recently released), except gaming industry, which is 2017.

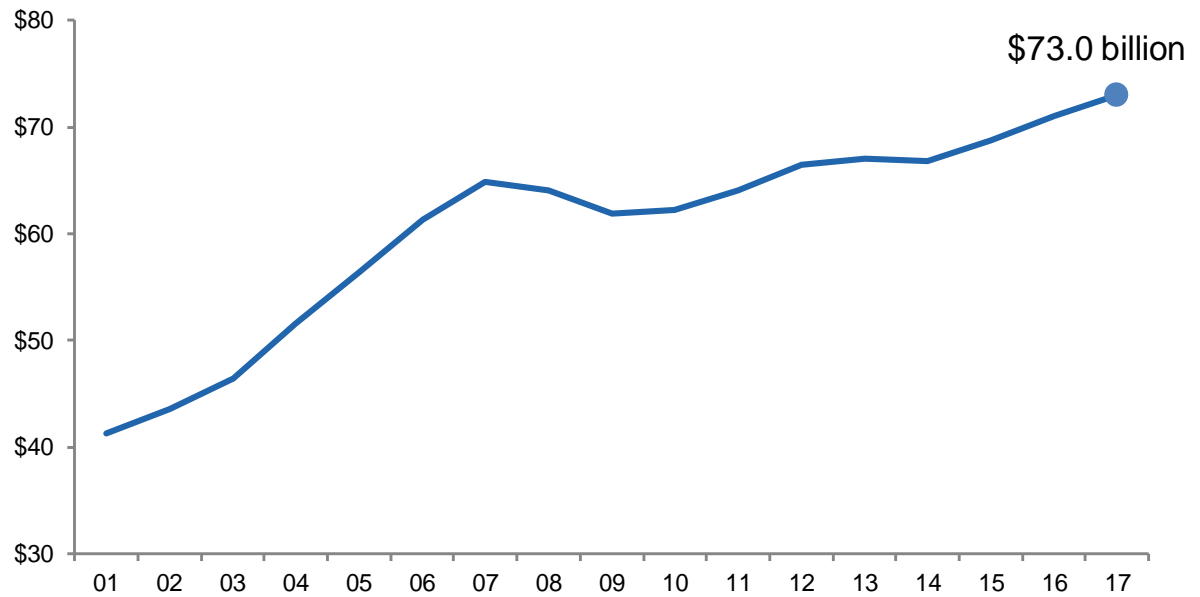
Source: Bureau of Economic Analysis; Oxford Economics

4. Gaming industry growth

Gaming growth: Consumer spending

Consumer spending on casino gaming increased to \$73.0 billion in 2017. This represents the gaming revenue portion of the total \$89.4 billion of consumer spending at casinos.

