ATTACHMENT

Economic Impact of the Chumash Casino Resort on the County of Santa Barbara

Report Prepared by
The California Economic Forecast
6489 Calle Real, Suite C, Goleta, California, 93117
(805) 692-2498 www.californiaforecast.com

for the

Santa Barbara County Taxpayers Association

February 20, 2008

Final Report

Table of Contents

Page

Key Findings iii

Executive Summary iv

Introduction 1

Chapter I Literature Review and Methodology 7

Chapter 2 Direct Effects 12

Chapter 3 Indirect and Induced Effects 16

Summary 21

References 22

Appendices

A 24
B 27
C 34
D 35

Key Findings

- In a review of the literature of economic impacts from Tribal gaming operations in California, Casinos generally yield positive net benefits to their host economies.
- Previous studies have shown that the economic benefits associated with Casino gambling are likely to be greatest when Casinos are built in a destination resort as opposed to an urban setting.
- The Chumash Casino Resort is a significant economic enterprise in Santa Barbara County.
    - It is one of the largest employers in Santa Barbara County.
    - Between 2001 and 2006, the Casino was the second fastest growing employer in Santa Barbara County, creating nearly 900 new jobs.
    - It has one of the larger direct payrolls in the County and average salaries of all workers at the Casino Resort are higher than average salaries for all workers in Santa Barbara County.

- Annual operating and capital expenditures have a large direct, indirect and induced impact on the level of economic activity in Santa Barbara County.
    - The total economic impact is large at over $350 million in total dollar sales in Santa Barbara County.
    - The 1,587 direct jobs at the Casino account for an additional 703 jobs created in the Santa Barbara County economy. These additional jobs produce an additional $30 million in payroll dollars.

- Because governments are not taxed, much of the tribal government-owned Casino operation is exempt from state, federal, and local taxation. However, the indirect and induced spending that occurs off tribal lands generates a significant amount of taxable activity.
- The largest tax is from payrolls, paid by both Casino workers and the Casino, and income taxes paid to the federal and state governments.
- The Casino serves as an additional attraction of visitors from adjacent counties to Santa Barbara County.
- The presence of the Casino gives more visitors more reasons to travel to Santa Barbara County and spend dollars on other visitor attractions, restaurants, local hotels, and general merchandise.
- Increased transient occupancy taxes collected by local jurisdictions are a result of the Casino attracting many out-of-County visitors who stay overnight in Santa Barbara, Santa Ynez, Solvang, and Santa Maria.

Executive Summary

This report provides an economic assessment of the Chumash Casino Resort located in the Santa Ynez Valley. The area of assessment is Santa Barbara County. The Chumash Casino Resort (or "Casino") is evaluated in terms of its current economic impact.

Economic impacts can include a number of criteria, but the most often used measures for evaluation are:

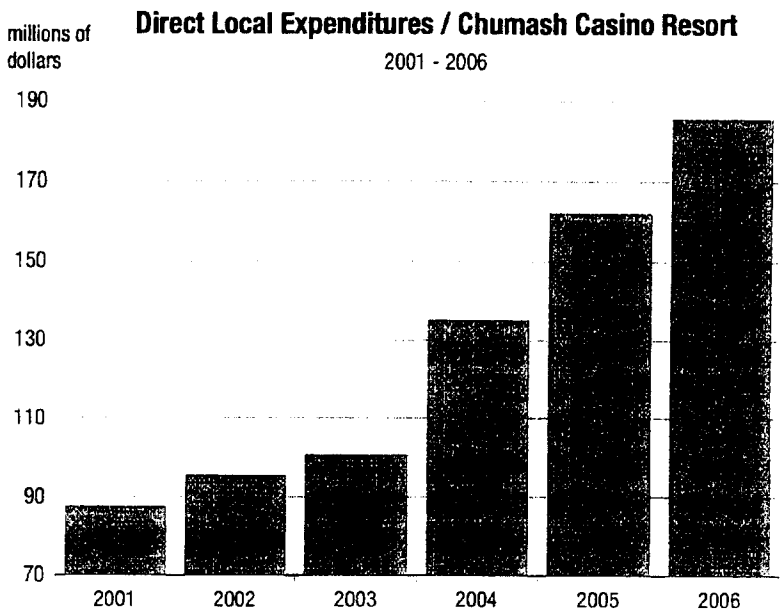
(1) expenditures made on goods and services by the Casino, provided by Santa Barbara County vendors--these are typically called the direct effects
(2) expenditures by the Santa Barbara County vendors for the sole purpose of providing goods and services to the Casino—these are typically called the indirect effects
(3) expenditures by workers at the Casino—these are typically called the induced effects

~~The sum of the~~ direct, indirect, and induced effects produce the total economic impact of the Casino. A rigorous methodology is used to quantify those impacts, along with information on direct expenditures provided by the Casino.

General Economic Impacts

In 2006, the Casino employed 1,587 people, spent more than $185 million on labor, goods, services, and distributions of income in Santa Barbara County. The operations of the Casino generated the collection of $16.6 million in state and federal payroll taxes.

The Casino generates, directly and indirectly, an estimated $366 million of gross sales in Santa Barbara County annually. Of this total, $159 million is allocated to wages and salaries of workers and payments to contractors and property owners.



These impacts translate into the creation of 700 jobs which is in addition to the nearly 1,500 workers employed at the Casino in 2007.

Expenditures on goods and services provided by Santa Barbara County vendors account for 10% of the job generation, and larger percentages of the output and income impacts.

Household Impacts

By far the largest contributor to the region's economy is the impact from payrolls to Casino workers. Workers who receive wage and salary income from the Casino re-spend much of that income in the Santa Barbara County economy. That re-spending accounts for $58 million in additional output (sales), nearly 400 jobs created in the County economy, and $14 million in tax payments to all government claimants.

Household impacts are impacts that come from the respending of income by Casino workers or "households." They account for between 15 and 20% of the total economic impacts in the county. Economic impacts are evaluated in terms of sales, income, and employment. The flow or ripple effect of the expenditures by households that earn direct income from the Casino is often neglected, but clearly, they provide significant contributions to the local economy.

Multipliers

In general, for every 10 jobs at the Casino, there are four additional jobs created in the community, and slightly more created outside Santa Barbara County.

For every $10 in sales occurring at the Casino, slightly more than an additional $4 in sales is created in the community.

Tax Receipts

Though much of the Casino operation is exempt from state, federal, and local taxation, the indirect and induced spending that occurs off tribal lands generates a significant amount of taxable activity. It is estimated that the Casino is responsible for the production of $35 million in tax receipts per year going to state, federal, and local governments. The largest tax is from payrolls, paid by both Casino workers and the Casino, and income taxes paid to the federal and state governments.

Final Word

The Chumash Casino Resort is a significant economic enterprise in Santa Barbara County. Annual operating and capital expenditures have a large direct, indirect and induced impact on the level of economic activity in the county.

However, while the direct impact on the county is substantial, it is not its most important contribution to the area. The size and nature of the Casino serves as an additional attraction of visitors from outside Santa Barbara County. And visitors to the Casino make additional expenditures in Solvang, Santa Barbara, and Santa Maria.

A large boost in tourism in Santa Barbara County occurred in 2004, the first year in which the current Casino was fully operating. Visits to the Casino were up sharply in 2004, as were the number of estimated daily and overnight visitors to Santa Barbara County's principal visitor destination: The South Coast.

While Santa Barbara is a major tourism destination in the state of California, the presence of the Casino gives more visitors more reasons to travel to Santa Barbara County. The model does not capture the additional expenditures that visitors make in route to or during their departure from the Casino. Consequently, this economic benefit of the Casino to Santa Barbara County is understated.

Introduction

This report provides an economic assessment of the Chumash Casino Resort located in the Santa Ynez Valley. The area of assessment is Santa Barbara County. The study was prepared at the request of the Santa Barbara County Taxpayers Association to provide information to the community about one of the largest business entities in Santa Barbara County.

Chapter 1 presents a brief review of the literature on Casino economic studies that have been prepared. It also includes a brief description of the methodology which uses models, assumptions and interpretations that are widely accepted in the economics and regional science professional literature for estimating economic impacts.[1]

A prominent feature of these models is their ability to capture the multiplier or *ripple effects*. These effects demonstrate the degree to which other parts of the economy are dependent on specific activities, in this case, the gaming industry.

In Chapter 2, the focus is on the direct economic impacts that the Casino provides to Santa Barbara County. In all cases, direct effects, derived from Chumash Casino accounting records are entered into economic models to estimate the total impacts on Santa Barbara County. The direct effects include:

- expenditures on goods and services
- expenditures on employee wages and salaries, and benefits
- expenditures on contractors and vendors
- other expenditures including contributions made to community infrastructure and charities

In Chapter 3, the total economic impacts are derived. The year 2006 was chosen since information is available for the entire calendar year, facilitating the most current assessment of the Casino. All monetary data are in current 2006 dollars.

Three types of impacts are shown:

- On output – the value of goods and services produced, shown in millions of dollars
- On employment – number of jobs created
- On income – the value of wages and salaries associated with the jobs, shown in millions of dollars

Overview of Chumash Casino Resort Operations

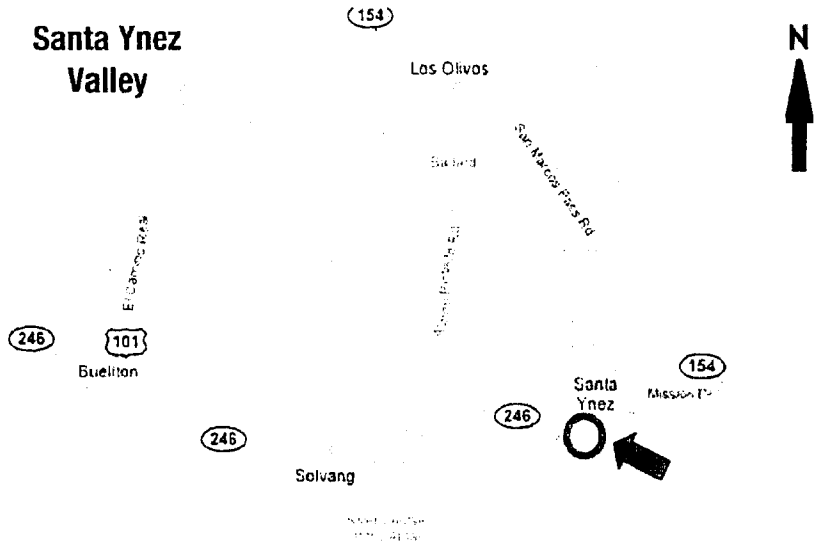
The Chumash Casino Resort (Casino) is located at 3400 East Highway 246, approximately 5 miles east of the City of Solvang. The Casino itself includes 94,000 square feet of gambling areas, primarily consisting of slots, table games, poker and bingo. Attached to the Casino is a 1,300 seat entertainment center that includes a bingo hall. Directly adjacent to the Casino is a 106 room hotel. Within and attached to these buildings there are three public restaurants, two gift shops, meeting rooms, and a spa. In its current form, the Casino opened in August 2003, while the hotel and spa became operational in July 2004.

