



EXECUTIVE SUMMARY

Applied Analysis was retained by the Las Vegas Convention and Visitors Authority (the "LVCVA") to review and analyze the economic impacts associated with its various operations and Southern Nevada's tourism industry. This brief outlines the economic impacts associated with the region's tourism industry, its convention travel segment and convention travel specifically served by the Las Vegas Convention Center (the "LVCC").

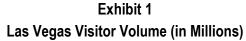
- Visitation to Southern Nevada declined slightly for the second consecutive year in 2018, as the region hosted 42.1 million visitors, 0.2 percent below the 42.2 million visitors recorded in 2017. There were positive signs near the end of the year, as the final three months each posted year-over-year growth in visitation and collectively saw 3.2 percent more visitors when comparing the fourth quarter of 2017 to the fourth quarter of 2018.
- In line with the visitation trend, overall spending sourced to visitors declined to \$34.5 billion, a decrease of 0.8 percent. This spending directly supported over 234,000 employees in the tourism sector as well as \$10.3 billion in wages and salaries. Jobs supported by visitors represented 23.9 percent of total employment in Southern Nevada and 26.7 percent of all private employment (i.e., excluding government employment). Wages and salaries supported by visitor spending made up similar shares of earnings in the region, accounting for 21.7 percent of all wages earned and 24.8 percent of all private wages.
- Including the indirect (i.e., supplier) and induced (i.e., employee spending) impacts of visitor spending in 2018, Southern Nevada's tourism industry contributed \$57.6 billion in total output, supported

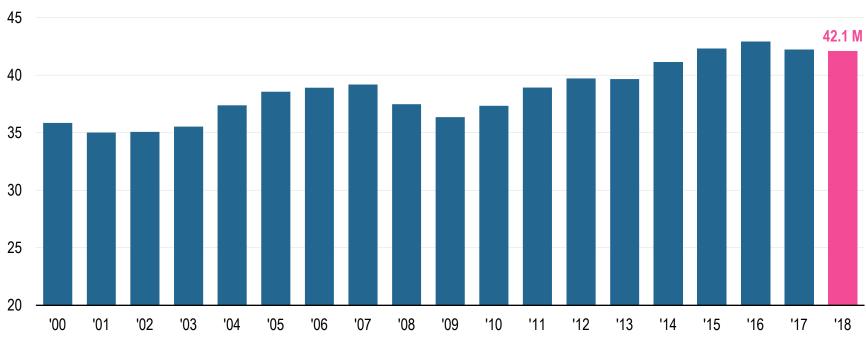
- roughly 367,900 jobs, equal to 41.9 percent of all private employment in Southern Nevada, and generated \$15.7 billion in wages and salaries throughout the region.
- Convention attendance declined by 2.2 percent in 2018 to 6.5 million after record-setting attendance in 2017 (6.6 million). However, due to an increase in per-capita spending by convention-goers, the overall economic impacts of the sector increased during the year. In 2018, convention visitor spending directly supported 42,800 jobs, \$1.9 billion in wages and economic output of \$6.3 billion. Including indirect and induced impacts, the totals increase to 67,200 jobs, \$2.9 billion in wages and \$10.5 billion of total economic output.
- The LVCC played host to 57 conventions during 2018, with total attendance of 1.3 million, roughly 19.5 percent of the overall convention segment. These visitors directly supported 8,300 jobs, \$365.2 million in wages and overall economic output of \$1.2 billion. Including indirect and induced impacts, the total impact of LVCC convention attendees grows to 13,100 jobs, \$558.6 million in wages and regional economic output of \$2.0 billion.



LAS VEGAS VISITOR VOLUME

In 2018, 42.1 million people visited Southern Nevada, marking the fourth straight year that visitation to the region has topped 42 million despite a slight decline of 0.2 percent from the 2017 total of 42.2 million visitors. This decrease can be attributed in part to the effects of the events of 1 October as well as a slight decline in convention attendance, which dropped from a record 6.6 million in 2017 to 6.5 million in 2018. Leisure visitors increased by roughly 47,000 during the year, partially offsetting the convention decline. These high visitation numbers translate into significant economic impacts throughout the Southern Nevada community. On average, visitors to Southern Nevada in 2018 spent \$819 per trip, directly and indirectly supporting hundreds of thousands of jobs and billions of dollars in wages and salaries.