Consumer spending on casino gaming
In billions, US gaming industry

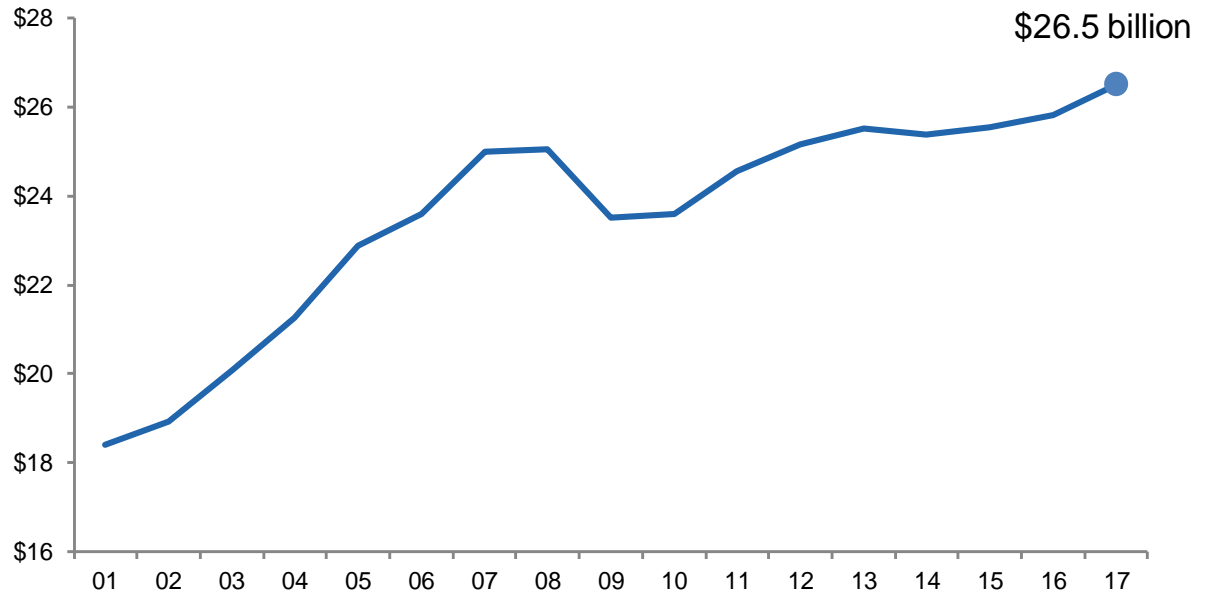


Source: American Gaming Association; National Indian Gaming Commission; Oxford Economics

Gaming growth: Labor income

Direct casino labor income has increased to well ahead of its prior peak, reaching \$26.5 billion.

Casino labor income
In billions



Source: Bureau of Labor Statistics; Oxford Economics

5. Impact on other industries

Impact on other industries

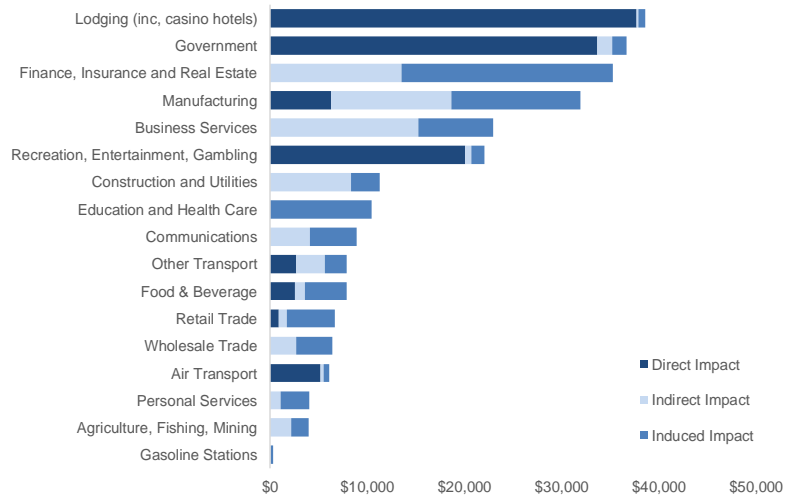
The economic impacts of the US gaming industry are far reaching, as direct spending ripples through the national economy, generating positive impacts for numerous supplier industries.

As shown on the following slides, impacted industries include:

- Finance, insurance, and real estate (\$35.3 billion in total output impacts): Insurance carriers, banks, funds and trusts, securities, real estate, consumer rentals, machinery and equipment rental and leasing
- Business services (\$23.0 billion in total output impacts): Legal, advertising, marketing, engineering, all other professional services, research and development, management, travel arrangement, business support, facilities services, administrative services, waste management
- Construction and utilities (\$11.3 billion in total output impacts): New building construction, renovations, residential construction, electric and gas distribution
- Education and health care (\$10.4 billion in total output impacts): Private elementary and secondary schools, colleges, universities, physicians, home health care, nursing and residential care facilities, child care (e.g. spending by employees of casinos and other businesses supported by gaming)
- Communications (\$8.9 billion in total output impacts): Telecommunications (corporate and personal), newspapers and periodicals, cable programming, data processing
- Air transportation (\$6.1 billion in total output impacts): Air travel

