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# South Tahoe Event Center

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Opportunity Costs Analysis

Final Report

6.0



*Ideas and solutions for your competitive world*

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## Project Overview

The tourism industry and gaming have changed significantly over the past twenty-five years from a time when Nevada Gaming was a near monopoly to a point now when gaming is available in one form or another in just about every jurisdiction within the United States.

The advent of tribal gaming in California has over the years significantly impacted Stateline Nevada Gaming and Transient Occupancy Tax revenues. As a competitive response the gaming industry in the Lake portion of Douglas County has developed more entertainment options. These options have included hosting entertainment the casino showrooms in Mont Bleu and Harrah's and the summer season outdoor concerts at Harvey's. In the summer of 2018, the series was expanded to 16 concert events. Additionally, the Hard Rock Casino has also featured entertainment in its club room on a smaller scale.

The shift by the casino industry has dovetailed with the repositioning of the South Shore from a narrowly focused gaming and skiing destination to a broader entertainment and outdoor recreation destination. This move has improved the competitiveness of the destination by providing visitors with additional reasons to visit the destination and Nevada Casinos.

To fully leverage this position and strengthen the competitiveness of the destination and the casino industry and the resulting revenue and tax streams the Lake Tahoe casino industry has proposed the development of the South Tahoe Events Center that is to be built in the parking lot of the Mont Bleu Casino Hotel.

The addition of this facility will not only increase revenue, and tax collection, but also provide more stable year-round employment. Additionally, this new facility will be a part of a total main street transformation that will extend from the California side through Stateline on the Nevada side. In total, this project could be a key anchor in improving the overall competitiveness of the destination and ensuring positive tax collections in the future.

What are the potential fiscal impacts if the project is not implemented?

Several studies have been completed related to this project. However, they fail to answer a critical and strategic question of what the fiscal impacts are if the project is not developed. For residents, the private sector and Douglas County as a whole will feel these impacts. To this end SMG Consulting has developed this analysis and report that that would assess the opportunity cost in terms of revenues, employment and taxes over a long period of time if the project is not implemented.

## Project Objectives:

1. Identify the inflation-adjusted twenty-year trend of key Douglas County tax revenue sources including Transient Occupancy Tax, and Gaming Revenue Tax.
2. Quantify the potential revenues and related tax collections with the development of the Events Center in the Lake Tahoe portion of Douglas County.
3. Identify the opportunity cost not developing the Events Center at the Lake portion of Douglas County and the resulting tax impacts for the county.



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4. Identify the potential tax impacts of not developing the Events Center at the Lake Tahoe on current Transient Occupancy Tax and Gaming Revenue Tax.

## Scope of Work

In considering the development of an economic opportunity cost analysis for the non-development of the events center SMG Consulting developed a three-phase process necessary for its success.

### Opportunity Cost Analysis Methodology



#### Phase 1 – Data and Information Collection

We looked to understand all aspects of the project and the collection of all appropriate data and information. A list of data sources and information used can be found in the Appendix section of this report.

#### Phase 2 – Data Analysis

Based on the collected information SMG Consulting develop the appropriate model building and data analysis to answer the project objectives.

#### Phase 3 – Draft and Final Report

Once we completed the analysis SMG Consulting developed a draft report for input and a final report for submission and public review within Douglas County.

## Report Format

The analysis consists of three separate sections including the historical trend, a future forecast without the South Tahoe Events Center and a future forecast with the South Tahoe Events Center.

### Table of Contents

**Part 1: Douglas County Lake Tahoe Historical Gaming Trends**

**Part 2: Forecasting Gaming Revenue and Room Nights**

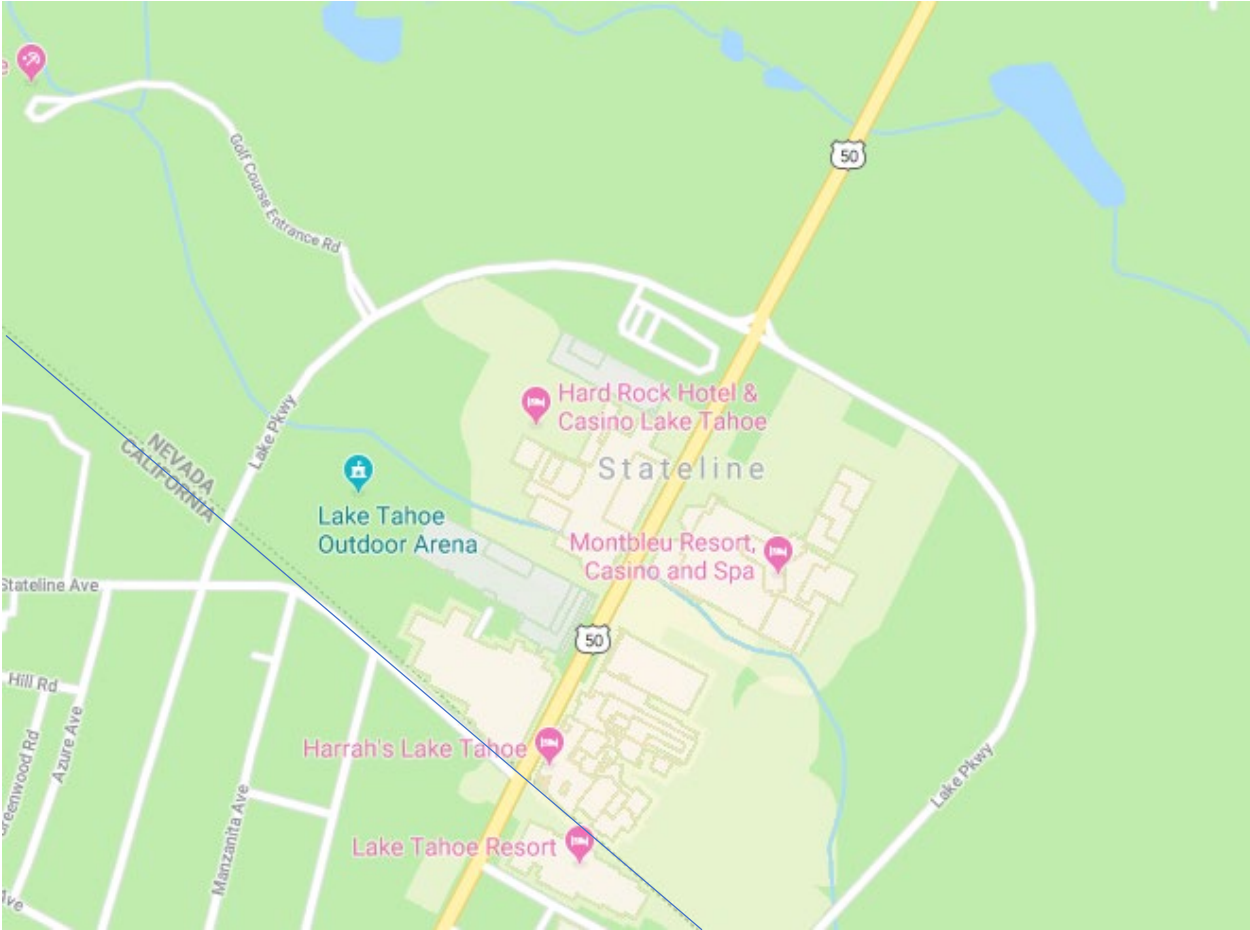
**Part 3: Forecasting Economic Impacts**

**Part 4: Comparison “Cost” of Not Developing the Events Center**

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# Project Area

Redevelopment area two (RA2) is located at Stateline in South Lake Tahoe. An approximate map can be found below. For the purposes of this report the analysis of sales, property and transient occupancy tax as well as gaming revenue and non-gaming revenue, employment only include those that would be generated with the redevelopment area.



# Project Assumptions

While all reasonable efforts were used to be as accurate with a range in the preparation of these forecasts, we recognize the forecasts are based on specific assumptions. All data used were from reliable sources and are listed in the Appendix Section of this report.

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## Executive Summary

To analyze the potential range of impacts from not building the South Tahoe Events Center, this report quantifies the “opportunity cost” of not building the facility in terms of forgone revenue. These costs are borne by a variety of stakeholders including Douglas County, the Lake Tahoe Casino Industry, and the broader community. In the process of developing this analysis it became evident that the Casino Industry has changed significantly over the past twenty years. While the basic building structures have remained the same, giving the impression of stability, the economics have changed drastically and will continue to change moving forward.

Without additional competitive improvements such as the South Tahoe Events Center, we anticipate the industry will become less competitive as measured by revenues, taxes and employment. By framing this analysis from an opportunity cost perspective, we identify the potential opportunities available to the County, the industry and the community. The analysis focuses on four core areas including the decline of the gaming industry, the long-term impact of California tribal gaming on the industry, forecasts of a range of revenue, tax and employment metrics and the results of the analysis.

## Historical Trends

### Gaming Decline

There can be little doubt the Stateline Casino Industry has changed dramatically since the turn of the century.

- **After reaching a peak of \$341 million in FY 2001, gaming revenue declined to \$219 million in FY 2018. This is a 36 percent decline over the past 17 years.**
- **After adjusting for inflation, annual gaming revenues decline from \$470 million in FY 2002 to \$230 million in FY2018, a decline of \$240 million or 51 percent.**
- In 1998, gaming revenue comprised 61 percent of total annual casino revenue. By 2018, the casino share of total revenue had fallen to 54 percent.
- From 1998 through 2001, the growth of gaming revenue outpaced the growth of non-gaming revenue. However, since the recession gaming revenues have been the slowest to recover. By the end of 2018, gaming revenue was only at 76 percent of the 1998 level. In contrast, non-gaming revenue had fully recovered to the 1998 level.
- Before 2008, gaming revenue helped support positive returns on invested capital (ROIC). From 2009, annual ROIC averaged -11 percent. By 2018, ROIC had declined to -56 percent.
- Declining returns is an important reason why Douglas County Lake Tahoe Casinos have received limited investment capital in recent years. Capital investment is needed to revise and refresh the Lake Tahoe casino experience to match the ever-expanding competitive offerings from California tribal casinos.

### The Impact of Tribal Gaming

- Tribal gaming revenue has significantly increased from 2001 through 2017, the most recent year data is available. During the same period, Lake Tahoe gaming revenues have decreased. The development of quality tribal casino gaming experiences closer to where consumers live has

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reduced their travel time and costs. This strengthens the value proposition of tribal casinos and in turn visitation to Lake Tahoe casinos has diminished significantly over the past two decades.

- In 2001, South Lake Tahoe (SLT) captured 11 percent of the market. By 2018, this share had fallen to only two percent.

### **Room Revenue Declines Impact Room Tax Collections**

- From 2002 through 2012, both room nights and average daily rate (ADR) declined. This resulted in an almost 40 percent revenue decline over that decade. From 2012 through 2018, ADR recovered to be 16 percent greater than 2002 ADR. In contrast, room nights remain 16 percent below 2002 sales levels. Thus, 2018 revenue is almost flat with 2002 at two percent below.
- Casino operators have sought to maintain revenues by modestly increasing room rates to compensate for the loss of occupied rooms.
- In a similar pattern, occupancy declined from 2002 to 2012, from 80 percent to less than 60 percent. Except for 2015, room night availability has remained rather consistent in the range of 850,000. As mentioned above, room nights sold have declined from the 700,000 level in 2002 – 2005 to less than 600,000 in 2018.
- A more recent short-term trend is a stronger post-recession recovery for room nights than gaming revenues. From 2015 to 2018, gaming revenues increased roughly 12.5 percent. In contrast, room nights increased approximately 25 percent from a mean of 40,000 to 50,000.
- Data analysis shows a generally increasing degree of seasonality over time, with most of the transition occurring from 2005 to 2012. This may be a result of a shift from a relatively more stable gaming economy to a more seasonal outdoor recreation economy in which the spring and fall shoulder seasons are much slower than the peak winter and summer seasons.
- One of the goals of the South Tahoe Events Center is to reduce the degree of seasonal variation by offering events and concerts that take place indoors, sheltered from the weather.

### **Sales Tax**

- From 2010, Nevada has experienced steady sales tax growth. In contrast, Douglas County continued to decline through 2012. From 2012, the County has grown steadily, though at a lesser annual rate (3.6%) than the State (5.5%).

### **Property Tax**

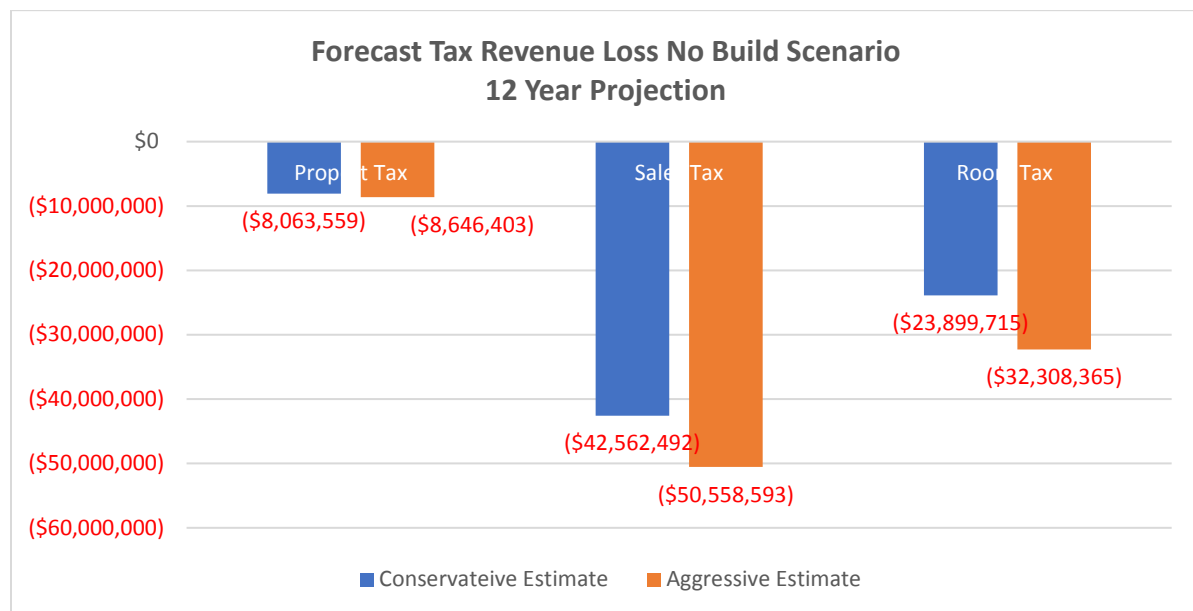
- The property taxes levied on Lake Tahoe casinos are proportional to gaming revenue. After reaching almost \$3 million annually during the early 2000s, property tax revenue fell to almost half that amount by 2004. By 2018, property tax revenue remained below \$2 million.

## Future Forecasts of Alternative Event Center Impact Scenarios

To understand the economic impact of not developing the South Tahoe Events Center this analysis modeled several different scenarios. The first scenario is an analysis without the South Tahoe Events Center based on the continuation of long-term trends. The second scenario, is a baseline or **conservative** forecast of impacts resulting from the development of the South Tahoe Events Center. The third scenario is an induced or more **aggressive** forecast associated with the Stateline revitalization project. Baseline and induced estimates bound a forecast range throughout the study.

This analysis is similar to the analysis of the previous EPS study that looked at the potential impact of the South Tahoe Events Center as a stand-alone project as well as the induced impact the South Shore Revitalization project would have on the Events Center. We have assumed the Events Center opening in January 2022. It should also be noted that unlike the EPS study which looked at a one year impact this analysis included a twelve-year forecast of the anticipated impacts.

A summary of forecasted tax losses indicated without the Special Event Center potential lost tax revenues over a twelve-year period is estimated to be between \$74 and \$91 Million, cumulative.



Source: SMG Consulting

### Tax Revenue Impacts

- Sales Tax**  
 Developing the South Lake Tahoe Event Center will generate incremental county sales tax (CTX) in the range of \$43 to \$51 million over the next twelve years or \$3.7 to \$4.4 million annually.

- **Property Tax**

Developing the South Lake Tahoe Event Center will generate incremental property tax in the range of \$8 to \$8.6 million over the next twelve years or \$666,000 to \$716,000 annually.

- **Room Tax Revenue**

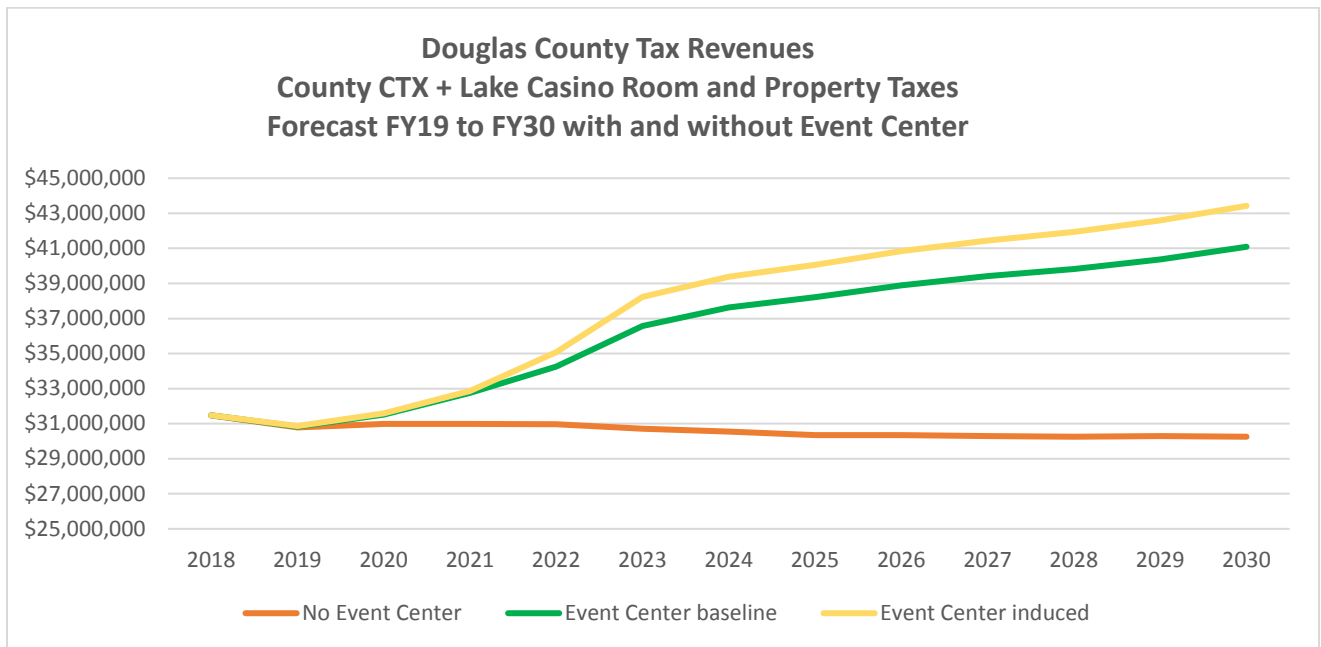
Developing the South Lake Tahoe Event Center will generate incremental Lake Tahoe resort room tax revenue in the range of \$24 to \$32 million over the next twelve years or \$1.9 to \$2.7 million annually. Note that 2.7 percent of these revenue figures are allocated to Nevada Tourism.

In addition to these total figures, the report breaks down these projections for each account currently receiving room tax funding. A detailed analysis of each account can be found in Table 12B of this report.

**Combined Tax Revenues**

The chart below clearly demonstrates the impact of not developing the Events Center. By 2030, without the development of the Events Center, these combined tax revenues are forecast to be \$30 million annually, a decline of a million dollars from 2018 revenue.

By developing the Events Center, tax revenues could reach \$43 million annually. This would be an opportunity loss of up to \$13 million annually.



Source: SMG Consulting

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## Revenue Impacts

This analysis forecasts incremental gaming revenue, non-gaming revenue and combined revenues over the next twelve years by comparing each of the baselines and induced forecasts to the scenario without the development of the South Tahoe Events Center.

- **Gaming Revenues**  
Developing the South Lake Tahoe Event Center will generate incremental gaming revenues in the range of \$916 to \$982 million over the next twelve years or \$76 to \$82 million annually.
- **Non-Gaming Revenues**  
Developing the South Lake Tahoe Event Center will generate incremental non-gaming revenues in the range of \$631 to \$750 million over the next twelve years or \$53 to \$62 million annually.
- **Combined Gaming and Non-gaming Revenues**  
Developing the South Lake Tahoe Event Center will generate incremental total revenues in the range of \$1.5 to \$1.7 billion over the next twelve years or \$129 to \$144 million annually.
- **Combined Gaming and Non-gaming Revenues with 1.37 multiplier**  
Developing the South Lake Tahoe Event Center will generate incremental total revenues in the range of \$2.1 to \$2.4 billion over the next twelve years or \$177 to \$197 million annually.

## Room Nights and Room Revenue Impacts

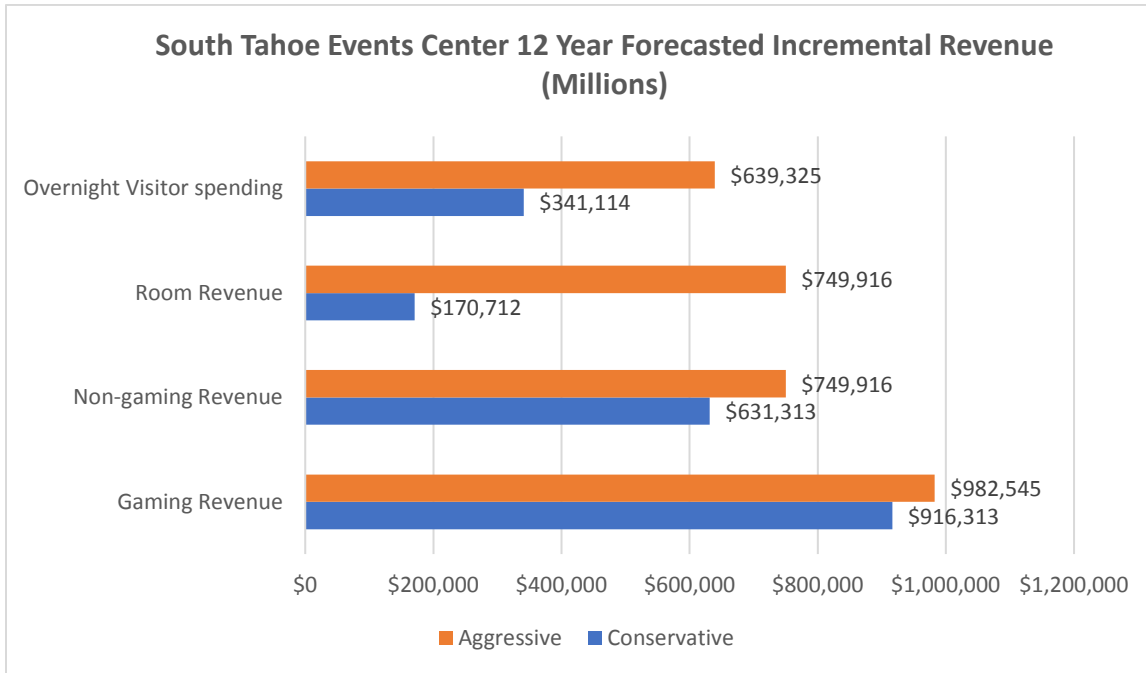
- **Room Nights**  
Developing the South Lake Tahoe Event Center will generate incremental room night sales in the range of 1.7 to 2.0 million over the next twelve years or 142 to 169 thousand annually.
- **Room Revenue**  
Developing the South Lake Tahoe Event Center will generate incremental room revenues in the range of \$171 to \$231 million over the next twelve years or \$14 to \$19 million annually.