---

[1] See for example, Philip R. Israilevich, Geoffrey J.D. Hewings, Michael Sonis and Graham R. Schindler, "Forecasting Structural Change with a Regional Econometric Input-Output Model," *Journal of Regional Science* 37: 565-90 (1997)

Employment

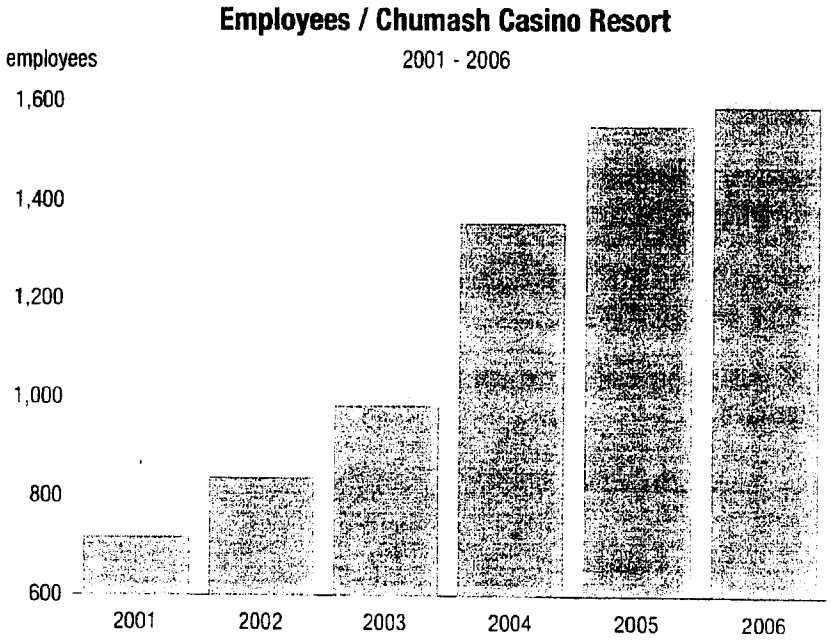
In 2006, the Casino employed 1,587 people, which is approximately 0.8 percent of the total Santa Barbara County workforce. Since 2001, employment has increased by 871 people, as a result of internal growth and expanded operations from the new hotel and Casino. From 2001 to 2006, there were 8,525 jobs created in Santa Barbara County, which means that the Casino accounted for about 10 percent of county net job creation.



Chumash Casino Resort, Santa Ynez Valley

From 2001 to 2006, the Casino has created the second most jobs of any organization in Santa Barbara County, behind only Alan Hancock College which opened a new campus at Vandenberg AFB.

The Casino has created more jobs than any private sector employer over that time period.



Largest Growing Employers Santa Barbara County	**From 2001 to 2006**
2001-2006	**Increase in**
Company / Organization	**Workforce (jobs)**
Alan Hancock College	900
Chumash Casino Resort	**871**
Bacara Resort and Spa	800
Santa Barbara City College	686
Santa Barbara Cottage Hospital	673
Santa Barbara County Education Office	504
UCSB	403
City of Santa Barbara	395
Albertson's Stores	301
Raytheon Electronic Systems	223
Sources: UCSB Economic Forecast Project & Chumash Casino Resort	

Average Salaries

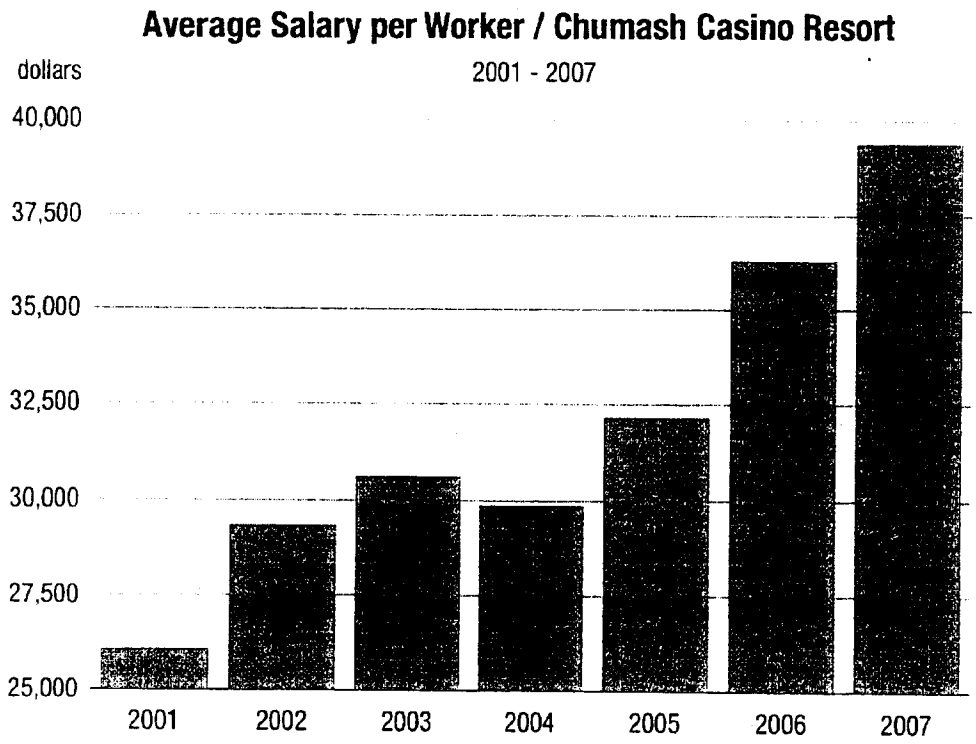
In 2006, the average salary per worker at the Casino was $36,281. This was the average salary to workers only and does not include any other forms of disbursement. In comparison, the average non-farm salary in all of Santa Barbara County during 2006 was $43,082.

The average salary in Santa Barbara County for workers in the accommodation and food services industry was $17,647 and for workers in the arts, entertainment and recreation industry it was $29,310. Most workers at the Casino would be classified into one of those two industries.

Consequently, it appears that the Casino pays significantly above average salaries to its workers, relative to how workers in the same sectors are paid in Santa Barbara County.

Furthermore, from 2001 to 2006, benefits accounted for an additional 26 to 29 percent of pay above and beyond the average salary.

In 2007, salaries per worker are now averaging $39,386 per year. The increase over the 2006 average is 8.6 percent.



Origin of Casino Visitors

The Casino mainly attracts visitors from throughout Southern California. In 2006, there were 2,894,561 visitors to the Casino and 34,049 guests in the hotel. The hotel occupancy rate was 85 percent. (Note that a visitor or guest who had two separate stays would be counted twice). Slightly less than 25 percent of visitors are from Santa Barbara County. Slightly more than 25 percent of visitors are from Ventura County. An additional six percent are from San Luis Obispo, while 13 percent come from the San Fernando Valley. The remaining visitors are predominately from the rest of Los Angeles County, Kern County, Orange and San Diego Counties.

Chumash Casino Resort Visitors - 2006

Origin of Visitor	Percent of Visitors from Respective Regions
Santa Barbara County	23.3
Ventura County	27.8
San Luis Obispo County	6.4
San Fernando Valley	13.0
Other*	29.4

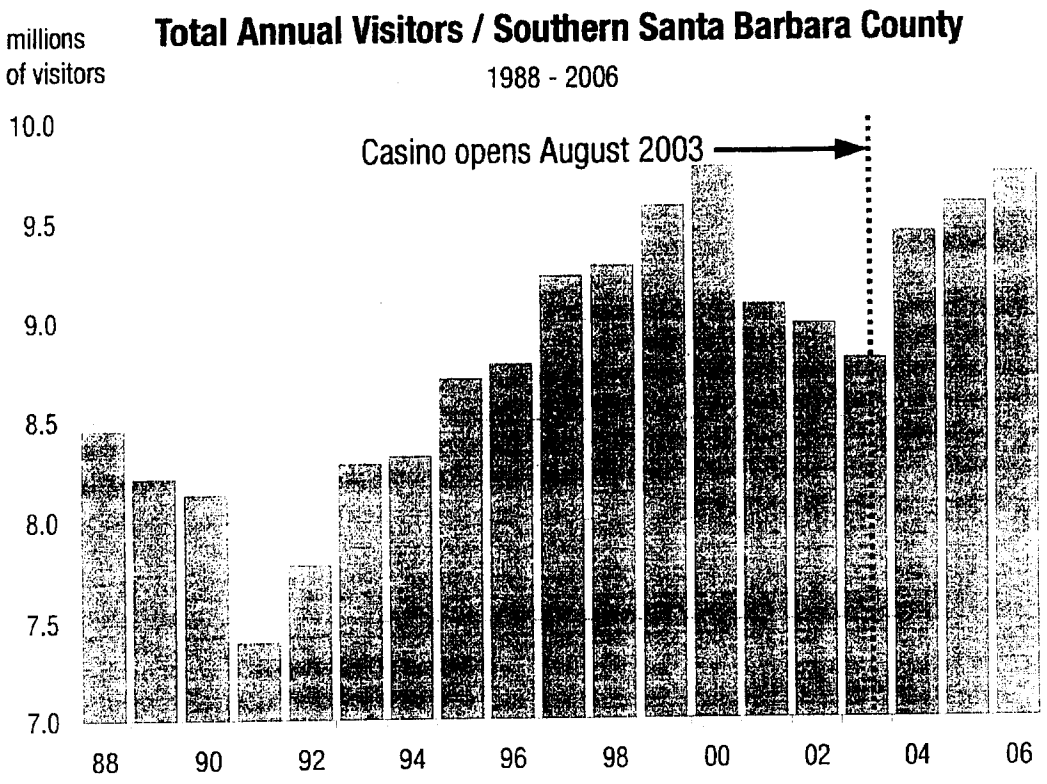
*largely from the rest of Los Angeles County, and Kern, Orange, and San Diego Counties
Source: Chumash Casino Player's Club

The Casino and General Tourism in Santa Barbara County

Total visitors to the Casino as estimated by the Casino totaled 2.89 million in 2006. Most visitors to the Casino are non-Santa Barbara County residents. The total number of visitors from outside the county are estimated at 2.22 million in 2006.