Impact on other industries: Output

Distribution of Output Impacts, by Major Industry (\$ Millions, 2017)



Output (Business Sales) Impacts on Other Industries (2017)

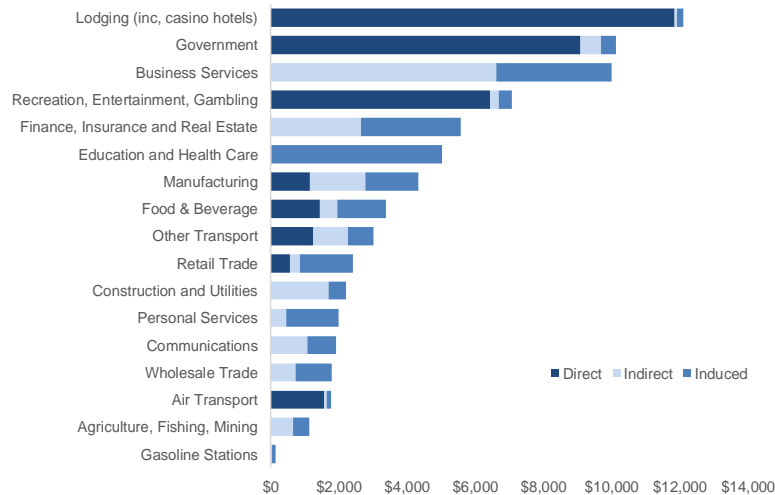
In millions

	Output (Business Sales)			
	Direct	Indirect	Induced	Total Impact
Lodging (inc, casino hotels)	\$37,700	\$236	\$679	\$38,616
Government	33,691	1,515	1,460	36,665
Finance, Insurance and Real Estate	0	13,493	21,788	35,281
Manufacturing	6,272	12,405	13,287	31,965
Business Services	0	15,261	7,713	22,974
Recreation, Entertainment, Gambling	20,086	601	1,342	22,029
Construction and Utilities	0	8,329	2,958	11,287
Education and Health Care	0	7	10,424	10,430
Communications	0	4,110	4,763	8,873
Other Transport	2,668	2,949	2,273	7,890
Food & Beverage	2,535	1,018	4,334	7,887
Retail Trade	860	852	4,937	6,648
Wholesale Trade	0	2,699	3,714	6,413
Air Transport	5,163	331	563	6,057
Personal Services	0	1,071	2,962	4,033
Agriculture, Fishing, Mining	0	2,151	1,823	3,974
Gasoline Stations	0	63	271	334
Total	\$108,974	\$67,090	\$85,292	\$261,356

Source: Oxford Economics

Impact on other industries: Labor income

Distribution of Labor Income Impacts, by Major Industry (\$ Millions, 2017)



Labor Income Impacts on Other Industries (2017)