## Overnight Visitor Spending

- **Overnight Visitor Spending**  
Developing the South Lake Tahoe Event Center will generate incremental visitor spending in the range of \$341 to \$639 million over the next twelve years or \$28 to \$53 million annually.
- **Overnight Visitor Spending with 1.37 multiplier**  
Developing the South Lake Tahoe Event Center will generate incremental visitor spending in the range of \$467 to \$876 million over the next twelve years or \$38 to \$73 million annually.

The following Figures summarize the potential opportunity revenues that could be realized with the development of the South Tahoe Event Center. These figures include both the potential

revenue impacts and well as the potential induced revenue impacts that could be realized with the addition of the South Shore revitalization project.



Source: SMG Consulting

### Casino and County Employment

- Casino Employment**  
 Developing the South Lake Tahoe Event Center will generate between 1,156 and 1,346 additional jobs by the year 2030.
- County Employment**  
 Developing the South Lake Tahoe Event Center will generate between 1,877 and 2,186 additional jobs by the year 2030.



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# Report Analysis

## Part 1: Douglas County Lake Tahoe Historical Gaming Industry Trends

This section reviews the historical context of the South Lake Tahoe Gaming Industry from a variety of different perspectives. Twenty-year data sets allow for a long-term analysis of the structural changes that have taken place in this economy. This section includes an analysis of gaming and non-gaming casino revenues, casino lodging occupancy and revenues, room taxes, population and employment trends as they relate to the Lake Tahoe gaming industry. Additionally, the analysis also includes the introduction of California tribal gaming on the market and its impact.

### **A careful analysis of the data draws several important conclusions:**

First, the gaming industry in South Lake Tahoe has seen a significant decline over the period of time under study 1998 through 2018. As measured in dollars or as a percentage of total gaming revenue gaming has declined significantly, in absolute terms gaming revenues have declined 24% between 1998 and 2018.

This decrease is significant given the dramatic increases in competitive offerings in the industry's core Northern California Feeder market.

Second, the reason for that decline can be seen in two critical areas; the 2008 recession and the introduction of casino tribal gaming in California. The former was temporary, but that latter has had a systematic and long-lasting negative impact on the industry. There are currently sixty-nine tribal casinos in Northern California with more on the way in the next several years. As such the competitive environment will continue to get even more challenging as tribal casinos increase their competitive offerings in an attempt to draw visitors to their locations. Additionally, these tribal casinos are located closer to major population bases and have much easier access especially in the winter months as potential visitors have to negotiate Highway 50 which is often subject to challenging winter driving conditions.

Third, the South Lake Tahoe Gaming Industry is subject to significant seasonality. This is reflected in both Quarter 3 (July- September) and Quarter 1 (January-March) as the seasons with the biggest demand. The addition of the South Tahoe Events Center which will seek to reduce the seasonal demand pattern and attract visitors through its programming during other times of the years. This will enable casinos to more effectively plan and retain labor on a more consistent basis.

Fourth, the casino industry has broader impacts including tax-related and employment impacts that affect Douglas County. Currently casino employment from Lake Tahoe is almost one-quarter of jobs in Douglas County. Any further deterioration of employment is sure to impact Douglas County, both directly in income and wages and indirectly in the dollars that those employees would have to spend locally enhancing the Douglas County economy.

***The industry must increase its competitiveness or anticipate further deterioration.***

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From the outset of gaming in South Lake Tahoe it was a primary revenue generator for Douglas County's economy, taking advantage of Nevada's near monopoly on gaming. However, on February 25, 1987, the market dynamics and competitive advantage Nevada had held was changed forever. "The U.S. Supreme Court decided that neither the State of California nor Riverside County could regulate the bingo and card game operations of the Cabazon Band of Mission Indians and the Morongo Band of Cahuilla Mission Indians. This court ruling, known as the Cabazon decision, set in motion a series of federal and state actions -- including two ballot propositions -- that dramatically expanded tribal casino operations in California and other states." <sup>1</sup>

The spread of gaming across the country since 1987 has eroded Douglas County's competitive advantage and negatively impacted the County. Today there are 45 tribal casinos in Northern California, with six additional casinos to open in the next several years.<sup>2</sup> This dramatic increase in the supply of casinos has significantly altered the competitive dynamics for Douglas County Lake Tahoe casinos.

In response to these changes, the Industry has shifted to offering more and more entertainment and performances as a way to diversify and differentiate their offerings. In addition to entertainment, the Industry has started taking full advantage of Lake Tahoe's natural environmental and recreational amenities to create more reasons for consumers to visit.

Currently, major entertainment is regularly offered and Harrah's, Harvey's and Montbleu. These combined efforts have worked to help the destination reposition itself in the marketplace as a recreation and entertainment destination.

The proposed South Tahoe Event Center is a tangible effort to diversify the Lake Tahoe Casino Industry further to attract not just entertainment but also a variety of sporting and cultural events. This fits with the desire to create more diverse reasons for consumers to visit the area. The Event Center will strengthen the casino industry's competitive position, increase revenues, solidify year-round employment, and increase state and local tax revenues.

## **A. Gaming Revenue**

### **1. Market Share**

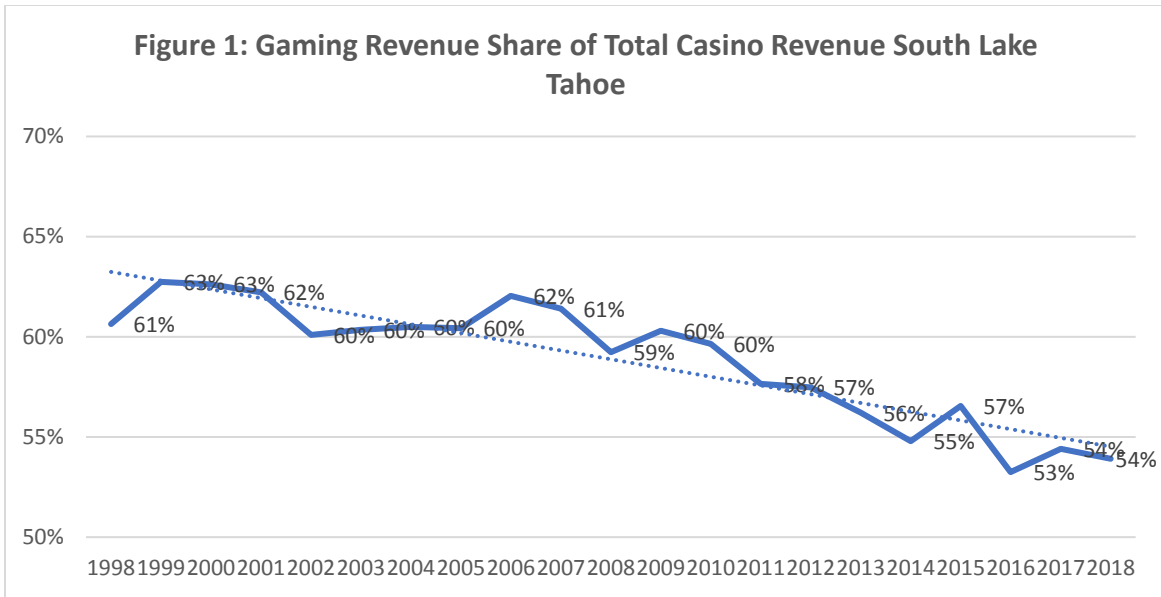
The Nevada Gaming Control Board collects detailed financial information monthly and annually on casino operations throughout the State. The South Lake Tahoe region of Douglas County is a separate reporting district and considered for this study.

At the end of the fiscal year 1998, ending on June 30<sup>th</sup>, gaming revenue comprised 61 percent of total annual casino revenue. By 2018, the casino share of total revenue had fallen to 54 percent.

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<sup>1</sup> California Legislative Analyst's Office, February 2007. California Tribal Casinos Questions and Answers

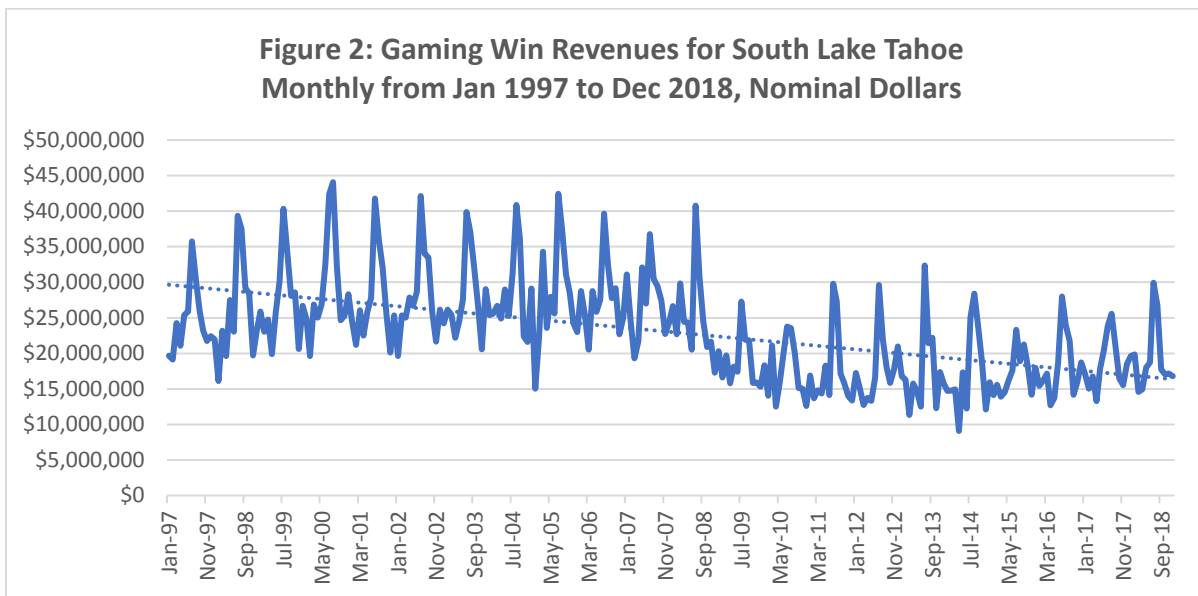
<sup>2</sup> 500 hundred nations.com



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

## 2. Nominal Dollars

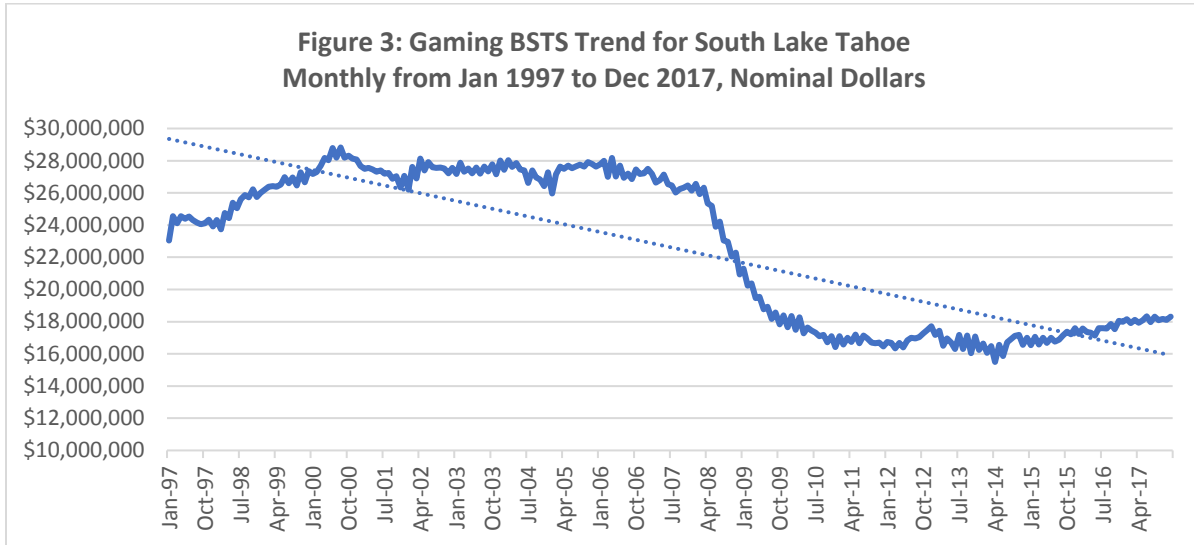
Absolute casino revenue declined as well, falling from \$289,349,661 in 1998 to \$219,079,428 in 2018, after peaking in 2001 at \$341,264,560. This revenue decline did not take place gradually. The chart below shows monthly gaming win revenues beginning in January 1997. Although gaming revenues are highly seasonal on a monthly basis, the chart shows a gradual increase through the first twelve years. After September 2008, industry revenues fall too much lower levels and a new norm is established.



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

This reflects the impact of the 2008 recession of which the industry and never been able to recover. In looking at the data using nominal dollars, after climbing from \$24 million to \$28 million at the end of the

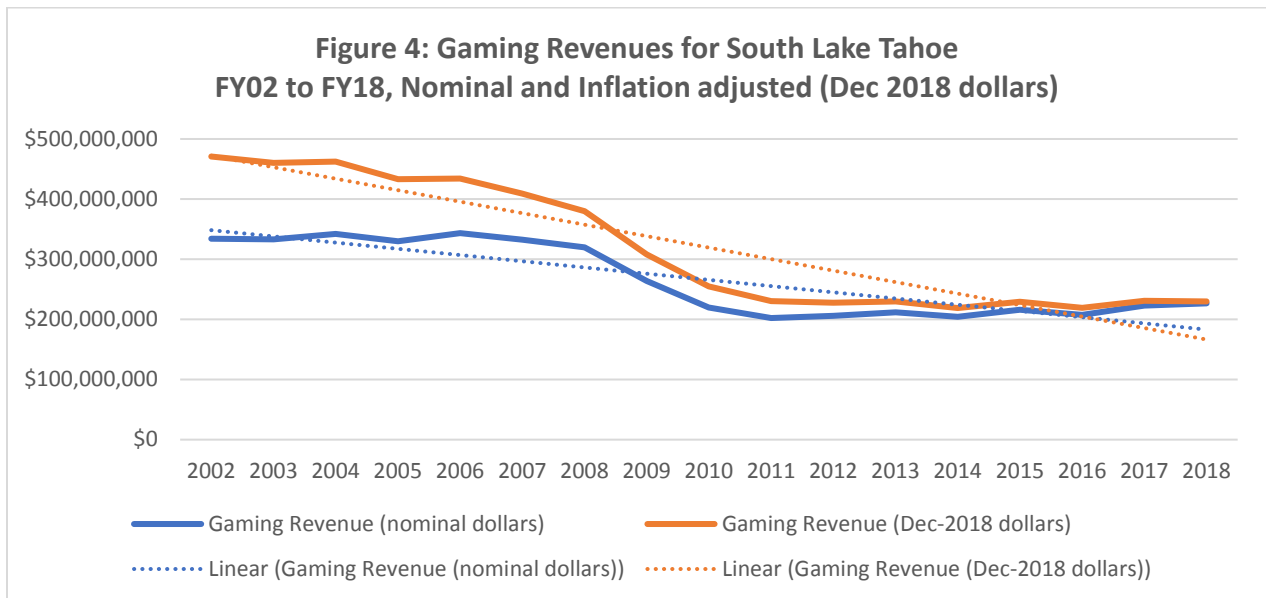
1990s, monthly gaming revenues plateaued at \$28 million through 2008. Throughout 2009, revenues fell to \$18 million, reaching a low of \$16 million by 2014. Since then revenues have grown modestly, returning to \$18 million by the end of 2017. Figure 3 below shows the gaming revenue trend extracted from the data using Bayesian Structural Time Series (BSTS) modeling techniques (see Appendix 2 for details).



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

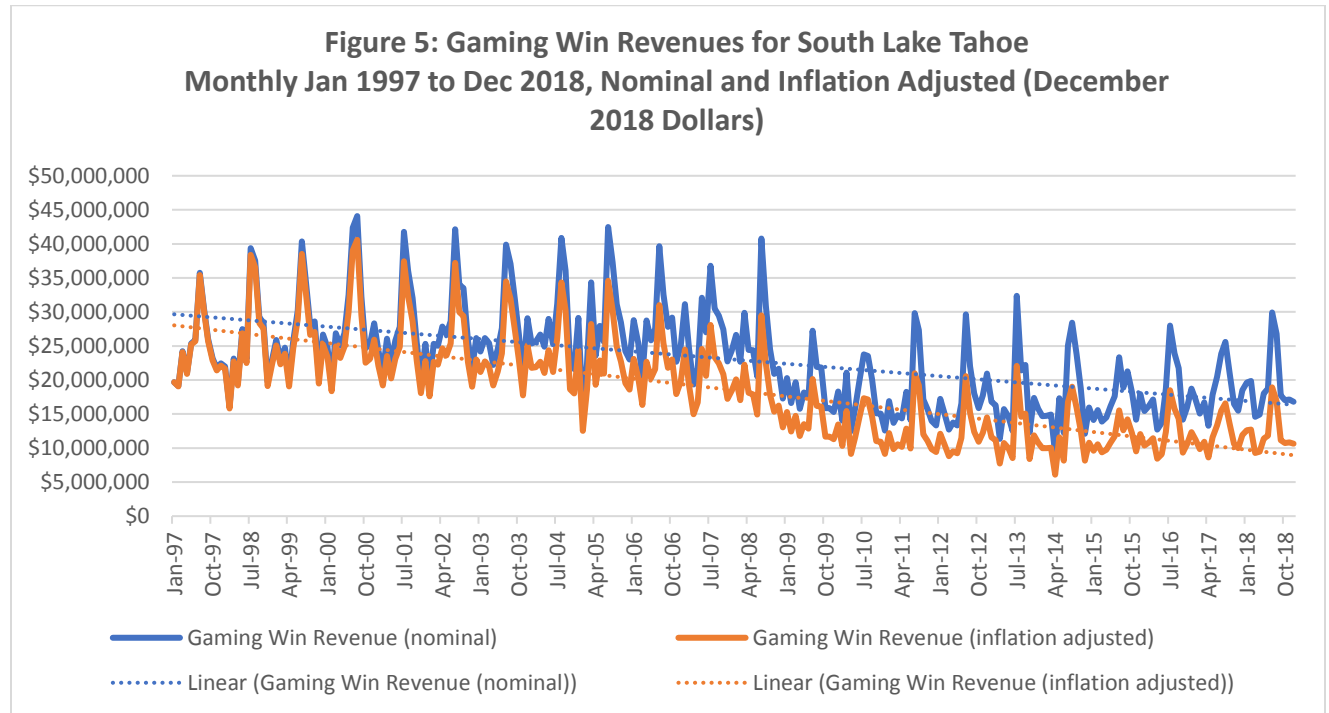
### 3. Real Dollars

Adjusting for inflation shows a further decline in real dollar values. On the basis of December 2018 valuation, inflation-adjusted annual gaming revenues decline from \$470 million in FY2002 to \$230 million in FY2018, a decline of \$240 million or 51 percent. In comparison, the decline in nominal dollars falls from \$334 million to \$227 million or 32 percent during the same period.

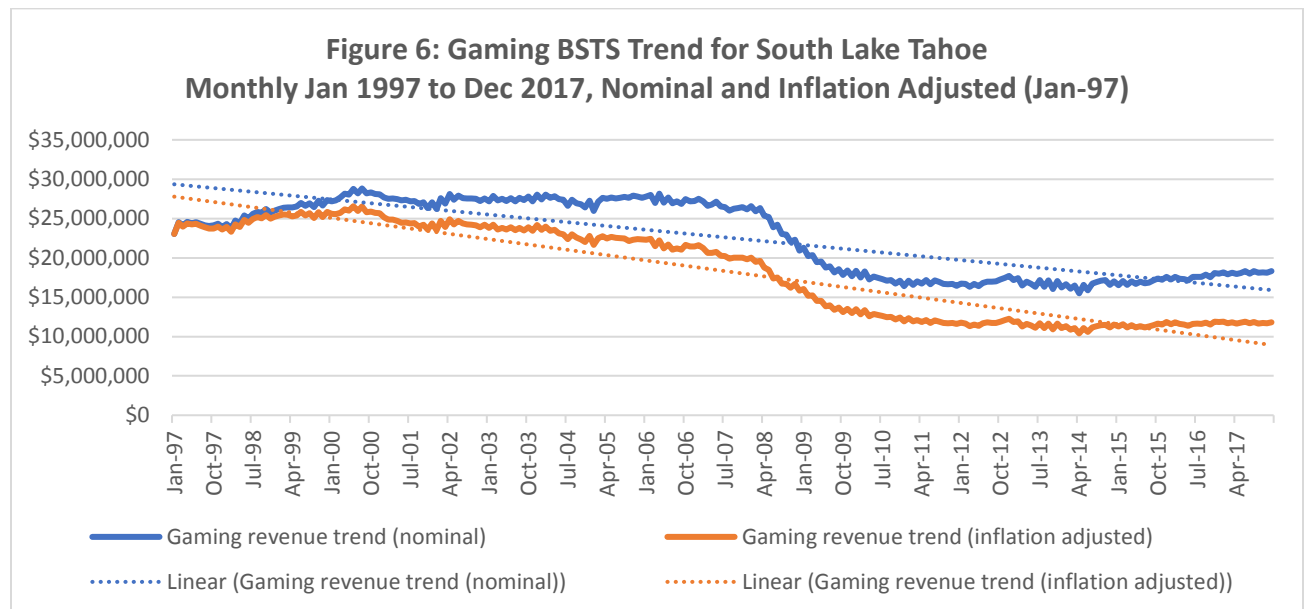


Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

On the basis of January 1997 valuation, 2018 inflation adjusted monthly gaming win revenues are 37 percent less. Adjusting the nominal trend values for inflation shows essentially no increase in value from 2011 through 2017.



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

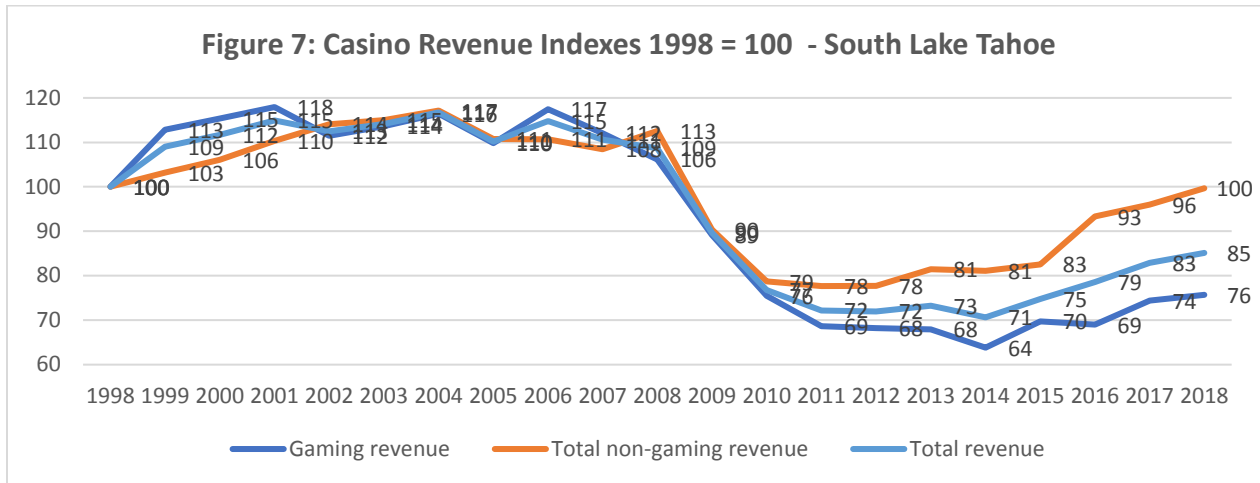


Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

The historical revenue trends are clear. The industry has suffered significant declines since the 2008 recession. Since that time the industry has not recovered.