Total visitors to the South Coast of Santa Barbara County are estimated at 9.84 million in 2006.[2] Consequently, out-of-county visitors to the Casino represent 29 percent of total visitors to the South Coast—Santa Barbara County's principal tourist destination.

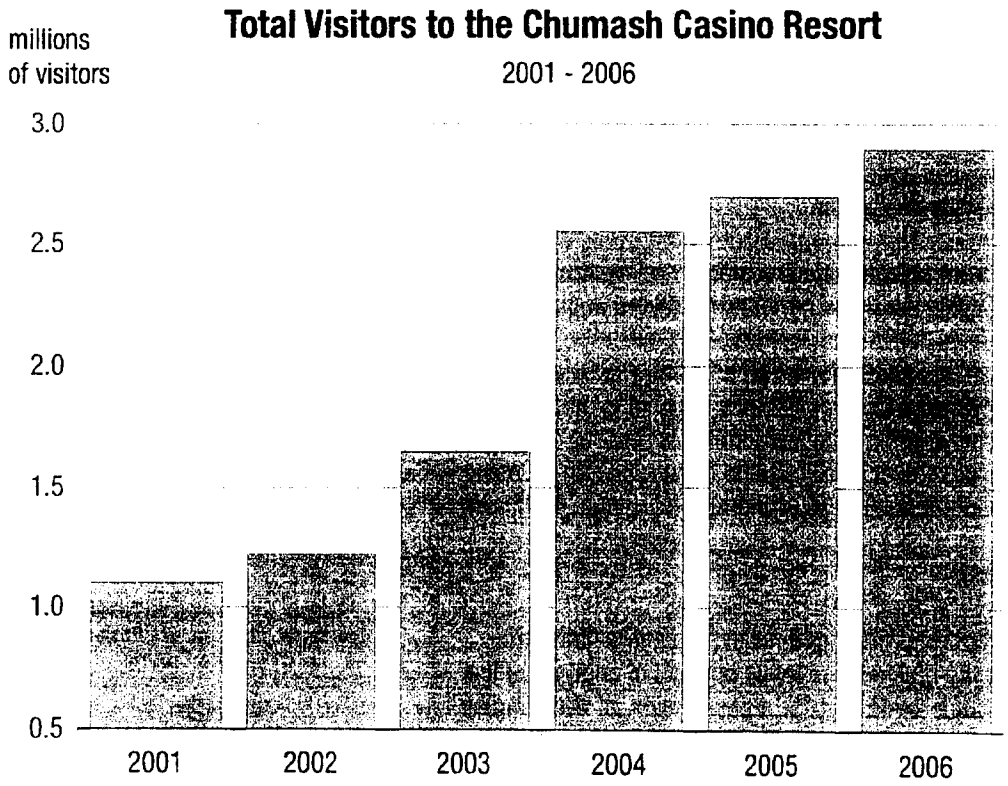
The Casino as we know it today opened in August of 2003 and experienced its first full year of operation in 2004. During 2004, declining tourism in Santa Barbara County and the South Coast rebounded. The total number of visitors to the South Coast increased 7.2 percent ---- the largest year-over-year increase in annual visitors since 1985.



[2] Estimates of total overnight and daily visitors are derived from the California Economic Forecast tourism model of the South Coast of Santa Barbara County, based on reported hotel-motel occupancy rates, the number of transient rooms, and survey-derived ratios of daily to overnight visitors in resort areas of California.

The Casino may have fortunately opened in a turnaround year, or it may have been partly responsible for the rebound by providing Santa Barbara County with another visitor activity and destination for tourists. Total visitors to Southern Santa Barbara County appear to rise in tandem with the total number of visitors at the Chumash Casino over time.

Since 2004, tourism has been rising sharply in the county, as it has in other California visitor destinations. Transient Occupancy Taxes (Bed taxes) collected by hotels and motels in the City of Santa Barbara jumped sharply in 2004, rising 5.8 percent. They further increased 11.3 percent in 2005, the largest gain since 1996.



Chapter 1: Literature Review and Methodology

Brief Review of Selected Relevant Economic Literature

There has been a relatively significant amount of research conducted on Tribal Gaming operations in the United States. Numerous articles and studies have been written on the economic effects of the Casino industry, but the content of most of these reports contain broad generalization. Very few studies utilize an economic model (such as an econometric or input-output model) to estimate a net economic benefit, especially for an area the size of a county.

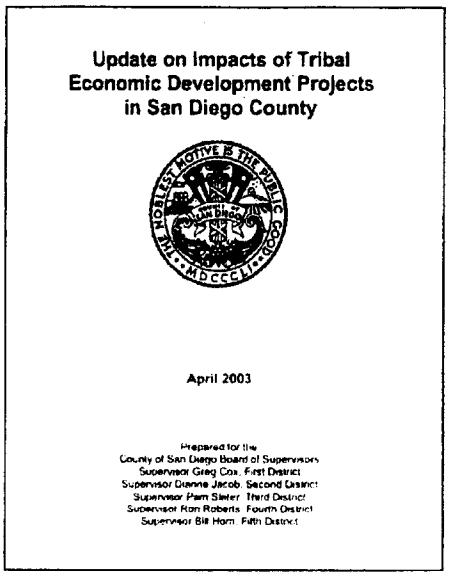
In fact a relatively recent (2003) report commissioned by the County of San Diego Board of Supervisors succinctly states in reference to the body of work on the subject, "none of the reports prepared to date contain comprehensive or accurate information that would allow for a definitive analysis of the economic or fiscal impacts of Indian gaming in California" (San Diego 2003).

More definitive studies have been prepared since that do provide more definitive results. Some of these studies are reviewed below.

Key points from selected studies that are relevant in the determination of economic impacts from the Chumash Casino are listed here and explained in more detail below.

- In an unsaturated market, a Casino yields positive net benefits to its host economy.
- Destination Casinos act as a regional export, generating positive economic stimulus.
- Employment multipliers for Illinois Casinos at the county level ranged from 1.20 to 1.42
- Census tracts with a Casino or surrounding a Casino in California between 1990 and 2000 had greater increases in economic well-being, particularly in poor areas, than areas without a Casino.

Early Studies


Update on Impacts of Tribal Economic Development Projects in San Diego County

April 2003

Prepared for the
County of San Diego Board of Supervisors
Supervisor Greg Cox, First District
Supervisor Dianne Jacob, Second District
Supervisor Pam Slater, Third District
Supervisor Ron Roberts, Fourth District
Supervisor Bill Horn, Fifth District

In a 1998 report purporting to review the entire literature concerning the regional economic impacts of analysis at the time, the author found that "...a new Casino, of even limited attractiveness and placed in a market that is not already saturated, will yield positive economic benefits on net to its host economy" (Rose 1998). The author goes on to state that economic multipliers for Casinos located in small cities or rural areas should be at or below 1.5, a value which is very close to the results reported for the Chumash Casino in this study. Larger multipliers are expected for more urban areas. However, the author does not believe that a truly complete and unbiased study had been prepared, as of 1998.

Another 1998 study states that the economic benefits associated with Casino gambling are likely to be greatest when Casinos are built in a destination resort as opposed to an urban setting. The author makes the case that whether a Casino is beneficial or not to the local economy depends largely from where the users of the Casino originate. "If most of a region's gaming revenues come from tourists, or from import

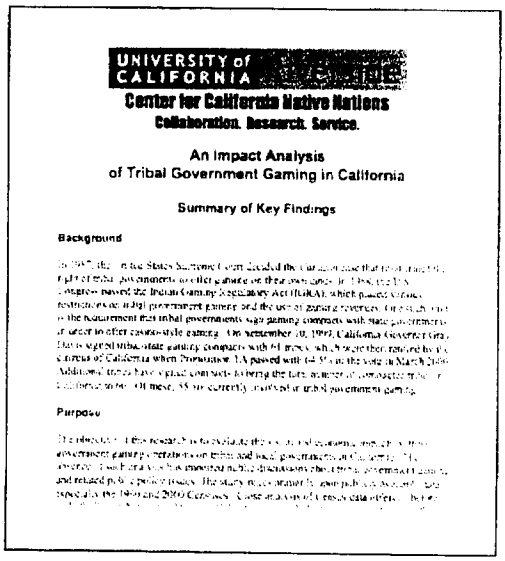
substitution, then positive economic spin-offs stimulate local and regional economies; gambling acts as a regional export. If, however, the bulk of gambling revenues for newly permitted gambling are generated by local residents ... there may be little, if any, net gain for the overall local or regional economic activity as a result" (Eadington 1998). We note here that the Chumash Casino fits the description of a "destination Casino." The majority of visitors to the Casino have origins outside of Santa Barbara County.

Casinos in Illinois

In 2003 a study was published by the Regional Economic Applications Laboratory of the University of Illinois that used the IMPLAN input-output model to evaluate the economic impact of the Casino industry on the Illinois state economy. The authors found that that the total employment economic multiplier on the respective local county economy ranged from 1.20 to 1.42 for the nine Casinos examined, with an average multiplier of 1.39. The largest direct employment was to the services industry, while trade, finance, insurance and real estate had large indirect employment effects. They found that, "for every 10 jobs at the Casino, there are between two and four additional jobs created in the community" (REAL 2003). This number is dependent upon many factors including the percent of vendor expenditures made in the county, which the authors estimated at less than six percent.

Casinos in California

A 2006 study by The Center for California Native Nations at the University of California Riverside evaluated the impacts of Indian Casinos on the California economy. The authors focused their attention on changes in indicators of "well-being" between the 1990 census and the 2000 census for regions in California with and without a Casino. They found that for areas that included or surrounded a Casino, "...gaming raised median family incomes in neighboring tracts by as much as 30-60 percent at very low levels of income" (Martin 2006). The author also found no positive income effect on census tracts with already high levels of income.


UNIVERSITY of CALIFORNIA

Center for California Native Nations

Collaboration. Research. Service.

An Impact Analysis
of Tribal Government Gaming in California

Summary of Key Findings

Background

Purpose

The Casinos were also responsible for lower rates of poverty and higher educational attainment. There was no discernible effect on unemployment rates.

Casinos in Oregon

In 2007, ECONorthwest published a study of the Indian gaming industry in Oregon that detailed the economic impacts using the same methodology that we adopt in this study: IMPLAN. There are nine Indian Casinos in Oregon, which have operations that total three times the size of Chumash Casino. The authors found that the total jobs multiplier was 2.56, inferring that for every job that directly comes from tribal gaming, another 1.56 jobs are created in the state. The sectors with the strongest impact felt from indirect and induced spending are services and trade. The output multiplier is 2.19 and the wage multiplier is 2.24. These multipliers cover employment and spending over the entire state of Oregon and therefore involve less leakages than a countywide model.