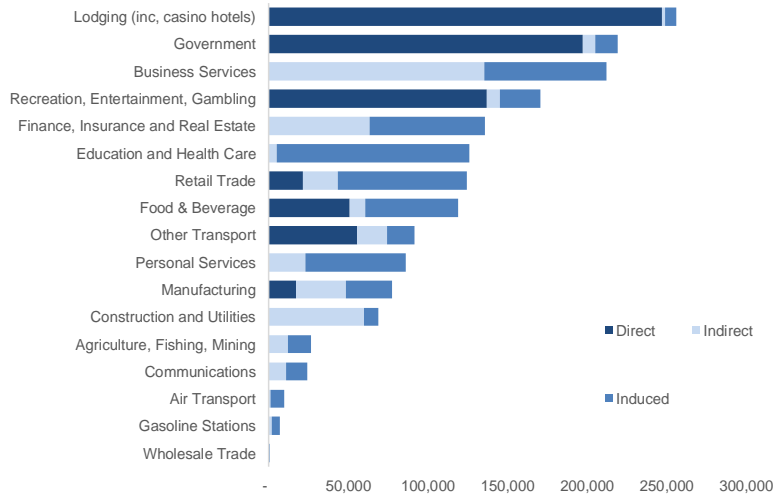
In millions

	Labor Income			Total Impact
	Direct	Indirect	Induced	
Lodging (inc, casino hotels)	\$11,852	\$62	\$190	\$12,104
Government	9,086	598	450	10,134
Business Services	0	6,611	3,399	10,009
Recreation, Entertainment, Gambling	6,434	252	394	7,080
Finance, Insurance and Real Estate	0	2,650	2,922	5,572
Education and Health Care	0	6	5,020	5,026
Manufacturing	1,144	1,635	1,542	4,321
Food & Beverage	1,438	507	1,428	3,372
Other Transport	1,232	1,033	742	3,007
Retail Trade	557	289	1,562	2,408
Construction and Utilities	0	1,691	512	2,203
Personal Services	0	458	1,530	1,988
Communications	0	1,082	837	1,919
Wholesale Trade	0	726	1,066	1,792
Air Transport	1,563	76	122	1,760
Agriculture, Fishing, Mining	0	645	484	1,129
Gasoline Stations	0	28	112	141
Total	\$33,306	\$18,349	\$22,312	\$73,967

Source: Oxford Economics

Impact on other industries: Employment

Distribution of Employment Impacts, by Major Industry (Total Jobs, 2017)



Employment Impacts on Other Industries (2017)

Jobs

	Employment			Total Impact
	Direct	Indirect	Induced	
Lodging (inc, casino hotels)	247,085	2,105	7,104	256,294
Government	197,533	7,907	14,099	219,540
Business Services	-	135,562	76,846	212,408
Recreation, Entertainment, Gambling	137,053	8,214	25,342	170,609
Finance, Insurance and Real Estate	-	63,358	72,584	135,942
Education and Health Care	-	4,955	121,030	125,985
Retail Trade	21,548	21,999	80,907	124,454
Food & Beverage	50,974	9,841	58,236	119,051
Other Transport	55,486	18,922	17,195	91,603
Personal Services	-	22,845	63,086	85,931
Manufacturing	17,132	31,221	29,144	77,498
Construction and Utilities	-	59,968	9,059	69,028
Agriculture, Fishing, Mining	-	12,064	14,371	26,435
Communications	-	10,795	13,244	24,039
Air Transport	-	929	8,820	9,749
Gasoline Stations	-	1,672	5,383	7,055
Wholesale Trade	-	104	256	360
Total	726,811	412,463	616,707	1,755,981

Source: Oxford Economics

Impact on other industries: Output, by component

The accompanying table provides a breakdown of total output (business sales) impacts (including direct, indirect, and induced labor income), by component (i.e., casinos, manufacturers, and ancillary spending).

Total Output Impacts, by Industry (2017)

In millions

	Output (Business Sales)				Total Impact
	Casinos	Gaming Manufacturers	Subtotal, Casinos and Manf.	Ancillary Spending	
Agriculture, Fishing, Mining	\$3,064	\$175	\$3,239	\$735	\$3,974
Construction and Utilities	10,048	400	10,448	839	11,287
Manufacturing	18,855	9,346	28,201	3,764	31,965
Wholesale Trade	4,645	857	5,501	912	6,413
Air Transport	737	50	787	5,270	6,057
Other Transport	3,726	305	4,031	3,859	7,890
Retail Trade	4,785	296	5,081	1,567	6,648
Gasoline Stations	279	16	295	39	334
Communications	7,319	445	7,764	1,109	8,873
Finance, Insurance and Real Estat	29,120	1,595	30,715	4,566	35,281
Business Services	19,331	1,041	20,372	2,602	22,974
Education and Health Care	8,434	604	9,038	1,392	10,430
Recreation and Entertainment	20,714	89	20,803	1,226	22,029
Lodging	37,390	47	37,437	1,179	38,616
Food & Beverage	4,374	271	4,644	3,242	7,887
Personal Services	3,284	224	3,508	525	4,033
Government	36,101	134	36,235	430	36,665
Total	\$212,206	\$15,895	\$228,101	\$33,255	\$261,356