#### 4. Revenues Index

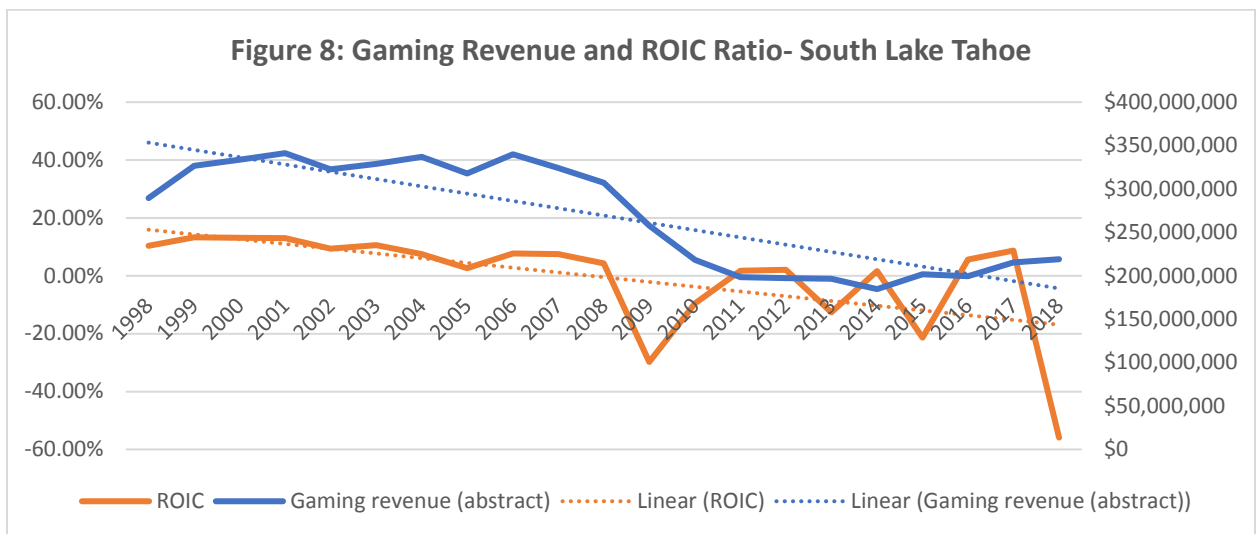
The index chart below (Figure 7) compares the growth of gaming and non-gaming revenue over time beginning in 1998 through 2001, the growth of gaming revenue outpaced non-gaming revenue. However, during and since the recession gaming revenues have been slowest to recover. **By the end of 2018, gaming revenue was only at 76% of the 1998 level. In contrast, non-gaming revenue had fully recovered to the 1998 level.**



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

#### 5. Casino Financial Ratios

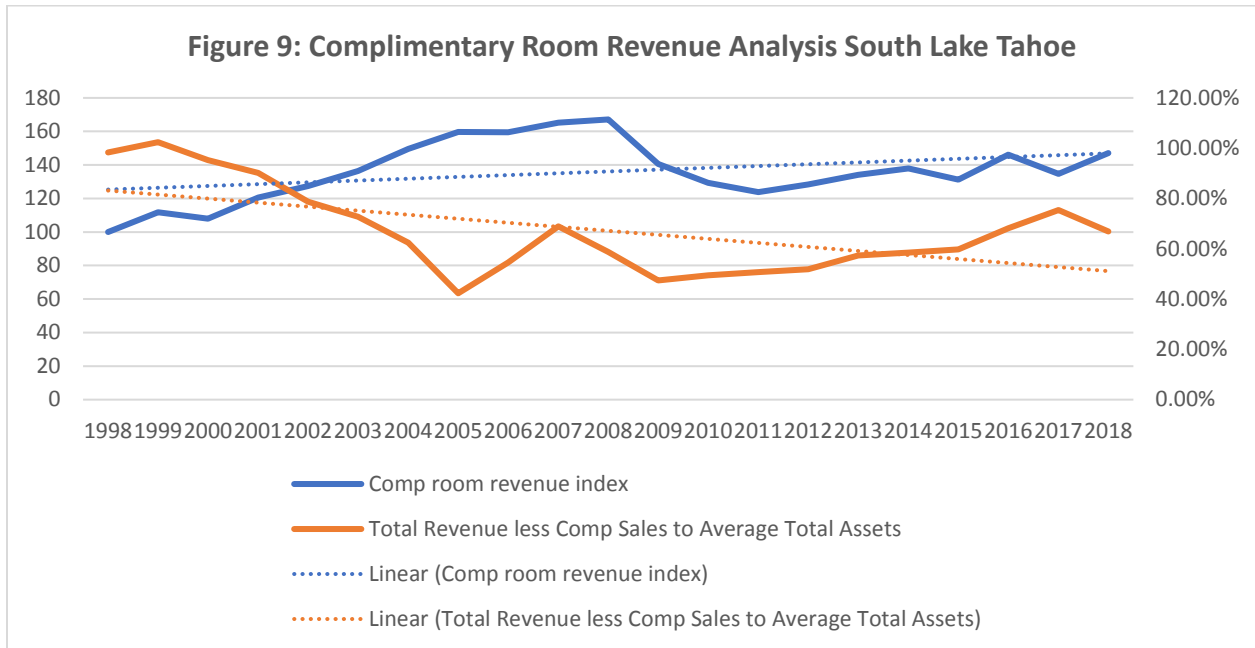
Before 2008 gaming revenue helped support positive returns on invested capital (ROIC). As Figure 8 illustrates, from 2009 annual ROIC has averaged -11 percent. By 2018, ROIC declined to -56 percent. Figure 8 further shows revenue consistent with capacity prior to 2009 and insufficient since 2009. This lack of a return is an important reason why Douglas County Lake Tahoe Casinos have received limited investment capital to revise and refresh the casino experience and match the ever-increasing competitive offerings from California tribal casinos.



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

The chart in Figure 9 shows the ratio of Total Revenue less Comp Sales to Average Total Assets in the context of complimentary room revenue. The ratio declines as complimentary rooms revenue grows through 2008. For the past ten years, the ratio has improved along with modest growth in complimentary rooms revenue.

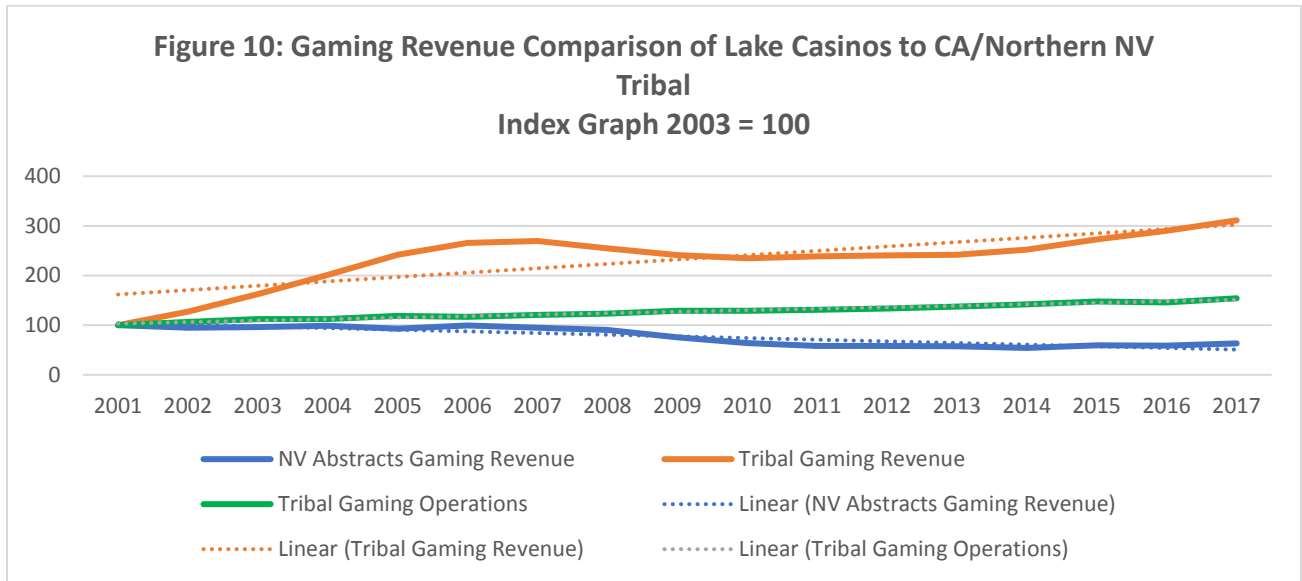
This chart suggests that prior to 2009, complimentary room revenues were propping up total revenue. Indeed, this is a sign that the casinos had begun fighting for market share prior to the recession.



Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

## B. The impact of Tribal Gaming in California

The availability of tribal gaming in California has had a significant impact on casino gaming in the Douglas County Lake Tahoe market. As Figure 10 below illustrates, tribal gaming revenue has significantly increased from 2001 through 2017, the most recent year data is available. At the same time gaming revenues have decreased. Having quality gaming experiences available to consumers closer to where they live, thus reducing travel time and costs, has created a strong price value which has reduced visitation to Lake Tahoe casinos significantly over time.



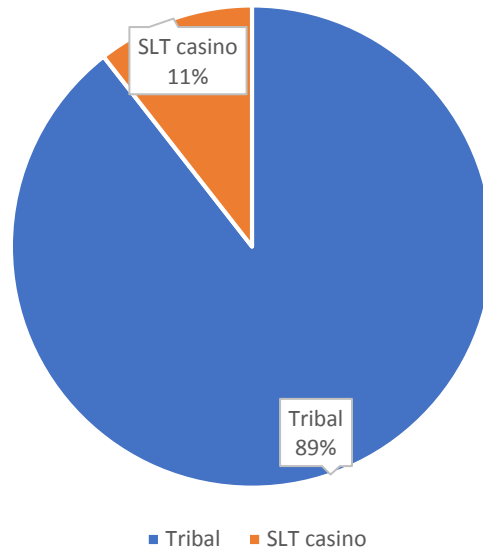
Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

### 1. Lake Casino Share of Combined Revenue

Further confirmation of this long-term trend can be found in Figures 11 and 12. The two market share charts show Douglas County Lake Tahoe casino gaming revenues losing market share to tribal revenues. In 2001, SLT captured 11 percent of the market. By 2018, this share had fallen to only two percent.

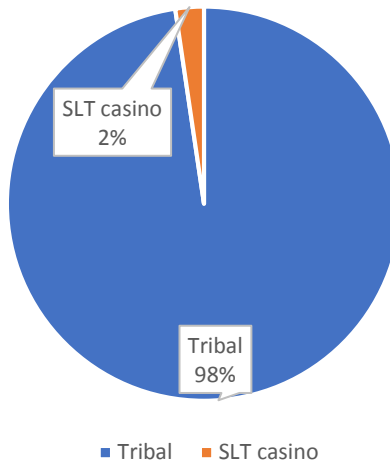


**Figure 11: Market Shares by Gaming Revenue 2001  
CA/Northern NV Tribal and SLT Casino**



Source: National Indian Gaming Commission

**Figure 12: Market Shares by Gaming Revenue 2018  
CA/Northern NV Tribal and SLT Casino**

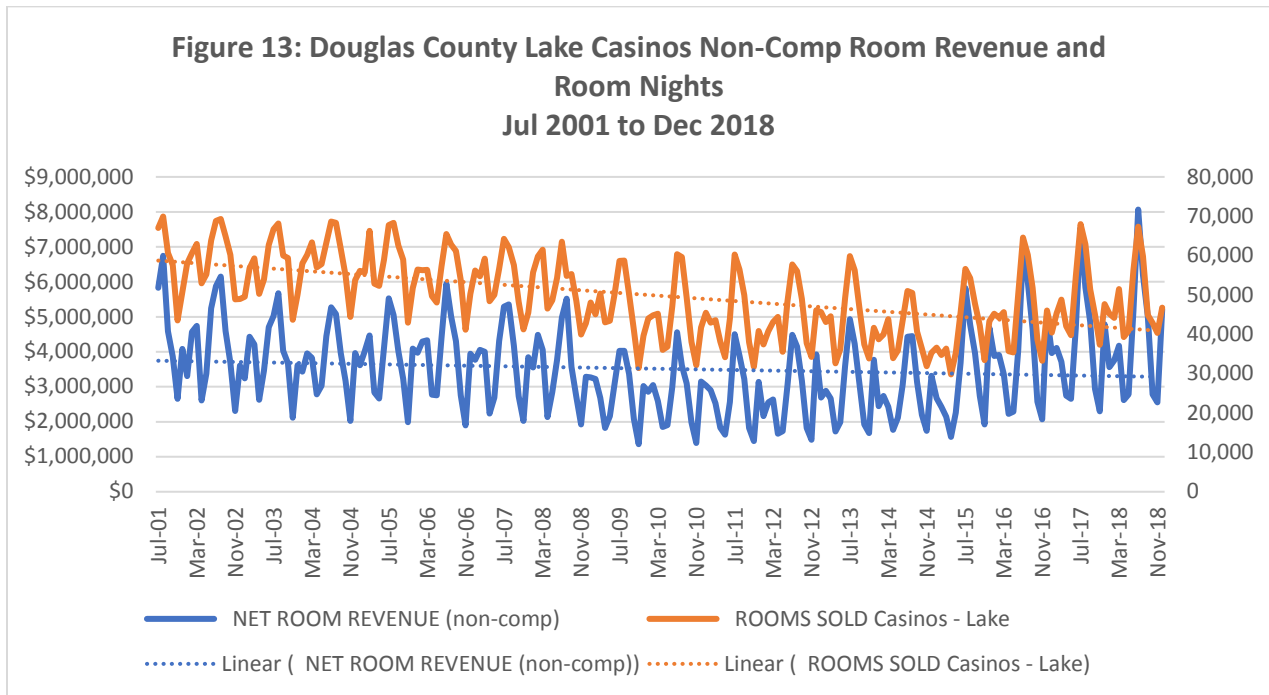


Source: National Indian Gaming Commission

## C. Douglas County Lodging Trends

### 1. Casino Lodging

A second component to evaluate the Douglas County Lake Tahoe Casino industry is an analysis of casino lodging. Figure 13 shows monthly net room revenues and room nights sold for July 2001 through December 2018. Clearly similar to gaming revenue, lodging performance exhibits the same degree of seasonality.

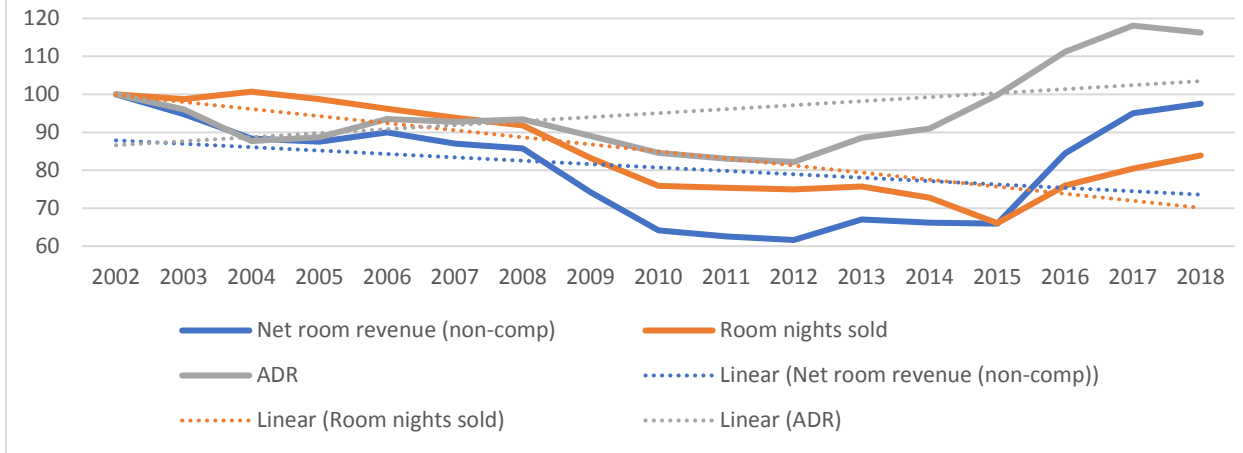


Source: Douglas County Room Tax Reports

An index comparison of annual revenue, room nights sold and average daily rate (ADR) over time is shown in the index chart Figure 14 on the following page. From 2002 through 2012, both room nights and ADR declined leading to an almost 40 percent revenue reduction over that decade. From 2012 through 2018, ADR has recovered to be 16 percent above 2002. In contrast, room nights remain 16 percent below 2002 levels. Thus, revenue is almost flat with 2002 at two percent under.

Casino operators have sought to maintain revenues by increasing room rates to some degree to compensate for the loss of occupied rooms.

**Figure 14: Douglas County Lake Casinos Lodging Metrics Indices  
FY2002 to FY2018, 2002 = 100**

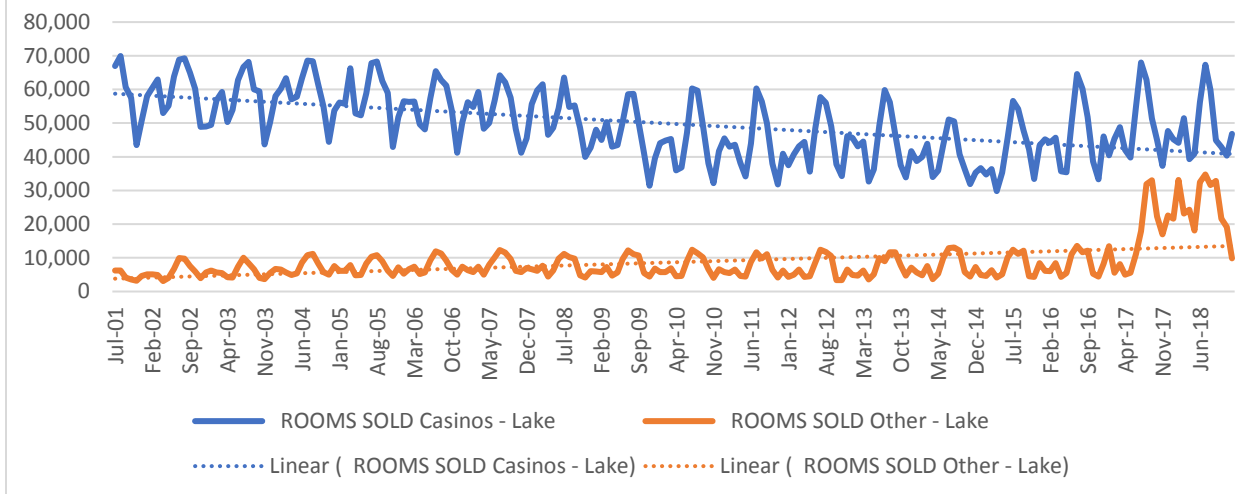


Source: Douglas County Room Tax Reports

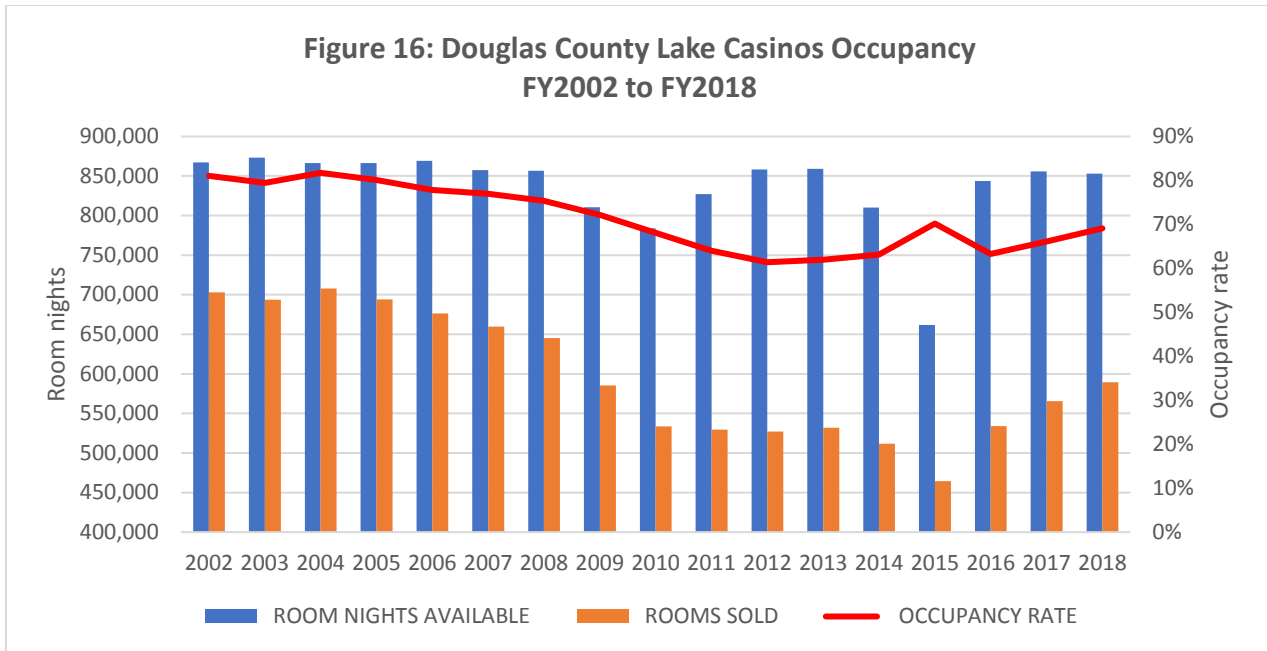
In a similar pattern, occupancy declined from 2002 to 2012, from 80 percent to less than 60 percent. Except for 2015, room night availability has remained rather consistent in the range of 850,000. As mentioned above, room nights sold have declined from the 700,000 level in 2002 – 2005 to less than 600,000 in 2018.

Although Lake Casino room nights recover over the past three years, the room night sales of other Lake region properties roughly triple during the past two years as shown in Figure 15 below.

**Figure 15: Douglas County Lake Region Total Room Nights  
Jul 2001 to Dec 2018**

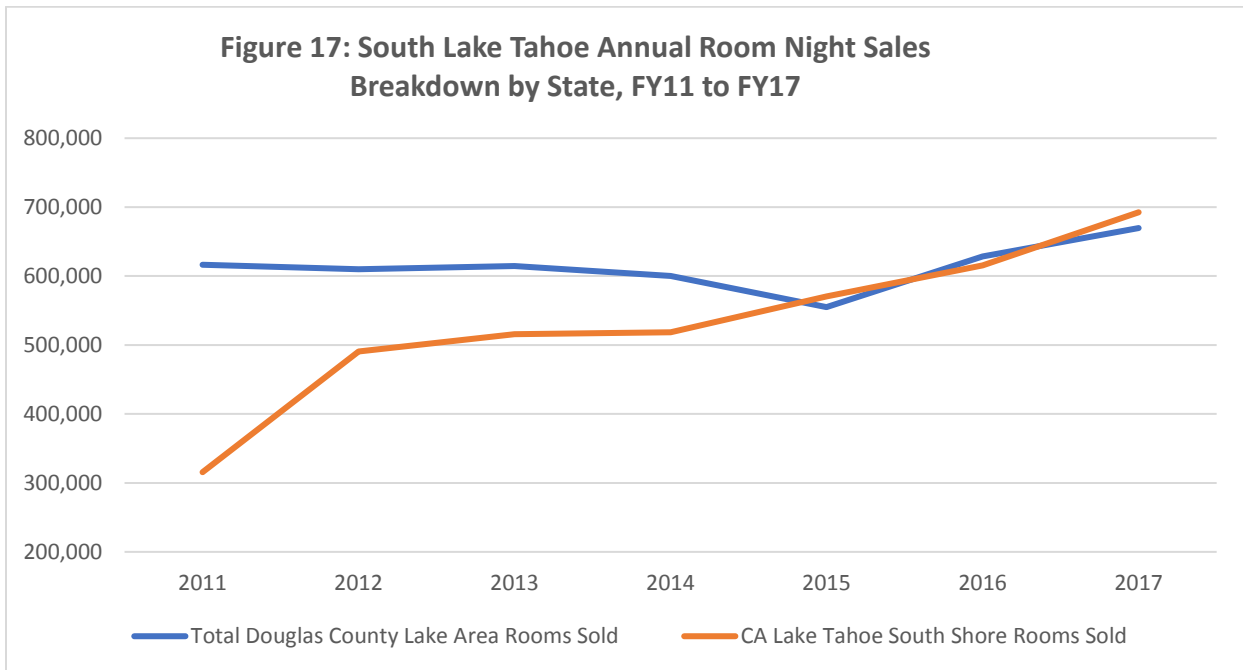


Source: Douglas County Room Tax Reports



Source: Douglas County Room Tax Reports

A comparison of room night sales for South Lake Tahoe broken out by state shows California has caught up to and surpassed Douglas County for annual room night sales.