In an earlier version of their 2007 report, ECONorthwest examined the net economic impact of the Cow Creek Tribe on Douglas County, Oregon. The Cow Creek Tribe's main operations are a 50,000 square foot Casino and 147 room hotel. (This size of operation is similar to the Chumash Casino Resort).

Douglas County has a population of approximately 105,000 people, about 25 percent the size of Santa Barbara County. According to ECONorthwest, "the Cow Creek had a net direct jobs impact of 750 yet the Tribe actually employed an average of 1,168 workers in 2004. Consequently, the net direct job impacts are approximately 35 percent less than the actual gross number of jobs at the Tribe" (ECONorthwest 2005).

The authors also found that there are 860 jobs created from indirect and induced effects. Therefore, "the employment multiplier on tribal activities is approximately 2.2. Thus, for every ten tribal employees, approximately 12 jobs are generated in other sectors of the Douglas County economy..." (ECONorthwest 2005). The top five industries affected by indirect and induced spending are construction, state and local government, food services and drinking places, real estate, and employment services. The output multiplier is 2.0 and the wages multiplier is 1.8.

Casinos in Kansas, Rhode Island

In 2005, professors from Pittsburg State University estimated the impacts that a destination Casino would have on the city of Galena, Kansas. Due to the small size of the city, the authors applied the IMPLAN model to Cherokee County, Kansas, which itself has a population of less than 25,000 people, as well as to the Joplin MSA (population of approximately 160,000).

The authors assumed the Casino would have 1,700 employees and revenues similar to the Chumash Casino. The authors found that in addition to the direct 1,700 jobs, there would be an additional 877 indirect jobs and a potential of 900 induced jobs created in Cherokee County, from total expenses of $133 million per year. This direct $133 million was calculated to have an additional indirect effect of $169 million per year on county output.

For the entire Joplin metro area, the additional indirect jobs created from total expenses of $133 million per year were 2,523. The indirect output spending was $232 million per year. These estimated impacts imply slightly higher multipliers than would be expected for the Chumash Casino because the authors assumed that only 9.2 percent of revenue would come from Kansas residents, implying that over 90 percent of total revenue was from out-of-area visitors. For the Chumash Casino, approximately 24 percent of visitors reside in Santa Barbara County, and 30 percent of total revenue is a result of Santa Barbara County residents.

The Center for Policy Analysis at University of Massachusetts, Dartmouth released a study in 2004 on the proposed impacts of destination Casino in West Warwick, Rhode Island. The authors used the entire state of Rhode Island as the area for their IMPLAN model. The state has about 2.5 times the population of Santa Barbara County. The West Warwick Casino is expected to create 3,571 direct jobs with a total compensation of $101 million. The authors found that a total of 1,335 indirect and induced jobs would be created, implying a jobs multiplier of 1.37. The top sectors for indirect and induced job creation were general merchandise stores, real estate, hospitals, offices of physicians and dentists, and automotive repair.

Methodology

In studying the impact of the Casino on Santa Barbara County's economy, it is necessary to first identify the volume of Casino expenditures made in the county's economy because of its activities. This is called the firm's "direct" impact which forms part of the "primary" tier of the total impact. Once these initial tier expenditures are made, a good deal of it is re-spent locally, helping to create the economy's "secondary" tier. This includes two kinds of spending.

To the extent the money is re-spent locally to buy supplies like food, beverages, equipment, supplies, cleaning services, etc, the secondary tier is increased through an "indirect" impact. To the extent that payrolls are re-spent locally by employees of the Casino to support their families or the firm's suppliers in support of their own businesses, the secondary tier is increased through an "induced" impact.

Furthermore, expenditures by the Casino are being made from the revenues the Casino receives from its customers. To the extent that these customers are non-local, the direct expenditure (financed from revenues or sales from outside the county) is larger and the "secondary" tier of *indirect* and *induced* activity on the local economy is larger.

For economists, the direct effects of economic activity are easily explained because expenditures by firms in the local economy and dollar sales by customers can usually be traced.

"Indirect" and "induced" activity are more difficult to comprehend because once the dollars hit the local economy, there is no way to trace their further movements. At one time, the U.S. Navy paid its fleets in $2.00 bills so that local merchants and residents could see them change hands throughout a port's secondary economy and recognize the importance of the outside money from the fleet. These secondary impacts were:

- "Indirect" as the Navy purchased needed items (like food, supplies, and entertainment) in the local economy. The suppliers of these goods and services purchased goods and services and hired workers necessary to produce or provide the food, supplies and entertainment demanded by the Navy.
- "Induced" when sailors spent a portion of their salaries at a restaurant in town, at the movies, on gifts for their families, etc.

To analyze the impact of the Casino on the Santa Barbara County economy, it is necessary to determine the employment and income impacts of three types of spending:

1. The "direct" expenditures by the Casino on labor, supplies, equipment, contract services, consultants, and capital improvements. The direct impact also includes money spent on payroll taxes, contributions to the local communities, and infrastructure investments.
2. The "indirect" spending as the vendors and contractors of the Casino make expenditures on labor, equipment, and supplies to produce the goods and services demanded by the Casino. Wholesale distribution firms, construction companies, restaurant services, laundry services, advertising companies must purchase services and supplies in the local economy.
3. The "induced" spending as employees of the Casino re-spend their incomes locally, supporting their families. The induced impact also occurs when the employees of vendors that provides goods and services to the Casino, re-spend their salaries locally.

The direct expenditures or the "direct effect" is what is normally considered the principal economic activity of the business entity on the local economy. However, the sum of the indirect and induced can be larger than the direct effect alone. The addition of all three effects is the total effect. The multiplier is derived as:

The Total Effect / The Direct Effect

Multipliers are calculated for Employment, Output, and Income. Multipliers simply show the amount of additional economic impact that is forthcoming from the direct expenditure.

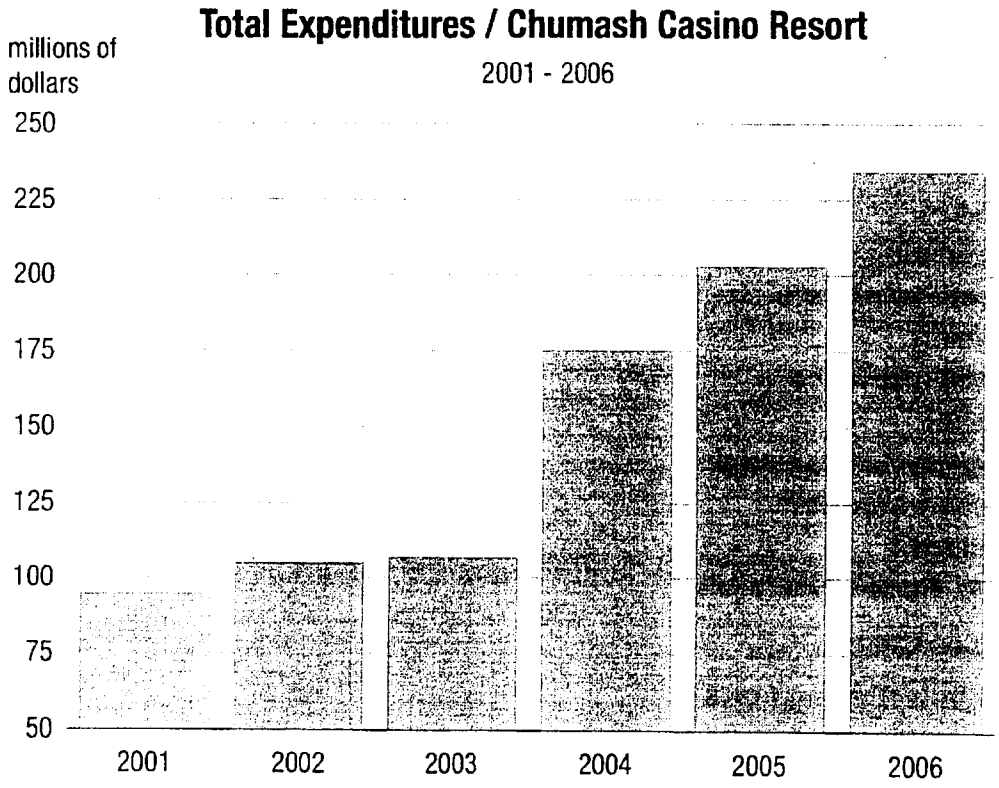
We describe the methodology in greater detail in Appendices A and B.

Chapter 2: Direct Effects

The direct effects or impacts of the Casino are the expenditures that the Casino makes on goods and services, and equipment in the local economy as part of its business to provide recreation, entertainment, and lodging services to its customers throughout the year.

Expenditures by the Casino Resort Operation In Santa Barbara County

In 2006, the Casino spent $234 million on wage, salary, and contract labor, income distributions to the tribe, and goods and services provided by vendors located in the state. That total also included contributions to charities, scholarships, and to special revenue sharing funds for Indian tribes. Expenditures made inside Santa Barbara County accounted for 79 percent of the total 2006 budget.



The Casino employed 1,587 people and spent over $90 million on payrolls, and goods and services provided by Santa Barbara County vendors. Furthermore, the Casino was responsible for $16.6 million in state and federal payroll tax payments. $12.1 million of the total was paid directly by employees of the Casino.[3]

[3] While the Santa Ynez Chumash Indian Tribe does not pay taxes (akin to county or state governments), its tribal members employees of Chumash business operations do. The Chumash Casino Resort pays payroll taxes for all employees of the Casino and transient lodging operation.

Table 1 provides a summary of the direct expenditures on the Santa Barbara County economy.

Table 1
Expenditures by the Chumash Casino/Resort
Calendar year 2006

General Description	Amount ($millions)	Inside Santa Barbara County ($millions)
Payroll		
Payroll Taxes		
Benefits		
Operating Purchases		
Goods and Services		
Food		
Advertising		
Event Promotions		
Bussing		
Health Insurance		
Utilities		
Property maintanance		
Concert expenses		
Insurance		
other supplies /services		
Capital Costs		
Revenue Sharing Fund		
Special Distribution Fun		
Charitable Contribution:		
Total Expenditure	$	

Source: Chumash Casino/Resort. Accounting, 2007, and IMPLAN regional purchase coefficients

The data in the table has been deemed proprietary and withheld from the publicly released report. It was made available to the author by way of a confidentiality agreement and is available for peer review only by way of a confidentiality agreement between the parties.