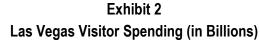
¹ Source: Las Vegas Convention and Visitors Authority, Visitor Statistics.

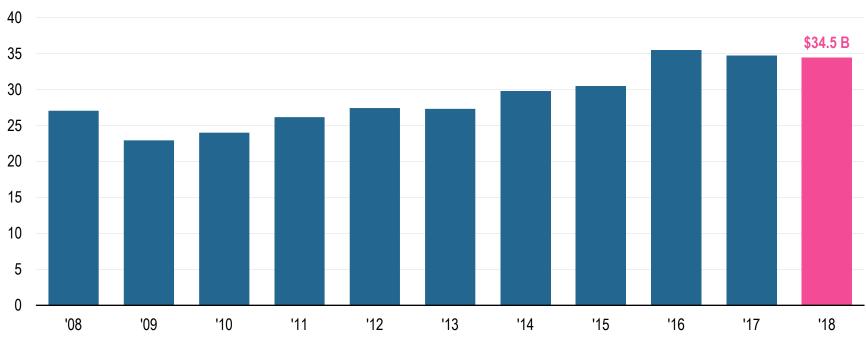




LAS VEGAS VISITOR SPENDING

The tourism industry in Southern Nevada remains the biggest driver of economic activity in the region, with direct visitor spending in 2018 estimated at \$34.5 billion after conservatively adjusting survey-based data for known control totals (e.g., actual gaming revenue, lodging expenditures based on room tax totals, etc.).2 Gaming represented the largest share of visitor spending in 2018, accounting for 23.7 percent of the \$34.5 billion in aggregate spending. Visitor spending on shopping and hotel rooms made up the next two largest spending categories for visitors at 18.9 percent and 16.5 percent, respectively. Rounding out the top five most significant spending categories were food and beverage, making up 11.9 percent of visitor spending, and other spending, which accounted for 9.4 percent. This category would include parking, tips and other unclassified expenses.





² Adjusted total spending per visitor (overall) is estimated at \$819 including gaming budgets for 2018.



EMPLOYMENT IMPACTS

During 2018, hotels and casinos in Southern Nevada directly employed roughly 164,400 people, representing 16.8 percent of the region's total employment and 18.7 percent of all private employment.³

An additional 69,600 employees working in tourism-related businesses, but not necessarily hotels or casinos, are estimated to be directly supported by visitor spending. This includes workers in venues such as bars, restaurants, nightclubs, entertainment venues and retail outlets as well as other businesses targeting non-resident consumers such as sightseeing tour companies, taxicab operators and Las Vegas Strip retailers. In total, the Southern Nevada tourism industry is estimated to directly employ 234,000 workers, equating to 23.9 percent of the region's total workforce and 26.7 percent of private sector employment in 2018.

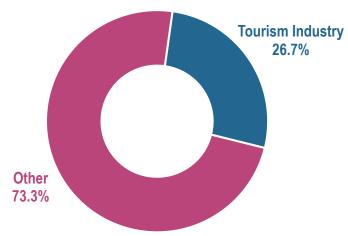
The impacts of visitor spending on employment flow beyond the tourism industry. Indirect, or secondary, impacts are often referred to as "ripple" effects, respecting the reality that an industry's impact reaches beyond those workers directly employed. Businesses in the tourism industry contract with suppliers and other businesses, which in turn have their own employees. Furthermore, tourism industry employees spend their earnings throughout the community, supporting other jobs in what are known as induced impacts. All told, the employment impacts of visitor spending total nearly 367,900 jobs when indirect and induced impacts are considered.

Exhibit 3

Direct Tourism Employment as a Share of Total Employment



Exhibit 4
Direct Tourism Employment as a Share of Private Employment



 $^{^3}$ Source: Nevada Department of Employment, Training and Rehabilitation, fiscal year 2018 (quarterly average).