Source: Oxford Economics

Impact on other industries: Employment, by component

The accompanying table provides a breakdown of total employment impacts (including direct, indirect, and induced labor income), by component (i.e., casinos, manufacturers, and ancillary spending).

Total Employment Impacts, by Industry (2017)

	Employment				Total Impact
	Casinos	Gaming Manufacturers	Subtotal, Casinos and Manf.	Ancillary Spending	
Agriculture, Fishing, Mining	22,095	563	22,658	3,777	26,435
Construction and Utilities	66,208	587	66,795	2,233	69,028
Manufacturing	49,456	22,271	71,727	5,772	77,498
Wholesale Trade	296	23	319	40	360
Air Transport	8,547	236	8,782	967	9,749
Other Transport	28,490	1,109	29,599	62,005	91,603
Retail Trade	88,296	4,049	92,345	32,109	124,454
Gasoline Stations	6,264	151	6,415	640	7,055
Communications	20,560	723	21,283	2,756	24,039
Finance, Insurance and Real Estate	119,191	2,760	121,951	13,991	135,942
Business Services	187,677	5,265	192,942	19,467	212,408
Education and Health Care	109,489	3,202	112,691	13,295	125,985
Recreation and Entertainment	153,267	778	154,045	16,564	170,609
Lodging	245,693	225	245,918	10,376	256,294
Food & Beverage	59,404	1,714	61,118	57,933	119,051
Personal Services	74,478	1,990	76,469	9,462	85,931
Government	216,467	508	216,975	2,564	219,540
Total	1,455,878	46,155	1,502,033	253,948	1,755,981

Source: Oxford Economics

Impact on other industries: Labor income, by component

The accompanying table provides a breakdown of total labor income impacts (including direct, indirect, and induced labor income), by component (i.e., casinos, manufacturers, and ancillary spending).

Total Labor Income Impacts, by Industry (2017)

In millions

	Labor Income				Total Impact
	Casinos	Gaming Manufacturers	Subtotal, Casinos and Manf.	Ancillary Spending	
Agriculture, Fishing, Mining	\$834	\$32	\$866	\$264	\$1,129
Construction and Utilities	1,977	45	2,022	181	2,203
Manufacturing	2,338	1,510	3,848	473	4,321
Wholesale Trade	1,301	178	1,479	312	1,792
Air Transport	162	7	170	1,590	1,760
Other Transport	1,231	69	1,300	1,707	3,007
Retail Trade	1,512	59	1,572	837	2,408
Gasoline Stations	116	4	120	21	141
Communications	1,598	58	1,657	262	1,919
Finance, Insurance and Real Estate	4,530	158	4,688	884	5,572
Business Services	8,352	323	8,676	1,334	10,009
Education and Health Care	4,015	181	4,196	831	5,026
Recreation and Entertainment	6,509	18	6,526	554	7,080
Lodging	11,656	8	11,664	440	12,104
Food & Beverage	1,574	56	1,630	1,742	3,372
Personal Services	1,603	72	1,675	313	1,988
Government	9,935	28	9,963	171	10,134
Total	\$59,244	\$2,808	\$62,052	\$11,915	\$73,967

Source: Oxford Economics

About American Gaming Association

The American Gaming Association is the premier national trade group representing the U.S. casino industry. AGA members include commercial and tribal casino operators, suppliers and other entities affiliated with the gaming industry. It is the mission of the AGA to achieve sound policies and regulations consistent with casino gaming's modern appeal and vast economic contributions.

About Oxford Economics

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become 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.

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