The direct effects are often characterized as the expenditures a business needs to make to satisfy the final demands by consumers for its products. Alternatively, the direct effects represent the goods and

services required by the Casino to produce the services and goods that its direct customers (or visitors) are demanding, plus the value added by the Casino.

These are annual expenditures which produce subsequent impacts through the re-spending, multiplier, or ripple effect. Direct expenditures have been rising over time. Consequently, we would expect the absolute value of expenditures and therefore the direct effects to continue rising over time as the demand for Casino recreation grows in California.

Local expenditures and disbursements by the Casino have been consistently in excess of $100 million per year since 2003, growing to a grand total of nearly $186 million last year.

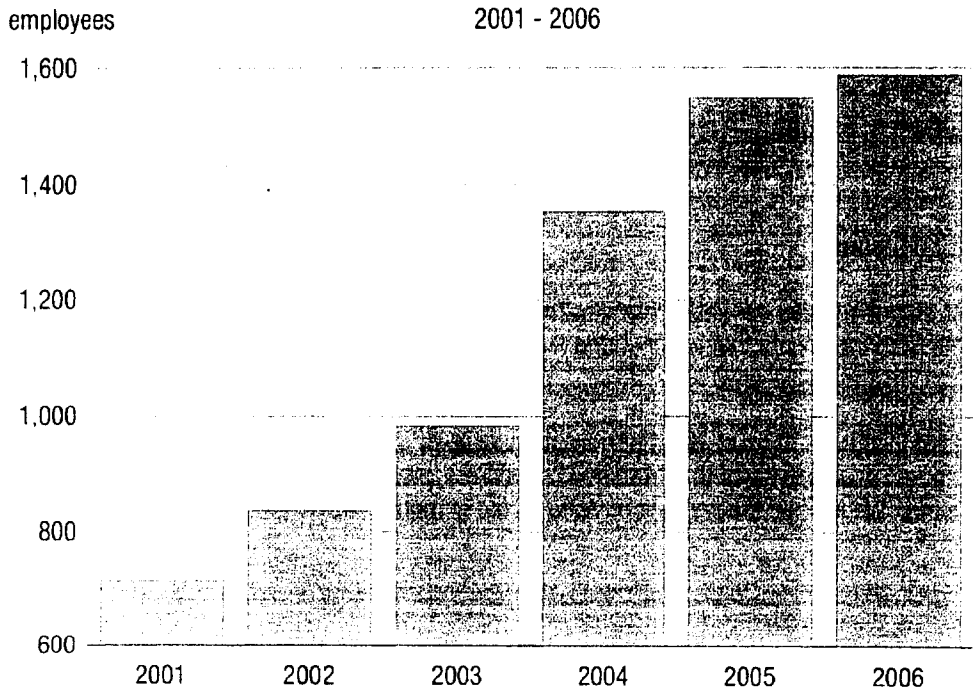
These direct effects include capital expenditures, which were substantial in 2003 and 2004 as the Casino was being enlarged. Since 2005, the dominant expenditure by the Casino is the payroll cost of operations. While expenditures on local vendors represent 40 percent of total vendor expenditures, total expenditures for vendor goods and services has eclipsed $80 million per year.

Summary of Direct Effects

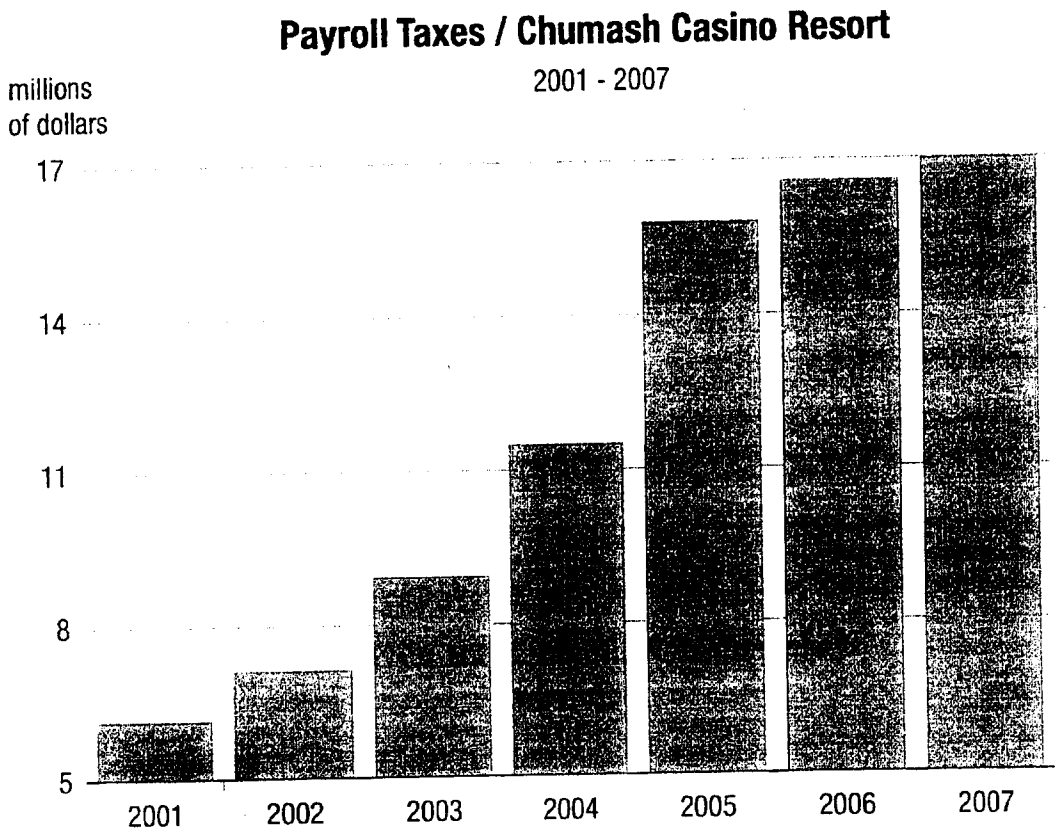
The direct effects are responsible for the employment of 1,587 wage and salary workers in 2006, and nearly 1,500 workers this year, plus 78 unfilled positions.

Expenditures made by the Casino are principally payroll expenditures to direct workers, plus benefits. Spending on promotions, food and beverages, advertising, and capital projects (renovations, new construction) dominates the direct expenditures in the Santa Barbara County economy.

Employment / Chumash Casino Resort



Nearly $60 million in worker payrolls was paid in 2007 by the Casino. Direct worker payroll distributions generate $17 million in payroll taxes to the State and Federal Government. We describe the payment of taxes in more detail in the next chapter.



Total Output and Income

The total direct output or sales per year (calendar 2006) is estimated at $[redacted] million. Total value added income in Santa Barbara County that is generated annually by direct sales at the Casino is estimated at $101 million.

Total value added income is the sum of employee compensation, proprietor income, other property income, and indirect business taxes that is shared by workers, proprietors, asset holders, and state and local governments. We explain the concept of value added in more detail in the next chapter.

[redacted] = confidential data

Chapter 3: Impact Analysis

The annual expenditure of $154 million plus revenue disbursements from the Casino to Tribal members and the charitable contributions from both the Casino and the Tribe generate additional impacts on the Santa Barbara County economy. The impacts accrue from the re-spending of these direct effect dollars.

Indirect and Induced Impacts

The expenditure impacts generate multiplier effects from re-spending by the vendors and contractors that provide goods and services to the Casino, and from household spending by Casino workers and tribal members.

Output or Sales Impacts

Output is the value of the industry's or the enterprise's total production. Total production from the Chumash Casino is represented by total sales.

The Casino generated nearly $ million in sales in calendar 2006. Allowing for some leakages outside the county, the direct output or dollar volume of the Casino in the county is estimated at $254 million.

The total dollar output (or sales) impact in the local economy (including the direct, indirect, and induced effects) is estimated at $366 million. To meet the final demand for goods and services generated by the Casino and its workers, the local economy produces this much output.

The indirect effect is $52.9 million. This is the amount of sales that are generated by local vendors in the economy that must meet the good and service demands of the Casino. The induced effect is $58.5 million. The induced effect is the total sales that occur due to the re-spending by households that receive the direct labor income from the Casino in the form of wages and salaries.

The output multiplier is 1.44 implying that for every direct dollar of output (sales) by the Casino, and additional 44 cents in the economy is created.

Total Income or Value Added

Value added is the additional value created by the Casino above the value of the goods and services that it purchases to produce it's output, or final sales. Value added corresponds to the contribution of the factors of production, i.e., the land, labor, and capital (equipment, services, setting) that are used to raise the value of the product. Value added corresponds to the incomes received by the owners of these factors: workers, asset owners, and land owners.

Value added can therefore be thought of as the manner in which income is distributed: to workers, proprietors (or contractors), owners of capital equipment or machinery, and owners of land or entitlement. Local, State, and Federal governments are included in the recipients of value added income because taxes are collected during the process of adding value.

Taxes on payrolls, property, and sales are collected at many stages of the direct dollar spending and indirect and induced re-spending that occurs as a result of the Casino operation.

Worker Compensation

Total compensation (W-2 payrolls) going to local workers is $88.3 million. The employee compensation multiplier is 1.53 indicating that for every dollar of Casino payroll, there is an additional 53 cents in payroll created in the local economy as a result of the indirect and induced effects.

Proprietor Income and Other Property Income

Total proprietor income (or payments to contractors or self-employed individuals for services) sums to $14.4 million. Income to proprietors includes income received by private business owners, doctors, lawyers, accountants, construction workers, etc.

Other property and asset income consists of payments for rents, royalties, and dividends. Payments to individuals in the form of rents received on property, land, and equipment, royalties from contracts, and corporate profits earned by the Casino. The total amount of income in this category is $52 million.

Indirect Business Taxes and other taxes

These taxes consist of excise taxes, property taxes, fees, licenses, fines, and sales taxes paid by the Casino, by businesses that provide goods and services to the Casino, and by households that earn worker compensation and contractor income from the Casino. Taxes paid to state, federal, and local governments occur during the normal operation of the Casino and it's vendors. Income taxes are not included in Indirect Business Taxes.

Excise taxes are special taxes on specific goods or activities—such as gasoline, tobacco or utilities—rather than general taxes based on income or consumption. Excise taxes include motor vehicle fuel taxes, telephone taxes, and utility taxes. Excise taxes are often included in the final price of products and services, and are often hidden to consumers.

The largest tax that is paid by the Casino and its vendors and workers are payroll taxes, going principally to the federal government. The second largest tax is the state sales tax of which Santa Barbara County receives 1.5 percentage point of the 7.75 percent tax rate (including the half-cent or 0.5 percentage point for Measure D).