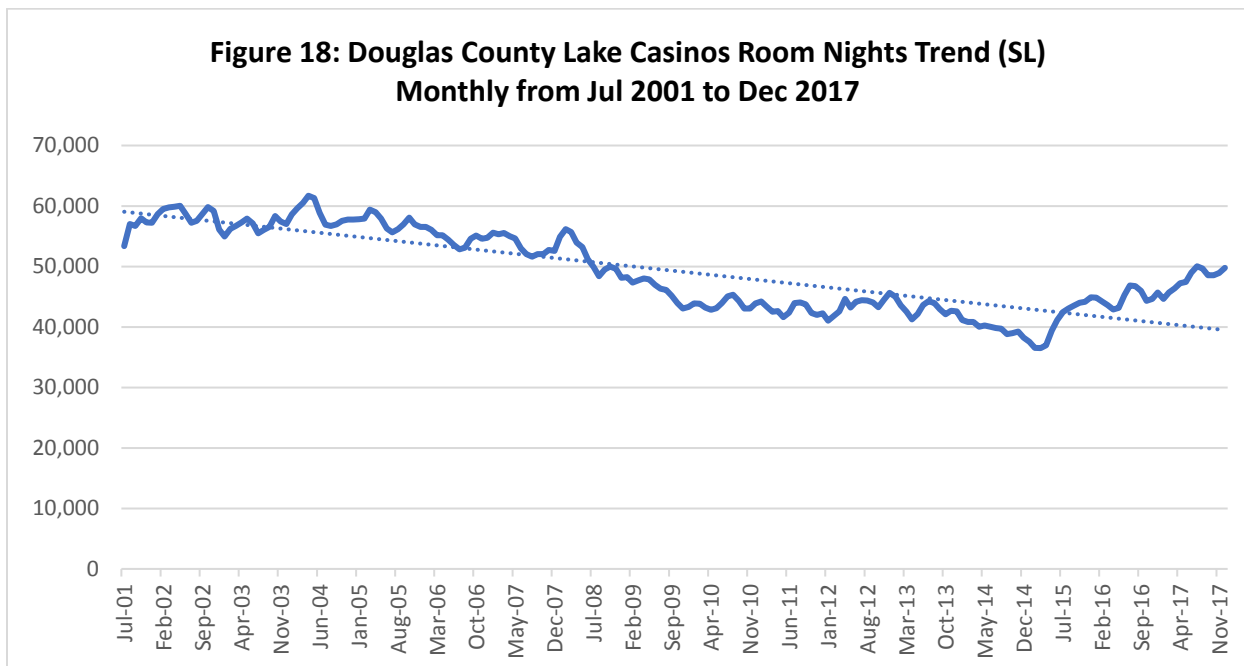


Source: Douglas County Room Tax Reports, City of South Lake Tahoe

## 2. Modeling Room Nights

Figure 18 below shows the room night sold trend extracted from the data using Bayesian Structural Time Series (BSTS) modeling techniques (See Appendix 3 for details) The trend component shows a strong recovery for room nights than gaming revenues. From 2015 to 2018, gaming revenues increased roughly 12.5 percent. In contrast, the trend charts below show room nights increasing approximately 25 percent from a mean of 40,000 to 50,000.

The other interesting finding of the data analysis is the increasing degree of seasonality over time. For the past decade, July has been the peak month and November the trough. By one measure, the difference in room night sales between these months has generally increased over time. This may be a result of a shift from a relatively more stable gaming economy to a more seasonal outdoor recreation economy in which the spring and fall shoulder seasons are much slower than the peak winter and summer seasons.

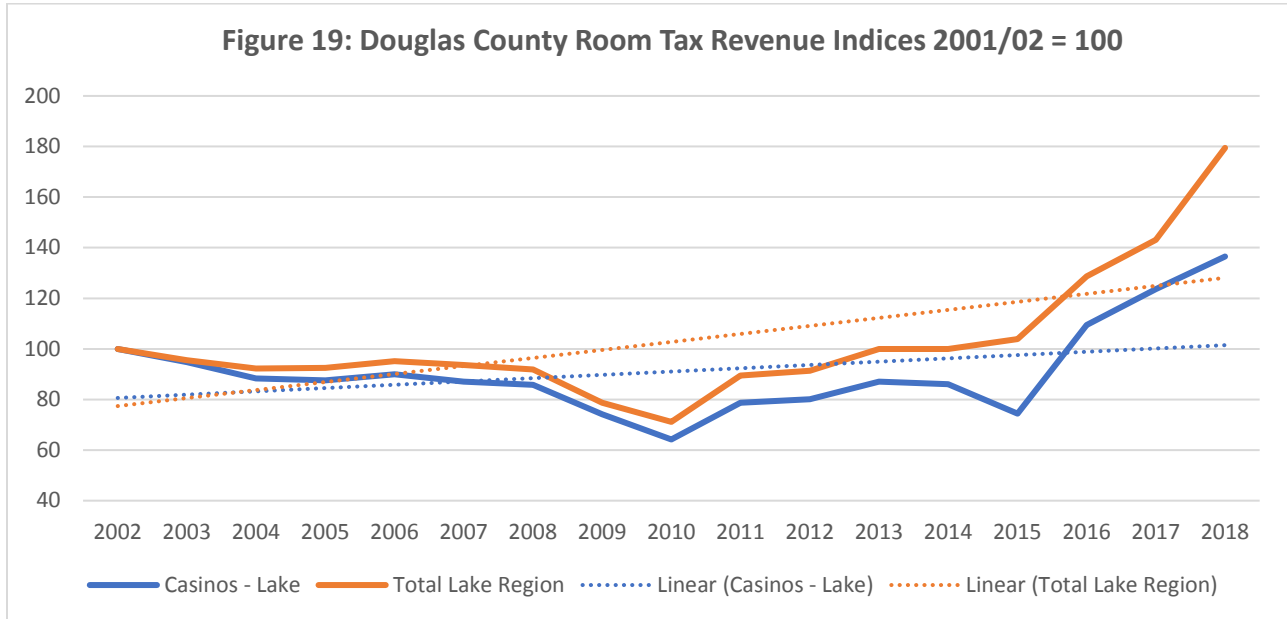


Source: Douglas County Room Tax Reports

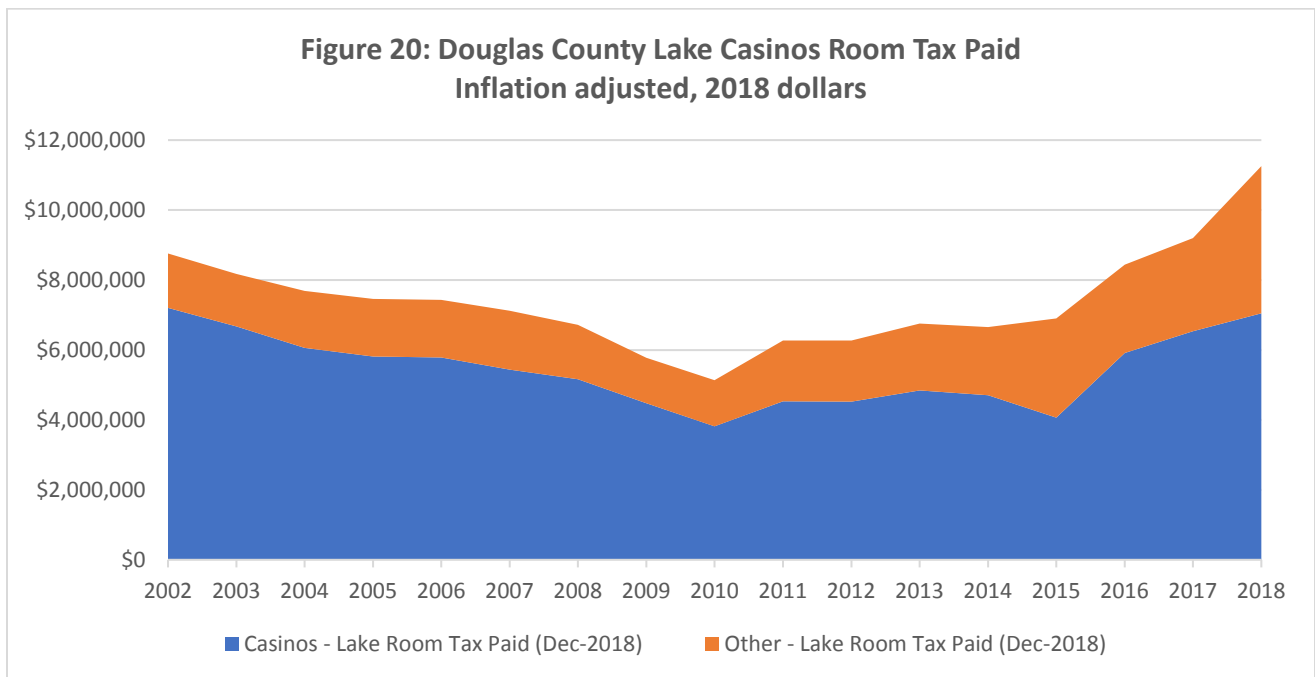
One of the goals of the South Tahoe Events Center is to reduce the level of seasonality to the market by enabling the programming of events and concerts that normally would not take place due to unpredictable and colder weather that would be able to happen indoors.

### 3. Room Tax Revenues

Non-casino lodging has been outperforming casino lodging, in terms of Transient Occupancy Tax collections and that gap has widened since 2010. This may be due in part to the increased use of rental properties that have been facilitated by Airbnb and similar programs.



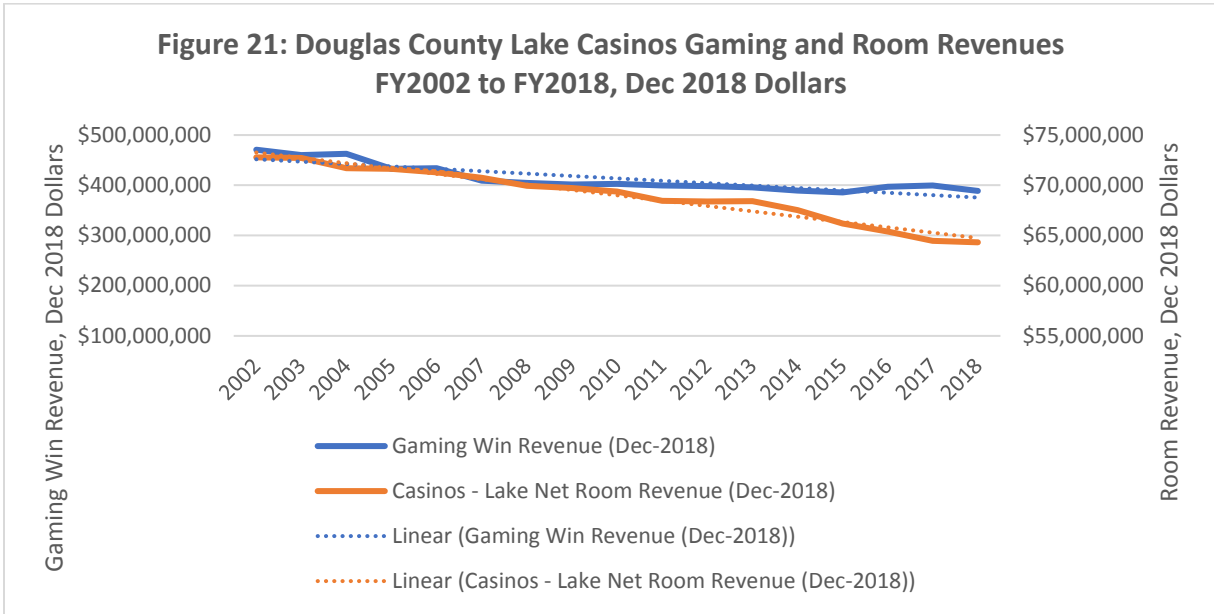
Source: Douglas County Room Tax Reports



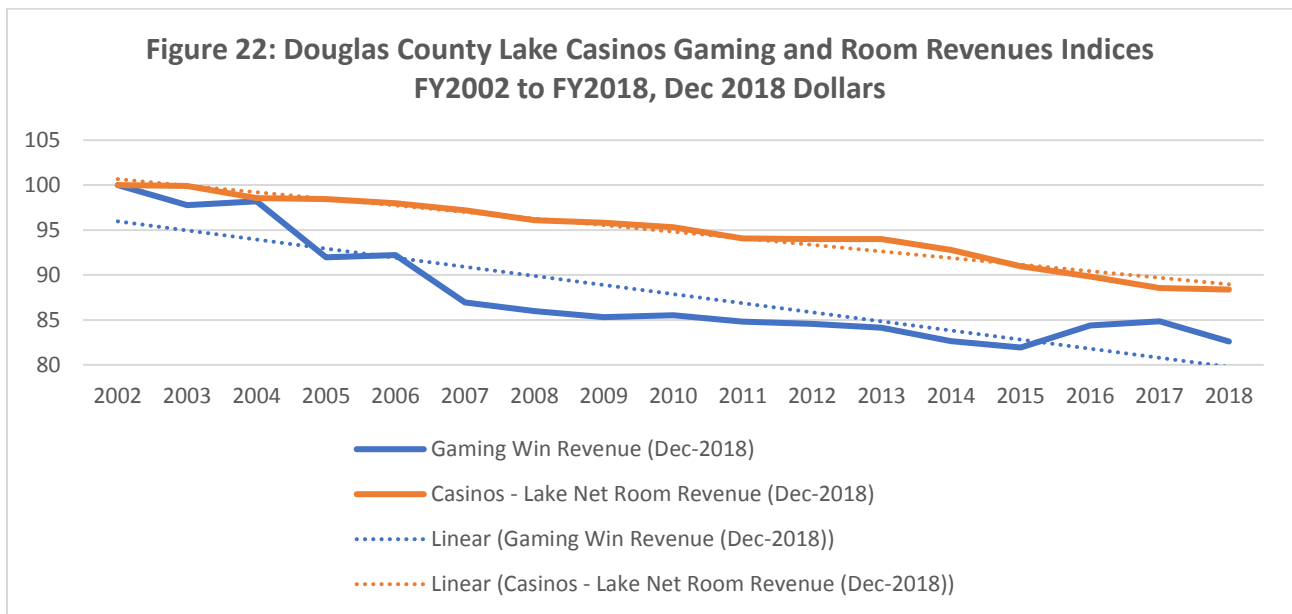
Source: Douglas County Room Tax Reports

#### 4. Gaming Win and Room Revenues

A close look at Figures 21 and 22 illustrates how both gaming win and room revenues have declined since 2002.



Source: Nevada Gaming Abstracts, Douglas County Room Tax Reports



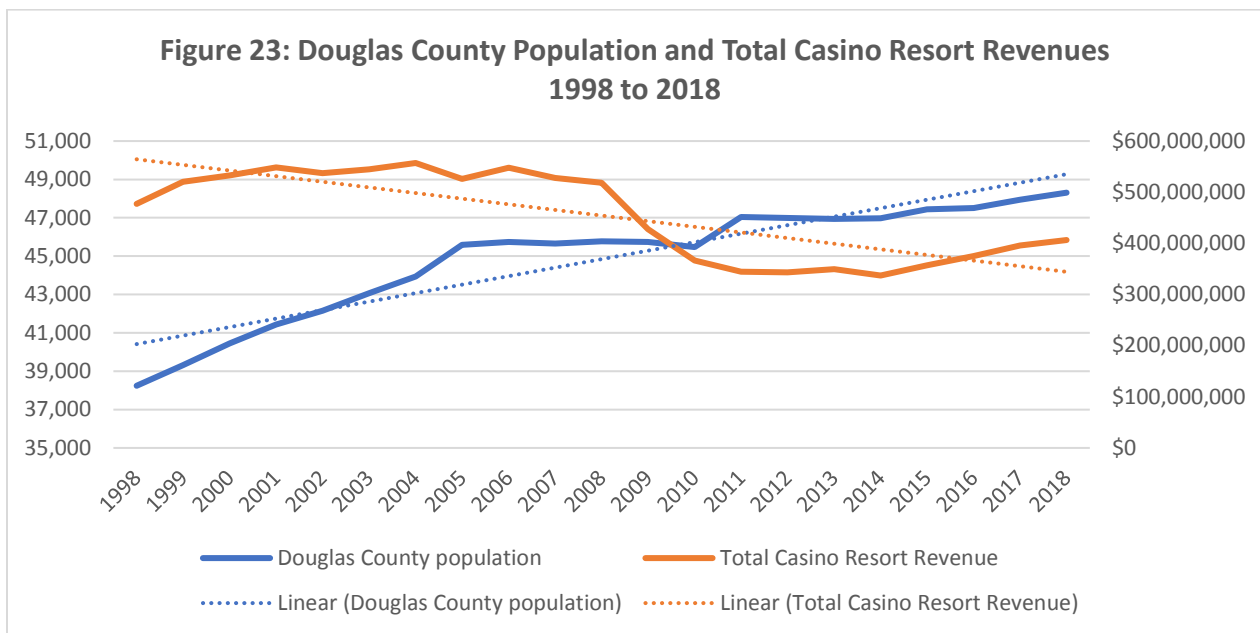
Source: Nevada Gaming Abstracts, Douglas County Room Tax Reports

## D. Population and Employment

### 1. Population

From 1998 to 2018, the population of Douglas County grew at an average annual rate of 2.5 percent, growing from 38,241 in 1998 to 45,591 by 2005. As discussed above, this was a period of growth and stability for the resort casinos. From 2006, the County's population has averaged annual growth of 0.5 percent. During four of the last 12 years, the population even declined slightly.

Figure 23 below shows this population growth trend plotted against the total annual revenue of the resort casinos. Since 2015, both population and total revenues have grown modestly, at average annual rates of 0.7 and 4.8 percent, respectively.



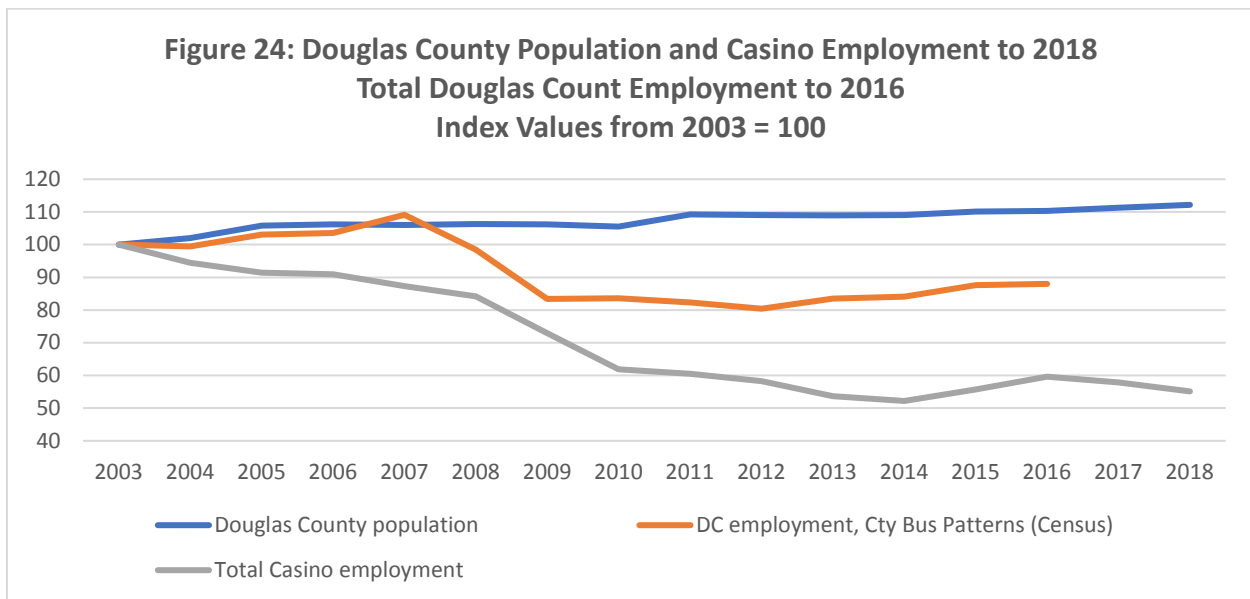
Source: Nevada Gaming Abstracts, U.S. Census



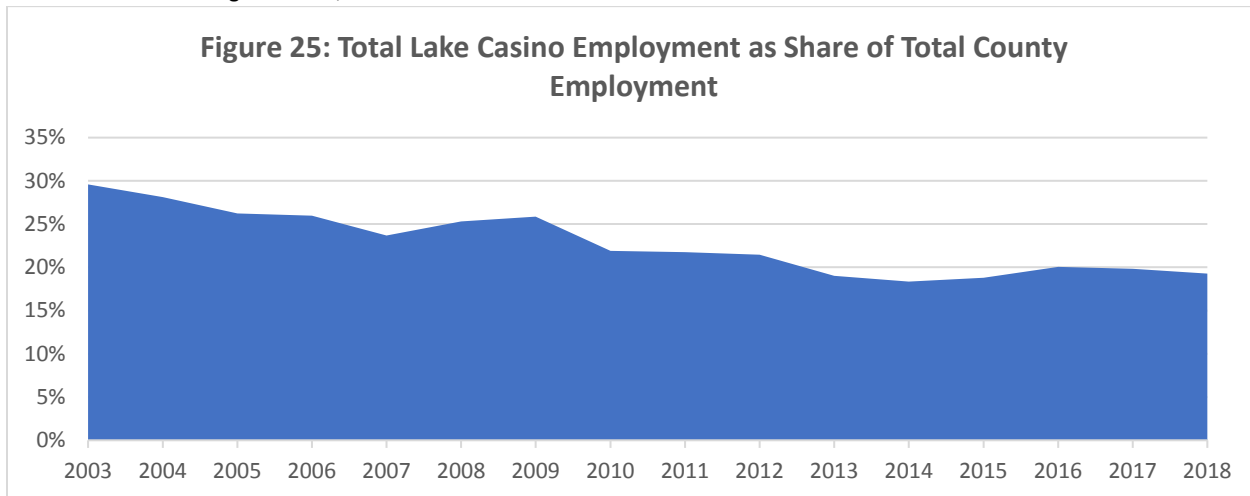
## 2. Employment

The U.S. Census Bureau’s publication of County Business Patterns (CBP) provides Douglas County employment data from 2003. Since that year, total County employment had fallen 12 percent to 16,841 in 2016. The Nevada Gaming Abstracts report casino employment by department. Total annual employment has fallen from 7,078 in 1998 to 5,660 in 2003, and to 3,118 by 2018. The casino department represents 37 percent of the total employment this share has remained very consistent over the past 20 years.