WAGE IMPACTS

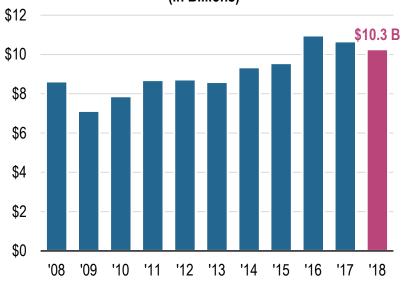
Tourism workers in Southern Nevada earned wages and salaries of \$10.3 billion in 2018, a decrease of 3.8 percent from 2017 and an increase of 44 percent from the recessionary low in 2009. This represented 21.7 percent of all wages earned in Southern Nevada during the year and 24.8 percent of all earnings among private industry workers. The wages and salaries earned by tourism industry workers is roughly equal to the total earnings by employees in Clark County's manufacturing, professional services and information industries, combined.⁴

As visitor spending ripples through the economy with indirect and induced impacts, the total wages supported by visitors grows considerably. Indirect wage impacts were estimated at roughly \$2.4 billion in 2018, supported by tourism businesses paying suppliers, vendors and other businesses for services. As tourism industry employees spend their \$10.3 billion in wages throughout the community, they create induced impacts that total \$3.0 billion in wages for employees in other industries. When combined, this equals \$15.7 billion in total wages and salaries throughout Southern Nevada that were either directly or indirectly supported by visitor spending.

Exhibit 5
Direct Tourism Wages and Salaries as a
Share of Total Wages and Salaries



Exhibit 6
Historical Direct Wage Impacts of Visitor Spending
(in Billions)



⁴ Source: Nevada Department of Employment, Training and Rehabilitation

\$0

Exhibit 7



ECONOMIC OUTPUT

The direct economic output associated with Southern Nevada's tourism industry is equal to the total amount of visitor spending, which in 2018 reached \$34.5 billion. This equated to 30.7 percent of the region's gross economic output of \$112.3 billion.⁵ Though these are not perfectly aligned concepts, the fact that Southern Nevada's tourism industry directly generated nearly a third of the region's gross product is significant and demonstrates the level of importance the industry has in Southern Nevada.

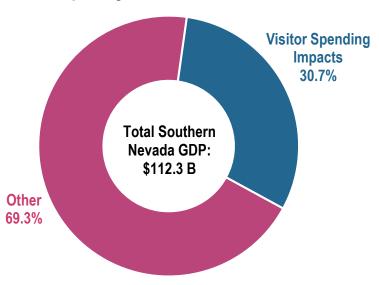
Much like the employment and wage impacts of visitor spending, the overall economic output resulting from visitor activity is even more significant when indirect and induced impacts are taken into account. In 2018, indirect economic impacts were an estimated \$9.6 billion and induced economic impacts added another \$13.5 billion. When combined with the direct spending impacts, the overall impact of visitor spending on the Southern Nevada economy rises to over \$57.6 billion, roughly 51.3 percent of the region's total gross product.

Historical Total Economic Impacts of Tourism Spending
(in Billions)

\$70
\$60
\$57.6 B
\$50
\$40
\$30
\$30
\$10

Exhibit 8
Visitor Spending as a Share of Total Gross Product

'09 '10 '11 '12 '13 '14 '15 '16 '17 '18



⁵ U.S. Bureau of Economic Analysis, 2017 GDP by Metropolitan Area (latest available).

TOTAL ECONOMIC IMPACTS OF THE SOUTHERN NEVADA TOURISM INDUSTRY

While the direct impacts of Southern Nevada's tourism industry and the spending of the 42.1 million visitors to the area are significant, accounting for roughly 24 percent of employment, 22 percent of wages earned and 31 percent of total output, the total impacts of tourism industry activity are actually much greater, as demonstrated on the previous pages. Indirect impacts, or "ripple" effects, respect the reality that an industry's impact reaches beyond just those workers directly employed. Suppliers of goods and services to businesses in the tourism industry providing food, cleaning supplies, uniforms and other inputs stimulate economic activity and create jobs. Many of these suppliers are based in Southern Nevada, keeping those dollars in the region and stimulating job growth in other sectors of the economy. Additionally, as tourism industry employees spend their wages at a wide variety of local businesses throughout the community, they spur additional commerce in the local economy, effects that are commonly known as induced impacts.