Total estimated indirect business taxes generated by the Casino sum to $8.6 million. The sales tax implication alone is $2.7 million. Santa Barbara County's share is $530,000. Accounting for State and Federal government receipts, total indirect business taxes that remain in Santa Barbara County are estimated at $3.4 million. More than half of this total is property taxes that are paid indirectly by vendors and workers of the Casino.

Total Value Added Income

Total value added in the economy is $159 million. This is the total amount of income going to all claimants (workers, proprietors, local governments, and asset holding individuals and enterprises) in Santa Barbara County, each year as a result of the Casino.

The direct, indirect and induced impacts of the Casino are summarized in Table 2.

Note on Induced Effects

The second set of impacts traces the effects of expenditures from wages and salaries paid to Casino industry employees. Total value added sums to just over $31 million. A large proportion of household expenditures are made within the County. The results of the induced effects are shown in Table 2. Total additional output or sales in Santa Barbara County from the re-spending by households is $58.5 million.

The expenditures by the approximately 1,600 Casino employees generate additional jobs in other sectors of the economy through the multiplier effect. These expenditures will range from groceries, to automobiles, to meals in restaurants, medical expenses and other items a household needs to sustain itself. In turn, these direct expenditures generate additional demands on other sectors of the economy and so the ripple process continues such that, in total, Casino employee expenditures account for another 392 jobs in the county's economy.

The principal impact in the local Santa Barbara County economy from household re-spending is on additional labor wages and salaries ($15.8 million). The average salary of an induced job generated is therefore:

$15,762,748 / 392 = $40,211 per worker

Table 2
Total Economic Impact Summary
Chumash Casino / Santa Ynez, California

	Direct	Indirect	Induced	Total	Implied Multiplier
Employment Impact (jobs)	**1,587**	**310**	**392**	**2,290**	**1.443**
Dollar Impacts (2006 dollars)					
Output	254,266,746	52,910,394	58,490,534	365,667,674	**1.438**
Value Added					
Employee Compensation	57,577,930	14,906,472	15,828,282	88,312,685	1.534
Proprietor Income	6,498,294	3,169,179	2,781,405	14,448,878	1.700
Other Property Income	31,942,971	8,486,363	12,012,025	52,441,360	1.642
Indirect Business Taxes	2,449,099	352,736	618,039	3,419,874	1.396
Total Value Added	**100,468,295**	**26,914,750**	**31,239,752**	**158,622,797**	**1.579**

Total Tax Impacts

The total estimated tax impact is presented in Table 3. These impacts go beyond Santa Barbara County. Expenditure impacts generate indirect and induced payroll taxes, corporate profits taxes, property taxes, income taxes to both state and federal governments. These taxes are in addition to the indirect business taxes that we have already discussed. They however are also shown in Table 3.

The largest tax-generating activities are payroll, household incomes, and sales taxes. Excise and corporate income taxes produce incremental revenues to state and federal governments.

Excise taxes are special taxes on specific goods or activities—such as gasoline, tobacco or utilities—rather than general tax bases such as income or consumption. Excise taxes are often included in the final price of products and services, and are often hidden to consumers. Overall excise taxes account for less than 10 percent of all federal tax receipts.

Corporate taxes are taxes paid indirectly by vendors and suppliers to the Casino. The Casino itself is exempt from corporate income tax.

Sales taxes are those taxes paid by vendors who supply goods and services to the Casino, and by households who derive wage and salary or proprietor income from the Casino. The same is associated with property taxes.

Income taxes are those paid by workers to the State of California. Non-taxes are fines, fees, and penalties paid by households who derive income from the Casino.

The total output or sales of $366 million generate approximately $35 million in total taxes. Total taxes therefore represent 9.6 percent of total output or sales in Santa Barbara County that are directly and indirectly attributable to the operation of the Chumash Casino.

Table 3: Total Tax Impact / Chumash Casino

	Employee Compensation	Proprietor Income	Household expenditures	Enterprises (Corporations)	Indirect Bus Taxes	Total
Federal Government NonDefense						
Corporate Profits Tax				939,791		939,791
Indirect Bus Tax: Custom Duty					482,824	482,824
Indirect Bus Tax: Excise Taxes					1,479,663	1,479,663
Indirect Bus Tax: Federal fees & licenses					515,979	515,979
Personal Tax: Estate and Gift Tax						0
Personal Tax: Income Tax			8,124,406			8,124,406
Personal Tax: NonTaxes (Fines- Fees)						0
Social Ins Tax- Employee Contribution	5,401,796	660,792				6,062,588
Social Ins Tax- Employer Contribution	5,609,724					5,609,724
Total	**11,011,520**	**660,792**	**8,124,406**	**939,791**	**2,478,356**	**23,214,864**
State/Local Govt NonEducation						
Corporate Profits Tax				267,128		267,128
Dividends				545,525		545,525
Indirect Bus Tax: Motor vehicle License fees					155,410	155,410
Indirect Bus Tax: Other Taxes					461,901	461,901
Indirect Bus Tax: Property Tax					1,980,064	1,980,064
Indirect Bus Tax: State/Local fees/fines					740,784	740,784
Indirect Bus Tax: Sales Tax to Santa Barbara County					529,812	529,812
Indirect Bus Tax: Sales Tax to State					2,207,560	2,207,560
Indirect Bus Tax: Severance Tax					2,601	2,601
Personal Tax: Estate and Gift Tax						0
Personal Tax: Income Tax			2,810,038			2,810,038
Personal Tax: Motor vehicle License			116,549			116,549
Personal Tax: NonTaxes (Fines- Fees			1,066,069			1,066,069
Personal Tax: Other Tax (Fish Hunt)			22,167			22,167
Personal Tax: Property Taxes			44,294			44,294
Social Ins Tax- Employee Contribution	182,569					182,569
Social Ins Tax- Employer Contribution	606,391					606,391
Total	**788,960**	**0**	**4,047,116**	**812,651**	**6,078,322**	**11,727,049**
Grand Total	**11,800,480**	**660,792**	**14,163,555**	**1,752,442**	**8,556,677**	**34,941,913**

Indirect Business Taxes include sales taxes, excise taxes, property taxes, import/export duties, motor vehicle license fees, and severance taxes. Excise taxes include motor vehicle fuel taxes, telephone taxes, and utility taxes.

August 10, 2007

Summary

The direct annual expenditure by the Casino is $154 million. The amount going to vendors is $81 million. The amount going to 1,587 employed workers is $58 million.

Direct Casino expenditures on goods, materials, supplies, services, and labor generate additional indirect and induced impacts in the Santa Barbara County economy.

Total sales in the Santa Barbara County economy are estimated at $366 million.

Total value added sums to $159 million. Of that amount, a total of $88 million represents worker wages and salaries (payroll income) in Santa Barbara County. $3.4 million is indirect business taxes, mostly sales and excise taxes including gasoline and utility taxes.

The employment multiplier is 1.44. The 1,587 direct jobs at the Casino account for an additional 703 jobs created in the Santa Barbara County economy. These additional jobs produce an additional $30 million in payroll dollars.

The direct expenditures, and the distributions to the Tribe also produce significant tax impacts that send income to State, Local, and Federal Governments. Tax payments total approximately $35 million per year.

Final Note

The Chumash Casino Resort is a significant economic enterprise in Santa Barbara County. Annual operating and capital expenditures have a large direct, indirect and induced impact on the level of economic activity in the county.

However, while the direct impact on the county is substantial, it is not its most important contribution to the area. The size and nature of the Casino serves as an additional attraction of visitors from outside Santa Barbara County. And visitors to the Casino make additional expenditures in Solvang, Santa Barbara, and Santa Maria.

A large boost in tourism in Santa Barbara County occurred in 2004, the first year in which the current Casino was fully operating. Visits to the Casino were up sharply in 2004, as were the number of estimated daily and overnight visitors to Santa Barbara County's principal visitor destination: The South Coast.

While Santa Barbara is a major tourism destination in the state of California, the presence of the Casino gives more visitors more reasons to travel to Santa Barbara County. The model does not capture the additional expenditures that visitors make in route to or during their departure from the Casino. Consequently, this economic benefit of the Casino to Santa Barbara County is understated.

References

Eadington, W.R. (1998). "Contributions of Casino-style gambling to local economies". Annals of the American Academy of Political and Social Science, 556.

Martin, Joel. 2006. "An Impact Analysis of Tribal Government Gaming in California", The Center for California Native Nations, University of California at Riverside, Riverside, CA.

Regional Economic Applications Laboratory (REAL), University of Illinois. 2003. "Economic Impact of the Casino Gaming Industry on the State of Illinois and Local Communities", REAL, University of Illinois, Urbana, IL.

Rose, Adam. 1998. "The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda", Adam Rose and Associates, State College, PA.

San Diego County Board of Supervisors. 2003. "Update on Impacts of Tribal Economic Development Projects in San Diego County", San Diego, CA.

Cortes, Bienvenido S. 2005. "Economic Impact of a Destination Casino in Galena, Kansas", Pittsburg, KS.

ECONorthwest. 2007. "The Contributions of Indian Gaming to Oregon's Economy in 2005", Portland, OR.

ECONorthwest. 2005. "The Economic Benefits of the Cow Creek Tribe to Douglas County, Oregon", Portland, OR.

Center for Policy Analysis, University of Dartmouth. 2004. "Economic and Fiscal Impact Analysis for a West Warwick Resort Casino", North Dartmouth, MA.

UCSB Economic Forecast Project, 2001, 2006. "Santa Barbara County Economic Outlook," Santa Barbara, California.

Economic Multipliers: How Communities Can Use Them for Planning, by Wayne P. Miller and Tracy Armbruster.
See: http://www.uaex.edu/Other_Areas/publications/HTML/FSCDD-6.asp

Consumer's Guide to Regional Economic Multipliers,
by Cletus C., Coughlin and Thomas B. Mandelbaum.
See: http://research.stlouisfed.org/publications/review/91/01/Consumer_Jan_Feb1991.pdf

Economic Multipliers, Income and Employment,
By Thayer Watkins, San Jose State University,
See: http://www2.sjsu.edu/faculty/watkins/multipliers.htm

Economic Multipliers and the Economic Impact of DOE Spending in New Mexico,
Working paper by Lloyd J. Dumas, Professor of Economics and Political Economy, University of Texas at Dallas, March 2003

Employment and Income Multipliers in Kern County: The Construction Industry
By Frank Falero, Professor of Economics, Cal State Bakersfield, Report to JTS Construction, Inc, January 31, 2000.