Figure 24 below indexes county population, county employment and total casino employment from 2003. The decline in total county employment reflects the decline in total casino employment. By 2016, casino employment had fallen 40 percent, before declining an additional five percent over the past two years. Figure 25 shows that although casino employment has fallen from a 30 percent share of county employment, casinos still account for one in five Douglas County jobs.



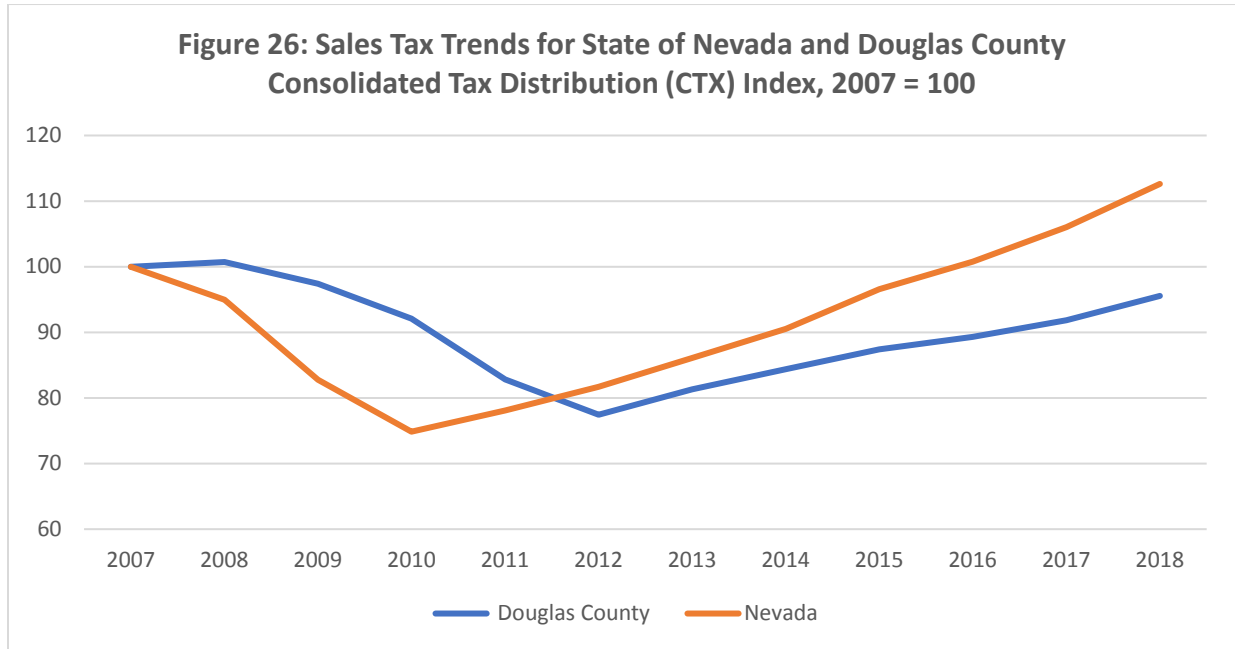
Source: Nevada Gaming Abstracts, U.S. Census



Source: Nevada Gaming Abstracts, U.S. Census

## E. Sales Tax Trends

Figure 26 below compares Douglas County sales tax revenue trends to Nevada sales tax trends from 2007 through 2018. From 2007 through 2010, although both accounts declined, Douglas County did not decline as much as the state. From 2010 however, Nevada has experienced steady growth. In contrast, Douglas County continued to decline through 2012. From 2012, the County has grown steadily, though at a lesser annual rate (3.6%) than the State (5.5%).



Source: State of Nevada, Department of Taxation

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## Part 2: Forecasting Gaming Revenue and Room Nights

### About the Methodology

This study uses the BSTS modeling approach mentioned above to forecast monthly gaming revenues and room night sales through December 2030 for both with and without the event center scenarios (see Appendices 2 and 3 for details). Confidence intervals are presented. Posterior distributions are available, but not presented. Mean values are annualized and used as the basis for extrapolating other metrics.

This analysis is similar to the analysis of the previous EPS study that looked at the potential impact of the South Tahoe Events Center as a stand-alone project as well as the induced impact the South Shore Revitalization project would have on the Events Center. It should be noted that it is uncertain what year this project would start as such for this analysis. We have assumed the Events Center opening in January 2022. It should also be noted that unlike the EPS study which looked at a single year impact, this analysis includes twelve-year forecasts of the anticipated impacts.

The forecasts for the “without Event Center” scenario adopt a semi-local linear trend model specification. The forecasts for the “with Event Center” scenarios are based on a local linear trend model specification which better captures the economic impact of the Event Center. Both specifications fit the data well. The confidence intervals show a high degree of uncertainty towards the end of the forecast range (2030).

To understand the economic impact of not developing the South Tahoe Events Center this analysis modeled several different scenarios. The first scenario is an analysis without the South Tahoe Events Center based on the continuation of long-term trends. The second scenario is a baseline or conservative forecast of the impacts resulting from the development of the South Tahoe Events Center. The third scenario is an induced or more aggressive forecast associated with the addition of the Stateline area loop road project. Baseline and induced estimates bound a forecast range throughout the study.

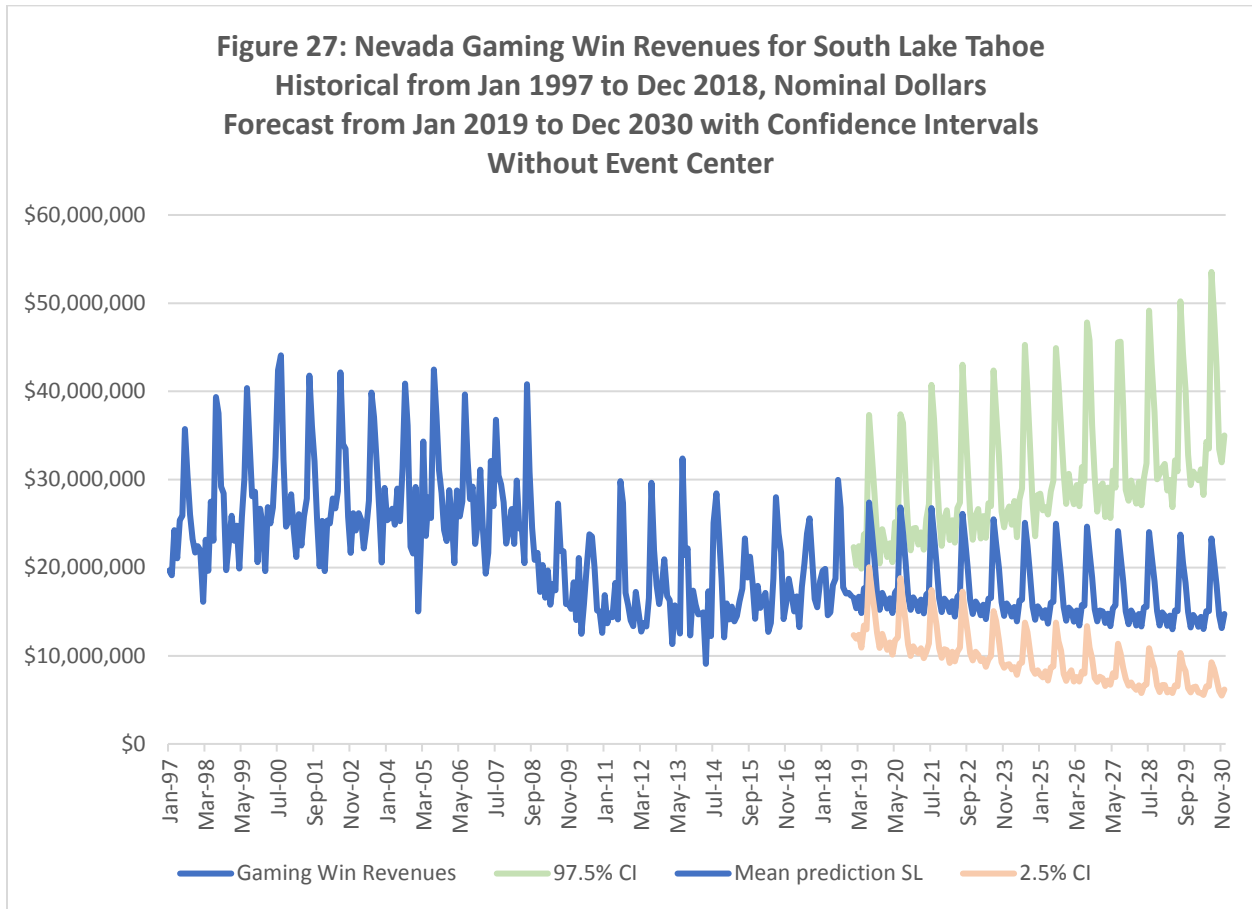
The EPS study assumes an additional 11.43 percent gain from the Event Center as a baseline and a 16.93 percent gain as an induced scenario. Since the Event Center will not directly promote gaming visitation, these gains are assumed half for gaming revenue forecasting, 5.72 and 8.47 percent, respectively.

In Part 3, forecasts of other economic measures, such as tax revenue and employment are extrapolated from these forecasts based on correlations derived from historical data. These extrapolations are conducted and presented on an annual basis.

Further comparisons to the EPS study allow for fine-tuning assumptions and cross-validation. Consistent findings, especially at the outset of the forecast period support the accuracy of both studies and the forecasting in this study.

## A. Gaming Revenue without the Event Center

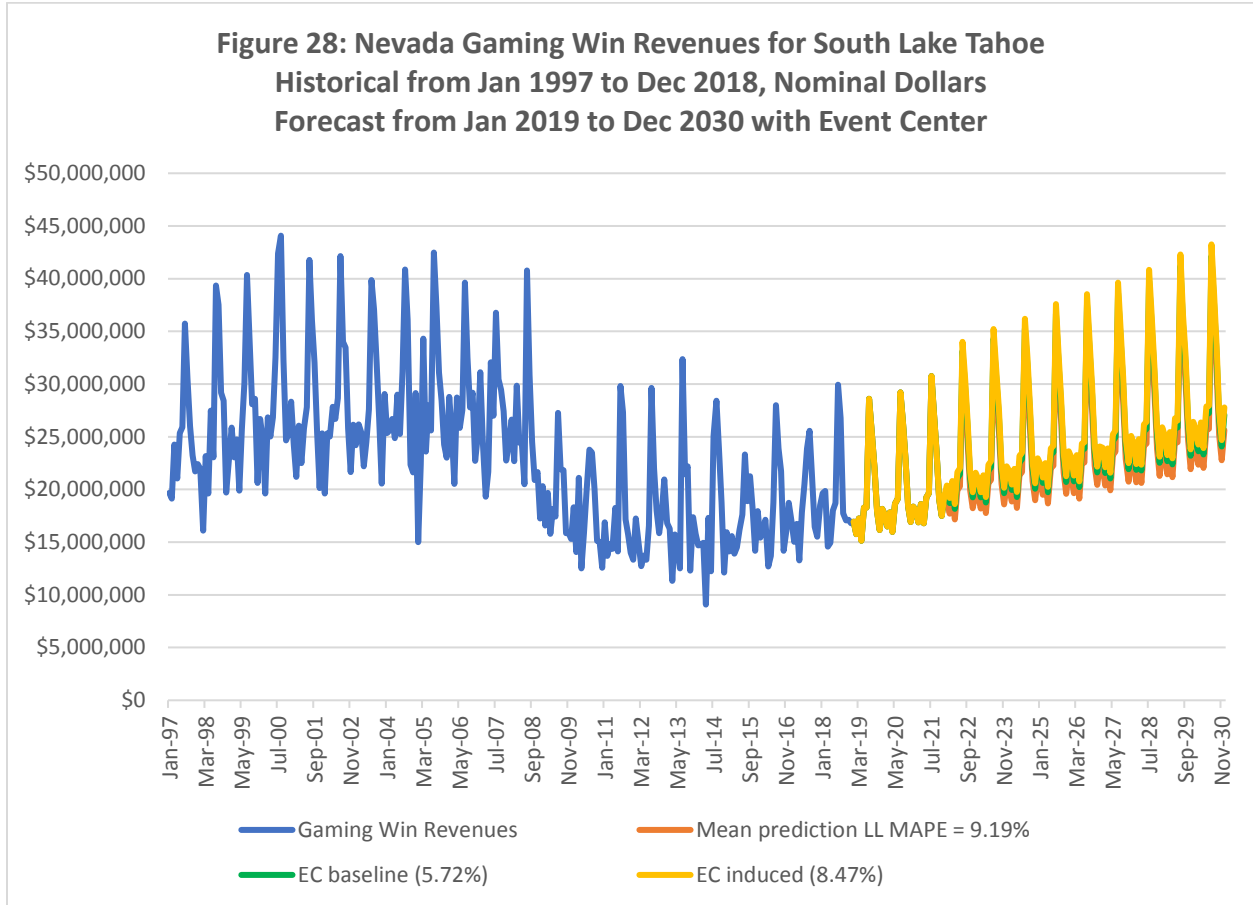
The chart below shows historical and forecast gaming revenues through December 2030 without the Event Center. The expected value (mean) revenues decline modestly over the 12-year forecast period. Note that the peak month level of the 97.5 percent confidence interval does not exceed historical levels until July 2026. Thus, it is unlikely gaming revenues will return to historical levels over the next decade.



Source: SMG Consulting Forecast

## B. Gaming Revenue with the Event Center

The chart below shows an Event Center having a positive impact on gaming revenues as they grow steadily through the forecast period. However, not even the induced mean reaches a high point of \$44 million that was achieved in August 2000.

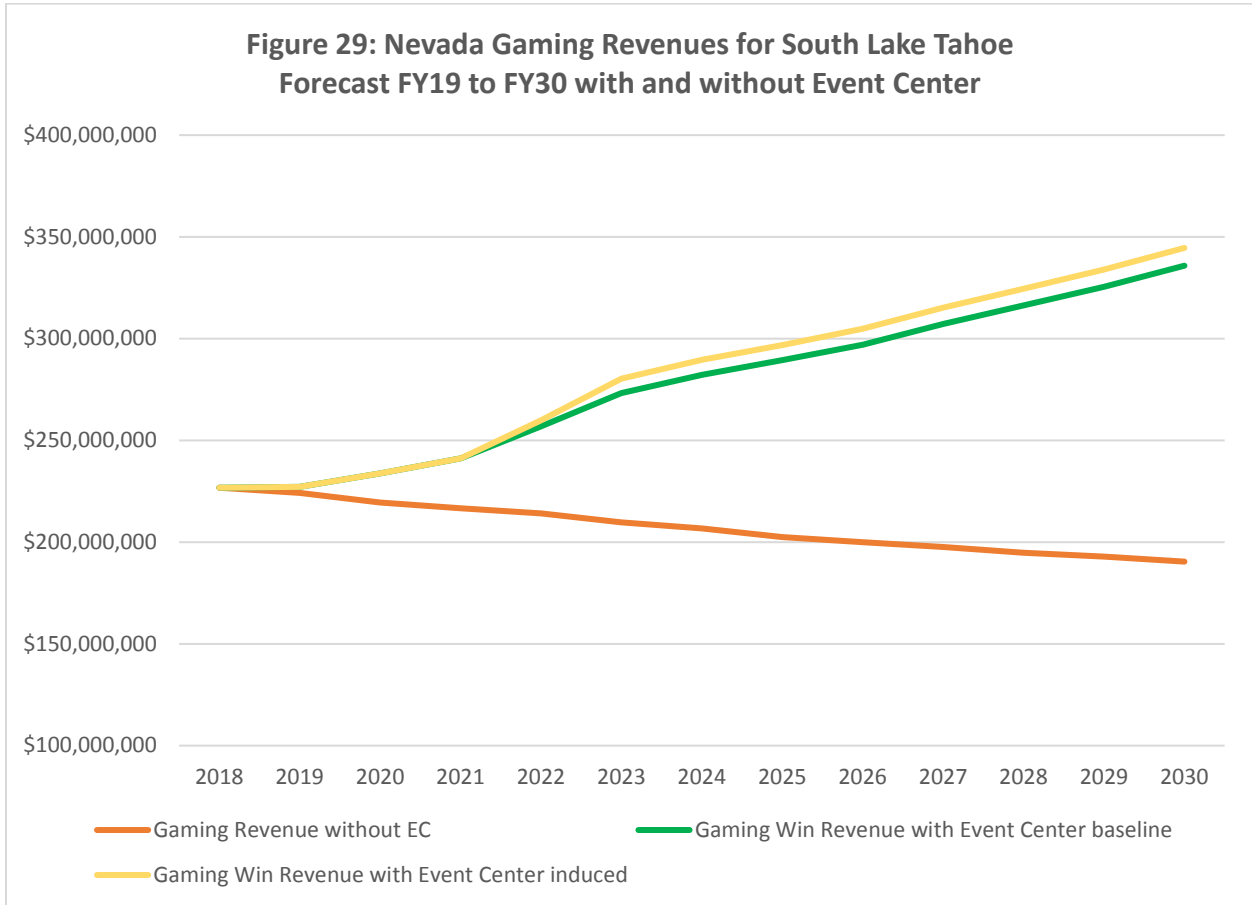


Source: SMG Consulting Forecast

### C. Annualized Gaming Revenue Forecasts

The chart below shows the with and without Event Center forecasts presented above on an annual basis. Only mean forecast values are shown. By 2030, with the Event Center, gaming win revenues only return to peak levels of the 2000s.

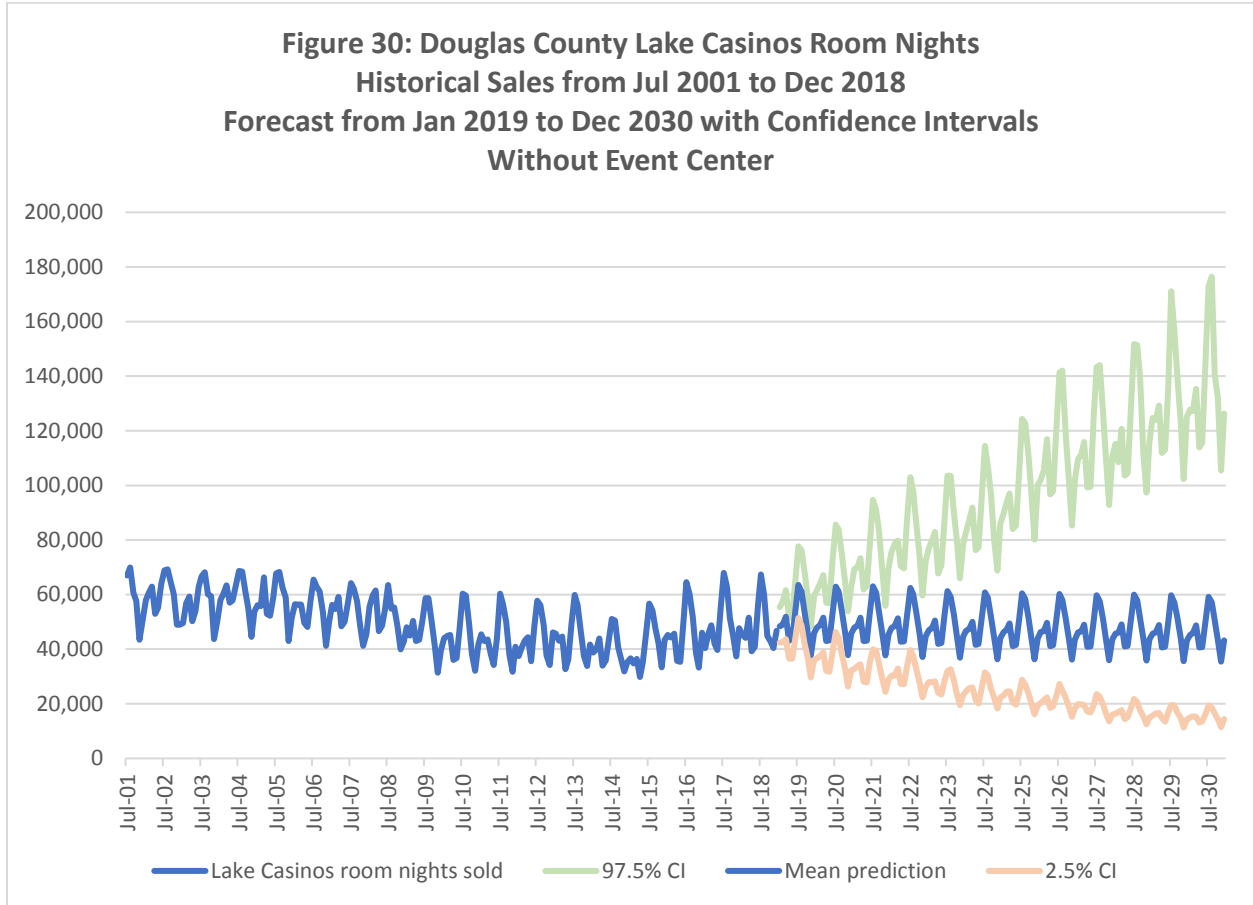
More importantly, if the proposed Event Center is not developed, annual gaming revenue is forecast to decline from \$227 million to \$190 million by 2030. On the other hand, if the Event Center is constructed, gaming revenue is forecast to increase to a range of \$335 to \$345 million annually by 2030, as shown in the chart below.



Source: SMG Consulting Forecast

### D. Room Nights without the Event Center

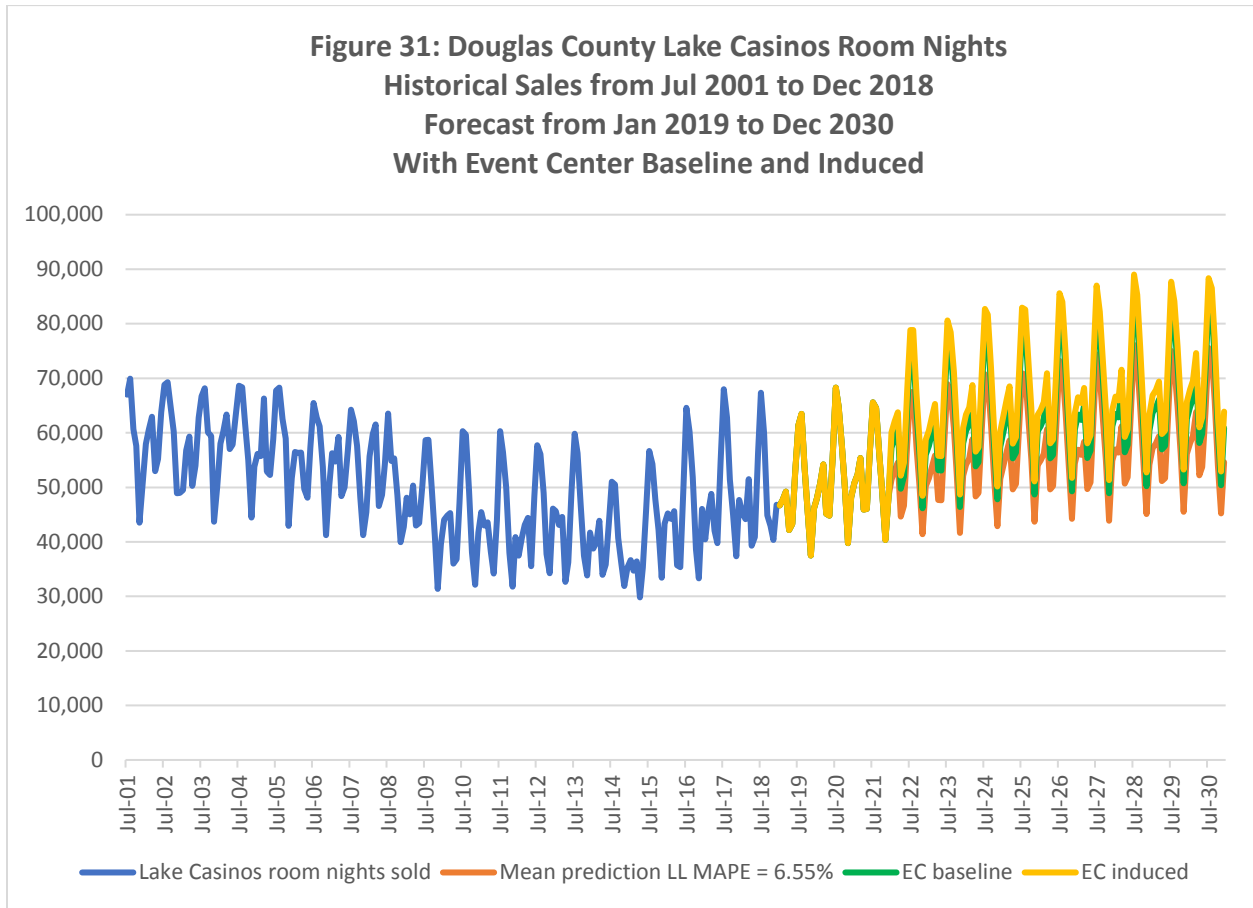
The chart below shows the historical and monthly room night sales without the Event Center scenario. The forecast mean number of room nights stay rather constant through 2030 in a range around 50,000 per month. As with gaming revenue, uncertainty increases over time.