Once these indirect and induced impacts are combined with the direct impacts of the tourism industry, it is estimated that the industry accounts for \$57.6 billion in aggregate economic output (51.3 percent of the region's gross product), supporting 367,900 jobs (37.6 percent of total employment) and generating \$15.7 billion in local wage and salary payments (33.2 percent of total wages and salaries in the region). The details of these impacts are illustrated below in Exhibit 9.

Exhibit 9

Economic Impacts of the Southern Nevada Tourism Industry as a Function of Visitor Spending, 2018⁶

	Direct Impacts of Visitor Spending (Casinos, Hotels, Restaurants, Shopping, etc.)	Suppliers and Vendors Supported by Visitor Spending	Spending by Employees Directly Supported by Visitor Spending	Total Economic Impacts Generated by Visitor Spending
	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impacts
Total Employees	234,038	55,382	78,485	367,906
Total Wage & Salary Payments	\$10,265,832,766	\$2,416,822,489	\$3,017,963,382	\$15,700,618,637
Wages Per Employee	\$43,864	\$43,639	\$38,453	\$42,676
Total Economic Output	\$34,497,010,170	\$9,574,955,646	\$13,536,247,324	\$57,608,213,140
Output Per Employee	\$147,399	\$172,890	\$172,469	\$156,584

⁶ Calculations are based on IMPLAN, an input-output econometric model. Refer to the Methodology section of this analysis for further detail.



TOTAL ECONOMIC IMPACTS OF THE CONVENTION AND MEETING SEGMENT

Conventions and meetings are an important portion of the overall tourism industry in Southern Nevada. After setting a record with 6.6 million convention attendees in 2017, total convention attendance declined by 2.2 percent to 6.5 million in 2018.⁷ The convention segment positively impacts Southern Nevada's tourism industry in a number of ways. Conventions can bring large numbers of visitors to town during weekdays, keeping room occupancy rates high when leisure visitors are less likely to be in town. Survey data also indicates that convention visitors spend more per visit than the average leisure visitor. In 2018, the average leisure visitor is estimated to have spent \$792 during their trip, while the average convention visitor spent \$970.

Because of their higher average spending profile, convention visitors generate higher per-capita economic impacts on Southern Nevada than leisure visitors. In 2018, convention visitor spending directly supported an estimated 42,800 jobs, \$1.9 billion in wages and \$6.3 billion in direct economic impact. When the indirect and induced impacts of convention visitor spending are included, the convention sector is estimated to support 67,200 jobs, \$2.9 billion in wages and \$10.5 billion in overall economic output in Southern Nevada. While convention visitors represented 15.4 percent of total visitation in 2018, their spending accounted for 18.3 percent of all visitor economic impacts, underscoring their importance to the tourism industry as a whole.

Exhibit 10
Economic Impact of Southern Nevada Convention and Meeting Segment, 20188

	Direct Impacts of Convention & Meeting Segment <u>Direct Impacts</u>	Convention Suppliers & Vendors Indirect Impacts	Spending by Convention & Meeting Industry Employees Induced Impacts	Total Economic Impacts Generated by Convention & Meeting Segment Total Impacts
Total Employees Total Wage & Salary Payments	42,766 \$1,875,869,700	10,120 \$441,624,579	14,342 \$551,470,708	67,227 \$2,868,964,988
Total Economic Output	\$6,303,618,772	\$1,749,626,123	\$2,473,470,666	\$10,526,715,561



⁷ Source: Las Vegas Convention and Visitors Authority *Visitor Statistics*.

⁸ Calculations are based on IMPLAN, an input-output econometric model. Refer to the Methodology section of this analysis for further detail.

ECONOMIC IMPACT OF EVENTS HELD AT THE LV CONVENTION CENTER

The Las Vegas Convention Center ("LVCC") plays an important role in the region's convention and meeting segment, hosting 57 events in 2018 with a combined attendance of 1.3 million.⁹ Attendance at LVCC conventions declined by 10.1 percent from 2017 but still accounted for approximately 3.0 percent of all visitor trips and roughly one in five convention and meeting trips to the region.