Implan Pro User's Guide, by Minnesota Implan Group, Inc., Version 2.0, 1999.

Implan Pro Model Software, by Minnesota Impan Group, Inc, New Sectoring for IMPLAN Data, Version 2.2, 2005. Updated in May 2007.

Appendix A:
Methodology for Determining Total Economic Impacts

Introduction

For effective planning of either public-sector and private-sector projects at the state and local level, an analysis of the economic impacts of these projects will yield an understanding of total economic benefits that would be forthcoming.

Not only do small regional jurisdictions (like cities or counties) benefit from the direct economic impacts of a project, they also benefit from the indirect impacts, or the economic effects generated from the multiplier process.

Any regional economic analysis must take into account inter-industry relationships within regions because these relationships largely determine the total regional responses to changes in the economy as a result of a new project or an expanded one. The sum of the responses by all industries in the region determine the total economic impact that is attributable to a new project or change to an existing economic activity.

If a demand for materials, supplies, equipment or services in a particular region changes, a multiplier model is used to examine and determine the estimated effects that change the production and delivery of those commodities. This in turn will affect a region's employment, sales, income, and population.

The multiplier model is derived from an elaborate set of assumptions and data on inter-industry relationships that are indicative of the region.

Methodology: Use of the Input-Output Method

Particular economic models are used for impact analysis. Impact analysis is the evaluation of the overall changes to the regional county economy when there is a change to an economic activity. For a meaningful multiplier analysis of economic impacts using industries that are more finely disaggregated, an input-output methodology is used. The program is called IMPLAN[4].

The multipliers are defined below. The model can be used to determine the effects in the region on employment, output, and income when *final demand* changes. Final demand changes are the increases in spending and hiring that occur directly in the region as a result of a new project. Knowledge of the final demand change is critical. Specific information on employment levels, payrolls, expenditures by

[4]Micro IMPLAN is a microcomputer program that constructs regional input-output accounts and models. The Forecast Project constructed a model for Santa Barbara County using companion data which are available at the county level. The model allows us to create aggregate models which consist of industries grouped together for a specific purpose. For this application, the model was aggregated to industries which are important to the Santa Barbara County economy. Once the model is built, it can be used to perform impact analysis. New industries can be introduced or industries can be downsized or removed to determine the impact on total regional production, employment, and income.

industry, and investment (or divestment) in facilities is necessary to conduct a proper analysis and to determine industry impacts to the local region.

The final demand changes are generally provided in the project description. The Chumash provided us with information on capital and operating expenditures, and employment over time for the Casino Resort.

Chapter 2 presented the final demands in terms of direct effects that occur in Santa Barbara County and California. If all economic activities associated with the final demand occurred inside Santa Barbara County, it would equal the direct effects. Using the final demands, we will determine the economic activities in the region that are necessary to meet the final demands of the project. The sum of all economic activities needed to meet final demand yield the total economic impacts.

Definitions

The stimulus to an economic region is defined as a change in the final demand. The economic impacts that result are evaluated in terms of direct, indirect, and induced effects.

Final Demand: value of goods and services (output) going to ultimate consumers rather than other producing industries. A change in final demand is a change in expenditure on goods and services. Changes in final demand imply that a change occurs to the level of consumption in the region due to a change in economic activity. Examples of changes in economic activity include the closure of a military base, the relocation of a large firm to the area, or the construction of a large industrial facility.

Direct Effects: production changes that occur immediately in response to changes in final demand or changes in supply from a local economic activity.

For example: the Vahevala project increases the supply of offshore crude oil and natural gas production. ExxonMobil must now make expenditures in the local economy and locally adjacent economies on materials and labor services to meet the expansion of production.

Indirect Effects: production changes in supply industries caused by the changing input needs of the industry responsible for the direct effects.

For example: The Casino purchases food and beer from Jordanos who must increase their purchases of products and increase their service in order to meet the increased demand by the Casino. To do that, Jordanos will need to make further expenditures on materials, equipment, and perhaps labor. The Casino will also contract for building rehab and/or maintenance services. Contractors must hire additional workers and buy equipment and materials to perform the services demanded by the Casino.

Induced Effects: changes in regional household spending patterns caused by changes in regional employment and income as a result of direct and indirect effects.

For example: The Casino hires 100 additional workers who earn new income (the direct effect) and spend that income in the local region. Firms servicing the Casino with necessary materials, supplies, and services to meet the extra production load must also hire extra workers who earn additional income which they spend in the local economy. The expenditure of earned income by direct and indirect workers increases demand for local products like food, recreation, and other services. These are the induced effects.

Multipliers

Employment Multipliers

Employment multipliers for a given industry in a region show the number of jobs that regional industries provide, both directly and indirectly, in order for the given industry to deliver $1 million of output (i.e., value of production) to satisfy final demand. Employment multipliers can be interpreted as estimates of the total (direct and indirect) changes in number of jobs that occur in regional industries for each additional $1 million of output from a particular industry delivered to final demand.

Appendix D shows each local sector in the study area and the employment, output, and income multipliers associated with each. The sectoral detail is aggregated to provide for more meaningful multipliers for some of the industries that were too small (in terms of employment and income) to be uniquely specified as a sector.

Definitions

DIRECT = direct change in employment for a $1 million change in the industry's output necessary to meet the change in final demand.

INDIRECT = indirect change in employment for a $1 million change in the industry's output.

INDUCED = induced change in employment for a $1 million change in the industry's output.

TOTAL = sum of Direct, Indirect, and Induced changes.

TYPE I multiplier = Direct plus Indirect change in employment for a direct change in an industry's employment

TYPE III multiplier = Total change in employment for a direct change in an industry's employment.

Other multipliers: Output and total income

In Appendix B, TYPE I output multipliers represent the value of production (from indirect and direct effects) required from all sectors by a particular sector to deliver one dollar's worth of output to Final Demand. TYPE III adds in the induced requirements. TYPE I and TYPE III income multipliers calculate the effects on total income (employee compensation, proprietary income, and other property income) generated from one dollar's worth of production for final demand.

Expenditures are determined in the analysis of direct effects (Chapter 1), and demonstrate the magnitude of final demand dollars affecting Santa Barbara County in 2006. The material expenditures, along with labor payrolls are incurred in Santa Barbara County and indirectly affect the local economy through the output, employment, and income multipliers.

However, not all of the final demand expenditures result in local economic impacts. A portion of the direct expenditures made and the direct payrolls paid do not impact the local economy due to leakages.

Fiscal effects

Changes in final demand will effect the purchase of retail goods in the region both directly and indirectly. Increased property taxes and retail sales taxes provide revenues to county and city governments. Induced effects will also contribute to increased or decreased spending by workers who incur a change in income. Personal consumption expenditures include the expenditure by resident workers on taxable retail goods and on housing in the region. Estimated changes to taxable sales will yield sales tax effects. Purchases of homes will yield property tax effects. There are also excise tax impacts, and revenues going to local governments from fines and penalties.

Appendix B:

Economic Impact Analysis

Regional economic impact analysis is the study of the manner in which an economic activity or a development project affect the local economy. Economic impact analysis attempts to measure the consequences that an industry or a new project or action will have on considerations such as local or regional employment patterns, wage levels, business activity, tourism, housing, and even migration patterns.

In this study of the new housing industry, the analysis measures the direct benefits that the industry produces for the local economy. The direct benefits are the first order or immediate impacts of the industry on users of new housing and non-users, and consist of employment and population impacts, and expenditure impacts.

Outside of the direct economic activity, new housing construction stimulates considerable economic activity in various industries that directly do business with the housing construction industry. This includes, among others, purchases of supplies and equipment, utilities, building maintenance, financial and accounting operations, and all other expenditures directly related to housing production. These influences are considered the ***indirect benefits*** of the new housing industry.

In addition to the direct and indirect components, new housing construction also contributes to the economy through ***induced*** economic activity. The induced component measures the consumption expenditures of direct and indirect sector employees. In other words, those employed directly or indirectly by the new housing construction industry take their pay checks and induce additional economic activity in the form of retail consumption, housing of their own, personal expenditures on health care, banking, insurance and other sectors of the economy.

Input-Output Models

Input-output analysis is a key component of most regional economic modeling of the employment, output, and income impacts of investments. Input-output analysis quantifies the multiple economic effects resulting from a change in the final demand for a specific product or service. For example, a person being paid to work on a new construction project will spend some of those wages to buy goods and services. The money the worker spends shows up as sales and wages to other parties, who spend the money elsewhere, and so on. This chain of effects, known as the "multiplier," captures the distributive effects of construction spending and across a broad range of industries. Typically, the input-output multipliers are driven by the direct benefits of the project: the initial expenditure or investment. The simplest regional economic models are direct applications of input-output models, such as RIMS II ("Regional Input-Output Modeling System," 2nd edition, U.S. Department of Commerce), or IMPLAN. These applications are "static" in the sense that they provide an all-at-once view of economic effects, without a time component that is necessary for understanding when the effects will be realized.

Employment Impacts

The major concern in most impact studies is the effect on local employment. Under a growth scenario, job impacts are generally based on the assumption that new jobs go to new residents, which leads to

population growth. This in turn leads to increased consumer spending on local products. However, any number of factors could break this chain of events.

For example, the new job creation could be absorbed by:

(1) current residents (the unemployed, job up-graders, or current out-commuters) or
(2) new in-commuters.

In either case, the increase in local population and spending would be less than expected.

Other considerations can also be raised in evaluating employment impacts. For example: Under a growth scenario, will new jobs be permanent and full-time? Another consideration is the type of occupations that will be generated (a key determinant of desirability in many rural areas). In addition, local workers may be unqualified for the new positions, and in-migrants or in-commuters will be employed instead.

Many of these issues are examined using the Input-Output model. For example, wage estimates — an important part of desirability — are imbedded in such models. An industry occupation table (matrix), showing the distribution of occupations by industries, can alternatively be used to predict the types of generated occupations. Such a table translates employment estimates for each industry into a group of occupations. Coupled with information about the local labor force, the matrix can show if local individuals can fill the new occupations. Other questions such as the permanence of employment impacts can be evaluated based on knowledge of the regional economy.

Multipliers

In the most general sense, an economic multiplier is a quantitative measure of economic impact that explicitly recognizes that economies (local, state, regional, national, or global) are interconnected networks of interdependent activity. When a change takes place in one part of such a network, its effects propagate throughout the system. These effects typically result in a larger total impact than the original change would have caused in isolation.

TYPE I multipliers show the estimated change in total jobs due to direct and indirect changes in output by industry. TYPE III multipliers show the estimated change in total jobs due to direct, indirect, and induced changes in output by industry. The Direct, Indirect, Induced, and Total columns present the number of changes in jobs in the industry for every million dollars in final demand change.