Source: SMG Consulting Forecast

### E. Room Nights with the Event Center

In the with Event Center scenario, room nights gradually increase over time in a range around 60,000 per month. The incremental baseline and induced impacts begin in January 2022.



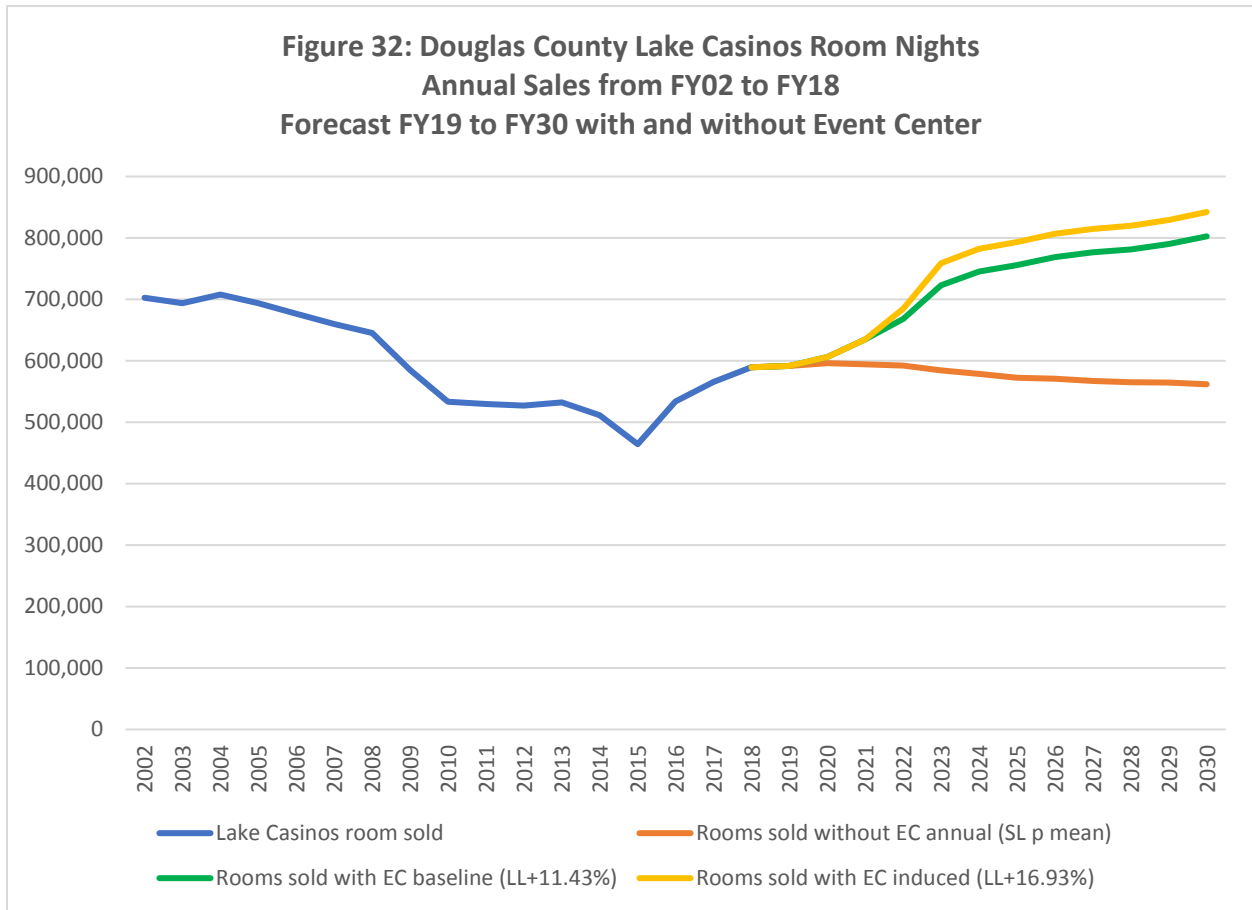
Source: SMG Consulting Forecast



## F. Annualized Room Night Forecasts

Filling rooms mid-week and during shoulder months is an intended benefit of the proposed Event Center. By summing monthly amounts into the annual chart below, we can assume the monthly distribution is somewhat more even as room night sales increase over the forecast period.

Note that in contrast to gaming win revenues, which just return to peak 2000s levels by 2030 with the event center, room night sales with the event center exceed peak levels soon after construction and increase to 800,000 or more by 2030.

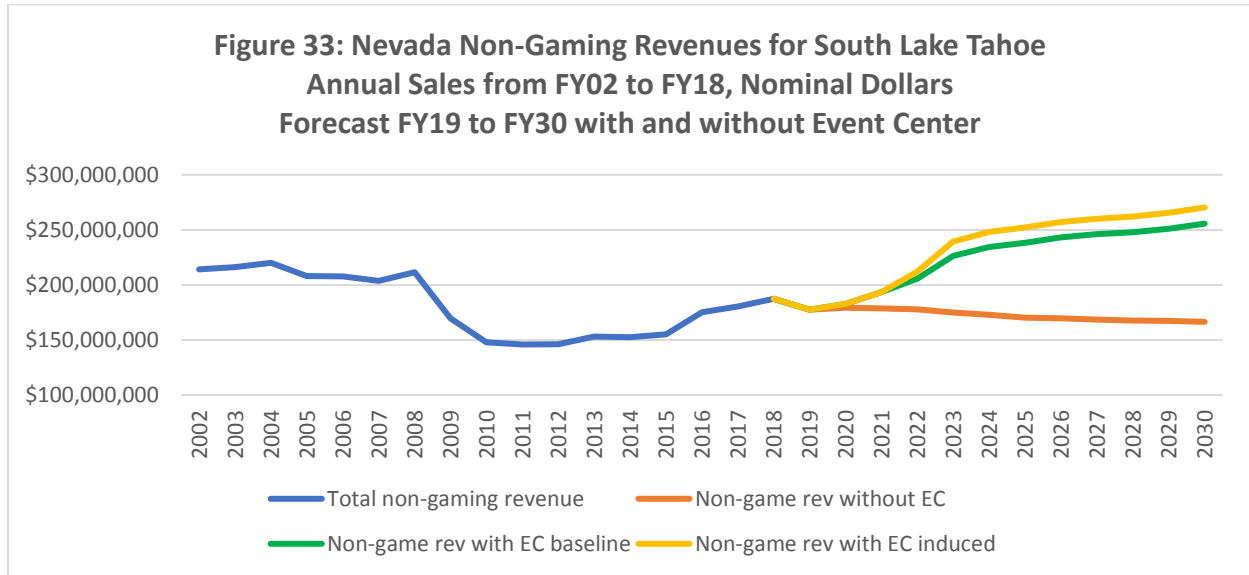


Source: SMG Consulting Forecast

## Part 3: Forecasting Economic Impacts

### A. Non-gaming revenue

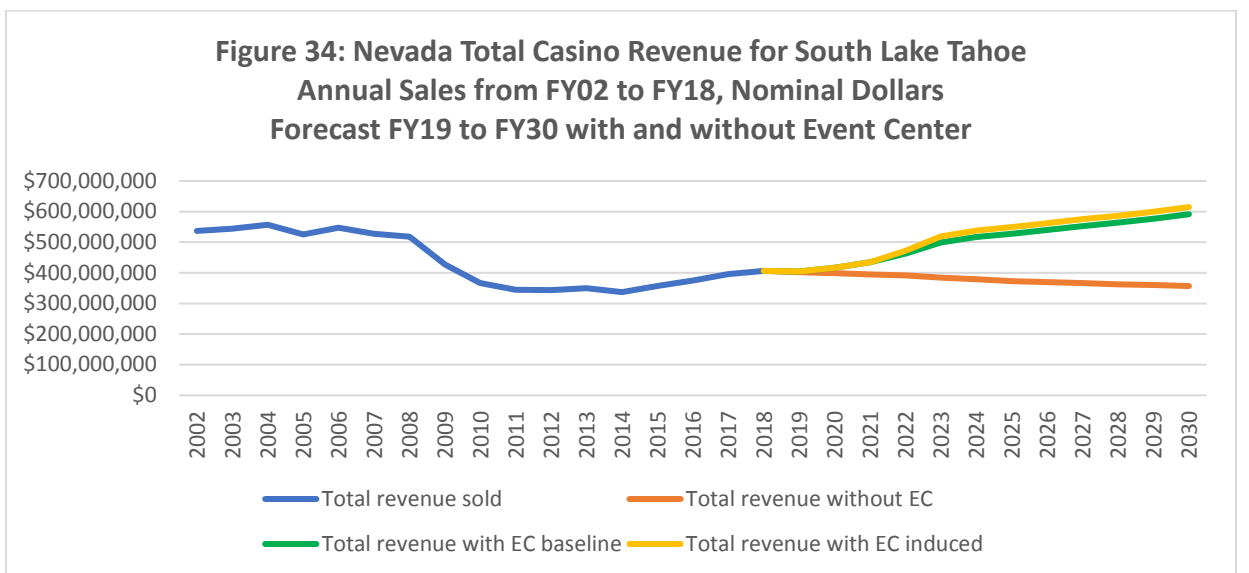
Non-gaming Casino revenue is extrapolated as a function of the room night forecasts based on a strong correlation between the two. See Appendix 4. This forecast is based on the assumption that the Event Center will commence operations in January 2022.



Source: SMG Consulting Forecast

### B. Total revenue

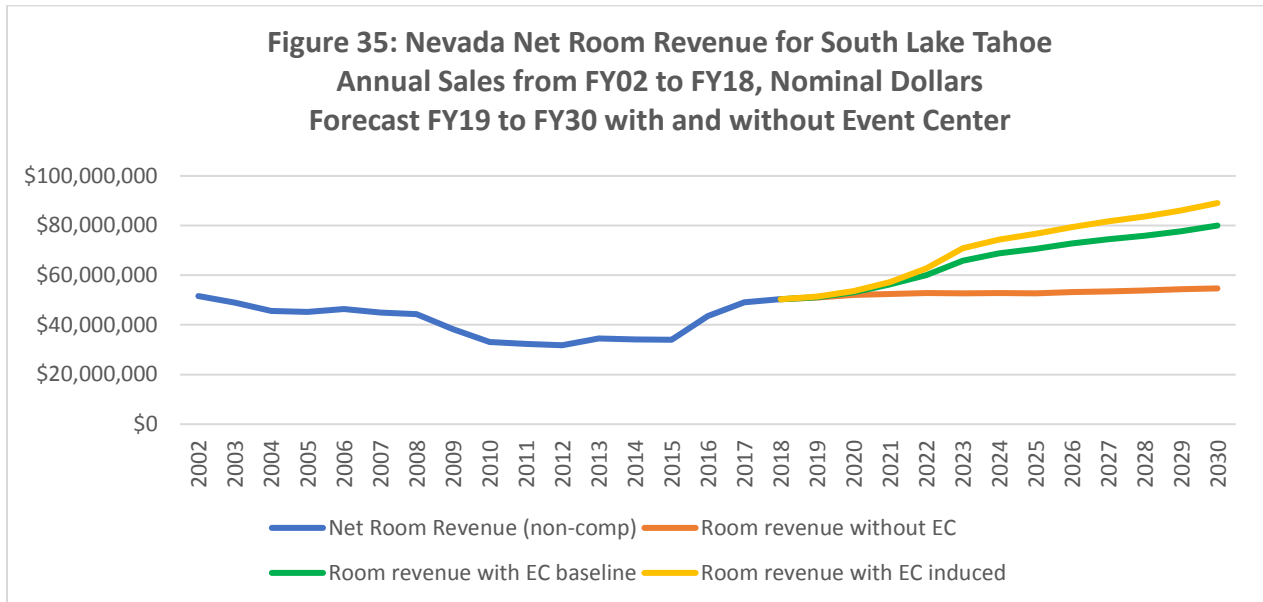
The total revenue forecasts shown below are the sum of the gaming and non-gaming revenue forecasts above.



Source: SMG Consulting Forecast

### C. Room revenue

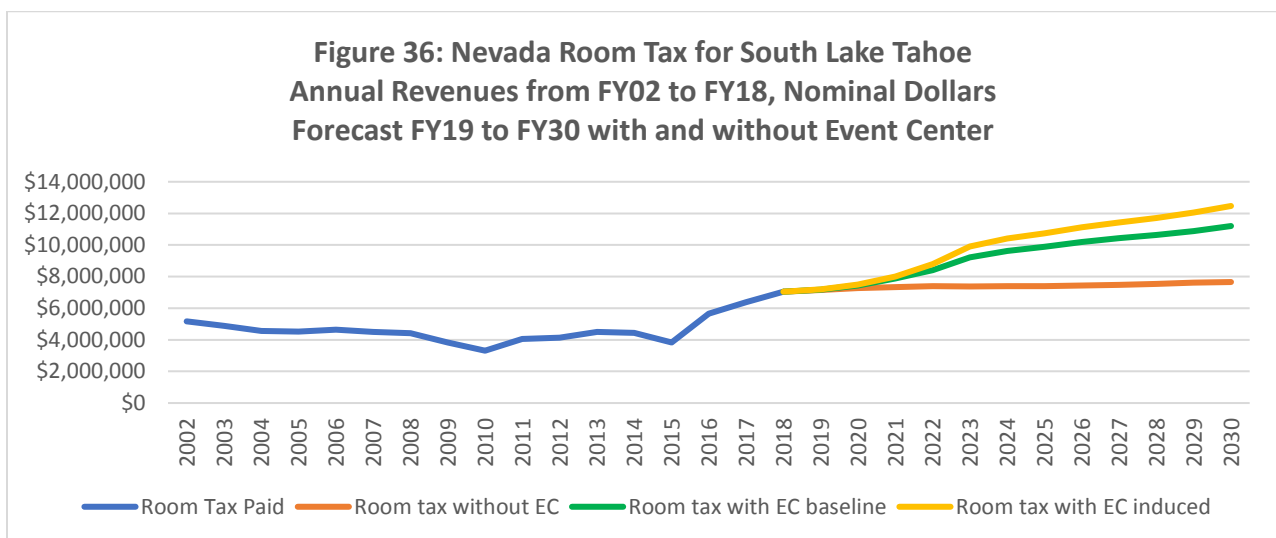
Room revenue is calculated by assuming ADR growth rates over the forecast period. For the without Event Center scenario, the historical ADR growth of 1.1 percent per year is assumed to continue. For the Event Center scenarios, in the baseline scenario, ADR grows at 1.3 percent and 1.8 percent for the induced.



Source: SMG Consulting Forecast

### D. Room tax revenue

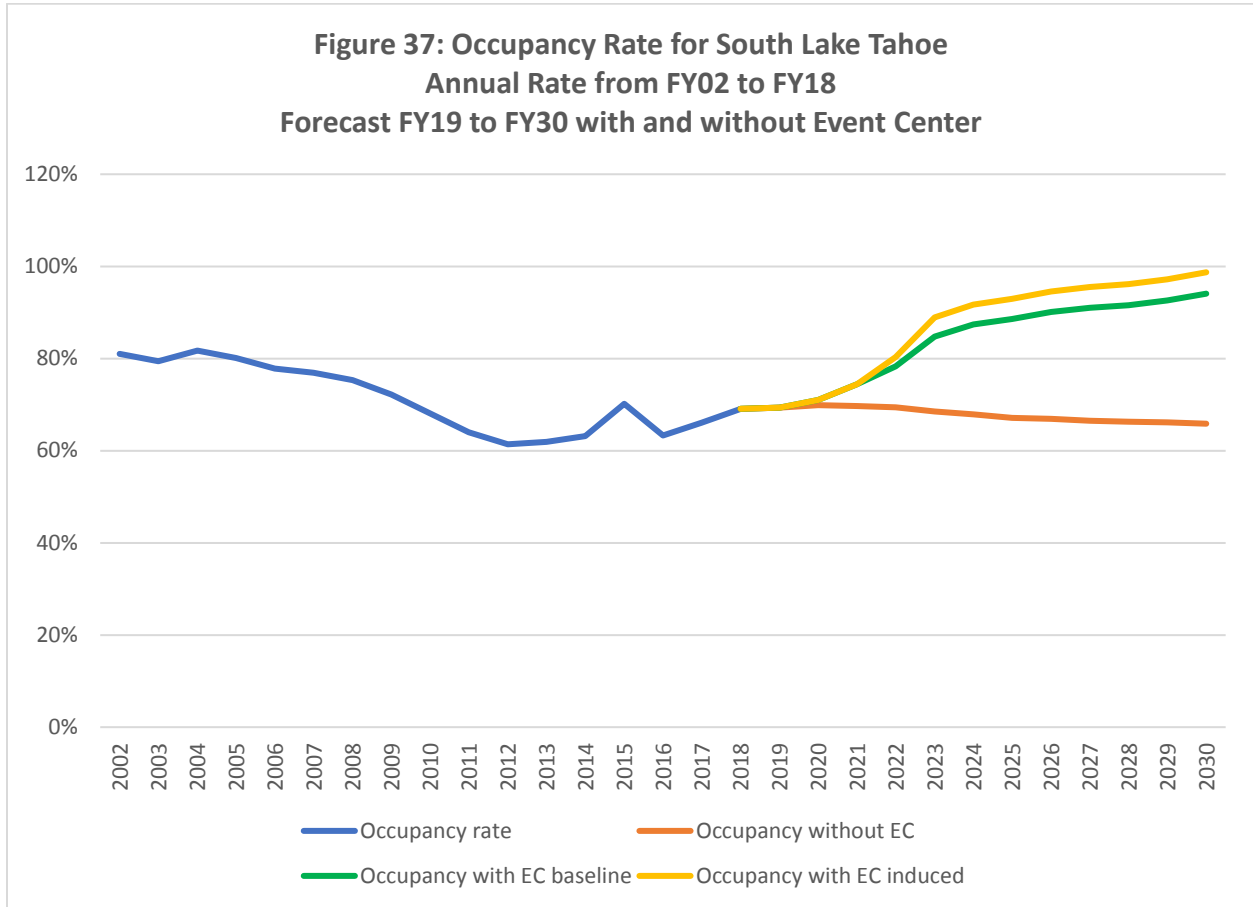
Room tax scenarios are calculated as 14 percent of room revenue which corresponds to the 2018 amounts. In 2023, the first full fiscal year with the Event Center, the difference between the baseline and induced room tax amount is \$385,000 which is within \$5,000 of the EPS estimate of \$390,000.



Source: SMG Consulting Forecast

## E. Occupancy rate

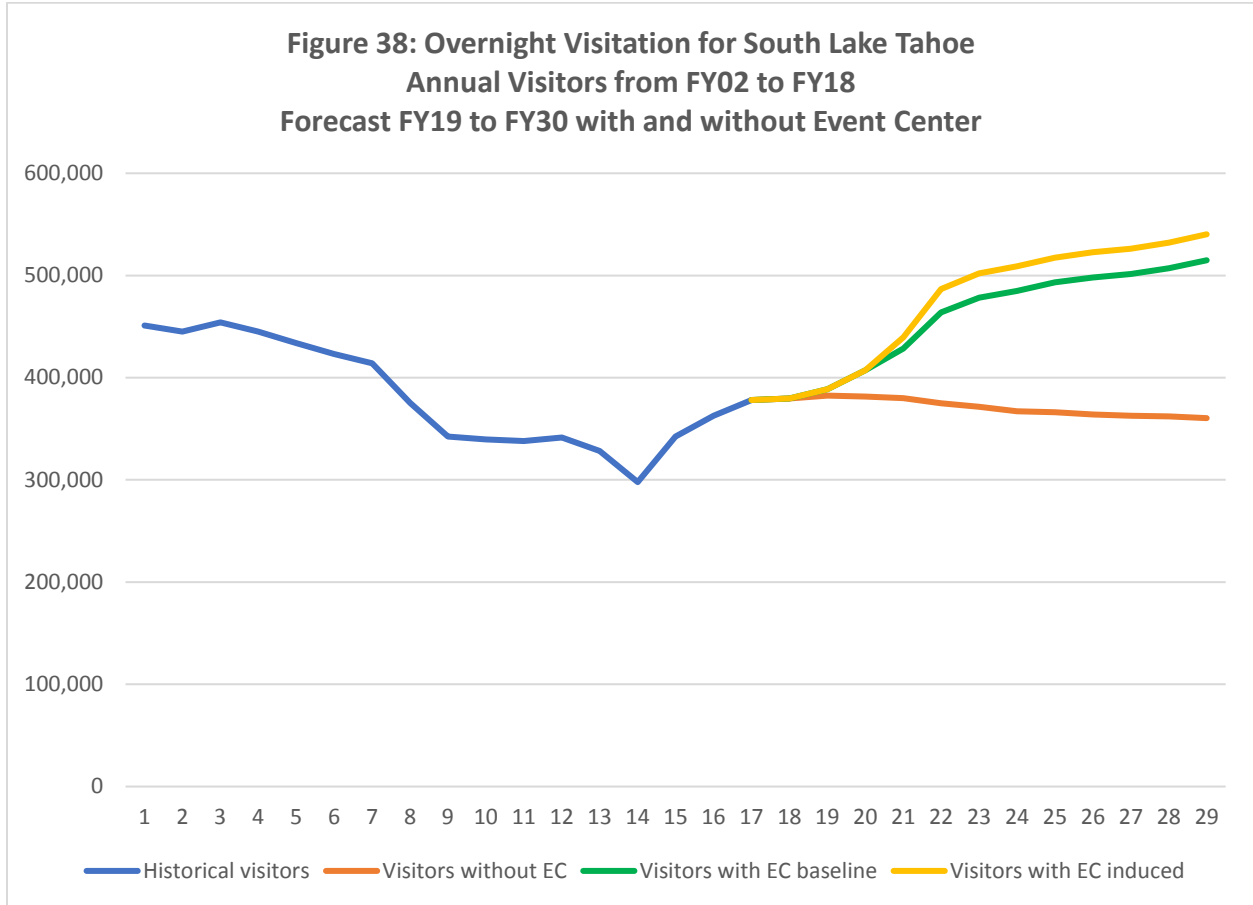
The chart below shows occupancy rates based on 853,111 available rooms in 2018. Given near-capacity occupancy levels are reached towards the end of the forecast period, it is likely that new inventory would be constructed. However, additional inventory is not considered in this study.