Like the convention segment overall, the economic impacts of spending by LVCC convention attendees grew despite the decline in attendance. In 2018, the total (i.e. direct, indirect and induced) impacts of LVCC visitors was nearly 13,100 jobs, \$558.6 million in wages and salaries, and \$2.0 billion in economic output.

The expansion of the Las Vegas Convention Center continues, which upon completion will add 600,000 square feet of exhibit space and 150,000 of meeting space while extensively renovating existing spaces. This will allow for existing conventions to expand and accommodate additional visitors as well as allow for the hosting of additional events. The project will provide an estimated 14,000 construction jobs and 7,800 new permanent full-time jobs upon completion, further expanding the economic impact of the convention segment in Southern Nevada.

Exhibit 11
Las Vegas Convention Center Impacts, 2018¹⁰

Statistic	Value
Total LVCC Conventions	57
LVCC Convention Attendees	1,265,845
Employment Impact:	
Direct	8,326
Indirect	1,970
Induced	<u>2,792</u>
Total Employment	13,089
Wages and Salaries Impact:	
Direct	\$365,215,830
Indirect	\$85,980,539
Induced	\$107,366,643
Total Wages and Salaries	\$558,563,011
Economic Output:	
Direct	\$1,227,260,805
Indirect	\$340,637,282
Induced	\$481,563,640
Total Economic Output	\$2,049,461,727

¹⁰ Data includes conventions and tradeshows. Baseline data is per the Las Vegas Convention and Visitors Authority. Calculations are based on IMPLAN, an input-output econometric model. Refer to the Methodology section of this analysis for further detail.



⁹ Source: Las Vegas Convention and Visitors Authority; includes conventions and tradeshows



METHODOLOGY

General and industry-specific employment and wage data reported on a quarterly basis were obtained from the Nevada Department of Employment, Training and Rehabilitation. Baseline travel volume, visitor spending data and room tax collections were obtained from the Las Vegas Convention and Visitors Authority, the Nevada Gaming Control Board and the Nevada Commission on Tourism. Gross domestic product estimates were obtained from the Bureau of Economic Analysis and the U.S. Department of Commerce.

To identify the interrelationships in a regional economy, the IMPLAN (Impact Analysis for Planning) software, databases and methodology were used when estimating the economic impacts generated by the Southern Nevada resort and tourism industry. IMPLAN is one of three generally accepted applications that are used to model how industries within an economy are interrelated. The model attempts to demonstrate mathematically how the outputs of one industry become the inputs of other industries.

IMPLAN employs a regional social accounting system that is used to generate a set of balanced accounts and multipliers. The social accounting system is an extension of input-output analysis. Input-output analysis has been expanded beyond market-based transaction accounting to include non-market financial market flows by using a social accounting matrix framework. The model is designed to describe the transfer of money between industries and institutions (e.g., households) and contains both market-based and non-market financial flows, such as inter-institutional transfers. IMPLAN uses regional

purchase coefficients generated by complex econometric equations that predict local purchases based on a region's characteristics. In this case, the region is Clark County, Nevada. Output from the model includes descriptive measures of the economy including total industry output, employment and value-added contributions for over 500 industries.

ANALYSIS LIMITATIONS

This analysis used the best available data to analyze the economic impacts of Southern Nevada's tourism industry. It relies heavily on data reported by third-party data providers; and, although we have no reason to doubt the accuracy of these data, they have not been subjected to any auditing or review procedures by AA. Input-output models, as is the case with all economics-based models, are not without their limitations. The static model used in this analysis, IMPLAN, for example, assumes that capital and labor are used in fixed proportions. This means that for every job lost or created, a fixed change in investment, income and employment will result. In reality, developers, operators, consumers and governments deal with a changing economy in very complex ways, constantly altering their mix of capital, labor and levels of investment.

Finally, it is important to note that this is a preliminary undertaking that will be supplemented by on-going and future analyses. This report is not intended to be comprehensive and may not be appropriate for all purposes.