Employment Multiplier

Communities often wish to know the number of jobs that will be created as a result of an existing or new economic activity. The employment multiplier measures the total economy-wide employment resulting from a specific sector of the local economy or a change in employment of a "basic" or exporting industry.

The employment in the existing activity multiplied by the employment multiplier for the industry provides an estimate of total jobs created in the study area. In the "change" scenario, the additional employment in the new activity multiplied by the employment multiplier for the industry provides an estimate of the total new jobs created in the area of study (i.e. a county, a district, a state or multi-state region).

Consider the example of a new construction project in which 100 new workers are hired. Assume the regional employment multiplier for the construction industry is 1.8. In this hypothetical scenario, an additional 80 jobs (1.8 * 100, less the initial 100 jobs) would be created as a result of the 100 new jobs created to construct the new project. The total economic impact is 180 jobs created in the region.

Output and Income Multipliers

The output multiplier estimates the total change in local sales, including the initial $1 of sales outside the area, resulting from a $1 increase in sales outside of the study area. This is typically called an increase in final demand. Multiplying the increase in sales of the exporting industry by the output multiplier provides an estimate of the total increase in sales for the study area, including the $1 export sales. The output multiplier is used to assess the interdependence of sectors in the local economy.

An output multiplier for a given sector is the total value of sales by all sectors of the regional economy necessary to satisfy a dollar's worth of final demand for that sector's output. An important point is that this value of total business activity is larger than the market value of currently produced goods and services because some of the re-spending in input-output models is for the purchase of intermediate goods and services. The value of these inputs are counted again when the final goods they are used to produce are sold.

The income multiplier measures the total increase in income in the local economy resulting from a one dollar increase in income received by workers in the exporting industry. Multiplying the initial change in income by the income multiplier for the industry provides an estimate of the increase in income for all individuals in the study area resulting from the initial growth of one industry.

Geographic Area and Multipliers

Typically, economic impact analyses endeavors to show that the new economic activity being evaluated or the existing industry being expanded will have large spin-off effects (i.e., high multipliers). Multipliers usually range between 1.0 and 3.0 and vary by the amount of economic activity that is located within an area and by the interaction of industries within the area. *The more inputs purchased locally and the more consumer expenditures at local shops, the higher the multiplier.* A larger area of analysis will normally expand the capability of the economy to provide the necessary inputs or produce the necessary shops that can accommodate the demand produced by the new economic activity. Therefore, the larger the area, the more economic activity will likely occur within the area.

The table below illustrates this concept. The output multiplier for the new construction industry increases as the area of analysis expands. The multiplier increases from 1.9 for the immediate vicinity of Santa Barbara County, to 2.5 for California. It would be inappropriate to use the state multiplier of 2.5 to estimate the economic impact on the County of Santa Barbara.

Table: Output Multipliers

Type of Industry	Santa Barbara County	California
New Construction	1.9	2.5

The area included when computing multipliers should be large enough to serve as a functional economic unit. However, it would be inappropriate to use a state or multi-state multiplier to analyze the economic impact on a county's local economy. As you expand the geographic area to include more of the backward linked industries and businesses that supply goods and services, you increase the size of the multiplier. A state multiplier will reflect all interactions between businesses and industry throughout the state and not the economic interrelationships within a county or region within the state.

Reasonable Values for Multipliers

What are Some Reasonable Values for Local Economy Multipliers?

County employment size class	Average multiplier	Probable range
1,000-2,999	1.7	1.5-1.9
3,000-4,999	1.8	1.5-2.0
5,000-9,999	1.9	1.6-2.1
10,000-19,999	2.0	1.8-2.2
20,000-49,999	2.2	2.0-2.4
50,000 and over	2.2	2.0-2.5

All things else equal, multipliers will tend to be higher where:

1. The community is larger with a more diverse economy.
2. The community is a substantial distance from competitive retail/service centers.
3. The per capita income is low.

Abuse of Multipliers

Economic multipliers are very simple and convenient methods for calculating economic impacts of regional activity. However, they can be misused quite easily and frequently are.[5]

Type I and Type III Multipliers

A multiplier is a simple ratio. Most multipliers are calculated as:

Multiplier = Total Charge / Initial Charge

[5] See: "Policy Uses of Economic Multiplier and Impact Analysis," working paper by David W. Hughes, West Virginia University, June 2003. (available at: http://www.choicesmagazine.org/archives/2003/q2/2003-2-06_print.htm)

Also see: "Economic Multipliers and the Impact of DOE Spending in New Mexico," working paper by Lloyd Dumas, University of Texas at Dallas, March 2003.

Typically, there are Type I and Type II multipliers. This is economic jargon for identifying which effects are included when calculating the multiplier. Type I multipliers include the direct and indirect effects. The indirect effects are those associated with changes in the backward linked industries due to an increase in demand from the directly affected industry. Therefore, Type I multipliers are calculated as follows:

$$\text{Type I Multiplier} = \frac{\text{(Direct + Indirect Effects)}}{\text{Direct Effects}}$$

A Type III multiplier (sometimes referred to as Type II) includes the direct, indirect and induced effects. It includes the effect on the backward linked industries as well as the induced or consumption effect. Type III multipliers are similar to Type II multipliers, except the method of calculating the induced effects are different. Type III (and Type II) multipliers are calculated as follows:

$$\text{Type III Multiplier} = \frac{\text{(Direct + Indirect + Induced Effects)}}{\text{Direct Effects}}$$

Multipliers can be interpreted as simple ratios. Economic multipliers provide estimates of the total impact resulting from an initial change in economic output (called final demand). The higher the multiplier, the greater the effect on the local economy.

Other Considerations: leakages

Margins

The expenditure for retail goods normally reflects charges for the output of wholesalers, transporters, and manufacturers, as well as of retailers. Wholesale and retail output is called the "margin." The margin consists of operating expenses, profits, sales taxes, and excise taxes. The margin is normally expressed as a percentage. The margin is multiplied by the final demand change to reflect the amount of final demand that remains in the region, the remainder going to pay producers, transporters, and wholesalers of the good who are located in other regions. Margins are usually applied to final demand changes in the retail and wholesale industries.

Example: the Casino may spend $3 million in retail goods which are non-food. According to the U.S. Dept. of Commerce (1986), the markup for retail merchandise by local retailers is 5.5 percent. Consequently, the resulting final demand that remains with local retailers net of their costs for goods sold is:

5.5 percent * $3 million = $165,000.

The latter amount is used as the final demand entry for the local multiplier analysis, not the original $3 million. The remaining $2.835 million goes to the manufacturers of the retail goods located elsewhere in California, the U.S., or overseas. Jobs are created from the expenditure of the $2.835 million that goes elsewhere, but not in Santa Barbara County.

Location of Purchase considerations[6]

The location of purchase is important because not all expenditure activity associated with a change in final demand occurs in the region of the impact scenario. LPCs (location purchase coefficients) indicate what proportion of total expenditure occurs within the model region.

Example: the Casino spends $6 million per year on contruction materials but not all of the expenditure is from firms located in Santa Barbara County. It is entirely plausible that only 25 percent of the annual expenditure occurs in the local area, and 75 percent occurs from wholesalers in Ventura County, Los Angeles County, or elsewhere. Consequently, if the Casino spends $6 million per year on materials, equipment, and supplies of which only 25 percent of the expenditure is from vendors in Santa Barbara County, then the local expenditure is:

$6 million * LPC = $6 million * 25 percent = $1.5 million

where LPC is the location purchase coefficient (which is assumed to be 0.25 in this example). In any event, since 0<LPC<=1, the actual expenditure in the region will be at most $6 million and likely much less. If there is a margin associated with these purchases and it is ten percent, then the true expenditure impact of $6 million spent by the Casino for retail goods per year in the local region is $150,000 (10 percent of $1.5 million). This amount remains in the local economy to generate additional output, income, and jobs. The balance of the expenditure "leaks" out of the region (Santa Barbara County) but remains in California where economic impacts can be determined on the entire amount.

[6] Many regional impact studies of particular economic events, or of an existing industry are frequently overstated with claims that the resulting multipliers from the event or industry are 3, 4 or as high as 7. Multipliers of this magnitude are very rare. Furthermore, the smaller the region, the smaller the multiplier. Multipliers are largest for (1) the world economy, (2) a continental economy, (3) a nation, (4) a region within the nation (such as the Northeast), (5) a state, (6) a group of counties comprising a region within the state (such as Southern California), and (7) a single county. The reason they are larger, the larger the jurisdiction of impact assessment, is due to "leakages." Leakages are the loss of the direct effect from the region of analysis, principally because the region does not have the resources or the competitive advantage to internally produce the good or service that the direct expenditure has been made on. In the case of specialized capital equipment and specialized construction or oil and gas services, it is doubtful that Santa Barbara County will be able to supply 100 percent of all goods and services directly demanded by the Casino associated with daily operations. However, probably all of the specialized resources will be available somewhere in California. Consequently, the multiplier for the state will generally be larger; therefore the impacts to the state economy will be larger.

Appendix C:

Preparers and Study Timeline

The preparers of this study were Mark Schniepp, Ph.D., and Mats Olson, M.A., of the California Economic Forecast.

The study was prepared at the request of the Santa Barbara County Taxpayers Association, Joe Armendariz, Executive Director.

The study was prepared during the months of May and June of 2007. A draft document was produced for review and comment on June 15, 2007. A final draft version of the study was produced on August 15, 2007. After all comments were received, a final report was delived in November 2007.

The Chumash Casino Resort provided significant detailed accounting records over the 2001 to 2007 time period. Carol Clearwater directed the delivery of such data to the California Economic Forecast during the months of April and May, 2007. She provided further clarification on the draft report during July 2007.

Appendix D:

Industries in Santa Barbara County and Employment Multipliers

The following lists the industries and the associated employment multipliers for Santa Barbara County that are derived from the IMPLAN modeling system, based on the most recent 2002 Census of Manufacturing, 2004 ES-202 Payroll, and 2004 Employment data for the County.

The first 4 columns indicate the number of jobs created per million dollars of output or sales generated by direct, indirect, and induced economic activity.

The Type I multiplier shows the number of direct and indirect jobs created for every direct job created in the local economy.

The SAM or Social Activities Multiplier is the sum of the direct, indirect, and induced employment created, divided by the direct employment. The SAM multiplier includes the household (induced) effect.

This is the Type III or total multiplier effect. For every direct job created by direct economic activity in the county (such as Casino spending), this column indicates the total number of jobs that are created by industry in the county.