Source: SMG Consulting Forecast

## F. Overnight visitation

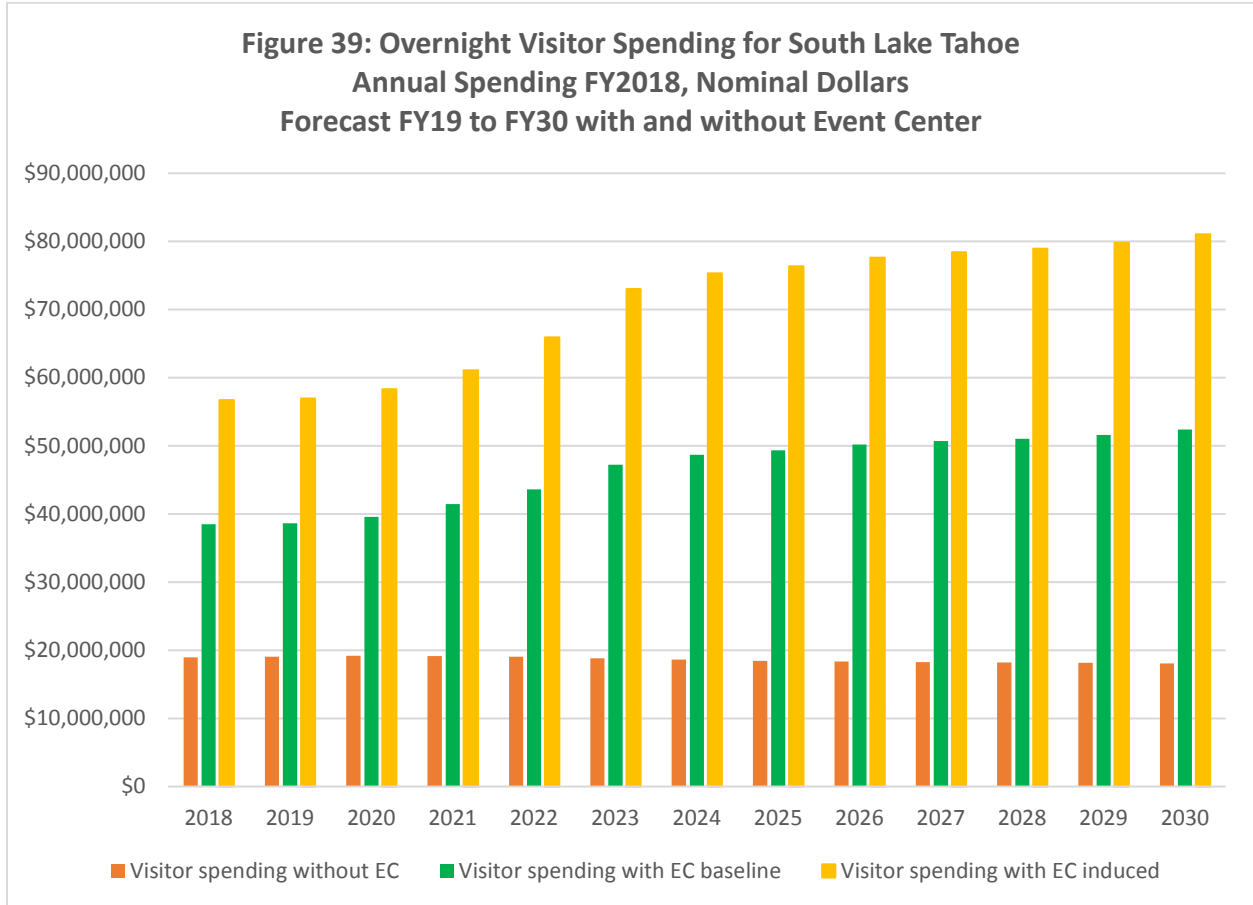
Visitation is calculated by assuming 1.7 people per room and an average length of stay (LOS) of 2.65 nights. The EPS study estimates 89,000 overnight visitors resulting from the Event Center. This analysis shows 89,000 more visitors in the 2023 baseline scenario than the without Event Center scenario.



Source: SMG Consulting Forecast

## G. Overnight visitor spending

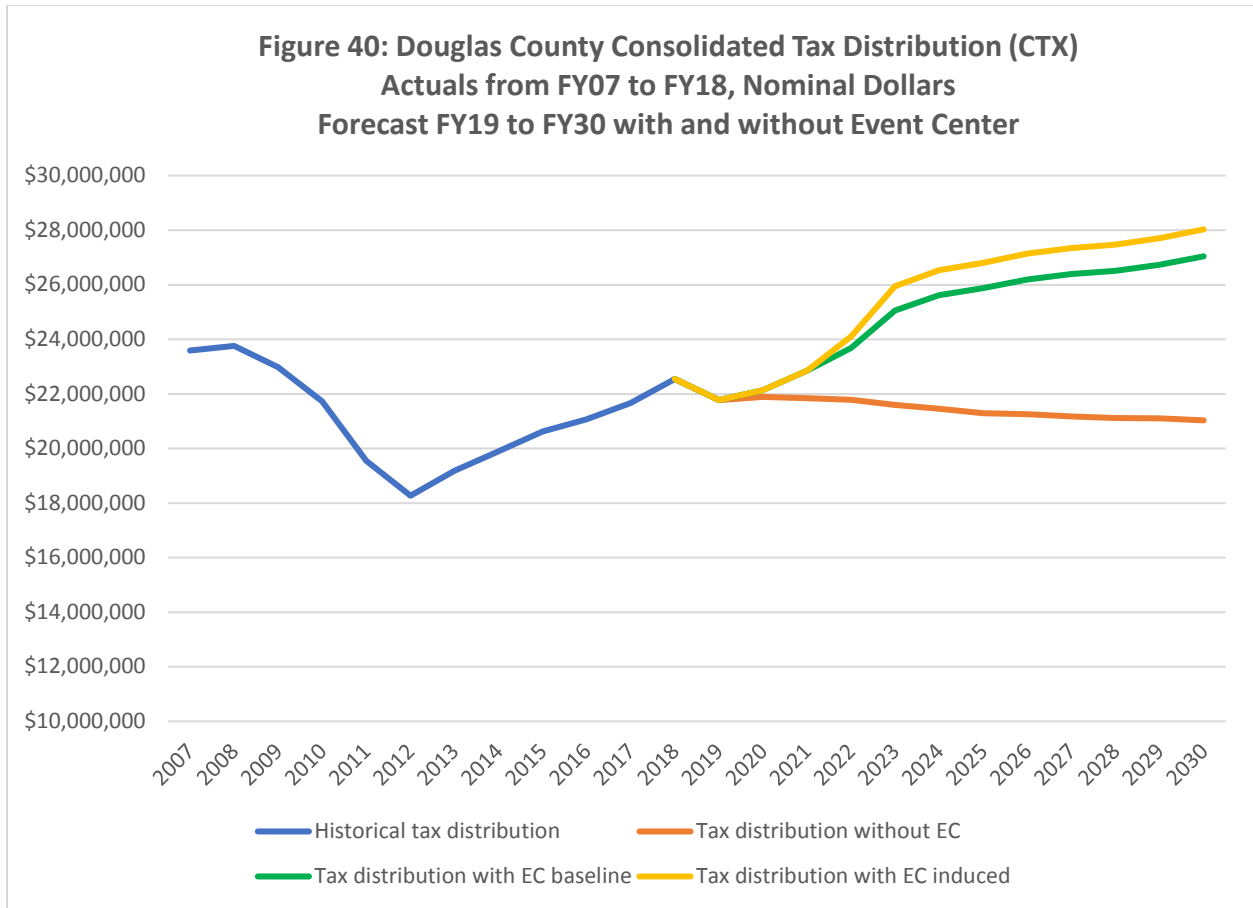
Visitor spending is calculated using the total spending amounts shown the EPS study Tables D-3A, D-3B, D-3C. From these amounts, per visitors spending is derived and multiplied by visitor forecasts through 2030.



Source: SMG Consulting Forecast

## H. Sales tax

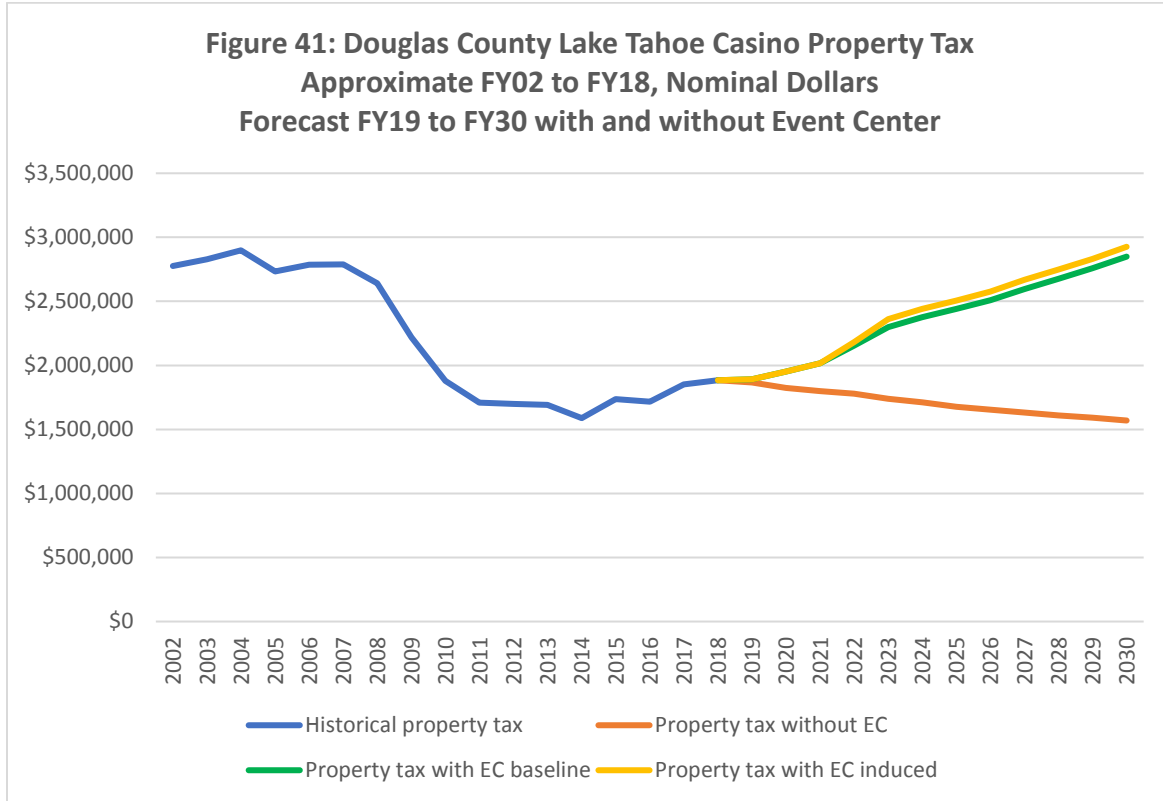
County sales tax (CTX) is extrapolated based on its historical correlation with room nights. See Appendix 4. By this method, multiplier effects are implicitly included in the sales tax forecast.



Source: SMG Consulting Forecast

## I. Property tax

Lake Tahoe Casino Property tax is reported in FY00, FY06, and FY17. The amount of tax revenue is approximately 0.87 percent of gaming revenue. This ratio was used to infer the missing historical years and forecast future scenarios.

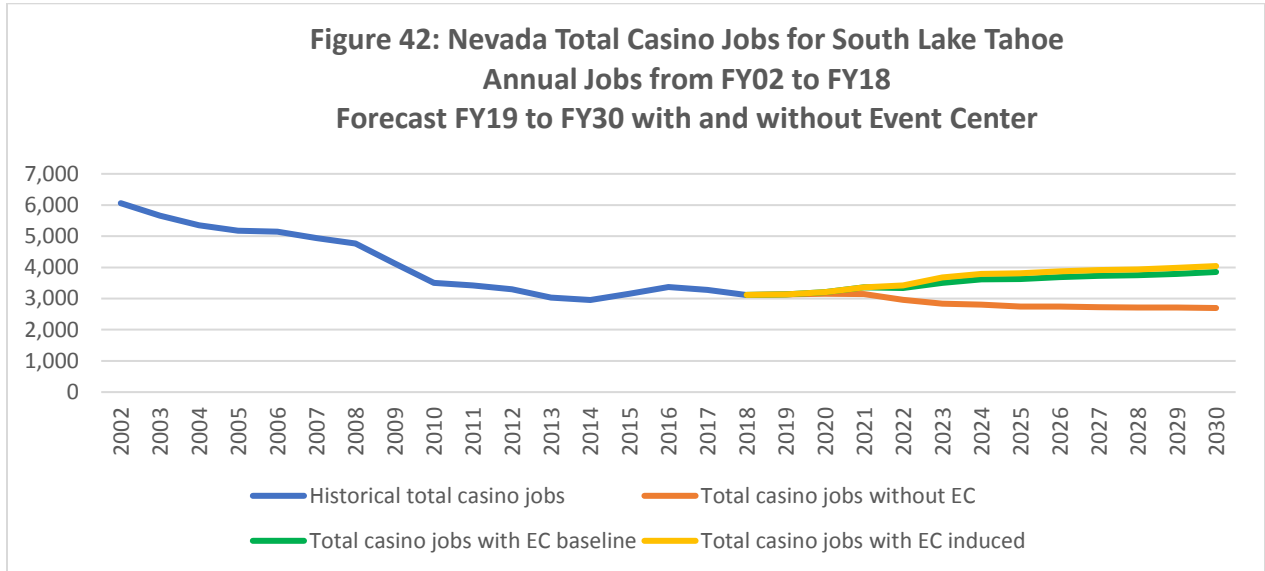


Source: SMG Consulting Forecast



## J. Casino employment

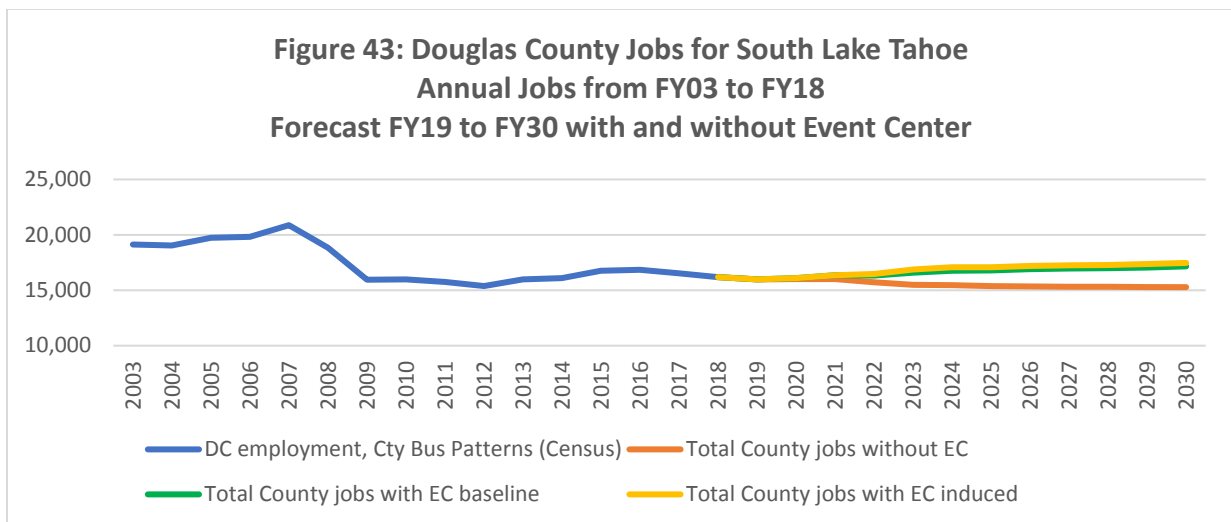
The number of jobs required per department has been evolving and generally declining in terms of ratios of other measures. Prior to the construction of the Event Center, this forecast uses the number of jobs per sold room night in 2018 (0.00529) as the basis for extrapolating employment per scenario. This ratio is reduced slightly in phases to represent further automation and match the incremental number of jobs created to the EPS study, which shows 357 jobs in the baseline scenario and 537 jobs in the induced scenario. From 2025, the ratio is assumed to be 0.0048 for the remainder of the forecast period.



Source: SMG Consulting Forecast

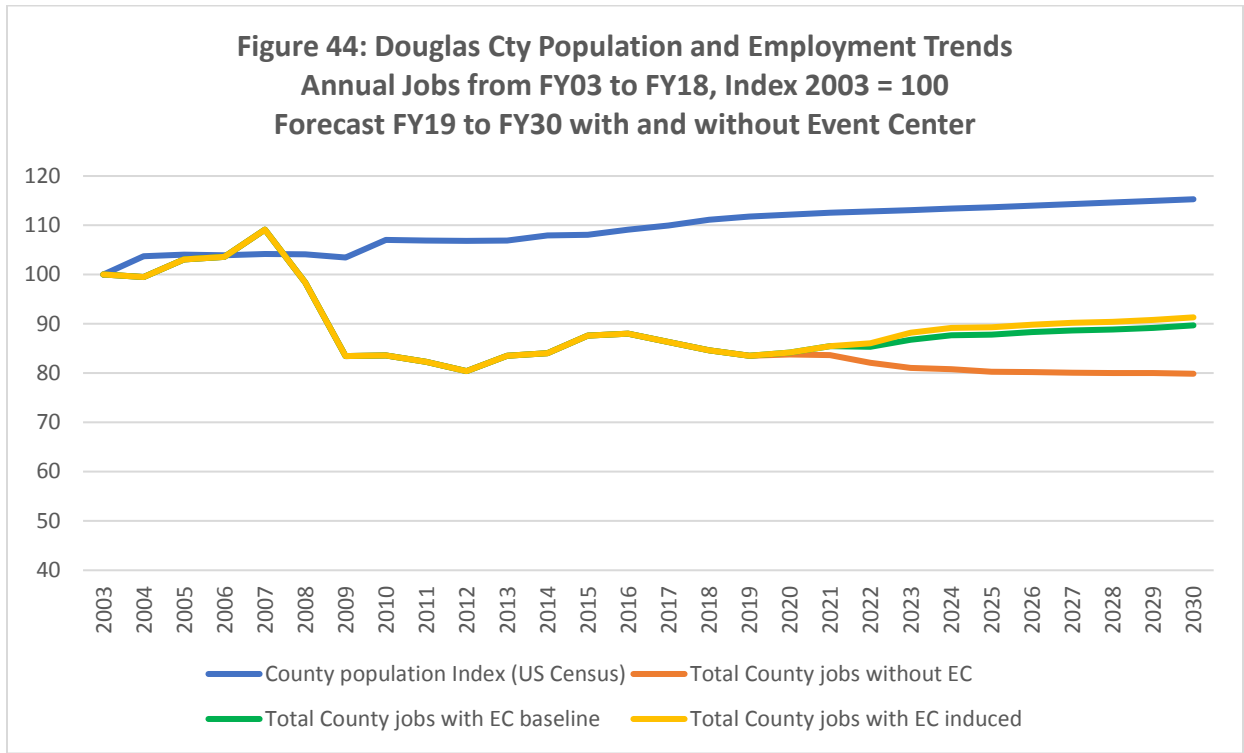
## K. County employment

County employment is extrapolated based on its historical correlation with room nights. See Appendix 4.

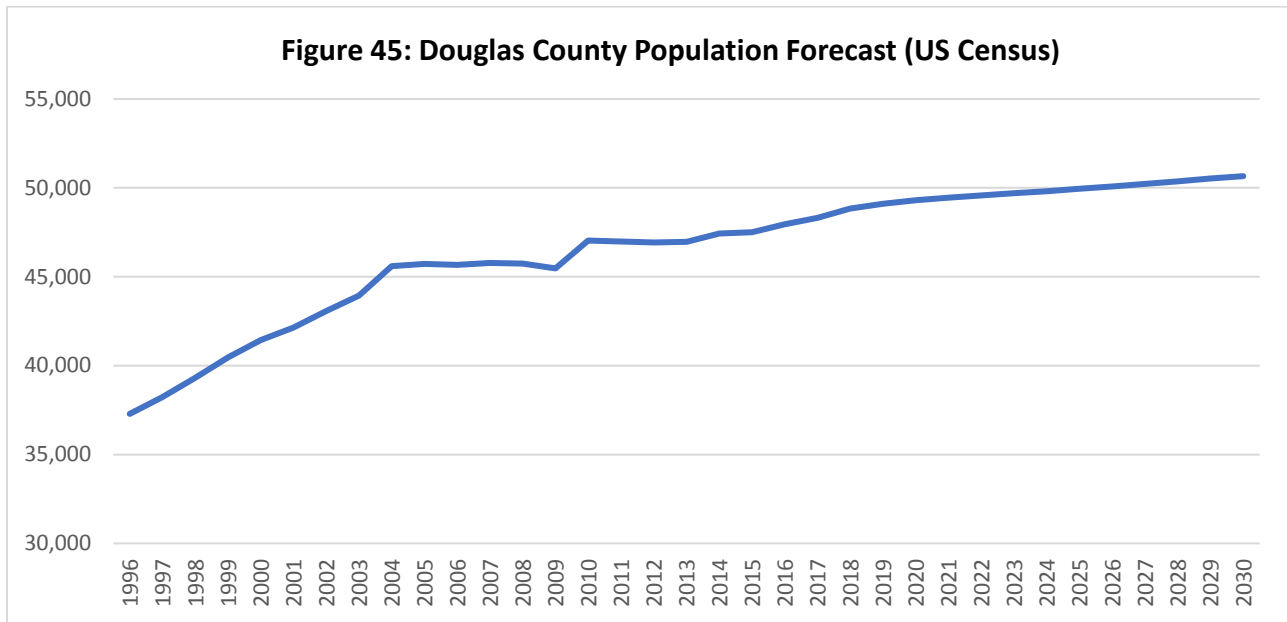


Source: SMG Consulting Forecast

**L. County employment and population**



Source: SMG Consulting Forecast



Source: U.S. Census

## Part 4: Comparison: “Cost” of Not Developing Event Center

### A. Gaming

Tables 1 through 4 are forecasts for gaming revenue. Each forecast includes the forecast for what is anticipated without the events center, with the events center (baseline) and with the events center and induced revenue. For example, in Table 1 gaming revenue without the events center at its current trend is projected to generate \$2,469,159,200. The addition of the event center changes that projection to \$3,385,472,720 an increase of \$916,313,530 over a twelve-year period. The addition of the events center will also induce additional spending within the community which increases the projection over the same 12-year period to \$3,451,704,962 an increase of \$982,545,762.

Projections have been made for each of the following categories.

**Table 1: Gaming revenue**

	Cumulative 12-year	Diff from no EC
Gaming Win Revenue without EC annual (SL p mean)	\$2,469,159,200	
Gaming Win Revenue w EC baseline (5.72%)	\$3,385,472,720	\$916,313,520
Gaming Win Revenue w EC induced (8.47%)	\$3,451,704,962	\$982,545,762

**Table 2: Non-gaming revenue**

	Cumulative 12-year	Diff from no EC
Non-game rev without EC	\$2,071,198,569	
Non-game rev with EC baseline	\$2,702,511,583	\$631,313,013
Non-game rev with EC induced	\$2,821,114,657	\$749,916,088

**Table 3: Total revenue (Gaming + Non-Gaming)**

	Cumulative 12-year	Diff from no EC
Total revenue without EC	\$4,540,357,769	
Total revenue with EC baseline	\$6,087,984,303	\$1,547,626,534
Total revenue with EC induced	\$6,272,819,619	\$1,732,461,850

**Table 4: Total revenue (Gaming + Non-Gaming) including 1.37 multiplier**

	Cumulative 12-year	Diff from no EC
Total revenue without EC	\$6,220,290,143	
Total revenue with EC baseline	\$8,340,538,495	\$2,120,248,352
Total revenue with EC induced	\$8,593,762,877	\$2,373,472,734

## B. Room Nights and Room Revenue

Tables 5 and 6 are room night and room night revenue projections. As can be seen in Table 6 Room Revenue is projected to be \$636,109,415 without the events center and \$806,821,633 and \$866,883,407 included the events center and additional induced spending.

**Table 5: Room nights**

	Cumulative 12-year	Diff from no EC
Rooms sold without EC annual (SL p mean)	6,940,676	
Rooms sold with EC baseline (LL+11.43%)	8,645,221	1,704,545
Rooms sold with EC induced (LL+16.93%)	8,965,450	2,024,773

**Table 6: Room revenue**

	Cumulative 12-year	Diff from no EC
Room revenue without EC	\$636,109,415	
Room revenue with EC baseline	\$806,821,633	\$170,712,218
Room revenue with EC induced	\$866,883,407	\$230,773,993

## C. Visitor Spending

Tables 7 and 8 includes overnight visitor spending. Table 8 includes a multiplier of 1.37 which is the additional dollars that will be generated in the community as a result of additional visitor spending.

**Table 7: Overnight visitor spending**

	Cumulative 12-year	Diff from no EC
Visitor spending without EC	\$223,388,350	
Visitor spending with EC baseline	\$564,503,299	\$341,114,949
Visitor spending with EC induced	\$862,714,060	\$639,325,709

**Table 8: Overnight visitor spending including 1.37 multiplier**

	Cumulative 12-year	Diff from no EC
Visitor spending without EC	\$306,042,040	
Visitor spending with EC baseline	\$773,369,520	\$467,327,480
Visitor spending with EC induced	\$1,181,918,262	\$875,876,222

## D. Sales Tax

Table 9 includes a projection for increased sales tax generated in Douglas County.

**Table 9: Sales tax**

	Cumulative 12-year	Diff from no EC
Tax distribution without EC	\$257,308,683	
Tax distribution with EC baseline	\$299,871,175	\$42,562,492
Tax distribution with EC induced	\$307,867,276	\$50,558,593

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## E. Casino and County Employment

Tables 10 and 11 are projections of both casino and county employment.

**Table 10: Casino employment**

	2030 Employment	Diff from no EC
Total casino jobs without EC	2,697	
Total casino jobs with EC baseline	3,853	1,156
Total casino jobs with EC induced	4,043	1,346

**Table 11: County employment**

	2030 Employment	Diff from no EC
Total County jobs without EC	15,280	
Total County jobs with EC baseline	17,157	1,877
Total County jobs with EC induced	17,466	2,186

## F. Room Tax Revenue

Table 12A reflects a projection of room tax that is anticipated to be collected.

**Table 12A: Room tax revenue**

	Cumulative 12-year	Diff from no EC
Room tax without EC	\$89,055,335	
Room tax with EC baseline	\$112,955,050	\$23,899,715
Room tax with EC induced	\$121,363,700	\$32,308,365

Table 14B on the following page is a projection of each category within Douglas County that receives a percentage of room tax.

**Table 12B: Room tax revenue breakdown by category**

	Cumulative 12-year	Diff from no EC
Room tax without EC	\$89,055,335	
ToT to collect and admin	\$6,361,094	
ToT remitted to TDVA	\$5,565,957	
ToT to rec and libraries	\$38,961,702	
NV Tourism	\$2,385,410	
LTVA and Chamber	\$3,975,684	
Tahoe Transportation District	\$6,361,094	
Transient Lodging License Tax - Econ Vitality	\$6,361,094	
Transient Lodging License Tax - Econ Health	\$12,722,188	
Transient Lodging License Tax - Redevelopment	\$6,361,094	
	Cumulative 12-year	Diff from no EC
Room tax with EC baseline	\$112,955,050	\$23,899,715
ToT to collect and admin	\$8,068,216	\$1,707,122
ToT remitted to TDVA	\$7,059,689	\$1,493,732
ToT to rec and libraries	\$49,417,825	\$10,456,123
NV Tourism	\$3,025,581	\$640,171
LTVA and Chamber	\$5,042,635	\$1,066,951
Tahoe Transportation District	\$8,068,216	\$1,707,122
Transient Lodging License Tax - Econ Vitality	\$8,068,216	\$1,707,122
Transient Lodging License Tax - Econ Health	\$16,136,433	\$3,414,244
Transient Lodging License Tax - Redevelopment	\$8,068,216	\$1,707,122
	Cumulative 12-year	Diff from no EC
Room tax with EC induced	\$121,363,700	\$32,308,365
ToT to collect and admin	\$8,668,834	\$2,307,740
ToT remitted to TDVA	\$7,585,230	\$2,019,272
ToT to rec and libraries	\$53,096,609	\$14,134,907
NV Tourism	\$3,250,813	\$865,402
LTVA and Chamber	\$5,418,021	\$1,442,337
Tahoe Transportation District	\$8,668,834	\$2,307,740
Transient Lodging License Tax - Econ Vitality	\$8,668,834	\$2,307,740
Transient Lodging License Tax - Econ Health	\$17,337,668	\$4,615,480
Transient Lodging License Tax - Redevelopment	\$8,668,834	\$2,307,740

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## G. Property Tax

**Table 13: Property tax**

	Cumulative 12-year	Diff from no EC
Property tax without EC	\$20,453,913	
Property tax with EC baseline	\$28,517,472	\$8,063,559
Property tax with EC induced	\$29,100,316	\$8,646,403

## H. Combined Taxes

**Table 14: Combined tax**

	Cumulative 12-year	Diff from no EC
Combined tax revenue without EC	\$366,817,931	
Combined tax revenue with EC baseline	\$441,343,697	\$74,525,766
Combined tax revenue with EC induced	\$458,331,291	\$91,513,361

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# Glossary

**Nominal dollars:** actual dollar value at the time of sale and not adjusted for inflation.

**Real dollars:** dollar values adjusted for inflation to exclude the effect of inflation.

**Non-gaming revenue:** total casino resort revenue less gaming revenue, including room revenue, food and beverage, entertainment, retail and other sources of revenue.

**BSTS:** Bayesian Structural Time Series. A mathematical modeling technique for fitting historical data and forecasting future trends. See bibliography for references.

**Index:** a method for comparing the changes in different metrics over time. The same base year is set for each metric and the following measurements are scaled off of that year.

**Return on Invested Capital (ROIC):** the amount of return a company makes above the average cost it pays for its debt and equity capital.

**Comp:** short for complimentary. A free room or admission ticket was given to a guest as an incentive.

**MAPE:** mean absolute percentage error. A measure of how well a time series model fits data.

**Gaming win:** net **win** from **gaming** activities which is the difference between **gaming wins** and losses before deducting costs and expenses determined in accordance with GAAP.

**Baseline:** a term used to describe a lower value or more conservative forecast estimate.

**Induced:** a term used to describe a higher value or more conservative forecast estimate.

**Multiplier:** captures the effect of secondary and tertiary spending in an economy.



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<https://www.census.gov/programs-surveys/cbp/data/datasets.html>

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# Appendix 1: Forecast Assumptions

The following are assumptions used in the preparation of the forecasts used in this report.

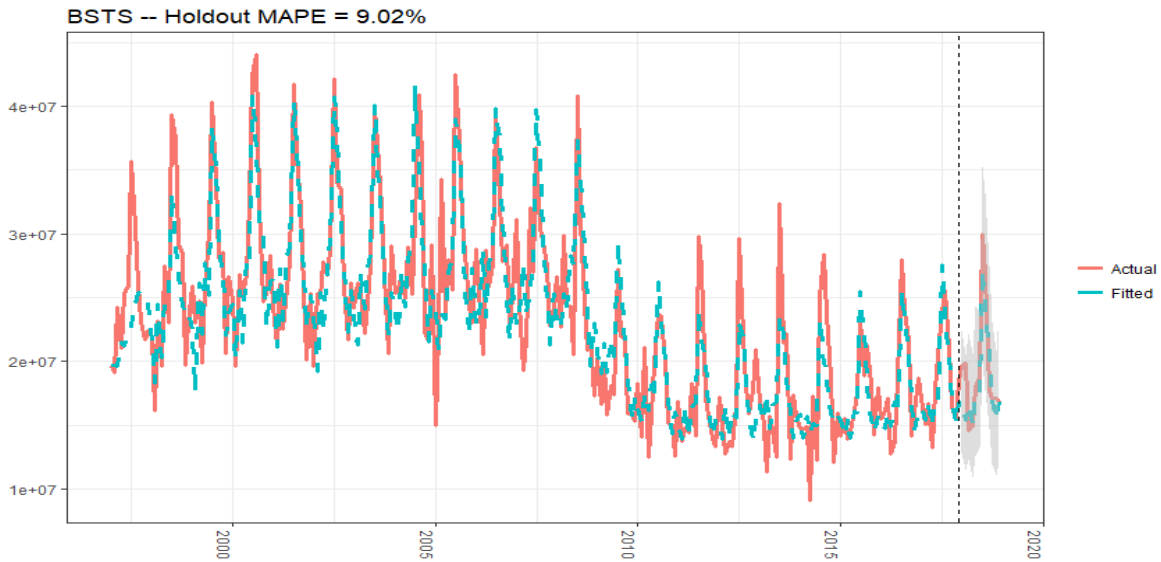
1. The national economy would experience moderate growth 2-3% GNP. It is also assumed there will be an economic slowdown at some point but it will not affect the overall 12-year trend.
2. The forecasts assume a minimal inflation rate 1-2% annually.
3. The forecasts assume an increase in competition from tribal and other destinations.
4. The forecasts use Bayesian Structural Time Series (BSTS) models to forecast future gaming revenue and room night trends (See Appendix 2 and 3 for more detail). A semi-local linear trend is assumed for the “without Events Center” scenario while a local linear trend best captures the development of the Events Center.
5. Additional metrics are forecast based on correlations with either of the BSTS forecasts mentioned above.
6. The baseline and induced increments are based on the EPS study (7/18/2018); however, gaming increments are assumed to be half of other on the assumption that some of the gaming decline is irreversible.
7. If developed, the Events Center will open in January 2022.
8. No new room inventory will be constructed over forecast period.

# Appendix 2: Bayesian Model of Gaming Revenue

## Bayesian Model Fit

To better understand the underlying trends, the data were analyzed by fitting a Bayesian Structure Time Series (BSTS) model.

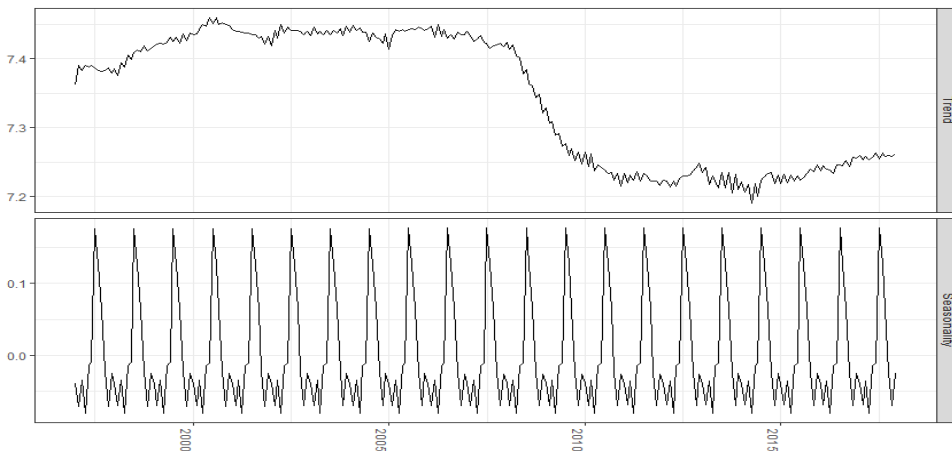
Bayesian structural modeling allows the underlying trends to be separated from seasonal and other components. The chart below shows the model fitting the data well with a mean absolute percentage error of nine percent (MAPE). Note that the y-axis shows the log values of the gaming revenues.



Source: SMG Consulting

Using this model, this chart plots the underlying trends separately from the seasonality component.

## Nevada Gaming Win Revenue Trend and Seasonality Components Jan 1997 to Dec 2017

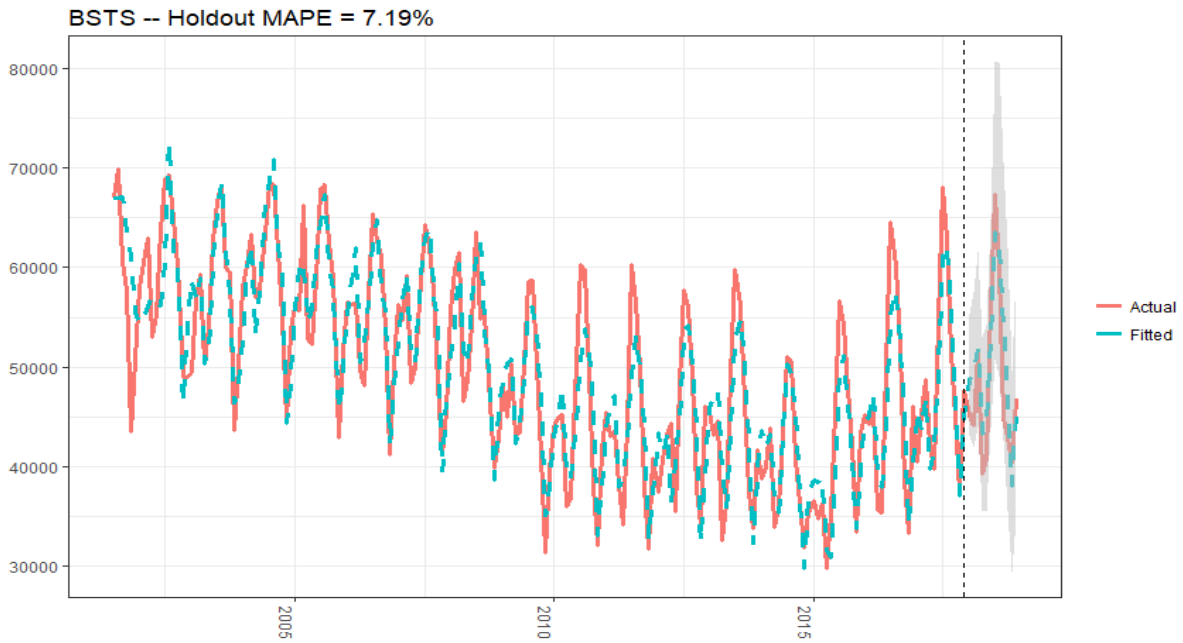


Source: Nevada Gaming Abstracts (State of Nevada Gaming Control Board)

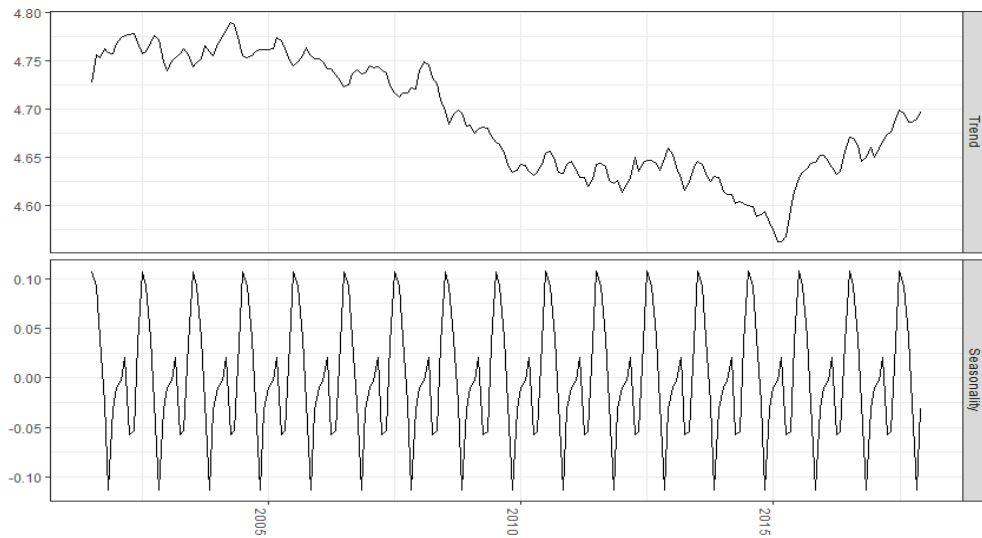
# Appendix 3: Bayesian Model of Room Nights

## Bayesian Model Fit

Using BSTS techniques to model Douglas County lake casinos room nights as described for gaming revenues above provides a better view of historical trends. The chart below shows the model fits the data with a MAPE of 7.2 percent.



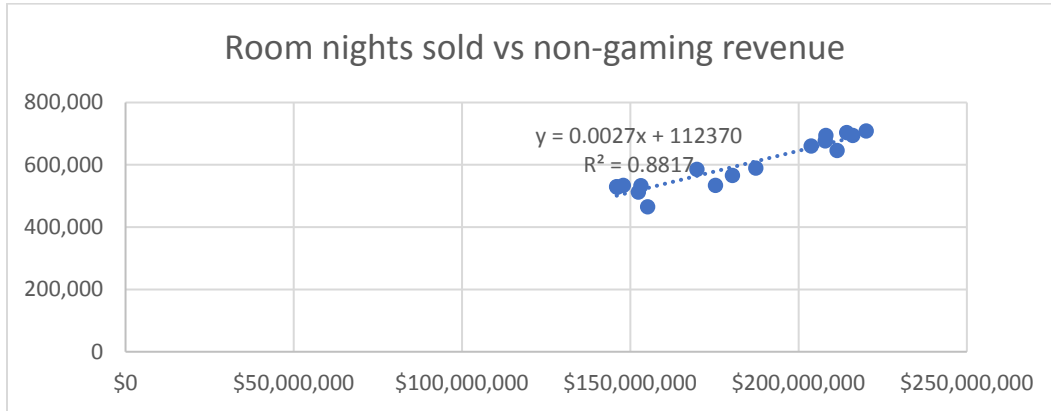
Source: SMG Consulting, Source: Douglas County Room Tax Reports



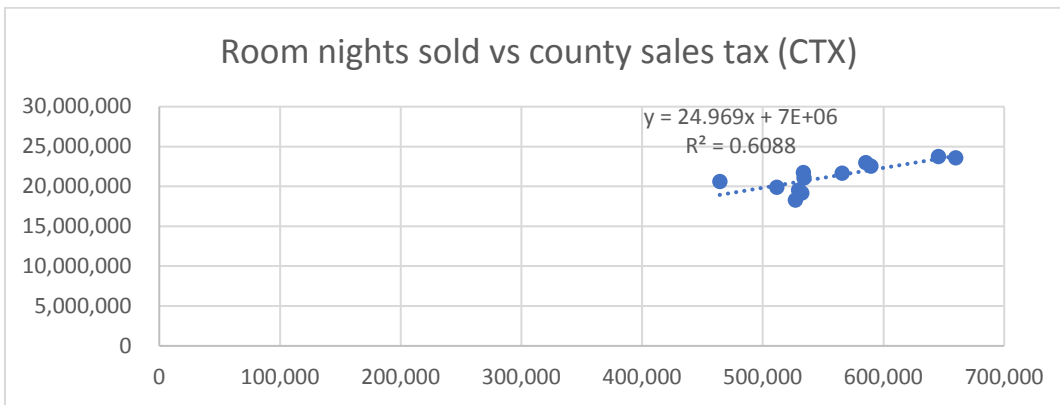
Source: Douglas County Room Tax Reports

# Appendix 3: Correlations for Extrapolations

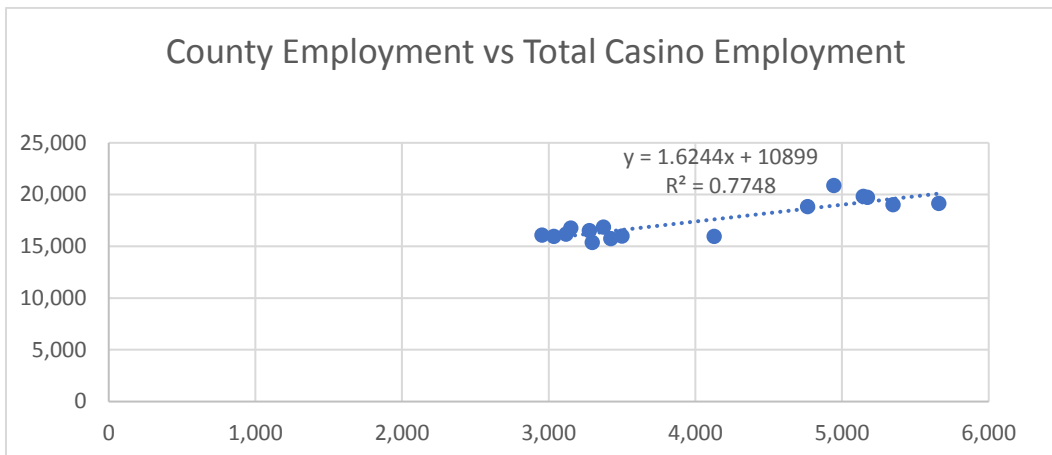
**Non-gaming revenue:** correlation between room nights and not gaming revenue from 2002 to 2018:



**Sales tax:** correlation between county sales tax and room nights sold from 2007 to 2018:



**Employment:** correlation between county employment and casino employment:





SMG Consulting is a tourism and recreation consulting firm located in South Lake Tahoe. The firm specializes in marketing research, economic analysis and strategy development for the tourism and recreation industry. [www.smgonline.net](http://www.smgonline.net)

### **Carl Ribaldo**

Carl is a strategic thinker, thought leader and innovator in the tourism industry. As the founder and president of SMG Consulting, Carl is a specialist in destination competitiveness, he has developed a wide range of services including, marketing research, marketing strategy and planning, tourism economic analysis, measurement and organizational change management. Carl is a trusted advisor to numerous CEO's and senior executives throughout the industry.

Carl writes a monthly op-ed page and has published a number of marketing strategy reports as well as tourism and motorcycle touring related articles. He has also been both a guest speaker and a panelist at several industry conferences including ESTO, Visit California, Travel Nevada and the Mountain Travel Symposium. Carl serves as an advisor to the Recreation, Parks and Tourism Department at San Francisco State University and was appointed to the Visit California Research & ROI Committee and well as Travel Nevada's Marketing Committee.

Carl obtained a Bachelor of Science degree from California State University at Northridge. He received his master's degree in Business Administration (MBA) from San Francisco State University Graduate School of Business. He has additionally completed a certificate program at Cornell University in Organizational Change Leadership and Dartmouth College in Strategic Thinking.

### **Jeff Moffett**

Jeffrey Moffett, Ph.D. Jeff has thirty years of experience working in the fields of economic development, data analysis, and destination marketing. As an undergraduate fellow, Jeff wrote a thesis on economic development and forest utilization in Nepal. In the years following, he guided in Himalayan tourism. In the Pacific Northwest, Jeff worked in the field of resource optimization to balance the allocation of forest land between wildlife habitat and timber production. After transitioning to the Colorado ski industry, Jeff worked for Crested Butte Mountain Resort holding positions in internet marketing, pricing, central reservations and air service development. In 2013, Jeff founded Triple Point Strategic Consulting to provide market research, strategic planning, and business development analysis to a variety of clients in the travel industry.

Jeff earned his M.S. in econometrics and Ph.D. in applied statistics at the University of Washington, Seattle.